



# Full wwPDB X-ray Structure Validation Report

Jun 16, 2014 – 10:36 PM BST

PDB ID : 4V8O  
Title : Crystal structure of the hybrid state of ribosome in complex with the guanosine triphosphatase release factor 3  
Authors : Jin, H.; Kelley, A.C.; Ramakrishnan, V.  
Deposited on : 2011-07-26  
Resolution : 3.80 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>

---

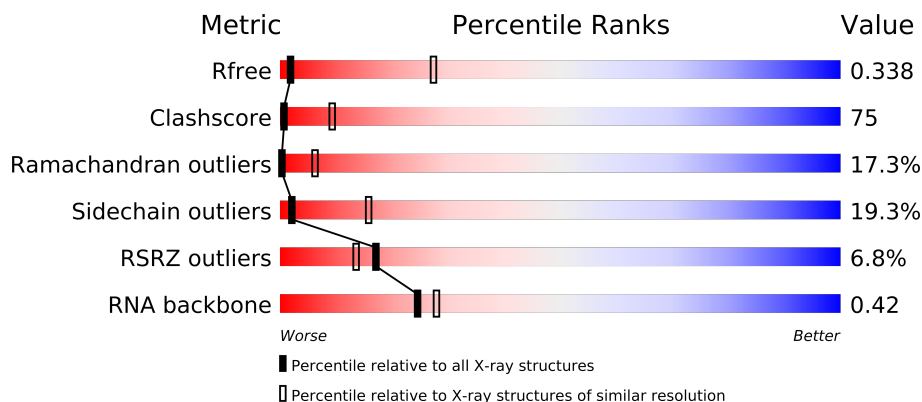
The following versions of software and data (see [references](#)) were used in the production of this report:

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 3.80 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	1162 (4.20-3.40)
Clashscore	79885	1100 (4.10-3.50)
Ramachandran outliers	78287	1050 (4.10-3.50)
Sidechain outliers	78261	1042 (4.10-3.50)
RSRZ outliers	66119	1163 (4.20-3.40)
RNA backbone	1838	1009 (4.76-2.80)

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	
2	AB	256	
3	AC	239	
4	AD	209	
5	AE	162	
6	AF	101	
7	AG	156	
8	AH	138	
9	AI	128	
10	AJ	105	
11	AK	129	
12	AL	135	

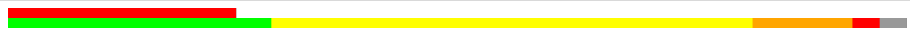
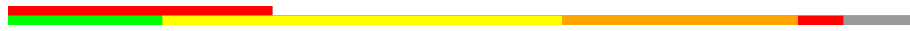
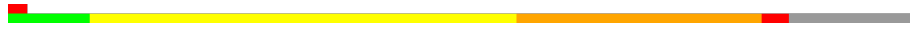
Continued on next page...

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
13	AM	126	
14	AN	61	
15	AO	89	
16	AP	88	
17	AQ	105	
18	AR	88	
19	AS	93	
20	AT	106	
21	AU	27	
22	AV	77	
23	AX	9	
24	AY	529	
25	B0	85	
26	B1	98	
27	B2	72	
28	B3	60	
29	B4	71	
30	B5	60	
31	B6	54	
32	B7	49	
33	B8	65	
34	B9	37	
35	BA	2915	
36	BB	122	
37	BC	229	
38	BD	276	
39	BE	206	
40	BF	210	
41	BG	182	
42	BH	180	
43	BJ	173	
44	BK	147	
45	BN	140	
46	BO	122	
47	BP	150	
48	BQ	141	
49	BR	118	
50	BS	112	
51	BT	146	
52	BU	118	
53	BV	101	
54	BW	113	

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
55	BX	96	
56	BY	110	
57	BZ	206	

## 2 Entry composition

There are 58 unique types of molecules in this entry. The entry contains 151017 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 RRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	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			

- 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			

- 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			

- 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			

- 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			

- 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			

- 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			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	S	0	0	0
			1011	639	198	174				

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AI	58	ARG	HIS	CONFLICT	UNP P80374

- 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			

- 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			

- 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			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AL	1	MET	-	EXPRESSION TAG	UNP P17293
AL	2	VAL	-	EXPRESSION TAG	UNP P17293
AL	3	ALA	-	EXPRESSION TAG	UNP P17293
AL	4	LEU	-	EXPRESSION TAG	UNP P17293

- 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			

- 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			

- 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			

- 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			

- 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			

- 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				

- 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			

- 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			

- 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			

- Molecule 22 is a RNA chain called PE HYBRID STATE TRNA FMET.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			

- Molecule 23 is a RNA chain called MRNA 5'-R(\*AP\*AP\*AP\*AP\*AP\*AP\*UP\*GP\*UP)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AX	9	Total	C	N	O	P	0	0	0
			192	88	39	57	8			

- Molecule 24 is a protein called PEPTIDE CHAIN RELEASE FACTOR 3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AY	496	Total	C	N	O	S	0	0	0
			3934	2492	677	744	21			

- Molecule 25 is a protein called 50S RIBOSOMAL PROTEIN L27.

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

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L28.



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

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L29.

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

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L30.

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

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L31.

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

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L32.

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

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L33.

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

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L34.

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

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L35.

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

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L36.

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

- Molecule 35 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BA	2901	Total	C	N	O	P	0	0	0
			62477	27807	11683	20087	2900			

- Molecule 36 is a RNA chain called 5S RIBOSOMAL RNA.

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

- Molecule 37 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BC	228	Total	C	N	O	S	0	0	0
			1742	1101	318	319	4			

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BC	19	ILE	VAL	CONFLICT	UNP Q5SLP7
BC	27	HIS	ARG	CONFLICT	UNP Q5SLP7
BC	127	MET	LEU	CONFLICT	UNP Q5SLP7

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L2.

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

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L3.

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

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L4.

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

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L5.

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

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BH	156	Total	C	N	O	S	0	0	1
			1189	752	222	214	1			

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BJ	131	Total	C	N	O		0	0	1
			654	393	131	130				

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L11.

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

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L13.

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

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L14.

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

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L15.

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

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L16.

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

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L17.

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

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

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

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L19.

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

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L20.

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

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L21.

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

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L22.

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

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L23.

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

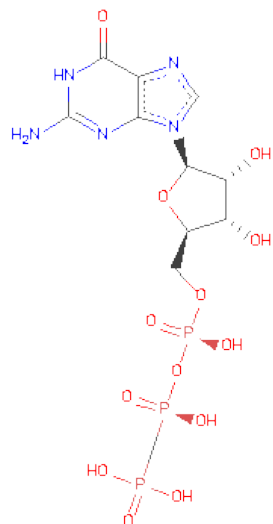
- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L24.

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

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L25.

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

- Molecule 58 is PHOSPHOMETHYLPHOSPHONICACID GUANYLATE ESTER (three-letter code: GCP) (formula:  $C_{11}H_{18}N_5O_{13}P_3$ ).



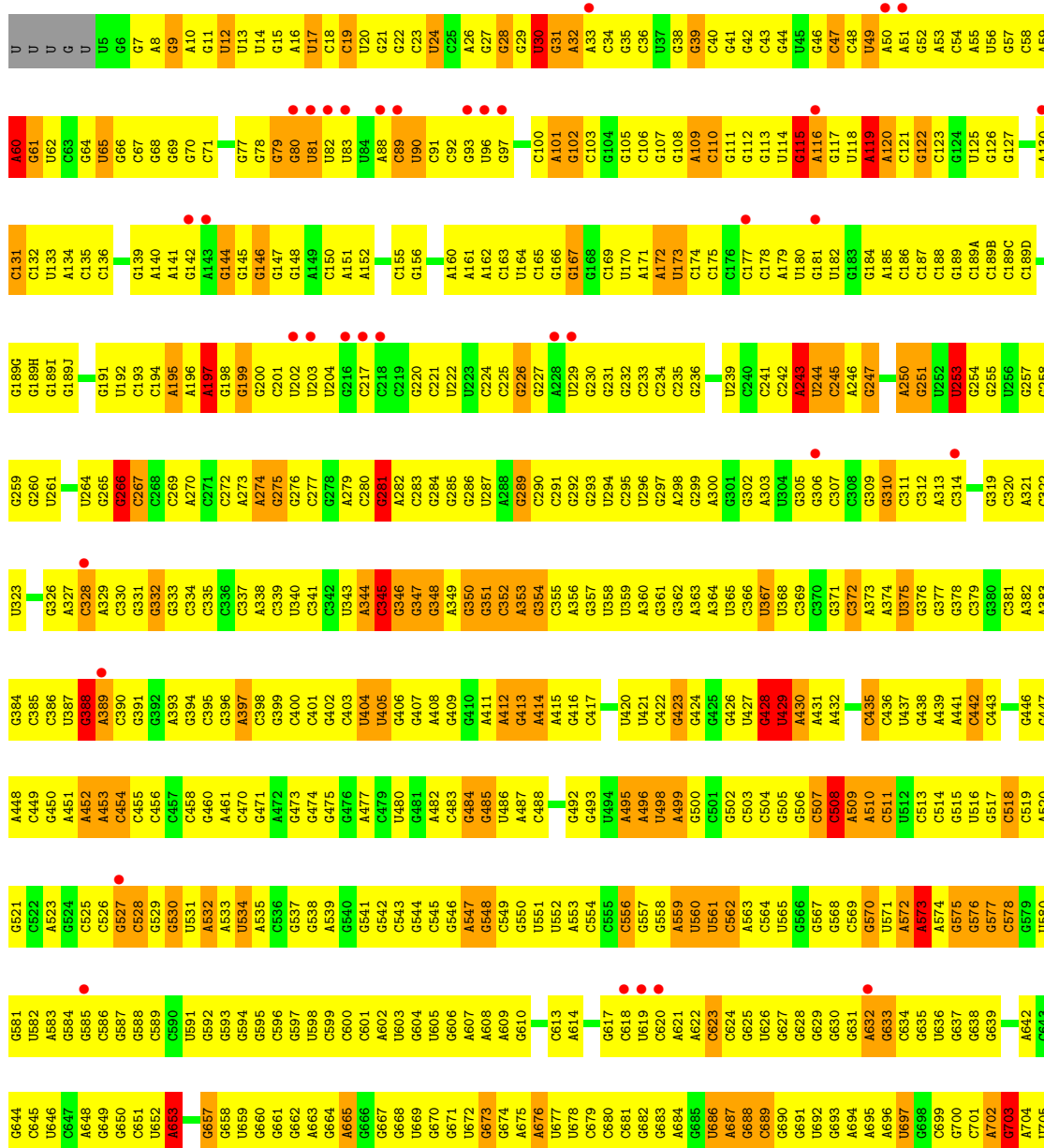
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
			Total	C	N	O	P		
58	AY	1	32	11	5	13	3	0	0

### 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.

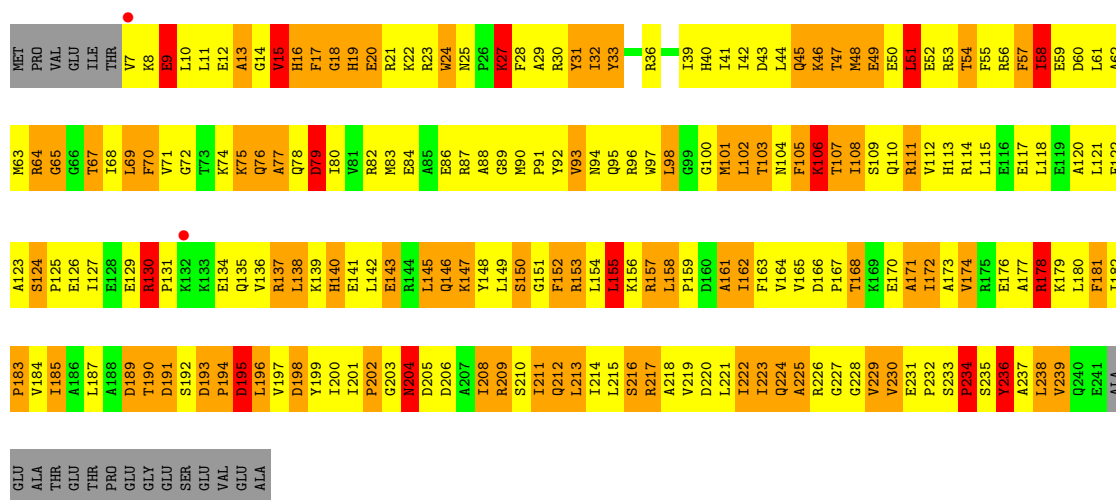
- Molecule 1: 16S rRNA

Chain AA: 



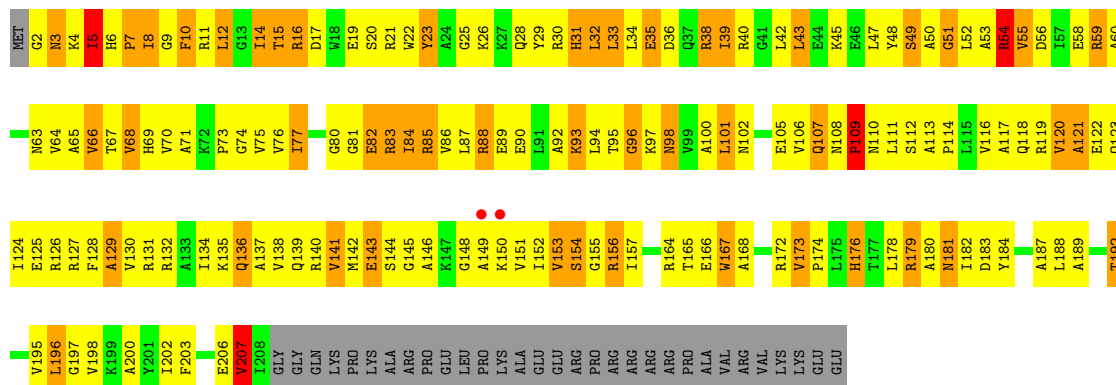






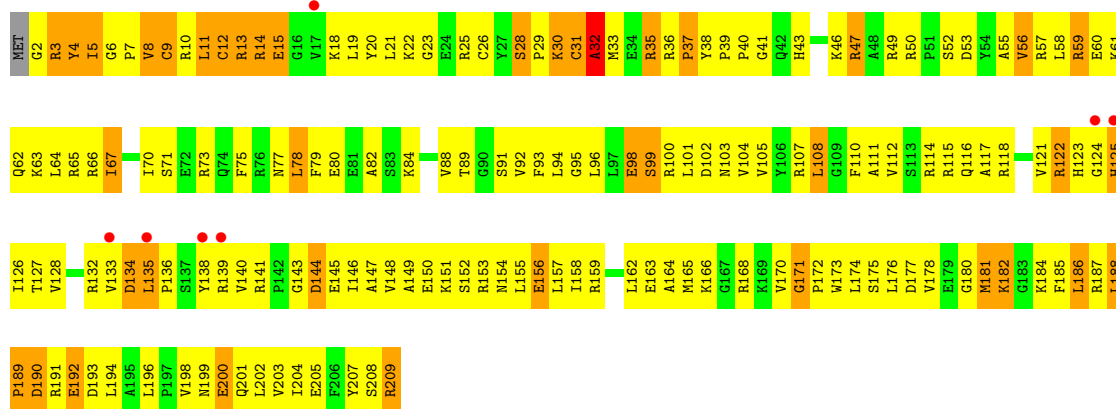
### • Molecule 3: 30S RIBOSOMAL PROTEIN S3

Chain AC:



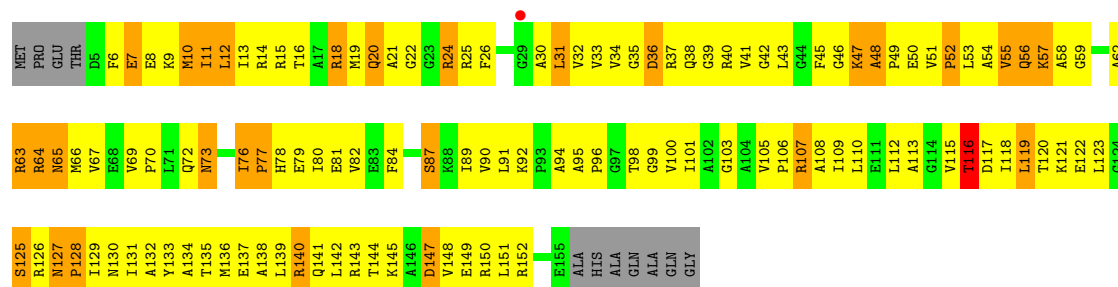
### • Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain AD:



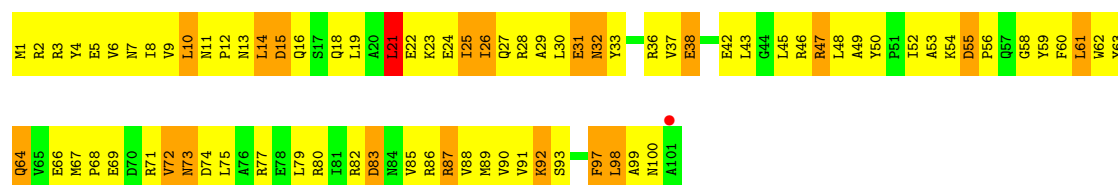
### • Molecule 5: 30S RIBOSOMAL PROTEIN S5

Chain AE:



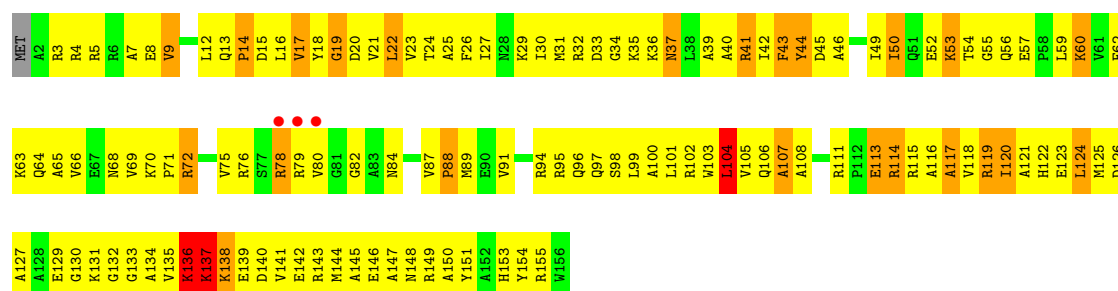
• Molecule 6: 30S RIBOSOMAL PROTEIN S6

Chain AF:



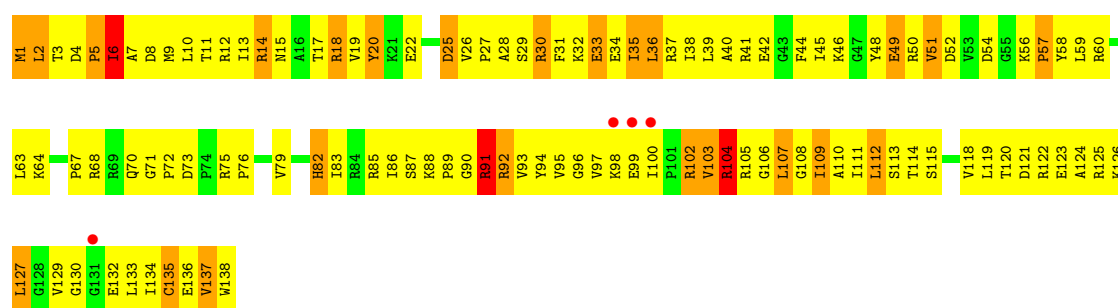
• Molecule 7: 30S RIBOSOMAL PROTEIN S7

Chain AG:



• Molecule 8: 30S RIBOSOMAL PROTEIN S8

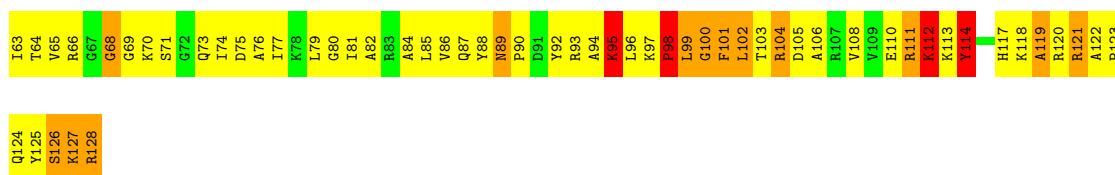
Chain AH:



• Molecule 9: 30S RIBOSOMAL PROTEIN S9

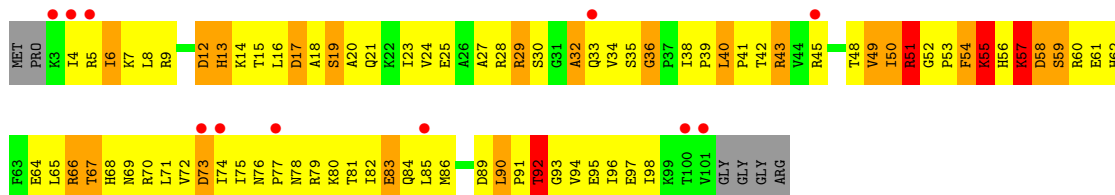
Chain AI:





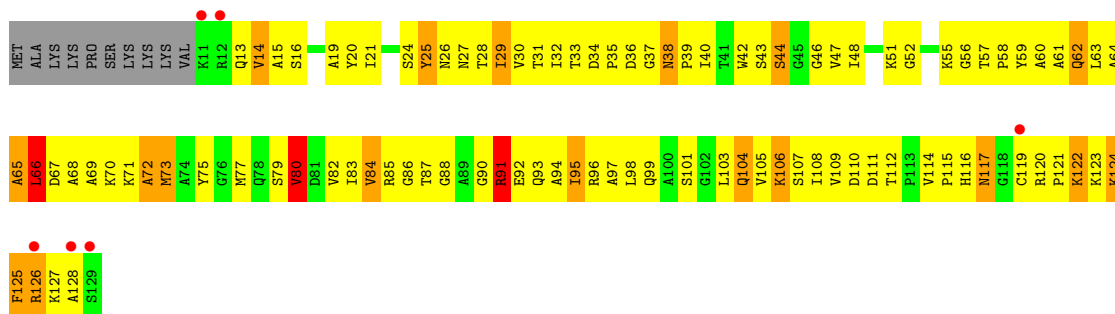
• Molecule 10: 30S RIBOSOMAL PROTEIN S10

Chain AJ:



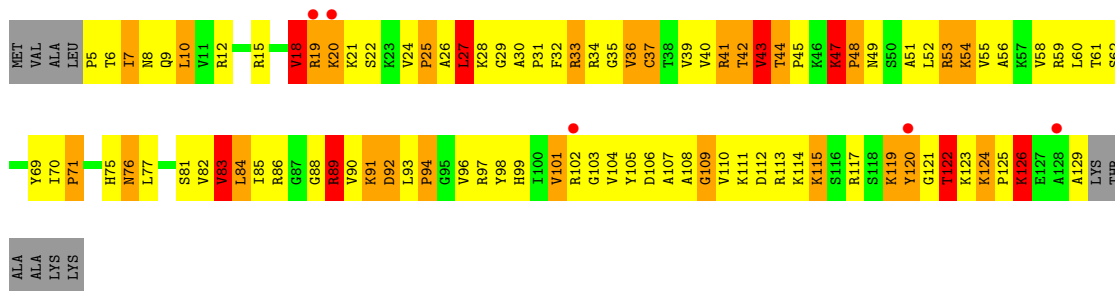
• Molecule 11: 30S RIBOSOMAL PROTEIN S11

Chain AK:



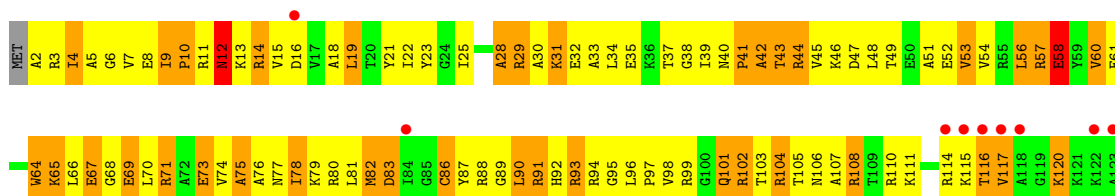
• Molecule 12: 30S RIBOSOMAL PROTEIN S12

Chain AL:



• Molecule 13: 30S RIBOSOMAL PROTEIN S13

Chain AM:





• Molecule 14: 30S RIBOSOMAL PROTEIN S14 TYPE Z

Chain AN:



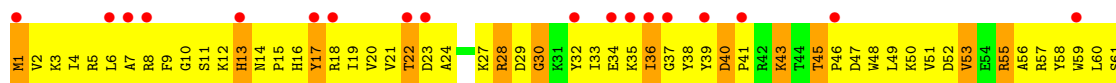
• Molecule 15: 30S RIBOSOMAL PROTEIN S15

Chain AO:



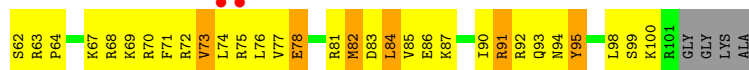
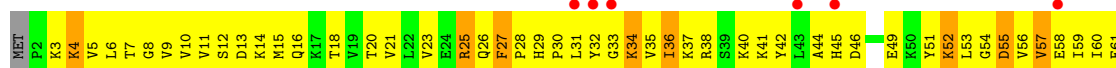
• Molecule 16: 30S RIBOSOMAL PROTEIN S16

Chain AP:



• Molecule 17: 30S RIBOSOMAL PROTEIN S17

Chain AQ:



• Molecule 18: 30S RIBOSOMAL PROTEIN S18

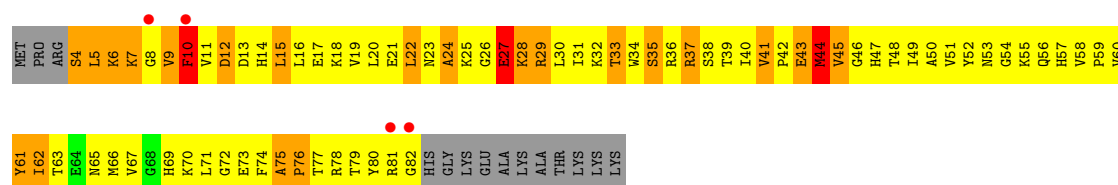
Chain AR:



• Molecule 19: 30S RIBOSOMAL PROTEIN S19

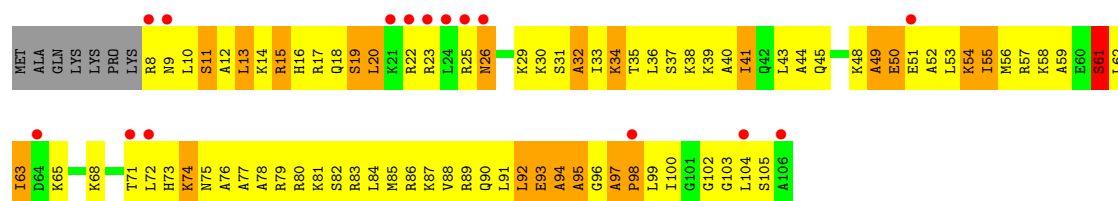
Chain AS:





• Molecule 20: 30S RIBOSOMAL PROTEIN S20

Chain AT:



• Molecule 21: 30S RIBOSOMAL PROTEIN THX

Chain AU:



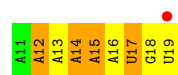
• Molecule 22: PE HYBRID STATE TRNA FMET

Chain AV:



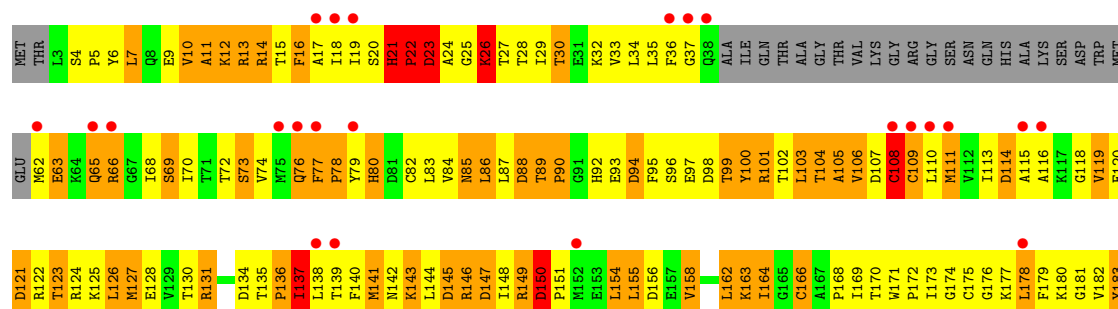
• Molecule 23: MRNA 5'-R(\*AP\*AP\*AP\*AP\*AP\*AP\*UP\*GP\*UP)-3'

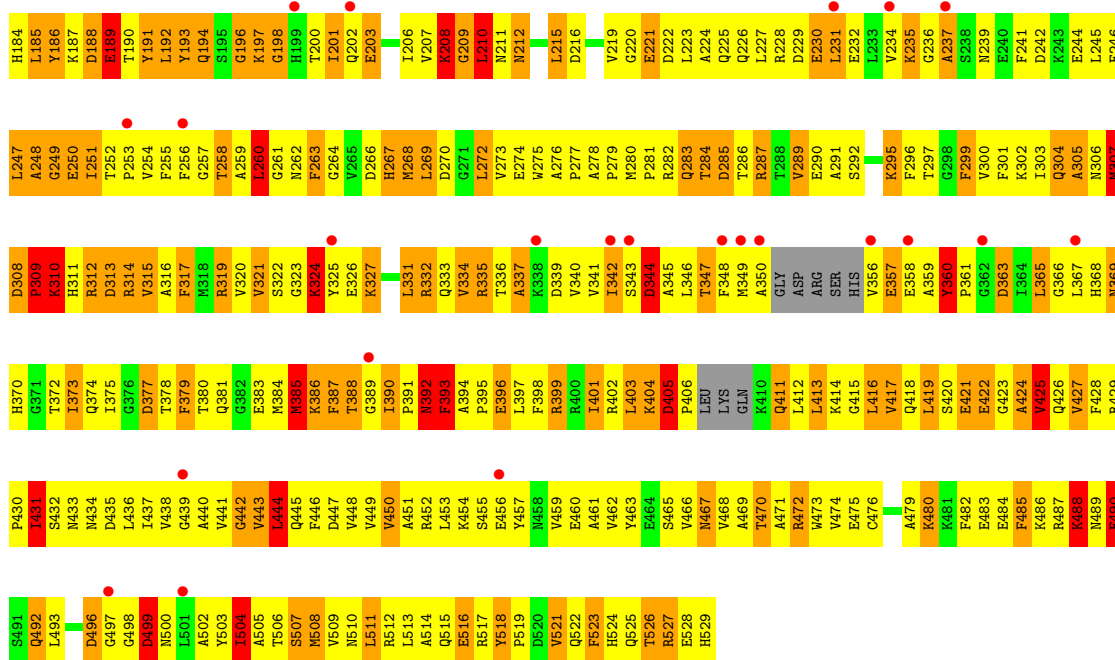
Chain AX:



• Molecule 24: PEPTIDE CHAIN RELEASE FACTOR 3

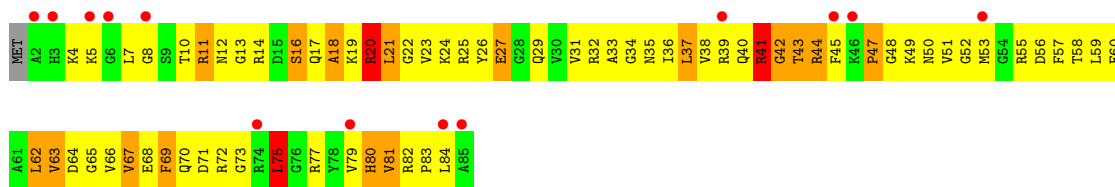
Chain AY:





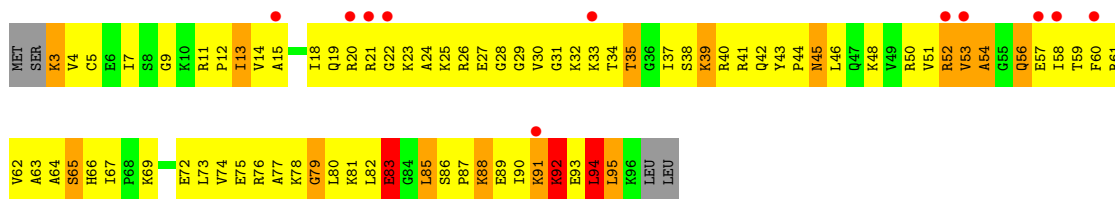
• Molecule 25: 50S RIBOSOMAL PROTEIN L27

Chain B0:



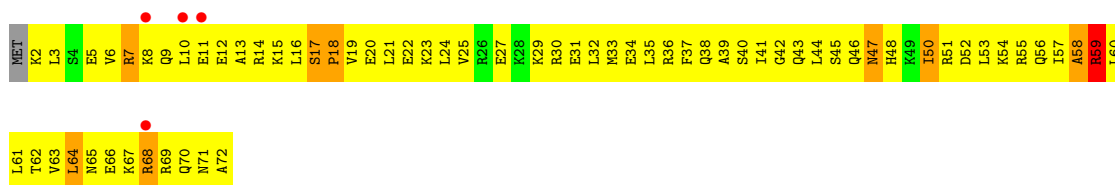
• Molecule 26: 50S RIBOSOMAL PROTEIN L28

Chain B1:



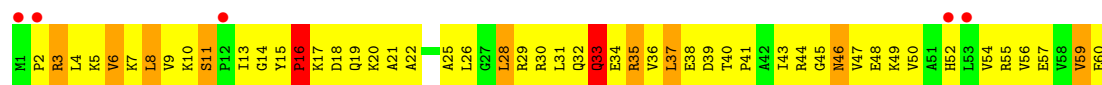
• Molecule 27: 50S RIBOSOMAL PROTEIN L29

Chain B2:



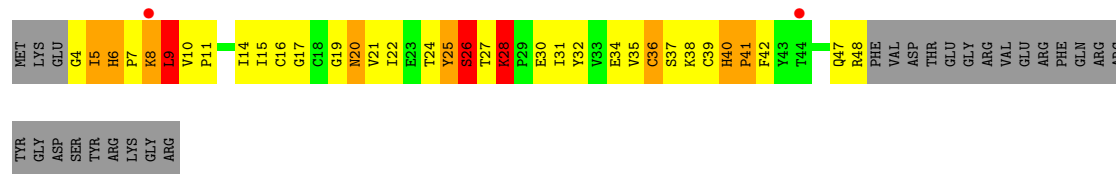
• Molecule 28: 50S RIBOSOMAL PROTEIN L30

Chain B3:



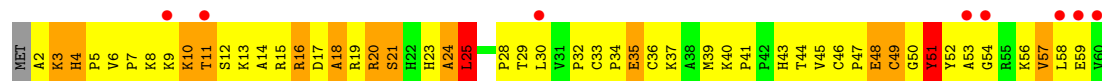
- Molecule 29: 50S RIBOSOMAL PROTEIN L31

Chain B4:



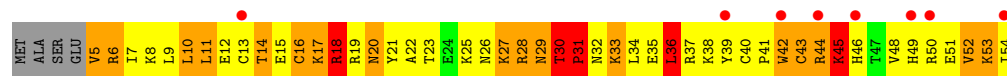
- Molecule 30: 50S RIBOSOMAL PROTEIN L32

Chain B5:



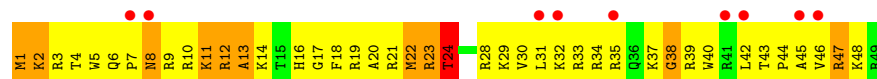
- Molecule 31: 50S RIBOSOMAL PROTEIN L33

Chain B6:



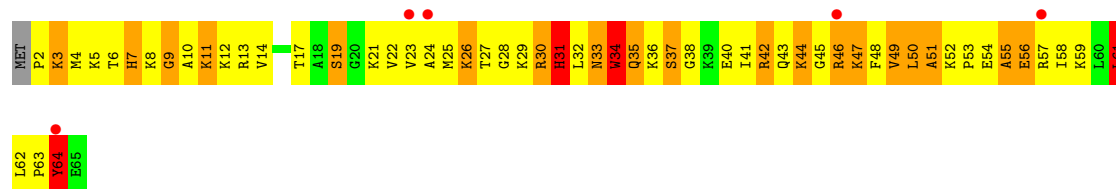
- Molecule 32: 50S RIBOSOMAL PROTEIN L34

Chain B7:



- Molecule 33: 50S RIBOSOMAL PROTEIN L35

Chain B8:



- Molecule 34: 50S RIBOSOMAL PROTEIN L36

Chain B9:



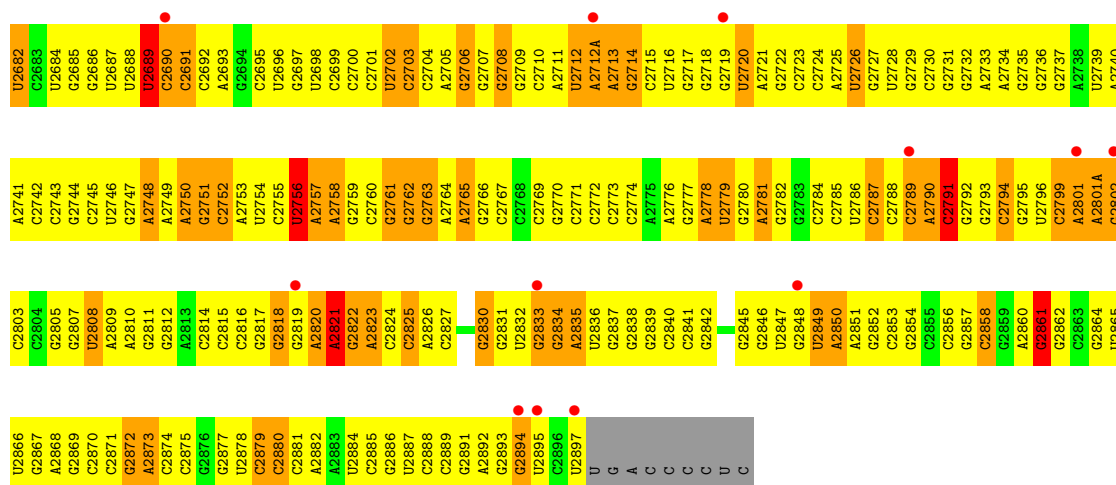
- Molecule 35: 23S RIBOSOMAL RNA





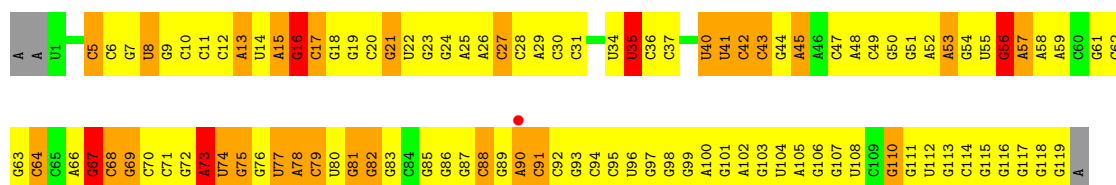
C1670	U1671	C1672	U1673	C1674	U1675	C1676	U1677	C1678	U1679	C1680	U1681	C1682	U1683	C1684	U1688	C1689	U1690	C1691	U1692	U1693	C1694	U1695	C1696	U1697	C1698	U1699	A1700	U1701	C1702	U1705	C1706	U1707	C1708	U1709	C1710	U1711	C1712	U1713	C1714	U1717	C1718	U1719	C1720	U1721	A1722	C1744	U1746	C1747	U1747A	C1748	U1749											
A1610	C1611	C1612	C1613	A1614	C1615	A1616	C1617	A1618	C1619	A1620	C1621	C1622	C1623	C1624	C1625	C1626	A1627	C1628	U1629	U1631A	A1632	C1633	C1634	C1635	C1636	A1637	C1638	C1639	C1640	A1641	C1642	C1643	C1644	C1645	C1646	C1647	C1648	C1649	C1650	C1651	C1652	C1653	A1654	C1655	C1656	C1657	C1658	C1659	C1660	C1661	C1662	C1663	A1664	A1665	C1666	C1667	A1668	C1669				
C1548	C1549	C1550	C1551	C1552	C1553	C1554	C1555	C1556	C1557	A1558	C1559	U1562	C1563	C1564	C1565	C1566	A1567	C1568	A1569	A1570	A1571	C1572	C1573	C1574	C1575	U1576	C1577	U1578	A1579	C1580	C1581	C1582	C1583	C1584	C1586	C1587	C1588	C1589	C1590	C1591	C1592	C1593	C1594	C1595	A1596	A1597	C1598	C1599	C1600	C1601	C1602	A1603	C1604	C1605	C1606	C1607	A1608	C1609				
A1486	A1487	A1490	C1491	C1492	C1493	C1494	A1495	A1496	U1497	C1498	C1499	C1500	C1501	C1502	U1503	C1504	C1505	C1506	A1507	A1508	C1509	A1509A	A1509B	C1510	C1511	C1512	C1513	A1514	C1515	C1516	C1517	C1518	C1519	C1520	C1523	C1524	C1525	C1526	C1527	A1528	A1528A	C1529	C1530	C1531	U1534	A1535	C1536	C1537	C1538	C1539	U1540	C1541	A1542	C1543	A1544	A1545	C1546	C1547				
G1426	A1427	C1428	C1429	C1430	U1431	C1432	U1433	A1434	C1435	C1436	C1437	U1438	A1439	C1440	C1441	C1442	C1443	A1444	C1445	A1446	C1447	C1448	C1449	C1450	C1450A	C1451	A1452	U1453	C1454	C1455	C1456	C1457	C1458	C1459	A1460	C1461	C1462	C1463	C1464	C1465	C1466	C1467	C1468	A1469	C1470	A1471	A1472	C1473	C1474	C1475	C1476	C1477	C1478	A1479	C1480	C1481	C1482	C1483	C1484	C1485		
A1366	A1367	C1368	C1369	C1370	C1371	C1372	A1373	C1374	C1375	C1376	C1377	A1378	A1379	C1380	C1381	C1382	C1383	A1384	C1385	C1386	C1387	C1388	C1389	C1390	U1391	C1392	A1393	C1394	A1395	C1396	C1397	C1398	C1399	C1400	C1401	C1402	C1403	C1404	C1405	U1406	C1407	C1408	C1409	C1410	C1411	A1412	C1413	C1414	U1415	C1416	C1417	C1418	A1419	U1420	C1421	C1422	C1423	C1424	C1425			
C1304	C1305	C1306	A1307	C1308	C1309	C1310	C1311	C1312	C1313	C1314	C1315	C1316	C1317	C1318	C1319	C1320	A1321	A1322	C1325	C1326	C1327	C1328	C1329	C1330	A1331	C1332	C1333	C1334	C1335	A1336	C1337	C1338	C1339	C1340	C1341	A1342	C1343	C1344	C1345	U1348	A1349	C1350	C1351	C1352	A1353	A1354	C1355	C1356	C1357	C1358	C1359	C1360	C1361	C1362	C1363	C1364	A1365					
G1243	G1244	C1245	A1246	C1247	C1248	U1249	C1250	C1251	C1252	A1253	A1254	U1255	C1256	C1257	C1258	C1259	C1260	C1261	A1262	U1263	C1264	A1265	C1266	C1267	A1268	C1269	C1270	C1271	A1272	U1273	A1274	A1275	C1276	C1277	A1278	C1279	C1280	C1281	U1282	G1285	A1286	A1287	U1288	C1289	C1290	C1291	U1292	C1293	U1294	C1295	C1296	C1297	C1298	C1299	U1300	A1301	A1302	C1303				
G1183	G1184	C1185	G1186	G1187	U1188	A1189	C1190	G1191	C1192	G1193	A1194	G1197	U1198	U1199	C1200	G1201	C1202	C1203	A1204	U1205	C1206	C1207	C1208	C1209	U1210	U1211	C1212	A1213	U1214	C1215	C1216	C1217	C1218	C1219	A1220	C1221	C1221A	C1222	G1223	C1224	G1225	A1226	G1227	G1228	G1229	C1230	C1231	U1232	C1233	U1234	G1235	G1236	A1237	G1238	U1239	U1240	A1241	A1242				
C1121	G1122	C1123	C1124	G1125	A1126	U1129	U1130	U1131	C1132	U1133	C1135	C1136	G1137	U1138	U1139	C1140	U1141	U1142	A1142A	G1143	C1144	C1145	G1146	C1147	A1148	C1149	C1150	C1151	C1152	C1153	G1154	A1155	A1156	C1157	C1158	U1159	C1160	C1161	G1162	C1163	U1164	C1165	C1166	U1167	G1168	C1169	G1170	G1171	C1173	A1174	U1175	G1176	A1177	C1178	C1179	C1180	C1181	A1182				
U1061	G1062	C1063	G1064	U1065	U1066	U1067	U1068	A1069	C1070	C1071	C1072	A1073	G1074	U1075	A1077	U1078	C1079	C1080	U1081	U1082	U1083	A1084	U1085	U1086	C1087	A1088	U1089	U1090	C1091	C1092	U1093	U1094	A1095	A1096	U1097	A1098	C1099	U1100	U1101	C1102	A1103	C1104	U1105	G1106	G1107	U1108	C1109	G1110	A1111	G1112	U1113	G1114	C1115	C1116	C1117	C1118	G1119	C1120				
G942	U943	G944	A945	G946	G947	G948	G949	G950	C951	G952	A953	G954	C955	G956	A957	U958	A959	A960	C961	G962	U963	G964	C965	G966	C967	G968	U969	C970	C971	G972	A973	G974	C975	G976	G977	G978	G979	A980	A981	G982	G983	A984	C985	G986	G987	A988	G989	A990	C991	C992	G993	G994	C995	G996	G997	G998	U999	A1000				
G879	G880	G881	G882	G883	C884	C885	C886	C887	C888	C889	A890	G892	C893	C894	U895	U896	A896	C897	A898	A899	A900	A901	C902	C903	C904	U905	G906	U907	C908	A909	A910	A911	C912	U913	C914	C915	C916	C917	A917	A918	G919	G920	G921	U922	A923	C924	C925	A926	G927	G928	U930	G931	C932	A933	G934	C935	G936	G937	G938	G939	G940	A941

C2619	C2559	U2438	A2378	G2318	C2258	C2185	U2122	A2062	A2001	C1880	G1750
C2620	C2560	A2439	G2379	G2319	G2259	G2186	G2123	C2063	G2002	C1881	C1751
A2621	A2561	C2440	C2380	A2320	C2260	C2187	G2124	C2064	G2003	C1882	C1752
G2624	G2562	C2441	G2381	G2321	C2261	C2188	G2125	C2065	C2006	G1883	G1753
G2625	G2563	C2442	G2382	A2322	C2262	U2189	A2126	G2066	C2007	A1884	C1754
G2626	A2564	C2443	G2383	G2323	C2263	G2190	G2127	C2067	C2008	A1885	A1755
G2627	A2565	G2444	G2384	C2324	C2264	G2191	C2128	U2068	C2009	C1886	G1756
G2628	A2566	G2445	C2385	G2325	U2265	G2192	C2129	G2069	G2010	C1887	U1757
A2629	G2568	G2446	A2387	A2327	A2267	G2193	U2130	G2070	U2011	G1888	G1758
G2630	G2569	A2448	A2388	A2328	A2268	C2194	G2131	A2071	A1950	A1889	A1759
G2631	G2570	U2449	G2389	G2329	A2269	C2195	U2132	G2072	G2012	A1900	A1760
A2632	U2510	A2450	U2390	G2330	G2270	G2196	G2133	C2073	A2013	G1891	C1761
G2633	C2512	A2451	G2391	G2331	G2271	A2198	A2134	U2074	A2014	C1892	G1762
G2634	G2513	C2452	A2392	U2332	U2272	C2137	C2135	U2075	A2015	C1893	G1763
G2635	G2514	A2453	A2393	A2333	A2273	C2138	U2117	U2076	U2016	C1894	G1764
U2636	C2515	G2454	C2394	G2334	A2274	C2139	G2136	U2077	U2017	C1895	C1765
U2637	G2516	G2455	C2395	A2335	C2275	G2140	C2145	C2078	G2018	G1896	C1766
G2638	G2517	U2456	G2396	A2336	G2276	G2141	G2146	U2079	A2019	C1897	C1767
A2639	A2518	U2457	G2397	G2337	G2277	C2142	C2147	G2080	A2020	U1898	U1768
G2640	U2519	G2458	U2398	G2338	A2278	A2208	G2148	G2081	C2021	G1899	G1769
G2641	C2520	A2459	G2399	G2339	A2279	U2218	U2149	A2082	U2022	A1900	C1770
G2642	U2521	U2460	G2400	G2340	G2280	G2220	U2144	C2083	G2023	A1901	C1771
G2643	G2581	C2461	U2401	G2341	C2281	G2221	C2145	G2084	G2024	G1831	C1772
G2644	G2582	U2462	C2402	C2342	G2282	G2222	G2146	G1964	C2025	G1903	A1773
G2645	U2584	C2463	C2403	C2343	C2283	G2223	G2147	C1965	C2026	G1904	C1774
U2646	U2585	G2464	G2404	U2344	C2284	G2224	G2148	A1966	G2027	C1905	U1775
U2647	G2586	C2465	G2405	G2345	C2285	G2225	G2149	C1967	U2028	G1906	G1776
A2648	A2587	G2466	U2406	A2346	A2286	C2226	U2150	G1968	G2029	C1907	C1777
U2649	G2588	C2467	G2407	C2347	A2287	G2151	G2152	A1969	C2030	G1908	U1778
U2650	G2589	U2468	U2408	U2348	A2288	G2228	G2153	U1970	C2031	G1909	U1779
C2651	A2590	G2469	C2409	G2349	G2289	C2229	G2154	A1971	G2032	G1910	A1780
C2652	C2591	G2470	G2410	C2350	C2290	G2230	G2155	A1972	U2033	U1911	C1781
G2653	G2592	C2471	A2411	G2351	U2291	G2231	G2156	G1973	G2034	G1912	C1782
A2654	U2593	G2472	A2412	A2352	C2292	U2232	C2157	C1974	C2035	A1913	A1783
G2655	C2594	U2473	G2413	C2353	C2293	G2233	A2158	G1975	G2036	C1914	A1784
U2656	G2595	C2474	G2414	G2354	C2294	G2234	G2159	U1976	G2037	U1915	A1785
A2657	U2596	G2475	G2415	C2355	C2295	G2235	G2160	A1977	G2038	A1916	A1786
C2658	G2597	A2476	C2416	C2356	U2296	G2236	C2161	A1978	C2039	U1917	A1787
G2659	A2598	C2477	G2417	U2357	C2297	G2237	G2162	G1979	C2040	A1918	C1788
G2660	G2599	A2478	A2418	G2358	A2298	G2238	C2163	G1980	U2041	A1919	A1789
C2661	A2600	G2479	U2419	C2359	G2299	G2239	C2164	A1981	C2042	C1920	C1790
G2662	C2601	G2480	C2420	A2360	G2300	A2240	G2165	C1982	C2043	G1921	A1791
A2663	A2602	G2481	A2421	G2361	C2301	A2241	U2167	C1983	C2044	U1922	G1792
G2664	G2603	G2482	A2422	G2362	G2302	G2242	G2168	G1984	C2045	C1923	C1793
C2665	U2604	C2483	U2423	C2363	G2303	G2243	A2169	G1985	G2046	C1924	U1794
C2666	G2605	G2484	C2424	C2364	G2304	U2244	C2170	A1986	U2047	C1925	C1795
C2667	U2606	G2485	A2425	G2365	A2305	G2245	A2171	G1987	G2048	U1926	G1796
G2668	C2607	G2486	A2426	G2366	C2306	G2246	U2172	C1988	C2049	A1927	C1797
G2669	U2608	G2487	G2427	G2367	G2307	A2247	A2173	G1989	C2050	U1928	U1798
G2670	G2609	A2488	C2428	C2368	G2308	C2248	C2174	C1990	A2051	G1929	G1799
G2671	C2610	G2489	A2429	A2369	A2309	U2249	G2175	U1991	G2052	C1930	C1800
A2672	U2611	U2490	U2430	G2370	A2310	G2250	C2177	G1992	G2053	U1931	G1801
G2673	G2612	U2491	A2431	G2371	A2311	G2251	U2178	U1993	A2054	G1862	A1802
A2674	U2613	G2492	U2432	G2372	G2312	G2252	G2179	C1994	C2055	G1863	A1803
G2675	G2614	U2493	A2433	G2373	U2313	G2253	C2180	U1995	G2056	U1864	C1804
C2676	A2615	G2494	A2434	G2374	C2314	G2254	G2181	G1996	A2057	G1865	U1805
G2677	U2616	G2495	A2435	C2375	G2315	C2255	G2182	G1997	A1936	C1866	C1806
C2678	A2617	C2496	A2436	G2376	G2316	G2256	C2183	G1998	A1937	G1878	U1807
C2679	G2618	G2497	G2436	A2377	C2317	U2257	G2184	G2000	U1939	C1879	A1809



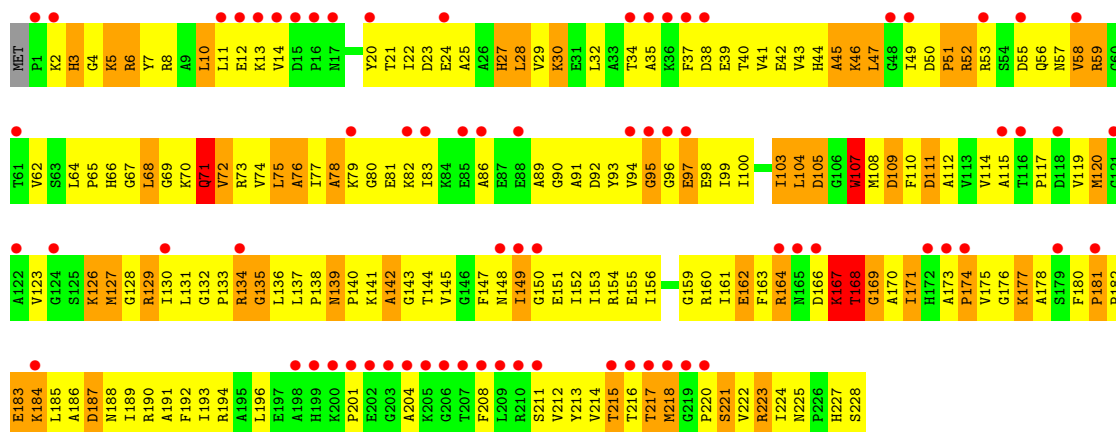
### • Molecule 36: 5S RIBOSOMAL RNA

Chain BB:



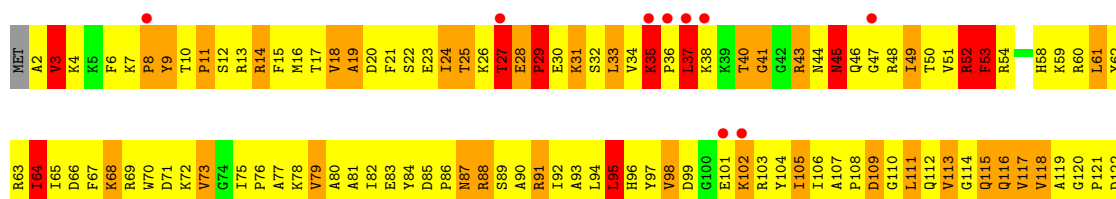
### • Molecule 37: 50S RIBOSOMAL PROTEIN L1

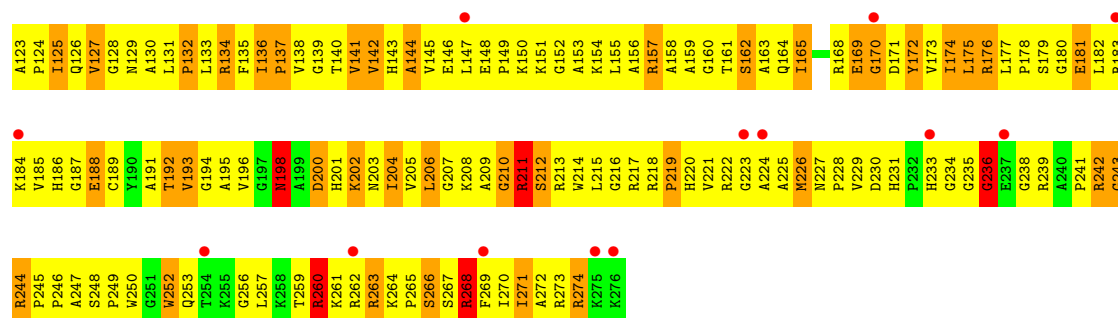
Chain BC:



### • Molecule 38: 50S RIBOSOMAL PROTEIN L2

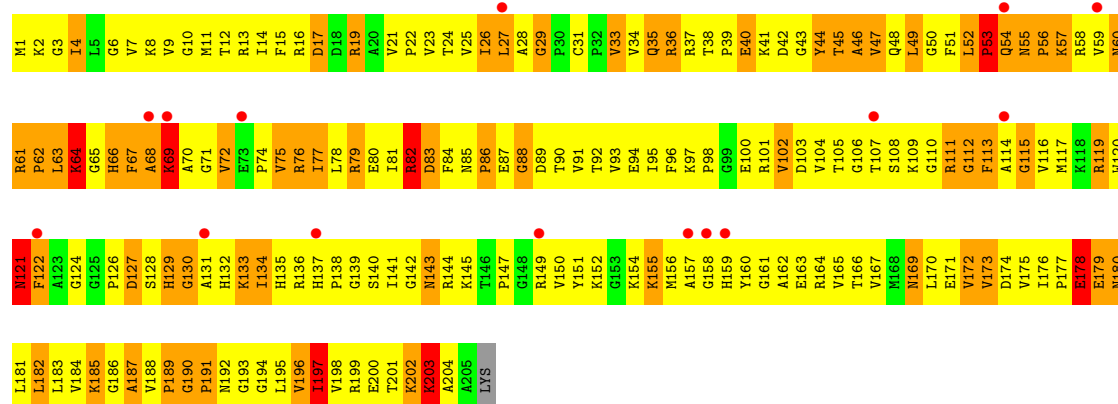
Chain BD:





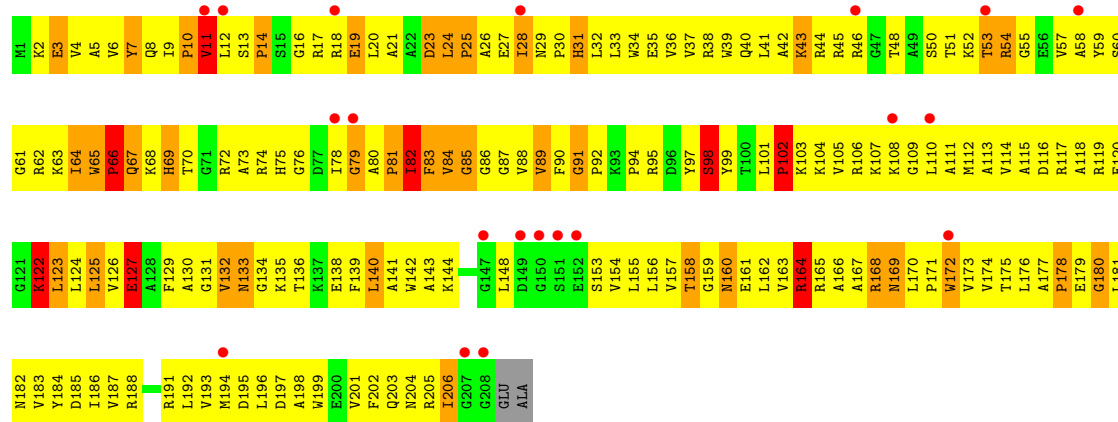
• Molecule 39: 50S RIBOSOMAL PROTEIN L3

Chain BE:



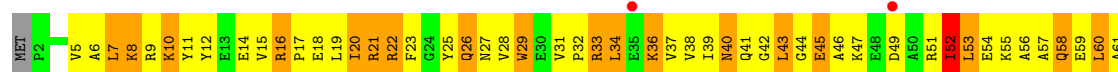
• Molecule 40: 50S RIBOSOMAL PROTEIN L4

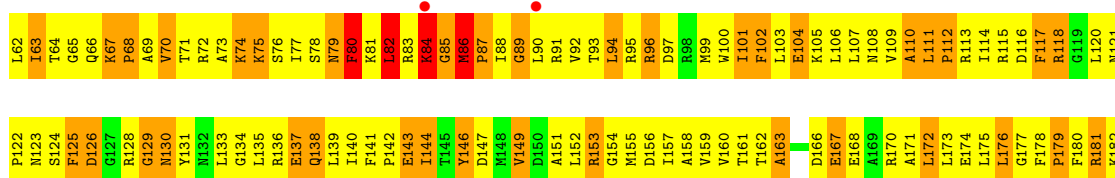
Chain BF:



• Molecule 41: 50S RIBOSOMAL PROTEIN L5

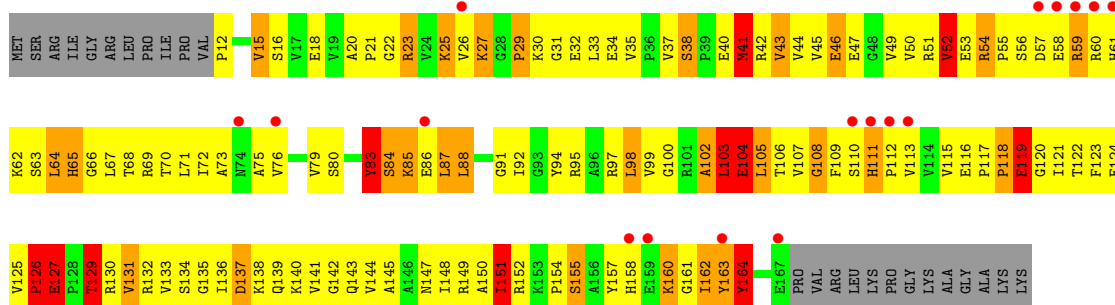
Chain BG:





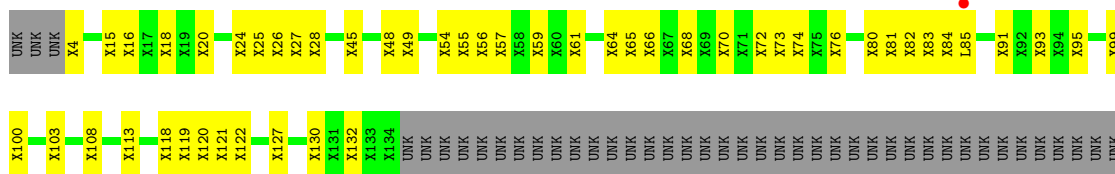
• Molecule 42: 50S RIBOSOMAL PROTEIN L6

Chain BH:



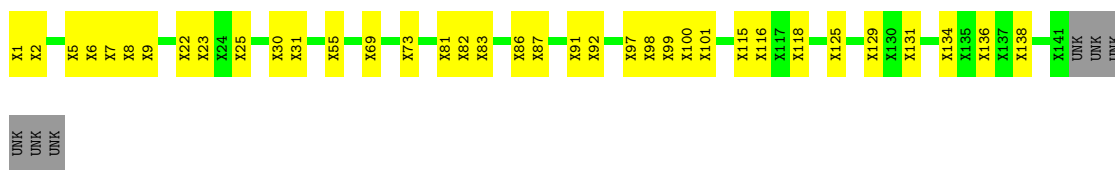
• Molecule 43: 50S RIBOSOMAL PROTEIN L10

Chain BJ:



• Molecule 44: 50S RIBOSOMAL PROTEIN L11

Chain BK:

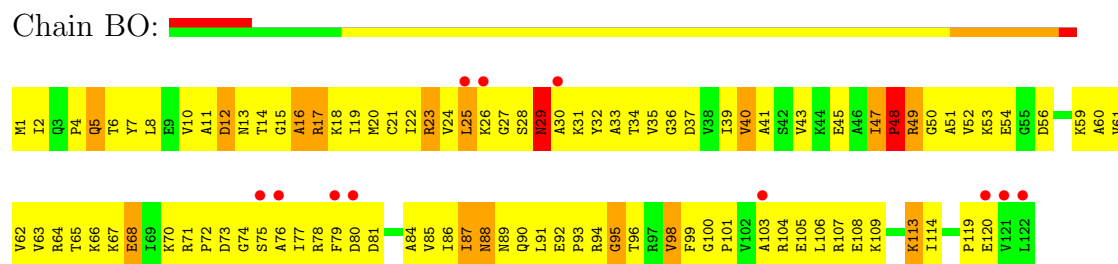


• Molecule 45: 50S RIBOSOMAL PROTEIN L13

Chain BN:



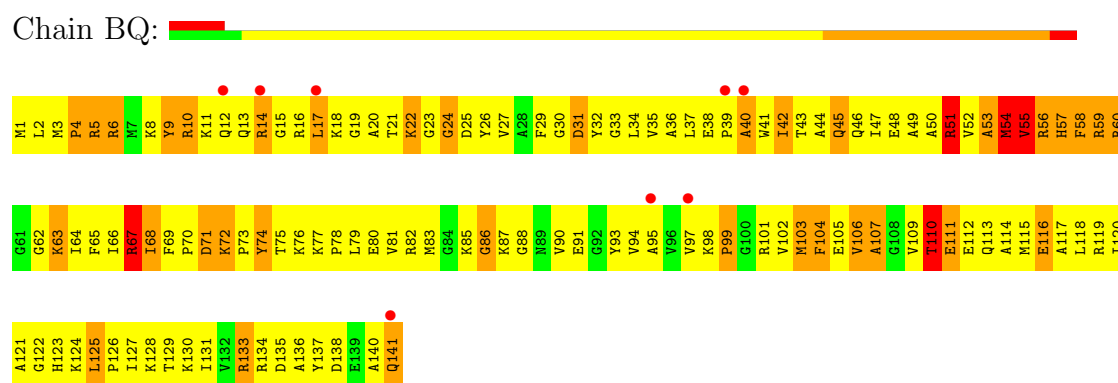
- Molecule 46: 50S RIBOSOMAL PROTEIN L14



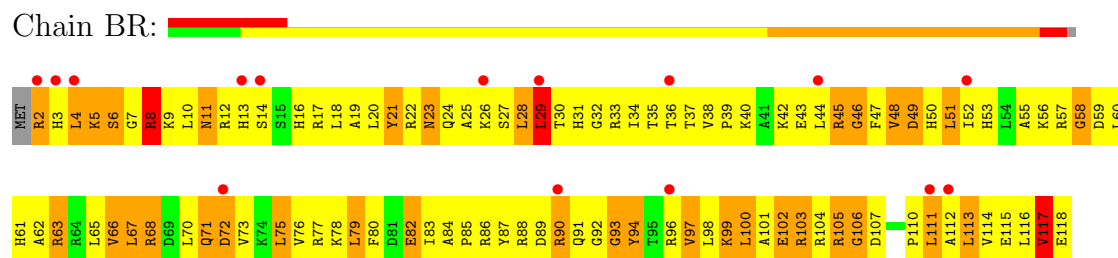
- Molecule 47: 50S RIBOSOMAL PROTEIN L15



- Molecule 48: 50S RIBOSOMAL PROTEIN L16



- Molecule 49: 50S RIBOSOMAL PROTEIN L17



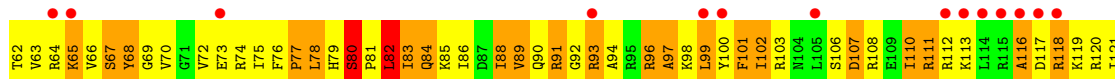
- Molecule 50: 50S RIBOSOMAL PROTEIN L18





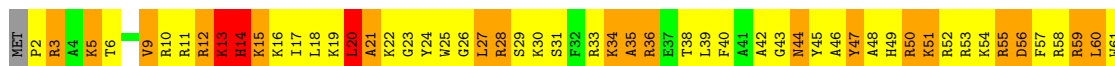
• Molecule 51: 50S RIBOSOMAL PROTEIN L19

Chain BT:



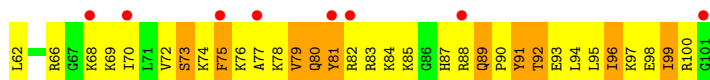
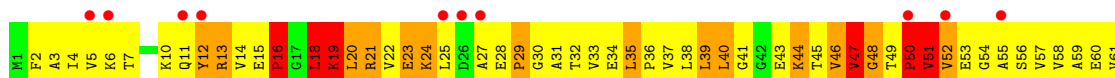
• Molecule 52: 50S RIBOSOMAL PROTEIN L20

Chain BU:



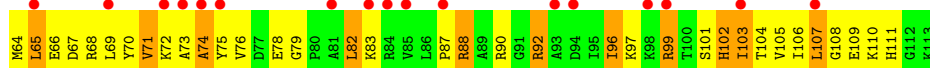
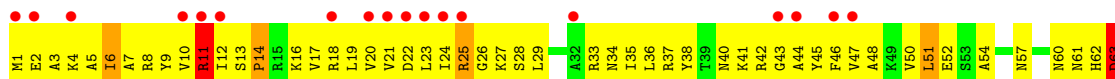
• Molecule 53: 50S RIBOSOMAL PROTEIN L21

Chain BV:



• Molecule 54: 50S RIBOSOMAL PROTEIN L22

Chain BW:



• Molecule 55: 50S RIBOSOMAL PROTEIN L23

Chain BX:





## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	204.70Å 229.30Å 307.00Å 90.00° 90.17° 90.00°	Depositor
Resolution (Å)	44.90 – 3.80 44.91 – 3.60	Depositor EDS
% Data completeness (in resolution range)	98.7 (44.90-3.80) 96.6 (44.91-3.60)	Depositor EDS
$R_{merge}$	0.18	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.70 (at 3.57Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.293 , 0.351 0.287 , 0.338	Depositor DCC
$R_{free}$ test set	6543 reflections (2.07%)	DCC
Wilson B-factor (Å <sup>2</sup> )	110.2	Xtriage
Anisotropy	0.390	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.16 , -3.9	EDS
Estimated twinning fraction	0.166 for h,-k,-l	Xtriage
L-test for twinning	$\langle  L  \rangle = 0.31$ , $\langle L^2 \rangle = 0.15$	Xtriage
Outliers	6 of 2273458 reflections (0.000%)	Xtriage
$F_o, F_c$ correlation	0.90	EDS
Total number of atoms	151017	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	147.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.32% 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: GCP

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	0.79	12/36190 (0.0%)	0.89	56/56486 (0.1%)
2	AB	0.62	0/1936	0.96	1/2611 (0.0%)
3	AC	0.60	0/1637	0.93	3/2207 (0.1%)
4	AD	0.50	0/1733	0.86	2/2318 (0.1%)
5	AE	0.63	0/1163	0.94	1/1566 (0.1%)
6	AF	0.56	0/856	0.88	0/1154
7	AG	0.59	0/1276	0.85	0/1709
8	AH	0.56	0/1136	0.91	1/1527 (0.1%)
9	AI	0.56	0/1029	0.83	0/1378
10	AJ	0.59	0/808	0.88	0/1087
11	AK	0.57	0/900	0.89	0/1213
12	AL	0.59	0/987	1.01	2/1322 (0.2%)
13	AM	0.59	0/999	0.95	0/1338
14	AN	0.71	0/501	1.03	1/664 (0.2%)
15	AO	0.65	0/745	0.86	0/992
16	AP	0.53	0/717	0.88	0/965
17	AQ	0.61	0/837	0.92	1/1119 (0.1%)
18	AR	0.60	0/579	0.89	1/768 (0.1%)
19	AS	0.68	0/643	0.91	1/867 (0.1%)
20	AT	0.54	0/765	0.80	0/1007
21	AU	0.70	0/213	0.95	1/279 (0.4%)
22	AV	0.65	0/1832	0.82	0/2855
23	AX	0.66	0/216	0.77	0/335
24	AY	1.05	19/4005 (0.5%)	1.16	32/5407 (0.6%)
25	B0	0.61	0/671	0.98	2/892 (0.2%)
26	B1	0.49	0/739	0.85	0/983
27	B2	0.51	0/600	0.82	0/793
28	B3	0.57	0/473	0.93	0/636
29	B4	0.69	0/350	0.80	0/476
30	B5	0.64	0/473	0.89	0/639
31	B6	0.79	0/440	1.09	2/586 (0.3%)
32	B7	0.53	0/427	0.79	0/563

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
33	B8	0.68	0/516	0.92	0/681
34	B9	0.53	0/310	0.85	0/407
35	BA	0.76	16/69976 (0.0%)	0.86	82/109244 (0.1%)
36	BB	0.76	1/2853 (0.0%)	0.89	5/4451 (0.1%)
37	BC	0.81	4/1775 (0.2%)	0.94	4/2392 (0.2%)
38	BD	0.69	0/2195	1.07	9/2955 (0.3%)
39	BE	0.59	0/1597	0.95	1/2155 (0.0%)
40	BF	0.61	0/1659	0.88	0/2246
41	BG	0.58	0/1499	0.92	3/2016 (0.1%)
42	BH	0.66	0/1211	0.88	0/1636
43	BJ	0.53	0/7	0.70	0/8
45	BN	0.57	0/1132	0.91	1/1527 (0.1%)
46	BO	0.60	0/943	0.90	0/1269
47	BP	0.57	0/1131	1.08	6/1504 (0.4%)
48	BQ	0.63	0/1143	1.00	3/1527 (0.2%)
49	BR	0.49	0/974	0.92	1/1302 (0.1%)
50	BS	0.66	0/779	1.12	6/1038 (0.6%)
51	BT	0.60	0/1156	0.92	3/1544 (0.2%)
52	BU	0.63	0/975	0.91	1/1297 (0.1%)
53	BV	0.54	0/790	0.97	2/1057 (0.2%)
54	BW	0.59	0/907	0.82	0/1216
55	BX	0.63	0/740	0.83	1/995 (0.1%)
56	BY	0.61	0/789	0.90	0/1053
57	BZ	0.62	0/1435	0.95	0/1949
All	All	0.73	52/162368 (0.0%)	0.89	235/242211 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	3	125
9	AI	0	1
11	AK	0	1
17	AQ	0	1
21	AU	0	1
22	AV	0	5
24	AY	0	5
30	B5	0	1
35	BA	3	160
36	BB	0	12

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	#Chirality outliers	#Planarity outliers
42	BH	0	1
45	BN	0	1
48	BQ	0	1
53	BV	0	1
All	All	6	316

All (52) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	AY	191	TYR	CE2-CZ	11.85	1.53	1.38
24	AY	189	GLU	CG-CD	-10.57	1.36	1.51
24	AY	191	TYR	CD1-CE1	10.46	1.55	1.39
24	AY	504	ILE	C-N	-9.62	1.11	1.34
24	AY	444	LEU	C-N	-9.54	1.12	1.34
1	AA	1318	A	C5-C6	9.29	1.49	1.41
24	AY	191	TYR	CZ-OH	-8.75	1.23	1.37
37	BC	127	MET	CG-SD	8.54	2.03	1.81
24	AY	109	CYS	CB-SG	8.32	1.96	1.82
24	AY	16	PHE	CE2-CZ	8.14	1.52	1.37
35	BA	2458	G	C5-C6	-7.35	1.35	1.42
24	AY	307	MET	CG-SD	7.30	2.00	1.81
1	AA	933	G	N9-C4	7.23	1.43	1.38
35	BA	1930	G	N1-C2	-6.59	1.32	1.37
37	BC	120	MET	CG-SD	6.58	1.98	1.81
37	BC	218	MET	CG-SD	6.56	1.98	1.81
35	BA	671	C	N1-C2	6.52	1.46	1.40
1	AA	1202	G	C5-C6	-6.38	1.35	1.42
35	BA	2106	G	C3'-O3'	6.33	1.51	1.42
35	BA	2457	U	N1-C2	6.32	1.44	1.38
1	AA	1157	A	C5-C6	6.17	1.46	1.41
24	AY	108	CYS	CB-SG	6.01	1.92	1.82
35	BA	2457	U	C2-O2	6.01	1.27	1.22
24	AY	189	GLU	C-O	5.97	1.34	1.23
24	AY	149	ARG	C-O	5.95	1.34	1.23
35	BA	809	G	C3'-O3'	5.88	1.50	1.42
1	AA	1395	C	N1-C2	5.83	1.46	1.40
35	BA	2035	G	C3'-O3'	5.80	1.50	1.42
35	BA	2200	C	N1-C2	5.79	1.46	1.40
24	AY	16	PHE	CE1-CZ	5.61	1.48	1.37
1	AA	573	A	C3'-O3'	5.56	1.50	1.42
35	BA	1940	U	N1-C2	5.54	1.43	1.38
24	AY	321	VAL	CB-CG1	-5.45	1.41	1.52

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	AY	502	ALA	C-N	5.45	1.46	1.34
35	BA	989	G	N9-C4	5.42	1.42	1.38
1	AA	1324	A	C5-C6	-5.39	1.36	1.41
24	AY	189	GLU	CB-CG	-5.33	1.42	1.52
35	BA	2458	G	N3-C4	-5.25	1.31	1.35
35	BA	207	A	C5-C6	-5.21	1.36	1.41
24	AY	21	HIS	C-O	5.20	1.33	1.23
1	AA	1318	A	N9-C4	5.18	1.41	1.37
35	BA	2029	G	C5-C6	-5.16	1.37	1.42
1	AA	1370	G	N1-C2	5.15	1.41	1.37
24	AY	63	GLU	CB-CG	-5.11	1.42	1.52
1	AA	921	U	N1-C2	5.08	1.43	1.38
35	BA	2392	A	C5-C6	-5.07	1.36	1.41
35	BA	2490	G	N3-C4	-5.06	1.31	1.35
36	BB	56	G	C3'-O3'	5.06	1.49	1.42
37	BC	107	TRP	CB-CG	5.04	1.59	1.50
24	AY	191	TYR	CD2-CE2	5.04	1.47	1.39
1	AA	428	G	C5-C6	5.03	1.47	1.42
1	AA	1231	G	N9-C4	5.02	1.42	1.38

All (235) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	AY	191	TYR	CB-CG-CD1	-18.01	110.19	121.00
24	AY	307	MET	CG-SD-CE	13.35	121.55	100.20
24	AY	319	ARG	NE-CZ-NH1	12.45	126.52	120.30
24	AY	504	ILE	C-N-CA	-12.18	91.26	121.70
1	AA	1498	U	C2'-C3'-O3'	11.78	135.42	109.50
24	AY	191	TYR	CB-CG-CD2	11.08	127.65	121.00
24	AY	191	TYR	CD1-CE1-CZ	-10.61	110.25	119.80
24	AY	504	ILE	O-C-N	10.18	138.99	122.70
24	AY	504	ILE	CA-C-N	-9.86	95.51	117.20
24	AY	319	ARG	NE-CZ-NH2	-9.85	115.38	120.30
35	BA	1799	G	C2'-C3'-O3'	9.79	131.03	109.50
24	AY	126	LEU	CB-CG-CD1	-9.58	94.71	111.00
35	BA	1300	U	C2'-C3'-O3'	9.55	130.51	109.50
53	BV	18	LEU	CA-CB-CG	9.47	137.08	115.30
47	BP	52	GLU	N-CA-C	9.33	136.20	111.00
1	AA	1049	U	C2'-C3'-O3'	9.24	129.84	109.50
24	AY	393	PHE	N-CA-C	9.24	135.96	111.00
35	BA	1819	A	C2'-C3'-O3'	9.18	129.69	109.50
1	AA	1399	C	C2'-C3'-O3'	9.04	129.40	109.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	428	G	C2'-C3'-O3'	8.97	129.24	109.50
1	AA	961	U	N1-C1'-C2'	-8.78	102.34	112.00
35	BA	1992	G	C2'-C3'-O3'	8.60	128.43	109.50
1	AA	1504	G	C2'-C3'-O3'	8.48	128.17	109.50
1	AA	508	C	C2'-C3'-O3'	8.19	127.51	109.50
1	AA	1325	C	C5'-C4'-C3'	-8.15	102.96	116.00
38	BD	132	PRO	N-CA-C	-8.10	91.05	112.10
35	BA	387	U	C2'-C3'-O3'	8.06	127.23	109.50
24	AY	321	VAL	CG1-CB-CG2	-8.05	98.02	110.90
1	AA	792	A	C2'-C3'-O3'	7.91	126.89	109.50
35	BA	2128	C	N1-C1'-C2'	-7.57	103.67	112.00
38	BD	210	GLY	N-CA-C	-7.50	94.36	113.10
52	BU	74	LEU	CA-CB-CG	7.50	132.54	115.30
35	BA	669	G	N9-C1'-C2'	7.40	123.62	114.00
35	BA	945	A	C1'-O4'-C4'	-7.40	103.98	109.90
1	AA	1529	G	N9-C1'-C2'	7.39	123.61	114.00
35	BA	2346	A	N9-C1'-C2'	7.16	123.31	114.00
24	AY	363	ASP	CB-CG-OD2	-7.14	111.87	118.30
47	BP	28	GLY	N-CA-C	-7.10	95.34	113.10
1	AA	243	A	N9-C1'-C2'	7.09	123.22	114.00
1	AA	686	U	N1-C1'-C2'	7.09	123.22	114.00
1	AA	927	G	N9-C1'-C2'	-7.08	104.22	112.00
35	BA	989	G	O4'-C1'-N9	7.03	113.83	108.20
1	AA	896	C	N1-C1'-C2'	-6.99	104.31	112.00
36	BB	67	G	N9-C1'-C2'	-6.94	104.36	112.00
35	BA	1012	U	N1-C1'-C2'	6.91	122.98	114.00
1	AA	1283	G	N9-C1'-C2'	-6.86	104.46	112.00
24	AY	76	GLN	CA-CB-CG	-6.82	98.40	113.40
35	BA	945	A	C5'-C4'-O4'	6.78	117.23	109.10
37	BC	68	LEU	CA-CB-CG	6.75	130.83	115.30
24	AY	189	GLU	CA-CB-CG	-6.72	98.61	113.40
35	BA	2756	U	C2'-C3'-O3'	6.71	124.44	113.70
35	BA	783	A	N9-C1'-C2'	-6.70	104.63	112.00
1	AA	1159	U	N1-C1'-C2'	6.65	122.64	114.00
35	BA	945	A	N9-C1'-C2'	6.60	122.58	114.00
1	AA	931	C	N1-C1'-C2'	-6.51	104.84	112.00
35	BA	199	A	C5'-C4'-O4'	6.47	116.87	109.10
35	BA	864	G	N9-C1'-C2'	6.42	122.35	114.00
35	BA	1495	A	N9-C1'-C2'	6.42	122.35	114.00
35	BA	2314	C	N1-C1'-C2'	-6.40	104.96	112.00
1	AA	341	C	N1-C1'-C2'	-6.39	104.97	112.00
24	AY	37	GLY	N-CA-C	-6.39	97.13	113.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	256	A	N9-C1'-C2'	-6.37	104.99	112.00
47	BP	41	ARG	N-CA-C	-6.37	93.81	111.00
49	BR	111	LEU	CA-CB-CG	6.30	129.79	115.30
17	AQ	84	LEU	CA-CB-CG	-6.30	100.81	115.30
35	BA	1248	G	N9-C1'-C2'	6.29	122.18	114.00
48	BQ	33	GLY	N-CA-C	6.28	128.81	113.10
50	BS	54	LEU	N-CA-C	-6.26	94.08	111.00
1	AA	1289	A	N9-C1'-C2'	-6.26	105.12	112.00
35	BA	801	G	N9-C1'-C2'	6.24	122.11	114.00
35	BA	1835	G	C5'-C4'-C3'	-6.23	106.03	116.00
35	BA	527	C	N1-C1'-C2'	6.22	122.09	114.00
1	AA	902	G	N9-C1'-C2'	-6.22	105.16	112.00
1	AA	960	U	N1-C1'-C2'	6.21	122.08	114.00
50	BS	50	SER	N-CA-C	6.21	127.77	111.00
1	AA	1345	U	N1-C1'-C2'	6.19	122.05	114.00
1	AA	197	A	N9-C1'-C2'	6.19	122.05	114.00
1	AA	266	G	C2'-C3'-O3'	6.18	123.59	113.70
47	BP	53	GLY	N-CA-C	-6.17	97.67	113.10
2	AB	51	LEU	CA-CB-CG	-6.17	101.11	115.30
35	BA	654(I)	C	N1-C1'-C2'	6.17	122.02	114.00
38	BD	236	GLY	N-CA-C	-6.15	97.72	113.10
25	B0	13	GLY	N-CA-C	6.15	128.47	113.10
24	AY	191	TYR	CG-CD1-CE1	6.14	126.22	121.30
38	BD	260	ARG	NE-CZ-NH2	-6.14	117.23	120.30
24	AY	324	LYS	CA-CB-CG	-6.13	99.92	113.40
35	BA	1280	G	N9-C1'-C2'	-6.12	105.27	112.00
35	BA	2200	C	C5'-C4'-C3'	-6.12	106.21	116.00
35	BA	1187	G	N9-C1'-C2'	6.11	121.94	114.00
24	AY	392	ASN	C-N-CA	6.06	136.84	121.70
24	AY	393	PHE	CA-C-N	-6.03	103.93	117.20
35	BA	1970	A	C1'-O4'-C4'	-6.00	105.10	109.90
12	AL	119	LYS	N-CA-C	-6.00	94.81	111.00
3	AC	101	LEU	CA-CB-CG	-5.99	101.53	115.30
41	BG	34	LEU	CA-CB-CG	5.98	129.04	115.30
35	BA	1812	A	N9-C1'-C2'	-5.97	105.43	112.00
35	BA	2897	U	C2'-C3'-O3'	5.97	123.25	113.70
51	BT	80	SER	N-CA-C	5.96	127.08	111.00
51	BT	82	LEU	CA-CB-CG	5.95	128.98	115.30
1	AA	724	G	N9-C1'-C2'	-5.94	105.47	112.00
35	BA	479	A	N9-C1'-C2'	5.94	121.72	114.00
5	AE	125	SER	N-CA-C	-5.94	94.97	111.00
35	BA	1847	A	O5'-P-OP1	-5.91	100.38	105.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	895	G	O4'-C1'-N9	5.90	112.92	108.20
39	BE	49	LEU	CA-CB-CG	5.89	128.85	115.30
48	BQ	72	LYS	N-CA-C	-5.88	95.12	111.00
1	AA	1181	G	N9-C1'-C2'	5.88	121.64	114.00
41	BG	89	GLY	N-CA-C	-5.88	98.40	113.10
3	AC	33	LEU	CA-CB-CG	-5.87	101.79	115.30
35	BA	2187	G	N9-C1'-C2'	-5.87	105.54	112.00
35	BA	2422	A	C2'-C3'-O3'	5.83	123.03	113.70
35	BA	1060	U	C2'-C3'-O3'	5.76	122.92	113.70
3	AC	43	LEU	CA-CB-CG	-5.76	102.05	115.30
35	BA	2821	A	N9-C1'-C2'	-5.75	105.67	112.00
35	BA	1698	A	O4'-C1'-N9	5.74	112.79	108.20
24	AY	393	PHE	CB-CG-CD1	5.71	124.80	120.80
35	BA	2238	G	C5'-C4'-O4'	-5.71	102.25	109.10
41	BG	94	LEU	CA-CB-CG	-5.70	102.18	115.30
55	BX	57	LEU	CA-CB-CG	5.70	128.41	115.30
35	BA	1944	U	N1-C1'-C2'	5.70	121.40	114.00
35	BA	1131	G	N9-C1'-C2'	5.68	121.39	114.00
1	AA	60	A	C2'-C3'-O3'	5.67	122.77	113.70
1	AA	1325	C	C2'-C3'-O3'	5.67	122.77	113.70
31	B6	45	LYS	N-CA-C	5.63	126.21	111.00
37	BC	75	LEU	CA-CB-CG	5.59	128.15	115.30
35	BA	2114	A	N9-C1'-C2'	-5.58	105.86	112.00
1	AA	1302	U	N1-C1'-C2'	5.58	121.25	114.00
35	BA	968	G	N9-C1'-C2'	-5.58	105.87	112.00
35	BA	1689	A	N9-C1'-C2'	-5.58	105.87	112.00
50	BS	39	ILE	N-CA-C	-5.56	95.99	111.00
24	AY	86	LEU	CB-CG-CD2	-5.56	101.55	111.00
25	B0	21	LEU	CA-CB-CG	5.55	128.06	115.30
1	AA	1179	A	N9-C1'-C2'	-5.54	105.91	112.00
36	BB	16	G	N9-C1'-C2'	-5.54	105.91	112.00
35	BA	199	A	C5'-C4'-C3'	5.53	124.85	116.00
36	BB	35	U	N1-C1'-C2'	5.53	121.19	114.00
1	AA	1504	G	OP2-P-O3'	5.52	117.35	105.20
18	AR	40	LEU	CA-CB-CG	-5.52	102.60	115.30
24	AY	260	LEU	CB-CG-CD2	-5.52	101.62	111.00
35	BA	1935	G	N9-C1'-C2'	-5.51	105.93	112.00
1	AA	573	A	N9-C1'-C2'	5.51	121.16	114.00
35	BA	2035	G	C5'-C4'-O4'	5.50	115.70	109.10
1	AA	1188	A	C5'-C4'-C3'	-5.50	107.20	116.00
1	AA	1498	U	N1-C1'-C2'	5.49	121.14	114.00
35	BA	2346	A	O4'-C1'-N9	5.49	112.59	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1395	C	N1-C1'-C2'	5.49	121.13	114.00
35	BA	272(B)	G	N9-C1'-C2'	-5.48	105.97	112.00
35	BA	2791	C	N1-C1'-C2'	5.48	121.12	114.00
35	BA	1963	U	N1-C1'-C2'	5.47	121.11	114.00
38	BD	8	PRO	N-CA-C	5.46	126.30	112.10
31	B6	36	LEU	CA-CB-CG	5.46	127.86	115.30
37	BC	174	PRO	N-CA-C	5.44	126.24	112.10
37	BC	129	ARG	N-CA-C	-5.43	96.33	111.00
35	BA	2110	G	C2'-C3'-O3'	5.43	122.39	113.70
38	BD	211	ARG	N-CA-C	-5.43	96.34	111.00
1	AA	1408	A	C5'-C4'-O4'	-5.42	102.59	109.10
36	BB	75	G	C2'-C3'-O3'	5.41	122.35	113.70
35	BA	2880	C	N1-C1'-C2'	5.38	121.00	114.00
21	AU	15	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	AA	813	U	N1-C1'-C2'	5.37	120.98	114.00
1	AA	770	C	O4'-C1'-N1	5.37	112.49	108.20
1	AA	970	C	O4'-C1'-N1	5.36	112.49	108.20
35	BA	2179	C	OP1-P-O3'	5.35	116.97	105.20
1	AA	1130	A	N9-C1'-C2'	-5.34	106.12	112.00
24	AY	393	PHE	C-N-CA	5.33	135.04	121.70
4	AD	12	CYS	N-CA-C	-5.33	96.61	111.00
38	BD	136	ILE	N-CA-C	-5.33	96.61	111.00
35	BA	2508	G	N9-C1'-C2'	-5.33	106.14	112.00
35	BA	1141	U	N1-C1'-C2'	5.33	120.92	114.00
35	BA	331	A	C2'-C3'-O3'	5.33	122.22	113.70
35	BA	2365	G	N9-C1'-C2'	5.32	120.92	114.00
47	BP	47	ASP	C-N-CD	-5.32	108.89	120.60
1	AA	703	G	OP1-P-O3'	5.32	116.89	105.20
35	BA	443	A	N9-C1'-C2'	5.31	120.91	114.00
53	BV	20	LEU	CA-CB-CG	5.31	127.52	115.30
4	AD	32	ALA	N-CA-C	-5.31	96.67	111.00
35	BA	271(Q)	G	C5'-C4'-C3'	-5.29	107.53	116.00
50	BS	104	GLY	N-CA-C	-5.29	99.87	113.10
35	BA	2027	G	O4'-C1'-N9	5.29	112.43	108.20
24	AY	126	LEU	CB-CG-CD2	5.28	119.98	111.00
1	AA	895	G	C5'-C4'-O4'	5.27	115.43	109.10
1	AA	173	U	N1-C1'-C2'	5.26	120.83	114.00
24	AY	444	LEU	O-C-N	-5.26	114.29	122.70
35	BA	2504	U	N1-C1'-C2'	-5.25	106.22	112.00
35	BA	2035	G	C1'-O4'-C4'	-5.25	105.70	109.90
1	AA	388	G	N9-C1'-C2'	5.24	120.81	114.00
19	AS	15	LEU	CA-CB-CG	5.24	127.35	115.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	AY	393	PHE	CA-C-O	5.24	131.10	120.10
35	BA	1272	A	N9-C1'-C2'	5.23	120.80	114.00
8	AH	79	VAL	N-CA-C	-5.22	96.89	111.00
35	BA	972	G	N9-C1'-C2'	5.22	120.79	114.00
35	BA	1787	A	C5'-C4'-C3'	-5.22	107.65	116.00
35	BA	30	G	N9-C1'-C2'	5.21	120.77	114.00
35	BA	265	A	N9-C1'-C2'	5.21	120.77	114.00
50	BS	15	ARG	NE-CZ-NH2	-5.21	117.70	120.30
1	AA	1108	G	OP2-P-O3'	5.20	116.64	105.20
35	BA	1215	G	N9-C1'-C2'	-5.19	106.29	112.00
1	AA	24	U	N1-C1'-C2'	-5.19	106.29	112.00
1	AA	1239	A	C2'-C3'-O3'	5.18	121.99	113.70
47	BP	66	GLY	N-CA-C	-5.18	100.16	113.10
36	BB	56	G	N9-C1'-C2'	5.17	120.72	114.00
35	BA	1558	A	C2'-C3'-O3'	5.17	121.97	113.70
35	BA	748	G	N9-C1'-C2'	5.16	120.71	114.00
51	BT	59	THR	N-CA-C	-5.16	97.07	111.00
1	AA	1281	U	N1-C1'-C2'	5.16	120.70	114.00
24	AY	109	CYS	CA-CB-SG	5.16	123.28	114.00
1	AA	115	G	C2'-C3'-O3'	5.15	121.94	113.70
35	BA	1519	G	C5'-C4'-C3'	-5.15	107.76	116.00
35	BA	989	G	N9-C1'-C2'	5.14	120.68	114.00
38	BD	95	LEU	CA-CB-CG	5.13	127.10	115.30
35	BA	1858	G	N9-C1'-C2'	5.12	120.65	114.00
35	BA	2255	G	N9-C1'-C2'	-5.12	106.37	112.00
1	AA	30	U	C2'-C3'-O3'	5.11	121.88	113.70
50	BS	92	TYR	CA-CB-CG	5.11	123.11	113.40
1	AA	1138	G	N9-C1'-C2'	5.11	120.64	114.00
38	BD	53	PHE	N-CA-C	5.11	124.80	111.00
35	BA	135	G	N9-C1'-C2'	-5.11	106.38	112.00
1	AA	928	G	N9-C1'-C2'	-5.10	106.39	112.00
24	AY	393	PHE	CB-CG-CD2	-5.10	117.23	120.80
35	BA	613	G	C5'-C4'-O4'	-5.09	102.99	109.10
24	AY	490	GLU	N-CA-C	-5.08	97.27	111.00
1	AA	167	G	N9-C1'-C2'	-5.07	106.42	112.00
35	BA	2035	G	N9-C1'-C2'	5.07	120.59	114.00
35	BA	783	A	C4'-C3'-O3'	5.07	123.14	113.00
35	BA	1300	U	C4'-C3'-O3'	5.07	123.13	113.00
14	AN	31	ARG	NE-CZ-NH2	-5.05	117.78	120.30
1	AA	362	G	N9-C1'-C2'	-5.04	106.46	112.00
24	AY	166	CYS	CA-CB-SG	-5.04	104.93	114.00
24	AY	188	ASP	CB-CG-OD2	-5.04	113.77	118.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	576	U	C5'-C4'-C3'	-5.03	107.95	116.00
48	BQ	5	ARG	N-CA-C	-5.03	97.42	111.00
12	AL	43	VAL	N-CA-C	5.01	124.53	111.00
45	BN	41	ASP	N-CA-C	-5.01	97.47	111.00
1	AA	508	C	C4'-C3'-C2'	5.01	107.61	102.60
35	BA	1277	G	N9-C1'-C2'	-5.00	106.50	112.00

All (6) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	1049	U	C3'
1	AA	1399	C	C3'
1	AA	1498	U	C3'
35	BA	1300	U	C3'
35	BA	1799	G	C3'
35	BA	1819	A	C3'

All (316) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1048	G	Sidechain
1	AA	1056	U	Sidechain
1	AA	1074	G	Sidechain
1	AA	1077	G	Sidechain
1	AA	1084	G	Sidechain
1	AA	1085	U	Sidechain
1	AA	1095	U	Sidechain
1	AA	1104	G	Sidechain
1	AA	1118	C	Sidechain
1	AA	1124	G	Sidechain
1	AA	1126	U	Sidechain
1	AA	1136	U	Sidechain
1	AA	1138	G	Sidechain
1	AA	1149	C	Sidechain
1	AA	1154	G	Sidechain
1	AA	1166	G	Sidechain
1	AA	1174	G	Sidechain
1	AA	1181	G	Sidechain
1	AA	1182	G	Sidechain
1	AA	1186	G	Sidechain
1	AA	119	A	Sidechain
1	AA	1194	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	1196	U	Sidechain
1	AA	12	U	Sidechain
1	AA	1205	U	Sidechain
1	AA	1216	G	Sidechain
1	AA	1220	G	Sidechain
1	AA	1225	A	Sidechain
1	AA	1231	G	Sidechain
1	AA	1235	U	Sidechain
1	AA	1268	A	Sidechain
1	AA	1277	C	Sidechain
1	AA	1281	U	Sidechain
1	AA	1283	G	Sidechain
1	AA	1300	G	Sidechain
1	AA	1305	G	Sidechain
1	AA	1309	G	Sidechain
1	AA	1317	C	Sidechain
1	AA	1319	A	Sidechain
1	AA	1322	C	Sidechain
1	AA	1323	G	Sidechain
1	AA	1331	G	Sidechain
1	AA	1338	G	Sidechain
1	AA	1345	U	Sidechain
1	AA	1361	G	Sidechain
1	AA	1364	U	Sidechain
1	AA	1368	G	Sidechain
1	AA	1370	G	Sidechain
1	AA	1374	A	Sidechain
1	AA	1393	U	Sidechain
1	AA	1396	A	Sidechain
1	AA	1408	A	Sidechain
1	AA	1409	C	Sidechain
1	AA	1442	G	Sidechain
1	AA	1481	U	Sidechain
1	AA	1498	U	Sidechain
1	AA	1501	C	Sidechain
1	AA	1512	U	Sidechain
1	AA	1519	A	Sidechain
1	AA	1528	U	Sidechain
1	AA	17	U	Sidechain
1	AA	19	C	Sidechain
1	AA	197	A	Sidechain
1	AA	226	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	239	U	Sidechain
1	AA	253	U	Sidechain
1	AA	257	G	Sidechain
1	AA	266	G	Sidechain
1	AA	28	G	Sidechain
1	AA	281	G	Sidechain
1	AA	310	G	Sidechain
1	AA	345	C	Sidechain
1	AA	350	G	Sidechain
1	AA	375	U	Sidechain
1	AA	404	U	Sidechain
1	AA	405	U	Sidechain
1	AA	429	U	Sidechain
1	AA	498	U	Sidechain
1	AA	510	A	Sidechain
1	AA	523	A	Sidechain
1	AA	549	C	Sidechain
1	AA	556	C	Sidechain
1	AA	563	A	Sidechain
1	AA	578	C	Sidechain
1	AA	653	A	Sidechain
1	AA	657	G	Sidechain
1	AA	676	A	Sidechain
1	AA	697	U	Sidechain
1	AA	710	G	Sidechain
1	AA	713	G	Sidechain
1	AA	724	G	Sidechain
1	AA	740	U	Sidechain
1	AA	746	A	Sidechain
1	AA	763	G	Sidechain
1	AA	768	A	Sidechain
1	AA	782	A	Sidechain
1	AA	793	U	Sidechain
1	AA	813	U	Sidechain
1	AA	823	G	Sidechain
1	AA	827	U	Sidechain
1	AA	835	U	Sidechain
1	AA	853	G	Sidechain
1	AA	855	G	Sidechain
1	AA	865	A	Sidechain
1	AA	866	C	Sidechain
1	AA	867	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	870	U	Sidechain
1	AA	871	U	Sidechain
1	AA	880	C	Sidechain
1	AA	886	G	Sidechain
1	AA	891	U	Sidechain
1	AA	902	G	Sidechain
1	AA	908	A	Sidechain
1	AA	909	A	Sidechain
1	AA	914	A	Sidechain
1	AA	917	G	Sidechain
1	AA	921	U	Sidechain
1	AA	931	C	Sidechain
1	AA	940	C	Sidechain
1	AA	955	U	Sidechain
1	AA	96	U	Sidechain
1	AA	961	U	Sidechain
1	AA	971	G	Sidechain
1	AA	978	A	Sidechain
1	AA	980	C	Sidechain
9	AI	114	TYR	Sidechain
11	AK	25	TYR	Sidechain
17	AQ	95	TYR	Sidechain
21	AU	18	TYR	Sidechain
22	AV	30	G	Sidechain
22	AV	36	U	Sidechain
22	AV	38	A	Sidechain
22	AV	58	A	Sidechain
22	AV	76	A	Sidechain
24	AY	186	TYR	Sidechain
24	AY	189	GLU	Mainchain
24	AY	360	TYR	Sidechain
24	AY	444	LEU	Mainchain
24	AY	504	ILE	Mainchain
30	B5	51	TYR	Sidechain
35	BA	1130	U	Sidechain
35	BA	1140	C	Sidechain
35	BA	1187	G	Sidechain
35	BA	1199	U	Sidechain
35	BA	1211	U	Sidechain
35	BA	1215	G	Sidechain
35	BA	1238	G	Sidechain
35	BA	1277	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
35	BA	1285	G	Sidechain
35	BA	1297	C	Sidechain
35	BA	1326	U	Sidechain
35	BA	1336	A	Sidechain
35	BA	1340	U	Sidechain
35	BA	1415	U	Sidechain
35	BA	1425	G	Sidechain
35	BA	1453	U	Sidechain
35	BA	147	U	Sidechain
35	BA	1498	C	Sidechain
35	BA	1514	U	Sidechain
35	BA	1523	U	Sidechain
35	BA	1528	A	Sidechain
35	BA	1567	A	Sidechain
35	BA	1623	G	Sidechain
35	BA	1660	C	Sidechain
35	BA	1669	A	Sidechain
35	BA	1697	G	Sidechain
35	BA	1768	U	Sidechain
35	BA	1777	U	Sidechain
35	BA	1779	U	Sidechain
35	BA	1781	C	Sidechain
35	BA	1783	A	Sidechain
35	BA	1802	A	Sidechain
35	BA	1807	G	Sidechain
35	BA	1820	U	Sidechain
35	BA	1833	U	Sidechain
35	BA	1834	U	Sidechain
35	BA	1842	G	Sidechain
35	BA	1845	G	Sidechain
35	BA	1854	A	Sidechain
35	BA	187	G	Sidechain
35	BA	1896	G	Sidechain
35	BA	1908	C	Sidechain
35	BA	1919	A	Sidechain
35	BA	1929	G	Sidechain
35	BA	1930	G	Sidechain
35	BA	1931	U	Sidechain
35	BA	1935	G	Sidechain
35	BA	1947	C	Sidechain
35	BA	1954	G	Sidechain
35	BA	1959	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
35	BA	197	A	Sidechain
35	BA	1971	A	Sidechain
35	BA	1981	A	Sidechain
35	BA	1984	G	Sidechain
35	BA	1993	U	Sidechain
35	BA	1997	G	Sidechain
35	BA	1998	G	Sidechain
35	BA	2011	U	Sidechain
35	BA	2015	A	Sidechain
35	BA	2034	U	Sidechain
35	BA	2040	C	Sidechain
35	BA	206	U	Sidechain
35	BA	2064	C	Sidechain
35	BA	2074	U	Sidechain
35	BA	2102	U	Sidechain
35	BA	2128	C	Sidechain
35	BA	215	G	Sidechain
35	BA	2156	G	Sidechain
35	BA	2172	U	Sidechain
35	BA	2189	U	Sidechain
35	BA	2237	G	Sidechain
35	BA	229	A	Sidechain
35	BA	2314	C	Sidechain
35	BA	2317	C	Sidechain
35	BA	2331	G	Sidechain
35	BA	2334	G	Sidechain
35	BA	2337	G	Sidechain
35	BA	2344	U	Sidechain
35	BA	2357	U	Sidechain
35	BA	2358	G	Sidechain
35	BA	2372	G	Sidechain
35	BA	2381	C	Sidechain
35	BA	2389	G	Sidechain
35	BA	2405	G	Sidechain
35	BA	2412	A	Sidechain
35	BA	2419	U	Sidechain
35	BA	2429	G	Sidechain
35	BA	2432	A	Sidechain
35	BA	2446	G	Sidechain
35	BA	2449	U	Sidechain
35	BA	2469	A	Sidechain
35	BA	2471	C	Sidechain

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Group
35	BA	2481	G	Sidechain
35	BA	249	C	Sidechain
35	BA	2490	G	Sidechain
35	BA	2492	U	Sidechain
35	BA	2494	G	Sidechain
35	BA	2496	C	Sidechain
35	BA	2504	U	Sidechain
35	BA	2505	G	Sidechain
35	BA	255	A	Sidechain
35	BA	2552	U	Sidechain
35	BA	2557	G	Sidechain
35	BA	2562	U	Sidechain
35	BA	2567	G	Sidechain
35	BA	257	A	Sidechain
35	BA	2576	G	Sidechain
35	BA	2579	C	Sidechain
35	BA	2582	G	Sidechain
35	BA	2599	G	Sidechain
35	BA	2607	G	Sidechain
35	BA	2614	A	Sidechain
35	BA	263	C	Sidechain
35	BA	2689	U	Sidechain
35	BA	2706	G	Sidechain
35	BA	2708	G	Sidechain
35	BA	271(Q)	G	Sidechain
35	BA	271(Y)	U	Sidechain
35	BA	272(B)	G	Sidechain
35	BA	2822	G	Sidechain
35	BA	2836	U	Sidechain
35	BA	2861	G	Sidechain
35	BA	33	U	Sidechain
35	BA	35	G	Sidechain
35	BA	384	U	Sidechain
35	BA	396	G	Sidechain
35	BA	463	G	Sidechain
35	BA	467	G	Sidechain
35	BA	491	G	Sidechain
35	BA	530	G	Sidechain
35	BA	567	A	Sidechain
35	BA	604	G	Sidechain
35	BA	609	A	Sidechain
35	BA	700	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
35	BA	710	G	Sidechain
35	BA	762	U	Sidechain
35	BA	767	U	Sidechain
35	BA	793	A	Sidechain
35	BA	811	U	Sidechain
35	BA	828	U	Sidechain
35	BA	833	U	Sidechain
35	BA	838	C	Sidechain
35	BA	851	U	Sidechain
35	BA	864	G	Sidechain
35	BA	869	G	Sidechain
35	BA	898	C	Sidechain
35	BA	905	U	Sidechain
35	BA	908	C	Sidechain
35	BA	918	A	Sidechain
35	BA	925	C	Sidechain
35	BA	926	A	Sidechain
35	BA	930	U	Sidechain
35	BA	946	G	Sidechain
35	BA	965	C	Sidechain
35	BA	968	G	Sidechain
35	BA	975(A)	G	Sidechain
35	BA	977	G	Sidechain
35	BA	989	G	Sidechain
35	BA	990	A	Sidechain
35	BA	999	U	Sidechain
36	BB	16	G	Sidechain
36	BB	35	U	Sidechain
36	BB	5	C	Sidechain
36	BB	64	C	Sidechain
36	BB	67	G	Sidechain
36	BB	69	G	Sidechain
36	BB	73	A	Sidechain
36	BB	77	U	Sidechain
36	BB	78	A	Sidechain
36	BB	79	C	Sidechain
36	BB	82	G	Sidechain
36	BB	90	A	Sidechain
42	BH	83	TYR	Sidechain
45	BN	4	TYR	Sidechain
48	BQ	9	TYR	Sidechain
53	BV	81	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	2581	0
2	AB	1901	0	1951	513	1
3	AC	1613	0	1677	306	0
4	AD	1703	0	1767	335	0
5	AE	1147	0	1207	231	0
6	AF	843	0	857	144	0
7	AG	1257	0	1296	177	0
8	AH	1116	0	1177	205	0
9	AI	1011	0	1043	205	0
10	AJ	795	0	840	196	0
11	AK	885	0	904	152	0
12	AL	971	0	1057	217	0
13	AM	988	0	1059	192	0
14	AN	492	0	533	153	0
15	AO	734	0	771	229	0
16	AP	701	0	720	131	0
17	AQ	824	0	891	158	0
18	AR	574	0	644	122	0
19	AS	630	0	652	209	0
20	AT	763	0	861	150	0
21	AU	209	0	221	48	0
22	AV	1640	0	837	194	0
23	AX	192	0	99	22	0
24	AY	3934	0	3922	1256	0
25	B0	662	0	688	138	0
26	B1	732	0	808	131	0
27	B2	598	0	653	126	0
28	B3	468	0	523	108	0
29	B4	341	0	339	89	0
30	B5	459	0	480	131	0
31	B6	433	0	461	109	0
32	B7	419	0	467	110	0
33	B8	508	0	576	154	0
34	B9	307	0	338	70	0
35	BA	62477	0	31497	5291	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	BB	2551	0	1295	230	0
37	BC	1742	0	1794	377	1
38	BD	2145	0	2234	780	0
39	BE	1564	0	1629	448	0
40	BF	1624	0	1677	415	0
41	BG	1474	0	1535	340	0
42	BH	1189	0	1247	282	0
43	BJ	654	0	157	36	0
44	BK	701	0	168	41	0
45	BN	1105	0	1180	270	0
46	BO	933	0	996	182	0
47	BP	1114	0	1187	361	0
48	BQ	1122	0	1179	291	0
49	BR	960	0	1021	236	0
50	BS	771	0	832	206	0
51	BT	1142	0	1202	332	0
52	BU	958	0	1015	317	0
53	BV	779	0	852	219	0
54	BW	896	0	953	173	0
55	BX	726	0	778	114	0
56	BY	776	0	870	193	0
57	BZ	1403	0	1432	371	0
58	AY	32	0	14	11	0
All	All	151017	0	103381	18980	1

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 75.

All (18980) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:111:MET:CE	24:AY:139:THR:HG23	1.18	1.62
24:AY:331:LEU:CD2	24:AY:379:PHE:HD2	1.19	1.51
24:AY:331:LEU:HD22	24:AY:379:PHE:CD2	1.46	1.47
37:BC:127:MET:SD	37:BC:127:MET:CG	2.03	1.45
24:AY:135:THR:CG2	24:AY:136:PRO:HD2	1.44	1.45
24:AY:184:HIS:ND1	24:AY:191:TYR:HE1	1.18	1.38
24:AY:296:PHE:CG	24:AY:331:LEU:HD11	1.57	1.38
24:AY:184:HIS:ND1	24:AY:191:TYR:CE1	1.91	1.37
24:AY:109:CYS:HB2	24:AY:137:ILE:CG2	1.56	1.34
24:AY:473:TRP:CH2	24:AY:500:ASN:HB2	1.62	1.33
24:AY:193:TYR:CB	24:AY:263:PHE:HD1	1.42	1.32
24:AY:181:GLY:HA2	24:AY:263:PHE:CE1	1.65	1.30

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:111:MET:HE1	24:AY:139:THR:CG2	1.62	1.28
24:AY:331:LEU:CD2	24:AY:379:PHE:CD2	2.10	1.27
24:AY:111:MET:CE	24:AY:139:THR:CG2	2.12	1.24
1:AA:951:G:H2'	1:AA:952:U:C6	1.70	1.24
24:AY:183:TYR:HE2	24:AY:189:GLU:N	1.34	1.24
35:BA:1922:G:O2'	35:BA:1923:U:H5'	1.33	1.24
35:BA:782:A:C2	38:BD:226:MET:HG2	1.73	1.24
35:BA:1947:C:C2'	35:BA:1948:G:H5''	1.68	1.23
38:BD:60:ARG:HD2	38:BD:86:PRO:CB	1.69	1.23
24:AY:134:ASP:OD1	24:AY:249:GLY:HA3	1.37	1.22
42:BH:33:LEU:HD12	42:BH:75:ALA:O	1.38	1.21
24:AY:109:CYS:CB	24:AY:137:ILE:HG23	1.71	1.21
24:AY:138:LEU:HD23	24:AY:253:PRO:HG3	1.21	1.20
38:BD:85:ASP:OD1	38:BD:88:ARG:HD2	1.39	1.20
24:AY:331:LEU:HB3	24:AY:379:PHE:CE2	1.77	1.19
24:AY:369:ASN:HD22	24:AY:373:ILE:HG12	1.04	1.19
35:BA:2744:G:N2	42:BH:143:GLN:HE22	1.39	1.19
1:AA:673:G:H2'	1:AA:674:G:C8	1.77	1.18
35:BA:2134:A:H61	35:BA:2157:G:H1'	1.08	1.18
24:AY:255:PHE:CZ	24:AY:275:TRP:CZ3	2.32	1.18
53:BV:16:PRO:O	53:BV:96:ILE:HG12	1.43	1.18
35:BA:1902:C:O2'	38:BD:244:ARG:HB2	1.44	1.17
1:AA:1488:G:H2'	1:AA:1489:G:H8	1.06	1.17
23:AX:14:A:H3'	23:AX:15:A:H5''	1.19	1.17
24:AY:170:THR:HG22	24:AY:184:HIS:HA	1.22	1.17
35:BA:2472:G:H5'	35:BA:2473:U:H5''	1.26	1.16
24:AY:184:HIS:CE1	24:AY:191:TYR:CE1	2.34	1.16
35:BA:2014:A:H2'	35:BA:2015:A:N7	1.58	1.16
38:BD:13:ARG:HG3	38:BD:16:MET:SD	1.84	1.16
38:BD:92:ILE:HG22	38:BD:106:ILE:HA	1.28	1.16
24:AY:74:VAL:CG2	24:AY:87:LEU:HD23	1.73	1.16
2:AB:220:ASP:HA	2:AB:223:ILE:HD12	1.26	1.16
47:BP:47:ASP:HB3	47:BP:48:PRO:HA	1.25	1.16
57:BZ:152:ALA:HB1	57:BZ:167:PRO:HB2	1.25	1.16
35:BA:2893:G:H5'	35:BA:2894:G:H5'	1.26	1.15
31:B6:52:VAL:HG22	31:B6:53:LYS:H	1.09	1.15
35:BA:1911:U:H2'	35:BA:1918:A:N1	1.58	1.15
35:BA:1925:C:C2'	35:BA:1926:U:H5''	1.76	1.15
15:AO:54:ARG:HG3	15:AO:58:MET:CE	1.75	1.15
42:BH:106:THR:HG21	42:BH:112:PRO:CA	1.76	1.15
11:AK:126:ARG:HH11	11:AK:126:ARG:HB3	1.11	1.15
24:AY:101:ARG:HD2	24:AY:390:ILE:HG12	1.23	1.15

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1947:C:H2'	35:BA:1948:G:C5'	1.76	1.15
39:BE:50:GLY:HA2	39:BE:78:LEU:HB3	1.28	1.14
35:BA:914:C:H2'	35:BA:915:C:H5'	1.26	1.14
51:BT:20:PRO:HD2	51:BT:85:LYS:HB2	1.29	1.13
35:BA:2523:G:H2'	35:BA:2524:G:H5''	1.17	1.13
24:AY:189:GLU:HG3	24:AY:189:GLU:O	1.45	1.13
38:BD:176:ARG:HG2	38:BD:176:ARG:HH11	0.98	1.13
22:AV:61:C:H3'	22:AV:62:C:H5''	1.15	1.13
24:AY:164:ILE:CD1	24:AY:252:THR:HG23	1.79	1.13
48:BQ:134:ARG:NH1	57:BZ:122:ARG:HH21	1.43	1.13
24:AY:11:ALA:HA	24:AY:278:ALA:HB1	1.22	1.13
24:AY:473:TRP:CZ3	24:AY:500:ASN:HB3	1.83	1.13
45:BN:34:LEU:HD21	45:BN:120:LEU:HD23	1.29	1.13
35:BA:2605:U:H2'	35:BA:2606:C:C6	1.83	1.13
21:AU:10:ARG:HA	21:AU:13:ILE:HD12	1.30	1.13
24:AY:421:GLU:O	24:AY:422:GLU:HG3	1.49	1.13
12:AL:36:VAL:HG11	24:AY:406:PRO:HB3	1.25	1.13
54:BW:14:PRO:HG2	54:BW:78:GLU:HG3	1.27	1.13
10:AJ:50:ILE:HA	10:AJ:60:ARG:HG2	1.31	1.12
52:BU:101:ARG:O	52:BU:103:PRO:HD3	1.46	1.12
24:AY:181:GLY:CA	24:AY:263:PHE:HE1	1.63	1.12
24:AY:473:TRP:HZ3	24:AY:500:ASN:HB3	1.14	1.12
46:BO:61:VAL:HG12	46:BO:87:ILE:HD11	1.31	1.12
25:B0:43:THR:H	35:BA:2331:G:H4'	1.04	1.12
24:AY:307:MET:SD	24:AY:307:MET:O	2.07	1.12
56:BY:7:VAL:HB	56:BY:8:LYS:HD2	1.31	1.12
24:AY:193:TYR:CB	24:AY:263:PHE:CD1	2.31	1.12
38:BD:26:LYS:NZ	38:BD:113:VAL:HG21	1.65	1.12
55:BX:12:VAL:HB	55:BX:17:ALA:HB1	1.21	1.12
1:AA:1386:G:H2'	1:AA:1387:G:H5''	1.32	1.12
4:AD:26:CYS:HA	4:AD:31:CYS:HA	1.30	1.12
24:AY:222:ASP:O	24:AY:226:GLN:HB2	1.47	1.11
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.27	1.11
9:AI:8:GLY:HA2	9:AI:79:LEU:HD12	1.20	1.11
38:BD:147:LEU:H	38:BD:154:LYS:HD2	1.02	1.11
53:BV:96:ILE:H	53:BV:96:ILE:HD13	1.14	1.11
24:AY:135:THR:HG23	24:AY:136:PRO:CD	1.79	1.11
24:AY:138:LEU:CD2	24:AY:253:PRO:HG3	1.78	1.11
38:BD:13:ARG:HA	38:BD:16:MET:HG2	1.17	1.11
2:AB:75:LYS:O	2:AB:78:GLN:HG3	1.48	1.11
40:BF:126:VAL:HG11	40:BF:142:TRP:HH2	1.11	1.11
6:AF:25:ILE:HA	6:AF:28:ARG:HH11	1.08	1.11

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BF:6:VAL:HG12	40:BF:7:TYR:H	1.07	1.11
40:BF:101:LEU:HD12	40:BF:102:PRO:HD2	1.29	1.11
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.29	1.11
24:AY:134:ASP:OD1	24:AY:249:GLY:CA	1.99	1.11
38:BD:24:ILE:HD11	38:BD:91:ARG:HB3	1.23	1.11
48:BQ:44:ALA:HA	48:BQ:47:ILE:HD12	1.11	1.11
35:BA:1919:A:H2'	35:BA:1920:C:H5''	1.30	1.10
27:B2:25:VAL:HG22	27:B2:60:LEU:HD13	1.32	1.10
35:BA:1061:U:H4'	35:BA:1070:A:C1'	1.81	1.10
12:AL:126:LYS:HB3	24:AY:487:ARG:HH21	0.96	1.10
24:AY:181:GLY:CA	24:AY:263:PHE:CE1	2.33	1.10
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.30	1.10
1:AA:975:A:H4'	1:AA:976:G:H5''	1.30	1.10
24:AY:307:MET:HG2	24:AY:312:ARG:HA	1.25	1.10
4:AD:99:SER:HB3	4:AD:139:ARG:HG3	1.16	1.10
39:BE:34:VAL:HG11	39:BE:78:LEU:HD22	1.26	1.10
35:BA:330:A:H2	35:BA:1210:A:H2'	1.16	1.10
51:BT:90:GLN:HG2	51:BT:120:ARG:HH22	1.13	1.10
35:BA:1024:G:H3'	35:BA:1025:G:H5''	1.30	1.10
35:BA:1270:C:H5''	35:BA:1271:G:H5'	1.21	1.10
35:BA:1484:G:H2'	35:BA:1485:G:H5''	1.28	1.10
24:AY:263:PHE:HD2	24:AY:263:PHE:C	1.54	1.10
38:BD:201:HIS:ND1	38:BD:204:ILE:HG21	1.67	1.10
26:B1:11:ARG:HB3	26:B1:12:PRO:HD2	1.27	1.10
24:AY:473:TRP:CH2	24:AY:500:ASN:CB	2.34	1.09
35:BA:2159:G:H2'	35:BA:2160:G:H5''	1.30	1.09
24:AY:308:ASP:N	24:AY:309:PRO:HD2	1.65	1.09
49:BR:48:VAL:HA	49:BR:51:LEU:HD22	1.34	1.09
24:AY:193:TYR:HB3	24:AY:263:PHE:HD1	1.17	1.09
25:B0:27:GLU:HB3	25:B0:68:GLU:HA	1.29	1.09
55:BX:8:ILE:HA	55:BX:30:VAL:HG12	1.31	1.09
42:BH:132:ARG:HG2	42:BH:133:VAL:N	1.63	1.09
50:BS:13:ARG:HG3	50:BS:14:VAL:H	1.04	1.09
35:BA:797:C:H2'	35:BA:798:G:H8	1.08	1.09
24:AY:255:PHE:CZ	24:AY:275:TRP:CH2	2.39	1.09
24:AY:105:ALA:HB1	24:AY:319:ARG:HD3	1.30	1.09
12:AL:36:VAL:HG21	24:AY:406:PRO:HG2	1.17	1.09
56:BY:12:THR:HB	56:BY:75:ILE:HG21	1.34	1.09
12:AL:126:LYS:HB3	24:AY:487:ARG:NH2	1.66	1.09
35:BA:143:G:H1'	55:BX:37:THR:HG21	1.32	1.09
24:AY:113:ILE:HG22	24:AY:114:ASP:H	1.04	1.09
24:AY:443:VAL:HG23	24:AY:444:LEU:H	1.06	1.09

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:51:ARG:HG2	51:BT:62:THR:OG1	1.53	1.09
46:BO:2:ILE:HB	46:BO:33:ALA:HB3	1.31	1.09
40:BF:24:LEU:HB3	40:BF:25:PRO:HD2	1.29	1.09
4:AD:59:ARG:CZ	4:AD:59:ARG:HA	1.82	1.09
35:BA:1844:C:H2'	35:BA:1845:G:H5'	1.31	1.09
11:AK:30:VAL:HG21	11:AK:68:ALA:HB2	1.35	1.09
46:BO:86:ILE:HG22	46:BO:94:ARG:HG3	1.11	1.08
27:B2:50:ILE:HG21	35:BA:61:G:H5'	1.27	1.08
35:BA:2593:U:H2'	35:BA:2594:C:C6	1.87	1.08
24:AY:168:PRO:CB	24:AY:171:TRP:CZ2	2.36	1.08
33:B8:62:LEU:HD13	35:BA:242:G:H5''	1.31	1.08
5:AE:50:GLU:HG3	5:AE:52:PRO:HD2	1.17	1.08
37:BC:175:VAL:HG21	37:BC:189:ILE:HG12	1.23	1.08
24:AY:109:CYS:O	24:AY:137:ILE:HA	1.52	1.08
51:BT:124:ASP:HB3	51:BT:125:ARG:NH1	1.67	1.08
35:BA:833:U:H5''	47:BP:48:PRO:HG3	1.31	1.08
35:BA:2628:C:H1'	35:BA:2781:A:H2'	1.31	1.08
35:BA:2820:A:N6	39:BE:192:ASN:HB3	1.68	1.08
13:AM:96:LEU:HB3	13:AM:97:PRO:HD2	1.35	1.08
40:BF:167:ALA:HB1	40:BF:173:VAL:HG11	1.11	1.08
57:BZ:150:LEU:HG	57:BZ:171:ILE:HD11	1.10	1.08
15:AO:4:THR:HB	15:AO:7:GLU:CB	1.84	1.08
35:BA:2596:U:H1'	38:BD:244:ARG:HH21	1.11	1.07
34:B9:7:VAL:HG13	34:B9:34:GLN:HG2	1.36	1.07
57:BZ:56:VAL:HG22	57:BZ:70:LEU:HD13	1.36	1.07
7:AG:29:LYS:HE2	7:AG:102:ARG:HA	1.33	1.07
45:BN:133:GLN:HG2	45:BN:135:PRO:HD3	1.34	1.07
24:AY:181:GLY:HA2	24:AY:263:PHE:CZ	1.89	1.07
24:AY:193:TYR:HB3	24:AY:263:PHE:CD1	1.89	1.07
24:AY:32:LYS:HA	24:AY:35:LEU:HG	1.15	1.07
45:BN:91:LEU:HA	45:BN:95:PRO:HB3	1.30	1.07
35:BA:1061:U:H4'	35:BA:1070:A:H1'	1.34	1.07
1:AA:1442(A):G:H22	51:BT:121:ILE:HG12	1.15	1.07
54:BW:8:ARG:HA	54:BW:102:HIS:CB	1.84	1.07
35:BA:1720:U:H2'	35:BA:1721:G:H5''	1.32	1.07
35:BA:1543:C:H3'	35:BA:1544:A:H5''	1.29	1.07
24:AY:138:LEU:HD23	24:AY:253:PRO:CG	1.85	1.07
47:BP:38:GLN:HG3	47:BP:39:LYS:H	1.19	1.07
52:BU:31:SER:HB3	52:BU:34:LYS:HB2	1.12	1.07
55:BX:57:LEU:HD21	55:BX:78:LYS:HE2	1.14	1.07
15:AO:39:LEU:CB	15:AO:56:LEU:HD21	1.83	1.07
2:AB:18:GLY:H	2:AB:42:ILE:HG22	1.10	1.07

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B2:2:LYS:HB2	35:BA:97:C:H5''	1.34	1.07
35:BA:2594:C:H2'	35:BA:2595:G:H8	1.12	1.07
37:BC:86:ALA:HB3	37:BC:94:VAL:HG11	1.30	1.07
39:BE:199:ARG:NH1	39:BE:199:ARG:HB2	1.70	1.07
47:BP:113:LYS:HB2	47:BP:129:ALA:HB3	1.37	1.07
2:AB:209:ARG:HH11	2:AB:239:VAL:HG11	1.13	1.07
1:AA:692:U:H2'	1:AA:694:A:OP2	1.52	1.07
24:AY:105:ALA:HA	24:AY:319:ARG:HH11	0.97	1.06
15:AO:54:ARG:HG3	15:AO:58:MET:HE1	1.09	1.06
35:BA:1911:U:H2'	35:BA:1918:A:C2	1.90	1.06
12:AL:34:ARG:HD3	12:AL:105:TYR:OH	1.55	1.06
35:BA:547:A:H2'	35:BA:548:A:H8	1.14	1.06
35:BA:2305:A:H5''	41:BG:134:GLY:HA3	1.09	1.06
2:AB:22:LYS:HE2	2:AB:22:LYS:HA	1.37	1.06
24:AY:373:ILE:HG22	24:AY:374:GLN:H	1.19	1.06
38:BD:183:ARG:HD2	38:BD:270:ILE:HG23	1.34	1.06
39:BE:34:VAL:HG11	39:BE:78:LEU:CD2	1.86	1.06
35:BA:2833:G:H3'	35:BA:2834:G:C5'	1.85	1.06
35:BA:94(A):G:H2'	35:BA:95:G:H5''	1.33	1.06
15:AO:4:THR:CB	15:AO:7:GLU:HB3	1.84	1.06
24:AY:136:PRO:C	24:AY:137:ILE:HG13	1.76	1.06
35:BA:2784:C:H1'	39:BE:37:ARG:HH12	1.17	1.06
35:BA:2839:G:H5''	49:BR:46:GLY:HA2	1.32	1.06
41:BG:101:ILE:HG22	41:BG:105:LYS:NZ	1.69	1.06
1:AA:405:U:H3'	1:AA:406:G:H5'	1.35	1.06
35:BA:655:A:H4'	35:BA:656:G:H5'	1.31	1.06
50:BS:29:PHE:HE1	50:BS:31:SER:HB2	1.17	1.06
24:AY:193:TYR:HB2	24:AY:263:PHE:HD1	1.12	1.05
24:AY:291:ALA:HA	24:AY:361:PRO:CG	1.85	1.05
24:AY:453:LEU:HB3	24:AY:459:VAL:HG23	1.35	1.05
56:BY:14:LEU:HB3	56:BY:73:ARG:HB2	1.31	1.05
24:AY:193:TYR:HB2	24:AY:263:PHE:CD1	1.92	1.05
37:BC:42:GLU:HB3	37:BC:215:THR:HG23	1.35	1.05
5:AE:43:LEU:HD21	5:AE:132:ALA:HB1	1.38	1.05
1:AA:110:C:H2'	1:AA:111:G:H8	1.12	1.05
24:AY:183:TYR:CE2	24:AY:189:GLU:N	2.23	1.05
52:BU:28:ARG:HH11	52:BU:38:THR:HG23	1.18	1.05
38:BD:35:LYS:H	38:BD:36:PRO:HD2	1.22	1.05
27:B2:35:LEU:HD11	27:B2:50:ILE:HG13	1.38	1.05
45:BN:55:VAL:HG22	45:BN:125:GLY:HA3	1.38	1.05
24:AY:74:VAL:HG23	24:AY:87:LEU:HD23	1.08	1.05
22:AV:51:C:H2'	22:AV:52:G:C8	1.92	1.05

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BW:25:ARG:HA	54:BW:71:VAL:HG11	1.38	1.05
5:AE:39:GLY:HA2	5:AE:69:VAL:HB	1.37	1.05
24:AY:110:LEU:HD13	24:AY:268:MET:CE	1.87	1.05
1:AA:1488:G:H2'	1:AA:1489:G:C8	1.92	1.05
33:B8:27:THR:HG22	47:BP:62:LEU:HD22	1.10	1.05
24:AY:342:ILE:HD11	24:AY:345:ALA:HB2	1.39	1.05
24:AY:473:TRP:CZ3	24:AY:500:ASN:CB	2.40	1.04
24:AY:155:LEU:HD23	24:AY:166:CYS:HB3	1.34	1.04
35:BA:249:C:H2'	35:BA:2395:C:OP1	1.56	1.04
42:BH:125:VAL:HA	42:BH:131:VAL:HG12	1.34	1.04
19:AS:9:VAL:HG12	19:AS:11:VAL:HG12	1.34	1.04
35:BA:140:G:H1'	35:BA:141:A:H2	1.17	1.04
35:BA:2689:U:H5''	35:BA:2690:C:H5'	1.38	1.04
6:AF:72:VAL:HG13	6:AF:73:ASN:H	1.18	1.04
48:BQ:29:PHE:HE2	48:BQ:67:ARG:NH2	1.54	1.04
12:AL:27:LEU:HD22	12:AL:28:LYS:H	1.12	1.04
3:AC:19:GLU:HG2	3:AC:54:ARG:HE	1.16	1.04
37:BC:10:LEU:HB3	37:BC:220:PRO:CG	1.86	1.04
35:BA:1007:C:H5''	45:BN:35:ARG:NH1	1.72	1.04
35:BA:2134:A:N6	35:BA:2157:G:H1'	1.70	1.04
37:BC:41:VAL:HG23	37:BC:176:GLY:O	1.55	1.04
39:BE:13:ARG:HB3	39:BE:22:PRO:HA	1.39	1.04
52:BU:92:ARG:HD3	52:BU:94:ASN:HB3	1.37	1.04
46:BO:21:CYS:HA	46:BO:41:ALA:HB2	1.40	1.04
17:AQ:3:LYS:O	17:AQ:60:ILE:HG13	1.57	1.04
24:AY:111:MET:HE3	24:AY:139:THR:HG23	1.34	1.04
39:BE:171:GLU:HB2	39:BE:185:LYS:HG2	1.40	1.04
38:BD:17:THR:HG22	38:BD:18:VAL:N	1.70	1.04
38:BD:60:ARG:HD2	38:BD:86:PRO:HB3	1.37	1.04
35:BA:547:A:H2'	35:BA:548:A:C8	1.93	1.04
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.18	1.04
31:B6:33:LYS:HA	31:B6:33:LYS:HE2	1.36	1.04
3:AC:54:ARG:O	3:AC:55:VAL:HG23	1.57	1.03
1:AA:977:A:O2'	1:AA:978:A:H5''	1.57	1.03
17:AQ:75:ARG:NH1	17:AQ:77:VAL:HG22	1.72	1.03
42:BH:43:VAL:HG11	42:BH:52:VAL:HG23	1.36	1.03
38:BD:17:THR:HG22	38:BD:18:VAL:H	0.87	1.03
46:BO:60:ALA:HA	46:BO:87:ILE:HG12	1.36	1.03
35:BA:2287:A:N6	35:BA:2344:U:H3	1.54	1.03
24:AY:182:VAL:HG12	24:AY:183:TYR:H	1.24	1.03
38:BD:60:ARG:HD2	38:BD:86:PRO:HB2	1.34	1.03
39:BE:117:MET:HA	39:BE:122:PHE:H	1.22	1.03

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:979:C:H3'	1:AA:980:C:H5''	1.03	1.03
41:BG:109:VAL:HG11	41:BG:142:PRO:HD3	1.40	1.03
1:AA:800:G:HO2'	1:AA:801:U:H6	1.03	1.03
38:BD:131:LEU:HB2	38:BD:136:ILE:HG13	1.40	1.03
24:AY:512:ARG:O	24:AY:516:GLU:HG2	1.55	1.03
38:BD:13:ARG:HA	38:BD:16:MET:CG	1.87	1.03
38:BD:60:ARG:NH2	38:BD:87:ASN:HA	1.74	1.03
48:BQ:78:PRO:HD2	48:BQ:81:VAL:HG11	1.41	1.03
4:AD:12:CYS:SG	4:AD:19:LEU:O	2.16	1.03
35:BA:2312:U:H2'	35:BA:2313:C:H5''	1.07	1.03
6:AF:98:LEU:H	6:AF:98:LEU:HD12	1.17	1.03
35:BA:271(L):U:H5''	35:BA:271(M):G:H5'	1.40	1.03
12:AL:47:LYS:HB3	12:AL:48:PRO:HD3	1.38	1.03
24:AY:255:PHE:HZ	24:AY:275:TRP:CZ3	1.72	1.03
23:AX:14:A:C3'	23:AX:15:A:H5''	1.89	1.03
42:BH:88:LEU:HD21	42:BH:130:ARG:HG2	1.39	1.03
35:BA:2262:U:H4'	35:BA:2328:A:H2	1.22	1.03
1:AA:1060:C:H5''	10:AJ:51:ARG:HD3	1.40	1.03
30:B5:24:ALA:O	54:BW:19:LEU:HD11	1.59	1.03
1:AA:1266:G:N2	1:AA:1268:A:H5''	1.72	1.03
24:AY:109:CYS:HB2	24:AY:137:ILE:HG23	1.03	1.02
35:BA:1912:A:C5'	35:BA:1918:A:H61	1.72	1.02
57:BZ:33:LEU:HD12	57:BZ:34:ASN:H	0.89	1.02
35:BA:2833:G:H3'	35:BA:2834:G:H5''	1.06	1.02
35:BA:631:A:H5''	47:BP:65:ARG:NH1	1.74	1.02
35:BA:272(H):C:H2'	35:BA:272(I):U:H5''	1.41	1.02
26:B1:23:LYS:HD3	26:B1:28:GLY:HA3	1.34	1.02
35:BA:2086:U:H2'	35:BA:2087:G:C8	1.94	1.02
37:BC:100:ILE:HG21	37:BC:126:LYS:HB3	1.39	1.02
36:BB:102:A:H3'	36:BB:103:G:C8	1.95	1.02
24:AY:146:ARG:HH11	24:AY:146:ARG:HG3	1.23	1.02
24:AY:72:THR:HG22	24:AY:90:PRO:HD3	1.42	1.02
30:B5:25:LEU:HD13	54:BW:23:LEU:HD22	1.34	1.02
35:BA:1434:A:H2'	35:BA:1435:G:C8	1.94	1.02
24:AY:360:TYR:HB3	24:AY:361:PRO:HD2	1.39	1.02
24:AY:368:HIS:O	24:AY:373:ILE:HD11	1.58	1.02
35:BA:910:A:H62	48:BQ:12:GLN:HA	1.23	1.02
37:BC:10:LEU:CB	37:BC:220:PRO:HG3	1.89	1.02
24:AY:215:LEU:O	24:AY:219:VAL:HG22	1.60	1.02
51:BT:33:LYS:HG3	51:BT:43:GLN:HB2	1.40	1.02
38:BD:177:LEU:HG	38:BD:181:GLU:O	1.60	1.02
28:B3:47:VAL:HA	28:B3:50:VAL:HG22	1.41	1.02

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:180:PHE:HB3	37:BC:184:LYS:HB3	1.42	1.02
37:BC:100:ILE:HG23	37:BC:127:MET:HG3	1.37	1.01
39:BE:77:ILE:HG22	39:BE:78:LEU:H	1.23	1.01
15:AO:39:LEU:HB3	15:AO:56:LEU:HD21	1.38	1.01
40:BF:179:GLU:HG3	40:BF:201:VAL:HG21	1.40	1.01
50:BS:28:VAL:HG12	50:BS:29:PHE:H	1.26	1.01
5:AE:80:ILE:HA	8:AH:104:ARG:NH2	1.75	1.01
5:AE:70:PRO:HG3	5:AE:142:LEU:HB3	1.39	1.01
24:AY:105:ALA:HA	24:AY:319:ARG:NH1	1.75	1.01
24:AY:223:LEU:HG	42:BH:97:ARG:HH12	1.23	1.01
35:BA:2820:A:H62	39:BE:192:ASN:HB3	1.23	1.01
35:BA:1892:C:H2'	35:BA:1893:C:H5'	1.42	1.01
35:BA:662:G:OP1	47:BP:18:ARG:HD2	1.61	1.01
57:BZ:33:LEU:HD12	57:BZ:34:ASN:N	1.75	1.01
19:AS:46:GLY:H	19:AS:62:ILE:HG23	1.21	1.01
42:BH:122:THR:HG22	42:BH:123:PHE:H	1.20	1.01
1:AA:939:G:H5''	7:AG:102:ARG:NH2	1.75	1.01
35:BA:1539:G:C2	35:BA:1540:U:H1'	1.95	1.01
31:B6:14:THR:HG22	31:B6:50:ARG:HB2	1.42	1.01
24:AY:21:HIS:CD2	24:AY:122:ARG:H	1.78	1.01
24:AY:21:HIS:ND1	24:AY:22:PRO:HD2	1.74	1.01
1:AA:1363(A):A:H4'	1:AA:1364:U:H5''	1.40	1.01
35:BA:1899:G:H21	35:BA:1902:C:H41	1.07	1.01
49:BR:14:SER:HA	49:BR:17:ARG:NH2	1.74	1.01
38:BD:129:ASN:O	38:BD:193:VAL:HG12	1.60	1.01
36:BB:105:A:H2'	36:BB:106:G:O4'	1.61	1.01
47:BP:7:ARG:HA	47:BP:7:ARG:HH11	1.23	1.01
35:BA:705:A:C2	35:BA:727:A:H1'	1.96	1.01
6:AF:87:ARG:HH11	6:AF:87:ARG:HG2	1.20	1.01
48:BQ:44:ALA:CA	48:BQ:47:ILE:HD12	1.90	1.01
54:BW:14:PRO:HG3	54:BW:101:SER:HB3	1.41	1.01
1:AA:108:G:H5'	1:AA:109:A:H5''	1.38	1.01
38:BD:124:PRO:O	38:BD:129:ASN:ND2	1.94	1.01
40:BF:188:ARG:HA	47:BP:7:ARG:HD2	1.43	1.01
16:AP:73:LEU:HD23	16:AP:76:GLN:HE22	1.25	1.01
35:BA:613:G:H5'	35:BA:613:G:H8	1.25	1.01
50:BS:97:ARG:NH2	50:BS:98:VAL:HA	1.75	1.01
24:AY:263:PHE:CD2	24:AY:263:PHE:C	2.30	1.01
40:BF:179:GLU:HB3	40:BF:205:ARG:HH22	1.23	1.01
2:AB:204:ASN:ND2	2:AB:206:ASP:H	1.59	1.00
35:BA:1447:G:H5'	35:BA:1545:A:H4'	1.40	1.00
46:BO:19:ILE:HG22	46:BO:43:VAL:HA	1.38	1.00

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:90:GLN:HG2	51:BT:120:ARG:NH2	1.76	1.00
35:BA:1922:G:C2'	35:BA:1923:U:H5'	1.90	1.00
52:BU:15:LYS:HA	52:BU:18:LEU:HD23	1.43	1.00
5:AE:12:LEU:HD22	5:AE:13:ILE:N	1.76	1.00
1:AA:401:C:H2'	1:AA:402:G:H8	1.24	1.00
5:AE:11:ILE:HD12	5:AE:31:LEU:HD13	1.42	1.00
1:AA:711:G:H2'	1:AA:712:A:H8	1.22	1.00
38:BD:17:THR:CG2	38:BD:18:VAL:H	1.74	1.00
39:BE:47:VAL:HG23	39:BE:84:PHE:O	1.61	1.00
39:BE:3:GLY:HA3	39:BE:81:ILE:HD12	1.43	1.00
47:BP:47:ASP:HB3	47:BP:48:PRO:CA	1.92	1.00
51:BT:46:GLU:O	51:BT:65:LYS:HD2	1.60	1.00
38:BD:108:PRO:HB3	38:BD:143:HIS:CE1	1.96	1.00
47:BP:71:VAL:H	47:BP:72:PRO:CD	1.72	1.00
34:B9:36:GLN:NE2	35:BA:1031:G:H21	1.57	1.00
57:BZ:100:VAL:HG23	57:BZ:126:VAL:HG21	1.43	1.00
37:BC:10:LEU:HD12	37:BC:32:LEU:HA	1.44	1.00
35:BA:2310:A:O2'	35:BA:2311:A:H5'	1.60	1.00
1:AA:713:G:H2'	1:AA:714:G:C8	1.97	1.00
18:AR:58:LEU:HD13	18:AR:66:LEU:HD22	1.42	1.00
1:AA:1318:A:H1'	19:AS:37:ARG:NH2	1.77	1.00
35:BA:2746:U:H2'	35:BA:2747:G:H5'	1.39	1.00
2:AB:115:LEU:HD13	2:AB:145:LEU:HD12	1.43	1.00
51:BT:24:PRO:HB3	51:BT:99:LEU:HD21	1.44	1.00
2:AB:155:LEU:HD21	2:AB:159:PRO:HG3	1.43	1.00
12:AL:36:VAL:HG21	24:AY:406:PRO:CG	1.91	1.00
1:AA:979:C:C3'	1:AA:980:C:H5''	1.92	1.00
12:AL:45:PRO:HG2	12:AL:51:ALA:HB3	1.43	1.00
17:AQ:40:LYS:HD3	17:AQ:42:TYR:CZ	1.96	1.00
52:BU:50:ARG:HH12	53:BV:72:VAL:HG12	1.23	1.00
52:BU:50:ARG:NH1	53:BV:72:VAL:HG12	1.76	1.00
1:AA:110:C:H2'	1:AA:111:G:C8	1.96	1.00
35:BA:2312:U:C2'	35:BA:2313:C:H5''	1.91	0.99
45:BN:5:VAL:HG12	45:BN:7:LYS:HG3	1.41	0.99
4:AD:73:ARG:O	4:AD:77:ASN:HB2	1.60	0.99
35:BA:1499:C:H2'	35:BA:1500:G:C8	1.97	0.99
24:AY:135:THR:CG2	24:AY:136:PRO:CD	2.36	0.99
35:BA:786:C:H2'	35:BA:787:U:H6	1.24	0.99
1:AA:1471:G:H2'	1:AA:1472:U:C6	1.97	0.99
13:AM:13:LYS:HA	13:AM:44:ARG:HH11	1.27	0.99
24:AY:473:TRP:HH2	24:AY:500:ASN:HB2	0.93	0.99
51:BT:60:THR:HG22	51:BT:77:PRO:HA	1.44	0.99

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:106:THR:HG21	42:BH:112:PRO:HA	1.37	0.99
35:BA:1170:G:H22	35:BA:1179:C:H42	1.03	0.99
35:BA:1121:C:H2'	35:BA:1122:G:H8	1.25	0.99
35:BA:1665:A:H2'	35:BA:1666:G:H5''	1.44	0.99
27:B2:25:VAL:HG12	27:B2:29:LYS:HE2	1.42	0.99
24:AY:296:PHE:CD1	24:AY:331:LEU:HD11	1.97	0.99
24:AY:291:ALA:CA	24:AY:361:PRO:HG3	1.91	0.99
35:BA:1844:C:C2'	35:BA:1845:G:H5'	1.92	0.99
6:AF:89:MET:SD	18:AR:76:LEU:HD21	2.03	0.99
25:B0:11:ARG:HB2	25:B0:11:ARG:NH1	1.77	0.99
1:AA:979:C:H3'	1:AA:980:C:C5'	1.93	0.99
42:BH:67:LEU:HG	42:BH:71:LEU:HD12	1.42	0.99
35:BA:2113:U:H2'	35:BA:2114:A:H8	1.25	0.99
35:BA:2199:A:H5'	35:BA:2200:C:OP2	1.63	0.99
57:BZ:33:LEU:CD1	57:BZ:34:ASN:H	1.74	0.99
35:BA:2593:U:H2'	35:BA:2594:C:C5	1.97	0.99
1:AA:351:G:H4'	1:AA:352:C:OP2	1.63	0.99
38:BD:8:PRO:HB3	38:BD:14:ARG:HB2	1.40	0.99
35:BA:1578:U:H2'	35:BA:1579:A:H5''	1.41	0.99
35:BA:833:U:H5''	47:BP:48:PRO:CG	1.93	0.99
51:BT:28:VAL:HG22	51:BT:47:GLY:H	1.27	0.99
12:AL:27:LEU:HD22	12:AL:28:LYS:N	1.78	0.99
40:BF:84:VAL:O	40:BF:86:GLY:N	1.95	0.98
48:BQ:114:ALA:O	48:BQ:118:LEU:HD12	1.61	0.98
2:AB:115:LEU:O	2:AB:118:LEU:HB2	1.63	0.98
24:AY:470:THR:HG21	24:AY:472:ARG:HH21	1.25	0.98
1:AA:1409:C:H2'	1:AA:1410:G:H8	1.28	0.98
38:BD:148:GLU:HB2	38:BD:151:LYS:HD3	1.45	0.98
50:BS:15:ARG:O	50:BS:18:ILE:HD13	1.61	0.98
17:AQ:75:ARG:HH12	17:AQ:77:VAL:HG22	1.26	0.98
24:AY:76:GLN:HE21	24:AY:85:ASN:ND2	1.61	0.98
35:BA:1467:C:H2'	35:BA:1468:C:H6	1.22	0.98
41:BG:5:VAL:HG12	41:BG:6:ALA:H	1.27	0.98
52:BU:112:ARG:HH12	53:BV:46:VAL:HG11	1.23	0.98
57:BZ:5:LEU:HD13	57:BZ:39:VAL:HG11	1.45	0.98
40:BF:103:LYS:HE3	40:BF:106:ARG:HH21	1.26	0.98
42:BH:76:VAL:O	42:BH:79:VAL:HG22	1.63	0.98
38:BD:16:MET:HB3	38:BD:207:GLY:HA3	1.43	0.98
35:BA:1884:A:H2'	35:BA:1885:A:H5''	1.43	0.98
24:AY:110:LEU:HD13	24:AY:268:MET:HE1	1.40	0.98
24:AY:105:ALA:CA	24:AY:319:ARG:HH11	1.76	0.98
15:AO:3:ILE:CG1	15:AO:8:LYS:HE2	1.92	0.98

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BF:111:ALA:HB2	40:BF:206:ILE:HG21	1.43	0.98
41:BG:34:LEU:HA	41:BG:161:THR:HG22	1.40	0.98
35:BA:500:G:N2	35:BA:502:A:H3'	1.79	0.98
8:AH:86:ILE:HG12	8:AH:135:CYS:HA	1.46	0.98
35:BA:433:C:H2'	35:BA:434:U:H6	1.25	0.98
38:BD:158:ALA:O	38:BD:196:VAL:HG11	1.62	0.98
39:BE:114:ALA:HB3	39:BE:160:TYR:HB3	1.43	0.98
5:AE:33:VAL:HG22	5:AE:43:LEU:HD13	1.46	0.98
38:BD:176:ARG:HG2	38:BD:176:ARG:NH1	1.71	0.98
22:AV:48:C:H4'	22:AV:49:G:H5''	1.43	0.98
50:BS:46:VAL:HG12	50:BS:47:THR:H	1.29	0.98
24:AY:324:LYS:HD3	24:AY:358:GLU:HB2	1.41	0.98
51:BT:23:ARG:NH2	51:BT:120:ARG:HD3	1.79	0.98
8:AH:89:PRO:HA	8:AH:92:ARG:NH1	1.78	0.98
35:BA:2402:C:H2'	35:BA:2403:C:H5'	1.46	0.98
35:BA:565:C:H4'	35:BA:1253:A:N1	1.79	0.97
39:BE:7:VAL:HG23	39:BE:194:GLY:H	1.29	0.97
37:BC:49:ILE:HG22	37:BC:204:ALA:CB	1.93	0.97
40:BF:110:LEU:HA	40:BF:183:VAL:HG11	1.46	0.97
35:BA:1019:U:HO2'	35:BA:1021:A:H2	1.00	0.97
35:BA:797:C:H2'	35:BA:798:G:C8	1.97	0.97
35:BA:2444:G:OP1	40:BF:68:LYS:HE3	1.64	0.97
24:AY:342:ILE:HD11	24:AY:345:ALA:CB	1.93	0.97
38:BD:124:PRO:HB2	38:BD:129:ASN:HD21	1.27	0.97
35:BA:2125:G:H21	35:BA:2173:A:N6	1.62	0.97
24:AY:150:ASP:O	24:AY:154:LEU:HG	1.62	0.97
35:BA:1310:G:H2'	35:BA:1311:G:H5'	1.45	0.97
13:AM:75:ALA:HB1	13:AM:79:LYS:HE3	1.43	0.97
42:BH:123:PHE:HA	42:BH:133:VAL:HG22	1.43	0.97
1:AA:60:A:OP2	1:AA:387:U:H4'	1.64	0.97
35:BA:2177:C:O2'	37:BC:168:THR:HG21	1.63	0.97
24:AY:32:LYS:NZ	24:AY:260:LEU:HA	1.78	0.97
45:BN:23:LEU:HB3	45:BN:60:ILE:HG21	1.47	0.97
46:BO:92:GLU:HG3	46:BO:93:PRO:HD2	1.46	0.97
22:AV:61:C:C3'	22:AV:62:C:H5''	1.94	0.97
40:BF:157:VAL:HG23	40:BF:194:MET:HA	1.46	0.97
37:BC:6:ARG:NH2	37:BC:7:TYR:HA	1.80	0.97
5:AE:20:GLN:HG2	5:AE:21:ALA:N	1.79	0.97
35:BA:631:A:OP1	47:BP:64:LYS:HE3	1.61	0.97
36:BB:57:A:H8	41:BG:27:ASN:HD21	1.07	0.97
6:AF:47:ARG:HB3	6:AF:47:ARG:NH1	1.79	0.97
24:AY:111:MET:HE2	24:AY:139:THR:HG23	1.43	0.97

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1924:C:OP2	35:BA:1924:C:H2'	1.63	0.97
1:AA:753:A:H5''	15:AO:69:TYR:OH	1.64	0.97
50:BS:12:PHE:HD1	50:BS:12:PHE:H	1.03	0.97
38:BD:263:ARG:HH11	38:BD:263:ARG:HG2	1.30	0.97
36:BB:35:U:H2'	36:BB:36:C:H6	1.30	0.97
24:AY:225:GLN:HA	24:AY:228:ARG:HB2	1.46	0.97
35:BA:1899:G:N2	35:BA:1902:C:H41	1.61	0.97
2:AB:87:ARG:HH11	2:AB:223:ILE:HD11	1.29	0.97
3:AC:20:SER:HB2	3:AC:40:ARG:HH22	1.27	0.97
35:BA:1199:U:H2'	35:BA:1200:C:H6	1.27	0.97
57:BZ:51:ALA:HA	57:BZ:55:HIS:HD2	1.26	0.97
13:AM:88:ARG:HG3	13:AM:98:VAL:HG11	1.44	0.97
35:BA:2746:U:C2'	35:BA:2747:G:H5'	1.92	0.97
24:AY:369:ASN:HD22	24:AY:373:ILE:CG1	1.78	0.97
35:BA:754:C:H2'	35:BA:755:C:C6	2.00	0.97
51:BT:58:ASN:ND2	51:BT:58:ASN:H	1.57	0.97
35:BA:1528(A):A:H62	35:BA:1541:G:N2	1.63	0.97
38:BD:26:LYS:HZ3	38:BD:113:VAL:HG21	1.24	0.97
52:BU:31:SER:CB	52:BU:34:LYS:HB2	1.95	0.97
53:BV:47:VAL:HG12	53:BV:52:VAL:HB	1.46	0.97
1:AA:754:C:H4'	15:AO:72:ARG:HH12	1.30	0.97
2:AB:172:ILE:HD12	2:AB:172:ILE:H	1.30	0.97
35:BA:2833:G:C3'	35:BA:2834:G:H5''	1.94	0.97
35:BA:2183:C:H2'	35:BA:2184:G:C8	1.99	0.97
48:BQ:10:ARG:HH11	48:BQ:10:ARG:HB2	1.27	0.97
1:AA:951:G:H2'	1:AA:952:U:H6	1.18	0.96
38:BD:13:ARG:CA	38:BD:16:MET:HG2	1.94	0.96
47:BP:131:SER:OG	47:BP:134:ALA:HB3	1.64	0.96
2:AB:51:LEU:HD23	2:AB:55:PHE:HE2	1.30	0.96
22:AV:1:C:H6	22:AV:1:C:HO5'	1.09	0.96
48:BQ:141:GLN:NE2	57:BZ:72:ARG:HD3	1.79	0.96
7:AG:29:LYS:CB	7:AG:105:VAL:HG21	1.95	0.96
24:AY:164:ILE:HD11	24:AY:252:THR:HG23	1.46	0.96
47:BP:21:ARG:HD3	47:BP:29:LYS:HE2	1.47	0.96
1:AA:1030:C:H2'	1:AA:1030(A):G:O4'	1.63	0.96
24:AY:10:VAL:HG12	24:AY:279:PRO:HG2	1.44	0.96
33:B8:13:ARG:HD2	47:BP:61:ARG:HH11	1.27	0.96
48:BQ:67:ARG:HH11	48:BQ:67:ARG:HB3	1.29	0.96
54:BW:8:ARG:CA	54:BW:102:HIS:HB3	1.94	0.96
1:AA:295:C:H2'	1:AA:296:U:H6	1.29	0.96
39:BE:54:GLN:O	39:BE:75:VAL:HG23	1.65	0.96
38:BD:201:HIS:CE1	38:BD:204:ILE:HG21	1.99	0.96

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BN:27:ALA:HA	45:BN:30:ILE:HD12	1.44	0.96
47:BP:23:PRO:HD2	47:BP:33:ARG:HH21	1.30	0.96
2:AB:69:LEU:O	2:AB:162:ILE:HG13	1.65	0.96
35:BA:1915:U:O2'	35:BA:1916:A:H5'	1.64	0.96
1:AA:295:C:H2'	1:AA:296:U:C6	2.01	0.96
42:BH:41:MET:SD	42:BH:53:GLU:O	2.24	0.96
35:BA:2298:A:H2'	35:BA:2299:G:O4'	1.62	0.96
35:BA:2696:U:H2'	35:BA:2697:G:C8	1.99	0.96
24:AY:473:TRP:HZ2	24:AY:496:ASP:OD2	1.46	0.96
1:AA:1491:G:H2'	1:AA:1492:A:C8	1.98	0.96
1:AA:740:U:OP2	15:AO:2:PRO:HB3	1.66	0.96
35:BA:2476:A:H2'	35:BA:2477:C:H5''	1.44	0.96
12:AL:36:VAL:HG11	12:AL:82:VAL:HG22	1.45	0.96
50:BS:13:ARG:CG	50:BS:14:VAL:H	1.75	0.96
1:AA:1061:G:O2'	1:AA:1062:U:H5'	1.65	0.96
35:BA:884:C:H3'	35:BA:885:C:H5''	1.47	0.96
35:BA:888:C:N4	35:BA:890:A:OP1	1.99	0.96
41:BG:101:ILE:HG22	41:BG:105:LYS:HZ1	1.26	0.96
35:BA:2086:U:H2'	35:BA:2087:G:H8	1.25	0.96
35:BA:1190:G:H5'	47:BP:35:HIS:H	1.29	0.96
1:AA:1437:C:H2'	1:AA:1438:G:C8	2.01	0.96
20:AT:87:LYS:O	20:AT:91:LEU:HG	1.66	0.96
35:BA:1845:G:H2'	35:BA:1846:G:H8	1.30	0.96
49:BR:45:ARG:O	49:BR:49:ASP:HB2	1.66	0.96
1:AA:1032:G:H2'	1:AA:1033:G:C8	2.00	0.96
35:BA:272(J):C:H2'	35:BA:274:G:H5''	1.45	0.96
48:BQ:44:ALA:HA	48:BQ:47:ILE:CD1	1.94	0.96
35:BA:2305:A:H5''	41:BG:134:GLY:CA	1.96	0.96
19:AS:78:ARG:HB2	19:AS:81:ARG:NH1	1.79	0.96
24:AY:331:LEU:HB3	24:AY:379:PHE:HE2	1.15	0.95
17:AQ:76:LEU:HD12	17:AQ:77:VAL:H	1.27	0.95
36:BB:102:A:H3'	36:BB:103:G:H8	1.25	0.95
55:BX:40:LYS:HG3	55:BX:51:VAL:HB	1.46	0.95
41:BG:52:ILE:HD13	41:BG:52:ILE:H	1.30	0.95
1:AA:1047:G:H5''	14:AN:4:LYS:HE2	1.44	0.95
24:AY:346:LEU:HB2	24:AY:366:GLY:HA3	1.44	0.95
10:AJ:64:GLU:CD	14:AN:59:ALA:HA	1.86	0.95
14:AN:4:LYS:O	14:AN:7:ILE:HG12	1.66	0.95
56:BY:46:LYS:N	56:BY:62:GLU:HG2	1.80	0.95
54:BW:8:ARG:HA	54:BW:102:HIS:HB3	0.98	0.95
35:BA:2305:A:C2	35:BA:2306:C:H1'	2.02	0.95
25:B0:11:ARG:HB2	25:B0:11:ARG:HH11	1.31	0.95

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.00	0.95
38:BD:248:SER:OG	38:BD:252:TRP:CE2	2.17	0.95
47:BP:100:LEU:HB2	47:BP:106:LEU:HD22	1.48	0.95
37:BC:10:LEU:HB3	37:BC:220:PRO:HG3	0.96	0.95
35:BA:2183:C:H2'	35:BA:2184:G:H8	1.31	0.95
20:AT:78:ALA:HA	20:AT:81:LYS:HD3	1.43	0.95
24:AY:155:LEU:O	24:AY:158:VAL:HG23	1.66	0.95
45:BN:31:ALA:O	45:BN:35:ARG:HG2	1.65	0.95
1:AA:1191:A:H5''	3:AC:4:LYS:HZ1	1.29	0.95
50:BS:23:ARG:HB3	50:BS:24:LEU:HD22	1.49	0.95
1:AA:390:C:H4'	16:AP:28:ARG:HH21	1.28	0.95
40:BF:108:LYS:O	40:BF:112:MET:HB2	1.64	0.95
39:BE:52:LEU:HD23	39:BE:75:VAL:HB	1.44	0.95
35:BA:1930:G:N2	35:BA:1968:G:H2'	1.81	0.95
35:BA:2070:G:H2'	35:BA:2071:A:C8	2.02	0.95
15:AO:29:VAL:HG21	15:AO:67:LEU:HD21	1.48	0.95
1:AA:1014:A:H4'	19:AS:14:HIS:CE1	2.01	0.95
25:B0:51:VAL:HG21	25:B0:79:VAL:O	1.66	0.95
6:AF:69:GLU:O	6:AF:72:VAL:HG12	1.67	0.95
11:AK:38:ASN:HD22	11:AK:38:ASN:N	1.63	0.95
35:BA:1222:C:H2'	35:BA:1223:G:H5''	1.47	0.95
38:BD:147:LEU:HD23	38:BD:183:ARG:NH2	1.81	0.95
41:BG:42:GLY:HA2	41:BG:90:LEU:H	1.29	0.95
35:BA:2121:G:H2'	35:BA:2122:U:C6	2.02	0.95
36:BB:20:C:H2'	36:BB:21:G:H5''	1.46	0.95
35:BA:2208:A:H1'	35:BA:2219:G:C5	2.02	0.95
35:BA:925:C:H2'	35:BA:926:A:H5''	1.46	0.95
24:AY:12:LYS:HG3	24:AY:82:CYS:HA	1.49	0.95
35:BA:2491:U:H4'	35:BA:2570:G:OP1	1.67	0.95
35:BA:782:A:H2	38:BD:226:MET:HG2	1.31	0.95
38:BD:33:LEU:HG	38:BD:34:VAL:HG13	1.49	0.95
39:BE:154:LYS:O	39:BE:156:MET:HG3	1.67	0.95
24:AY:101:ARG:CZ	24:AY:390:ILE:HG23	1.97	0.94
24:AY:335:ARG:HH21	24:AY:335:ARG:HG2	1.32	0.94
35:BA:1676:A:H2'	35:BA:1677:A:C8	2.02	0.94
27:B2:2:LYS:O	27:B2:6:VAL:HG23	1.67	0.94
40:BF:126:VAL:O	40:BF:196:LEU:HG	1.64	0.94
40:BF:126:VAL:HG11	40:BF:142:TRP:CH2	2.01	0.94
4:AD:58:LEU:HD12	4:AD:59:ARG:HH12	1.29	0.94
35:BA:1038:C:H2'	35:BA:1039:G:H5''	1.47	0.94
35:BA:628:G:C2'	35:BA:629:G:H5''	1.95	0.94
35:BA:1971:A:C8	38:BD:241:PRO:HB3	2.02	0.94

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2744:G:H22	42:BH:143:GLN:HE22	0.98	0.94
35:BA:142:A:H8	35:BA:1595:G:H21	1.05	0.94
57:BZ:141:VAL:HA	57:BZ:144:LEU:HD23	1.45	0.94
24:AY:21:HIS:CG	24:AY:22:PRO:HD2	2.02	0.94
50:BS:36:TYR:HD1	50:BS:36:TYR:N	1.65	0.94
35:BA:2199:A:H5'	35:BA:2200:C:H5	1.30	0.94
27:B2:43:GLN:HG2	27:B2:44:LEU:H	1.27	0.94
24:AY:30:THR:HG23	24:AY:86:LEU:HD21	1.47	0.94
35:BA:1155:A:O2'	35:BA:1156:A:H2'	1.67	0.94
54:BW:14:PRO:HG2	54:BW:78:GLU:CG	1.96	0.94
19:AS:6:LYS:HD2	19:AS:6:LYS:N	1.81	0.94
3:AC:20:SER:HB2	3:AC:40:ARG:NH2	1.81	0.94
40:BF:6:VAL:CG1	40:BF:7:TYR:H	1.80	0.94
37:BC:47:LEU:HD23	37:BC:208:PHE:CZ	2.01	0.94
1:AA:112:G:H5'	1:AA:389:A:H4'	1.48	0.94
35:BA:1747:G:H2'	35:BA:1747(A):G:H8	1.32	0.94
24:AY:13:ARG:HD3	24:AY:363:ASP:OD1	1.67	0.94
35:BA:2594:C:H2'	35:BA:2595:G:C8	2.01	0.94
37:BC:214:VAL:HG23	37:BC:224:ILE:HD13	1.46	0.94
20:AT:16:HIS:O	20:AT:19:SER:HB3	1.67	0.94
38:BD:126:GLN:O	38:BD:193:VAL:HG11	1.67	0.94
1:AA:1124:G:H2'	1:AA:1145:C:H41	1.30	0.94
24:AY:111:MET:HE1	24:AY:139:THR:HG23	0.98	0.94
24:AY:183:TYR:HE2	24:AY:189:GLU:H	1.12	0.94
24:AY:94:ASP:CG	24:AY:442:GLY:HA3	1.88	0.94
35:BA:528:A:H2	35:BA:2043:C:H4'	1.31	0.94
2:AB:102:LEU:HD22	2:AB:176:GLU:HB3	1.48	0.94
2:AB:223:ILE:O	2:AB:226:ARG:HB2	1.68	0.94
35:BA:2329:G:H1	35:BA:2386:C:H42	1.02	0.94
35:BA:2199:A:H3'	35:BA:2200:C:H6	1.32	0.94
29:B4:14:ILE:HG13	29:B4:31:ILE:HB	1.46	0.94
24:AY:201:ILE:HG23	24:AY:262:ASN:HB3	1.49	0.94
35:BA:786:C:H2'	35:BA:787:U:C6	2.02	0.94
35:BA:532:A:HO2'	35:BA:2021:C:H5	1.10	0.94
47:BP:39:LYS:O	47:BP:41:ARG:HG2	1.68	0.94
52:BU:21:ALA:HB2	52:BU:39:LEU:HD21	1.50	0.94
40:BF:181:LEU:HD11	40:BF:186:ILE:HD11	1.47	0.94
41:BG:63:ILE:HD12	41:BG:141:PHE:HE2	1.31	0.94
5:AE:41:VAL:O	5:AE:66:MET:HA	1.67	0.94
1:AA:1145:C:HO2'	1:AA:1146:A:H8	0.94	0.94
35:BA:2100:G:H3'	35:BA:2101:G:C8	2.03	0.94
9:AI:10:ARG:HG3	9:AI:75:ASP:HB3	1.50	0.94

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:10:PRO:CB	13:AM:18:ALA:HB1	1.98	0.94
24:AY:26:LYS:O	24:AY:30:THR:HB	1.68	0.94
35:BA:2375:G:H1'	35:BA:2379:G:H22	1.32	0.94
15:AO:49:ASP:OD2	15:AO:52:SER:HB3	1.68	0.94
22:AV:52:G:H1	22:AV:62:C:H42	1.06	0.94
1:AA:799:G:H2'	1:AA:800:G:C8	2.01	0.94
36:BB:22:U:H3	36:BB:61:G:H1	0.94	0.94
35:BA:1993:U:H4'	39:BE:128:SER:OG	1.68	0.94
16:AP:67:THR:N	16:AP:70:ALA:HB3	1.83	0.94
38:BD:18:VAL:HG23	38:BD:211:ARG:NH2	1.83	0.94
42:BH:38:SER:CB	42:BH:64:LEU:HD11	1.98	0.94
33:B8:3:LYS:HD3	35:BA:242:G:O5'	1.68	0.93
39:BE:171:GLU:O	39:BE:184:VAL:HA	1.68	0.93
2:AB:209:ARG:NH1	2:AB:239:VAL:HG11	1.83	0.93
42:BH:85:LYS:NZ	42:BH:87:LEU:HD12	1.82	0.93
35:BA:143:G:C1'	55:BX:37:THR:HG21	1.98	0.93
35:BA:597:U:O2'	47:BP:15:ARG:HD3	1.68	0.93
24:AY:297:THR:HB	24:AY:322:SER:OG	1.66	0.93
3:AC:90:GLU:O	3:AC:93:LYS:HB3	1.67	0.93
57:BZ:151:HIS:HB3	57:BZ:171:ILE:H	1.33	0.93
1:AA:554:C:OP1	12:AL:22:SER:OG	1.86	0.93
46:BO:23:ARG:HG3	46:BO:24:VAL:H	1.31	0.93
19:AS:11:VAL:HG23	19:AS:38:SER:HB2	1.48	0.93
1:AA:1266:G:H22	1:AA:1268:A:H5''	1.29	0.93
35:BA:2092:U:H4'	35:BA:2093:G:H5''	1.48	0.93
30:B5:57:VAL:HG12	30:B5:58:LEU:HD12	1.50	0.93
35:BA:1414:G:H1	35:BA:1588:C:H42	1.15	0.93
33:B8:7:HIS:CE1	33:B8:9:GLY:HA3	2.03	0.93
35:BA:2001:A:H2'	35:BA:2002:G:C8	2.02	0.93
39:BE:35:GLN:HG2	39:BE:36:ARG:H	1.30	0.93
57:BZ:100:VAL:HG23	57:BZ:126:VAL:CG2	1.98	0.93
14:AN:53:LEU:HB3	14:AN:56:VAL:HG21	1.50	0.93
51:BT:108:ARG:HB3	51:BT:111:ARG:NH2	1.82	0.93
35:BA:999:U:O2'	35:BA:1000:A:H5'	1.67	0.93
50:BS:29:PHE:CE1	50:BS:31:SER:HB2	2.03	0.93
35:BA:1695:G:H2'	35:BA:1696:G:H5'	1.50	0.93
33:B8:25:MET:HG2	47:BP:64:LYS:HB2	1.50	0.93
24:AY:101:ARG:CD	24:AY:390:ILE:HG12	1.99	0.93
24:AY:16:PHE:HA	24:AY:106:VAL:CG2	1.99	0.93
38:BD:176:ARG:CG	38:BD:176:ARG:HH11	1.80	0.93
10:AJ:43:ARG:HB2	10:AJ:67:THR:HG23	1.51	0.93
35:BA:1434:A:H61	35:BA:1558:A:H62	1.12	0.93

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:507:C:OP2	1:AA:508:C:H2'	1.68	0.93
10:AJ:34:VAL:HG22	10:AJ:74:ILE:HG22	1.50	0.93
51:BT:3:ARG:HB3	51:BT:6:LEU:HB2	1.51	0.93
24:AY:395:PRO:HA	24:AY:441:VAL:HG22	1.50	0.93
38:BD:213:ARG:NH1	38:BD:219:PRO:HD3	1.82	0.93
6:AF:11:ASN:HB3	6:AF:14:LEU:HD23	1.49	0.93
57:BZ:122:ARG:HH11	57:BZ:122:ARG:HG2	1.33	0.93
35:BA:2523:G:C2'	35:BA:2524:G:H5''	1.98	0.93
42:BH:151:ILE:HD12	42:BH:151:ILE:H	1.32	0.93
35:BA:1221:C:H2'	35:BA:1221(A):C:C6	2.04	0.93
35:BA:989:G:H5'	35:BA:1157:G:H4'	1.49	0.93
40:BF:6:VAL:HG12	40:BF:7:TYR:N	1.82	0.93
17:AQ:40:LYS:HD3	17:AQ:42:TYR:OH	1.69	0.93
24:AY:263:PHE:HD2	24:AY:263:PHE:O	1.49	0.93
4:AD:99:SER:CB	4:AD:139:ARG:HG3	1.99	0.93
42:BH:132:ARG:CG	42:BH:133:VAL:H	1.82	0.93
50:BS:89:ARG:HB3	50:BS:92:TYR:HB3	1.50	0.93
4:AD:53:ASP:O	4:AD:56:VAL:HG23	1.67	0.93
38:BD:36:PRO:O	38:BD:37:LEU:HB2	1.68	0.92
40:BF:179:GLU:HB3	40:BF:205:ARG:NH2	1.84	0.92
26:B1:23:LYS:CD	26:B1:28:GLY:HA3	1.98	0.92
1:AA:1323:G:H4'	1:AA:1363:C:O2	1.69	0.92
35:BA:828:U:H2'	35:BA:829:A:C8	2.04	0.92
24:AY:291:ALA:HA	24:AY:361:PRO:HG3	0.95	0.92
35:BA:1141:U:OP2	45:BN:63:THR:HG23	1.69	0.92
35:BA:1892:C:H2'	35:BA:1893:C:C5'	1.99	0.92
38:BD:164:GLN:O	38:BD:175:LEU:HD22	1.69	0.92
38:BD:9:TYR:HD1	38:BD:10:THR:N	1.67	0.92
18:AR:74:ARG:HA	18:AR:79:LEU:O	1.68	0.92
42:BH:106:THR:CG2	42:BH:112:PRO:HA	1.98	0.92
48:BQ:133:ARG:HH11	48:BQ:133:ARG:HB3	1.31	0.92
35:BA:612:C:H2'	35:BA:613:G:H5''	1.47	0.92
35:BA:264:C:H4'	35:BA:428:A:N1	1.84	0.92
3:AC:6:HIS:CD2	3:AC:8:ILE:HB	2.04	0.92
53:BV:21:ARG:HB3	53:BV:91:TYR:HB2	1.52	0.92
25:B0:43:THR:HG22	35:BA:2331:G:O3'	1.69	0.92
24:AY:307:MET:HG2	24:AY:312:ARG:CA	1.98	0.92
22:AV:31:G:H1	22:AV:39:C:H42	0.95	0.92
51:BT:29:ARG:HE	51:BT:86:ILE:HG23	1.33	0.92
2:AB:47:THR:O	2:AB:51:LEU:HD12	1.67	0.92
37:BC:62:VAL:HG21	37:BC:192:PHE:HA	1.51	0.92
32:B7:46:VAL:HG12	32:B7:47:ARG:H	1.34	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:108:CYS:HA	24:AY:135:THR:HG22	1.51	0.92
24:AY:349:MET:HE3	24:AY:358:GLU:HG2	1.51	0.92
32:B7:6:GLN:O	35:BA:686:G:H1'	1.70	0.92
38:BD:247:ALA:HB1	38:BD:252:TRP:O	1.69	0.92
51:BT:55:ASN:H	51:BT:59:THR:HG22	1.34	0.92
42:BH:132:ARG:CG	42:BH:133:VAL:N	2.33	0.92
7:AG:29:LYS:HB3	7:AG:105:VAL:HG21	1.48	0.92
1:AA:105:G:H2'	1:AA:106:C:C6	2.05	0.92
35:BA:803:U:O2'	35:BA:804:A:H5'	1.68	0.92
24:AY:527:ARG:NH1	24:AY:529:HIS:HA	1.84	0.92
48:BQ:141:GLN:HE22	57:BZ:72:ARG:HA	1.34	0.92
37:BC:47:LEU:HD11	37:BC:171:ILE:HB	1.52	0.92
31:B6:38:LYS:HA	31:B6:48:VAL:HA	1.47	0.92
25:B0:51:VAL:HG22	25:B0:81:VAL:HG22	1.51	0.92
3:AC:36:ASP:HB3	3:AC:40:ARG:HH12	1.33	0.92
35:BA:1097:U:O2'	44:BK:6:UNK:HA	1.69	0.92
12:AL:126:LYS:CB	24:AY:487:ARG:HH21	1.83	0.92
41:BG:124:SER:HB2	41:BG:131:TYR:CE1	2.05	0.92
24:AY:227:LEU:O	24:AY:231:LEU:N	2.02	0.92
24:AY:462:VAL:HG12	24:AY:463:TYR:N	1.85	0.92
57:BZ:120:ILE:HG12	57:BZ:172:ALA:HA	1.48	0.92
1:AA:1220:G:H21	19:AS:54:GLY:HA3	1.35	0.92
38:BD:9:TYR:HD1	38:BD:10:THR:H	0.98	0.92
8:AH:120:THR:OG1	8:AH:123:GLU:HG3	1.70	0.92
34:B9:36:GLN:HE22	35:BA:1031:G:H21	1.08	0.92
35:BA:1543:C:H3'	35:BA:1544:A:C5'	1.99	0.92
35:BA:1499:C:H2'	35:BA:1500:G:H8	1.29	0.92
55:BX:80:ILE:HG13	55:BX:80:ILE:O	1.69	0.92
32:B7:40:TRP:CH2	35:BA:459:U:H4'	2.05	0.92
35:BA:1273:U:O2'	35:BA:1274:A:H5''	1.69	0.92
35:BA:1590:U:H2'	35:BA:1591:G:H5''	1.52	0.92
35:BA:1655:A:H4'	39:BE:115:GLY:H	1.32	0.92
35:BA:972:G:H2'	35:BA:973:A:C8	2.04	0.92
51:BT:52:ILE:HA	51:BT:61:PHE:HA	1.50	0.92
9:AI:85:LEU:HD12	9:AI:86:VAL:N	1.85	0.92
35:BA:118:A:H5'	35:BA:119:A:H8	1.35	0.92
35:BA:1925:C:O2'	35:BA:1926:U:H5''	1.70	0.91
35:BA:579:G:H5''	35:BA:2018:G:H5''	1.49	0.91
51:BT:50:ILE:HG23	51:BT:99:LEU:O	1.69	0.91
35:BA:2786:U:H2'	35:BA:2787:C:C6	2.05	0.91
56:BY:15:VAL:HG12	56:BY:20:TYR:O	1.70	0.91
1:AA:711:G:H2'	1:AA:712:A:C8	2.03	0.91

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:431:ILE:H	24:AY:431:ILE:HD13	1.34	0.91
24:AY:219:VAL:HG23	24:AY:224:ALA:HB2	1.50	0.91
24:AY:462:VAL:HG12	24:AY:463:TYR:H	1.35	0.91
53:BV:39:LEU:HB3	53:BV:47:VAL:HG21	1.49	0.91
1:AA:1309:G:OP1	13:AM:88:ARG:HD2	1.70	0.91
35:BA:2839:G:C5'	49:BR:46:GLY:HA2	1.99	0.91
38:BD:128:GLY:N	38:BD:193:VAL:HG13	1.85	0.91
35:BA:1467:C:H2'	35:BA:1468:C:C6	2.04	0.91
35:BA:471:A:H2'	35:BA:472:A:H5''	1.52	0.91
24:AY:302:LYS:O	24:AY:316:ALA:HA	1.68	0.91
38:BD:32:SER:O	38:BD:36:PRO:HD3	1.71	0.91
35:BA:880:G:H1	35:BA:897:C:H42	1.10	0.91
55:BX:8:ILE:H	55:BX:8:ILE:HD12	1.36	0.91
3:AC:152:ILE:HG12	3:AC:167:TRP:HB2	1.50	0.91
1:AA:1461:G:H2'	1:AA:1462:G:H8	1.34	0.91
24:AY:168:PRO:HB3	24:AY:171:TRP:CZ2	2.05	0.91
35:BA:2023:G:H1	35:BA:2040:C:H42	1.18	0.91
39:BE:24:THR:HG21	39:BE:188:VAL:HG11	1.53	0.91
35:BA:432:A:H2'	35:BA:433:C:C6	2.06	0.91
54:BW:4:LYS:HA	54:BW:106:ILE:HG22	1.51	0.91
38:BD:68:LYS:HB3	38:BD:70:TRP:CH2	2.06	0.91
24:AY:419:LEU:HD13	24:AY:449:VAL:HG12	1.52	0.91
45:BN:40:PRO:O	52:BU:64:ARG:NH1	2.03	0.91
8:AH:6:ILE:H	8:AH:6:ILE:HD12	1.32	0.91
15:AO:68:ARG:O	15:AO:72:ARG:N	2.02	0.91
12:AL:36:VAL:CG2	24:AY:406:PRO:HG2	2.01	0.91
11:AK:59:TYR:CE1	11:AK:63:LEU:HD21	2.05	0.91
51:BT:121:ILE:O	51:BT:124:ASP:HB2	1.70	0.91
49:BR:56:LYS:HE2	49:BR:88:ARG:HA	1.50	0.91
45:BN:9:VAL:HG11	45:BN:39:ARG:NH2	1.85	0.91
42:BH:68:THR:HA	42:BH:71:LEU:HB3	1.49	0.91
55:BX:63:LYS:HG3	55:BX:72:LYS:HG2	1.52	0.91
35:BA:1845:G:H2'	35:BA:1846:G:C8	2.05	0.91
38:BD:210:GLY:O	38:BD:211:ARG:HB2	1.67	0.91
45:BN:2:LYS:NZ	52:BU:95:LEU:HD21	1.85	0.91
6:AF:25:ILE:CA	6:AF:28:ARG:HH11	1.83	0.91
57:BZ:100:VAL:CG2	57:BZ:126:VAL:HG21	2.01	0.91
35:BA:94(A):G:C2'	35:BA:95:G:H5''	2.00	0.91
1:AA:1375:A:H2'	1:AA:1376:U:H6	1.34	0.91
24:AY:140:PHE:CZ	24:AY:257:GLY:O	2.23	0.91
24:AY:33:VAL:HG12	24:AY:34:LEU:HD23	1.51	0.91
51:BT:85:LYS:NZ	51:BT:85:LYS:HB3	1.85	0.91

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:86:ALA:HB3	37:BC:94:VAL:CG1	2.01	0.91
20:AT:18:GLN:HE21	20:AT:22:ARG:HH12	0.93	0.91
42:BH:26:VAL:HG21	42:BH:76:VAL:HG22	1.51	0.91
41:BG:161:THR:HG21	41:BG:172:LEU:HD13	1.53	0.91
24:AY:138:LEU:HD12	24:AY:268:MET:HE3	1.53	0.91
33:B8:62:LEU:HD13	35:BA:242:G:C5'	2.01	0.91
35:BA:1021:A:H62	35:BA:1141:U:H3	1.11	0.91
2:AB:185:ILE:HG23	2:AB:199:TYR:HB2	1.53	0.91
1:AA:363:A:OP2	12:AL:33:ARG:HD2	1.70	0.91
35:BA:1509(B):A:H2'	35:BA:1510:G:O4'	1.70	0.91
35:BA:1639:U:H4'	35:BA:2699:C:H4'	1.50	0.91
24:AY:445:GLN:O	24:AY:448:VAL:HB	1.69	0.91
35:BA:1572:A:O2'	35:BA:1573:G:H5'	1.70	0.91
35:BA:1824:G:OP1	38:BD:52:ARG:HD2	1.71	0.91
46:BO:23:ARG:HG3	46:BO:24:VAL:N	1.84	0.91
2:AB:54:THR:HG22	2:AB:58:ILE:HD11	1.53	0.91
48:BQ:53:ALA:O	48:BQ:56:ARG:HB2	1.70	0.91
48:BQ:12:GLN:HG2	48:BQ:73:PRO:HD2	1.52	0.91
9:AI:9:ARG:HB3	9:AI:104:ARG:NH1	1.86	0.91
1:AA:404:U:H2'	1:AA:405:U:H6	1.34	0.91
8:AH:103:VAL:HG12	8:AH:108:GLY:HA3	1.53	0.91
28:B3:7:LYS:O	28:B3:54:VAL:HG13	1.70	0.91
35:BA:1448:G:H2'	35:BA:1449:A:C8	2.06	0.91
49:BR:55:ALA:HA	49:BR:80:PHE:CE1	2.06	0.91
24:AY:138:LEU:HB2	24:AY:268:MET:HE1	1.53	0.90
24:AY:210:LEU:O	24:AY:215:LEU:HD22	1.71	0.90
15:AO:54:ARG:CG	15:AO:58:MET:HE1	2.01	0.90
57:BZ:125:LEU:HD23	57:BZ:164:ALA:O	1.70	0.90
12:AL:91:LYS:O	12:AL:92:ASP:HB2	1.70	0.90
50:BS:87:PHE:HD1	50:BS:88:ASP:H	1.14	0.90
48:BQ:63:LYS:HG3	57:BZ:175:VAL:HG21	1.52	0.90
47:BP:88:LEU:HD21	47:BP:125:VAL:HG21	1.53	0.90
35:BA:2786:U:H2'	35:BA:2787:C:H6	1.34	0.90
35:BA:2393:A:H2'	35:BA:2394:C:H6	1.34	0.90
4:AD:28:SER:HB3	4:AD:29:PRO:HD2	1.53	0.90
4:AD:102:ASP:HB3	4:AD:121:VAL:HG21	1.52	0.90
35:BA:2703:C:O2'	35:BA:2704:C:H5'	1.70	0.90
42:BH:71:LEU:HD22	42:BH:72:ILE:CD1	2.01	0.90
1:AA:923:A:OP1	5:AE:21:ALA:HB2	1.70	0.90
41:BG:52:ILE:HG12	41:BG:53:LEU:H	1.32	0.90
41:BG:52:ILE:HB	41:BG:54:GLU:OE1	1.71	0.90
16:AP:19:ILE:HG22	16:AP:36:ILE:HG13	1.53	0.90

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1840:G:H1	35:BA:1902:C:H42	1.13	0.90
8:AH:8:ASP:O	8:AH:12:ARG:HG3	1.71	0.90
3:AC:67:THR:HG23	3:AC:102:ASN:HB2	1.52	0.90
27:B2:10:LEU:O	27:B2:14:ARG:HG3	1.70	0.90
40:BF:5:ALA:HB2	40:BF:24:LEU:HD11	1.51	0.90
35:BA:2758:A:N6	42:BH:67:LEU:HD11	1.86	0.90
50:BS:35:ILE:HD11	50:BS:99:LYS:HE3	1.52	0.90
1:AA:1423:G:H5''	46:BO:49:ARG:HH22	1.36	0.90
43:BJ:27:UNK:CB	43:BJ:113:UNK:HA	2.02	0.90
35:BA:1614:A:H61	54:BW:87:PRO:HA	1.35	0.90
38:BD:147:LEU:N	38:BD:154:LYS:HD2	1.87	0.90
10:AJ:7:LYS:C	10:AJ:8:LEU:HD12	1.90	0.90
37:BC:53:ARG:HH12	37:BC:55:ASP:HB2	1.37	0.90
51:BT:58:ASN:N	51:BT:58:ASN:HD22	1.60	0.90
14:AN:13:THR:H	14:AN:14:PRO:CD	1.82	0.90
18:AR:22:VAL:HG23	18:AR:55:ARG:O	1.72	0.90
2:AB:68:ILE:H	2:AB:90:MET:CE	1.84	0.90
10:AJ:16:LEU:HD11	10:AJ:70:ARG:HG3	1.54	0.90
1:AA:1386:G:C2'	1:AA:1387:G:H5''	2.00	0.90
37:BC:29:VAL:CG1	37:BC:222:VAL:HG21	2.02	0.90
1:AA:1035:A:H2'	1:AA:1036:G:H8	1.35	0.90
24:AY:513:LEU:HD22	24:AY:517:ARG:CZ	2.02	0.90
24:AY:74:VAL:CG2	24:AY:87:LEU:CD2	2.49	0.90
38:BD:91:ARG:O	38:BD:107:ALA:HB2	1.71	0.90
33:B8:13:ARG:HD2	47:BP:61:ARG:NH1	1.85	0.90
1:AA:950:U:OP2	13:AM:102:ARG:NH1	2.05	0.90
33:B8:8:LYS:HZ3	33:B8:11:LYS:NZ	1.68	0.90
38:BD:165:ILE:HG13	38:BD:175:LEU:HD21	1.54	0.90
1:AA:197:A:N6	1:AA:221:C:H4'	1.85	0.90
42:BH:106:THR:HG21	42:BH:112:PRO:CB	2.01	0.90
37:BC:22:ILE:HD12	37:BC:190:ARG:HG2	1.51	0.90
35:BA:2187:G:H2'	35:BA:2188:C:H5'	1.54	0.90
1:AA:279:A:H5''	1:AA:281:G:O4'	1.71	0.90
38:BD:87:ASN:HB2	38:BD:88:ARG:CZ	2.01	0.90
35:BA:469:G:OP1	40:BF:78:ILE:HD11	1.71	0.90
51:BT:62:THR:HG22	51:BT:75:ILE:HG23	1.52	0.90
35:BA:2811:G:OP1	39:BE:60:ASN:HB2	1.72	0.90
3:AC:112:SER:O	3:AC:116:VAL:HG23	1.72	0.90
1:AA:1359:C:OP2	14:AN:22:THR:HG21	1.71	0.90
40:BF:126:VAL:HG23	40:BF:127:GLU:N	1.87	0.90
4:AD:108:LEU:HD23	4:AD:110:PHE:CE2	2.06	0.90
7:AG:121:ALA:O	7:AG:125:MET:HG3	1.70	0.90

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:109:VAL:O	41:BG:112:PRO:HD2	1.72	0.90
7:AG:57:GLU:O	7:AG:60:LYS:HB3	1.72	0.90
25:B0:37:LEU:HD21	25:B0:60:PHE:HA	1.54	0.90
24:AY:113:ILE:CG2	24:AY:114:ASP:H	1.85	0.90
24:AY:369:ASN:ND2	24:AY:373:ILE:HG12	1.87	0.90
40:BF:57:VAL:HG12	40:BF:59:TYR:H	1.33	0.90
1:AA:754:C:H4'	15:AO:72:ARG:NH1	1.86	0.90
35:BA:2605:U:H2'	35:BA:2606:C:C5	2.06	0.90
35:BA:880:G:N2	35:BA:897:C:N3	2.20	0.90
35:BA:1720:U:C2'	35:BA:1721:G:H5''	2.01	0.90
56:BY:86:ARG:NH1	56:BY:95:LYS:HZ2	1.70	0.90
30:B5:13:LYS:HA	30:B5:16:ARG:HB3	1.54	0.89
30:B5:13:LYS:O	30:B5:16:ARG:HB3	1.72	0.89
30:B5:4:HIS:HB3	30:B5:5:PRO:HD3	1.51	0.89
35:BA:2035:G:H3'	35:BA:2036:C:H5'	1.54	0.89
35:BA:1252:G:O4'	52:BU:33:ARG:HD3	1.73	0.89
35:BA:2744:G:N2	42:BH:143:GLN:NE2	2.19	0.89
1:AA:977:A:H2'	1:AA:977:A:N3	1.84	0.89
35:BA:484:C:OP1	56:BY:49:VAL:HG13	1.71	0.89
37:BC:24:GLU:HA	37:BC:27:HIS:HB2	1.54	0.89
41:BG:63:ILE:HD12	41:BG:141:PHE:CE2	2.06	0.89
1:AA:299:G:H2'	1:AA:300:A:C8	2.06	0.89
24:AY:197:LYS:CB	24:AY:202:GLN:HG3	2.02	0.89
34:B9:6:SER:HB2	35:BA:2466:C:H5''	1.53	0.89
38:BD:53:PHE:HB3	38:BD:218:ARG:O	1.72	0.89
22:AV:51:C:H2'	22:AV:52:G:H8	1.30	0.89
35:BA:2839:G:OP1	49:BR:46:GLY:HA3	1.73	0.89
35:BA:900:A:H5'	35:BA:901:A:OP2	1.72	0.89
13:AM:45:VAL:HA	13:AM:48:LEU:HD11	1.53	0.89
1:AA:1123:A:H4'	10:AJ:36:GLY:HA3	1.52	0.89
54:BW:69:LEU:HD23	54:BW:108:GLY:O	1.71	0.89
51:BT:68:TYR:O	51:BT:70:VAL:N	2.05	0.89
1:AA:180:U:H2'	1:AA:181:G:H5'	1.54	0.89
22:AV:36:U:O2'	22:AV:37:A:H5'	1.71	0.89
24:AY:331:LEU:HD23	24:AY:379:PHE:CD2	2.05	0.89
1:AA:1191:A:H5''	3:AC:4:LYS:NZ	1.86	0.89
1:AA:621:A:H2'	1:AA:622:A:H8	1.34	0.89
24:AY:174:GLY:O	24:AY:179:PHE:CD1	2.25	0.89
35:BA:1919:A:C2'	35:BA:1920:C:H5''	2.02	0.89
24:AY:10:VAL:HG12	24:AY:279:PRO:CG	2.02	0.89
35:BA:199:A:N6	35:BA:2433:A:H2'	1.87	0.89
24:AY:109:CYS:CA	24:AY:137:ILE:HG23	2.03	0.89

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:182:LEU:C	38:BD:272:ALA:HB2	1.91	0.89
47:BP:30:THR:HG22	47:BP:31:ALA:H	1.37	0.89
25:B0:42:GLY:HA3	35:BA:2331:G:O4'	1.72	0.89
41:BG:39:ILE:HD12	41:BG:157:ILE:HG12	1.55	0.89
10:AJ:4:ILE:CG2	10:AJ:74:ILE:HD11	2.02	0.89
47:BP:97:PRO:O	47:BP:98:GLU:HB3	1.73	0.89
1:AA:720:C:H1'	18:AR:50:ILE:HG21	1.54	0.89
35:BA:2838:G:O2'	49:BR:45:ARG:HD3	1.71	0.89
41:BG:64:THR:HG23	41:BG:66:GLN:H	1.35	0.89
4:AD:125:HIS:HD1	4:AD:152:SER:HG	1.10	0.89
2:AB:121:LEU:O	2:AB:121:LEU:HD23	1.71	0.89
1:AA:1228:C:H2'	1:AA:1229:A:H5'	1.54	0.89
24:AY:443:VAL:HG23	24:AY:444:LEU:N	1.88	0.89
24:AY:425:VAL:CG1	24:AY:445:GLN:HG3	2.03	0.89
39:BE:35:GLN:HG2	39:BE:36:ARG:N	1.85	0.89
47:BP:83:VAL:HG23	47:BP:105:LEU:HD22	1.53	0.89
1:AA:882:C:H41	12:AL:5:PRO:HB3	1.38	0.89
5:AE:33:VAL:CG2	5:AE:43:LEU:HD13	2.03	0.89
35:BA:433:C:H2'	35:BA:434:U:C6	2.06	0.89
35:BA:575:A:H2'	35:BA:576:U:H6	1.38	0.89
13:AM:76:ALA:O	13:AM:80:ARG:HB2	1.72	0.89
24:AY:14:ARG:HD3	24:AY:276:ALA:HB3	1.54	0.89
24:AY:221:GLU:HA	24:AY:225:GLN:HE22	1.36	0.89
24:AY:359:ALA:HA	24:AY:363:ASP:OD2	1.72	0.89
35:BA:996:A:H61	35:BA:1159:U:H3	1.18	0.89
53:BV:72:VAL:HG23	53:BV:85:LYS:HB3	1.52	0.89
3:AC:32:LEU:O	3:AC:35:GLU:HB2	1.73	0.89
56:BY:13:VAL:HB	56:BY:28:LYS:HZ3	1.36	0.89
4:AD:89:THR:HA	4:AD:92:VAL:HB	1.52	0.89
37:BC:2:LYS:HD3	37:BC:2:LYS:O	1.70	0.89
57:BZ:4:ARG:HG2	57:BZ:58:VAL:HB	1.54	0.89
24:AY:80:HIS:HD2	24:AY:273:VAL:HG21	1.37	0.89
35:BA:2570:G:H2'	35:BA:2571:C:H6	1.38	0.89
52:BU:102:GLU:HB2	52:BU:105:VAL:HG23	1.53	0.89
46:BO:61:VAL:HG12	46:BO:87:ILE:CD1	2.02	0.89
11:AK:126:ARG:NH1	11:AK:126:ARG:HB3	1.87	0.89
48:BQ:133:ARG:HG2	48:BQ:134:ARG:H	1.35	0.89
47:BP:124:LYS:HD3	47:BP:143:GLY:HA3	1.54	0.89
57:BZ:20:ARG:NH1	57:BZ:20:ARG:HB2	1.88	0.89
41:BG:33:ARG:H	41:BG:162:THR:HB	1.35	0.89
24:AY:247:LEU:HD22	24:AY:277:PRO:HG3	1.55	0.88
38:BD:61:LEU:O	38:BD:63:ARG:NH1	2.05	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:35:VAL:HG13	48:BQ:130:LYS:HB3	1.52	0.88
50:BS:13:ARG:HG3	50:BS:14:VAL:N	1.87	0.88
35:BA:140:G:H1'	35:BA:141:A:C2	2.07	0.88
11:AK:124:LYS:HZ3	11:AK:125:PHE:HE1	0.95	0.88
35:BA:581:C:H2'	35:BA:582:G:H8	1.36	0.88
35:BA:2684:U:H1'	46:BO:70:LYS:HD2	1.54	0.88
35:BA:1750:G:O2'	35:BA:1751:C:H5'	1.73	0.88
24:AY:113:ILE:HG22	24:AY:114:ASP:N	1.88	0.88
35:BA:581:C:H2'	35:BA:582:G:C8	2.09	0.88
38:BD:9:TYR:OH	38:BD:13:ARG:NH1	2.05	0.88
57:BZ:102:LEU:HD21	57:BZ:124:ILE:HD11	1.53	0.88
22:AV:2:G:O2'	22:AV:3:C:H5''	1.71	0.88
1:AA:974:A:C8	14:AN:31:ARG:HD3	2.07	0.88
40:BF:26:ALA:O	40:BF:27:GLU:HG3	1.72	0.88
36:BB:35:U:H2'	36:BB:36:C:C6	2.08	0.88
28:B3:31:LEU:HD23	28:B3:32:GLN:N	1.88	0.88
49:BR:28:LEU:HD23	49:BR:29:LEU:HD13	1.54	0.88
4:AD:8:VAL:HG23	4:AD:22:LYS:HE2	1.54	0.88
40:BF:8:GLN:HG3	40:BF:9:ILE:N	1.87	0.88
35:BA:1061:U:C4'	35:BA:1070:A:H1'	2.03	0.88
30:B5:4:HIS:CB	30:B5:5:PRO:HD3	2.02	0.88
39:BE:117:MET:HA	39:BE:122:PHE:N	1.87	0.88
47:BP:16:ARG:HD3	47:BP:18:ARG:H	1.36	0.88
51:BT:16:ARG:HB3	51:BT:16:ARG:HH11	1.38	0.88
52:BU:36:ARG:HH11	52:BU:36:ARG:HB3	1.37	0.88
36:BB:40:U:H3'	36:BB:41:U:H5''	1.55	0.88
26:B1:5:CYS:HB2	26:B1:46:LEU:HD21	1.56	0.88
4:AD:125:HIS:ND1	4:AD:152:SER:OG	2.05	0.88
24:AY:138:LEU:HD11	24:AY:272:LEU:HB3	1.54	0.88
24:AY:255:PHE:CE1	24:AY:275:TRP:HZ3	1.90	0.88
24:AY:420:SER:HB2	24:AY:427:VAL:HG22	1.55	0.88
35:BA:1020:A:H5'	35:BA:1021:A:C2	2.09	0.88
38:BD:182:LEU:N	38:BD:272:ALA:CB	2.36	0.88
35:BA:1919:A:H3'	35:BA:1920:C:H5'	1.55	0.88
48:BQ:110:THR:HG23	48:BQ:113:GLN:OE1	1.72	0.88
1:AA:1204:A:H2'	1:AA:1205:U:C6	2.09	0.88
40:BF:154:VAL:HG22	40:BF:191:ARG:HB3	1.54	0.88
49:BR:96:ARG:HD3	49:BR:98:LEU:HD11	1.51	0.88
1:AA:186:C:H5'	20:AT:78:ALA:HB1	1.55	0.88
35:BA:576:U:H2'	35:BA:577:G:C8	2.08	0.88
24:AY:359:ALA:HB1	24:AY:363:ASP:HB2	1.56	0.88
1:AA:834:C:H2'	1:AA:835:U:C6	2.08	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:46:GLN:O	48:BQ:49:ALA:HB3	1.74	0.88
12:AL:36:VAL:HG11	24:AY:406:PRO:CB	2.03	0.88
9:AI:9:ARG:HB3	9:AI:104:ARG:HH12	1.37	0.88
41:BG:76:SER:OG	41:BG:84:LYS:HG3	1.74	0.88
28:B3:47:VAL:HA	28:B3:50:VAL:CG2	2.04	0.88
25:B0:37:LEU:HG	25:B0:59:LEU:O	1.73	0.88
9:AI:26:VAL:HG13	9:AI:61:ALA:HB3	1.55	0.88
24:AY:419:LEU:CD2	24:AY:424:ALA:HB3	2.04	0.88
2:AB:44:LEU:O	2:AB:47:THR:HB	1.74	0.88
2:AB:98:LEU:O	2:AB:101:MET:HG2	1.73	0.88
35:BA:2431:U:H6	35:BA:2433:A:OP2	1.57	0.88
4:AD:12:CYS:HA	4:AD:19:LEU:HB2	1.55	0.88
19:AS:31:ILE:HG22	19:AS:48:THR:O	1.74	0.88
49:BR:47:PHE:C	49:BR:51:LEU:HD13	1.94	0.88
35:BA:271(P):C:O2'	35:BA:271(Q):G:H5'	1.74	0.88
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.54	0.88
6:AF:74:ASP:HB3	6:AF:77:ARG:HH21	1.39	0.88
24:AY:32:LYS:HZ2	24:AY:260:LEU:HA	1.34	0.88
24:AY:403:LEU:HD13	24:AY:461:ALA:HB2	1.53	0.88
24:AY:473:TRP:CZ2	24:AY:496:ASP:OD2	2.27	0.88
51:BT:26:ASP:HA	51:BT:48:ILE:HG23	1.55	0.88
52:BU:102:GLU:HB2	52:BU:105:VAL:CG2	2.04	0.88
57:BZ:162:GLU:O	57:BZ:163:LEU:HD23	1.74	0.88
57:BZ:8:TYR:HD2	57:BZ:38:TYR:HH	0.95	0.88
21:AU:5:ASP:OD1	21:AU:7:ARG:HB2	1.74	0.88
41:BG:76:SER:CB	41:BG:83:ARG:HB3	2.04	0.88
20:AT:18:GLN:HE21	20:AT:22:ARG:NH1	1.71	0.88
20:AT:81:LYS:O	20:AT:85:MET:HG3	1.74	0.88
15:AO:85:LEU:HD23	15:AO:85:LEU:N	1.88	0.88
35:BA:814:C:O2'	35:BA:815:C:H5'	1.74	0.88
24:AY:171:TRP:HE1	24:AY:234:VAL:HG11	1.37	0.88
35:BA:445:C:H2'	35:BA:446:G:C8	2.08	0.88
38:BD:183:ARG:CD	38:BD:270:ILE:HG23	2.03	0.88
35:BA:954:G:H4'	48:BQ:13:GLN:OE1	1.72	0.88
42:BH:66:GLY:HA2	42:BH:69:ARG:HD2	1.55	0.88
14:AN:12:ARG:NH1	14:AN:14:PRO:HG2	1.88	0.88
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.09	0.88
24:AY:138:LEU:CD2	24:AY:253:PRO:CG	2.49	0.87
35:BA:1005:C:H2'	35:BA:1006:C:H6	1.38	0.87
35:BA:1892:C:C2'	35:BA:1893:C:C5'	2.52	0.87
39:BE:167:VAL:HG11	39:BE:188:VAL:HA	1.54	0.87
53:BV:52:VAL:HG13	53:BV:55:ALA:HB3	1.55	0.87

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:12:LEU:C	5:AE:13:ILE:HD12	1.93	0.87
57:BZ:166:SER:HB2	57:BZ:168:GLU:N	1.88	0.87
35:BA:1484:G:C2'	35:BA:1485:G:H5''	2.03	0.87
22:AV:31:G:H1	22:AV:39:C:N4	1.73	0.87
24:AY:62:MET:HG2	24:AY:451:ALA:HB3	1.55	0.87
1:AA:250:A:H4'	1:AA:251:G:O5'	1.70	0.87
22:AV:52:G:H2'	22:AV:53:G:H8	1.39	0.87
1:AA:981:U:C5	1:AA:982:U:H2'	2.09	0.87
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.39	0.87
37:BC:56:GLN:HA	37:BC:201:PRO:HB3	1.55	0.87
19:AS:78:ARG:O	19:AS:81:ARG:HD3	1.73	0.87
28:B3:8:LEU:CD2	28:B3:31:LEU:HA	2.05	0.87
38:BD:273:ARG:HH11	38:BD:273:ARG:HG3	1.40	0.87
35:BA:540:C:H2'	35:BA:541:C:H6	1.39	0.87
37:BC:156:ILE:HA	37:BC:160:ARG:HB2	1.56	0.87
39:BE:7:VAL:HG23	39:BE:194:GLY:N	1.89	0.87
47:BP:23:PRO:HD2	47:BP:33:ARG:NH2	1.89	0.87
49:BR:2:ARG:O	49:BR:2:ARG:HD2	1.72	0.87
35:BA:893:C:C2'	35:BA:894:C:H5'	2.04	0.87
9:AI:48:GLU:HA	9:AI:51:ARG:HD2	1.55	0.87
26:B1:80:LEU:HD23	26:B1:81:LYS:H	1.39	0.87
24:AY:182:VAL:HG12	24:AY:183:TYR:N	1.84	0.87
38:BD:24:ILE:HA	38:BD:82:ILE:HB	1.56	0.87
39:BE:50:GLY:HA2	39:BE:78:LEU:CB	2.03	0.87
35:BA:636:G:H2'	47:BP:115:LEU:HD12	1.54	0.87
3:AC:157:ILE:CG2	3:AC:164:ARG:HH21	1.87	0.87
35:BA:370:G:H4'	35:BA:371:A:OP2	1.73	0.87
24:AY:457:TYR:HB2	24:AY:459:VAL:HG22	1.57	0.87
35:BA:1430:C:H2'	35:BA:1431:U:C6	2.09	0.87
57:BZ:59:LEU:O	57:BZ:66:SER:HA	1.74	0.87
10:AJ:65:LEU:HD13	14:AN:55:GLY:HA3	1.52	0.87
24:AY:308:ASP:H	24:AY:309:PRO:HD2	1.36	0.87
5:AE:129:ILE:N	5:AE:129:ILE:HD12	1.89	0.87
35:BA:81:G:H21	56:BY:2:ARG:HH12	1.18	0.87
24:AY:151:PRO:HA	24:AY:154:LEU:HD12	1.53	0.87
24:AY:182:VAL:CG1	24:AY:183:TYR:H	1.87	0.87
39:BE:34:VAL:CG1	39:BE:78:LEU:HD22	2.04	0.87
51:BT:26:ASP:HB3	51:BT:89:VAL:O	1.75	0.87
46:BO:88:ASN:HD21	46:BO:92:GLU:HB3	1.39	0.87
47:BP:59:LEU:HA	47:BP:61:ARG:NE	1.89	0.87
48:BQ:141:GLN:HE22	57:BZ:72:ARG:CA	1.87	0.87
20:AT:20:LEU:O	20:AT:23:ARG:HB3	1.73	0.87

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:101:G:H2'	36:BB:102:A:O4'	1.74	0.87
5:AE:77:PRO:CG	5:AE:142:LEU:HD22	2.05	0.87
17:AQ:94:ASN:O	17:AQ:98:LEU:HG	1.75	0.87
1:AA:115:G:H1'	1:AA:116:A:N7	1.89	0.87
24:AY:32:LYS:CA	24:AY:35:LEU:HG	2.03	0.87
33:B8:8:LYS:HD3	33:B8:11:LYS:HD2	1.56	0.87
35:BA:621:A:H2'	35:BA:622:G:H5'	1.54	0.87
39:BE:13:ARG:CB	39:BE:22:PRO:HA	2.04	0.87
42:BH:162:ILE:O	42:BH:162:ILE:HD13	1.75	0.87
42:BH:85:LYS:HZ2	42:BH:87:LEU:HD12	1.35	0.87
40:BF:32:LEU:HD22	40:BF:33:LEU:HD22	1.57	0.87
35:BA:1367:A:H2'	35:BA:1368:G:H5'	1.57	0.87
24:AY:216:ASP:HA	24:AY:224:ALA:CB	2.04	0.87
24:AY:396:GLU:N	24:AY:440:ALA:O	2.07	0.87
35:BA:2530:A:H2'	35:BA:2531:A:H5''	1.54	0.87
38:BD:144:ALA:HB3	38:BD:192:THR:HG21	1.56	0.87
38:BD:35:LYS:H	38:BD:36:PRO:CD	1.86	0.87
2:AB:42:ILE:HD12	2:AB:203:GLY:N	1.90	0.87
35:BA:857:C:H42	35:BA:920:G:H1	1.18	0.87
22:AV:61:C:H3'	22:AV:62:C:C5'	2.02	0.87
27:B2:53:LEU:O	27:B2:57:ILE:HG12	1.75	0.87
55:BX:12:VAL:HG23	55:BX:13:LEU:N	1.88	0.87
49:BR:94:TYR:N	49:BR:94:TYR:HD1	1.72	0.87
37:BC:47:LEU:HD11	37:BC:171:ILE:HD12	1.55	0.87
41:BG:110:ALA:CB	41:BG:140:ILE:HD13	2.05	0.87
1:AA:1375:A:H2'	1:AA:1376:U:C6	2.09	0.87
57:BZ:20:ARG:HB2	57:BZ:20:ARG:HH11	1.39	0.87
35:BA:2077:A:O2'	35:BA:2078:C:H5'	1.74	0.87
24:AY:138:LEU:HD12	24:AY:268:MET:CE	2.05	0.87
1:AA:681:C:H5''	38:BD:174:ILE:HD12	1.57	0.87
35:BA:2596:U:H1'	38:BD:244:ARG:NH2	1.89	0.87
53:BV:58:VAL:HG12	53:BV:59:ALA:H	1.40	0.87
42:BH:105:LEU:HD22	42:BH:105:LEU:H	1.40	0.87
13:AM:91:ARG:HD2	13:AM:97:PRO:O	1.75	0.87
1:AA:1002:G:H2'	1:AA:1003:G:C8	2.10	0.87
24:AY:6:TYR:O	24:AY:10:VAL:HG23	1.75	0.86
35:BA:672:C:C2'	35:BA:673:C:H5''	2.05	0.86
38:BD:92:ILE:CG2	38:BD:106:ILE:HA	2.04	0.86
35:BA:1948:G:O2'	35:BA:1949:G:H5'	1.72	0.86
42:BH:98:LEU:HD13	42:BH:102:ALA:O	1.75	0.86
19:AS:63:THR:HG22	19:AS:66:MET:SD	2.15	0.86
57:BZ:117:LEU:HD12	57:BZ:118:GLN:N	1.90	0.86

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B3:26:LEU:HB2	28:B3:28:LEU:HD21	1.57	0.86
54:BW:1:MET:HE3	54:BW:2:GLU:N	1.90	0.86
35:BA:1820:U:C6	38:BD:202:LYS:HD3	2.09	0.86
35:BA:2760:C:O2	42:BH:143:GLN:NE2	2.08	0.86
8:AH:14:ARG:HG2	8:AH:18:ARG:HH21	1.40	0.86
35:BA:1720:U:H2'	35:BA:1721:G:C5'	2.05	0.86
35:BA:1423:G:H2'	35:BA:1424:G:H8	1.38	0.86
1:AA:790:A:H61	1:AA:1498:U:P	1.97	0.86
1:AA:1452:C:H5'	1:AA:1456:G:N1	1.90	0.86
35:BA:1925:C:H2'	35:BA:1926:U:C5'	2.04	0.86
38:BD:212:SER:HA	38:BD:215:LEU:HD12	1.57	0.86
51:BT:89:VAL:HG21	51:BT:91:ARG:HH21	1.39	0.86
42:BH:33:LEU:HD21	42:BH:136:ILE:HG22	1.56	0.86
35:BA:2262:U:H4'	35:BA:2328:A:C2	2.09	0.86
35:BA:884:C:C3'	35:BA:885:C:H5''	2.04	0.86
37:BC:161:ILE:HG12	37:BC:174:PRO:HG2	1.58	0.86
35:BA:2388:A:H5'	35:BA:2389:G:OP2	1.72	0.86
35:BA:2107:C:H2'	35:BA:2108:C:H6	1.40	0.86
13:AM:10:PRO:HB2	13:AM:18:ALA:HB1	1.57	0.86
49:BR:56:LYS:HE2	49:BR:88:ARG:CA	2.06	0.86
40:BF:42:ALA:HA	40:BF:45:ARG:HG3	1.57	0.86
2:AB:196:LEU:HD12	2:AB:197:VAL:HG23	1.57	0.86
38:BD:186:HIS:HE2	38:BD:188:GLU:CD	1.78	0.86
38:BD:247:ALA:CB	38:BD:253:GLN:HA	2.06	0.86
38:BD:24:ILE:HD11	38:BD:91:ARG:CB	2.05	0.86
35:BA:2476:A:C2'	35:BA:2477:C:H5''	2.05	0.86
2:AB:80:ILE:H	2:AB:80:ILE:HD12	1.38	0.86
31:B6:52:VAL:HG22	31:B6:53:LYS:N	1.89	0.86
25:B0:43:THR:N	35:BA:2331:G:H4'	1.89	0.86
12:AL:69:TYR:O	12:AL:71:PRO:HD3	1.76	0.86
38:BD:125:ILE:HD12	38:BD:137:PRO:HD3	1.58	0.86
16:AP:73:LEU:HA	16:AP:76:GLN:HE21	1.40	0.86
35:BA:121:G:H4'	35:BA:149:A:H5'	1.56	0.86
1:AA:918:A:H2'	1:AA:919:A:C8	2.10	0.86
24:AY:527:ARG:HD2	24:AY:528:GLU:H	1.40	0.86
35:BA:1270:C:H5''	35:BA:1271:G:C5'	2.02	0.86
51:BT:54:ARG:HA	51:BT:59:THR:HB	1.58	0.86
4:AD:13:ARG:HA	4:AD:33:MET:CE	2.05	0.86
41:BG:97:ASP:O	41:BG:101:ILE:HG13	1.75	0.86
33:B8:27:THR:HG22	47:BP:62:LEU:CD2	2.02	0.86
35:BA:2415:G:H4'	47:BP:66:GLY:C	1.94	0.86
31:B6:35:GLU:OE1	31:B6:35:GLU:HA	1.75	0.86

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:21:HIS:HD2	24:AY:122:ARG:H	1.18	0.86
35:BA:1892:C:C2'	35:BA:1893:C:H5''	2.05	0.86
38:BD:33:LEU:HD21	38:BD:102:LYS:HB2	1.57	0.86
1:AA:356:A:H5''	1:AA:367:U:C5	2.10	0.86
19:AS:78:ARG:HB2	19:AS:81:ARG:HH11	1.37	0.86
51:BT:107:ASP:H	51:BT:110:ILE:CG1	1.87	0.86
35:BA:373:U:H2'	35:BA:374:A:H8	1.38	0.86
38:BD:201:HIS:ND1	38:BD:204:ILE:CG2	2.38	0.86
39:BE:9:VAL:HG12	39:BE:25:VAL:O	1.76	0.86
35:BA:1678:G:O5'	35:BA:1678:G:H8	1.58	0.86
15:AO:63:ARG:O	15:AO:67:LEU:HG	1.74	0.86
18:AR:56:THR:HB	18:AR:58:LEU:HD12	1.58	0.86
31:B6:52:VAL:CG2	31:B6:53:LYS:H	1.88	0.86
22:AV:52:G:H2'	22:AV:53:G:C8	2.10	0.86
28:B3:37:LEU:HD22	28:B3:38:GLU:H	1.40	0.86
24:AY:138:LEU:HD22	24:AY:275:TRP:CZ3	2.10	0.86
24:AY:420:SER:HA	24:AY:425:VAL:O	1.76	0.86
24:AY:99:THR:HA	24:AY:102:THR:OG1	1.74	0.86
45:BN:52:VAL:HG12	45:BN:53:VAL:H	1.41	0.86
15:AO:39:LEU:HD13	15:AO:56:LEU:CD2	2.06	0.86
22:AV:7:G:H1	22:AV:66:C:H42	1.23	0.86
27:B2:10:LEU:HD21	27:B2:59:ARG:HD3	1.56	0.86
11:AK:27:ASN:HA	11:AK:56:GLY:HA2	1.57	0.86
35:BA:2712:U:O2'	35:BA:2712(A):A:H3'	1.75	0.86
35:BA:1272:A:H3'	35:BA:1273:U:H5''	1.57	0.86
32:B7:24:THR:O	32:B7:28:ARG:HG3	1.76	0.86
1:AA:192:U:H5'	20:AT:102:GLY:O	1.75	0.86
35:BA:1910:G:H1	35:BA:1920:C:H42	1.18	0.86
3:AC:21:ARG:O	3:AC:58:GLU:HA	1.76	0.86
19:AS:23:ASN:HB2	29:B4:47:GLN:HG2	1.56	0.86
35:BA:1203:G:H3'	35:BA:1204:A:H5''	1.55	0.86
7:AG:139:GLU:O	7:AG:143:ARG:HG3	1.76	0.86
35:BA:1270:C:C5'	35:BA:1271:G:H5'	2.06	0.86
51:BT:56:GLY:O	51:BT:59:THR:HG23	1.75	0.86
1:AA:585:G:H4'	12:AL:8:ASN:HD22	1.39	0.86
15:AO:4:THR:HG22	15:AO:6:GLU:HB2	1.58	0.86
5:AE:11:ILE:HD13	5:AE:105:VAL:HG13	1.58	0.86
25:B0:14:ARG:HD3	35:BA:2280:G:O6	1.76	0.86
50:BS:36:TYR:N	50:BS:36:TYR:CD1	2.39	0.86
33:B8:56:GLU:CD	33:B8:56:GLU:H	1.79	0.86
1:AA:226:G:O2'	1:AA:227:G:H5'	1.75	0.86
24:AY:144:LEU:HB3	24:AY:179:PHE:CZ	2.11	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:324:LYS:CD	24:AY:358:GLU:HB2	2.06	0.85
35:BA:1258:C:H1'	40:BF:84:VAL:HG21	1.57	0.85
45:BN:96:GLU:HG2	45:BN:97:ARG:H	1.41	0.85
52:BU:106:PHE:HA	52:BU:109:LEU:HD12	1.58	0.85
46:BO:60:ALA:HB1	46:BO:85:VAL:O	1.75	0.85
2:AB:12:GLU:O	2:AB:16:HIS:ND1	2.08	0.85
42:BH:98:LEU:CB	42:BH:125:VAL:HG21	2.06	0.85
1:AA:1330:U:H5'	1:AA:1331:G:OP2	1.76	0.85
13:AM:90:LEU:H	13:AM:90:LEU:HD23	1.40	0.85
24:AY:307:MET:CG	24:AY:312:ARG:HA	2.04	0.85
35:BA:2840:C:OP1	49:BR:50:HIS:HA	1.76	0.85
42:BH:132:ARG:HG2	42:BH:133:VAL:H	1.32	0.85
35:BA:871:U:H4'	48:BQ:69:PHE:CZ	2.12	0.85
35:BA:872:A:H5'	48:BQ:69:PHE:HE2	1.37	0.85
45:BN:3:THR:HG22	45:BN:5:VAL:HG23	1.58	0.85
35:BA:500:G:H22	35:BA:502:A:H3'	1.38	0.85
1:AA:1032:G:H2'	1:AA:1033:G:H8	1.41	0.85
57:BZ:18:LEU:HD22	57:BZ:18:LEU:H	1.41	0.85
1:AA:707:C:H2'	1:AA:708:C:C6	2.11	0.85
12:AL:54:LYS:HD2	12:AL:54:LYS:H	1.39	0.85
35:BA:1670:C:H2'	35:BA:1671:U:O4'	1.76	0.85
1:AA:231:G:H2'	1:AA:232:G:H8	1.39	0.85
40:BF:84:VAL:HG12	40:BF:85:GLY:N	1.91	0.85
5:AE:12:LEU:HD22	5:AE:13:ILE:H	1.37	0.85
10:AJ:5:ARG:HG2	10:AJ:71:LEU:HD11	1.58	0.85
40:BF:24:LEU:HB3	40:BF:25:PRO:CD	2.06	0.85
36:BB:106:G:H2'	36:BB:107:G:H8	1.39	0.85
13:AM:22:ILE:HB	13:AM:25:ILE:HD12	1.56	0.85
16:AP:45:THR:O	16:AP:47:ASP:N	2.08	0.85
29:B4:35:VAL:HG13	29:B4:39:CYS:SG	2.16	0.85
35:BA:1428:C:N4	35:BA:1569:A:H3'	1.91	0.85
24:AY:168:PRO:CG	24:AY:171:TRP:CZ2	2.59	0.85
24:AY:164:ILE:CG1	24:AY:252:THR:HG23	2.05	0.85
24:AY:303:ILE:HG13	24:AY:375:ILE:CD1	2.06	0.85
1:AA:949:A:C2'	1:AA:950:U:H5'	2.06	0.85
1:AA:1484:C:O2'	35:BA:1961:C:H5'	1.75	0.85
11:AK:115:PRO:C	11:AK:117:ASN:H	1.79	0.85
4:AD:99:SER:HB3	4:AD:139:ARG:CG	2.03	0.85
35:BA:654(T):C:H2'	35:BA:654(U):A:O4'	1.74	0.85
38:BD:45:ASN:CG	38:BD:46:GLN:H	1.77	0.85
35:BA:729:G:O2'	35:BA:763:G:H4'	1.75	0.85
38:BD:165:ILE:HD12	38:BD:165:ILE:N	1.91	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:12:ILE:HG23	15:AO:27:VAL:CG1	2.06	0.85
2:AB:8:LYS:O	2:AB:10:LEU:N	2.09	0.85
22:AV:52:G:H1	22:AV:62:C:N4	1.73	0.85
35:BA:1496:A:H2'	35:BA:1498:C:N4	1.91	0.85
16:AP:67:THR:HG22	16:AP:68:ASP:H	1.39	0.85
35:BA:2540:C:H2'	35:BA:2541:A:O4'	1.76	0.85
5:AE:87:SER:HB2	5:AE:130:ASN:HB3	1.57	0.85
24:AY:32:LYS:HA	24:AY:35:LEU:CG	2.02	0.85
35:BA:962:G:N2	35:BA:963:U:H1'	1.91	0.85
39:BE:34:VAL:HG13	39:BE:48:GLN:HE21	1.40	0.85
45:BN:120:LEU:CD1	45:BN:122:VAL:HG23	2.07	0.85
49:BR:48:VAL:HA	49:BR:51:LEU:CD2	2.06	0.85
42:BH:122:THR:HG22	42:BH:123:PHE:N	1.91	0.85
35:BA:877:U:O2'	35:BA:878:A:H5''	1.77	0.85
41:BG:41:GLN:HG2	41:BG:155:MET:HB3	1.58	0.85
35:BA:1639:U:C2'	35:BA:1640:C:H5''	2.06	0.85
1:AA:194:C:H2'	1:AA:195:A:H5''	1.57	0.85
35:BA:540:C:H2'	35:BA:541:C:C6	2.11	0.85
27:B2:46:GLN:HB3	27:B2:48:HIS:HE1	1.40	0.85
24:AY:138:LEU:HA	24:AY:253:PRO:HG2	1.59	0.85
24:AY:335:ARG:HG2	24:AY:335:ARG:NH2	1.87	0.85
35:BA:1199:U:H2'	35:BA:1200:C:C6	2.12	0.85
53:BV:72:VAL:HG23	53:BV:85:LYS:CB	2.07	0.85
1:AA:658:G:O2'	15:AO:22:THR:HG21	1.77	0.85
57:BZ:10:ARG:HB3	57:BZ:36:LYS:HG3	1.58	0.85
22:AV:48:C:C4'	22:AV:49:G:H5''	2.05	0.85
41:BG:170:ARG:HG3	41:BG:174:GLU:OE1	1.76	0.85
16:AP:60:LEU:HD11	16:AP:79:VAL:HG12	1.57	0.85
9:AI:5:TYR:O	9:AI:84:ALA:HA	1.74	0.85
24:AY:76:GLN:NE2	24:AY:85:ASN:HD21	1.75	0.85
33:B8:26:LYS:HB3	33:B8:44:LYS:HG3	1.59	0.85
46:BO:20:MET:O	46:BO:41:ALA:HB1	1.76	0.85
35:BA:2257:U:O2'	35:BA:2258:C:H5'	1.77	0.85
57:BZ:48:PHE:CD1	57:BZ:52:SER:HA	2.12	0.85
1:AA:1203:C:H2'	1:AA:1204:A:H8	1.40	0.85
10:AJ:50:ILE:HD13	10:AJ:60:ARG:HD3	1.59	0.85
55:BX:12:VAL:CB	55:BX:17:ALA:HB1	2.07	0.85
11:AK:59:TYR:O	11:AK:62:GLN:HB3	1.76	0.85
37:BC:6:ARG:HH12	37:BC:10:LEU:HD21	1.41	0.85
24:AY:470:THR:CG2	24:AY:472:ARG:HH21	1.90	0.85
35:BA:839:U:H2'	35:BA:840:C:H6	1.42	0.85
53:BV:38:LEU:O	53:BV:39:LEU:HD13	1.76	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:200:ILE:HG22	2:AB:202:PRO:HD3	1.55	0.85
19:AS:51:VAL:HB	19:AS:58:VAL:CG2	2.07	0.85
35:BA:1071:G:H5'	35:BA:1088:A:O2'	1.76	0.85
38:BD:117:VAL:HG21	38:BD:128:GLY:HA3	1.56	0.85
5:AE:70:PRO:CG	5:AE:142:LEU:HB3	2.06	0.85
35:BA:209:C:H5'	35:BA:681:G:H4'	1.57	0.85
35:BA:2591:C:H2'	35:BA:2592:G:C8	2.12	0.85
27:B2:50:ILE:HG21	35:BA:61:G:C5'	2.05	0.85
35:BA:330:A:C2	35:BA:1210:A:H2'	2.08	0.85
11:AK:27:ASN:HA	11:AK:56:GLY:CA	2.07	0.85
50:BS:65:VAL:O	50:BS:69:VAL:HG12	1.76	0.85
35:BA:803:U:C2'	35:BA:804:A:H5'	2.07	0.85
35:BA:1516:C:H2'	35:BA:1517:G:H5''	1.58	0.85
53:BV:7:THR:OG1	53:BV:25:LEU:HD11	1.75	0.85
24:AY:171:TRP:NE1	24:AY:234:VAL:HG11	1.91	0.85
35:BA:1310:G:C2'	35:BA:1311:G:H5'	2.05	0.85
30:B5:11:THR:HG23	35:BA:2615:U:O2'	1.77	0.85
15:AO:36:ILE:HG12	15:AO:59:MET:HE1	1.57	0.85
35:BA:2469:A:N7	35:BA:2482:G:H1'	1.92	0.85
48:BQ:29:PHE:HE2	48:BQ:67:ARG:HH21	1.23	0.85
10:AJ:50:ILE:H	10:AJ:50:ILE:HD13	1.41	0.85
4:AD:13:ARG:HA	4:AD:33:MET:HE1	1.58	0.85
41:BG:46:ALA:C	41:BG:47:LYS:HD2	1.95	0.85
35:BA:1547:C:O2'	35:BA:1548:C:H5'	1.76	0.85
28:B3:5:LYS:HA	28:B3:36:VAL:HG12	1.57	0.85
1:AA:1166:G:N2	1:AA:1169:A:H3'	1.91	0.85
54:BW:88:ARG:HG2	54:BW:88:ARG:HH11	1.37	0.85
24:AY:14:ARG:HD3	24:AY:276:ALA:CB	2.06	0.84
24:AY:181:GLY:HA3	24:AY:263:PHE:HE1	1.40	0.84
24:AY:296:PHE:CD2	24:AY:331:LEU:HD11	2.12	0.84
24:AY:13:ARG:HD3	24:AY:363:ASP:CG	1.97	0.84
38:BD:106:ILE:O	38:BD:108:PRO:HD3	1.76	0.84
38:BD:201:HIS:O	38:BD:204:ILE:CG2	2.25	0.84
15:AO:50:HIS:O	15:AO:53:HIS:HB3	1.77	0.84
2:AB:53:ARG:O	2:AB:56:ARG:HB2	1.75	0.84
35:BA:2839:G:H4'	49:BR:49:ASP:OD2	1.75	0.84
41:BG:71:THR:HB	41:BG:89:GLY:C	1.98	0.84
39:BE:51:PHE:O	39:BE:74:PRO:HB3	1.77	0.84
24:AY:373:ILE:HG22	24:AY:374:GLN:N	1.90	0.84
30:B5:19:ARG:C	30:B5:21:SER:H	1.77	0.84
35:BA:2784:C:C1'	39:BE:37:ARG:HH12	1.89	0.84
38:BD:87:ASN:HB2	38:BD:88:ARG:NH2	1.92	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BE:65:GLY:O	39:BE:70:ALA:HB2	1.76	0.84
52:BU:69:CYS:HB2	52:BU:74:LEU:HD11	1.58	0.84
3:AC:36:ASP:HB3	3:AC:40:ARG:NH1	1.92	0.84
10:AJ:65:LEU:CD1	14:AN:55:GLY:HA3	2.05	0.84
1:AA:356:A:H5''	1:AA:367:U:H5	1.40	0.84
35:BA:2840:C:H2'	35:BA:2841:C:H6	1.41	0.84
35:BA:1468:C:H2'	35:BA:1469:A:H8	1.40	0.84
5:AE:129:ILE:H	5:AE:129:ILE:CD1	1.90	0.84
22:AV:17(A):U:O2'	22:AV:18:G:H4'	1.76	0.84
24:AY:296:PHE:CG	24:AY:331:LEU:CD1	2.53	0.84
39:BE:50:GLY:CA	39:BE:78:LEU:HB3	2.06	0.84
8:AH:5:PRO:O	8:AH:8:ASP:HB3	1.77	0.84
47:BP:9:ASN:H	47:BP:10:PRO:HD2	1.42	0.84
14:AN:12:ARG:HB3	14:AN:14:PRO:HD2	1.59	0.84
35:BA:2645:G:H3'	35:BA:2646:C:H5'	1.58	0.84
24:AY:359:ALA:HB1	24:AY:363:ASP:CB	2.05	0.84
30:B5:30:LEU:HD11	54:BW:34:ASN:O	1.77	0.84
35:BA:1925:C:O2'	35:BA:1926:U:C6	2.30	0.84
45:BN:26:LEU:O	45:BN:30:ILE:HG13	1.77	0.84
35:BA:2801:A:H8	35:BA:2894:G:OP1	1.60	0.84
27:B2:50:ILE:HG22	27:B2:51:ARG:N	1.90	0.84
40:BF:28:ILE:HD13	40:BF:28:ILE:H	1.41	0.84
2:AB:113:HIS:O	2:AB:117:GLU:HB2	1.76	0.84
1:AA:1461:G:H2'	1:AA:1462:G:C8	2.12	0.84
35:BA:2348:U:O2'	35:BA:2349:G:H5'	1.78	0.84
6:AF:25:ILE:HA	6:AF:28:ARG:NH1	1.91	0.84
6:AF:82:ARG:HB2	6:AF:85:VAL:CG2	2.07	0.84
57:BZ:10:ARG:HE	57:BZ:36:LYS:HB2	1.42	0.84
9:AI:114:TYR:CE2	10:AJ:59:SER:HA	2.12	0.84
1:AA:404:U:H2'	1:AA:405:U:C6	2.11	0.84
16:AP:69:THR:HA	16:AP:72:ARG:HB3	1.60	0.84
34:B9:24:TYR:CZ	34:B9:35:ARG:HG3	2.12	0.84
5:AE:37:ARG:O	5:AE:38:GLN:HG2	1.78	0.84
35:BA:2137:C:N4	35:BA:2154:G:H22	1.75	0.84
33:B8:62:LEU:CD1	35:BA:242:G:H5''	2.07	0.84
35:BA:999:U:H5	35:BA:1154:G:C5	1.94	0.84
45:BN:61:ARG:HG3	45:BN:61:ARG:HH11	1.42	0.84
35:BA:2329:G:H1	35:BA:2386:C:N4	1.76	0.84
54:BW:25:ARG:HA	54:BW:71:VAL:CG1	2.07	0.84
35:BA:1038:C:C2'	35:BA:1039:G:H5''	2.07	0.84
7:AG:135:VAL:O	7:AG:138:LYS:HB3	1.76	0.84
35:BA:2295:C:H2'	35:BA:2296:U:C6	2.13	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2852:G:H2'	35:BA:2853:C:C6	2.12	0.84
2:AB:127:ILE:HA	2:AB:135:GLN:NE2	1.93	0.84
35:BA:2491:U:H5'	35:BA:2570:G:H5''	1.60	0.84
30:B5:3:LYS:HE2	35:BA:2611:U:O2'	1.78	0.84
12:AL:92:ASP:O	12:AL:93:LEU:HD23	1.78	0.84
1:AA:981:U:H2'	1:AA:982:U:C5	2.12	0.84
40:BF:7:TYR:HB3	40:BF:16:GLY:O	1.76	0.84
5:AE:84:PHE:CE1	5:AE:133:TYR:HB3	2.12	0.84
35:BA:473:G:H5''	35:BA:508:G:N2	1.90	0.84
35:BA:723:G:H2'	35:BA:724:U:C6	2.13	0.84
24:AY:111:MET:SD	24:AY:113:ILE:HD11	2.18	0.84
23:AX:14:A:H3'	23:AX:15:A:C5'	2.05	0.84
2:AB:172:ILE:HD12	2:AB:172:ILE:N	1.92	0.84
11:AK:33:THR:HA	11:AK:39:PRO:HA	1.59	0.84
35:BA:2389:G:H5''	35:BA:2390:U:H5'	1.58	0.84
51:BT:108:ARG:C	51:BT:110:ILE:H	1.79	0.84
1:AA:180:U:C2'	1:AA:181:G:H5'	2.08	0.84
42:BH:91:GLY:HA3	42:BH:94:TYR:CD2	2.12	0.84
47:BP:123:LEU:H	47:BP:123:LEU:HD23	1.42	0.84
35:BA:122:G:H2'	35:BA:123:G:H8	1.40	0.84
35:BA:1891:G:H2'	35:BA:1892:C:C6	2.11	0.84
35:BA:2291:U:H2'	35:BA:2292:C:C6	2.13	0.84
38:BD:182:LEU:O	38:BD:272:ALA:HB2	1.78	0.84
52:BU:69:CYS:HB2	52:BU:74:LEU:CD1	2.08	0.84
8:AH:29:SER:HB3	8:AH:32:LYS:HG3	1.57	0.84
12:AL:36:VAL:CG1	24:AY:406:PRO:HB3	2.07	0.84
14:AN:57:ARG:O	14:AN:59:ALA:N	2.11	0.84
12:AL:126:LYS:HE2	24:AY:487:ARG:NH2	1.92	0.84
37:BC:68:LEU:O	37:BC:177:LYS:HG2	1.77	0.84
54:BW:27:LYS:O	54:BW:71:VAL:HG23	1.78	0.84
32:B7:19:ARG:O	32:B7:22:MET:HB2	1.78	0.84
24:AY:164:ILE:HD11	24:AY:251:ILE:C	1.97	0.84
38:BD:71:ASP:CB	38:BD:103:ARG:HH12	1.91	0.84
47:BP:97:PRO:C	47:BP:99:LEU:H	1.80	0.84
1:AA:1368:G:OP2	9:AI:112:LYS:HD2	1.78	0.84
10:AJ:6:ILE:O	10:AJ:71:LEU:HD12	1.78	0.84
56:BY:43:ASN:HB3	56:BY:64:GLU:HA	1.59	0.84
56:BY:49:VAL:O	56:BY:50:ARG:HB2	1.76	0.84
40:BF:125:LEU:HD12	40:BF:196:LEU:HD21	1.60	0.84
49:BR:48:VAL:CA	49:BR:51:LEU:HD22	2.08	0.84
42:BH:70:THR:HA	42:BH:73:ALA:HB3	1.59	0.84
1:AA:1393:U:H2'	1:AA:1395:C:H5	1.42	0.84

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1495:U:C2'	1:AA:1496:C:H5'	2.06	0.84
7:AG:65:ALA:CB	7:AG:124:LEU:HD23	2.07	0.84
20:AT:36:LEU:HD12	20:AT:59:ALA:HB2	1.59	0.84
1:AA:949:A:H2'	1:AA:950:U:H5'	1.59	0.83
2:AB:77:ALA:HB2	2:AB:211:ILE:HD13	1.60	0.83
1:AA:982:U:H4'	1:AA:983:A:O5'	1.78	0.83
10:AJ:61:GLU:OE1	14:AN:45:ARG:HD2	1.77	0.83
56:BY:13:VAL:HB	56:BY:28:LYS:NZ	1.91	0.83
27:B2:25:VAL:O	27:B2:29:LYS:HG2	1.78	0.83
55:BX:12:VAL:CG2	55:BX:13:LEU:H	1.90	0.83
37:BC:43:VAL:HG22	37:BC:214:VAL:HG22	1.60	0.83
35:BA:272(J):C:C2'	35:BA:274:G:H5''	2.07	0.83
2:AB:127:ILE:HA	2:AB:135:GLN:HE22	1.42	0.83
35:BA:1914:C:O2	35:BA:1914:C:H5'	1.78	0.83
35:BA:6:A:H2'	35:BA:7:G:C8	2.13	0.83
1:AA:310:G:H2'	1:AA:311:C:H6	1.42	0.83
24:AY:428:PHE:HB2	24:AY:437:ILE:HG13	1.59	0.83
47:BP:28:GLY:O	47:BP:29:LYS:HD2	1.78	0.83
1:AA:892:A:H2'	1:AA:893:C:C6	2.12	0.83
24:AY:404:LYS:O	24:AY:405:ASP:HB2	1.77	0.83
37:BC:47:LEU:HD12	37:BC:47:LEU:N	1.92	0.83
37:BC:76:ALA:HB2	37:BC:153:ILE:HD11	1.60	0.83
35:BA:2696:U:H2'	35:BA:2697:G:H8	1.42	0.83
1:AA:375:U:H2'	1:AA:376:G:H8	1.43	0.83
35:BA:1925:C:C2'	35:BA:1926:U:C5'	2.56	0.83
38:BD:242:ARG:HH11	38:BD:242:ARG:HG2	1.44	0.83
47:BP:71:VAL:H	47:BP:72:PRO:HD3	1.43	0.83
2:AB:100:GLY:HA2	2:AB:103:THR:OG1	1.78	0.83
2:AB:204:ASN:HD21	2:AB:206:ASP:H	1.24	0.83
35:BA:2268:A:O2'	35:BA:2269:A:H5'	1.77	0.83
40:BF:157:VAL:CG2	40:BF:194:MET:HA	2.08	0.83
4:AD:187:ARG:NH1	4:AD:187:ARG:HB3	1.93	0.83
38:BD:79:VAL:HG22	38:BD:115:GLN:O	1.79	0.83
35:BA:612:C:C2'	35:BA:613:G:H5''	2.09	0.83
35:BA:2177:C:H5'	35:BA:2178:C:OP1	1.78	0.83
25:B0:48:GLY:H	25:B0:51:VAL:HB	1.41	0.83
22:AV:39:C:H2'	22:AV:40:C:H5'	1.60	0.83
35:BA:783:A:C2	35:BA:785:G:H1'	2.13	0.83
45:BN:9:VAL:HG21	45:BN:41:ASP:OD2	1.77	0.83
10:AJ:53:PRO:HA	14:AN:41:ARG:NH2	1.93	0.83
35:BA:654(M):C:H2'	35:BA:654(N):G:C8	2.13	0.83
24:AY:136:PRO:O	24:AY:137:ILE:HG13	1.77	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1925:C:H2'	35:BA:1926:U:H5''	1.57	0.83
38:BD:24:ILE:HG12	38:BD:82:ILE:CG2	2.08	0.83
10:AJ:49:VAL:CG2	14:AN:41:ARG:HB2	2.09	0.83
10:AJ:53:PRO:C	14:AN:41:ARG:HH22	1.80	0.83
35:BA:2066:C:H2'	35:BA:2067:G:H8	1.44	0.83
24:AY:135:THR:HG23	24:AY:136:PRO:HD2	0.85	0.83
24:AY:221:GLU:HG2	24:AY:222:ASP:N	1.94	0.83
35:BA:1826:G:H4'	38:BD:242:ARG:NH2	1.94	0.83
52:BU:59:ARG:O	52:BU:63:VAL:HG23	1.76	0.83
1:AA:858:G:O2'	1:AA:859:A:H5''	1.79	0.83
1:AA:1489:G:H2'	1:AA:1490:C:C6	2.13	0.83
6:AF:47:ARG:HB3	6:AF:47:ARG:CZ	2.08	0.83
51:BT:58:ASN:HD22	51:BT:58:ASN:H	0.84	0.83
35:BA:1607:C:H4'	35:BA:1608:A:O5'	1.77	0.83
1:AA:1278:U:H5''	1:AA:1279:A:O4'	1.78	0.83
24:AY:168:PRO:HG2	24:AY:171:TRP:CZ2	2.13	0.83
24:AY:445:GLN:HA	24:AY:448:VAL:CG2	2.09	0.83
35:BA:2509:G:O2'	35:BA:2510:C:H5'	1.79	0.83
51:BT:80:SER:HB3	51:BT:81:PRO:HD3	1.59	0.83
1:AA:580:U:H2'	1:AA:581:G:O4'	1.77	0.83
6:AF:72:VAL:HG13	6:AF:73:ASN:N	1.92	0.83
42:BH:105:LEU:CD2	42:BH:105:LEU:H	1.91	0.83
35:BA:909:A:H2'	35:BA:912:C:H41	1.42	0.83
1:AA:990:C:H2'	1:AA:991:U:C6	2.14	0.83
14:AN:47:LEU:HD13	14:AN:52:GLN:HB2	1.60	0.83
1:AA:619:U:H2'	4:AD:135:LEU:HD21	1.58	0.83
37:BC:47:LEU:CD1	37:BC:171:ILE:HB	2.09	0.83
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.14	0.83
1:AA:895:G:O6	1:AA:904:C:N3	2.10	0.83
24:AY:11:ALA:HA	24:AY:279:PRO:HD2	1.58	0.83
24:AY:196:GLY:O	24:AY:197:LYS:HG2	1.78	0.83
24:AY:263:PHE:CD2	24:AY:263:PHE:O	2.30	0.83
38:BD:169:GLU:OE1	38:BD:184:LYS:HD2	1.78	0.83
39:BE:199:ARG:HB2	39:BE:199:ARG:HH11	1.38	0.83
45:BN:58:ASP:OD2	45:BN:59:LYS:HG2	1.78	0.83
8:AH:13:ILE:O	8:AH:17:THR:HG23	1.77	0.83
15:AO:65:ARG:HH11	15:AO:65:ARG:CB	1.92	0.83
35:BA:1915:U:H2'	35:BA:1916:A:C5'	2.08	0.83
13:AM:91:ARG:HB3	13:AM:98:VAL:HG22	1.59	0.83
37:BC:37:PHE:CE1	37:BC:39:GLU:HG3	2.14	0.83
41:BG:110:ALA:HB2	41:BG:140:ILE:HD13	1.60	0.83
16:AP:56:ALA:O	16:AP:60:LEU:HG	1.78	0.83

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:107:ASP:H	51:BT:110:ILE:HG12	1.40	0.83
35:BA:1221:C:H2'	35:BA:1221(A):C:H6	1.42	0.83
35:BA:1427:A:H1'	35:BA:1428:C:C5	2.14	0.83
35:BA:721:C:H3'	35:BA:722:A:H8	1.44	0.83
24:AY:11:ALA:HA	24:AY:278:ALA:CB	2.08	0.83
37:BC:100:ILE:HG12	37:BC:127:MET:HE2	1.60	0.83
38:BD:6:PHE:CD2	38:BD:17:THR:HA	2.14	0.83
35:BA:2265:U:H2'	35:BA:2266:A:C8	2.13	0.83
12:AL:24:VAL:O	12:AL:26:ALA:N	2.12	0.83
54:BW:14:PRO:CG	54:BW:101:SER:HB3	2.09	0.83
3:AC:121:ALA:O	3:AC:124:ILE:HB	1.79	0.83
9:AI:112:LYS:HD3	9:AI:112:LYS:C	1.99	0.83
4:AD:8:VAL:CG2	4:AD:22:LYS:HE2	2.08	0.83
22:AV:27:U:H2'	22:AV:28:C:H5'	1.61	0.83
33:B8:19:SER:HB2	33:B8:21:LYS:HE3	1.57	0.83
33:B8:8:LYS:HZ2	33:B8:11:LYS:HE2	1.44	0.83
38:BD:69:ARG:NE	38:BD:105:ILE:HD11	1.93	0.83
38:BD:9:TYR:OH	38:BD:13:ARG:HD3	1.78	0.83
38:BD:24:ILE:HG12	38:BD:82:ILE:HG22	1.61	0.83
49:BR:17:ARG:HB2	49:BR:17:ARG:NH1	1.94	0.83
48:BQ:1:MET:HE1	48:BQ:48:GLU:HB2	1.60	0.83
3:AC:48:TYR:HE1	3:AC:118:GLN:NE2	1.77	0.83
4:AD:19:LEU:HD23	4:AD:21:LEU:HD11	1.61	0.83
11:AK:52:GLY:H	11:AK:55:LYS:CE	1.91	0.83
29:B4:10:VAL:HG23	29:B4:11:PRO:HD2	1.61	0.83
1:AA:112:G:C5'	1:AA:389:A:H4'	2.08	0.83
5:AE:81:GLU:HG2	5:AE:90:VAL:HG13	1.58	0.83
42:BH:94:TYR:HB3	42:BH:107:VAL:CG1	2.09	0.83
1:AA:1283:G:HO2'	1:AA:1284:C:H6	1.19	0.83
24:AY:26:LYS:HG2	58:AY:1000:GCP:O2B	1.79	0.82
24:AY:403:LEU:H	24:AY:403:LEU:HD22	1.41	0.82
35:BA:2009:G:H2'	35:BA:2010:G:H8	1.43	0.82
51:BT:80:SER:CB	51:BT:81:PRO:HD3	2.08	0.82
35:BA:1915:U:C2'	35:BA:1916:A:H5'	2.09	0.82
35:BA:2588:G:H2'	35:BA:2589:A:O4'	1.78	0.82
10:AJ:50:ILE:CA	10:AJ:60:ARG:HG2	2.07	0.82
49:BR:48:VAL:HA	49:BR:51:LEU:HB2	1.60	0.82
40:BF:29:ASN:HB3	40:BF:112:MET:SD	2.18	0.82
36:BB:13:A:O2'	36:BB:14:U:H3'	1.77	0.82
24:AY:104:THR:O	24:AY:105:ALA:HB2	1.77	0.82
24:AY:10:VAL:HG11	24:AY:291:ALA:HB1	1.61	0.82
35:BA:2457:U:O2'	35:BA:2458:G:H5'	1.79	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BF:81:PRO:HA	40:BF:87:GLY:O	1.79	0.82
35:BA:996:A:H4'	52:BU:92:ARG:NE	1.94	0.82
35:BA:2159:G:H2'	35:BA:2160:G:C5'	2.09	0.82
48:BQ:133:ARG:CG	48:BQ:134:ARG:H	1.91	0.82
12:AL:89:ARG:HD3	12:AL:90:VAL:N	1.95	0.82
35:BA:1854:A:H62	35:BA:1888:G:H8	1.24	0.82
28:B3:43:ILE:O	28:B3:47:VAL:HG23	1.78	0.82
24:AY:513:LEU:HB3	24:AY:517:ARG:HE	1.44	0.82
35:BA:814:C:OP1	53:BV:84:LYS:N	2.12	0.82
1:AA:1383:C:H2'	1:AA:1384:C:C6	2.14	0.82
35:BA:210:C:H2'	35:BA:211:A:C8	2.14	0.82
24:AY:109:CYS:HB2	24:AY:137:ILE:HG21	1.60	0.82
24:AY:138:LEU:HB3	24:AY:255:PHE:HE1	1.44	0.82
1:AA:741:G:H2'	1:AA:742:G:H8	1.44	0.82
2:AB:208:ILE:HA	2:AB:211:ILE:HD12	1.61	0.82
48:BQ:134:ARG:NH1	57:BZ:122:ARG:NH2	2.25	0.82
48:BQ:55:VAL:HA	48:BQ:58:PHE:CE1	2.13	0.82
13:AM:75:ALA:O	13:AM:79:LYS:HG3	1.78	0.82
14:AN:23:ARG:HD2	14:AN:28:GLY:O	1.79	0.82
24:AY:309:PRO:HG3	24:AY:313:ASP:OD2	1.79	0.82
38:BD:14:ARG:HG2	38:BD:14:ARG:HH11	1.42	0.82
35:BA:2584:U:O2'	35:BA:2585:U:H5'	1.79	0.82
35:BA:2052:G:H4'	39:BE:143:ASN:O	1.78	0.82
35:BA:1190:G:H2'	35:BA:1191:G:C8	2.15	0.82
35:BA:1827:C:H2'	35:BA:1828:G:O4'	1.80	0.82
35:BA:1977:A:H2'	35:BA:1978:A:O4'	1.78	0.82
52:BU:91:ASP:OD1	52:BU:96:ALA:HB2	1.80	0.82
35:BA:2591:C:P	38:BD:239:ARG:HG3	2.19	0.82
56:BY:13:VAL:HG23	56:BY:74:PRO:HA	1.60	0.82
40:BF:167:ALA:HB1	40:BF:173:VAL:CG1	2.03	0.82
37:BC:64:LEU:HD13	37:BC:175:VAL:O	1.79	0.82
51:BT:11:GLU:H	51:BT:11:GLU:CD	1.82	0.82
25:B0:37:LEU:HD21	25:B0:60:PHE:CA	2.08	0.82
1:AA:1495:U:H2'	1:AA:1496:C:H5'	1.58	0.82
35:BA:2439:A:C8	35:BA:2439:A:H5'	2.13	0.82
1:AA:80:G:H3'	1:AA:81:U:H5'	1.62	0.82
1:AA:1408:A:H2	35:BA:1913:A:H62	1.28	0.82
35:BA:244:A:H5'	35:BA:245:G:OP2	1.77	0.82
38:BD:158:ALA:HB3	38:BD:161:THR:OG1	1.79	0.82
35:BA:1187:G:H5''	53:BV:81:TYR:CE1	2.15	0.82
1:AA:668:G:O2'	15:AO:46:HIS:HB3	1.79	0.82
2:AB:220:ASP:CA	2:AB:223:ILE:HD12	2.09	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1912:A:C5'	35:BA:1918:A:N6	2.41	0.82
35:BA:912:C:O2'	35:BA:913:U:H5'	1.77	0.82
15:AO:3:ILE:HG13	15:AO:8:LYS:HE2	1.60	0.82
13:AM:13:LYS:HA	13:AM:44:ARG:NH1	1.92	0.82
1:AA:1321:C:H5'	1:AA:1322:C:C5'	2.10	0.82
16:AP:20:VAL:HA	16:AP:36:ILE:HG12	1.60	0.82
35:BA:2853:C:H2'	35:BA:2854:G:C8	2.15	0.82
42:BH:94:TYR:HB3	42:BH:107:VAL:HG12	1.59	0.82
1:AA:1320:C:H5'	1:AA:1320:C:H6	1.44	0.82
35:BA:847:U:H2'	35:BA:848:G:H5''	1.61	0.82
4:AD:61:LYS:HA	4:AD:203:VAL:HG22	1.61	0.82
1:AA:92:C:H2'	1:AA:93:G:H8	1.45	0.82
35:BA:629:G:H1'	35:BA:639:U:H1'	1.61	0.82
35:BA:833:U:H5''	47:BP:48:PRO:CB	2.09	0.82
38:BD:60:ARG:CD	38:BD:86:PRO:HB2	2.08	0.82
45:BN:91:LEU:CA	45:BN:95:PRO:HB3	2.10	0.82
1:AA:401:C:H2'	1:AA:402:G:C8	2.13	0.82
26:B1:76:ARG:HA	35:BA:271(Q):G:H4'	1.62	0.82
16:AP:73:LEU:HD23	16:AP:76:GLN:NE2	1.93	0.82
24:AY:155:LEU:HB3	24:AY:166:CYS:SG	2.19	0.82
24:AY:189:GLU:CG	24:AY:189:GLU:O	2.27	0.82
24:AY:282:ARG:HD3	24:AY:319:ARG:HH22	1.45	0.82
33:B8:33:ASN:HA	33:B8:36:LYS:HD3	1.62	0.82
35:BA:1024:G:H3'	35:BA:1025:G:C5'	2.08	0.82
35:BA:1803:A:H2'	35:BA:1804:C:H6	1.45	0.82
35:BA:2443:C:O2'	35:BA:2444:G:H5'	1.79	0.82
52:BU:92:ARG:HD2	53:BV:11:GLN:HG3	1.60	0.82
2:AB:162:ILE:HG12	2:AB:163:PHE:N	1.94	0.82
1:AA:1204:A:H2'	1:AA:1205:U:H6	1.45	0.82
40:BF:179:GLU:HG3	40:BF:201:VAL:CG2	2.09	0.82
5:AE:54:ALA:O	5:AE:58:ALA:HB2	1.80	0.82
35:BA:873:G:O2'	35:BA:874:G:H5'	1.80	0.82
35:BA:1457:A:O2'	35:BA:1458:C:H5'	1.80	0.82
36:BB:102:A:C3'	36:BB:103:G:H8	1.92	0.82
35:BA:2118:U:OP1	35:BA:2148:G:H4'	1.79	0.82
48:BQ:10:ARG:NH1	48:BQ:10:ARG:HB2	1.94	0.82
35:BA:1327:C:H2'	35:BA:1328:G:O4'	1.80	0.82
35:BA:1805:U:H5'	38:BD:250:TRP:CE3	2.14	0.82
35:BA:1998:G:H4'	35:BA:2724:C:H4'	1.60	0.82
35:BA:659:C:H2'	35:BA:660:G:H8	1.44	0.82
35:BA:730:C:H2'	35:BA:731:C:C6	2.13	0.82
35:BA:1819:A:H5''	38:BD:158:ALA:HB2	1.60	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:243:GLY:O	38:BD:244:ARG:HB3	1.79	0.82
39:BE:49:LEU:O	39:BE:78:LEU:HB2	1.80	0.82
39:BE:77:ILE:HG22	39:BE:78:LEU:N	1.94	0.82
51:BT:55:ASN:N	51:BT:59:THR:HG22	1.94	0.82
45:BN:2:LYS:HZ3	52:BU:95:LEU:HD21	1.43	0.82
9:AI:114:TYR:HE2	10:AJ:59:SER:HA	1.45	0.82
4:AD:9:CYS:SG	4:AD:31:CYS:O	2.37	0.82
40:BF:178:PRO:HG2	40:BF:179:GLU:OE1	1.80	0.82
5:AE:32:VAL:O	5:AE:43:LEU:HD12	1.79	0.82
35:BA:473:G:H5''	35:BA:508:G:H22	1.41	0.82
25:B0:52:GLY:HA3	25:B0:60:PHE:CE1	2.14	0.82
1:AA:1498:U:C4	23:AX:17:U:H4'	2.14	0.82
1:AA:163:C:H2'	1:AA:164:U:C6	2.14	0.82
24:AY:484:GLU:O	24:AY:488:LYS:HB2	1.80	0.82
35:BA:740:U:H2'	35:BA:741:G:C8	2.14	0.82
39:BE:63:LEU:O	39:BE:63:LEU:HD23	1.79	0.82
51:BT:22:PHE:HE2	51:BT:85:LYS:NZ	1.77	0.82
52:BU:48:ALA:O	52:BU:52:ARG:HG3	1.78	0.82
53:BV:75:PHE:CZ	53:BV:77:ALA:HA	2.15	0.82
2:AB:18:GLY:H	2:AB:42:ILE:CG2	1.92	0.82
5:AE:98:THR:HG21	5:AE:119:LEU:HD21	1.61	0.82
35:BA:2377:A:H2'	35:BA:2378:A:C8	2.15	0.82
36:BB:115:G:H2'	36:BB:116:G:H8	1.44	0.82
35:BA:1924:C:P	35:BA:1924:C:H2'	2.19	0.82
35:BA:1839:G:C8	35:BA:1927:A:H1'	2.15	0.82
35:BA:2684:U:C1'	46:BO:70:LYS:HD2	2.09	0.82
35:BA:572:A:H2'	35:BA:573:G:O4'	1.80	0.82
1:AA:738:C:H2'	1:AA:739:C:H6	1.45	0.82
35:BA:2391:G:C6	35:BA:2427:C:H1'	2.14	0.82
33:B8:12:LYS:HD3	47:BP:68:GLN:HG3	1.62	0.82
49:BR:55:ALA:HB2	49:BR:79:LEU:HD11	1.61	0.82
4:AD:125:HIS:C	4:AD:126:ILE:HD12	2.01	0.82
24:AY:411:GLN:OE1	24:AY:414:LYS:HD2	1.80	0.81
35:BA:1778:U:H2'	35:BA:1784:A:N6	1.95	0.81
35:BA:2575:C:H5''	35:BA:2576:G:OP2	1.80	0.81
52:BU:112:ARG:NH1	53:BV:46:VAL:HG11	1.95	0.81
35:BA:1912:A:H5''	35:BA:1918:A:H61	1.42	0.81
25:B0:43:THR:HG21	35:BA:2332:U:H5'	1.62	0.81
36:BB:75:G:H2'	57:BZ:85:HIS:CE1	2.15	0.81
3:AC:30:ARG:HD3	14:AN:35:ARG:O	1.79	0.81
27:B2:61:LEU:O	27:B2:64:LEU:HB3	1.80	0.81
52:BU:78:THR:O	52:BU:81:HIS:HB3	1.79	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:2:ALA:O	38:BD:3:VAL:HG23	1.79	0.81
35:BA:1375:C:H2'	35:BA:1376:C:H6	1.43	0.81
24:AY:105:ALA:CB	24:AY:319:ARG:HD3	2.09	0.81
35:BA:673:C:H6	35:BA:673:C:H5'	1.45	0.81
8:AH:1:MET:HE3	8:AH:3:THR:N	1.94	0.81
19:AS:46:GLY:H	19:AS:62:ILE:CG2	1.92	0.81
35:BA:94(A):G:H2'	35:BA:95:G:C5'	2.10	0.81
4:AD:10:ARG:O	4:AD:13:ARG:HB2	1.79	0.81
37:BC:175:VAL:HG11	37:BC:189:ILE:HG13	1.62	0.81
8:AH:82:HIS:CD2	8:AH:138:TRP:HE1	1.97	0.81
20:AT:91:LEU:C	20:AT:93:GLU:H	1.83	0.81
37:BC:137:LEU:HD22	37:BC:138:PRO:HD2	1.61	0.81
33:B8:45:GLY:O	33:B8:46:ARG:HB2	1.79	0.81
1:AA:1346:A:C5'	9:AI:120:ARG:HH12	1.94	0.81
35:BA:1958:C:O2'	35:BA:1959:G:H5'	1.80	0.81
24:AY:296:PHE:CD1	24:AY:331:LEU:CD1	2.63	0.81
35:BA:2868:A:H2'	35:BA:2869:G:C8	2.15	0.81
39:BE:132:HIS:HA	39:BE:135:HIS:CE1	2.14	0.81
45:BN:44:PRO:O	45:BN:45:ASN:HB3	1.80	0.81
35:BA:2413:G:H21	47:BP:70:GLN:HE22	1.28	0.81
52:BU:80:ILE:O	52:BU:84:LYS:HB2	1.80	0.81
35:BA:2057:A:H2'	35:BA:2058:A:C8	2.15	0.81
35:BA:2459:A:N6	35:BA:2493:U:H3	1.78	0.81
35:BA:2489:G:O5'	35:BA:2489:G:H8	1.62	0.81
38:BD:71:ASP:HB3	38:BD:103:ARG:HH12	1.45	0.81
35:BA:1677:A:H2'	35:BA:1678:G:C8	2.15	0.81
46:BO:88:ASN:ND2	46:BO:92:GLU:HB3	1.95	0.81
6:AF:69:GLU:H	6:AF:69:GLU:CD	1.81	0.81
15:AO:25:THR:OG1	15:AO:70:LEU:HD21	1.79	0.81
1:AA:1087:G:N2	1:AA:1099:G:H1'	1.94	0.81
35:BA:1912:A:H5'	35:BA:1918:A:N6	1.95	0.81
1:AA:1149:C:H2'	1:AA:1150:U:C6	2.15	0.81
3:AC:123:GLN:HB3	3:AC:128:PHE:HD2	1.44	0.81
55:BX:28:PHE:CZ	55:BX:81:VAL:HG21	2.15	0.81
40:BF:24:LEU:O	40:BF:115:ALA:HB1	1.79	0.81
2:AB:22:LYS:HE2	2:AB:22:LYS:CA	2.11	0.81
31:B6:26:ASN:HD22	31:B6:32:ASN:HD21	1.26	0.81
35:BA:1578:U:C2'	35:BA:1579:A:H5''	2.11	0.81
35:BA:2184:G:H2'	35:BA:2185:C:C1'	2.10	0.81
28:B3:8:LEU:HD22	28:B3:32:GLN:H	1.44	0.81
49:BR:79:LEU:O	49:BR:79:LEU:HD22	1.80	0.81
16:AP:45:THR:C	16:AP:47:ASP:H	1.82	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AN:13:THR:N	14:AN:14:PRO:CD	2.42	0.81
55:BX:24:GLY:O	55:BX:82:GLN:HA	1.79	0.81
46:BO:89:ASN:C	46:BO:91:LEU:H	1.83	0.81
24:AY:446:PHE:O	24:AY:450:VAL:HG23	1.81	0.81
35:BA:1770:G:O2'	35:BA:1771:C:H5'	1.79	0.81
35:BA:2682:U:O2	39:BE:22:PRO:HB3	1.78	0.81
15:AO:65:ARG:HH11	15:AO:65:ARG:HB3	1.46	0.81
2:AB:42:ILE:HD12	2:AB:203:GLY:CA	2.09	0.81
2:AB:84:GLU:OE1	2:AB:216:SER:HA	1.80	0.81
35:BA:908:C:O2'	35:BA:909:A:H5'	1.80	0.81
3:AC:30:ARG:HB2	14:AN:36:PHE:O	1.81	0.81
35:BA:2343:C:H2'	35:BA:2344:U:C6	2.15	0.81
13:AM:56:LEU:HD13	13:AM:60:VAL:HG21	1.62	0.81
1:AA:1417:G:H2'	1:AA:1482:G:H22	1.45	0.81
12:AL:41:ARG:HH11	12:AL:41:ARG:HB3	1.44	0.81
24:AY:183:TYR:HE2	24:AY:189:GLU:CA	1.93	0.81
24:AY:511:LEU:O	24:AY:515:GLN:HG2	1.81	0.81
35:BA:1789:A:OP1	38:BD:222:ARG:HG2	1.80	0.81
35:BA:2484:G:H1'	48:BQ:124:LYS:HD2	1.62	0.81
53:BV:39:LEU:O	53:BV:40:LEU:HB2	1.80	0.81
1:AA:882:C:N4	12:AL:5:PRO:HB3	1.96	0.81
15:AO:58:MET:SD	15:AO:58:MET:N	2.54	0.81
22:AV:5:G:H2'	22:AV:6:G:H8	1.45	0.81
10:AJ:54:PHE:CD2	10:AJ:55:LYS:HD2	2.15	0.81
11:AK:30:VAL:CG2	11:AK:68:ALA:HB2	2.11	0.81
5:AE:51:VAL:O	5:AE:55:VAL:HG23	1.80	0.81
1:AA:390:C:H2'	1:AA:391:G:C8	2.16	0.81
38:BD:263:ARG:CG	38:BD:263:ARG:HH11	1.93	0.81
1:AA:1283:G:O2'	1:AA:1284:C:H6	1.64	0.81
35:BA:608:A:H2'	35:BA:609:A:C8	2.16	0.81
24:AY:138:LEU:HD22	24:AY:275:TRP:CE3	2.14	0.81
24:AY:402:ARG:O	24:AY:461:ALA:HB1	1.79	0.81
35:BA:976:C:H42	35:BA:987:G:H1	1.27	0.81
38:BD:201:HIS:O	38:BD:204:ILE:HG22	1.79	0.81
38:BD:229:VAL:HG13	38:BD:230:ASP:N	1.95	0.81
45:BN:120:LEU:HD11	45:BN:122:VAL:HG23	1.62	0.81
35:BA:1917:U:H2'	35:BA:1918:A:H5'	1.62	0.81
48:BQ:35:VAL:CG1	48:BQ:130:LYS:HB3	2.09	0.81
35:BA:300:A:H2'	35:BA:334:C:O2'	1.80	0.81
49:BR:97:VAL:HA	49:BR:113:LEU:O	1.80	0.81
41:BG:56:ALA:HA	41:BG:153:ARG:HH21	1.42	0.81
50:BS:89:ARG:CB	50:BS:92:TYR:HB3	2.11	0.81

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1428:C:N4	35:BA:1570:A:OP2	2.13	0.81
24:AY:331:LEU:HD22	24:AY:379:PHE:HD2	0.65	0.81
1:AA:950:U:H2'	1:AA:951:G:C8	2.15	0.81
38:BD:35:LYS:N	38:BD:36:PRO:HD2	1.95	0.81
39:BE:114:ALA:CB	39:BE:160:TYR:HB3	2.11	0.81
42:BH:27:LYS:HG2	42:BH:32:GLU:HG2	1.62	0.81
15:AO:29:VAL:CG2	15:AO:67:LEU:HD21	2.10	0.81
35:BA:1938:A:O2'	35:BA:1939:U:H5'	1.80	0.81
21:AU:10:ARG:CA	21:AU:13:ILE:HD12	2.11	0.81
12:AL:89:ARG:HH11	12:AL:91:LYS:HA	1.45	0.81
41:BG:42:GLY:HA2	41:BG:90:LEU:N	1.95	0.81
28:B3:45:GLY:HA2	28:B3:48:GLU:HG3	1.60	0.81
5:AE:76:ILE:HD11	5:AE:78:HIS:O	1.80	0.81
4:AD:147:ALA:HB2	4:AD:182:LYS:HG2	1.63	0.81
17:AQ:10:VAL:CG1	17:AQ:53:LEU:HA	2.11	0.81
35:BA:589:C:H2'	35:BA:590:A:H8	1.46	0.81
38:BD:16:MET:HB3	38:BD:207:GLY:CA	2.11	0.81
39:BE:47:VAL:HG21	39:BE:86:PRO:HD2	1.61	0.81
35:BA:565:C:OP2	53:BV:78:LYS:HG3	1.80	0.81
1:AA:920:U:H1'	1:AA:1080:A:C2	2.16	0.81
36:BB:75:G:O2'	57:BZ:10:ARG:NH2	2.14	0.81
3:AC:86:VAL:HG23	3:AC:87:LEU:HD23	1.61	0.81
31:B6:11:LEU:HD21	31:B6:51:GLU:HG2	1.62	0.81
35:BA:2115:G:H22	35:BA:2119:A:P	2.04	0.81
35:BA:67:U:H2'	35:BA:68:G:C8	2.16	0.81
24:AY:103:LEU:HD12	24:AY:103:LEU:H	1.45	0.81
30:B5:13:LYS:CA	30:B5:16:ARG:HB3	2.11	0.81
38:BD:30:GLU:HA	38:BD:83:GLU:OE1	1.80	0.81
6:AF:87:ARG:CG	6:AF:87:ARG:HH11	1.94	0.81
31:B6:53:LYS:O	31:B6:54:ILE:HG22	1.80	0.81
57:BZ:57:ILE:HD13	57:BZ:70:LEU:HA	1.63	0.81
13:AM:91:ARG:H	13:AM:94:ARG:HB2	1.44	0.81
24:AY:513:LEU:HD13	24:AY:517:ARG:HH21	1.46	0.81
35:BA:1291:C:C2'	35:BA:1292:U:H5'	2.10	0.81
35:BA:1441:G:H2'	35:BA:1442:G:H8	1.44	0.81
24:AY:6:TYR:HA	24:AY:360:TYR:HE2	1.45	0.81
35:BA:628:G:H2'	35:BA:629:G:C5'	2.11	0.81
38:BD:4:LYS:HE3	38:BD:20:ASP:OD1	1.80	0.81
39:BE:3:GLY:O	39:BE:4:ILE:HB	1.80	0.81
52:BU:15:LYS:O	52:BU:18:LEU:HB2	1.80	0.81
1:AA:598:U:H2'	1:AA:599:C:H6	1.46	0.81
35:BA:2472:G:H21	35:BA:2478:A:H62	1.29	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:178:ARG:HG3	2:AB:178:ARG:HH11	1.43	0.81
14:AN:3:ARG:O	14:AN:7:ILE:HG23	1.81	0.81
37:BC:47:LEU:HD21	37:BC:171:ILE:HD12	1.63	0.81
37:BC:3:HIS:HB3	37:BC:7:TYR:HD2	1.45	0.81
35:BA:1121:C:H2'	35:BA:1122:G:C8	2.13	0.81
35:BA:2199:A:H5''	35:BA:2200:C:C5	2.16	0.81
35:BA:2184:G:H2'	35:BA:2185:C:H1'	1.61	0.81
42:BH:12:PRO:HD2	42:BH:15:VAL:CG2	2.11	0.81
24:AY:403:LEU:N	24:AY:403:LEU:HD22	1.96	0.80
24:AY:90:PRO:HD2	24:AY:99:THR:HG21	1.63	0.80
35:BA:1255:U:O5'	35:BA:1256:G:H5''	1.80	0.80
35:BA:1394:U:H4'	35:BA:1603:A:H4'	1.62	0.80
35:BA:2393:A:C4	35:BA:2394:C:C6	2.69	0.80
48:BQ:134:ARG:HH11	57:BZ:122:ARG:HH21	1.27	0.80
13:AM:90:LEU:O	13:AM:91:ARG:HB2	1.80	0.80
11:AK:57:THR:HG23	11:AK:60:ALA:H	1.44	0.80
41:BG:140:ILE:HD12	41:BG:141:PHE:N	1.97	0.80
1:AA:59:A:O2'	1:AA:388:G:H3'	1.81	0.80
13:AM:40:ASN:HD22	13:AM:43:THR:HG23	1.45	0.80
27:B2:46:GLN:HB3	27:B2:48:HIS:CE1	2.15	0.80
22:AV:26:G:N2	22:AV:44:A:H61	1.78	0.80
35:BA:1084:A:OP1	43:BJ:55:UNK:HA	1.81	0.80
40:BF:132:VAL:HG22	40:BF:133:ASN:H	1.46	0.80
47:BP:122:PRO:HB3	47:BP:141:ALA:HB3	1.62	0.80
1:AA:1137:C:H4'	1:AA:1138:G:C2	2.16	0.80
7:AG:24:THR:HG22	7:AG:27:ILE:HD12	1.63	0.80
45:BN:36:GLY:O	45:BN:42:TRP:HB2	1.80	0.80
41:BG:113:ARG:HE	41:BG:113:ARG:HA	1.43	0.80
42:BH:35:VAL:HG12	42:BH:72:ILE:HD11	1.62	0.80
38:BD:124:PRO:HB2	38:BD:129:ASN:ND2	1.96	0.80
36:BB:68:C:H2'	36:BB:69:G:H8	1.46	0.80
35:BA:2199:A:H3'	35:BA:2200:C:C6	2.16	0.80
35:BA:1930:G:H22	35:BA:1968:G:H2'	1.41	0.80
19:AS:16:LEU:HD12	19:AS:16:LEU:H	1.45	0.80
35:BA:30:G:H2'	35:BA:31:C:C6	2.17	0.80
1:AA:1398:A:H61	5:AE:22:GLY:H	1.29	0.80
49:BR:99:LYS:H	49:BR:99:LYS:HD2	1.46	0.80
35:BA:845:G:H8	35:BA:845:G:OP2	1.64	0.80
1:AA:1407:C:H2'	1:AA:1408:A:H5'	1.62	0.80
35:BA:2777:G:H5''	35:BA:2778:A:H5'	1.62	0.80
38:BD:176:ARG:HD2	38:BD:182:LEU:HD11	1.62	0.80
8:AH:28:ALA:HB3	8:AH:57:PRO:HB2	1.63	0.80

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:54:THR:HG21	2:AB:201:ILE:CD1	2.10	0.80
57:BZ:166:SER:CB	57:BZ:168:GLU:HB3	2.12	0.80
12:AL:126:LYS:HB2	24:AY:487:ARG:HE	1.44	0.80
37:BC:107:TRP:HZ3	37:BC:131:LEU:HD21	1.43	0.80
52:BU:36:ARG:CB	52:BU:36:ARG:HH11	1.94	0.80
3:AC:131:ARG:HA	3:AC:134:ILE:HD12	1.63	0.80
35:BA:57:C:O2'	35:BA:58:G:H5'	1.79	0.80
35:BA:2303:G:H1	35:BA:2313:C:H42	1.29	0.80
35:BA:1496:A:H2'	35:BA:1498:C:H41	1.46	0.80
42:BH:91:GLY:HA3	42:BH:94:TYR:HD2	1.46	0.80
35:BA:2052:G:OP1	39:BE:141:ILE:HG12	1.82	0.80
1:AA:607:A:H2'	1:AA:608:A:H8	1.46	0.80
1:AA:969:A:O2'	1:AA:970:C:H5'	1.82	0.80
1:AA:775:G:O2'	1:AA:776:G:H5'	1.81	0.80
38:BD:127:VAL:HA	38:BD:193:VAL:HG22	1.62	0.80
35:BA:1887:C:H3'	35:BA:1888:G:H5''	1.63	0.80
5:AE:79:GLU:HB3	5:AE:92:LYS:HG3	1.62	0.80
28:B3:6:VAL:HG12	28:B3:56:VAL:HA	1.64	0.80
17:AQ:92:ARG:HA	17:AQ:95:TYR:CD2	2.16	0.80
47:BP:122:PRO:HB3	47:BP:141:ALA:CB	2.12	0.80
28:B3:59:VAL:HG12	28:B3:60:GLU:N	1.96	0.80
35:BA:832:G:OP1	47:BP:40:SER:HB3	1.82	0.80
53:BV:15:GLU:HB3	53:BV:16:PRO:HD2	1.64	0.80
34:B9:29:ASN:HD21	34:B9:32:HIS:CE1	1.98	0.80
27:B2:36:ARG:HA	27:B2:39:ALA:HB3	1.63	0.80
35:BA:143:G:H4'	55:BX:35:THR:HG21	1.63	0.80
1:AA:714:G:H2'	1:AA:715:A:C8	2.16	0.80
22:AV:17:C:H3'	22:AV:17(A):U:H5'	1.62	0.80
4:AD:60:GLU:HG2	4:AD:202:LEU:HD12	1.63	0.80
24:AY:249:GLY:O	24:AY:250:GLU:HG2	1.82	0.80
24:AY:377:ASP:C	24:AY:377:ASP:OD2	2.19	0.80
38:BD:143:HIS:HB2	38:BD:196:VAL:HG23	1.64	0.80
53:BV:4:ILE:HD12	53:BV:39:LEU:O	1.81	0.80
1:AA:972:C:OP2	10:AJ:57:LYS:HE2	1.81	0.80
3:AC:155:GLY:HA3	3:AC:196:LEU:HD13	1.64	0.80
56:BY:12:THR:HB	56:BY:75:ILE:CG2	2.10	0.80
7:AG:66:VAL:O	7:AG:69:VAL:HG12	1.81	0.80
33:B8:25:MET:CG	47:BP:64:LYS:HB2	2.12	0.80
35:BA:705:A:N1	35:BA:727:A:H1'	1.97	0.80
16:AP:60:LEU:HD11	16:AP:79:VAL:CG1	2.12	0.80
10:AJ:75:ILE:HG13	10:AJ:76:ASN:H	1.47	0.80
50:BS:67:ARG:NH2	50:BS:100:ALA:HB3	1.97	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:811:U:O3'	35:BA:1251:C:H5'	1.81	0.80
8:AH:87:SER:OG	8:AH:92:ARG:HA	1.81	0.80
3:AC:19:GLU:HG2	3:AC:54:ARG:NE	1.97	0.80
10:AJ:8:LEU:HA	10:AJ:95:GLU:O	1.81	0.80
40:BF:28:ILE:HG22	40:BF:116:ASP:HB2	1.64	0.80
35:BA:1058:G:H2'	35:BA:1059:G:H5''	1.64	0.80
37:BC:14:VAL:HG11	37:BC:221:SER:O	1.82	0.80
1:AA:174:C:H2'	1:AA:175:C:C6	2.17	0.80
1:AA:613:C:H2'	1:AA:614:A:H8	1.46	0.80
35:BA:201:C:O2'	35:BA:202:U:H5'	1.81	0.80
24:AY:155:LEU:HD12	24:AY:155:LEU:H	1.47	0.80
24:AY:76:GLN:HE21	24:AY:85:ASN:HD21	1.29	0.80
32:B7:30:VAL:HG22	32:B7:33:ARG:NH2	1.97	0.80
35:BA:239:U:H1'	35:BA:259:G:H22	1.47	0.80
39:BE:7:VAL:HG21	51:BT:1:MET:SD	2.22	0.80
40:BF:66:PRO:HB2	40:BF:70:THR:HG23	1.63	0.80
51:BT:65:LYS:HE3	51:BT:66:VAL:N	1.95	0.80
52:BU:69:CYS:O	52:BU:74:LEU:HD12	1.81	0.80
1:AA:759:A:H1'	12:AL:12:ARG:NH2	1.97	0.80
15:AO:68:ARG:HG3	15:AO:72:ARG:HG3	1.61	0.80
1:AA:1414:U:H2'	1:AA:1415:G:H8	1.47	0.80
22:AV:5:G:H2'	22:AV:6:G:C8	2.17	0.80
3:AC:155:GLY:CA	3:AC:196:LEU:HD13	2.11	0.80
9:AI:63:ILE:HG21	9:AI:77:ILE:HD11	1.62	0.80
40:BF:154:VAL:CG1	40:BF:193:VAL:HG23	2.11	0.80
35:BA:1887:C:C3'	35:BA:1888:G:H5''	2.12	0.80
26:B1:50:ARG:HG2	26:B1:59:THR:CG2	2.12	0.80
42:BH:151:ILE:N	42:BH:151:ILE:HD12	1.96	0.80
48:BQ:63:LYS:HG3	57:BZ:175:VAL:CG2	2.12	0.80
35:BA:1628:G:H2'	35:BA:1629:U:C6	2.16	0.80
35:BA:2668:G:O2'	35:BA:2669:G:H5'	1.82	0.80
49:BR:63:ARG:HH11	49:BR:63:ARG:HB2	1.47	0.80
24:AY:135:THR:HG22	24:AY:136:PRO:HD2	1.60	0.80
24:AY:108:CYS:HB2	24:AY:136:PRO:HG2	1.64	0.80
24:AY:246:PHE:HA	24:AY:251:ILE:HG13	1.64	0.80
35:BA:1661:G:H2'	35:BA:1662:C:H6	1.46	0.80
35:BA:1825:A:H2'	35:BA:1826:G:H8	1.47	0.80
35:BA:2459:A:H61	35:BA:2493:U:H3	1.29	0.80
35:BA:2628:C:C1'	35:BA:2781:A:H2'	2.12	0.80
35:BA:533:G:H2'	35:BA:534:U:C6	2.17	0.80
38:BD:182:LEU:N	38:BD:272:ALA:HB2	1.95	0.80
38:BD:248:SER:OG	38:BD:252:TRP:CD2	2.34	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BE:9:VAL:CG1	39:BE:25:VAL:HB	2.12	0.80
52:BU:74:LEU:HD13	52:BU:75:ASN:O	1.82	0.80
1:AA:576:G:OP2	1:AA:577:G:H5''	1.82	0.80
8:AH:119:LEU:HB3	8:AH:123:GLU:CB	2.11	0.80
35:BA:916:G:O2'	35:BA:917:A:H5''	1.82	0.80
48:BQ:3:MET:HB2	48:BQ:4:PRO:HD2	1.63	0.80
21:AU:18:TYR:CD2	21:AU:24:ARG:HA	2.16	0.80
35:BA:479:A:O2'	35:BA:481:G:H5'	1.81	0.80
57:BZ:150:LEU:CG	57:BZ:171:ILE:HD11	2.04	0.80
26:B1:3:LYS:HG3	35:BA:1365:A:OP2	1.82	0.80
35:BA:1625:C:O2'	35:BA:1626:G:H5'	1.82	0.80
50:BS:42:ASP:C	50:BS:44:LYS:H	1.85	0.80
31:B6:41:PRO:O	31:B6:45:LYS:HB3	1.82	0.80
31:B6:19:ARG:HD3	35:BA:2400:G:H4'	1.64	0.80
26:B1:14:VAL:CG2	35:BA:188:G:H5'	2.12	0.80
55:BX:18:TYR:O	55:BX:20:GLY:N	2.16	0.80
24:AY:462:VAL:CG1	24:AY:463:TYR:H	1.95	0.79
35:BA:1602:U:H3'	35:BA:1603:A:C5'	2.11	0.79
45:BN:21:LYS:HD3	45:BN:22:THR:H	1.47	0.79
40:BF:159:GLY:CA	40:BF:178:PRO:HD3	2.12	0.79
35:BA:606:U:H4'	35:BA:658:C:H4'	1.64	0.79
26:B1:11:ARG:HB3	26:B1:12:PRO:CD	2.06	0.79
24:AY:342:ILE:CD1	24:AY:345:ALA:HB2	2.11	0.79
1:AA:275:G:H2'	1:AA:276:G:H8	1.46	0.79
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.00	0.79
33:B8:53:PRO:O	33:B8:57:ARG:HG3	1.82	0.79
1:AA:1481:U:H2'	1:AA:1482:G:H8	1.47	0.79
19:AS:16:LEU:HD12	19:AS:16:LEU:N	1.97	0.79
8:AH:46:LYS:HE2	8:AH:64:LYS:HA	1.64	0.79
24:AY:303:ILE:HG13	24:AY:375:ILE:HD11	1.62	0.79
24:AY:440:ALA:HB2	24:AY:446:PHE:CZ	2.16	0.79
38:BD:172:TYR:CE1	38:BD:186:HIS:HA	2.18	0.79
34:B9:26:ILE:HG22	34:B9:27:CYS:H	1.47	0.79
35:BA:1912:A:H5'	35:BA:1918:A:H61	1.46	0.79
24:AY:404:LYS:O	24:AY:404:LYS:HD3	1.82	0.79
4:AD:26:CYS:HA	4:AD:31:CYS:CA	2.10	0.79
37:BC:49:ILE:HG22	37:BC:204:ALA:HB2	1.63	0.79
1:AA:1452:C:H5'	1:AA:1456:G:C2	2.17	0.79
38:BD:223:GLY:HA3	38:BD:231:HIS:CD2	2.17	0.79
1:AA:838:G:H2'	1:AA:839:U:H5''	1.61	0.79
24:AY:281:PRO:O	24:AY:282:ARG:HD2	1.82	0.79
24:AY:449:VAL:CG2	24:AY:463:TYR:OH	2.30	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B7:16:HIS:HA	32:B7:21:ARG:HH12	1.46	0.79
35:BA:1352:U:O2'	35:BA:1353:A:H5'	1.81	0.79
35:BA:1904:G:H1'	35:BA:1927:A:H61	1.46	0.79
35:BA:2361:A:H2'	35:BA:2362:G:H8	1.46	0.79
38:BD:43:ARG:HH11	38:BD:49:ILE:HD11	1.47	0.79
22:AV:50:U:O2	22:AV:64:G:N2	2.13	0.79
15:AO:4:THR:HB	15:AO:7:GLU:HB3	0.90	0.79
50:BS:30:ARG:HH22	50:BS:62:LYS:HB3	1.47	0.79
50:BS:56:LEU:O	50:BS:56:LEU:HD23	1.81	0.79
1:AA:1223:C:P	19:AS:78:ARG:HH21	2.04	0.79
1:AA:1423:G:H5''	46:BO:49:ARG:NH2	1.97	0.79
13:AM:49:THR:O	13:AM:53:VAL:HG23	1.81	0.79
12:AL:41:ARG:HG2	12:AL:42:THR:H	1.44	0.79
36:BB:31:C:H42	36:BB:51:G:H1	1.30	0.79
35:BA:2772:C:O5'	35:BA:2772:C:H6	1.64	0.79
39:BE:174:ASP:HB3	39:BE:183:LEU:HD22	1.65	0.79
2:AB:18:GLY:N	2:AB:42:ILE:HG22	1.93	0.79
48:BQ:18:LYS:HG2	48:BQ:19:GLY:H	1.45	0.79
22:AV:69:C:O2'	22:AV:70:G:H5''	1.81	0.79
7:AG:16:LEU:CD1	9:AI:42:ARG:HA	2.12	0.79
40:BF:159:GLY:HA2	40:BF:164:ARG:HH21	1.46	0.79
41:BG:64:THR:HG23	41:BG:65:GLY:H	1.47	0.79
29:B4:9:LEU:HD13	29:B4:10:VAL:H	1.46	0.79
31:B6:9:LEU:HD22	31:B6:10:LEU:H	1.46	0.79
31:B6:36:LEU:HA	31:B6:49:HIS:O	1.82	0.79
2:AB:115:LEU:CD1	2:AB:145:LEU:HD12	2.12	0.79
35:BA:2102:U:H2'	35:BA:2103:C:O4'	1.83	0.79
35:BA:2137:C:H42	35:BA:2154:G:H22	1.28	0.79
22:AV:25:C:H2'	22:AV:26:G:O4'	1.81	0.79
24:AY:146:ARG:NH1	24:AY:146:ARG:HG3	1.92	0.79
24:AY:138:LEU:HB3	24:AY:255:PHE:CE1	2.17	0.79
24:AY:255:PHE:CE1	24:AY:275:TRP:CZ3	2.68	0.79
1:AA:1406:U:O2	1:AA:1518:A:H1'	1.80	0.79
1:AA:975:A:H5'	1:AA:975:A:H8	1.48	0.79
9:AI:46:ALA:HB2	9:AI:74:ILE:HG22	1.63	0.79
40:BF:167:ALA:CB	40:BF:173:VAL:HG11	2.05	0.79
37:BC:6:ARG:NH1	37:BC:10:LEU:HD21	1.96	0.79
35:BA:1498:C:H2'	35:BA:1499:C:C5'	2.13	0.79
35:BA:1170:G:H22	35:BA:1179:C:N4	1.79	0.79
25:B0:36:ILE:HD11	35:BA:2355:C:O4'	1.83	0.79
1:AA:1493:A:H3'	1:AA:1493:A:N3	1.97	0.79
35:BA:654(J):A:H8	35:BA:654(L):G:H1'	1.47	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:193:U:O2'	35:BA:194:G:H5'	1.82	0.79
25:B0:17:GLN:O	25:B0:19:LYS:HG3	1.82	0.79
35:BA:1010:A:H1'	35:BA:1153:C:H1'	1.64	0.79
35:BA:2801(A):A:H5'	35:BA:2802:G:H8	1.46	0.79
40:BF:163:VAL:O	40:BF:166:ALA:HB3	1.82	0.79
35:BA:1919:A:H3'	35:BA:1920:C:C5'	2.13	0.79
35:BA:1061:U:H4'	35:BA:1070:A:O4'	1.82	0.79
37:BC:40:THR:HG22	37:BC:41:VAL:H	1.47	0.79
35:BA:1203:G:H3'	35:BA:1204:A:C5'	2.09	0.79
35:BA:2853:C:H2'	35:BA:2854:G:H8	1.48	0.79
25:B0:10:THR:HG22	25:B0:12:ASN:H	1.46	0.79
27:B2:41:ILE:HG13	27:B2:42:GLY:N	1.96	0.79
24:AY:315:VAL:HG21	24:AY:346:LEU:CD1	2.12	0.79
24:AY:473:TRP:HH2	24:AY:500:ASN:CB	1.80	0.79
1:AA:702:A:N6	35:BA:1846:G:H5''	1.97	0.79
32:B7:38:GLY:O	35:BA:458:G:H2'	1.82	0.79
38:BD:24:ILE:CD1	38:BD:91:ARG:HB3	2.08	0.79
35:BA:1911:U:C2'	35:BA:1918:A:N1	2.43	0.79
37:BC:40:THR:HA	37:BC:177:LYS:HA	1.63	0.79
41:BG:133:LEU:HG	41:BG:157:ILE:HB	1.64	0.79
45:BN:17:ASP:OD1	45:BN:56:ASN:HB3	1.82	0.79
39:BE:51:PHE:HD1	39:BE:52:LEU:H	1.29	0.79
56:BY:101:LYS:HG2	56:BY:102:CYS:N	1.97	0.79
47:BP:146:VAL:HG22	47:BP:147:LEU:H	1.47	0.79
24:AY:336:THR:O	24:AY:337:ALA:CB	2.31	0.79
24:AY:453:LEU:HB3	24:AY:459:VAL:CG2	2.13	0.79
35:BA:1772:G:H21	35:BA:1774:C:H5''	1.47	0.79
38:BD:94:LEU:HD22	38:BD:95:LEU:H	1.47	0.79
52:BU:25:TRP:O	52:BU:28:ARG:HB2	1.82	0.79
8:AH:119:LEU:HB3	8:AH:123:GLU:HB2	1.65	0.79
22:AV:5:G:H1	22:AV:68:C:H42	1.29	0.79
35:BA:2605:U:H2'	35:BA:2606:C:H6	1.41	0.79
54:BW:75:TYR:O	54:BW:103:ILE:HG22	1.82	0.79
27:B2:25:VAL:CG1	27:B2:29:LYS:HE2	2.12	0.79
40:BF:154:VAL:HG11	40:BF:193:VAL:HG23	1.64	0.79
7:AG:118:VAL:HG23	7:AG:119:ARG:N	1.96	0.79
2:AB:115:LEU:HB2	2:AB:145:LEU:CD1	2.13	0.79
1:AA:1471:G:H2'	1:AA:1472:U:H6	1.46	0.79
14:AN:13:THR:N	14:AN:14:PRO:HD2	1.97	0.79
10:AJ:23:ILE:HG23	10:AJ:85:LEU:HD22	1.63	0.79
50:BS:83:LYS:HG2	50:BS:105:ALA:HB3	1.65	0.79
24:AY:186:TYR:CZ	24:AY:241:PHE:HB3	2.17	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2498:C:C2'	35:BA:2499:C:H5''	2.13	0.79
35:BA:839:U:H2'	35:BA:840:C:C6	2.16	0.79
38:BD:31:LYS:HG2	38:BD:33:LEU:HD23	1.65	0.79
1:AA:834:C:H2'	1:AA:835:U:H6	1.46	0.79
2:AB:172:ILE:H	2:AB:172:ILE:CD1	1.95	0.79
2:AB:88:ALA:O	2:AB:90:MET:HG2	1.82	0.79
57:BZ:57:ILE:H	57:BZ:57:ILE:HD12	1.48	0.79
1:AA:1053:G:H4'	1:AA:1054:C:C5'	2.12	0.79
10:AJ:13:HIS:HB3	10:AJ:68:HIS:CD2	2.18	0.79
35:BA:497:A:H2'	35:BA:498:G:C8	2.18	0.79
9:AI:8:GLY:HA2	9:AI:79:LEU:CD1	2.09	0.79
35:BA:2839:G:H2'	35:BA:2840:C:C6	2.17	0.79
25:B0:14:ARG:HD2	35:BA:2279:G:O6	1.83	0.79
35:BA:1434:A:H2'	35:BA:1435:G:H8	1.47	0.79
37:BC:181:PRO:HB2	37:BC:182:PRO:HD2	1.65	0.79
1:AA:436:C:H5''	4:AD:156:GLU:OE2	1.82	0.79
35:BA:210:C:H2'	35:BA:211:A:H8	1.45	0.79
12:AL:41:ARG:CZ	12:AL:41:ARG:HB2	2.13	0.79
1:AA:1126:U:H1'	1:AA:1280:A:C6	2.17	0.79
24:AY:164:ILE:HG12	24:AY:252:THR:HG23	1.65	0.79
35:BA:1190:G:H5'	47:BP:35:HIS:N	1.97	0.79
35:BA:1571:A:H2'	35:BA:1572:A:H8	1.48	0.79
35:BA:1773:A:H2'	35:BA:1774:C:H5'	1.64	0.79
35:BA:2437:U:H2'	35:BA:2438:U:C6	2.18	0.79
35:BA:818:G:H8	35:BA:818:G:O5'	1.64	0.79
2:AB:101:MET:HB2	2:AB:102:LEU:HD12	1.65	0.79
42:BH:98:LEU:HD11	42:BH:100:GLY:O	1.83	0.79
42:BH:132:ARG:O	42:BH:133:VAL:HG23	1.83	0.79
40:BF:110:LEU:HA	40:BF:183:VAL:CG1	2.13	0.79
38:BD:73:VAL:C	38:BD:75:ILE:HD12	2.02	0.79
13:AM:40:ASN:ND2	13:AM:43:THR:HG23	1.97	0.79
4:AD:152:SER:HB3	4:AD:155:LEU:HD12	1.63	0.79
35:BA:2066:C:H2'	35:BA:2067:G:C8	2.17	0.79
35:BA:1376:C:O2'	35:BA:1377:G:H5'	1.82	0.79
1:AA:836:G:O2'	1:AA:837:G:H5'	1.82	0.79
41:BG:115:ARG:HH22	41:BG:136:ARG:HB2	1.48	0.79
24:AY:183:TYR:CE2	24:AY:189:GLU:CA	2.65	0.78
24:AY:70:ILE:HG12	24:AY:95:PHE:CZ	2.18	0.78
1:AA:777:A:H2'	1:AA:778:G:C8	2.18	0.78
32:B7:7:PRO:HA	35:BA:686:G:H8	1.46	0.78
35:BA:1843:C:H4'	38:BD:256:GLY:O	1.83	0.78
47:BP:16:ARG:HB2	47:BP:16:ARG:NH1	1.97	0.78

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:31:SER:HB3	52:BU:34:LYS:CB	2.06	0.78
35:BA:1028:A:H2'	35:BA:1029:A:C8	2.18	0.78
2:AB:43:ASP:OD2	2:AB:46:LYS:HB2	1.82	0.78
56:BY:8:LYS:H	56:BY:8:LYS:HD2	1.48	0.78
1:AA:1442(A):G:N2	51:BT:121:ILE:HG12	1.97	0.78
41:BG:76:SER:OG	41:BG:83:ARG:HB3	1.81	0.78
35:BA:1414:G:H1	35:BA:1588:C:N4	1.80	0.78
54:BW:70:TYR:O	54:BW:107:LEU:HB3	1.83	0.78
1:AA:67:C:O2	1:AA:171:A:H2	1.64	0.78
1:AA:1494:G:C6	1:AA:1495:U:O4	2.36	0.78
17:AQ:46:ASP:OD2	17:AQ:51:TYR:HD2	1.65	0.78
53:BV:49:THR:HB	53:BV:50:PRO:HD2	1.65	0.78
1:AA:877:C:H5''	8:AH:88:LYS:HD3	1.65	0.78
2:AB:180:LEU:O	2:AB:182:ILE:HG13	1.83	0.78
35:BA:2394:C:H5''	35:BA:2395:C:OP2	1.84	0.78
1:AA:1195:C:H2'	1:AA:1197:G:O4'	1.83	0.78
1:AA:618:C:H42	1:AA:623:C:H42	1.27	0.78
26:B1:46:LEU:HD13	26:B1:62:VAL:C	2.03	0.78
20:AT:83:ARG:O	20:AT:87:LYS:HB2	1.84	0.78
57:BZ:18:LEU:O	57:BZ:21:ALA:HB3	1.83	0.78
35:BA:2356:C:O2'	35:BA:2357:U:H5'	1.83	0.78
35:BA:1778:U:O4	35:BA:1784:A:H1'	1.83	0.78
35:BA:672:C:H2'	35:BA:673:C:H5''	1.62	0.78
51:BT:20:PRO:HD2	51:BT:85:LYS:CB	2.10	0.78
52:BU:19:LYS:O	52:BU:21:ALA:N	2.15	0.78
35:BA:1911:U:H5''	35:BA:1912:A:OP2	1.82	0.78
48:BQ:135:ASP:H	48:BQ:137:TYR:HD2	1.30	0.78
22:AV:59:A:C2'	22:AV:60:U:H5'	2.12	0.78
35:BA:83:G:N2	35:BA:102:G:H2'	1.98	0.78
45:BN:13:TRP:O	45:BN:135:PRO:HD2	1.82	0.78
35:BA:2870:C:H5''	49:BR:65:LEU:HD21	1.66	0.78
35:BA:271(X):G:O3'	35:BA:272(D):G:H4'	1.83	0.78
24:AY:106:VAL:HG22	24:AY:107:ASP:N	1.98	0.78
24:AY:374:GLN:HG2	24:AY:529:HIS:O	1.83	0.78
35:BA:997:G:O2'	35:BA:998:C:H5'	1.83	0.78
39:BE:87:GLU:O	39:BE:89:ASP:N	2.16	0.78
53:BV:75:PHE:HA	53:BV:81:TYR:O	1.83	0.78
46:BO:23:ARG:HB3	46:BO:40:VAL:HG23	1.66	0.78
1:AA:1489:G:H2'	1:AA:1490:C:H6	1.45	0.78
4:AD:175:SER:OG	4:AD:184:LYS:HB2	1.83	0.78
35:BA:1598:C:H5'	55:BX:36:LYS:CD	2.13	0.78
11:AK:28:THR:O	11:AK:44:SER:HB2	1.84	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2101:G:H2'	35:BA:2102:U:H5''	1.65	0.78
35:BA:1655:A:O3'	39:BE:115:GLY:HA3	1.82	0.78
42:BH:103:LEU:HG	42:BH:105:LEU:HD13	1.64	0.78
57:BZ:29:TYR:HB3	57:BZ:34:ASN:HA	1.65	0.78
22:AV:1:C:O2'	22:AV:2:G:H5'	1.83	0.78
15:AO:4:THR:O	15:AO:8:LYS:N	2.17	0.78
35:BA:601:C:H4'	40:BF:108:LYS:HZ1	1.48	0.78
17:AQ:76:LEU:HD12	17:AQ:77:VAL:N	1.97	0.78
1:AA:1220:G:H2'	1:AA:1221:G:H8	1.46	0.78
2:AB:127:ILE:CA	2:AB:135:GLN:HE22	1.96	0.78
1:AA:947:G:H8	1:AA:947:G:O5'	1.67	0.78
35:BA:1906:G:H2'	35:BA:1907:G:O4'	1.84	0.78
35:BA:1839:G:H1'	35:BA:1927:A:OP1	1.83	0.78
35:BA:2028:U:H2'	35:BA:2029:G:C8	2.18	0.78
45:BN:96:GLU:HG2	45:BN:97:ARG:N	1.99	0.78
47:BP:47:ASP:OD2	47:BP:49:ARG:HB2	1.83	0.78
52:BU:92:ARG:HD2	53:BV:11:GLN:CG	2.14	0.78
35:BA:2740:A:H2'	35:BA:2741:A:C8	2.18	0.78
1:AA:735:C:H2'	1:AA:736:C:C6	2.17	0.78
53:BV:96:ILE:HD13	53:BV:96:ILE:N	1.95	0.78
40:BF:158:THR:HA	40:BF:198:ALA:HB2	1.66	0.78
33:B8:27:THR:CG2	47:BP:62:LEU:HD22	2.04	0.78
35:BA:2070:G:H2'	35:BA:2071:A:H8	1.46	0.78
35:BA:118:A:H5'	35:BA:119:A:C8	2.19	0.78
16:AP:45:THR:HG22	16:AP:47:ASP:HB3	1.64	0.78
24:AY:249:GLY:O	24:AY:250:GLU:CG	2.32	0.78
35:BA:1895:C:H5'	35:BA:1895:C:H6	1.48	0.78
38:BD:229:VAL:HG13	38:BD:230:ASP:H	1.47	0.78
2:AB:12:GLU:O	2:AB:14:GLY:N	2.17	0.78
35:BA:2431:U:C6	35:BA:2433:A:OP2	2.37	0.78
35:BA:910:A:C2	48:BQ:13:GLN:NE2	2.52	0.78
22:AV:62:C:H2'	22:AV:63:G:H5''	1.62	0.78
35:BA:2606:C:H2'	35:BA:2607:G:H8	1.48	0.78
35:BA:703:U:H3	35:BA:728:G:H1	1.30	0.78
35:BA:613:G:H5'	35:BA:613:G:C8	2.16	0.78
35:BA:1498:C:H2'	35:BA:1499:C:H5'	1.66	0.78
20:AT:58:LYS:O	20:AT:61:SER:HB3	1.84	0.78
35:BA:575:A:H2'	35:BA:576:U:C6	2.18	0.78
42:BH:154:PRO:HB3	42:BH:161:GLY:HA3	1.66	0.78
31:B6:18:ARG:HG2	31:B6:18:ARG:HH11	1.47	0.78
2:AB:82:ARG:O	2:AB:86:GLU:HG3	1.84	0.78
35:BA:1922:G:HO2'	35:BA:1923:U:H5'	1.46	0.78

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2639:A:H1'	35:BA:2778:A:C2	2.18	0.78
45:BN:58:ASP:C	45:BN:60:ILE:H	1.88	0.78
35:BA:1665:A:C2'	35:BA:1666:G:H5''	2.12	0.78
2:AB:17:PHE:HD1	2:AB:17:PHE:O	1.67	0.78
48:BQ:98:LYS:O	48:BQ:101:ARG:HB2	1.83	0.78
1:AA:1308:U:H2'	1:AA:1309:G:H8	1.46	0.78
1:AA:1117:G:O2'	9:AI:106:ALA:HB2	1.83	0.78
9:AI:48:GLU:N	9:AI:49:PRO:HD2	1.99	0.78
4:AD:88:VAL:O	4:AD:92:VAL:HG23	1.83	0.78
37:BC:6:ARG:HH22	37:BC:10:LEU:HD23	1.47	0.78
20:AT:18:GLN:O	20:AT:22:ARG:HG3	1.83	0.78
40:BF:188:ARG:HA	47:BP:7:ARG:CD	2.14	0.78
50:BS:30:ARG:HD3	50:BS:97:ARG:HG2	1.63	0.78
35:BA:1582:C:O2'	35:BA:1586:A:C8	2.36	0.78
35:BA:1403:C:H5''	35:BA:1471:A:H1'	1.66	0.78
36:BB:27:C:H5'	36:BB:28:C:OP2	1.84	0.78
1:AA:894:G:H2'	1:AA:895:G:H5'	1.64	0.78
3:AC:139:GLN:HE21	3:AC:143:GLU:CD	1.87	0.78
24:AY:171:TRP:HB3	24:AY:172:PRO:HD2	1.66	0.78
1:AA:681:C:H4'	38:BD:174:ILE:HD12	1.66	0.78
1:AA:773:G:H5''	38:BD:203:ASN:HD22	1.47	0.78
39:BE:28:ALA:HB2	39:BE:182:LEU:HD22	1.66	0.78
57:BZ:35:ARG:HA	57:BZ:35:ARG:CZ	2.13	0.78
36:BB:57:A:C2	36:BB:58:A:C4	2.72	0.78
54:BW:4:LYS:HD3	54:BW:6:ILE:HD11	1.66	0.78
35:BA:1639:U:H4'	35:BA:2699:C:C4'	2.14	0.78
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.19	0.78
1:AA:1019:C:O2'	1:AA:1020:U:H5'	1.84	0.78
1:AA:1040:U:H2'	1:AA:1041:A:H8	1.48	0.78
24:AY:12:LYS:CG	24:AY:82:CYS:HA	2.14	0.78
35:BA:692:C:H2'	35:BA:693:C:H6	1.50	0.78
35:BA:1791:A:H4'	38:BD:206:LEU:CD1	2.14	0.78
38:BD:213:ARG:HH12	38:BD:219:PRO:CD	1.95	0.78
52:BU:3:ARG:HH12	52:BU:5:LYS:HD2	1.48	0.78
1:AA:738:C:H2'	1:AA:739:C:C6	2.19	0.78
6:AF:5:GLU:HG3	6:AF:93:SER:OG	1.83	0.78
3:AC:86:VAL:O	3:AC:90:GLU:HG3	1.83	0.78
56:BY:73:ARG:HE	56:BY:73:ARG:HA	1.49	0.78
40:BF:162:LEU:HD12	40:BF:162:LEU:H	1.49	0.78
40:BF:125:LEU:HD12	40:BF:196:LEU:CD2	2.14	0.78
4:AD:4:TYR:O	4:AD:5:ILE:HB	1.83	0.78
11:AK:13:GLN:HB3	11:AK:75:TYR:O	1.84	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:38:SER:OG	42:BH:40:GLU:HB2	1.84	0.78
7:AG:140:ASP:HA	7:AG:143:ARG:HD2	1.65	0.78
22:AV:27:U:H2'	22:AV:28:C:C5'	2.14	0.78
1:AA:525:C:H2'	1:AA:526:C:H6	1.49	0.78
27:B2:19:VAL:HG12	27:B2:23:LYS:HE3	1.65	0.78
1:AA:1407:C:H2'	1:AA:1408:A:C5'	2.14	0.77
6:AF:82:ARG:HB2	6:AF:85:VAL:HG23	1.66	0.77
57:BZ:100:VAL:HG11	57:BZ:137:ILE:CG1	2.14	0.77
40:BF:165:ARG:HA	40:BF:168:ARG:HH21	1.50	0.77
40:BF:8:GLN:HG3	40:BF:9:ILE:H	1.49	0.77
4:AD:11:LEU:HB3	4:AD:66:ARG:NH1	1.98	0.77
1:AA:332:G:H2'	1:AA:333:G:H8	1.49	0.77
1:AA:1001(A):G:H8	1:AA:1002:G:C8	2.01	0.77
1:AA:1494:G:C6	1:AA:1495:U:C4	2.71	0.77
35:BA:2645:G:H3'	35:BA:2646:C:C5'	2.12	0.77
20:AT:59:ALA:O	20:AT:63:ILE:HG13	1.83	0.77
1:AA:894:G:C2'	1:AA:895:G:H5'	2.15	0.77
1:AA:258:G:H2'	1:AA:259:G:H8	1.49	0.77
1:AA:632:A:H3'	1:AA:633:G:H8	1.48	0.77
24:AY:170:THR:HA	24:AY:183:TYR:O	1.84	0.77
24:AY:300:VAL:HG13	24:AY:316:ALA:O	1.84	0.77
24:AY:420:SER:O	24:AY:422:GLU:N	2.15	0.77
35:BA:2223:G:C5'	38:BD:269:PHE:HZ	1.98	0.77
35:BA:2720:U:H3'	35:BA:2721:A:H8	1.49	0.77
35:BA:27:G:N2	35:BA:512:G:H2'	1.98	0.77
35:BA:764:A:OP1	38:BD:208:LYS:HE3	1.83	0.77
51:BT:96:ARG:HH11	51:BT:96:ARG:HB2	1.49	0.77
52:BU:107:ALA:O	52:BU:110:VAL:HB	1.85	0.77
1:AA:1305:G:N2	1:AA:1331:G:H2'	1.99	0.77
9:AI:104:ARG:HG3	9:AI:104:ARG:HH11	1.45	0.77
14:AN:6:LEU:HB3	14:AN:23:ARG:HH22	1.49	0.77
25:B0:51:VAL:HG22	25:B0:81:VAL:CG2	2.14	0.77
10:AJ:4:ILE:HG21	10:AJ:74:ILE:HD11	1.65	0.77
9:AI:4:TYR:HD2	9:AI:85:LEU:HA	1.49	0.77
35:BA:1639:U:H2'	35:BA:1640:C:H5''	1.66	0.77
1:AA:436:C:H5''	4:AD:156:GLU:CD	2.04	0.77
33:B8:23:VAL:HG22	33:B8:47:LYS:O	1.84	0.77
24:AY:119:VAL:HG22	24:AY:124:ARG:CG	2.14	0.77
35:BA:1258:C:C1'	40:BF:84:VAL:HG21	2.14	0.77
38:BD:9:TYR:OH	38:BD:13:ARG:CZ	2.33	0.77
39:BE:4:ILE:HG21	39:BE:96:PHE:HE2	1.48	0.77
8:AH:14:ARG:NE	8:AH:83:ILE:HG23	2.00	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:98:LEU:HB2	42:BH:125:VAL:HG21	1.64	0.77
35:BA:2330:G:H2'	35:BA:2331:G:O4'	1.84	0.77
1:AA:1152:A:H5''	10:AJ:13:HIS:HD2	1.46	0.77
40:BF:156:LEU:HD23	40:BF:167:ALA:HB3	1.66	0.77
37:BC:42:GLU:HG2	37:BC:44:HIS:CE1	2.19	0.77
42:BH:43:VAL:CG1	42:BH:52:VAL:HG23	2.14	0.77
11:AK:124:LYS:NZ	11:AK:125:PHE:HE1	1.81	0.77
5:AE:129:ILE:H	5:AE:129:ILE:HD12	1.47	0.77
2:AB:122:PHE:HA	2:AB:139:LYS:NZ	1.99	0.77
24:AY:296:PHE:CB	24:AY:331:LEU:HD11	2.15	0.77
35:BA:2007:C:H4'	35:BA:2824:C:O2'	1.83	0.77
35:BA:572:A:H2'	35:BA:573:G:C1'	2.14	0.77
35:BA:753:C:H2'	35:BA:754:C:H6	1.48	0.77
45:BN:90:MET:CE	45:BN:94:HIS:HB2	2.15	0.77
53:BV:5:VAL:HG21	53:BV:35:LEU:HB3	1.67	0.77
27:B2:63:VAL:O	27:B2:67:LYS:HG3	1.84	0.77
40:BF:36:VAL:HG22	40:BF:101:LEU:HD21	1.66	0.77
31:B6:32:ASN:CG	31:B6:33:LYS:H	1.88	0.77
25:B0:37:LEU:CD2	25:B0:60:PHE:HA	2.13	0.77
20:AT:36:LEU:HD13	20:AT:36:LEU:O	1.83	0.77
12:AL:41:ARG:NH1	12:AL:41:ARG:CB	2.47	0.77
1:AA:32:A:OP1	1:AA:398:C:H1'	1.84	0.77
48:BQ:36:ALA:HB2	48:BQ:103:MET:CE	2.14	0.77
24:AY:170:THR:HB	24:AY:182:VAL:HG12	1.64	0.77
35:BA:1018:C:O2'	35:BA:1019:U:H5'	1.84	0.77
35:BA:2012:G:H5''	54:BW:96:ILE:HD11	1.66	0.77
35:BA:2689:U:C5'	35:BA:2690:C:H5'	2.12	0.77
45:BN:34:LEU:HD13	45:BN:52:VAL:HG23	1.67	0.77
47:BP:101:VAL:HG23	47:BP:102:ARG:N	2.00	0.77
6:AF:4:TYR:CD1	6:AF:92:LYS:HG3	2.19	0.77
12:AL:6:THR:OG1	12:AL:9:GLN:HG3	1.85	0.77
15:AO:18:PHE:CE1	15:AO:21:ASP:HB3	2.19	0.77
3:AC:153:VAL:HG23	3:AC:166:GLU:O	1.83	0.77
27:B2:35:LEU:HD11	27:B2:50:ILE:CG1	2.13	0.77
41:BG:60:LEU:HD22	41:BG:63:ILE:HD11	1.67	0.77
35:BA:2235:G:O2'	35:BA:2236:C:H5'	1.84	0.77
35:BA:1491:G:H2'	35:BA:1492:G:H8	1.49	0.77
38:BD:72:LYS:HD3	38:BD:97:TYR:CE2	2.19	0.77
1:AA:1497:G:O2'	1:AA:1498:U:H5'	1.85	0.77
1:AA:1166:G:H21	1:AA:1169:A:H3'	1.49	0.77
10:AJ:29:ARG:O	10:AJ:29:ARG:HG2	1.84	0.77
48:BQ:60:ARG:HH11	48:BQ:60:ARG:CB	1.97	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1825:A:H2'	35:BA:1826:G:C8	2.20	0.77
35:BA:2014:A:C2'	35:BA:2015:A:N7	2.43	0.77
35:BA:2514:U:H2'	35:BA:2515:C:H6	1.49	0.77
35:BA:2690:C:OP1	49:BR:17:ARG:NH2	2.18	0.77
35:BA:1947:C:H2'	35:BA:1948:G:H5''	0.86	0.77
6:AF:72:VAL:CG1	6:AF:73:ASN:H	1.96	0.77
47:BP:58:THR:O	47:BP:61:ARG:NE	2.16	0.77
12:AL:89:ARG:NH1	12:AL:91:LYS:HA	1.99	0.77
1:AA:320:C:H2'	1:AA:321:A:C8	2.20	0.77
35:BA:1170:G:N2	35:BA:1179:C:H42	1.82	0.77
28:B3:8:LEU:HD22	28:B3:32:GLN:N	1.99	0.77
1:AA:438:G:H5'	4:AD:123:HIS:ND1	2.00	0.77
45:BN:14:VAL:HG11	45:BN:137:LYS:HG3	1.65	0.77
1:AA:306:G:O2'	1:AA:307:C:H5'	1.85	0.77
35:BA:2543:G:H8	35:BA:2543:G:H5'	1.50	0.77
24:AY:106:VAL:HG22	24:AY:107:ASP:H	1.50	0.77
24:AY:360:TYR:CB	24:AY:361:PRO:HD2	2.15	0.77
38:BD:33:LEU:HD22	38:BD:102:LYS:HD3	1.67	0.77
1:AA:681:C:C5'	38:BD:174:ILE:HD12	2.15	0.77
2:AB:68:ILE:H	2:AB:90:MET:HE3	1.50	0.77
14:AN:33:VAL:HG12	14:AN:39:LEU:O	1.85	0.77
4:AD:99:SER:O	4:AD:139:ARG:HA	1.83	0.77
1:AA:1342:C:H5''	9:AI:125:TYR:HB3	1.66	0.77
29:B4:10:VAL:CG2	29:B4:11:PRO:HD2	2.15	0.77
29:B4:25:TYR:O	29:B4:26:SER:OG	2.03	0.77
6:AF:98:LEU:HD12	6:AF:98:LEU:N	1.97	0.77
47:BP:6:LEU:HG	47:BP:9:ASN:HB2	1.67	0.77
26:B1:48:LYS:HE3	26:B1:59:THR:HB	1.66	0.77
35:BA:1578:U:H2'	35:BA:1579:A:C5'	2.15	0.77
35:BA:1468:C:H2'	35:BA:1469:A:C8	2.20	0.77
20:AT:78:ALA:HA	20:AT:81:LYS:CD	2.14	0.77
41:BG:51:ARG:HA	41:BG:51:ARG:HE	1.49	0.77
24:AY:513:LEU:HB3	24:AY:517:ARG:NE	1.99	0.77
13:AM:2:ALA:N	13:AM:9:ILE:CG2	2.48	0.77
35:BA:2295:C:H2'	35:BA:2296:U:C5	2.20	0.77
1:AA:160:A:H1'	1:AA:344:A:C5	2.20	0.77
1:AA:265:G:H2'	1:AA:267:C:H5	1.50	0.77
24:AY:197:LYS:HB2	24:AY:202:GLN:HG3	1.65	0.77
24:AY:369:ASN:HB2	24:AY:373:ILE:HG13	1.66	0.77
24:AY:443:VAL:CG2	24:AY:444:LEU:H	1.89	0.77
35:BA:2483:C:N3	48:BQ:124:LYS:NZ	2.29	0.77
18:AR:63:GLN:O	18:AR:66:LEU:HB3	1.84	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:28:GLU:HB3	53:BV:29:PRO:HD2	1.65	0.77
2:AB:162:ILE:O	2:AB:185:ILE:HD13	1.84	0.77
2:AB:204:ASN:C	2:AB:204:ASN:HD22	1.89	0.77
33:B8:13:ARG:CD	47:BP:61:ARG:HH11	1.97	0.77
48:BQ:141:GLN:NE2	57:BZ:72:ARG:HA	2.00	0.77
41:BG:11:TYR:CD1	41:BG:15:VAL:HB	2.20	0.77
35:BA:1882:C:H2'	35:BA:1883:G:H5'	1.67	0.77
29:B4:14:ILE:HG13	29:B4:31:ILE:CB	2.15	0.77
17:AQ:95:TYR:HD1	17:AQ:98:LEU:HD12	1.48	0.77
41:BG:33:ARG:H	41:BG:162:THR:CB	1.97	0.77
7:AG:126:ASP:HB2	7:AG:132:GLY:HA2	1.67	0.77
1:AA:230:G:OP1	16:AP:33:ILE:HD11	1.84	0.77
24:AY:16:PHE:HA	24:AY:106:VAL:HG23	1.67	0.77
35:BA:1830:C:H5'	38:BD:15:PHE:CE2	2.20	0.77
39:BE:117:MET:CA	39:BE:122:PHE:H	1.96	0.77
1:AA:597:G:H2'	1:AA:598:U:H5'	1.66	0.77
2:AB:103:THR:HA	2:AB:180:LEU:HD11	1.65	0.77
2:AB:236:TYR:H	2:AB:236:TYR:HD1	1.31	0.77
35:BA:1919:A:C3'	35:BA:1920:C:C5'	2.63	0.77
57:BZ:99:TYR:HE1	57:BZ:125:LEU:HD12	1.49	0.77
3:AC:47:LEU:HD23	3:AC:52:LEU:HD13	1.66	0.77
55:BX:12:VAL:CG2	55:BX:13:LEU:N	2.45	0.77
9:AI:48:GLU:O	9:AI:51:ARG:HB2	1.84	0.77
37:BC:175:VAL:HG13	37:BC:188:ASN:C	2.06	0.77
35:BA:655:A:C4'	35:BA:656:G:H5'	2.14	0.77
35:BA:370:G:H3'	35:BA:423:A:C5	2.20	0.77
24:AY:119:VAL:HG22	24:AY:124:ARG:HG2	1.67	0.77
24:AY:335:ARG:HH21	24:AY:335:ARG:CG	1.95	0.77
24:AY:442:GLY:O	24:AY:443:VAL:HG22	1.84	0.77
24:AY:76:GLN:HE21	24:AY:85:ASN:CG	1.88	0.77
38:BD:10:THR:O	38:BD:11:PRO:O	2.01	0.77
35:BA:811:U:C6	47:BP:24:GLY:O	2.37	0.77
47:BP:50:ARG:HG3	47:BP:51:PHE:N	2.00	0.77
47:BP:70:GLN:HB3	47:BP:72:PRO:HD3	1.67	0.77
8:AH:36:LEU:HD11	8:AH:59:LEU:HD13	1.67	0.77
15:AO:39:LEU:CD1	15:AO:56:LEU:HD21	2.14	0.77
15:AO:65:ARG:HH11	15:AO:65:ARG:CG	1.97	0.77
2:AB:42:ILE:HD12	2:AB:203:GLY:HA2	1.67	0.77
35:BA:917:A:H2	36:BB:79:C:O2	1.68	0.77
48:BQ:133:ARG:HG2	48:BQ:134:ARG:N	1.99	0.77
1:AA:1151:A:C4	1:AA:1152:A:N7	2.53	0.77
1:AA:975:A:H5'	1:AA:975:A:C8	2.20	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1070:A:N6	44:BK:7:UNK:O	2.18	0.77
1:AA:624:C:H2'	1:AA:625:G:H8	1.50	0.77
36:BB:68:C:H2'	36:BB:69:G:C8	2.20	0.77
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.67	0.77
48:BQ:63:LYS:HZ3	57:BZ:175:VAL:HG11	1.47	0.77
1:AA:1497:G:C2'	1:AA:1498:U:H5'	2.14	0.77
1:AA:199:G:H2'	1:AA:200:G:C8	2.20	0.77
24:AY:184:HIS:CE1	24:AY:191:TYR:CZ	2.73	0.76
35:BA:2512:C:H4'	39:BE:122:PHE:CZ	2.20	0.76
2:AB:185:ILE:HD12	2:AB:185:ILE:N	2.00	0.76
2:AB:67:THR:HA	2:AB:90:MET:HE1	1.65	0.76
13:AM:91:ARG:O	13:AM:95:GLY:N	2.17	0.76
21:AU:6:ARG:O	21:AU:12:LYS:NZ	2.16	0.76
35:BA:2303:G:H1	35:BA:2313:C:N4	1.82	0.76
54:BW:13:SER:O	54:BW:17:VAL:HG23	1.85	0.76
12:AL:47:LYS:HB3	12:AL:48:PRO:CD	2.15	0.76
49:BR:76:VAL:HG22	49:BR:80:PHE:CE2	2.20	0.76
1:AA:1346:A:H5'	9:AI:120:ARG:HH12	1.49	0.76
16:AP:4:ILE:HD12	16:AP:66:PRO:HG3	1.64	0.76
1:AA:381:C:H2'	1:AA:382:A:C8	2.20	0.76
33:B8:37:SER:OG	33:B8:40:GLU:HG3	1.84	0.76
35:BA:628:G:H2'	35:BA:629:G:H5''	1.63	0.76
39:BE:78:LEU:C	39:BE:79:ARG:HD2	2.06	0.76
45:BN:58:ASP:O	45:BN:60:ILE:N	2.15	0.76
35:BA:2893:G:C5'	35:BA:2894:G:H5'	2.13	0.76
36:BB:95:C:O2'	36:BB:96:U:H5'	1.85	0.76
19:AS:44:MET:SD	19:AS:44:MET:N	2.57	0.76
19:AS:45:VAL:HA	19:AS:62:ILE:HG13	1.67	0.76
1:AA:937:A:H2'	1:AA:938:A:H8	1.48	0.76
1:AA:9:G:OP2	5:AE:121:LYS:NZ	2.17	0.76
1:AA:1521:G:H2'	1:AA:1522:U:H6	1.49	0.76
16:AP:74:LEU:O	16:AP:79:VAL:HG23	1.85	0.76
12:AL:109:GLY:HA3	12:AL:121:GLY:HA3	1.66	0.76
12:AL:119:LYS:O	12:AL:120:TYR:HB2	1.85	0.76
24:AY:171:TRP:O	24:AY:182:VAL:HA	1.85	0.76
24:AY:300:VAL:HG11	24:AY:316:ALA:HB1	1.66	0.76
30:B5:49:CYS:SG	30:B5:50:GLY:N	2.59	0.76
35:BA:1791:A:H4'	38:BD:206:LEU:HD13	1.66	0.76
1:AA:598:U:H2'	1:AA:599:C:C6	2.19	0.76
35:BA:2589:A:O2'	35:BA:2590:A:H5'	1.85	0.76
9:AI:46:ALA:HB2	9:AI:74:ILE:CG2	2.15	0.76
4:AD:143:GLY:N	4:AD:185:PHE:O	2.18	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1120:G:H2'	35:BA:1121:C:O4'	1.85	0.76
28:B3:4:LEU:HD11	28:B3:39:ASP:OD1	1.85	0.76
57:BZ:16:SER:O	57:BZ:20:ARG:HG2	1.84	0.76
35:BA:1161:C:H2'	35:BA:1162:G:C8	2.19	0.76
1:AA:702:A:H61	35:BA:1846:G:H5''	1.49	0.76
35:BA:1906:G:H1	35:BA:1924:C:H42	1.29	0.76
35:BA:996:A:H4'	52:BU:92:ARG:HE	1.49	0.76
38:BD:44:ASN:HB2	38:BD:48:ARG:O	1.84	0.76
51:BT:32:TYR:HB3	51:BT:81:PRO:HB3	1.66	0.76
52:BU:74:LEU:HD11	52:BU:79:PHE:HB2	1.68	0.76
35:BA:2159:G:C2'	35:BA:2160:G:H5''	2.15	0.76
35:BA:2472:G:H5'	35:BA:2473:U:C5'	2.12	0.76
35:BA:2785:C:H2'	35:BA:2786:U:C6	2.20	0.76
4:AD:11:LEU:HB3	4:AD:66:ARG:HH11	1.48	0.76
37:BC:47:LEU:HD12	37:BC:47:LEU:H	1.46	0.76
31:B6:14:THR:CG2	31:B6:50:ARG:HB2	2.14	0.76
35:BA:6:A:H2'	35:BA:7:G:H8	1.50	0.76
1:AA:293:G:H5'	1:AA:610:G:C2	2.19	0.76
35:BA:535:C:H2'	35:BA:536:A:C8	2.21	0.76
24:AY:110:LEU:HD13	24:AY:268:MET:HE2	1.67	0.76
24:AY:300:VAL:CG1	24:AY:316:ALA:HB1	2.14	0.76
38:BD:16:MET:CB	38:BD:207:GLY:HA3	2.15	0.76
51:BT:90:GLN:CG	51:BT:120:ARG:HH22	1.98	0.76
51:BT:64:ARG:CZ	51:BT:103:ARG:HA	2.16	0.76
51:BT:78:LEU:HB3	51:BT:79:HIS:CE1	2.20	0.76
52:BU:92:ARG:HB2	53:BV:11:GLN:CD	2.05	0.76
48:BQ:48:GLU:HA	48:BQ:51:ARG:HB3	1.68	0.76
21:AU:5:ASP:C	21:AU:7:ARG:H	1.88	0.76
12:AL:24:VAL:HG13	12:AL:98:TYR:CE2	2.21	0.76
19:AS:20:LEU:HA	19:AS:23:ASN:HB3	1.67	0.76
37:BC:55:ASP:O	37:BC:56:GLN:HG3	1.84	0.76
35:BA:871:U:OP1	48:BQ:5:ARG:HG3	1.86	0.76
41:BG:133:LEU:CG	41:BG:157:ILE:HB	2.15	0.76
36:BB:106:G:H2'	36:BB:107:G:C8	2.20	0.76
40:BF:185:ASP:HA	40:BF:188:ARG:HG2	1.68	0.76
2:AB:115:LEU:HB2	2:AB:145:LEU:HD12	1.67	0.76
1:AA:1035:A:H2'	1:AA:1036:G:C8	2.20	0.76
51:BT:108:ARG:HA	51:BT:111:ARG:NH1	2.00	0.76
25:B0:38:VAL:HB	25:B0:59:LEU:HB2	1.66	0.76
1:AA:538:G:H5''	12:AL:114:LYS:HB2	1.67	0.76
9:AI:122:ALA:HB1	9:AI:123:PRO:HD2	1.67	0.76
35:BA:659:C:O2'	35:BA:660:G:H5'	1.86	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:89:SER:OG	38:BD:159:ALA:HB2	1.86	0.76
1:AA:577:G:H22	1:AA:765:G:H1'	1.50	0.76
8:AH:9:MET:SD	8:AH:26:VAL:HG21	2.25	0.76
36:BB:81:G:H2'	36:BB:82:G:H5'	1.65	0.76
36:BB:91:C:OP2	48:BQ:16:ARG:HD2	1.85	0.76
1:AA:1152:A:H5''	10:AJ:13:HIS:CD2	2.21	0.76
1:AA:1502:A:C2	1:AA:1504:G:C2	2.73	0.76
35:BA:2125:G:N2	35:BA:2173:A:N6	2.34	0.76
39:BE:51:PHE:CD1	39:BE:52:LEU:N	2.53	0.76
35:BA:1569:A:H2'	35:BA:1570:A:C8	2.21	0.76
35:BA:1385:G:H4'	35:BA:1386:C:OP1	1.86	0.76
35:BA:322:A:H5'	35:BA:340:A:H1'	1.65	0.76
24:AY:457:TYR:CB	24:AY:459:VAL:HG22	2.16	0.76
1:AA:1409:C:H2'	1:AA:1410:G:C8	2.18	0.76
35:BA:1998:G:O2'	35:BA:1999:C:H5'	1.85	0.76
35:BA:2823:A:H2'	35:BA:2824:C:H6	1.50	0.76
35:BA:628:G:O2'	35:BA:629:G:H5''	1.85	0.76
49:BR:7:GLY:O	49:BR:8:ARG:HB2	1.84	0.76
46:BO:14:THR:HG22	46:BO:95:GLY:N	2.00	0.76
8:AH:1:MET:N	8:AH:1:MET:HE2	2.01	0.76
21:AU:24:ARG:O	21:AU:24:ARG:HG2	1.84	0.76
19:AS:26:GLY:HA2	29:B4:47:GLN:O	1.86	0.76
49:BR:96:ARG:O	49:BR:114:VAL:HA	1.86	0.76
41:BG:64:THR:HG23	41:BG:65:GLY:N	2.01	0.76
24:AY:373:ILE:CG2	24:AY:374:GLN:H	1.96	0.76
35:BA:1155:A:HO2'	35:BA:1156:A:H2'	1.50	0.76
35:BA:1614:A:N6	54:BW:87:PRO:HA	2.01	0.76
35:BA:1789:A:H2'	35:BA:1790:C:O4'	1.86	0.76
35:BA:588:U:H2'	35:BA:589:C:C6	2.21	0.76
38:BD:181:GLU:CA	38:BD:272:ALA:HB1	2.15	0.76
42:BH:143:GLN:OE1	42:BH:143:GLN:HA	1.85	0.76
8:AH:120:THR:H	8:AH:123:GLU:HB2	1.50	0.76
18:AR:53:ARG:HG2	18:AR:58:LEU:O	1.85	0.76
48:BQ:122:GLY:HA2	48:BQ:125:LEU:HD23	1.68	0.76
12:AL:36:VAL:CG1	12:AL:82:VAL:HG22	2.15	0.76
56:BY:12:THR:CB	56:BY:75:ILE:HG21	2.13	0.76
40:BF:195:ASP:HB3	40:BF:198:ALA:CB	2.15	0.76
31:B6:28:ARG:HA	31:B6:32:ASN:HD22	1.49	0.76
1:AA:1004:A:H5''	1:AA:1025:U:O4	1.86	0.76
1:AA:1417:G:H2'	1:AA:1482:G:N2	2.01	0.76
24:AY:331:LEU:HB3	24:AY:379:PHE:CD2	2.20	0.76
35:BA:996:A:N6	35:BA:1159:U:H3	1.82	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1892:C:O2'	35:BA:1893:C:H5''	1.86	0.76
39:BE:144:ARG:HG2	39:BE:145:LYS:H	1.50	0.76
52:BU:34:LYS:HA	52:BU:34:LYS:HE2	1.68	0.76
35:BA:1936:A:P	35:BA:1961:C:H41	2.09	0.76
25:B0:43:THR:O	25:B0:43:THR:HG23	1.85	0.76
57:BZ:119:GLU:HG3	57:BZ:122:ARG:HD3	1.67	0.76
3:AC:142:MET:C	3:AC:144:SER:H	1.88	0.76
56:BY:46:LYS:H	56:BY:62:GLU:HG2	1.46	0.76
31:B6:38:LYS:HG2	31:B6:48:VAL:HG12	1.67	0.76
1:AA:1001:A:H2'	1:AA:1001:A:N3	2.01	0.76
1:AA:254:G:O2'	1:AA:255:G:H5'	1.85	0.76
4:AD:61:LYS:HD2	4:AD:207:TYR:OH	1.85	0.76
1:AA:601:C:H2'	1:AA:602:A:H8	1.51	0.76
35:BA:308:G:H1'	35:BA:501:A:OP1	1.85	0.76
24:AY:421:GLU:O	24:AY:422:GLU:CG	2.32	0.76
35:BA:2375:G:H1'	35:BA:2379:G:N2	2.01	0.76
35:BA:750:A:H2'	35:BA:751:A:H5''	1.68	0.76
39:BE:170:LEU:HD12	39:BE:170:LEU:H	1.49	0.76
53:BV:4:ILE:HD12	53:BV:40:LEU:HB2	1.67	0.76
55:BX:57:LEU:CD2	55:BX:78:LYS:HE2	2.07	0.76
47:BP:58:THR:O	47:BP:58:THR:HG22	1.86	0.76
33:B8:13:ARG:HH11	47:BP:61:ARG:HD2	1.49	0.76
35:BA:2590:A:OP2	38:BD:238:GLY:HA2	1.86	0.76
12:AL:36:VAL:HG12	12:AL:82:VAL:HG13	1.68	0.76
19:AS:45:VAL:HA	19:AS:62:ILE:CG1	2.14	0.76
8:AH:82:HIS:HD2	8:AH:138:TRP:HE1	1.31	0.76
50:BS:89:ARG:O	50:BS:92:TYR:HB3	1.86	0.76
32:B7:40:TRP:CE2	35:BA:459:U:H5'	2.20	0.76
49:BR:28:LEU:HD23	49:BR:29:LEU:CD1	2.15	0.76
17:AQ:10:VAL:HB	17:AQ:54:GLY:H	1.51	0.76
35:BA:1321:A:H5'	35:BA:1322:A:OP2	1.85	0.76
24:AY:155:LEU:HD23	24:AY:166:CYS:CB	2.15	0.75
24:AY:222:ASP:O	24:AY:226:GLN:CB	2.32	0.75
24:AY:255:PHE:CE1	24:AY:268:MET:SD	2.79	0.75
24:AY:373:ILE:O	24:AY:374:GLN:HG3	1.86	0.75
24:AY:78:PRO:HB3	24:AY:83:LEU:HB3	1.68	0.75
35:BA:2027:G:O2'	35:BA:2028:U:H5'	1.84	0.75
2:AB:102:LEU:O	2:AB:105:PHE:N	2.18	0.75
57:BZ:35:ARG:HA	57:BZ:35:ARG:NE	2.00	0.75
22:AV:53:G:H4'	22:AV:54:U:OP2	1.85	0.75
1:AA:1310:G:H2'	1:AA:1311:G:C8	2.20	0.75
56:BY:25:GLY:HA3	56:BY:40:GLU:HG2	1.67	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:BY:67:LEU:HD21	56:BY:71:LYS:HB2	1.68	0.75
41:BG:99:MET:O	41:BG:103:LEU:HB2	1.85	0.75
13:AM:15:VAL:O	13:AM:19:LEU:HD22	1.87	0.75
28:B3:4:LEU:HD12	28:B3:39:ASP:HA	1.68	0.75
4:AD:123:HIS:HB2	4:AD:125:HIS:CD2	2.20	0.75
9:AI:69:GLY:O	9:AI:73:GLN:HG3	1.85	0.75
1:AA:1383:C:H2'	1:AA:1384:C:H6	1.50	0.75
35:BA:614(C):A:C2	40:BF:180:GLY:HA2	2.21	0.75
42:BH:110:SER:O	42:BH:111:HIS:HB2	1.84	0.75
1:AA:1405:G:O2'	1:AA:1519:A:H5'	1.85	0.75
45:BN:91:LEU:HA	45:BN:95:PRO:CB	2.11	0.75
51:BT:28:VAL:HG22	51:BT:47:GLY:N	2.00	0.75
1:AA:673:G:C2'	1:AA:674:G:C8	2.65	0.75
35:BA:199:A:H61	35:BA:2433:A:H2'	1.48	0.75
3:AC:21:ARG:HG2	3:AC:58:GLU:HG2	1.67	0.75
1:AA:1199:U:H4'	10:AJ:54:PHE:CE2	2.21	0.75
1:AA:1202:G:C2	14:AN:42:ILE:HG21	2.21	0.75
51:BT:124:ASP:HB3	51:BT:125:ARG:HH12	1.49	0.75
16:AP:28:ARG:HG2	16:AP:29:ASP:OD1	1.85	0.75
47:BP:64:LYS:O	47:BP:66:GLY:N	2.19	0.75
13:AM:56:LEU:O	13:AM:60:VAL:HG23	1.86	0.75
1:AA:23:C:O2'	1:AA:24:U:H5'	1.85	0.75
35:BA:382:G:C2'	35:BA:383:U:H5'	2.15	0.75
1:AA:1241:G:OP1	7:AG:35:LYS:NZ	2.18	0.75
24:AY:173:ILE:O	24:AY:180:LYS:HB2	1.87	0.75
35:BA:1251:C:OP1	52:BU:10:ARG:HG3	1.87	0.75
35:BA:1846:G:N2	35:BA:1847:A:C2	2.54	0.75
35:BA:953:A:H61	35:BA:964:C:H42	1.33	0.75
38:BD:80:ALA:HB2	38:BD:96:HIS:CD2	2.21	0.75
51:BT:91:ARG:O	51:BT:117:ASP:HB3	1.85	0.75
15:AO:39:LEU:HD13	15:AO:56:LEU:HD21	1.68	0.75
2:AB:98:LEU:HD12	2:AB:101:MET:HE3	1.67	0.75
12:AL:83:VAL:CG1	12:AL:107:ALA:HB2	2.16	0.75
1:AA:974:A:H8	14:AN:31:ARG:HD3	1.50	0.75
28:B3:8:LEU:HD21	28:B3:31:LEU:HA	1.66	0.75
1:AA:80:G:H3'	1:AA:81:U:C5'	2.15	0.75
24:AY:113:ILE:HG23	24:AY:118:GLY:O	1.86	0.75
24:AY:424:ALA:O	24:AY:425:VAL:HG13	1.86	0.75
24:AY:76:GLN:NE2	24:AY:85:ASN:ND2	2.32	0.75
1:AA:1491:G:C2'	1:AA:1492:A:C8	2.68	0.75
39:BE:22:PRO:O	39:BE:23:VAL:HG13	1.86	0.75
51:BT:22:PHE:HE2	51:BT:85:LYS:HZ1	1.33	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:575:G:H4'	1:AA:576:G:O5'	1.85	0.75
17:AQ:29:HIS:ND1	17:AQ:30:PRO:HD2	2.02	0.75
53:BV:19:LYS:HG2	53:BV:94:LEU:HB2	1.68	0.75
35:BA:909:A:H2'	35:BA:912:C:N4	2.01	0.75
35:BA:914:C:C2'	35:BA:915:C:H5'	2.12	0.75
13:AM:90:LEU:N	13:AM:90:LEU:HD23	2.02	0.75
35:BA:327:G:N2	35:BA:328:U:H1'	2.01	0.75
30:B5:25:LEU:HG	54:BW:19:LEU:HG	1.67	0.75
17:AQ:75:ARG:HH11	17:AQ:75:ARG:HG3	1.51	0.75
35:BA:2188:C:H2'	35:BA:2189:U:C2	2.21	0.75
35:BA:925:C:C2'	35:BA:926:A:H5''	2.15	0.75
35:BA:575:A:O2'	35:BA:576:U:H5'	1.87	0.75
35:BA:2864:G:H2'	35:BA:2865:U:H6	1.50	0.75
24:AY:278:ALA:HB1	24:AY:279:PRO:HD2	1.68	0.75
1:AA:1410:G:H2'	1:AA:1411:C:H6	1.51	0.75
35:BA:1657:C:H5''	39:BE:133:LYS:O	1.87	0.75
39:BE:101:ARG:HD2	39:BE:169:ASN:ND2	2.02	0.75
39:BE:8:LYS:HA	39:BE:26:ILE:HG23	1.66	0.75
34:B9:10:ILE:HD12	34:B9:10:ILE:H	1.50	0.75
27:B2:35:LEU:HD13	27:B2:36:ARG:N	2.01	0.75
40:BF:3:GLU:O	40:BF:24:LEU:HG	1.87	0.75
35:BA:606:U:H4'	35:BA:658:C:C4'	2.16	0.75
57:BZ:120:ILE:HG12	57:BZ:172:ALA:CA	2.16	0.75
28:B3:5:LYS:CA	28:B3:36:VAL:HG12	2.16	0.75
35:BA:2801(A):A:H4'	35:BA:2802:G:H5'	1.68	0.75
1:AA:1211:U:H5'	1:AA:1212:U:OP1	1.86	0.75
1:AA:681:C:C4'	38:BD:174:ILE:HD12	2.16	0.75
35:BA:1924:C:O2'	35:BA:1925:C:H6	1.70	0.75
38:BD:186:HIS:CD2	38:BD:188:GLU:HB2	2.21	0.75
47:BP:80:TYR:CD1	47:BP:111:ARG:HB3	2.21	0.75
52:BU:115:ALA:C	52:BU:117:GLN:H	1.88	0.75
34:B9:2:LYS:HA	34:B9:33:LYS:O	1.85	0.75
35:BA:2396:G:C6	35:BA:2421:G:O6	2.39	0.75
42:BH:88:LEU:CD2	42:BH:130:ARG:HG2	2.16	0.75
3:AC:138:VAL:HG23	3:AC:149:ALA:HB3	1.68	0.75
37:BC:37:PHE:CZ	37:BC:217:THR:HG21	2.20	0.75
51:BT:125:ARG:O	51:BT:128:GLU:HG3	1.87	0.75
1:AA:618:C:N4	1:AA:623:C:H42	1.83	0.75
5:AE:43:LEU:CD2	5:AE:132:ALA:HB1	2.14	0.75
17:AQ:5:VAL:O	17:AQ:6:LEU:HD23	1.86	0.75
1:AA:1234:C:O2'	1:AA:1235:U:H5'	1.86	0.75
47:BP:6:LEU:H	47:BP:6:LEU:HD23	1.51	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1445(A):C:H2'	35:BA:1446:C:C6	2.22	0.75
32:B7:46:VAL:HG12	32:B7:47:ARG:N	2.01	0.75
28:B3:6:VAL:HB	28:B3:54:VAL:HG11	1.68	0.75
33:B8:53:PRO:HA	33:B8:56:GLU:OE1	1.85	0.75
24:AY:183:TYR:CE2	24:AY:189:GLU:C	2.60	0.75
24:AY:99:THR:O	24:AY:102:THR:N	2.19	0.75
35:BA:1602:U:H3'	35:BA:1603:A:H5'	1.67	0.75
35:BA:2720:U:H5'	35:BA:2721:A:OP2	1.87	0.75
35:BA:787:U:H5''	35:BA:788:A:H5'	1.69	0.75
45:BN:9:VAL:HG11	45:BN:39:ARG:HH22	1.49	0.75
46:BO:6:THR:HG22	46:BO:7:TYR:N	2.01	0.75
1:AA:981:U:H5	1:AA:982:U:H2'	1.52	0.75
40:BF:168:ARG:HG3	40:BF:175:THR:HG21	1.68	0.75
35:BA:1095:A:H2'	35:BA:1096:A:H8	1.52	0.75
11:AK:63:LEU:HA	11:AK:66:LEU:CD1	2.17	0.75
11:AK:62:GLN:HG2	11:AK:63:LEU:HD23	1.68	0.75
35:BA:903:C:O2'	35:BA:904:C:H5'	1.87	0.75
42:BH:69:ARG:O	42:BH:73:ALA:HB2	1.86	0.75
42:BH:12:PRO:HD2	42:BH:15:VAL:HG21	1.68	0.75
35:BA:1707:G:H2'	35:BA:1708:C:H6	1.52	0.75
24:AY:111:MET:HE1	24:AY:139:THR:HG21	1.66	0.75
35:BA:1135:C:N4	35:BA:1138:G:OP2	2.18	0.75
35:BA:2570:G:H2'	35:BA:2571:C:C6	2.22	0.75
38:BD:182:LEU:O	38:BD:271:ILE:CG1	2.34	0.75
39:BE:8:LYS:HD3	39:BE:191:PRO:O	1.85	0.75
52:BU:9:VAL:O	52:BU:13:LYS:HE2	1.87	0.75
35:BA:445:C:H5''	52:BU:3:ARG:HB3	1.69	0.75
1:AA:16:A:C2'	1:AA:17:U:H5'	2.17	0.75
8:AH:86:ILE:HD11	8:AH:136:GLU:HG2	1.69	0.75
15:AO:27:VAL:O	15:AO:30:ALA:HB3	1.86	0.75
15:AO:68:ARG:CG	15:AO:72:ARG:HE	1.99	0.75
3:AC:64:VAL:HG12	3:AC:65:ALA:H	1.50	0.75
19:AS:58:VAL:HG23	19:AS:60:VAL:HG12	1.69	0.75
35:BA:870:A:H5''	48:BQ:6:ARG:HB2	1.69	0.75
20:AT:18:GLN:NE2	20:AT:22:ARG:HH12	1.78	0.75
1:AA:1500:A:O2'	1:AA:1501:C:H5'	1.86	0.75
50:BS:88:ASP:CG	50:BS:89:ARG:H	1.86	0.75
1:AA:1003:G:N2	1:AA:1039:C:N3	2.35	0.75
16:AP:74:LEU:HB3	16:AP:79:VAL:HG21	1.69	0.75
28:B3:31:LEU:HD23	28:B3:32:GLN:H	1.52	0.75
1:AA:954:G:O2'	13:AM:120:LYS:HD2	1.86	0.75
35:BA:1707:G:H2'	35:BA:1708:C:C6	2.21	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:2:PHE:O	53:BV:41:GLY:HA2	1.87	0.75
5:AE:47:LYS:O	5:AE:48:ALA:HB2	1.86	0.75
24:AY:395:PRO:HG2	24:AY:398:PHE:CE1	2.22	0.75
1:AA:1231:G:H4'	9:AI:126:SER:OG	1.87	0.75
35:BA:1789:A:H5''	38:BD:221:VAL:HA	1.67	0.75
38:BD:30:GLU:HG3	38:BD:83:GLU:OE1	1.87	0.75
39:BE:82:ARG:HG3	39:BE:83:ASP:H	1.51	0.75
35:BA:1007:C:H5''	45:BN:35:ARG:HH12	1.50	0.75
47:BP:113:LYS:CB	47:BP:129:ALA:HB3	2.16	0.75
47:BP:38:GLN:HG3	47:BP:39:LYS:N	2.00	0.75
35:BA:2807:G:H2'	35:BA:2808:U:H5''	1.67	0.75
25:B0:27:GLU:HA	25:B0:67:VAL:O	1.86	0.75
1:AA:978:A:O2'	1:AA:979:C:O4'	2.05	0.75
19:AS:32:LYS:HA	19:AS:50:ALA:HB3	1.69	0.75
37:BC:59:ARG:CZ	37:BC:142:ALA:HB2	2.17	0.75
7:AG:101:LEU:O	7:AG:105:VAL:HG23	1.87	0.75
1:AA:1394:A:C8	1:AA:1501:C:O2'	2.40	0.75
5:AE:91:LEU:HB3	5:AE:118:ILE:HD11	1.69	0.75
35:BA:2147:G:H2'	35:BA:2148:G:C5'	2.17	0.75
2:AB:134:GLU:O	2:AB:138:LEU:HG	1.87	0.75
1:AA:375:U:H2'	1:AA:376:G:C8	2.21	0.75
40:BF:131:GLY:CA	40:BF:138:GLU:HB3	2.16	0.75
35:BA:2508:G:O2'	35:BA:2509:G:H5'	1.87	0.74
38:BD:265:PRO:C	38:BD:267:SER:H	1.90	0.74
35:BA:587:C:C4	47:BP:33:ARG:HG2	2.22	0.74
52:BU:95:LEU:HD13	53:BV:4:ILE:HG23	1.69	0.74
8:AH:14:ARG:HE	8:AH:83:ILE:HG23	1.51	0.74
15:AO:29:VAL:HG21	15:AO:67:LEU:CD2	2.16	0.74
17:AQ:29:HIS:CG	17:AQ:30:PRO:HD2	2.22	0.74
18:AR:53:ARG:NH1	18:AR:60:ALA:HA	2.02	0.74
2:AB:14:GLY:O	2:AB:15:VAL:HG22	1.86	0.74
56:BY:73:ARG:HB3	56:BY:80:GLY:HA2	1.69	0.74
4:AD:173:TRP:O	4:AD:186:LEU:HB2	1.87	0.74
42:BH:67:LEU:CG	42:BH:71:LEU:HD12	2.16	0.74
5:AE:72:GLN:O	5:AE:73:ASN:HB3	1.85	0.74
46:BO:43:VAL:HG21	46:BO:52:VAL:HG11	1.67	0.74
50:BS:106:ARG:HH12	50:BS:109:GLY:N	1.85	0.74
35:BA:2037:G:H2'	35:BA:2038:G:C8	2.23	0.74
35:BA:2784:C:H4'	39:BE:42:ASP:OD1	1.86	0.74
45:BN:22:THR:OG1	45:BN:25:ARG:HB2	1.86	0.74
53:BV:34:GLU:HA	53:BV:58:VAL:HA	1.69	0.74
25:B0:26:TYR:HE2	35:BA:857:C:H1'	1.50	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AV:2:G:O2'	22:AV:3:C:C6	2.40	0.74
1:AA:300:A:N3	1:AA:565:U:N3	2.31	0.74
54:BW:13:SER:HB3	54:BW:16:LYS:HD2	1.69	0.74
42:BH:64:LEU:O	42:BH:67:LEU:HB3	1.87	0.74
26:B1:80:LEU:HB3	26:B1:82:LEU:HD23	1.69	0.74
35:BA:2672:G:C3'	35:BA:2673:G:H5''	2.17	0.74
24:AY:332:ARG:HB2	24:AY:339:ASP:OD1	1.87	0.74
35:BA:2532:G:O5'	35:BA:2532:G:H8	1.70	0.74
35:BA:1007:C:H5''	45:BN:35:ARG:HH11	1.49	0.74
35:BA:1845:G:N2	35:BA:1895:C:O2	2.19	0.74
35:BA:2456:C:H2'	35:BA:2457:U:H6	1.52	0.74
35:BA:729:G:H4'	35:BA:763:G:H5'	1.68	0.74
51:BT:48:ILE:HD12	51:BT:48:ILE:N	2.02	0.74
12:AL:7:ILE:HG13	12:AL:10:LEU:HD12	1.69	0.74
2:AB:97:TRP:HH2	2:AB:176:GLU:HG3	1.52	0.74
35:BA:1915:U:C2'	35:BA:1916:A:C5'	2.66	0.74
13:AM:96:LEU:HB3	13:AM:97:PRO:CD	2.16	0.74
35:BA:291:C:O2'	35:BA:292:C:H5'	1.87	0.74
9:AI:33:PHE:HZ	9:AI:43:ALA:HB1	1.52	0.74
4:AD:174:LEU:CD2	4:AD:185:PHE:HA	2.17	0.74
41:BG:71:THR:HB	41:BG:89:GLY:O	1.88	0.74
5:AE:100:VAL:O	5:AE:107:ARG:NH2	2.19	0.74
35:BA:1434:A:H61	35:BA:1558:A:N6	1.85	0.74
35:BA:1496:A:H2'	35:BA:1498:C:C5	2.22	0.74
41:BG:161:THR:HG21	41:BG:172:LEU:CD1	2.16	0.74
32:B7:40:TRP:CZ3	35:BA:459:U:H4'	2.22	0.74
9:AI:4:TYR:HB2	9:AI:19:LEU:HB2	1.69	0.74
9:AI:70:LYS:O	9:AI:73:GLN:HB2	1.88	0.74
35:BA:1794:U:H2'	35:BA:1795:C:C6	2.21	0.74
35:BA:176:G:O2'	35:BA:177:G:H5'	1.87	0.74
35:BA:2535:G:H2'	35:BA:2536:G:H8	1.52	0.74
24:AY:168:PRO:HG2	24:AY:171:TRP:HZ2	1.50	0.74
24:AY:527:ARG:HD2	24:AY:528:GLU:N	2.02	0.74
8:AH:37:ARG:HH21	8:AH:41:ARG:HH22	1.33	0.74
15:AO:62:GLN:O	15:AO:65:ARG:HG3	1.85	0.74
48:BQ:29:PHE:CE2	48:BQ:67:ARG:NH2	2.47	0.74
9:AI:99:LEU:HD22	9:AI:99:LEU:N	2.02	0.74
14:AN:6:LEU:HB3	14:AN:23:ARG:NH2	2.00	0.74
9:AI:8:GLY:O	9:AI:76:ALA:HB1	1.87	0.74
50:BS:15:ARG:O	50:BS:18:ILE:CD1	2.36	0.74
50:BS:54:LEU:HD22	50:BS:58:LEU:O	1.86	0.74
35:BA:2180:U:H6	35:BA:2181:G:C8	2.05	0.74

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:BY:86:ARG:HB3	56:BY:88:LYS:HE3	1.67	0.74
13:AM:56:LEU:HD13	13:AM:57:ARG:N	2.02	0.74
1:AA:839:U:O2	1:AA:839:U:H2'	1.87	0.74
53:BV:3:ALA:O	53:BV:13:ARG:HA	1.87	0.74
35:BA:234:C:H2'	35:BA:235:U:C6	2.22	0.74
1:AA:189(A):C:H2'	1:AA:189(B):C:C6	2.23	0.74
17:AQ:87:LYS:O	17:AQ:91:ARG:HB2	1.86	0.74
25:B0:7:LEU:HD22	48:BQ:85:LYS:HG3	1.67	0.74
34:B9:6:SER:CB	35:BA:2466:C:H5''	2.17	0.74
35:BA:1188:U:H4'	53:BV:79:VAL:HG12	1.70	0.74
45:BN:18:ALA:HB1	45:BN:21:LYS:HB3	1.68	0.74
35:BA:1952:A:C6	46:BO:22:ILE:HD12	2.22	0.74
6:AF:12:PRO:HB3	6:AF:58:GLY:HA2	1.69	0.74
2:AB:19:HIS:O	2:AB:39:ILE:HG23	1.86	0.74
42:BH:125:VAL:O	42:BH:127:GLU:N	2.20	0.74
35:BA:2591:C:H2'	35:BA:2592:G:H8	1.52	0.74
24:AY:309:PRO:O	24:AY:310:LYS:HG2	1.86	0.74
56:BY:81:LYS:HD3	56:BY:97:ARG:O	1.86	0.74
5:AE:52:PRO:O	5:AE:55:VAL:HB	1.85	0.74
7:AG:104:LEU:O	7:AG:107:ALA:HB3	1.87	0.74
26:B1:80:LEU:HD23	26:B1:81:LYS:N	2.02	0.74
38:BD:68:LYS:HA	38:BD:70:TRP:CZ3	2.22	0.74
35:BA:1750:G:N3	35:BA:2860:A:H2	1.85	0.74
33:B8:52:LYS:O	33:B8:55:ALA:N	2.21	0.74
35:BA:721:C:H3'	35:BA:722:A:C8	2.21	0.74
35:BA:2801(A):A:C4'	35:BA:2802:G:H5'	2.18	0.74
24:AY:251:ILE:HD12	24:AY:252:THR:N	2.02	0.74
35:BA:1013:C:O2'	35:BA:1014:U:H5'	1.87	0.74
35:BA:573:G:O2'	35:BA:574:C:H5'	1.88	0.74
35:BA:629:G:H5'	35:BA:629:G:H8	1.51	0.74
35:BA:753:C:H2'	35:BA:754:C:C6	2.22	0.74
35:BA:762:U:H5'	35:BA:763:G:N2	2.02	0.74
38:BD:148:GLU:HB3	38:BD:149:PRO:HD2	1.69	0.74
39:BE:198:VAL:HG12	39:BE:199:ARG:N	2.02	0.74
47:BP:40:SER:O	47:BP:41:ARG:HD2	1.87	0.74
2:AB:8:LYS:HZ3	2:AB:217:ARG:CZ	2.00	0.74
35:BA:862:G:H2'	35:BA:863:A:O4'	1.87	0.74
19:AS:47:HIS:H	19:AS:62:ILE:HG21	1.52	0.74
1:AA:543:C:P	4:AD:14:ARG:HH21	2.09	0.74
37:BC:45:ALA:HB3	37:BC:171:ILE:CG2	2.17	0.74
35:BA:612:C:H2'	35:BA:613:G:C5'	2.17	0.74
26:B1:3:LYS:HD3	35:BA:1364:G:OP2	1.87	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BZ:116:VAL:O	57:BZ:174:VAL:HG13	1.88	0.74
24:AY:114:ASP:O	24:AY:118:GLY:HA2	1.87	0.74
24:AY:304:GLN:HB3	24:AY:314:ARG:O	1.86	0.74
32:B7:1:MET:O	32:B7:2:LYS:O	2.06	0.74
38:BD:198:ASN:C	38:BD:198:ASN:HD22	1.89	0.74
39:BE:98:PRO:HD3	39:BE:175:VAL:HG12	1.69	0.74
1:AA:737:A:H2'	1:AA:738:C:C6	2.22	0.74
8:AH:6:ILE:N	8:AH:6:ILE:HD12	2.02	0.74
33:B8:13:ARG:HH12	47:BP:59:LEU:HD23	1.51	0.74
21:AU:12:LYS:HB3	21:AU:17:THR:O	1.86	0.74
19:AS:63:THR:HG23	19:AS:65:ASN:H	1.52	0.74
35:BA:61:G:H2'	35:BA:62:C:C6	2.23	0.74
55:BX:12:VAL:HG23	55:BX:13:LEU:H	1.48	0.74
35:BA:1526:G:H2'	35:BA:1527:G:C8	2.23	0.74
35:BA:1590:U:C2'	35:BA:1591:G:H5''	2.16	0.74
1:AA:172:A:H8	1:AA:172:A:H5''	1.51	0.74
35:BA:2826:A:H2'	35:BA:2827:C:H6	1.52	0.74
1:AA:1457:G:H2'	1:AA:1458:G:C8	2.22	0.74
1:AA:594:G:H2'	1:AA:595:G:O4'	1.87	0.74
9:AI:82:ALA:HB1	9:AI:96:LEU:HD21	1.69	0.74
24:AY:223:LEU:HG	42:BH:97:ARG:NH1	2.01	0.74
33:B8:43:GLN:C	33:B8:44:LYS:HD2	2.07	0.74
35:BA:242:G:H1'	35:BA:243:U:H5	1.53	0.74
46:BO:63:VAL:HG22	46:BO:84:ALA:HA	1.69	0.74
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.53	0.74
34:B9:7:VAL:HG13	34:B9:34:GLN:CG	2.17	0.74
48:BQ:20:ALA:O	48:BQ:98:LYS:HB3	1.87	0.74
1:AA:1106:G:O2'	1:AA:1107:C:H5'	1.88	0.74
10:AJ:50:ILE:HG12	14:AN:41:ARG:HD2	1.68	0.74
1:AA:972:C:H4'	10:AJ:57:LYS:HG3	1.70	0.74
4:AD:13:ARG:HD2	4:AD:38:TYR:O	1.88	0.74
35:BA:796:C:H2'	35:BA:797:C:C6	2.22	0.74
30:B5:25:LEU:CD1	54:BW:23:LEU:HD22	2.14	0.74
38:BD:111:LEU:HD11	38:BD:115:GLN:HE21	1.52	0.74
16:AP:72:ARG:HG2	16:AP:73:LEU:HG	1.67	0.74
10:AJ:34:VAL:HG13	10:AJ:73:ASP:O	1.88	0.74
51:BT:108:ARG:C	51:BT:110:ILE:N	2.41	0.74
29:B4:35:VAL:HG12	29:B4:36:CYS:N	2.02	0.74
35:BA:1013:C:C2'	35:BA:1014:U:H5'	2.18	0.74
35:BA:957:A:C2	35:BA:2459:A:H5'	2.22	0.74
35:BA:2574:G:H2'	35:BA:2575:C:O4'	1.88	0.74
38:BD:226:MET:CE	38:BD:230:ASP:HB3	2.17	0.74

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1155:A:P	52:BU:55:ARG:HE	2.10	0.74
57:BZ:119:GLU:HG3	57:BZ:122:ARG:CD	2.18	0.74
40:BF:195:ASP:HB3	40:BF:198:ALA:HB3	1.70	0.74
49:BR:116:LEU:O	49:BR:117:VAL:HG12	1.88	0.74
49:BR:94:TYR:CD1	49:BR:94:TYR:N	2.46	0.74
57:BZ:111:VAL:HA	57:BZ:115:GLY:HA3	1.69	0.74
57:BZ:150:LEU:O	57:BZ:171:ILE:HG12	1.87	0.74
42:BH:35:VAL:CG1	42:BH:72:ILE:HD11	2.18	0.74
38:BD:111:LEU:HD12	38:BD:112:GLN:H	1.51	0.74
22:AV:26:G:H22	22:AV:44:A:H61	1.35	0.74
1:AA:80:G:C3'	1:AA:81:U:H5'	2.17	0.74
1:AA:635:G:O2'	1:AA:636:U:H5'	1.88	0.74
24:AY:420:SER:OG	24:AY:426:GLN:HA	1.87	0.74
35:BA:1140:C:H5'	35:BA:1141:U:OP2	1.88	0.74
35:BA:950:G:H2'	35:BA:951:C:H6	1.51	0.74
38:BD:181:GLU:CB	38:BD:272:ALA:HB1	2.18	0.74
2:AB:229:VAL:HG12	2:AB:230:VAL:N	2.03	0.74
21:AU:23:PRO:O	21:AU:25:LYS:N	2.20	0.74
1:AA:981:U:H2'	1:AA:982:U:H5	1.49	0.74
37:BC:22:ILE:CD1	37:BC:190:ARG:HG2	2.18	0.74
41:BG:71:THR:HG22	41:BG:72:ARG:N	2.01	0.74
17:AQ:3:LYS:HB2	17:AQ:60:ILE:HD11	1.70	0.74
35:BA:44:G:H2'	35:BA:215:G:C8	2.23	0.74
35:BA:2111:C:N3	35:BA:2147:G:N2	2.35	0.74
35:BA:263:C:H4'	35:BA:430:G:O4'	1.87	0.74
24:AY:146:ARG:NH2	35:BA:2654:A:OP1	2.21	0.73
24:AY:295:LYS:O	24:AY:323:GLY:HA3	1.88	0.73
24:AY:299:PHE:N	24:AY:299:PHE:CD2	2.53	0.73
30:B5:13:LYS:C	30:B5:16:ARG:HB3	2.08	0.73
38:BD:26:LYS:HZ2	38:BD:113:VAL:HG21	1.47	0.73
38:BD:92:ILE:HG22	38:BD:106:ILE:CA	2.14	0.73
35:BA:1655:A:H4'	39:BE:115:GLY:N	2.02	0.73
35:BA:2894:G:H2'	35:BA:2894:G:N3	2.03	0.73
22:AV:57:A:O2'	22:AV:58:A:H5'	1.88	0.73
3:AC:58:GLU:N	3:AC:65:ALA:HB3	2.02	0.73
27:B2:25:VAL:HG22	27:B2:60:LEU:CD1	2.14	0.73
55:BX:12:VAL:HG12	55:BX:27:THR:C	2.07	0.73
41:BG:44:GLY:O	41:BG:47:LYS:HE2	1.88	0.73
41:BG:102:PHE:CD1	41:BG:102:PHE:C	2.61	0.73
40:BF:110:LEU:HD22	40:BF:183:VAL:CG1	2.18	0.73
5:AE:92:LYS:O	5:AE:118:ILE:HG13	1.87	0.73
35:BA:1423:G:H2'	35:BA:1424:G:C8	2.21	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BZ:20:ARG:CB	57:BZ:20:ARG:HH11	2.01	0.73
35:BA:81:G:N2	56:BY:2:ARG:HH12	1.84	0.73
1:AA:551:U:O2'	1:AA:552:U:H5'	1.88	0.73
35:BA:2691:C:H5'	35:BA:2691:C:H6	1.52	0.73
10:AJ:40:LEU:N	10:AJ:40:LEU:HD23	2.03	0.73
35:BA:2126:A:N6	35:BA:2163:C:H4'	2.02	0.73
32:B7:44:PRO:HG2	35:BA:465:G:H5''	1.68	0.73
38:BD:268:ARG:H	38:BD:270:ILE:CD1	2.00	0.73
49:BR:38:VAL:CG2	49:BR:110:PRO:HB2	2.18	0.73
15:AO:68:ARG:CD	15:AO:72:ARG:HE	2.00	0.73
18:AR:43:PHE:O	18:AR:51:LEU:HD12	1.87	0.73
2:AB:152:PHE:O	2:AB:153:ARG:HG2	1.88	0.73
42:BH:87:LEU:CD2	42:BH:162:ILE:HD11	2.18	0.73
35:BA:861:A:C2	35:BA:862:G:C1'	2.71	0.73
35:BA:861:A:C2	35:BA:862:G:H1'	2.23	0.73
48:BQ:106:VAL:HG21	48:BQ:114:ALA:HB1	1.68	0.73
40:BF:175:THR:O	40:BF:176:LEU:HD12	1.87	0.73
37:BC:47:LEU:HD11	37:BC:171:ILE:CD1	2.18	0.73
29:B4:28:LYS:HE3	29:B4:28:LYS:HA	1.70	0.73
36:BB:41:U:H3	41:BG:70:VAL:HB	1.53	0.73
5:AE:41:VAL:HG23	5:AE:67:VAL:CG1	2.18	0.73
50:BS:53:SER:C	50:BS:55:ALA:N	2.40	0.73
35:BA:1438:U:C5	35:BA:1552:G:N2	2.56	0.73
37:BC:139:ASN:OD1	37:BC:140:PRO:HD2	1.89	0.73
35:BA:1537:G:H2'	35:BA:1538:G:H8	1.53	0.73
35:BA:404:C:H4'	35:BA:405:U:H5'	1.68	0.73
24:AY:223:LEU:CG	42:BH:97:ARG:HH12	2.00	0.73
35:BA:689:A:O2'	35:BA:690:G:H5'	1.88	0.73
38:BD:31:LYS:HG2	38:BD:33:LEU:CD2	2.17	0.73
46:BO:21:CYS:HA	46:BO:41:ALA:CB	2.18	0.73
34:B9:26:ILE:HG22	34:B9:27:CYS:N	2.01	0.73
42:BH:105:LEU:HD23	42:BH:105:LEU:O	1.87	0.73
57:BZ:24:LEU:HD12	57:BZ:41:LEU:HA	1.71	0.73
22:AV:2:G:O2'	22:AV:3:C:H6	1.71	0.73
35:BA:1786:A:C5	35:BA:1938:A:C2	2.76	0.73
13:AM:75:ALA:HA	13:AM:78:ILE:HB	1.67	0.73
13:AM:88:ARG:CG	13:AM:98:VAL:HG11	2.18	0.73
3:AC:9:GLY:O	3:AC:12:LEU:HG	1.88	0.73
41:BG:140:ILE:C	41:BG:140:ILE:HD12	2.08	0.73
38:BD:117:VAL:HG22	38:BD:129:ASN:OD1	1.87	0.73
9:AI:55:ALA:HB1	9:AI:59:PHE:CE2	2.23	0.73
1:AA:1497:G:H2'	1:AA:1498:U:H5'	1.70	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:156:ILE:HA	37:BC:160:ARG:CB	2.16	0.73
24:AY:347:THR:HG21	24:AY:357:GLU:OE2	1.88	0.73
33:B8:8:LYS:NZ	33:B8:11:LYS:NZ	2.36	0.73
35:BA:2822:G:H2'	35:BA:2823:A:H5''	1.71	0.73
35:BA:2823:A:H2'	35:BA:2824:C:C6	2.24	0.73
39:BE:105:THR:HG22	39:BE:106:GLY:H	1.52	0.73
39:BE:76:ARG:O	39:BE:77:ILE:O	2.06	0.73
45:BN:90:MET:HE1	45:BN:94:HIS:HB2	1.70	0.73
46:BO:22:ILE:HB	46:BO:40:VAL:O	1.88	0.73
18:AR:66:LEU:O	18:AR:70:ILE:HG13	1.89	0.73
2:AB:220:ASP:HA	2:AB:223:ILE:CD1	2.14	0.73
36:BB:94:C:H2'	36:BB:95:C:C6	2.23	0.73
3:AC:70:VAL:HG12	3:AC:71:ALA:N	2.01	0.73
5:AE:87:SER:CB	5:AE:130:ASN:HB3	2.18	0.73
22:AV:17:C:H3'	22:AV:17(A):U:C5'	2.17	0.73
40:BF:131:GLY:HA2	40:BF:138:GLU:HB3	1.69	0.73
51:BT:9:LEU:O	51:BT:12:SER:HB2	1.88	0.73
24:AY:151:PRO:HA	24:AY:154:LEU:CD1	2.19	0.73
24:AY:181:GLY:CA	24:AY:263:PHE:CZ	2.67	0.73
30:B5:13:LYS:HA	30:B5:16:ARG:CB	2.19	0.73
30:B5:45:VAL:HG22	30:B5:51:TYR:CE1	2.23	0.73
30:B5:6:VAL:HG23	35:BA:2015:A:C2	2.23	0.73
33:B8:62:LEU:HD22	35:BA:242:G:C5'	2.18	0.73
47:BP:106:LEU:HD11	47:BP:112:LEU:HG	1.70	0.73
47:BP:71:VAL:N	47:BP:72:PRO:HD3	2.04	0.73
35:BA:534:U:O2'	52:BU:49:HIS:HD2	1.72	0.73
54:BW:29:LEU:O	54:BW:33:ARG:HG3	1.89	0.73
46:BO:86:ILE:CG2	46:BO:94:ARG:HG3	2.06	0.73
6:AF:4:TYR:CE1	6:AF:92:LYS:HG3	2.23	0.73
6:AF:79:LEU:O	6:AF:85:VAL:HG11	1.88	0.73
8:AH:119:LEU:HD22	8:AH:123:GLU:HB3	1.70	0.73
42:BH:98:LEU:HB3	42:BH:125:VAL:HG21	1.70	0.73
57:BZ:29:TYR:O	57:BZ:30:ASN:HB3	1.87	0.73
3:AC:114:PRO:O	3:AC:118:GLN:HG3	1.88	0.73
3:AC:58:GLU:HB2	3:AC:65:ALA:HB2	1.70	0.73
37:BC:141:LYS:NZ	37:BC:164:ARG:NH2	2.36	0.73
41:BG:144:ILE:O	41:BG:144:ILE:HG23	1.87	0.73
17:AQ:59:ILE:HD13	17:AQ:73:VAL:HA	1.69	0.73
38:BD:79:VAL:HG21	38:BD:115:GLN:HB2	1.70	0.73
16:AP:21:VAL:HG11	16:AP:59:TRP:NE1	2.03	0.73
35:BA:2645:G:C3'	35:BA:2646:C:H5'	2.18	0.73
50:BS:42:ASP:O	50:BS:43:GLU:HB3	1.88	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:20:LYS:H	12:AL:20:LYS:HD3	1.54	0.73
35:BA:21:A:O2'	35:BA:22:C:H5'	1.88	0.73
24:AY:109:CYS:O	24:AY:137:ILE:CA	2.36	0.73
35:BA:1695:G:C2'	35:BA:1696:G:H5'	2.18	0.73
35:BA:1926:U:O2	35:BA:1926:U:H2'	1.86	0.73
39:BE:26:ILE:HG13	39:BE:182:LEU:HB3	1.69	0.73
40:BF:84:VAL:HG12	40:BF:85:GLY:H	1.52	0.73
53:BV:58:VAL:HG12	53:BV:59:ALA:N	2.02	0.73
57:BZ:91:LEU:HD22	57:BZ:130:PRO:HB3	1.70	0.73
57:BZ:18:LEU:H	57:BZ:18:LEU:CD2	2.01	0.73
1:AA:310:G:H2'	1:AA:311:C:C6	2.23	0.73
35:BA:1275:A:N6	49:BR:16:HIS:HA	2.03	0.73
24:AY:225:GLN:O	24:AY:228:ARG:HB3	1.88	0.73
35:BA:1820:U:C5	38:BD:202:LYS:HD3	2.23	0.73
35:BA:1840:G:H1	35:BA:1902:C:N4	1.85	0.73
1:AA:16:A:H2'	1:AA:17:U:H5'	1.71	0.73
57:BZ:79:ARG:O	57:BZ:81:ARG:N	2.21	0.73
1:AA:108:G:H5'	1:AA:109:A:C5'	2.18	0.73
1:AA:1323:G:H4'	1:AA:1363:C:C2	2.24	0.73
35:BA:1747:G:H2'	35:BA:1747(A):G:C8	2.21	0.73
1:AA:194:C:C2'	1:AA:195:A:H5''	2.17	0.73
51:BT:4:GLY:O	51:BT:7:ILE:HB	1.89	0.73
26:B1:73:LEU:HD22	26:B1:94:LEU:HB3	1.71	0.73
24:AY:80:HIS:CD2	24:AY:273:VAL:HG21	2.23	0.73
35:BA:1266:G:N2	35:BA:2012:G:H2'	2.03	0.73
35:BA:1796:U:H2'	35:BA:1797:C:C6	2.23	0.73
35:BA:957:A:N1	35:BA:2458:G:H4'	2.03	0.73
35:BA:2678:C:H2'	35:BA:2679:A:O4'	1.88	0.73
35:BA:2784:C:H1'	39:BE:37:ARG:NH1	1.99	0.73
38:BD:6:PHE:HD2	38:BD:17:THR:HA	1.52	0.73
1:AA:872:A:O2'	1:AA:873:A:H3'	1.87	0.73
2:AB:102:LEU:O	2:AB:105:PHE:HB2	1.88	0.73
2:AB:171:ALA:HA	2:AB:174:VAL:CG2	2.18	0.73
42:BH:102:ALA:HA	42:BH:115:VAL:O	1.89	0.73
25:B0:43:THR:CG2	35:BA:2332:U:H5'	2.18	0.73
36:BB:80:U:H2'	36:BB:81:G:H21	1.52	0.73
1:AA:1191:A:C2	1:AA:1192:C:C4	2.76	0.73
56:BY:13:VAL:HG13	56:BY:14:LEU:N	2.02	0.73
35:BA:145:G:C3'	35:BA:146:G:H5''	2.19	0.73
1:AA:621:A:H2'	1:AA:622:A:C8	2.23	0.73
47:BP:7:ARG:HH11	47:BP:7:ARG:CA	1.99	0.73
35:BA:2108:C:O2	35:BA:2108:C:H2'	1.87	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:41:ARG:HG2	12:AL:42:THR:N	2.03	0.73
35:BA:1932:A:H2'	35:BA:1933:G:O4'	1.89	0.73
38:BD:247:ALA:HB1	38:BD:253:GLN:HA	1.71	0.73
38:BD:35:LYS:HG2	38:BD:63:ARG:CG	2.19	0.73
45:BN:63:THR:HB	45:BN:66:LYS:NZ	2.04	0.73
52:BU:28:ARG:HD3	52:BU:38:THR:CG2	2.19	0.73
1:AA:668:G:H4'	15:AO:48:LYS:HB2	1.70	0.73
1:AA:735:C:H2'	1:AA:736:C:H6	1.53	0.73
53:BV:28:GLU:O	53:BV:61:VAL:HG21	1.89	0.73
21:AU:10:ARG:O	21:AU:13:ILE:HB	1.89	0.73
21:AU:23:PRO:C	21:AU:25:LYS:H	1.91	0.73
56:BY:15:VAL:HG12	56:BY:15:VAL:O	1.88	0.73
56:BY:23:ARG:HG2	56:BY:23:ARG:HH11	1.54	0.73
5:AE:6:PHE:HB3	5:AE:35:GLY:O	1.87	0.73
37:BC:180:PHE:HD2	37:BC:184:LYS:HG3	1.53	0.73
34:B9:16:VAL:HG11	35:BA:1032:A:H4'	1.71	0.73
35:BA:1344:G:H4'	35:BA:1384:A:N7	2.03	0.73
50:BS:49:VAL:O	50:BS:50:SER:HB3	1.87	0.73
35:BA:1639:U:O2'	35:BA:1640:C:H5''	1.89	0.73
35:BA:847:U:OP2	35:BA:928:G:O6	2.07	0.73
35:BA:1218:C:H2'	35:BA:1219:G:H5'	1.70	0.73
24:AY:13:ARG:CD	24:AY:363:ASP:OD2	2.37	0.73
24:AY:399:ARG:HA	24:AY:466:VAL:HG22	1.71	0.73
35:BA:2577:A:H5''	35:BA:2578:G:H5'	1.70	0.73
35:BA:566:U:H2'	35:BA:567:A:O4'	1.89	0.73
35:BA:621:A:H2'	35:BA:622:G:C5'	2.19	0.73
52:BU:9:VAL:HG23	52:BU:10:ARG:H	1.53	0.73
1:AA:589:C:H1'	1:AA:653:A:H61	1.54	0.73
40:BF:181:LEU:HD11	40:BF:186:ILE:CD1	2.19	0.73
4:AD:176:LEU:HD12	4:AD:177:ASP:H	1.54	0.73
37:BC:59:ARG:NE	37:BC:142:ALA:HB2	2.04	0.73
1:AA:624:C:H2'	1:AA:625:G:C8	2.23	0.73
47:BP:7:ARG:HA	47:BP:7:ARG:NH1	2.01	0.73
28:B3:4:LEU:O	28:B3:36:VAL:HA	1.89	0.73
35:BA:1448:G:H2'	35:BA:1449:A:H8	1.54	0.73
56:BY:84:ARG:HG2	56:BY:85:VAL:H	1.52	0.73
42:BH:94:TYR:HB3	42:BH:107:VAL:CB	2.19	0.73
16:AP:2:VAL:O	16:AP:64:ALA:HA	1.89	0.73
12:AL:109:GLY:CA	12:AL:121:GLY:HA3	2.18	0.73
35:BA:2562:U:H2'	35:BA:2563:U:H5'	1.71	0.73
45:BN:75:TYR:HB2	45:BN:82:LEU:HD12	1.70	0.73
24:AY:103:LEU:O	24:AY:105:ALA:N	2.22	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1894:C:H2'	35:BA:1895:C:H5''	1.69	0.72
35:BA:2715:C:H2'	35:BA:2716:U:H6	1.52	0.72
38:BD:27:THR:OG1	38:BD:83:GLU:HG2	1.88	0.72
51:BT:93:ARG:HG2	51:BT:117:ASP:HB2	1.71	0.72
1:AA:19:C:OP1	5:AE:127:ASN:HB3	1.89	0.72
35:BA:1494:A:C2'	35:BA:1495:A:H5''	2.19	0.72
35:BA:1466:G:H5'	35:BA:1467:C:OP1	1.88	0.72
19:AS:6:LYS:HD2	19:AS:6:LYS:H	1.53	0.72
28:B3:4:LEU:HB2	28:B3:37:LEU:O	1.89	0.72
13:AM:23:TYR:HB3	13:AM:67:GLU:HB2	1.71	0.72
1:AA:122:G:H2'	1:AA:123:C:C6	2.24	0.72
35:BA:1345:C:H4'	35:BA:1396:U:C4	2.24	0.72
1:AA:29:G:O2'	1:AA:30:U:H5'	1.89	0.72
7:AG:79:ARG:HD3	7:AG:82:GLY:HA2	1.71	0.72
35:BA:1755:A:O2'	35:BA:1756:G:H5'	1.89	0.72
35:BA:2007:C:H5'	35:BA:2824:C:H1'	1.70	0.72
52:BU:92:ARG:HH22	53:BV:10:LYS:HG2	1.54	0.72
30:B5:28:PRO:HD2	54:BW:35:ILE:HG23	1.71	0.72
8:AH:54:ASP:O	8:AH:56:LYS:HG3	1.89	0.72
2:AB:44:LEU:O	2:AB:47:THR:CB	2.37	0.72
2:AB:77:ALA:HA	2:AB:80:ILE:HD13	1.69	0.72
42:BH:98:LEU:HD12	42:BH:99:VAL:N	2.04	0.72
1:AA:1152:A:H5'	10:AJ:70:ARG:NH2	2.04	0.72
1:AA:1318:A:N3	19:AS:37:ARG:NH2	2.37	0.72
4:AD:12:CYS:SG	4:AD:19:LEU:HB3	2.29	0.72
49:BR:93:GLY:C	49:BR:94:TYR:HD1	1.92	0.72
4:AD:59:ARG:NH1	4:AD:59:ARG:HA	2.03	0.72
1:AA:403:C:H4'	4:AD:122:ARG:NH2	2.05	0.72
8:AH:122:ARG:O	8:AH:125:ARG:HB3	1.89	0.72
50:BS:62:LYS:H	50:BS:65:VAL:HG23	1.53	0.72
38:BD:70:TRP:O	38:BD:70:TRP:CD1	2.42	0.72
47:BP:147:LEU:O	47:BP:148:LEU:HB2	1.87	0.72
26:B1:86:SER:OG	26:B1:89:GLU:HB2	1.89	0.72
24:AY:369:ASN:CB	24:AY:373:ILE:HG13	2.19	0.72
35:BA:1005:C:H2'	35:BA:1006:C:C6	2.24	0.72
40:BF:70:THR:C	40:BF:72:ARG:H	1.92	0.72
6:AF:5:GLU:N	6:AF:91:VAL:O	2.22	0.72
35:BA:2469:A:O2'	48:BQ:56:ARG:HD2	1.89	0.72
48:BQ:31:ASP:HB2	48:BQ:107:ALA:HA	1.71	0.72
57:BZ:40:ASP:OD1	57:BZ:42:VAL:HG12	1.89	0.72
3:AC:14:ILE:O	3:AC:14:ILE:HG12	1.87	0.72
5:AE:41:VAL:HG23	5:AE:67:VAL:HG12	1.69	0.72

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:122:G:H2'	35:BA:123:G:C8	2.24	0.72
27:B2:38:GLN:O	27:B2:41:ILE:HG12	1.89	0.72
1:AA:1242:C:O2'	1:AA:1243:C:H5'	1.89	0.72
19:AS:55:LYS:HG2	19:AS:56:GLN:HE21	1.52	0.72
26:B1:53:VAL:HG22	26:B1:74:VAL:HG13	1.71	0.72
1:AA:412:A:H5'	1:AA:413:G:OP2	1.90	0.72
24:AY:184:HIS:NE2	24:AY:267:HIS:HB3	2.04	0.72
24:AY:412:LEU:HD23	24:AY:436:LEU:HD12	1.70	0.72
35:BA:2722:G:O2'	49:BR:5:LYS:HB3	1.88	0.72
51:BT:100:TYR:O	51:BT:103:ARG:HG3	1.88	0.72
51:BT:89:VAL:HG12	51:BT:91:ARG:HG3	1.70	0.72
1:AA:729:A:N6	15:AO:51:HIS:NE2	2.37	0.72
34:B9:29:ASN:ND2	34:B9:29:ASN:O	2.23	0.72
35:BA:918:A:C6	35:BA:919:G:H1'	2.24	0.72
35:BA:2523:G:O4'	35:BA:2765:A:C8	2.42	0.72
13:AM:91:ARG:CB	13:AM:98:VAL:HG22	2.20	0.72
14:AN:60:SER:O	14:AN:61:TRP:HB3	1.88	0.72
35:BA:497:A:H2'	35:BA:498:G:H8	1.54	0.72
37:BC:6:ARG:NH2	37:BC:10:LEU:HD23	2.04	0.72
37:BC:45:ALA:HB3	37:BC:171:ILE:HG22	1.71	0.72
37:BC:47:LEU:HD11	37:BC:171:ILE:CB	2.18	0.72
2:AB:148:TYR:O	2:AB:149:LEU:HD23	1.89	0.72
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.24	0.72
1:AA:633:G:H5'	1:AA:634:C:OP2	1.89	0.72
1:AA:441:A:H3'	1:AA:442:C:C6	2.24	0.72
1:AA:191:G:H1'	20:AT:105:SER:HB3	1.72	0.72
35:BA:1829:A:HO2'	38:BD:15:PHE:HD2	1.37	0.72
38:BD:206:LEU:CB	38:BD:211:ARG:HG2	2.20	0.72
39:BE:67:PHE:HD1	39:BE:68:ALA:N	1.88	0.72
18:AR:43:PHE:C	18:AR:51:LEU:HD12	2.10	0.72
48:BQ:120:ILE:O	48:BQ:123:HIS:N	2.22	0.72
3:AC:42:LEU:HD23	3:AC:43:LEU:HD21	1.70	0.72
14:AN:24:CYS:HB3	14:AN:27:CYS:O	1.89	0.72
4:AD:30:LYS:C	4:AD:32:ALA:N	2.41	0.72
4:AD:58:LEU:CD1	4:AD:59:ARG:HH12	2.02	0.72
41:BG:109:VAL:CG1	41:BG:142:PRO:HD3	2.18	0.72
38:BD:133:LEU:HD21	38:BD:191:ALA:HB2	1.72	0.72
1:AA:1321:C:H5'	1:AA:1322:C:H5''	1.71	0.72
5:AE:129:ILE:N	5:AE:129:ILE:CD1	2.50	0.72
5:AE:87:SER:OG	5:AE:131:ILE:HD13	1.90	0.72
47:BP:123:LEU:N	47:BP:123:LEU:HD23	2.04	0.72
20:AT:88:VAL:O	20:AT:92:LEU:HG	1.88	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:B6:45:LYS:HD3	31:B6:45:LYS:N	2.05	0.72
1:AA:1040:U:H2'	1:AA:1041:A:C8	2.24	0.72
24:AY:356:VAL:O	24:AY:357:GLU:HB2	1.87	0.72
24:AY:387:PHE:HD1	24:AY:387:PHE:H	1.37	0.72
24:AY:443:VAL:HG23	24:AY:444:LEU:HD22	1.70	0.72
33:B8:6:THR:O	33:B8:8:LYS:N	2.22	0.72
35:BA:1311:G:H21	35:BA:1603:A:H62	1.37	0.72
35:BA:1796:U:H2'	35:BA:1797:C:H6	1.52	0.72
35:BA:1817:G:O2'	35:BA:1818:U:H5'	1.89	0.72
35:BA:568:U:H5'	35:BA:945:A:N6	2.04	0.72
39:BE:176:ILE:HB	39:BE:181:LEU:HB2	1.70	0.72
47:BP:112:LEU:H	47:BP:128:HIS:HD2	1.35	0.72
53:BV:31:ALA:O	53:BV:61:VAL:HG22	1.88	0.72
42:BH:126:PRO:O	42:BH:127:GLU:HB2	1.90	0.72
22:AV:14:A:H2'	22:AV:15:G:O4'	1.90	0.72
40:BF:156:LEU:HD12	40:BF:157:VAL:H	1.52	0.72
4:AD:175:SER:HG	4:AD:184:LYS:HB2	1.54	0.72
11:AK:30:VAL:HG21	11:AK:68:ALA:CB	2.17	0.72
57:BZ:141:VAL:HG13	57:BZ:144:LEU:HB2	1.72	0.72
5:AE:63:ARG:O	5:AE:64:ARG:HB2	1.90	0.72
38:BD:128:GLY:H	38:BD:193:VAL:HG13	1.53	0.72
1:AA:1321:C:H5'	1:AA:1322:C:H5'	1.71	0.72
35:BA:852:G:H2'	35:BA:853:G:C8	2.25	0.72
2:AB:30:ARG:HG3	2:AB:31:TYR:H	1.54	0.72
1:AA:1161:C:H2'	1:AA:1162:C:H6	1.54	0.72
24:AY:106:VAL:HG22	24:AY:108:CYS:H	1.54	0.72
33:B8:17:THR:OG1	33:B8:21:LYS:HB2	1.89	0.72
51:BT:32:TYR:HB3	51:BT:81:PRO:CB	2.19	0.72
52:BU:114:LYS:HA	52:BU:117:GLN:HB2	1.71	0.72
1:AA:669:U:O2'	1:AA:670:G:H5'	1.89	0.72
1:AA:863:U:O2'	1:AA:865:A:N7	2.20	0.72
48:BQ:27:VAL:HG21	48:BQ:134:ARG:HG3	1.70	0.72
57:BZ:33:LEU:HD11	57:BZ:35:ARG:HB2	1.71	0.72
57:BZ:57:ILE:N	57:BZ:57:ILE:HD12	2.05	0.72
36:BB:104:U:O2'	57:BZ:72:ARG:HG3	1.90	0.72
14:AN:40:CYS:O	14:AN:42:ILE:N	2.23	0.72
40:BF:157:VAL:HG22	40:BF:193:VAL:O	1.90	0.72
40:BF:175:THR:C	40:BF:176:LEU:HD12	2.10	0.72
4:AD:102:ASP:CB	4:AD:121:VAL:HG21	2.19	0.72
4:AD:96:LEU:HD23	4:AD:139:ARG:NH1	2.05	0.72
11:AK:38:ASN:ND2	11:AK:38:ASN:N	2.34	0.72
1:AA:1240:U:O2'	7:AG:32:ARG:NH1	2.22	0.72

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:113:ARG:NE	41:BG:113:ARG:HA	2.04	0.72
41:BG:39:ILE:HA	41:BG:156:ASP:O	1.90	0.72
47:BP:62:LEU:CD2	47:BP:62:LEU:H	2.01	0.72
38:BD:117:VAL:HG21	38:BD:128:GLY:CA	2.20	0.72
45:BN:3:THR:CG2	45:BN:5:VAL:HG23	2.19	0.72
35:BA:2111:C:N3	35:BA:2145:C:H2'	2.05	0.72
1:AA:1377:A:P	7:AG:94:ARG:NH2	2.63	0.72
15:AO:17:ARG:HB3	15:AO:17:ARG:NH1	2.04	0.72
4:AD:91:SER:HA	4:AD:94:LEU:HD12	1.72	0.72
57:BZ:63:ASP:O	57:BZ:65:GLN:HG3	1.90	0.72
23:AX:12:A:H3'	23:AX:12:A:N3	2.04	0.72
1:AA:778:G:O2'	1:AA:779:C:H5'	1.90	0.72
35:BA:755:C:H2'	35:BA:756:C:C6	2.25	0.72
38:BD:62:TYR:HE1	38:BD:64:ILE:HA	1.55	0.72
38:BD:24:ILE:CD1	38:BD:84:TYR:HA	2.20	0.72
35:BA:2324:C:O2	35:BA:2385:C:H5	1.73	0.72
3:AC:81:GLY:O	3:AC:85:ARG:HD3	1.90	0.72
4:AD:100:ARG:O	4:AD:103:ASN:HB3	1.90	0.72
35:BA:307:G:H2'	35:BA:309:G:OP2	1.90	0.72
11:AK:48:ILE:HD11	11:AK:64:ALA:HA	1.70	0.72
5:AE:31:LEU:HD21	5:AE:43:LEU:HD11	1.70	0.72
32:B7:24:THR:H	32:B7:28:ARG:CZ	2.02	0.72
35:BA:1441:G:H2'	35:BA:1442:G:C8	2.25	0.72
35:BA:720:C:C4	35:BA:721:C:H1'	2.25	0.72
1:AA:594:G:O2'	1:AA:595:G:H5'	1.89	0.72
1:AA:805:C:O2'	1:AA:806:C:H5'	1.90	0.72
24:AY:389:GLY:O	24:AY:390:ILE:HG13	1.90	0.72
24:AY:395:PRO:HB2	24:AY:440:ALA:N	2.05	0.72
35:BA:1846:G:N2	35:BA:1847:A:N1	2.38	0.72
35:BA:2290:G:H2'	35:BA:2291:U:O4'	1.90	0.72
38:BD:182:LEU:O	38:BD:271:ILE:HG12	1.90	0.72
39:BE:132:HIS:HA	39:BE:135:HIS:HE1	1.54	0.72
52:BU:61:TRP:CZ3	52:BU:94:ASN:HB2	2.24	0.72
33:B8:13:ARG:HD3	47:BP:61:ARG:HD3	1.69	0.72
35:BA:2603:G:N2	35:BA:2604:U:H1'	2.04	0.72
1:AA:1269:A:H2	1:AA:1312:G:H21	1.35	0.72
3:AC:82:GLU:O	3:AC:85:ARG:HB2	1.89	0.72
10:AJ:49:VAL:HG23	14:AN:41:ARG:HB2	1.71	0.72
55:BX:29:TRP:HZ3	55:BX:59:VAL:HG21	1.55	0.72
40:BF:119:ARG:HH11	40:BF:119:ARG:HG2	1.54	0.72
35:BA:2307:G:H21	35:BA:2308:G:H5'	1.53	0.72
35:BA:2450:A:C2	35:BA:2451:A:C4	2.77	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:442:G:H4'	40:BF:46:ARG:HB2	1.71	0.72
24:AY:74:VAL:HG11	24:AY:317:PHE:CE2	2.24	0.72
24:AY:325:TYR:HE2	24:AY:357:GLU:OE2	1.73	0.72
35:BA:1019:U:H3	35:BA:1142(A):A:H62	1.37	0.72
35:BA:1922:G:C2'	35:BA:1923:U:C5'	2.68	0.72
35:BA:1977:A:O2'	35:BA:1978:A:H5'	1.88	0.72
35:BA:532:A:N3	35:BA:532:A:H2'	2.05	0.72
40:BF:82:ILE:HG12	40:BF:83:PHE:N	2.04	0.72
2:AB:235:SER:O	2:AB:237:ALA:N	2.22	0.72
35:BA:1915:U:H2'	35:BA:1916:A:O5'	1.88	0.72
1:AA:1318:A:H1'	19:AS:37:ARG:HH21	1.51	0.72
24:AY:308:ASP:N	24:AY:309:PRO:CD	2.48	0.72
49:BR:117:VAL:O	49:BR:118:GLU:HB2	1.88	0.72
11:AK:52:GLY:H	11:AK:55:LYS:HE2	1.53	0.72
37:BC:42:GLU:CD	37:BC:44:HIS:HE2	1.93	0.72
29:B4:24:THR:HG21	41:BG:104:GLU:OE2	1.90	0.72
2:AB:145:LEU:HD13	2:AB:149:LEU:HD12	1.71	0.72
35:BA:2125:G:N2	35:BA:2173:A:H61	1.87	0.72
4:AD:155:LEU:HB2	4:AD:158:ILE:HG12	1.70	0.72
35:BA:1291:C:H2'	35:BA:1292:U:H5'	1.69	0.72
35:BA:1428:C:C4	35:BA:1569:A:H5''	2.25	0.72
5:AE:145:LYS:O	5:AE:149:GLU:HG2	1.89	0.72
2:AB:179:LYS:HA	8:AH:72:PRO:HD3	1.72	0.72
24:AY:28:THR:OG1	58:AY:1000:GCP:H5'1	1.90	0.71
35:BA:1892:C:C2'	35:BA:1893:C:H5'	2.15	0.71
38:BD:208:LYS:HG3	38:BD:210:GLY:N	2.04	0.71
47:BP:112:LEU:HD22	47:BP:113:LYS:N	2.05	0.71
1:AA:759:A:H1'	12:AL:12:ARG:HH22	1.54	0.71
15:AO:70:LEU:HB3	15:AO:78:TYR:HB2	1.70	0.71
1:AA:1091:U:C2	1:AA:1095:U:N3	2.57	0.71
2:AB:21:ARG:HD2	2:AB:39:ILE:HG12	1.72	0.71
2:AB:87:ARG:HH12	2:AB:219:VAL:HB	1.54	0.71
48:BQ:133:ARG:CB	48:BQ:133:ARG:HH11	2.02	0.71
9:AI:79:LEU:O	9:AI:79:LEU:HD13	1.89	0.71
11:AK:57:THR:OG1	11:AK:58:PRO:HD2	1.90	0.71
41:BG:56:ALA:O	41:BG:59:GLU:HG2	1.90	0.71
26:B1:80:LEU:HB3	26:B1:82:LEU:CD2	2.20	0.71
25:B0:11:ARG:CB	25:B0:11:ARG:HH11	2.03	0.71
35:BA:1038:C:C3'	35:BA:1039:G:H5''	2.19	0.71
25:B0:20:ARG:HH22	35:BA:2271:G:H4'	1.55	0.71
35:BA:2278:A:OP1	48:BQ:11:LYS:HG3	1.89	0.71
35:BA:603:A:H1'	35:BA:604:G:OP1	1.89	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:395:PRO:HG2	24:AY:398:PHE:CZ	2.25	0.71
32:B7:6:GLN:OE1	32:B7:6:GLN:HA	1.90	0.71
35:BA:2223:G:H5'	38:BD:269:PHE:HZ	1.55	0.71
47:BP:38:GLN:CG	47:BP:39:LYS:H	1.99	0.71
52:BU:19:LYS:C	52:BU:21:ALA:H	1.91	0.71
1:AA:719:C:O2	18:AR:50:ILE:HG12	1.89	0.71
18:AR:44:LEU:HB3	18:AR:48:GLY:HA2	1.71	0.71
1:AA:1073:U:H2'	1:AA:1074:G:H8	1.55	0.71
57:BZ:155:LEU:HD23	57:BZ:155:LEU:H	1.54	0.71
35:BA:1911:U:C2	35:BA:1918:A:C2	2.79	0.71
3:AC:58:GLU:H	3:AC:65:ALA:CB	2.03	0.71
10:AJ:64:GLU:CG	14:AN:59:ALA:HA	2.20	0.71
19:AS:9:VAL:HG13	19:AS:39:THR:OG1	1.90	0.71
27:B2:2:LYS:HD2	27:B2:5:GLU:OE2	1.89	0.71
35:BA:2840:C:O2'	35:BA:2841:C:H5'	1.89	0.71
1:AA:390:C:H2'	1:AA:391:G:H8	1.54	0.71
34:B9:19:ARG:NH1	35:BA:2755:C:C6	2.58	0.71
50:BS:85:VAL:H	50:BS:106:ARG:HA	1.54	0.71
28:B3:8:LEU:HD13	28:B3:30:ARG:O	1.90	0.71
16:AP:21:VAL:HG12	16:AP:34:GLU:O	1.91	0.71
46:BO:64:ARG:NE	51:BT:70:VAL:HG21	2.05	0.71
3:AC:139:GLN:NE2	3:AC:143:GLU:HB2	2.05	0.71
32:B7:2:LYS:HB2	35:BA:1620:G:O2'	1.91	0.71
35:BA:1024:G:H8	35:BA:1024:G:O5'	1.74	0.71
35:BA:1817:G:C2'	35:BA:1818:U:H5'	2.19	0.71
35:BA:2821:A:OP1	39:BE:110:GLY:N	2.16	0.71
38:BD:71:ASP:CG	38:BD:103:ARG:HH12	1.94	0.71
35:BA:1805:U:O2	38:BD:50:THR:HB	1.89	0.71
39:BE:98:PRO:HD3	39:BE:175:VAL:CG1	2.20	0.71
47:BP:85:LEU:HA	47:BP:88:LEU:HB3	1.71	0.71
1:AA:585:G:H4'	12:AL:8:ASN:ND2	2.05	0.71
8:AH:29:SER:HB3	8:AH:32:LYS:CG	2.19	0.71
2:AB:61:LEU:N	2:AB:64:ARG:HH21	1.88	0.71
41:BG:40:ASN:HB2	41:BG:91:ARG:HB2	1.72	0.71
1:AA:1404:C:H1'	1:AA:1499:A:C2	2.25	0.71
35:BA:2113:U:H2'	35:BA:2114:A:C8	2.18	0.71
35:BA:1444:G:H2'	35:BA:1445(A):C:C4	2.24	0.71
1:AA:1277:C:HO2'	1:AA:1279:A:H8	1.35	0.71
26:B1:87:PRO:HG2	26:B1:88:LYS:H	1.53	0.71
24:AY:295:LYS:C	24:AY:323:GLY:HA3	2.11	0.71
24:AY:346:LEU:HB2	24:AY:366:GLY:CA	2.18	0.71
24:AY:508:MET:O	24:AY:511:LEU:HB3	1.91	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:B5:7:PRO:HG2	35:BA:2016:U:O2	1.90	0.71
35:BA:2873:A:H1'	49:BR:6:SER:OG	1.90	0.71
38:BD:247:ALA:CB	38:BD:252:TRP:O	2.38	0.71
51:BT:62:THR:CG2	51:BT:75:ILE:HG13	2.20	0.71
57:BZ:100:VAL:HG11	57:BZ:137:ILE:HG12	1.72	0.71
1:AA:1199:U:H4'	10:AJ:54:PHE:CZ	2.24	0.71
11:AK:63:LEU:HD23	11:AK:63:LEU:H	1.55	0.71
5:AE:41:VAL:CG1	5:AE:113:ALA:HA	2.21	0.71
54:BW:26:GLY:N	54:BW:71:VAL:HB	2.06	0.71
35:BA:1494:A:N3	35:BA:1494:A:H3'	2.05	0.71
13:AM:10:PRO:HB3	13:AM:18:ALA:HB1	1.73	0.71
1:AA:1371:G:H2'	1:AA:1372:U:C6	2.25	0.71
1:AA:1348:U:OP1	9:AI:110:GLU:N	2.20	0.71
31:B6:13:CYS:SG	31:B6:22:ALA:HB3	2.30	0.71
24:AY:134:ASP:OD1	24:AY:249:GLY:HA2	1.89	0.71
24:AY:78:PRO:HB3	24:AY:83:LEU:CB	2.20	0.71
35:BA:2001:A:H2'	35:BA:2002:G:H8	1.51	0.71
35:BA:515:A:H2'	35:BA:516:C:H5'	1.72	0.71
38:BD:181:GLU:HG3	38:BD:272:ALA:CB	2.20	0.71
47:BP:34:GLY:O	47:BP:35:HIS:HB2	1.89	0.71
51:BT:29:ARG:HE	51:BT:86:ILE:CG2	2.03	0.71
51:BT:54:ARG:HA	51:BT:59:THR:CB	2.20	0.71
35:BA:1951:U:H2'	35:BA:1953:A:OP2	1.89	0.71
35:BA:1912:A:H5''	35:BA:1918:A:N6	2.05	0.71
48:BQ:30:GLY:N	48:BQ:105:GLU:OE2	2.23	0.71
3:AC:83:ARG:HG3	3:AC:87:LEU:HD11	1.71	0.71
1:AA:1047:G:H5''	14:AN:4:LYS:CE	2.18	0.71
24:AY:21:HIS:HD2	24:AY:122:ARG:N	1.87	0.71
28:B3:30:ARG:O	28:B3:33:GLN:HB2	1.89	0.71
12:AL:41:ARG:NH1	12:AL:41:ARG:HB2	2.04	0.71
24:AY:138:LEU:HD13	24:AY:268:MET:SD	2.30	0.71
24:AY:440:ALA:HB2	24:AY:446:PHE:CE1	2.26	0.71
39:BE:197:ILE:CD1	39:BE:199:ARG:HH22	2.04	0.71
49:BR:38:VAL:HB	49:BR:39:PRO:HD3	1.71	0.71
35:BA:2807:G:C3'	35:BA:2808:U:H5''	2.21	0.71
35:BA:2243:U:O2'	35:BA:2244:U:H5'	1.89	0.71
22:AV:55:U:C6	22:AV:57:A:OP2	2.44	0.71
1:AA:1202:G:C2	14:AN:42:ILE:CG2	2.73	0.71
35:BA:897:C:H5''	35:BA:897:C:H6	1.55	0.71
1:AA:356:A:O3'	1:AA:367:U:H6	1.73	0.71
37:BC:183:GLU:O	37:BC:187:ASP:HB2	1.91	0.71
41:BG:47:LYS:HG2	41:BG:81:LYS:HG3	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B1:79:GLY:HA2	35:BA:271(H):G:N2	2.06	0.71
16:AP:57:ARG:HA	16:AP:60:LEU:HD12	1.70	0.71
9:AI:53:VAL:HG13	9:AI:95:LYS:NZ	2.04	0.71
24:AY:483:GLU:O	24:AY:486:LYS:HG2	1.90	0.71
1:AA:226:G:C2'	1:AA:227:G:H5'	2.20	0.71
49:BR:13:HIS:CE1	49:BR:16:HIS:HB2	2.25	0.71
2:AB:23:ARG:O	2:AB:23:ARG:NH1	2.23	0.71
56:BY:52:SER:O	56:BY:54:LYS:N	2.24	0.71
24:AY:390:ILE:HG22	24:AY:390:ILE:O	1.90	0.71
37:BC:100:ILE:HG12	37:BC:127:MET:CE	2.20	0.71
33:B8:8:LYS:HZ2	33:B8:11:LYS:CE	2.04	0.71
35:BA:1773:A:C2'	35:BA:1774:C:H5'	2.21	0.71
35:BA:568:U:H2'	35:BA:570:G:OP2	1.89	0.71
35:BA:1012:U:O4	45:BN:28:THR:HG21	1.90	0.71
48:BQ:95:ALA:O	48:BQ:97:VAL:HG23	1.89	0.71
22:AV:48:C:OP2	22:AV:48:C:H6	1.72	0.71
37:BC:141:LYS:HZ1	37:BC:164:ARG:NH2	1.89	0.71
57:BZ:108:PRO:HG2	57:BZ:111:VAL:HG21	1.70	0.71
8:AH:110:ALA:HB3	8:AH:121:ASP:HB3	1.72	0.71
35:BA:1447:G:C5'	35:BA:1545:A:H4'	2.17	0.71
38:BD:2:ALA:C	38:BD:3:VAL:HG23	2.11	0.71
1:AA:427:U:H5'	4:AD:41:GLY:HA2	1.73	0.71
38:BD:142:VAL:O	38:BD:163:ALA:HB3	1.90	0.71
35:BA:1361:G:O2'	35:BA:1362:C:H5'	1.90	0.71
1:AA:499:A:O3'	1:AA:500:G:H8	1.73	0.71
24:AY:174:GLY:O	24:AY:179:PHE:HD1	1.72	0.71
24:AY:186:TYR:CE2	24:AY:241:PHE:HB3	2.25	0.71
24:AY:315:VAL:HG21	24:AY:346:LEU:HD12	1.71	0.71
35:BA:1830:C:H2'	35:BA:1831:G:H8	1.55	0.71
35:BA:1902:C:O2'	38:BD:244:ARG:CB	2.33	0.71
35:BA:1819:A:H5''	38:BD:158:ALA:CB	2.19	0.71
47:BP:112:LEU:H	47:BP:128:HIS:CD2	2.09	0.71
47:BP:113:LYS:HE2	47:BP:131:SER:HB3	1.73	0.71
1:AA:1189:C:O3'	3:AC:5:ILE:HD12	1.91	0.71
40:BF:7:TYR:HD2	40:BF:16:GLY:CA	2.04	0.71
42:BH:122:THR:CG2	42:BH:123:PHE:H	1.99	0.71
35:BA:1525:G:H2'	35:BA:1526:G:C8	2.25	0.71
41:BG:86:MET:O	41:BG:86:MET:HG2	1.89	0.71
26:B1:76:ARG:NH2	26:B1:95:LEU:HD13	2.06	0.71
35:BA:1496:A:H2'	35:BA:1498:C:C4	2.26	0.71
1:AA:1145:C:O2'	1:AA:1146:A:H8	1.73	0.71
1:AA:64:G:H4'	1:AA:65:U:H5''	1.73	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:94:TYR:HD1	42:BH:108:GLY:N	1.89	0.71
1:AA:1286:A:O2'	1:AA:1287:A:H5''	1.90	0.71
35:BA:2378:A:N1	50:BS:19:LYS:HE3	2.04	0.71
35:BA:2126:A:H61	35:BA:2163:C:H4'	1.53	0.71
48:BQ:131:ILE:N	48:BQ:131:ILE:HD12	2.06	0.71
1:AA:768:A:OP1	1:AA:804:U:H4'	1.91	0.71
24:AY:142:ASN:HD21	58:AY:1000:GCP:C6	2.04	0.71
38:BD:87:ASN:HB2	38:BD:88:ARG:NE	2.05	0.71
52:BU:86:ALA:O	52:BU:88:ILE:HG23	1.91	0.71
53:BV:52:VAL:HG22	53:BV:52:VAL:O	1.90	0.71
53:BV:91:TYR:O	53:BV:92:THR:HG23	1.90	0.71
1:AA:720:C:C1'	18:AR:50:ILE:HG21	2.21	0.71
1:AA:853:G:O2'	1:AA:854:G:H5'	1.89	0.71
57:BZ:42:VAL:HG13	57:BZ:43:GLU:H	1.56	0.71
57:BZ:5:LEU:O	57:BZ:59:LEU:HA	1.91	0.71
22:AV:47:U:H3'	22:AV:47:U:O2	1.91	0.71
3:AC:36:ASP:O	3:AC:40:ARG:HG3	1.90	0.71
35:BA:1069:A:H1'	35:BA:1070:A:OP2	1.91	0.71
5:AE:110:LEU:O	5:AE:113:ALA:HB3	1.91	0.71
5:AE:62:ALA:O	5:AE:64:ARG:N	2.24	0.71
42:BH:35:VAL:HG12	42:BH:72:ILE:CD1	2.21	0.71
1:AA:642:A:N3	8:AH:113:SER:OG	2.22	0.71
2:AB:106:LYS:O	2:AB:109:SER:HB2	1.91	0.71
12:AL:45:PRO:HD3	12:AL:51:ALA:O	1.91	0.71
35:BA:1500:G:N2	38:BD:99:ASP:O	2.23	0.71
19:AS:78:ARG:CB	19:AS:81:ARG:NH1	2.53	0.71
49:BR:55:ALA:HB2	49:BR:79:LEU:CD1	2.21	0.71
13:AM:70:LEU:O	13:AM:73:GLU:HB3	1.90	0.71
35:BA:209:C:C5'	35:BA:681:G:H4'	2.21	0.71
1:AA:92:C:H2'	1:AA:93:G:C8	2.26	0.71
1:AA:1346:A:H5'	9:AI:120:ARG:NH1	2.04	0.71
49:BR:11:ASN:O	49:BR:12:ARG:HB2	1.90	0.71
7:AG:22:LEU:HD23	7:AG:22:LEU:O	1.90	0.71
35:BA:736:C:H2'	35:BA:737:C:H6	1.56	0.71
35:BA:1244:G:H4'	47:BP:11:GLY:HA2	1.72	0.71
35:BA:1766:U:H2'	35:BA:1767:C:H6	1.56	0.71
24:AY:255:PHE:HZ	24:AY:275:TRP:CH2	1.96	0.71
35:BA:253:C:H2'	35:BA:254:G:C8	2.26	0.71
35:BA:987:G:H2'	35:BA:988:A:O4'	1.91	0.71
39:BE:47:VAL:HG21	39:BE:86:PRO:CD	2.20	0.71
35:BA:2718:G:H5'	51:BT:100:TYR:HE2	1.53	0.71
51:BT:96:ARG:HB2	51:BT:96:ARG:NH1	2.05	0.71

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:868:C:C2'	1:AA:869:G:H5'	2.21	0.71
12:AL:69:TYR:HE1	12:AL:71:PRO:HA	1.56	0.71
40:BF:103:LYS:HE3	40:BF:106:ARG:NH2	2.02	0.71
13:AM:14:ARG:H	13:AM:44:ARG:HH11	1.38	0.71
14:AN:13:THR:H	14:AN:14:PRO:HD3	1.55	0.71
1:AA:538:G:H2'	1:AA:539:A:C8	2.24	0.71
1:AA:943:U:O2'	1:AA:944:G:H5'	1.89	0.71
22:AV:20:U:O2'	22:AV:21:A:H4'	1.91	0.71
24:AY:108:CYS:CB	24:AY:136:PRO:HG2	2.21	0.70
24:AY:247:LEU:C	24:AY:249:GLY:H	1.94	0.70
24:AY:349:MET:CE	24:AY:358:GLU:HG2	2.21	0.70
24:AY:30:THR:CG2	24:AY:86:LEU:HD21	2.21	0.70
24:AY:74:VAL:HG21	24:AY:87:LEU:CD2	2.21	0.70
35:BA:950:G:H2'	35:BA:951:C:C6	2.26	0.70
38:BD:147:LEU:HD23	38:BD:183:ARG:CZ	2.21	0.70
38:BD:242:ARG:HD2	38:BD:242:ARG:N	2.06	0.70
51:BT:120:ARG:HA	51:BT:123:GLN:OE1	1.91	0.70
46:BO:63:VAL:HG12	46:BO:106:LEU:HD11	1.73	0.70
18:AR:63:GLN:OE1	18:AR:66:LEU:HD23	1.90	0.70
42:BH:87:LEU:HD21	42:BH:162:ILE:HD11	1.73	0.70
35:BA:2273:A:H2'	35:BA:2274:A:C8	2.26	0.70
1:AA:1201:A:H4'	1:AA:1202:G:O5'	1.90	0.70
3:AC:131:ARG:HH11	3:AC:166:GLU:HG3	1.56	0.70
3:AC:95:THR:O	3:AC:97:LYS:N	2.23	0.70
1:AA:1014:A:C2	19:AS:34:TRP:CE2	2.79	0.70
27:B2:12:GLU:O	27:B2:16:LEU:HG	1.91	0.70
1:AA:1394:A:N7	1:AA:1501:C:H4'	2.06	0.70
35:BA:272(H):C:C2'	35:BA:272(I):U:H5''	2.19	0.70
35:BA:705:A:N1	35:BA:727:A:C1'	2.53	0.70
1:AA:1469:G:H2'	1:AA:1470:G:H8	1.54	0.70
35:BA:2125:G:H21	35:BA:2173:A:H61	1.38	0.70
13:AM:29:ARG:O	13:AM:32:GLU:HB3	1.90	0.70
35:BA:370:G:H5''	35:BA:423:A:N6	2.06	0.70
1:AA:918:A:N6	1:AA:919:A:C6	2.59	0.70
1:AA:50:A:N6	1:AA:361:G:H4'	2.05	0.70
24:AY:174:GLY:O	24:AY:179:PHE:HA	1.90	0.70
24:AY:94:ASP:O	24:AY:97:GLU:HG3	1.90	0.70
33:B8:19:SER:CB	33:B8:21:LYS:HE3	2.19	0.70
35:BA:528:A:C2	35:BA:2043:C:H4'	2.21	0.70
35:BA:2641:G:H8	35:BA:2641:G:H5'	1.55	0.70
35:BA:586:A:H5'	40:BF:89:VAL:HG11	1.72	0.70
15:AO:68:ARG:HD3	15:AO:72:ARG:HE	1.55	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:157:ILE:HG21	3:AC:164:ARG:HH21	1.56	0.70
3:AC:131:ARG:HH11	3:AC:166:GLU:CG	2.04	0.70
3:AC:48:TYR:CE1	3:AC:118:GLN:NE2	2.57	0.70
35:BA:892:G:H2'	35:BA:893:C:C6	2.26	0.70
9:AI:47:LEU:HG	9:AI:50:LEU:HD12	1.72	0.70
13:AM:13:LYS:CA	13:AM:44:ARG:HH11	2.03	0.70
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.26	0.70
7:AG:24:THR:HA	7:AG:27:ILE:HB	1.72	0.70
16:AP:1:MET:SD	16:AP:3:LYS:HE3	2.31	0.70
24:AY:104:THR:O	24:AY:105:ALA:CB	2.39	0.70
24:AY:246:PHE:CD1	24:AY:253:PRO:HD3	2.26	0.70
24:AY:315:VAL:HG12	24:AY:317:PHE:H	1.57	0.70
24:AY:380:THR:HG21	24:AY:383:GLU:HB2	1.74	0.70
24:AY:425:VAL:HG12	24:AY:445:GLN:HE21	1.54	0.70
35:BA:2361:A:O2'	35:BA:2362:G:H5'	1.91	0.70
35:BA:1803:A:O2'	38:BD:259:THR:HG21	1.89	0.70
45:BN:22:THR:O	45:BN:26:LEU:HB2	1.92	0.70
47:BP:88:LEU:HD21	47:BP:125:VAL:CG2	2.21	0.70
51:BT:89:VAL:HG11	51:BT:91:ARG:HE	1.56	0.70
46:BO:34:THR:N	46:BO:37:ASP:OD2	2.23	0.70
48:BQ:56:ARG:O	48:BQ:58:PHE:N	2.24	0.70
10:AJ:55:LYS:HE3	10:AJ:55:LYS:N	2.05	0.70
56:BY:28:LYS:HG2	56:BY:39:VAL:H	1.56	0.70
57:BZ:151:HIS:HB3	57:BZ:171:ILE:N	2.05	0.70
7:AG:31:MET:HG2	7:AG:32:ARG:N	2.04	0.70
5:AE:20:GLN:HG2	5:AE:21:ALA:H	1.56	0.70
47:BP:7:ARG:HB3	47:BP:8:PRO:HD3	1.72	0.70
39:BE:54:GLN:O	39:BE:75:VAL:CG2	2.40	0.70
35:BA:2161:C:H2'	35:BA:2162:G:H8	1.56	0.70
37:BC:120:MET:HE1	37:BC:123:VAL:HG21	1.73	0.70
35:BA:2735:G:H2'	35:BA:2736:G:H8	1.56	0.70
29:B4:15:ILE:HD13	29:B4:21:VAL:HG13	1.72	0.70
24:AY:11:ALA:O	24:AY:14:ARG:NH2	2.24	0.70
24:AY:170:THR:HB	24:AY:182:VAL:CG1	2.21	0.70
1:AA:778:G:H2'	1:AA:779:C:O4'	1.90	0.70
35:BA:780:G:H2'	35:BA:782:A:N7	2.07	0.70
38:BD:24:ILE:CG2	38:BD:83:GLU:HA	2.21	0.70
39:BE:14:ILE:HD11	39:BE:173:VAL:CG1	2.21	0.70
35:BA:1917:U:C2'	35:BA:1918:A:H5'	2.21	0.70
22:AV:48:C:H4'	22:AV:49:G:C5'	2.18	0.70
4:AD:8:VAL:C	4:AD:10:ARG:H	1.94	0.70
11:AK:91:ARG:HG3	11:AK:91:ARG:HH11	1.56	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2402:C:C2'	35:BA:2403:C:H5'	2.20	0.70
51:BT:8:LYS:HA	51:BT:11:GLU:OE2	1.91	0.70
13:AM:2:ALA:N	13:AM:9:ILE:HG23	2.04	0.70
35:BA:813:U:H2'	35:BA:814:C:C6	2.26	0.70
35:BA:2439:A:C8	35:BA:2439:A:C5'	2.74	0.70
12:AL:119:LYS:O	12:AL:120:TYR:CB	2.39	0.70
1:AA:1347:G:H3'	9:AI:108:VAL:O	1.91	0.70
39:BE:56:PRO:O	39:BE:57:LYS:HE3	1.91	0.70
1:AA:1465:C:H2'	1:AA:1466:C:C6	2.25	0.70
35:BA:1563:G:O2'	35:BA:1564:C:H5'	1.92	0.70
35:BA:1814:G:H2'	35:BA:1815:A:C8	2.26	0.70
35:BA:636:G:OP2	47:BP:113:LYS:NZ	2.24	0.70
56:BY:73:ARG:O	56:BY:74:PRO:O	2.09	0.70
11:AK:57:THR:CG2	11:AK:60:ALA:H	2.04	0.70
35:BA:616:G:C5'	40:BF:103:LYS:HZ3	2.03	0.70
36:BB:7:G:H3'	36:BB:8:U:H5''	1.72	0.70
42:BH:71:LEU:HD22	42:BH:72:ILE:HD12	1.72	0.70
35:BA:1639:U:C4'	35:BA:2699:C:H4'	2.20	0.70
16:AP:19:ILE:HG12	16:AP:37:GLY:C	2.11	0.70
17:AQ:53:LEU:HD21	17:AQ:85:VAL:HG11	1.71	0.70
35:BA:1332:G:N2	35:BA:1610:A:C8	2.60	0.70
1:AA:1172:C:H2'	1:AA:1173:G:C8	2.26	0.70
1:AA:568:G:O2'	1:AA:569:C:H5'	1.91	0.70
35:BA:1106:G:H4'	43:BJ:57:UNK:O	1.91	0.70
24:AY:221:GLU:CA	24:AY:225:GLN:HE22	2.03	0.70
24:AY:30:THR:O	24:AY:33:VAL:HB	1.90	0.70
35:BA:1812:A:H2'	35:BA:1813:G:C8	2.27	0.70
35:BA:2023:G:H1	35:BA:2040:C:N4	1.89	0.70
38:BD:10:THR:O	38:BD:10:THR:OG1	2.05	0.70
35:BA:1779:U:C5	35:BA:1783:A:C8	2.79	0.70
10:AJ:16:LEU:C	10:AJ:16:LEU:HD13	2.12	0.70
19:AS:43:GLU:C	19:AS:45:VAL:H	1.94	0.70
49:BR:62:ALA:HA	49:BR:65:LEU:HB2	1.71	0.70
41:BG:76:SER:HB3	41:BG:83:ARG:HB3	1.74	0.70
1:AA:326:G:C2'	1:AA:327:A:H5'	2.21	0.70
26:B1:78:LYS:O	26:B1:80:LEU:N	2.25	0.70
35:BA:2415:G:O3'	47:BP:66:GLY:HA3	1.92	0.70
1:AA:1034:G:O2'	1:AA:1035:A:H5'	1.92	0.70
35:BA:272(J):C:C3'	35:BA:274:G:H5''	2.22	0.70
1:AA:231:G:H2'	1:AA:232:G:C8	2.24	0.70
37:BC:77:ILE:HG13	37:BC:115:ALA:HB2	1.73	0.70
37:BC:115:ALA:HB3	37:BC:120:MET:CE	2.20	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:109:CYS:C	24:AY:137:ILE:CG2	2.60	0.70
35:BA:1843:C:H2'	35:BA:1844:C:C6	2.26	0.70
35:BA:1799:G:O6	38:BD:179:SER:HB3	1.92	0.70
38:BD:210:GLY:O	38:BD:211:ARG:CB	2.40	0.70
6:AF:91:VAL:HG12	6:AF:92:LYS:O	1.92	0.70
42:BH:98:LEU:HD13	42:BH:102:ALA:C	2.12	0.70
1:AA:1157:A:H5'	1:AA:1158:C:C5	2.26	0.70
10:AJ:54:PHE:O	10:AJ:56:HIS:N	2.24	0.70
56:BY:13:VAL:HG22	56:BY:73:ARG:C	2.12	0.70
40:BF:156:LEU:O	40:BF:157:VAL:HG13	1.91	0.70
5:AE:34:VAL:HG12	5:AE:62:ALA:HB1	1.71	0.70
20:AT:13:LEU:HD23	20:AT:13:LEU:N	2.06	0.70
38:BD:137:PRO:O	38:BD:140:THR:HG23	1.91	0.70
35:BA:1169:G:H1	35:BA:1180:C:H42	1.38	0.70
35:BA:1427:A:H1'	35:BA:1428:C:H5	1.56	0.70
22:AV:17:C:C3'	22:AV:17(A):U:H5'	2.20	0.70
36:BB:116:G:C2	36:BB:117:G:N7	2.60	0.70
1:AA:613:C:H2'	1:AA:614:A:C8	2.27	0.70
35:BA:496:G:O4'	54:BW:61:ASN:ND2	2.24	0.70
32:B7:17:GLY:O	32:B7:20:ALA:HB3	1.92	0.70
9:AI:121:ARG:HH11	9:AI:121:ARG:HG2	1.56	0.70
1:AA:1296:C:H4'	1:AA:1302:U:H5	1.57	0.70
35:BA:2707:G:H2'	35:BA:2708:G:C8	2.25	0.70
24:AY:241:PHE:CZ	24:AY:275:TRP:CD1	2.80	0.70
24:AY:473:TRP:CE2	24:AY:527:ARG:HG2	2.27	0.70
30:B5:49:CYS:O	30:B5:56:LYS:HD2	1.92	0.70
35:BA:1267:U:H2'	35:BA:1268:A:H8	1.57	0.70
35:BA:253:C:H2'	35:BA:254:G:H8	1.56	0.70
35:BA:2781:A:C5'	35:BA:2782:G:H5'	2.21	0.70
47:BP:131:SER:HG	47:BP:134:ALA:HB3	1.57	0.70
46:BO:78:ARG:NH2	51:BT:73:GLU:OE1	2.22	0.70
51:BT:89:VAL:CG1	51:BT:91:ARG:HG3	2.22	0.70
18:AR:34:TYR:CD2	18:AR:72:ARG:HD3	2.27	0.70
1:AA:1087:G:H22	1:AA:1099:G:H1'	1.57	0.70
10:AJ:90:LEU:H	10:AJ:91:PRO:HD3	1.54	0.70
56:BY:77:PRO:O	56:BY:99:CYS:SG	2.49	0.70
4:AD:19:LEU:HG	4:AD:21:LEU:HD21	1.74	0.70
37:BC:49:ILE:HG22	37:BC:204:ALA:HB1	1.73	0.70
37:BC:217:THR:HG22	37:BC:218:MET:N	2.07	0.70
42:BH:41:MET:HG3	42:BH:42:ARG:N	2.07	0.70
35:BA:1498:C:C2'	35:BA:1499:C:C5'	2.70	0.70
35:BA:2102:U:H2'	35:BA:2103:C:C1'	2.22	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1015:A:H2'	1:AA:1016:A:H8	1.54	0.70
49:BR:30:THR:HG23	49:BR:31:HIS:CD2	2.26	0.70
33:B8:54:GLU:O	33:B8:58:ILE:HG12	1.91	0.70
35:BA:1428:C:H42	35:BA:1569:A:H3'	1.53	0.70
5:AE:37:ARG:C	5:AE:38:GLN:HG2	2.11	0.70
20:AT:50:GLU:HB2	20:AT:100:ILE:HD13	1.73	0.70
38:BD:3:VAL:HG22	38:BD:200:ASP:CG	2.12	0.70
35:BA:1375:C:H2'	35:BA:1376:C:C6	2.24	0.70
35:BA:2127:G:H2'	35:BA:2128:C:C5	2.27	0.70
37:BC:119:VAL:O	37:BC:123:VAL:HB	1.91	0.70
6:AF:6:VAL:HB	6:AF:63:TYR:HB2	1.73	0.70
3:AC:88:ARG:HG3	3:AC:88:ARG:NH1	2.06	0.70
24:AY:78:PRO:HB2	24:AY:83:LEU:HD22	1.74	0.70
24:AY:89:THR:HB	24:AY:90:PRO:CD	2.21	0.70
24:AY:94:ASP:OD2	24:AY:442:GLY:HA3	1.90	0.70
35:BA:1847:A:C2	35:BA:1848:A:N6	2.60	0.70
35:BA:1999:C:H4'	35:BA:2723:C:O2	1.92	0.70
38:BD:183:ARG:CG	38:BD:270:ILE:HG23	2.21	0.70
35:BA:2848:G:O6	51:BT:54:ARG:NH2	2.25	0.70
1:AA:868:C:H2'	1:AA:869:G:H5'	1.74	0.70
1:AA:1080:A:H5''	5:AE:16:THR:HG21	1.73	0.70
2:AB:165:VAL:HG23	2:AB:166:ASP:N	2.07	0.70
3:AC:19:GLU:O	3:AC:56:ASP:HA	1.92	0.70
10:AJ:50:ILE:CD1	10:AJ:50:ILE:H	1.99	0.70
7:AG:15:ASP:HB3	7:AG:19:GLY:CA	2.22	0.70
4:AD:96:LEU:H	4:AD:96:LEU:HD12	1.56	0.70
35:BA:1348:G:H2'	35:BA:1349:A:H5''	1.73	0.70
1:AA:689:C:H2'	1:AA:690:G:O4'	1.91	0.70
51:BT:121:ILE:HA	51:BT:124:ASP:HB2	1.74	0.70
45:BN:134:ARG:HH21	45:BN:136:GLU:HB2	1.56	0.70
41:BG:64:THR:HG23	41:BG:66:GLN:N	2.04	0.70
41:BG:79:ASN:O	41:BG:80:PHE:HB2	1.91	0.70
24:AY:342:ILE:O	24:AY:342:ILE:CG1	2.40	0.70
31:B6:8:LYS:HD2	31:B6:27:LYS:HD3	1.73	0.70
5:AE:79:GLU:O	8:AH:104:ARG:CZ	2.39	0.70
13:AM:14:ARG:H	13:AM:44:ARG:NH1	1.88	0.70
1:AA:1124:G:H2'	1:AA:1145:C:N4	2.06	0.70
35:BA:264:C:H4'	35:BA:428:A:C2	2.26	0.70
1:AA:173:U:H5'	1:AA:197:A:O4'	1.92	0.70
22:AV:33:U:H5'	22:AV:33:U:H6	1.55	0.70
5:AE:128:PRO:HB2	5:AE:129:ILE:HD12	1.74	0.70
35:BA:1625:C:C2'	35:BA:1626:G:H5'	2.21	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2864:G:H2'	35:BA:2865:U:C6	2.26	0.70
35:BA:2127:G:H2'	35:BA:2128:C:C6	2.27	0.70
1:AA:697:U:H1'	1:AA:786:G:O4'	1.92	0.70
24:AY:168:PRO:CG	24:AY:171:TRP:HZ2	2.02	0.70
24:AY:302:LYS:O	24:AY:316:ALA:CA	2.38	0.70
24:AY:7:LEU:HD22	24:AY:292:SER:HB3	1.74	0.70
32:B7:37:LYS:O	32:B7:37:LYS:HG2	1.92	0.70
39:BE:116:VAL:O	39:BE:117:MET:HB3	1.92	0.70
39:BE:48:GLN:HE22	39:BE:64:LYS:HZ1	1.38	0.70
45:BN:21:LYS:HD3	45:BN:22:THR:N	2.06	0.70
35:BA:1667:G:OP1	46:BO:6:THR:HA	1.92	0.70
1:AA:741:G:H2'	1:AA:742:G:C8	2.26	0.70
4:AD:15:GLU:CG	4:AD:63:LYS:HG3	2.22	0.70
26:B1:23:LYS:HD3	26:B1:28:GLY:CA	2.19	0.70
35:BA:2111:C:H1'	35:BA:2118:U:O4'	1.92	0.70
35:BA:2144:U:O2	35:BA:2147:G:O6	2.10	0.70
16:AP:20:VAL:HG21	16:AP:32:TYR:CG	2.26	0.70
16:AP:20:VAL:HG21	16:AP:32:TYR:CD2	2.27	0.70
22:AV:32:C:H2'	22:AV:33:U:H5''	1.74	0.70
1:AA:1452:C:H5''	1:AA:1456:G:OP1	1.92	0.70
35:BA:2789:C:H1'	35:BA:2892:A:N1	2.07	0.70
1:AA:929:G:O2'	1:AA:930:C:H5'	1.90	0.70
28:B3:46:ASN:C	28:B3:46:ASN:HD22	1.91	0.70
24:AY:109:CYS:C	24:AY:137:ILE:HG23	2.13	0.69
24:AY:207:VAL:O	24:AY:207:VAL:HG12	1.92	0.69
24:AY:4:SER:HB3	24:AY:7:LEU:HD12	1.73	0.69
33:B8:6:THR:HG22	33:B8:61:LEU:HD12	1.71	0.69
38:BD:213:ARG:HH12	38:BD:219:PRO:HD3	1.55	0.69
45:BN:61:ARG:HG3	45:BN:61:ARG:NH1	2.05	0.69
54:BW:29:LEU:HD23	54:BW:33:ARG:HD2	1.74	0.69
2:AB:105:PHE:O	2:AB:107:THR:N	2.25	0.69
2:AB:189:ASP:O	2:AB:191:ASP:N	2.25	0.69
2:AB:43:ASP:OD2	2:AB:46:LYS:HE3	1.91	0.69
35:BA:893:C:O2'	35:BA:894:C:H5'	1.92	0.69
4:AD:59:ARG:HH11	4:AD:59:ARG:HG2	1.55	0.69
37:BC:59:ARG:HD2	37:BC:164:ARG:NE	2.06	0.69
41:BG:101:ILE:HG22	41:BG:105:LYS:HZ2	1.56	0.69
1:AA:1265:G:H2'	1:AA:1266:G:C8	2.27	0.69
50:BS:106:ARG:HH11	50:BS:107:GLU:C	1.95	0.69
1:AA:436:C:H5''	4:AD:156:GLU:OE1	1.92	0.69
4:AD:159:ARG:HG3	4:AD:159:ARG:NH1	2.07	0.69
54:BW:37:ARG:HG3	54:BW:37:ARG:HH11	1.57	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:62:LEU:O	25:B0:63:VAL:HG13	1.92	0.69
24:AY:421:GLU:HG2	24:AY:421:GLU:O	1.91	0.69
37:BC:107:TRP:CZ3	37:BC:131:LEU:HD21	2.26	0.69
1:AA:810:C:H2'	1:AA:811:C:O4'	1.92	0.69
30:B5:7:PRO:HA	35:BA:2615:U:C2	2.28	0.69
35:BA:976:C:H5'	35:BA:1156:A:N6	2.07	0.69
35:BA:770:G:N3	35:BA:1354:A:H2	1.89	0.69
35:BA:2359:C:O2'	35:BA:2360:A:H5'	1.92	0.69
35:BA:2729:G:H1'	39:BE:187:ALA:CB	2.21	0.69
35:BA:976:C:N4	35:BA:987:G:H1	1.88	0.69
35:BA:2784:C:H4'	39:BE:41:LYS:O	1.91	0.69
40:BF:66:PRO:HB2	40:BF:70:THR:CG2	2.22	0.69
45:BN:120:LEU:HD11	45:BN:122:VAL:CG2	2.22	0.69
35:BA:2718:G:OP1	51:BT:100:TYR:HD2	1.75	0.69
52:BU:57:PHE:CD1	52:BU:60:LEU:HD12	2.27	0.69
2:AB:20:GLU:HG2	2:AB:189:ASP:OD1	1.92	0.69
35:BA:2395:C:H2'	35:BA:2396:G:O4'	1.92	0.69
36:BB:94:C:H2'	36:BB:95:C:H6	1.57	0.69
40:BF:181:LEU:HD12	40:BF:182:ASN:H	1.56	0.69
17:AQ:5:VAL:HA	17:AQ:59:ILE:O	1.91	0.69
2:AB:30:ARG:HD2	2:AB:31:TYR:CE1	2.27	0.69
37:BC:128:GLY:HA2	37:BC:137:LEU:HD23	1.73	0.69
35:BA:2648:C:H2'	35:BA:2649:U:C6	2.27	0.69
44:BK:101:UNK:CB	44:BK:138:UNK:HA	2.22	0.69
35:BA:1186:G:H2'	35:BA:1187:G:O4'	1.93	0.69
35:BA:2616:C:H2'	35:BA:2617:C:H6	1.57	0.69
38:BD:60:ARG:CZ	38:BD:87:ASN:HA	2.22	0.69
1:AA:1053:G:H2'	1:AA:1199:U:H5	1.57	0.69
50:BS:15:ARG:HH11	50:BS:15:ARG:HB2	1.56	0.69
35:BA:869:G:O2'	35:BA:870:A:H5'	1.93	0.69
35:BA:2310:A:O2'	35:BA:2311:A:C5'	2.38	0.69
41:BG:85:GLY:O	41:BG:86:MET:HB3	1.92	0.69
31:B6:30:THR:HG22	31:B6:31:PRO:HD2	1.74	0.69
26:B1:75:GLU:O	26:B1:78:LYS:HG2	1.91	0.69
28:B3:26:LEU:HB2	28:B3:28:LEU:CD2	2.22	0.69
35:BA:2107:C:H2'	35:BA:2108:C:C6	2.25	0.69
46:BO:47:ILE:HG12	46:BO:48:PRO:HD2	1.75	0.69
1:AA:1495:U:O2'	1:AA:1496:C:H5'	1.92	0.69
22:AV:24:U:H2'	22:AV:25:C:H5'	1.73	0.69
31:B6:15:GLU:HG2	31:B6:18:ARG:CZ	2.21	0.69
35:BA:206:U:O2'	35:BA:207:A:H5'	1.92	0.69
2:AB:92:TYR:CG	2:AB:151:GLY:HA3	2.27	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AI:118:LYS:O	9:AI:119:ALA:HB2	1.92	0.69
28:B3:21:ALA:O	35:BA:849:A:C2	2.45	0.69
24:AY:225:GLN:CA	24:AY:228:ARG:HB2	2.22	0.69
24:AY:78:PRO:CB	24:AY:83:LEU:HD22	2.22	0.69
35:BA:1005:C:O2'	35:BA:1006:C:H5'	1.92	0.69
35:BA:1654:A:N6	35:BA:2006:C:O4'	2.25	0.69
39:BE:199:ARG:CB	39:BE:199:ARG:HH11	2.05	0.69
51:BT:62:THR:HG22	51:BT:75:ILE:CG2	2.21	0.69
35:BA:1028:A:H2'	35:BA:1029:A:H8	1.56	0.69
36:BB:82:G:N1	36:BB:96:U:N3	2.40	0.69
3:AC:55:VAL:HG22	3:AC:68:VAL:CG1	2.21	0.69
56:BY:20:TYR:HD2	56:BY:23:ARG:HG3	1.56	0.69
42:BH:69:ARG:O	42:BH:73:ALA:CB	2.40	0.69
35:BA:1499:C:O2'	35:BA:1500:G:H5'	1.91	0.69
42:BH:107:VAL:O	42:BH:107:VAL:HG23	1.92	0.69
35:BA:1605:C:H2'	35:BA:1606:G:H5'	1.74	0.69
1:AA:155:C:H2'	1:AA:156:G:H8	1.57	0.69
24:AY:272:LEU:HD12	24:AY:273:VAL:HG23	1.73	0.69
37:BC:100:ILE:HG23	37:BC:127:MET:CG	2.21	0.69
35:BA:1141:U:H4'	35:BA:1142(A):A:C8	2.28	0.69
35:BA:2072:G:H1'	35:BA:2440:C:N4	2.08	0.69
39:BE:144:ARG:CG	39:BE:145:LYS:H	2.05	0.69
52:BU:57:PHE:HA	52:BU:60:LEU:HB2	1.74	0.69
8:AH:12:ARG:NH1	8:AH:27:PRO:HD3	2.08	0.69
15:AO:33:THR:HG23	15:AO:34:LEU:N	2.08	0.69
35:BA:2807:G:H1	35:BA:2893:G:H1	1.39	0.69
13:AM:86:CYS:SG	13:AM:88:ARG:HB3	2.33	0.69
14:AN:4:LYS:HB2	14:AN:4:LYS:NZ	2.08	0.69
35:BA:324:A:O2'	35:BA:325:G:H5'	1.92	0.69
56:BY:45:VAL:HG13	56:BY:62:GLU:OE1	1.92	0.69
35:BA:2346:A:H5'	35:BA:2383:G:O4'	1.91	0.69
50:BS:35:ILE:O	50:BS:35:ILE:HG12	1.92	0.69
28:B3:35:ARG:CG	28:B3:35:ARG:HH11	2.06	0.69
17:AQ:67:LYS:HA	17:AQ:70:ARG:HH12	1.57	0.69
33:B8:52:LYS:N	33:B8:53:PRO:HD2	2.06	0.69
47:BP:146:VAL:HG22	47:BP:147:LEU:N	2.06	0.69
1:AA:632:A:H3'	1:AA:633:G:C8	2.27	0.69
35:BA:1683:C:H2'	35:BA:1684:C:C6	2.27	0.69
35:BA:1571:A:H2'	35:BA:1572:A:C8	2.27	0.69
35:BA:2777:G:H5''	35:BA:2778:A:C5'	2.23	0.69
35:BA:729:G:C6	38:BD:208:LYS:HB2	2.27	0.69
35:BA:774:A:C2	35:BA:787:U:O2'	2.45	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BO:24:VAL:HG21	46:BO:30:ALA:O	1.93	0.69
34:B9:36:GLN:HE22	35:BA:1031:G:N2	1.87	0.69
35:BA:1915:U:H2'	35:BA:1916:A:H5'	1.70	0.69
1:AA:1325:C:N4	1:AA:1326:C:H41	1.91	0.69
10:AJ:55:LYS:H	10:AJ:55:LYS:HE3	1.56	0.69
19:AS:23:ASN:HA	29:B4:47:GLN:CB	2.22	0.69
49:BR:89:ASP:O	49:BR:91:GLN:HG3	1.91	0.69
1:AA:687:A:H1'	1:AA:688:G:O4'	1.92	0.69
42:BH:66:GLY:HA2	42:BH:69:ARG:CD	2.22	0.69
51:BT:13:ARG:NE	51:BT:13:ARG:HA	2.08	0.69
32:B7:40:TRP:CD2	35:BA:459:U:H5'	2.27	0.69
56:BY:87:LYS:C	56:BY:88:LYS:HD2	2.13	0.69
1:AA:1493:A:O2'	1:AA:1494:G:C8	2.45	0.69
24:AY:62:MET:HG2	24:AY:451:ALA:CB	2.21	0.69
35:BA:2078:C:O2'	35:BA:2079:U:H5'	1.92	0.69
37:BC:128:GLY:CA	37:BC:137:LEU:HD23	2.22	0.69
1:AA:525:C:H2'	1:AA:526:C:C6	2.28	0.69
35:BA:1782:C:H1'	35:BA:2609:U:H5''	1.74	0.69
24:AY:470:THR:HG21	24:AY:472:ARG:NH2	2.03	0.69
35:BA:15:G:O2'	35:BA:16:G:H5'	1.92	0.69
38:BD:181:GLU:HG3	38:BD:272:ALA:HB1	1.75	0.69
45:BN:62:VAL:HG13	45:BN:62:VAL:O	1.91	0.69
47:BP:38:GLN:O	47:BP:39:LYS:HB2	1.93	0.69
30:B5:28:PRO:CD	54:BW:35:ILE:HG23	2.22	0.69
35:BA:1614:A:N1	54:BW:87:PRO:HB3	2.08	0.69
35:BA:1949:G:O6	35:BA:1957:C:N4	2.26	0.69
2:AB:164:VAL:CG1	2:AB:165:VAL:N	2.55	0.69
47:BP:59:LEU:HD23	47:BP:59:LEU:O	1.92	0.69
57:BZ:48:PHE:HD1	57:BZ:52:SER:HA	1.58	0.69
1:AA:1116:C:H2'	1:AA:1117:G:H5''	1.74	0.69
1:AA:972:C:O2'	1:AA:973:G:H5'	1.92	0.69
3:AC:64:VAL:HG12	3:AC:65:ALA:N	2.07	0.69
4:AD:5:ILE:CA	4:AD:115:ARG:HH12	2.05	0.69
49:BR:20:LEU:O	49:BR:23:ASN:N	2.25	0.69
35:BA:1406:U:H6	35:BA:1406:U:OP2	1.75	0.69
35:BA:143(A):C:H2'	35:BA:144:C:C6	2.27	0.69
35:BA:2092:U:C4'	35:BA:2093:G:H5''	2.21	0.69
1:AA:1228:C:C2'	1:AA:1229:A:H5'	2.22	0.69
16:AP:5:ARG:HE	16:AP:22:THR:CG2	2.05	0.69
31:B6:18:ARG:HG3	31:B6:19:ARG:H	1.58	0.69
1:AA:199:G:H2'	1:AA:200:G:H8	1.57	0.69
51:BT:132:LYS:C	51:BT:134:GLU:H	1.96	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:125:LYS:HD3	24:AY:128:GLU:OE1	1.91	0.69
24:AY:6:TYR:O	24:AY:10:VAL:CG2	2.40	0.69
24:AY:144:LEU:HD12	24:AY:179:PHE:CE1	2.27	0.69
24:AY:198:GLY:C	24:AY:262:ASN:HD21	1.96	0.69
1:AA:773:G:H5''	38:BD:203:ASN:ND2	2.07	0.69
35:BA:1789:A:H5''	38:BD:221:VAL:HG12	1.75	0.69
35:BA:464:U:H2'	35:BA:465:G:O4'	1.92	0.69
35:BA:999:U:H5	35:BA:1154:G:C4	2.10	0.69
39:BE:101:ARG:NH1	39:BE:171:GLU:HG3	2.08	0.69
47:BP:47:ASP:CG	47:BP:49:ARG:H	1.95	0.69
35:BA:1776:G:H8	35:BA:1776:G:O5'	1.76	0.69
35:BA:637:A:OP2	47:BP:115:LEU:HB2	1.92	0.69
38:BD:226:MET:HE2	38:BD:230:ASP:HB3	1.75	0.69
52:BU:28:ARG:NH1	52:BU:38:THR:HG23	2.00	0.69
2:AB:51:LEU:HD23	2:AB:55:PHE:CE2	2.20	0.69
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.73	0.69
2:AB:103:THR:HG23	2:AB:176:GLU:OE1	1.92	0.69
2:AB:171:ALA:HA	2:AB:174:VAL:HG23	1.72	0.69
12:AL:53:ARG:HG2	12:AL:53:ARG:HH11	1.58	0.69
1:AA:1117:G:H5'	1:AA:1117:G:H8	1.56	0.69
10:AJ:16:LEU:HD11	10:AJ:70:ARG:CG	2.22	0.69
10:AJ:6:ILE:HD12	10:AJ:8:LEU:HD11	1.75	0.69
4:AD:98:GLU:HA	4:AD:103:ASN:ND2	2.08	0.69
37:BC:32:LEU:HD11	37:BC:222:VAL:HG22	1.75	0.69
37:BC:214:VAL:CG2	37:BC:224:ILE:HD13	2.22	0.69
37:BC:189:ILE:HD13	37:BC:214:VAL:HG21	1.74	0.69
7:AG:29:LYS:HB2	7:AG:105:VAL:HG21	1.72	0.69
7:AG:118:VAL:CG2	7:AG:119:ARG:N	2.56	0.69
50:BS:29:PHE:HD1	50:BS:29:PHE:C	1.95	0.69
35:BA:1453:U:OP1	49:BR:77:ARG:HD3	1.92	0.69
9:AI:26:VAL:HG13	9:AI:61:ALA:CB	2.20	0.69
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.28	0.69
20:AT:36:LEU:CD1	20:AT:59:ALA:HB2	2.22	0.69
35:BA:271(F):C:O2'	35:BA:271(G):C:H5'	1.92	0.69
35:BA:1047:G:H2'	35:BA:1110:G:H21	1.58	0.69
35:BA:296:C:O2'	35:BA:297:C:H5'	1.92	0.69
12:AL:76:ASN:O	12:AL:77:LEU:HD23	1.93	0.69
38:BD:26:LYS:O	38:BD:27:THR:HG23	1.93	0.69
38:BD:33:LEU:CG	38:BD:34:VAL:HG13	2.22	0.69
1:AA:826:C:C4	1:AA:827:U:C5	2.81	0.69
8:AH:89:PRO:HA	8:AH:92:ARG:HH11	1.57	0.69
3:AC:153:VAL:O	3:AC:154:SER:HB3	1.92	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:975:A:O2'	14:AN:32:SER:HB3	1.93	0.69
56:BY:20:TYR:CD2	56:BY:23:ARG:HG3	2.27	0.69
27:B2:50:ILE:CG2	35:BA:61:G:H5'	2.15	0.69
35:BA:94(A):G:H2'	35:BA:95:G:O4'	1.93	0.69
1:AA:542:G:O3'	4:AD:14:ARG:NH2	2.25	0.69
35:BA:1102:C:H2'	35:BA:1103:A:C8	2.27	0.69
11:AK:43:SER:HB2	11:AK:71:LYS:HZ1	1.58	0.69
37:BC:47:LEU:CD1	37:BC:47:LEU:H	2.06	0.69
45:BN:3:THR:HG22	45:BN:4:TYR:H	1.58	0.69
1:AA:1321:C:H3'	1:AA:1322:C:H5''	1.74	0.69
16:AP:45:THR:CG2	16:AP:47:ASP:HB3	2.22	0.69
36:BB:98:G:C5	36:BB:99:G:C8	2.81	0.69
35:BA:201:C:C2'	35:BA:202:U:H5'	2.23	0.69
35:BA:2535:G:H2'	35:BA:2536:G:C8	2.27	0.69
35:BA:443:A:H2	35:BA:1245:G:N3	1.91	0.69
35:BA:221:A:H4'	35:BA:222:A:O5'	1.93	0.69
24:AY:16:PHE:CE2	24:AY:84:VAL:CG1	2.75	0.69
24:AY:331:LEU:CB	24:AY:379:PHE:CE2	2.69	0.69
24:AY:443:VAL:O	24:AY:445:GLN:N	2.25	0.69
35:BA:225:A:O2'	35:BA:257:A:H4'	1.92	0.69
35:BA:2443:C:C2'	35:BA:2444:G:H5'	2.22	0.69
35:BA:962:G:H2'	35:BA:963:U:O4'	1.92	0.69
35:BA:970:C:H2'	35:BA:971:C:H6	1.58	0.69
51:BT:20:PRO:CD	51:BT:85:LYS:HB2	2.17	0.69
51:BT:91:ARG:HG2	51:BT:116:ALA:HA	1.75	0.69
52:BU:106:PHE:O	52:BU:110:VAL:HG23	1.93	0.69
52:BU:13:LYS:HD3	52:BU:13:LYS:H	1.58	0.69
35:BA:1956:U:H2'	35:BA:1957:C:H5'	1.75	0.69
8:AH:9:MET:O	8:AH:13:ILE:HG12	1.93	0.69
1:AA:285:G:H2'	1:AA:286:G:H8	1.58	0.69
2:AB:8:LYS:NZ	2:AB:217:ARG:CZ	2.56	0.69
1:AA:1118:C:N4	1:AA:1155:G:H1	1.90	0.69
35:BA:884:C:H3'	35:BA:885:C:C5'	2.22	0.69
56:BY:13:VAL:HG22	56:BY:73:ARG:O	1.93	0.69
35:BA:657:U:H2'	35:BA:658:C:C6	2.27	0.69
41:BG:138:GLN:NE2	41:BG:144:ILE:HD11	2.07	0.69
38:BD:73:VAL:O	38:BD:75:ILE:HD12	1.93	0.69
35:BA:472:A:H8	35:BA:472:A:H5'	1.58	0.69
39:BE:56:PRO:HD2	39:BE:58:ARG:NH1	2.07	0.69
24:AY:297:THR:HG22	24:AY:321:VAL:HB	1.76	0.68
24:AY:449:VAL:HG23	24:AY:463:TYR:OH	1.93	0.68
35:BA:1136:G:N3	35:BA:2038:G:H4'	2.08	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:566:U:H4'	35:BA:809:G:OP2	1.93	0.68
39:BE:4:ILE:CG2	39:BE:198:VAL:HB	2.22	0.68
39:BE:78:LEU:O	39:BE:79:ARG:HD2	1.93	0.68
40:BF:81:PRO:HG2	40:BF:82:ILE:H	1.58	0.68
45:BN:23:LEU:HA	45:BN:26:LEU:HB3	1.73	0.68
45:BN:27:ALA:CA	45:BN:30:ILE:HD12	2.23	0.68
47:BP:101:VAL:CG2	47:BP:102:ARG:N	2.56	0.68
35:BA:246:C:OP1	47:BP:71:VAL:HB	1.92	0.68
53:BV:75:PHE:HD2	53:BV:82:ARG:HG3	1.57	0.68
18:AR:38:GLU:HG2	18:AR:39:VAL:H	1.57	0.68
1:AA:1414:U:H2'	1:AA:1415:G:C8	2.27	0.68
35:BA:199:A:C2	35:BA:2433:A:N3	2.61	0.68
35:BA:917:A:C2	36:BB:79:C:O2	2.45	0.68
22:AV:49:G:H21	22:AV:50:U:H1'	1.57	0.68
21:AU:18:TYR:HB3	21:AU:22:ARG:O	1.93	0.68
35:BA:886:C:H2'	35:BA:887:A:O5'	1.93	0.68
35:BA:76:C:H2'	35:BA:77:C:C6	2.28	0.68
40:BF:126:VAL:HG23	40:BF:127:GLU:H	1.56	0.68
19:AS:49:ILE:HD12	19:AS:49:ILE:N	2.07	0.68
20:AT:18:GLN:HG2	20:AT:22:ARG:HH11	1.58	0.68
42:BH:38:SER:HB2	42:BH:64:LEU:HD11	1.75	0.68
50:BS:53:SER:N	50:BS:55:ALA:HB3	2.08	0.68
41:BG:11:TYR:O	41:BG:15:VAL:HB	1.92	0.68
7:AG:139:GLU:O	7:AG:143:ARG:N	2.26	0.68
35:BA:1569:A:H2'	35:BA:1570:A:H8	1.55	0.68
12:AL:41:ARG:O	12:AL:42:THR:HB	1.92	0.68
25:B0:20:ARG:NH2	35:BA:2271:G:H4'	2.08	0.68
8:AH:95:VAL:HG22	8:AH:133:LEU:HD13	1.75	0.68
4:AD:107:ARG:HH12	4:AD:114:ARG:NH2	1.90	0.68
17:AQ:13:ASP:C	17:AQ:15:MET:H	1.95	0.68
35:BA:1316:U:H3	35:BA:1336:A:H61	1.41	0.68
24:AY:30:THR:HG23	24:AY:86:LEU:CD2	2.22	0.68
35:BA:999:U:C5	35:BA:1154:G:C5	2.81	0.68
35:BA:1340:U:OP2	55:BX:78:LYS:NZ	2.25	0.68
51:BT:60:THR:CG2	51:BT:77:PRO:HA	2.22	0.68
51:BT:32:TYR:CG	51:BT:81:PRO:HB2	2.28	0.68
42:BH:32:GLU:O	42:BH:33:LEU:HD23	1.93	0.68
2:AB:101:MET:HB2	2:AB:102:LEU:CD1	2.22	0.68
24:AY:342:ILE:HG13	24:AY:342:ILE:O	1.93	0.68
35:BA:2287:A:H61	35:BA:2344:U:H3	1.38	0.68
1:AA:1392:G:H21	1:AA:1502:A:H8	1.41	0.68
35:BA:117:G:H5'	35:BA:126:A:N3	2.08	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:373:U:H2'	35:BA:374:A:C8	2.26	0.68
1:AA:1320:C:H5'	1:AA:1320:C:C6	2.27	0.68
45:BN:14:VAL:CG1	45:BN:137:LYS:HG3	2.22	0.68
51:BT:131:ALA:C	51:BT:133:GLU:H	1.94	0.68
53:BV:88:ARG:O	53:BV:90:PRO:HD3	1.93	0.68
24:AY:173:ILE:HG22	24:AY:180:LYS:HB2	1.75	0.68
24:AY:272:LEU:O	24:AY:276:ALA:CB	2.41	0.68
35:BA:1772:G:N2	35:BA:1774:C:H5''	2.08	0.68
38:BD:92:ILE:HG22	38:BD:106:ILE:HG12	1.74	0.68
35:BA:2638:G:OP2	39:BE:82:ARG:NH2	2.26	0.68
51:BT:33:LYS:HG3	51:BT:43:GLN:CB	2.21	0.68
52:BU:17:ILE:HG23	52:BU:39:LEU:HD11	1.72	0.68
6:AF:87:ARG:CG	6:AF:87:ARG:NH1	2.55	0.68
2:AB:44:LEU:HA	2:AB:47:THR:OG1	1.93	0.68
35:BA:954:G:H5''	48:BQ:13:GLN:HB3	1.74	0.68
1:AA:1175:G:O2'	1:AA:1176:A:H5'	1.93	0.68
14:AN:40:CYS:O	14:AN:43:CYS:N	2.25	0.68
19:AS:47:HIS:O	19:AS:62:ILE:CG2	2.42	0.68
55:BX:14:SER:OG	55:BX:17:ALA:HB2	1.92	0.68
35:BA:1094:U:H1'	35:BA:1097:U:H5	1.58	0.68
35:BA:875:G:H4'	57:BZ:170:THR:OG1	1.93	0.68
41:BG:39:ILE:CD1	41:BG:157:ILE:HG12	2.22	0.68
36:BB:7:G:C3'	36:BB:8:U:H5''	2.24	0.68
17:AQ:57:VAL:HG23	17:AQ:58:GLU:O	1.93	0.68
35:BA:1539:G:H2'	35:BA:1540:U:O4'	1.94	0.68
2:AB:115:LEU:HD13	2:AB:145:LEU:CD1	2.22	0.68
2:AB:141:GLU:O	2:AB:145:LEU:HB2	1.92	0.68
2:AB:121:LEU:HG	2:AB:126:GLU:HB2	1.75	0.68
1:AA:918:A:C6	1:AA:919:A:C6	2.82	0.68
1:AA:1285:A:H4'	1:AA:1286:A:O5'	1.94	0.68
19:AS:22:LEU:O	29:B4:48:ARG:N	2.25	0.68
33:B8:30:ARG:NH2	35:BA:2419:U:O4	2.26	0.68
24:AY:29:ILE:HG12	24:AY:259:ALA:CB	2.24	0.68
25:B0:33:ALA:O	35:BA:2352:A:H2	1.76	0.68
35:BA:690:G:H21	38:BD:43:ARG:HH22	1.40	0.68
38:BD:24:ILE:HD13	38:BD:83:GLU:C	2.13	0.68
52:BU:96:ALA:C	52:BU:98:LEU:H	1.97	0.68
1:AA:754:C:C4'	15:AO:72:ARG:HH12	2.06	0.68
53:BV:99:ILE:N	53:BV:99:ILE:HD13	2.08	0.68
1:AA:1090:U:H2'	1:AA:1091:U:H6	1.58	0.68
2:AB:153:ARG:CG	2:AB:154:LEU:N	2.55	0.68
2:AB:178:ARG:NH1	2:AB:178:ARG:HG3	2.09	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:224:GLN:O	2:AB:227:GLY:N	2.27	0.68
1:AA:1116:C:C3'	1:AA:1117:G:H5''	2.23	0.68
19:AS:8:GLY:O	19:AS:9:VAL:HG23	1.93	0.68
1:AA:939:G:P	7:AG:95:ARG:HH22	2.15	0.68
1:AA:106:C:O2'	1:AA:379:C:H5''	1.93	0.68
2:AB:115:LEU:CB	2:AB:145:LEU:HD12	2.24	0.68
1:AA:507:C:P	1:AA:508:C:H3'	2.33	0.68
35:BA:1471:A:N6	35:BA:1519:G:H2'	2.08	0.68
35:BA:2186:G:H2'	35:BA:2187:G:C8	2.28	0.68
25:B0:51:VAL:CG2	25:B0:80:HIS:HA	2.22	0.68
54:BW:5:ALA:HB2	54:BW:54:ALA:HB2	1.74	0.68
35:BA:2861:G:O2'	35:BA:2862:G:H5'	1.93	0.68
1:AA:122:G:H2'	1:AA:123:C:O4'	1.93	0.68
48:BQ:36:ALA:HB2	48:BQ:103:MET:HE3	1.74	0.68
9:AI:121:ARG:NH1	9:AI:121:ARG:HG2	2.09	0.68
24:AY:448:VAL:O	24:AY:452:ARG:HG2	1.93	0.68
1:AA:1407:C:C2'	1:AA:1408:A:H5''	2.23	0.68
35:BA:2616:C:H2'	35:BA:2617:C:C6	2.29	0.68
35:BA:744:G:O2'	35:BA:745:G:H5'	1.94	0.68
35:BA:780:G:H21	35:BA:783:A:N6	1.91	0.68
35:BA:947:G:H2'	35:BA:948:G:H8	1.58	0.68
35:BA:1567:A:H5'	38:BD:58:HIS:HD2	1.58	0.68
38:BD:94:LEU:HD22	38:BD:95:LEU:N	2.07	0.68
45:BN:23:LEU:HB2	45:BN:99:LEU:HD21	1.76	0.68
52:BU:112:ARG:HH12	53:BV:46:VAL:CG1	2.00	0.68
1:AA:719:C:C2	18:AR:50:ILE:HG12	2.28	0.68
8:AH:85:ARG:HG3	8:AH:85:ARG:HH11	1.59	0.68
8:AH:2:LEU:HD21	8:AH:8:ASP:CB	2.23	0.68
48:BQ:12:GLN:OE1	48:BQ:72:LYS:HG3	1.93	0.68
22:AV:3:C:O2	35:BA:1851:U:H5''	1.94	0.68
1:AA:1192:C:O2'	5:AE:25:ARG:NH2	2.26	0.68
9:AI:98:PRO:HB2	9:AI:99:LEU:HD22	1.74	0.68
56:BY:37:VAL:HG22	56:BY:67:LEU:O	1.92	0.68
55:BX:39:ILE:HG21	55:BX:54:VAL:HG11	1.75	0.68
1:AA:706:A:C1'	11:AK:29:ILE:HD11	2.23	0.68
35:BA:1494:A:N3	35:BA:1494:A:H5'	2.08	0.68
35:BA:2110:G:H1	35:BA:2178:C:H41	1.40	0.68
35:BA:2181:G:O2'	35:BA:2182:G:H5'	1.94	0.68
20:AT:75:ASN:O	20:AT:79:ARG:HB2	1.94	0.68
1:AA:760:G:N2	17:AQ:94:ASN:HB3	2.07	0.68
35:BA:1628:G:H2'	35:BA:1629:U:H6	1.58	0.68
35:BA:2644:G:H2'	35:BA:2645:G:C8	2.28	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B8:23:VAL:HG12	33:B8:46:ARG:HH11	1.59	0.68
33:B8:33:ASN:HA	33:B8:36:LYS:CD	2.24	0.68
33:B8:4:MET:O	33:B8:62:LEU:HD11	1.93	0.68
38:BD:160:GLY:N	38:BD:196:VAL:HG12	2.09	0.68
39:BE:117:MET:O	39:BE:121:ASN:HA	1.94	0.68
45:BN:65:LYS:HD3	45:BN:69:GLN:HE21	1.58	0.68
51:BT:65:LYS:HZ1	51:BT:66:VAL:H	1.38	0.68
52:BU:47:TYR:HA	52:BU:50:ARG:HD2	1.75	0.68
35:BA:2157:G:O2'	35:BA:2158:A:H5'	1.93	0.68
2:AB:7:VAL:HG13	2:AB:11:LEU:CD1	2.23	0.68
3:AC:134:ILE:O	3:AC:138:VAL:HG12	1.93	0.68
35:BA:893:C:H2'	35:BA:894:C:H5'	1.73	0.68
35:BA:483:A:O3'	56:BY:49:VAL:HG22	1.94	0.68
27:B2:10:LEU:HD21	27:B2:59:ARG:CD	2.24	0.68
15:AO:4:THR:CG2	15:AO:6:GLU:HB2	2.23	0.68
36:BB:41:U:N3	41:BG:70:VAL:HB	2.07	0.68
16:AP:11:SER:OG	16:AP:14:ASN:HB3	1.94	0.68
35:BA:1884:A:C2'	35:BA:1885:A:H5''	2.21	0.68
41:BG:52:ILE:HG12	41:BG:53:LEU:N	2.08	0.68
16:AP:67:THR:H	16:AP:70:ALA:HB3	1.58	0.68
1:AA:1425:U:H2'	1:AA:1426:C:C6	2.29	0.68
56:BY:86:ARG:NH2	56:BY:95:LYS:HZ3	1.92	0.68
29:B4:36:CYS:O	29:B4:39:CYS:HB2	1.93	0.68
37:BC:137:LEU:HD22	37:BC:138:PRO:CD	2.23	0.68
35:BA:1331:A:HO2'	35:BA:1332:G:H8	1.39	0.68
35:BA:104:U:H2'	35:BA:105:C:H5'	1.76	0.68
35:BA:2422:A:H4'	35:BA:2423:U:OP1	1.94	0.68
35:BA:1924:C:O2'	35:BA:1925:C:C6	2.46	0.68
35:BA:2223:G:H2'	35:BA:2224:G:H5'	1.75	0.68
35:BA:2504:U:H6	35:BA:2504:U:O5'	1.76	0.68
35:BA:779:U:O2'	35:BA:780:G:H5'	1.93	0.68
38:BD:92:ILE:HA	38:BD:107:ALA:N	2.08	0.68
38:BD:24:ILE:HD13	38:BD:84:TYR:N	2.08	0.68
45:BN:69:GLN:O	45:BN:71:ILE:HG13	1.94	0.68
35:BA:1654:A:P	49:BR:3:HIS:HB2	2.33	0.68
53:BV:40:LEU:CD2	53:BV:47:VAL:HG22	2.22	0.68
46:BO:6:THR:O	46:BO:20:MET:HA	1.93	0.68
34:B9:36:GLN:NE2	35:BA:1031:G:N2	2.38	0.68
35:BA:2807:G:C2'	35:BA:2808:U:H5''	2.24	0.68
22:AV:62:C:C2'	22:AV:63:G:H5''	2.23	0.68
3:AC:157:ILE:CB	3:AC:164:ARG:HH21	2.06	0.68
35:BA:880:G:H1	35:BA:897:C:N4	1.88	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B2:9:GLN:HG2	27:B2:56:GLN:NE2	2.09	0.68
40:BF:154:VAL:HG12	40:BF:155:LEU:N	2.08	0.68
40:BF:19:GLU:O	40:BF:20:LEU:HD23	1.92	0.68
19:AS:51:VAL:HB	19:AS:58:VAL:HG22	1.75	0.68
35:BA:140:G:C1'	35:BA:141:A:H2	2.00	0.68
35:BA:144:C:H2'	35:BA:145:G:C8	2.29	0.68
35:BA:2306:C:N4	35:BA:2311:A:N7	2.41	0.68
38:BD:79:VAL:HG23	38:BD:114:GLY:H	1.58	0.68
1:AA:1266:G:N2	1:AA:1268:A:C5'	2.55	0.68
35:BA:2147:G:H2'	35:BA:2148:G:O4'	1.93	0.68
7:AG:72:ARG:O	7:AG:91:VAL:HG12	1.93	0.68
35:BA:2672:G:H3'	35:BA:2673:G:H5''	1.74	0.68
24:AY:401:ILE:HD13	24:AY:462:VAL:O	1.93	0.68
32:B7:7:PRO:HA	35:BA:686:G:C8	2.28	0.68
35:BA:972:G:H2'	35:BA:973:A:N7	2.09	0.68
39:BE:113:PHE:CE1	39:BE:158:GLY:HA2	2.28	0.68
39:BE:195:LEU:HD11	39:BE:197:ILE:CG2	2.23	0.68
40:BF:65:TRP:CH2	40:BF:72:ARG:HB3	2.29	0.68
47:BP:97:PRO:HA	47:BP:100:LEU:HD23	1.76	0.68
47:BP:38:GLN:OE1	47:BP:41:ARG:HD3	1.94	0.68
2:AB:193:ASP:C	2:AB:193:ASP:OD1	2.31	0.68
22:AV:76:A:P	35:BA:2432:A:H4'	2.34	0.68
48:BQ:67:ARG:HH11	48:BQ:67:ARG:CB	2.06	0.68
48:BQ:140:ALA:HB1	57:BZ:99:TYR:CD2	2.28	0.68
1:AA:1325:C:OP1	21:AU:15:ARG:NH2	2.26	0.68
1:AA:1327:C:H2'	1:AA:1328:C:H6	1.58	0.68
14:AN:50:LYS:O	14:AN:52:GLN:HG2	1.94	0.68
19:AS:63:THR:HG22	19:AS:66:MET:CG	2.24	0.68
35:BA:61:G:H1	35:BA:94:C:N4	1.91	0.68
40:BF:7:TYR:OH	40:BF:10:PRO:HB3	1.93	0.68
35:BA:1058:G:H2'	35:BA:1059:G:C5'	2.24	0.68
1:AA:619:U:C2	4:AD:135:LEU:HD11	2.28	0.68
36:BB:17:C:O2'	36:BB:18:G:H5'	1.93	0.68
50:BS:49:VAL:HG12	50:BS:50:SER:H	1.57	0.68
49:BR:44:LEU:O	49:BR:44:LEU:HD13	1.94	0.68
35:BA:1427:A:C1'	35:BA:1428:C:C5	2.77	0.68
2:AB:130:ARG:HA	2:AB:130:ARG:HE	1.57	0.68
20:AT:48:LYS:O	20:AT:52:ALA:HB2	1.92	0.68
24:AY:27:THR:HG1	24:AY:69:SER:HG	1.35	0.68
24:AY:331:LEU:CB	24:AY:379:PHE:HE2	1.99	0.68
24:AY:446:PHE:O	24:AY:449:VAL:CG2	2.42	0.68
35:BA:977:G:H2'	35:BA:978:G:H8	1.59	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BE:179:GLU:O	39:BE:180:ASN:HB2	1.94	0.68
45:BN:36:GLY:H	45:BN:49:GLY:HA2	1.58	0.68
52:BU:36:ARG:CB	52:BU:36:ARG:NH1	2.57	0.68
46:BO:24:VAL:O	46:BO:26:LYS:N	2.26	0.68
1:AA:910:C:O2'	1:AA:911:U:H5'	1.94	0.68
8:AH:85:ARG:NH1	8:AH:87:SER:O	2.27	0.68
2:AB:187:LEU:HD11	2:AB:204:ASN:O	1.93	0.68
35:BA:2248:C:H2'	35:BA:2249:U:O4'	1.94	0.68
48:BQ:52:VAL:O	48:BQ:55:VAL:HG13	1.94	0.68
13:AM:75:ALA:CB	13:AM:79:LYS:HE3	2.22	0.68
54:BW:18:ARG:NH1	54:BW:76:VAL:O	2.25	0.68
1:AA:978:A:N6	1:AA:1318:A:N7	2.42	0.68
3:AC:11:ARG:NH2	3:AC:182:ILE:HD12	2.08	0.68
3:AC:53:ALA:O	3:AC:54:ARG:O	2.12	0.68
10:AJ:69:ASN:O	10:AJ:70:ARG:HD3	1.94	0.68
37:BC:3:HIS:HB3	37:BC:7:TYR:CD2	2.28	0.68
42:BH:41:MET:HE2	42:BH:43:VAL:HG13	1.75	0.68
35:BA:1498:C:C2'	35:BA:1499:C:H5''	2.23	0.68
1:AA:1220:G:H21	19:AS:54:GLY:CA	2.06	0.68
27:B2:43:GLN:HG2	27:B2:44:LEU:N	2.06	0.68
28:B3:6:VAL:HA	28:B3:55:ARG:O	1.93	0.68
1:AA:1228:C:OP1	13:AM:108:ARG:NH2	2.27	0.68
10:AJ:75:ILE:O	10:AJ:77:PRO:HD3	1.94	0.68
35:BA:1537:G:H2'	35:BA:1538:G:C8	2.29	0.68
56:BY:54:LYS:HE3	56:BY:55:TYR:CE2	2.28	0.68
9:AI:118:LYS:O	9:AI:119:ALA:CB	2.42	0.68
29:B4:40:HIS:HD2	29:B4:42:PHE:CD1	2.11	0.68
35:BA:64:A:O3'	55:BX:71:GLY:HA3	1.94	0.68
24:AY:399:ARG:HA	24:AY:466:VAL:CG2	2.24	0.68
24:AY:445:GLN:HA	24:AY:448:VAL:HG23	1.76	0.68
24:AY:78:PRO:HA	24:AY:83:LEU:HA	1.76	0.68
35:BA:1814:G:H4'	38:BD:51:VAL:HG21	1.76	0.68
38:BD:169:GLU:O	38:BD:172:TYR:N	2.27	0.68
47:BP:47:ASP:HB2	47:BP:51:PHE:HD2	1.58	0.68
52:BU:17:ILE:N	52:BU:17:ILE:HD12	2.08	0.68
52:BU:65:ILE:HD11	52:BU:96:ALA:HB3	1.76	0.68
35:BA:2787:C:O2	39:BE:61:ARG:NH1	2.27	0.68
36:BB:82:G:H2'	36:BB:83:G:H8	1.58	0.68
57:BZ:119:GLU:HG3	57:BZ:122:ARG:NE	2.09	0.68
1:AA:977:A:C2'	1:AA:977:A:N3	2.57	0.68
35:BA:2840:C:H2'	35:BA:2841:C:C6	2.25	0.68
49:BR:48:VAL:CA	49:BR:51:LEU:HB2	2.24	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:631:A:H2'	35:BA:632:A:O4'	1.94	0.68
35:BA:631:A:H5''	47:BP:65:ARG:HH11	1.56	0.68
16:AP:71:ARG:HA	16:AP:74:LEU:HD12	1.75	0.68
27:B2:41:ILE:HG13	27:B2:42:GLY:H	1.59	0.68
1:AA:40:C:H2'	1:AA:41:G:H8	1.59	0.68
36:BB:111:G:O2'	36:BB:112:U:H5'	1.93	0.68
24:AY:349:MET:SD	24:AY:356:VAL:HA	2.34	0.67
1:AA:807:A:H2'	1:AA:808:C:H6	1.58	0.67
35:BA:2734:A:H62	35:BA:2770:G:H21	1.42	0.67
38:BD:108:PRO:HB3	38:BD:143:HIS:NE2	2.07	0.67
38:BD:43:ARG:HB3	38:BD:54:ARG:O	1.94	0.67
39:BE:171:GLU:O	39:BE:173:VAL:N	2.23	0.67
45:BN:18:ALA:HB3	45:BN:26:LEU:HD21	1.77	0.67
49:BR:17:ARG:CB	49:BR:17:ARG:HH11	2.07	0.67
1:AA:833:U:HO2'	1:AA:834:C:H6	1.40	0.67
1:AA:881:G:O2'	1:AA:882:C:H5'	1.94	0.67
8:AH:119:LEU:CD2	8:AH:123:GLU:HB3	2.24	0.67
15:AO:54:ARG:O	15:AO:58:MET:SD	2.52	0.67
17:AQ:26:GLN:O	17:AQ:27:PHE:HB3	1.93	0.67
2:AB:200:ILE:HD12	2:AB:200:ILE:H	1.59	0.67
48:BQ:34:LEU:HA	48:BQ:130:LYS:O	1.94	0.67
1:AA:1118:C:N3	1:AA:1155:G:N2	2.39	0.67
1:AA:1117:G:N1	1:AA:1184:G:C6	2.62	0.67
19:AS:45:VAL:HB	19:AS:63:THR:O	1.93	0.67
55:BX:8:ILE:HD12	55:BX:8:ILE:N	2.07	0.67
40:BF:18:ARG:CZ	40:BF:199:TRP:HZ3	2.07	0.67
40:BF:23:ASP:O	40:BF:115:ALA:HB2	1.94	0.67
49:BR:47:PHE:O	49:BR:51:LEU:HD13	1.95	0.67
11:AK:29:ILE:HA	11:AK:44:SER:HB3	1.77	0.67
7:AG:118:VAL:CG2	7:AG:119:ARG:H	2.07	0.67
29:B4:5:ILE:O	29:B4:5:ILE:HG12	1.94	0.67
1:AA:59:A:H1'	1:AA:354:G:N2	2.09	0.67
35:BA:2287:A:H62	35:BA:2344:U:H3	1.42	0.67
5:AE:115:VAL:O	5:AE:116:THR:HG23	1.94	0.67
54:BW:69:LEU:HA	54:BW:108:GLY:O	1.93	0.67
35:BA:1292:U:H2'	35:BA:1293:C:C6	2.29	0.67
1:AA:398:C:H3'	1:AA:398:C:H6	1.58	0.67
25:B0:50:ASN:C	25:B0:62:LEU:HD21	2.13	0.67
35:BA:2521:C:C2	35:BA:2545:G:N2	2.62	0.67
37:BC:103:ILE:HD12	37:BC:127:MET:HE3	1.75	0.67
33:B8:8:LYS:NZ	33:B8:11:LYS:CE	2.57	0.67
35:BA:1998:G:C2'	35:BA:1999:C:H5'	2.24	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:239:U:H1'	35:BA:259:G:N2	2.08	0.67
45:BN:27:ALA:HA	45:BN:30:ILE:CD1	2.21	0.67
45:BN:35:ARG:O	45:BN:37:LYS:N	2.27	0.67
47:BP:111:ARG:HA	47:BP:128:HIS:CD2	2.29	0.67
46:BO:33:ALA:HA	46:BO:37:ASP:OD2	1.94	0.67
15:AO:39:LEU:HD13	15:AO:56:LEU:HD23	1.75	0.67
35:BA:1030:G:OP2	48:BQ:128:LYS:HE2	1.93	0.67
35:BA:1915:U:C2'	35:BA:1916:A:O5'	2.42	0.67
57:BZ:42:VAL:HG13	57:BZ:43:GLU:N	2.09	0.67
57:BZ:56:VAL:CG2	57:BZ:70:LEU:HD13	2.18	0.67
22:AV:49:G:H2'	22:AV:50:U:H6	1.59	0.67
1:AA:979:C:H41	1:AA:1360:A:H62	1.40	0.67
40:BF:156:LEU:HD12	40:BF:157:VAL:N	2.09	0.67
50:BS:13:ARG:O	50:BS:14:VAL:HB	1.94	0.67
11:AK:29:ILE:HA	11:AK:44:SER:CB	2.24	0.67
42:BH:40:GLU:OE1	42:BH:40:GLU:HA	1.93	0.67
35:BA:2746:U:H2'	35:BA:2747:G:C5'	2.20	0.67
1:AA:1218:C:H2'	1:AA:1219:U:C5	2.29	0.67
1:AA:1314:C:O2'	1:AA:1315:U:H5'	1.94	0.67
35:BA:1440:G:O2'	35:BA:1441:G:H5'	1.94	0.67
4:AD:61:LYS:CA	4:AD:203:VAL:HG22	2.24	0.67
49:BR:60:LEU:O	49:BR:63:ARG:HB3	1.94	0.67
1:AA:633:G:H3'	1:AA:634:C:C6	2.28	0.67
1:AA:398:C:H3'	1:AA:398:C:C6	2.28	0.67
48:BQ:60:ARG:HB3	48:BQ:60:ARG:NH1	2.08	0.67
26:B1:89:GLU:HA	26:B1:92:LYS:HE3	1.77	0.67
35:BA:361:G:H2'	35:BA:362:U:H4'	1.76	0.67
1:AA:778:G:H2'	1:AA:779:C:C6	2.29	0.67
35:BA:2692:C:H1'	35:BA:2847:U:O2'	1.95	0.67
47:BP:16:ARG:HD3	47:BP:18:ARG:N	2.09	0.67
2:AB:17:PHE:C	2:AB:17:PHE:CD1	2.65	0.67
35:BA:1915:U:O2'	35:BA:1916:A:C5'	2.40	0.67
35:BA:861:A:H2	35:BA:862:G:H1'	1.59	0.67
35:BA:952:G:C4	35:BA:966:G:N2	2.61	0.67
35:BA:1786:A:H3'	35:BA:1787:A:N7	2.09	0.67
1:AA:1305:G:H5'	21:AU:4:GLY:HA3	1.76	0.67
3:AC:86:VAL:HG23	3:AC:87:LEU:CD2	2.25	0.67
19:AS:20:LEU:HA	19:AS:23:ASN:CB	2.24	0.67
57:BZ:151:HIS:CB	57:BZ:170:THR:HA	2.24	0.67
41:BG:130:ASN:HB3	41:BG:160:VAL:HA	1.76	0.67
1:AA:1506:U:O2'	1:AA:1507:A:H5'	1.93	0.67
41:BG:5:VAL:HG12	41:BG:6:ALA:N	2.04	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:51:ARG:NE	41:BG:51:ARG:HA	2.08	0.67
35:BA:852:G:H2'	35:BA:853:G:H8	1.60	0.67
35:BA:2101:G:C2'	35:BA:2102:U:H5''	2.25	0.67
49:BR:29:LEU:HD21	49:BR:52:ILE:HD11	1.75	0.67
6:AF:67:MET:HE2	6:AF:68:PRO:O	1.95	0.67
31:B6:15:GLU:OE2	31:B6:41:PRO:HB3	1.93	0.67
35:BA:233:A:H2'	35:BA:234:C:C6	2.29	0.67
35:BA:1068:G:N7	44:BK:25:UNK:C	2.56	0.67
11:AK:108:ILE:N	11:AK:108:ILE:HD12	2.09	0.67
24:AY:108:CYS:HA	24:AY:135:THR:CG2	2.25	0.67
24:AY:10:VAL:O	24:AY:279:PRO:HD3	1.94	0.67
24:AY:299:PHE:H	24:AY:299:PHE:HD2	1.42	0.67
24:AY:25:GLY:HA3	24:AY:29:ILE:HG13	1.74	0.67
24:AY:86:LEU:CD1	24:AY:88:ASP:H	2.07	0.67
35:BA:2454:G:O2'	35:BA:2455:G:H5'	1.94	0.67
51:BT:50:ILE:HA	51:BT:99:LEU:CD1	2.23	0.67
1:AA:17:U:H2'	1:AA:18:C:C6	2.28	0.67
18:AR:72:ARG:O	18:AR:76:LEU:HD23	1.93	0.67
2:AB:14:GLY:C	2:AB:15:VAL:HG22	2.13	0.67
2:AB:97:TRP:CH2	2:AB:176:GLU:HG3	2.29	0.67
25:B0:43:THR:H	35:BA:2331:G:C4'	1.95	0.67
1:AA:1304:G:H1'	1:AA:1334:G:H22	1.60	0.67
3:AC:74:GLY:HA2	3:AC:77:ILE:HD12	1.75	0.67
9:AI:34:ASN:O	9:AI:38:GLN:HB2	1.95	0.67
44:BK:5:UNK:O	44:BK:7:UNK:N	2.27	0.67
37:BC:10:LEU:HD12	37:BC:32:LEU:CA	2.24	0.67
1:AA:1265:G:C6	1:AA:1266:G:O6	2.47	0.67
28:B3:6:VAL:HB	28:B3:54:VAL:CG1	2.24	0.67
33:B8:52:LYS:O	33:B8:56:GLU:OE1	2.12	0.67
16:AP:5:ARG:O	16:AP:6:LEU:HD12	1.93	0.67
1:AA:1284:C:C2	1:AA:1285:A:N7	2.62	0.67
40:BF:132:VAL:HG22	40:BF:133:ASN:N	2.08	0.67
35:BA:614:U:H1'	35:BA:614(C):A:N7	2.09	0.67
1:AA:1350:A:OP2	9:AI:121:ARG:HG3	1.94	0.67
42:BH:59:ARG:HB2	42:BH:59:ARG:HH11	1.60	0.67
35:BA:315:G:H2'	35:BA:316:C:C6	2.29	0.67
35:BA:1053:C:H2'	35:BA:1054:A:H8	1.59	0.67
24:AY:164:ILE:HG12	24:AY:252:THR:CG2	2.24	0.67
1:AA:778:G:H2'	1:AA:779:C:H6	1.59	0.67
35:BA:1969:A:O2'	35:BA:1972:A:H1'	1.94	0.67
35:BA:2367:G:O2'	35:BA:2368:C:H5'	1.94	0.67
51:BT:51:ARG:HD3	51:BT:62:THR:HG21	1.76	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:577:G:N2	1:AA:765:G:H1'	2.09	0.67
2:AB:7:VAL:HG13	2:AB:11:LEU:HD12	1.76	0.67
2:AB:219:VAL:O	2:AB:223:ILE:HG13	1.94	0.67
42:BH:124:GLU:C	42:BH:126:PRO:HD3	2.14	0.67
3:AC:116:VAL:HG21	3:AC:202:ILE:HD11	1.76	0.67
35:BA:110:G:O2'	35:BA:111:A:H5'	1.93	0.67
35:BA:872:A:H5'	48:BQ:69:PHE:CE2	2.26	0.67
35:BA:2307:G:H21	35:BA:2308:G:C5'	2.07	0.67
38:BD:136:ILE:HD12	38:BD:191:ALA:HB3	1.75	0.67
12:AL:54:LYS:HD2	12:AL:54:LYS:N	2.10	0.67
12:AL:41:ARG:HH11	12:AL:41:ARG:CB	2.07	0.67
17:AQ:62:SER:CB	17:AQ:72:ARG:HG3	2.24	0.67
35:BA:2131:G:H4'	35:BA:2132:U:OP2	1.92	0.67
24:AY:260:LEU:HD21	35:BA:2655:G:H5''	1.77	0.67
1:AA:1491:G:C3'	1:AA:1492:A:C8	2.77	0.67
1:AA:1405:G:H1'	1:AA:1519:A:C4'	2.25	0.67
35:BA:1190:G:H2'	35:BA:1191:G:H8	1.57	0.67
39:BE:112:GLY:O	39:BE:114:ALA:N	2.27	0.67
35:BA:1248:G:P	40:BF:92:PRO:HG3	2.35	0.67
45:BN:66:LYS:HB3	45:BN:70:LYS:HB2	1.75	0.67
46:BO:24:VAL:HG23	46:BO:24:VAL:O	1.94	0.67
6:AF:45:LEU:HD13	6:AF:59:TYR:HD1	1.59	0.67
15:AO:33:THR:CG2	15:AO:34:LEU:N	2.58	0.67
15:AO:56:LEU:O	15:AO:59:MET:HB2	1.94	0.67
2:AB:155:LEU:CD2	2:AB:159:PRO:HG3	2.21	0.67
39:BE:60:ASN:OD1	39:BE:61:ARG:N	2.26	0.67
22:AV:1:C:H42	22:AV:72:A:H61	1.42	0.67
4:AD:18:LYS:HG3	4:AD:33:MET:HB3	1.76	0.67
4:AD:173:TRP:HA	4:AD:187:ARG:HH12	1.58	0.67
35:BA:2307:G:H3'	35:BA:2307:G:N3	2.09	0.67
35:BA:2758:A:H62	42:BH:67:LEU:HD11	1.55	0.67
51:BT:107:ASP:CG	51:BT:108:ARG:H	1.97	0.67
15:AO:85:LEU:N	15:AO:85:LEU:CD2	2.58	0.67
29:B4:35:VAL:HG12	29:B4:36:CYS:H	1.59	0.67
1:AA:376:G:H5''	16:AP:5:ARG:HB2	1.74	0.67
36:BB:10:C:O2'	36:BB:11:C:H5'	1.94	0.67
33:B8:23:VAL:HG13	33:B8:47:LYS:O	1.95	0.67
35:BA:193:U:C2'	35:BA:194:G:H5'	2.24	0.67
31:B6:18:ARG:HG2	31:B6:18:ARG:NH1	2.08	0.67
3:AC:137:ALA:HA	3:AC:140:ARG:CZ	2.25	0.67
35:BA:289:A:H61	35:BA:351:G:H1'	1.59	0.67
24:AY:412:LEU:C	24:AY:414:LYS:H	1.98	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2580:U:C5	35:BA:2581:G:C6	2.82	0.67
35:BA:668:G:H2'	35:BA:670:A:H62	1.60	0.67
39:BE:68:ALA:O	39:BE:70:ALA:N	2.26	0.67
47:BP:47:ASP:OD1	47:BP:49:ARG:HG3	1.95	0.67
57:BZ:152:ALA:O	57:BZ:155:LEU:HD21	1.95	0.67
19:AS:44:MET:HA	29:B4:47:GLN:OE1	1.95	0.67
19:AS:62:ILE:HA	19:AS:66:MET:CE	2.25	0.67
19:AS:23:ASN:OD1	29:B4:47:GLN:HG3	1.95	0.67
49:BR:21:TYR:O	49:BR:25:ALA:HB2	1.93	0.67
1:AA:687:A:O2'	1:AA:688:G:OP2	2.10	0.67
37:BC:29:VAL:HG12	37:BC:222:VAL:HG21	1.75	0.67
57:BZ:151:HIS:HA	57:BZ:171:ILE:HG12	1.76	0.67
45:BN:5:VAL:CG1	45:BN:7:LYS:HG3	2.20	0.67
50:BS:46:VAL:HG12	50:BS:47:THR:N	2.08	0.67
1:AA:1226:C:H4'	1:AA:1227:A:OP1	1.95	0.67
35:BA:1439:A:H2'	35:BA:1440:G:O4'	1.95	0.67
41:BG:115:ARG:NH2	41:BG:136:ARG:HD2	2.08	0.67
35:BA:2826:A:H2'	35:BA:2827:C:C6	2.29	0.67
35:BA:2562:U:C2'	35:BA:2563:U:H5'	2.24	0.67
24:AY:135:THR:O	24:AY:137:ILE:HG13	1.95	0.67
24:AY:168:PRO:HB2	24:AY:171:TRP:CZ2	2.28	0.67
24:AY:413:LEU:HD11	24:AY:429:ARG:HD3	1.77	0.67
35:BA:1691:C:H2'	35:BA:1692:U:H6	1.59	0.67
35:BA:1802:A:N1	35:BA:1822:G:H1'	2.10	0.67
35:BA:2223:G:H4'	38:BD:269:PHE:CZ	2.30	0.67
35:BA:2446:G:C2	35:BA:2501:C:C5	2.82	0.67
38:BD:69:ARG:CD	38:BD:105:ILE:HD11	2.25	0.67
39:BE:87:GLU:HG3	39:BE:87:GLU:O	1.95	0.67
52:BU:83:LEU:HG	52:BU:88:ILE:HD11	1.75	0.67
35:BA:2243:U:H2'	35:BA:2244:U:C6	2.29	0.67
57:BZ:124:ILE:O	57:BZ:126:VAL:HG13	1.95	0.67
22:AV:49:G:N2	22:AV:50:U:H1'	2.09	0.67
22:AV:51:C:C2	22:AV:52:G:N7	2.63	0.67
10:AJ:65:LEU:HG	10:AJ:65:LEU:O	1.95	0.67
10:AJ:43:ARG:O	10:AJ:67:THR:HG22	1.93	0.67
10:AJ:49:VAL:HG21	14:AN:41:ARG:HB2	1.77	0.67
19:AS:10:PHE:HE1	19:AS:70:LYS:HD2	1.59	0.67
56:BY:81:LYS:HD2	56:BY:96:ILE:HD12	1.77	0.67
35:BA:2312:U:OP1	41:BG:73:ALA:HA	1.95	0.67
1:AA:404:U:C2	1:AA:405:U:C5	2.83	0.67
20:AT:18:GLN:HG2	20:AT:22:ARG:NH1	2.10	0.67
8:AH:82:HIS:CD2	8:AH:138:TRP:NE1	2.63	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:11:TYR:HD1	41:BG:15:VAL:HB	1.59	0.67
50:BS:73:LEU:O	50:BS:73:LEU:HD23	1.94	0.67
1:AA:175:C:H4'	20:AT:25:ARG:NH1	2.09	0.67
13:AM:54:VAL:O	13:AM:58:GLU:HG2	1.94	0.67
2:AB:92:TYR:CE1	2:AB:150:SER:HB2	2.30	0.67
2:AB:92:TYR:CZ	2:AB:150:SER:HB2	2.30	0.67
7:AG:54:THR:OG1	7:AG:56:GLN:HG2	1.95	0.67
35:BA:1064:C:H3'	35:BA:1065:U:H5''	1.77	0.67
35:BA:2149:G:O2'	35:BA:2150:U:H5'	1.95	0.67
24:AY:472:ARG:HG3	24:AY:523:PHE:CZ	2.30	0.67
1:AA:1407:C:C2'	1:AA:1408:A:C5'	2.73	0.67
35:BA:531:C:O2'	35:BA:563:G:H5''	1.94	0.67
30:B5:3:LYS:HD3	35:BA:747:U:OP2	1.95	0.67
35:BA:1826:G:H4'	38:BD:242:ARG:CZ	2.25	0.67
38:BD:82:ILE:HA	38:BD:93:ALA:HA	1.77	0.67
39:BE:25:VAL:HG22	39:BE:183:LEU:HD11	1.76	0.67
47:BP:100:LEU:CB	47:BP:106:LEU:HD22	2.24	0.67
53:BV:74:LYS:O	53:BV:75:PHE:HB3	1.95	0.67
8:AH:5:PRO:HD2	8:AH:6:ILE:CD1	2.24	0.67
35:BA:906:G:H4'	48:BQ:67:ARG:NH2	2.09	0.67
48:BQ:21:THR:CG2	48:BQ:101:ARG:HD2	2.25	0.67
22:AV:14:A:N3	22:AV:15:G:H1'	2.10	0.67
1:AA:1106:G:H2'	1:AA:1107:C:H6	1.60	0.67
11:AK:43:SER:HA	11:AK:47:VAL:HG21	1.76	0.67
11:AK:63:LEU:HA	11:AK:66:LEU:HD11	1.76	0.67
37:BC:175:VAL:HG21	37:BC:189:ILE:CG1	2.15	0.67
7:AG:99:LEU:HD23	7:AG:102:ARG:NH2	2.09	0.67
41:BG:60:LEU:HD22	41:BG:63:ILE:CD1	2.24	0.67
47:BP:65:ARG:HB3	47:BP:68:GLN:HE22	1.58	0.67
35:BA:2745:C:O2'	42:BH:142:GLY:HA3	1.94	0.67
26:B1:35:THR:HG21	35:BA:2080:G:OP1	1.95	0.67
20:AT:49:ALA:O	20:AT:52:ALA:HB3	1.94	0.67
42:BH:12:PRO:HD2	42:BH:15:VAL:CG1	2.25	0.67
37:BC:77:ILE:O	37:BC:78:ALA:O	2.13	0.67
35:BA:266:G:H2'	35:BA:267:C:H5''	1.77	0.67
17:AQ:12:SER:HB3	17:AQ:20:THR:OG1	1.94	0.67
24:AY:18:ILE:CD1	24:AY:30:THR:OG1	2.43	0.67
37:BC:100:ILE:O	37:BC:100:ILE:HG22	1.94	0.67
35:BA:1135:C:C2	35:BA:1137:G:OP2	2.48	0.67
35:BA:2053:G:H4'	39:BE:145:LYS:HA	1.77	0.67
47:BP:112:LEU:N	47:BP:128:HIS:HD2	1.93	0.67
51:BT:32:TYR:O	51:BT:33:LYS:HB2	1.94	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:89:VAL:HG21	51:BT:91:ARG:NH2	2.10	0.67
53:BV:21:ARG:HG2	53:BV:91:TYR:CG	2.30	0.67
8:AH:114:THR:OG1	8:AH:119:LEU:HD12	1.94	0.67
15:AO:45:VAL:HG13	15:AO:46:HIS:CD2	2.29	0.67
18:AR:54:ARG:O	18:AR:55:ARG:HG2	1.95	0.67
1:AA:1073:U:H2'	1:AA:1074:G:C8	2.30	0.67
22:AV:67:C:H2'	22:AV:68:C:H6	1.59	0.67
12:AL:34:ARG:HD3	12:AL:105:TYR:CZ	2.30	0.67
35:BA:884:C:O5'	35:BA:884:C:H6	1.78	0.67
35:BA:2835:A:N6	35:BA:2878:U:H3'	2.10	0.67
38:BD:111:LEU:CD1	38:BD:115:GLN:NE2	2.58	0.67
40:BF:185:ASP:HA	40:BF:188:ARG:CD	2.23	0.67
35:BA:2122:U:H2'	35:BA:2123:G:H8	1.60	0.67
35:BA:1416:G:N2	35:BA:1582:C:O2	2.27	0.67
41:BG:171:ALA:HA	41:BG:174:GLU:HB3	1.77	0.67
1:AA:1002:G:H2'	1:AA:1003:G:H8	1.60	0.67
1:AA:291:C:H2'	1:AA:292:G:H8	1.60	0.67
1:AA:838:G:C2'	1:AA:839:U:H5''	2.24	0.67
7:AG:78:ARG:O	7:AG:78:ARG:HG3	1.94	0.67
12:AL:40:VAL:HG12	12:AL:40:VAL:O	1.95	0.67
32:B7:16:HIS:HA	32:B7:21:ARG:NH1	2.09	0.66
35:BA:1999:C:H2'	35:BA:2000:G:H8	1.60	0.66
35:BA:2553:G:H3'	35:BA:2554:U:H5''	1.75	0.66
35:BA:748:G:H5''	35:BA:2612:C:N4	2.10	0.66
38:BD:213:ARG:NH1	38:BD:219:PRO:CD	2.53	0.66
39:BE:14:ILE:HD11	39:BE:173:VAL:HG11	1.77	0.66
47:BP:85:LEU:HA	47:BP:88:LEU:CB	2.25	0.66
52:BU:57:PHE:HB3	52:BU:61:TRP:CE2	2.30	0.66
18:AR:40:LEU:O	18:AR:43:PHE:HB2	1.96	0.66
2:AB:187:LEU:CD2	2:AB:201:ILE:O	2.43	0.66
11:AK:126:ARG:C	11:AK:128:ALA:H	1.98	0.66
35:BA:864:G:N7	48:BQ:22:LYS:NZ	2.42	0.66
57:BZ:24:LEU:HD21	57:BZ:86:VAL:CG2	2.25	0.66
1:AA:1054:C:OP1	1:AA:1197:G:OP1	2.13	0.66
1:AA:979:C:O2	14:AN:19:ARG:NE	2.27	0.66
40:BF:125:LEU:HD23	40:BF:125:LEU:N	2.09	0.66
35:BA:2817:G:H2'	35:BA:2818:G:O4'	1.94	0.66
35:BA:2841:C:H2'	35:BA:2842:G:H8	1.60	0.66
35:BA:2319:G:H22	35:BA:2334:G:P	2.17	0.66
17:AQ:59:ILE:CD1	17:AQ:73:VAL:HA	2.24	0.66
31:B6:8:LYS:HE2	35:BA:2285:C:OP2	1.95	0.66
50:BS:51:ALA:CB	50:BS:73:LEU:HB2	2.25	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BS:24:LEU:CB	50:BS:85:VAL:HG12	2.26	0.66
35:BA:2355:C:H2'	35:BA:2355:C:O2	1.95	0.66
1:AA:539:A:OP2	12:AL:115:LYS:HE3	1.94	0.66
53:BV:2:PHE:CZ	53:BV:13:ARG:HD2	2.30	0.66
4:AD:180:GLY:O	4:AD:181:MET:HB2	1.94	0.66
35:BA:491:G:H2'	35:BA:492:A:O4'	1.94	0.66
35:BA:305:U:H2'	35:BA:306:U:C6	2.30	0.66
35:BA:2525:G:O2'	35:BA:2526:G:H5'	1.95	0.66
39:BE:23:VAL:HG12	39:BE:184:VAL:O	1.93	0.66
35:BA:565:C:OP2	53:BV:78:LYS:N	2.27	0.66
15:AO:38:ARG:O	15:AO:42:HIS:N	2.28	0.66
35:BA:909:A:O2'	35:BA:911:A:OP2	2.12	0.66
57:BZ:41:LEU:O	57:BZ:44:PHE:HB3	1.94	0.66
12:AL:35:GLY:HA2	12:AL:59:ARG:O	1.95	0.66
1:AA:1204:A:H2'	1:AA:1205:U:O4'	1.94	0.66
1:AA:974:A:N7	14:AN:31:ARG:NH1	2.43	0.66
52:BU:101:ARG:O	52:BU:103:PRO:CD	2.36	0.66
40:BF:122:LYS:HB3	40:BF:191:ARG:HG3	1.77	0.66
35:BA:1486:A:N6	35:BA:1504:C:H42	1.93	0.66
42:BH:118:PRO:HD2	42:BH:121:ILE:HG21	1.77	0.66
5:AE:118:ILE:HG12	5:AE:119:LEU:N	2.10	0.66
35:BA:118:A:OP2	35:BA:119:A:H2'	1.94	0.66
54:BW:1:MET:HE3	54:BW:2:GLU:H	1.60	0.66
35:BA:2153:G:N2	35:BA:2154:G:H1'	2.09	0.66
35:BA:1865:G:H5'	35:BA:1866:C:P	2.34	0.66
51:BT:83:ILE:HG13	51:BT:84:GLN:N	2.09	0.66
37:BC:100:ILE:HA	37:BC:127:MET:HE1	1.78	0.66
35:BA:2514:U:O2'	35:BA:2515:C:H5'	1.95	0.66
38:BD:24:ILE:HG23	38:BD:83:GLU:HA	1.77	0.66
38:BD:90:ALA:HB3	38:BD:106:ILE:HG23	1.76	0.66
52:BU:13:LYS:O	52:BU:16:LYS:HB2	1.95	0.66
52:BU:47:TYR:O	52:BU:51:LYS:HG2	1.95	0.66
35:BA:2559:C:H2'	35:BA:2560:C:H6	1.60	0.66
15:AO:16:ALA:HB1	15:AO:21:ASP:OD1	1.96	0.66
15:AO:54:ARG:CG	15:AO:58:MET:CE	2.66	0.66
18:AR:37:VAL:HG23	18:AR:38:GLU:N	2.10	0.66
2:AB:39:ILE:O	2:AB:41:ILE:HD12	1.95	0.66
11:AK:126:ARG:O	11:AK:128:ALA:N	2.28	0.66
35:BA:485:C:H2'	35:BA:486:C:C6	2.30	0.66
56:BY:25:GLY:CA	56:BY:40:GLU:HG2	2.25	0.66
37:BC:47:LEU:HD11	37:BC:171:ILE:CG1	2.25	0.66
1:AA:28:G:N2	1:AA:556:C:C2	2.63	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:126:GLN:C	38:BD:193:VAL:HG21	2.16	0.66
5:AE:91:LEU:HD13	5:AE:120:THR:OG1	1.95	0.66
24:AY:21:HIS:CG	24:AY:22:PRO:CD	2.79	0.66
35:BA:472:A:H2'	35:BA:473:G:H5'	1.77	0.66
56:BY:86:ARG:CZ	56:BY:95:LYS:NZ	2.59	0.66
1:AA:1481:U:H2'	1:AA:1482:G:C8	2.30	0.66
40:BF:131:GLY:C	40:BF:138:GLU:HB3	2.16	0.66
26:B1:58:ILE:HD11	26:B1:91:LYS:HB2	1.77	0.66
35:BA:1331:A:O2'	35:BA:1332:G:H8	1.76	0.66
37:BC:103:ILE:HB	37:BC:127:MET:SD	2.35	0.66
35:BA:1430:C:H2'	35:BA:1431:U:H6	1.55	0.66
35:BA:696:G:N3	35:BA:696:G:H2'	2.11	0.66
35:BA:762:U:H5'	35:BA:763:G:C2	2.29	0.66
38:BD:9:TYR:OH	38:BD:13:ARG:CD	2.43	0.66
38:BD:9:TYR:CD1	38:BD:10:THR:N	2.54	0.66
39:BE:107:THR:HA	39:BE:163:GLU:O	1.95	0.66
51:BT:85:LYS:HZ3	51:BT:85:LYS:HB3	1.60	0.66
52:BU:27:LEU:HA	52:BU:30:LYS:HB2	1.77	0.66
6:AF:80:ARG:HG2	6:AF:88:VAL:CG2	2.25	0.66
2:AB:102:LEU:N	2:AB:102:LEU:HD12	2.11	0.66
40:BF:126:VAL:HG21	40:BF:129:PHE:CZ	2.30	0.66
4:AD:187:ARG:HH11	4:AD:187:ARG:HB3	1.59	0.66
35:BA:2870:C:OP1	49:BR:61:HIS:HE1	1.78	0.66
35:BA:271(L):U:C5'	35:BA:271(M):G:H5'	2.22	0.66
1:AA:506:G:H2'	1:AA:507:C:C6	2.30	0.66
13:AM:22:ILE:CB	13:AM:25:ILE:HD12	2.24	0.66
35:BA:470:A:H2'	35:BA:471:A:O4'	1.96	0.66
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.31	0.66
14:AN:12:ARG:HH11	14:AN:14:PRO:HG2	1.57	0.66
32:B7:23:ARG:C	32:B7:24:THR:HG22	2.16	0.66
42:BH:94:TYR:HB3	42:BH:107:VAL:HB	1.78	0.66
35:BA:2378:A:C2	50:BS:19:LYS:HE3	2.30	0.66
31:B6:15:GLU:HB2	31:B6:20:ASN:HB3	1.78	0.66
1:AA:427:U:OP1	4:AD:41:GLY:N	2.29	0.66
35:BA:303:U:H2'	35:BA:304:G:H8	1.60	0.66
35:BA:682:G:O2'	35:BA:683:C:H5'	1.94	0.66
35:BA:781:A:C2	35:BA:1777:U:O4'	2.47	0.66
35:BA:1830:C:O2'	35:BA:1831:G:H5'	1.95	0.66
38:BD:169:GLU:O	38:BD:171:ASP:N	2.28	0.66
39:BE:172:VAL:HA	39:BE:183:LEU:O	1.95	0.66
39:BE:195:LEU:HD12	39:BE:196:VAL:N	2.11	0.66
1:AA:858:G:C6	1:AA:869:G:N7	2.63	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:164:VAL:HG12	2:AB:165:VAL:N	2.09	0.66
35:BA:910:A:N6	48:BQ:12:GLN:HA	2.04	0.66
57:BZ:123:ASP:C	57:BZ:124:ILE:HG12	2.16	0.66
57:BZ:72:ARG:HH22	57:BZ:97:GLU:HB3	1.60	0.66
1:AA:1203:C:O2'	1:AA:1204:A:H5'	1.96	0.66
3:AC:21:ARG:C	3:AC:22:TRP:CD1	2.69	0.66
27:B2:36:ARG:CA	27:B2:39:ALA:HB3	2.25	0.66
35:BA:2839:G:H4'	49:BR:49:ASP:CG	2.16	0.66
35:BA:2311:A:O2'	35:BA:2312:U:C6	2.47	0.66
50:BS:28:VAL:HG12	50:BS:29:PHE:N	2.06	0.66
1:AA:326:G:O2'	1:AA:327:A:H5'	1.95	0.66
35:BA:2101:G:H2'	35:BA:2102:U:C5'	2.24	0.66
17:AQ:92:ARG:O	17:AQ:95:TYR:HB2	1.95	0.66
38:BD:273:ARG:HG3	38:BD:273:ARG:NH1	2.07	0.66
1:AA:231:G:O2'	1:AA:232:G:H5'	1.96	0.66
42:BH:154:PRO:HA	42:BH:160:LYS:O	1.95	0.66
35:BA:654(L):G:H2'	35:BA:654(M):C:H4'	1.77	0.66
36:BB:29:A:O2'	36:BB:30:C:H5'	1.94	0.66
26:B1:86:SER:O	26:B1:90:ILE:HG12	1.96	0.66
8:AH:63:LEU:N	8:AH:63:LEU:HD22	2.10	0.66
24:AY:403:LEU:HD11	24:AY:412:LEU:HB2	1.76	0.66
24:AY:425:VAL:HG21	24:AY:449:VAL:CG1	2.25	0.66
35:BA:2007:C:H5'	35:BA:2824:C:C1'	2.26	0.66
32:B7:3:ARG:NH2	35:BA:752:A:OP1	2.27	0.66
36:BB:104:U:O3'	57:BZ:72:ARG:HD2	1.96	0.66
48:BQ:67:ARG:HD2	48:BQ:105:GLU:OE1	1.96	0.66
35:BA:2601:C:H6	35:BA:2601:C:O5'	1.77	0.66
35:BA:2606:C:H2'	35:BA:2607:G:C8	2.29	0.66
35:BA:1071:G:N2	35:BA:1091:G:N7	2.44	0.66
1:AA:939:G:H2'	1:AA:940:C:C6	2.31	0.66
54:BW:26:GLY:H	54:BW:71:VAL:HB	1.59	0.66
35:BA:2284:C:H2'	35:BA:2285:C:H6	1.59	0.66
35:BA:2206:G:N3	35:BA:2206:G:H3'	2.11	0.66
1:AA:917:G:H2'	1:AA:918:A:O4'	1.96	0.66
20:AT:36:LEU:HD12	20:AT:59:ALA:CB	2.26	0.66
37:BC:120:MET:SD	37:BC:123:VAL:HG11	2.36	0.66
1:AA:1172:C:H2'	1:AA:1173:G:H8	1.60	0.66
28:B3:46:ASN:O	28:B3:46:ASN:ND2	2.26	0.66
1:AA:241:C:O2'	1:AA:242:C:H5'	1.94	0.66
35:BA:2075:U:H5'	35:BA:2597:G:H1'	1.76	0.66
1:AA:942:G:H21	9:AI:124:GLN:NE2	1.94	0.66
1:AA:675:A:H2'	1:AA:676:A:O4'	1.94	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:255:PHE:CE2	24:AY:268:MET:HA	2.31	0.66
24:AY:101:ARG:NH1	24:AY:301:PHE:O	2.28	0.66
1:AA:678:U:O2	1:AA:777:A:H4'	1.96	0.66
32:B7:10:ARG:HH21	35:BA:1378:A:H5''	1.60	0.66
51:BT:123:GLN:HA	51:BT:126:ALA:CB	2.25	0.66
52:BU:36:ARG:HA	52:BU:39:LEU:HG	1.78	0.66
2:AB:69:LEU:HD23	2:AB:159:PRO:HG3	1.77	0.66
48:BQ:58:PHE:O	48:BQ:58:PHE:HD1	1.79	0.66
19:AS:47:HIS:N	19:AS:62:ILE:HG21	2.10	0.66
56:BY:67:LEU:HD23	56:BY:68:HIS:N	2.09	0.66
35:BA:94(A):G:C3'	35:BA:95:G:H5''	2.26	0.66
40:BF:159:GLY:HA2	40:BF:164:ARG:NH2	2.11	0.66
4:AD:101:LEU:O	4:AD:105:VAL:HG23	1.95	0.66
37:BC:189:ILE:HD13	37:BC:214:VAL:CG2	2.25	0.66
41:BG:125:PHE:HB3	41:BG:130:ASN:O	1.96	0.66
35:BA:2389:G:H5''	35:BA:2390:U:C5'	2.26	0.66
50:BS:65:VAL:C	50:BS:69:VAL:HG12	2.16	0.66
35:BA:2747:G:C2	35:BA:2756:U:H5	2.13	0.66
35:BA:1367:A:C2'	35:BA:1368:G:H5'	2.26	0.66
39:BE:147:PRO:HB2	39:BE:149:ARG:HG2	1.78	0.66
1:AA:848:C:H2'	1:AA:849:C:C6	2.30	0.66
1:AA:600:C:H2'	1:AA:601:C:C6	2.30	0.66
5:AE:150:ARG:O	5:AE:151:LEU:HD23	1.95	0.66
1:AA:1348:U:H5'	9:AI:110:GLU:OE1	1.96	0.66
3:AC:88:ARG:HG3	3:AC:88:ARG:HH11	1.60	0.66
35:BA:1315:C:O2'	35:BA:1316:U:H5'	1.96	0.66
24:AY:261:GLY:O	24:AY:262:ASN:HB2	1.96	0.66
24:AY:420:SER:C	24:AY:422:GLU:H	1.98	0.66
30:B5:19:ARG:O	30:B5:21:SER:N	2.28	0.66
35:BA:1803:A:H2'	35:BA:1804:C:C6	2.29	0.66
35:BA:1827:C:C2	35:BA:1828:G:C8	2.83	0.66
35:BA:2009:G:H2'	35:BA:2010:G:C8	2.29	0.66
35:BA:2358:G:O2'	35:BA:2359:C:H5'	1.94	0.66
39:BE:117:MET:N	39:BE:122:PHE:HB2	2.10	0.66
49:BR:101:ALA:HB1	54:BW:38:TYR:HE1	1.61	0.66
8:AH:5:PRO:O	8:AH:8:ASP:N	2.29	0.66
15:AO:12:ILE:HG12	15:AO:27:VAL:HG12	1.77	0.66
15:AO:39:LEU:CD1	15:AO:56:LEU:CD2	2.72	0.66
2:AB:87:ARG:NH1	2:AB:223:ILE:HD11	2.08	0.66
57:BZ:119:GLU:HG3	57:BZ:122:ARG:CZ	2.24	0.66
48:BQ:141:GLN:HE22	57:BZ:72:ARG:HD3	1.59	0.66
22:AV:61:C:O2	22:AV:61:C:H2'	1.94	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:89:ARG:HH11	12:AL:91:LYS:CA	2.09	0.66
4:AD:28:SER:HB3	4:AD:29:PRO:CD	2.25	0.66
57:BZ:141:VAL:CA	57:BZ:144:LEU:HD23	2.24	0.66
1:AA:622:A:N7	1:AA:623:C:C4	2.63	0.66
35:BA:272(H):C:O5'	35:BA:272(H):C:H6	1.78	0.66
26:B1:27:GLU:HG3	26:B1:28:GLY:N	2.10	0.66
8:AH:44:PHE:CE2	8:AH:109:ILE:HG21	2.30	0.66
16:AP:73:LEU:HA	16:AP:76:GLN:NE2	2.11	0.66
16:AP:20:VAL:HG23	16:AP:34:GLU:O	1.96	0.66
26:B1:3:LYS:HD2	35:BA:1364:G:C8	2.31	0.66
2:AB:29:ALA:O	2:AB:32:ILE:HG22	1.96	0.66
54:BW:88:ARG:HH11	54:BW:88:ARG:CG	2.09	0.66
39:BE:142:GLY:C	39:BE:143:ASN:HD22	1.99	0.66
12:AL:41:ARG:NH1	12:AL:41:ARG:HB3	2.08	0.66
35:BA:608:A:H2'	35:BA:609:A:H8	1.59	0.66
35:BA:845:G:C8	35:BA:845:G:OP2	2.48	0.66
57:BZ:60:GLU:HA	57:BZ:65:GLN:O	1.95	0.66
35:BA:244:A:C2	35:BA:255:A:C4	2.83	0.66
35:BA:628:G:C2'	35:BA:629:G:C5'	2.69	0.66
35:BA:780:G:H21	35:BA:783:A:H62	1.41	0.66
38:BD:24:ILE:HG23	38:BD:82:ILE:C	2.17	0.66
39:BE:174:ASP:O	39:BE:183:LEU:HB2	1.96	0.66
52:BU:97:ASP:O	52:BU:100:VAL:HB	1.96	0.66
52:BU:9:VAL:C	52:BU:13:LYS:HE2	2.16	0.66
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.11	0.66
2:AB:17:PHE:O	2:AB:18:GLY:O	2.13	0.66
48:BQ:54:MET:O	48:BQ:56:ARG:N	2.29	0.66
35:BA:1786:A:C6	35:BA:1938:A:C2	2.83	0.66
12:AL:53:ARG:HG3	12:AL:69:TYR:HE2	1.60	0.66
1:AA:980:C:H5'	1:AA:981:U:C4	2.31	0.66
10:AJ:6:ILE:HA	10:AJ:97:GLU:O	1.95	0.66
19:AS:49:ILE:O	19:AS:60:VAL:CG1	2.44	0.66
4:AD:67:ILE:HG22	4:AD:67:ILE:O	1.96	0.66
1:AA:9:G:H5'	5:AE:122:GLU:OE1	1.96	0.66
5:AE:106:PRO:O	5:AE:110:LEU:HG	1.96	0.66
50:BS:53:SER:H	50:BS:55:ALA:HB3	1.61	0.66
36:BB:57:A:N7	41:BG:29:TRP:HD1	1.94	0.66
35:BA:1712:C:N4	35:BA:1747:G:H1	1.94	0.66
16:AP:67:THR:HG22	16:AP:68:ASP:N	2.11	0.66
55:BX:55:ASN:HB2	55:BX:80:ILE:CG1	2.26	0.66
54:BW:72:LYS:CE	54:BW:108:GLY:HA3	2.26	0.66
1:AA:1377:A:OP2	7:AG:94:ARG:CZ	2.44	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1377:A:OP2	7:AG:94:ARG:NH2	2.28	0.66
28:B3:35:ARG:HG3	28:B3:35:ARG:HH11	1.59	0.66
35:BA:1750:G:N3	35:BA:2860:A:C2	2.63	0.66
35:BA:1192:G:O2'	35:BA:1193:G:H5'	1.95	0.66
1:AA:707:C:H2'	1:AA:708:C:H6	1.61	0.66
35:BA:363(E):U:C5	35:BA:363(F):A:H2	2.14	0.66
5:AE:24:ARG:HH11	5:AE:24:ARG:HG2	1.59	0.66
11:AK:84:VAL:HG22	11:AK:110:ASP:HA	1.78	0.66
1:AA:145:G:N2	1:AA:178:C:C2	2.64	0.66
24:AY:99:THR:HA	24:AY:102:THR:HG1	1.59	0.66
24:AY:197:LYS:CG	24:AY:202:GLN:HG3	2.25	0.66
24:AY:246:PHE:CE2	24:AY:247:LEU:HD23	2.31	0.66
24:AY:449:VAL:HG21	24:AY:463:TYR:OH	1.96	0.66
35:BA:2530:A:C2'	35:BA:2531:A:H5''	2.24	0.66
9:AI:126:SER:O	9:AI:127:LYS:HB3	1.95	0.66
35:BA:1131:G:N7	35:BA:2025:C:H1'	2.10	0.66
35:BA:1922:G:H2'	35:BA:1923:U:H5'	1.77	0.66
35:BA:1934:C:C2'	35:BA:1935:G:H5'	2.26	0.66
35:BA:2628:C:H1'	35:BA:2781:A:C2'	2.19	0.66
35:BA:1007:C:OP1	45:BN:35:ARG:NH1	2.29	0.66
35:BA:2761:G:H2'	35:BA:2762:G:H5''	1.78	0.66
2:AB:97:TRP:CH2	2:AB:173:ALA:HA	2.31	0.66
35:BA:864:G:H2'	35:BA:865:C:C6	2.30	0.66
57:BZ:130:PRO:HA	57:BZ:133:ILE:HD11	1.78	0.66
22:AV:49:G:N3	22:AV:50:U:C6	2.64	0.66
1:AA:1152:A:OP1	10:AJ:68:HIS:HD2	1.79	0.66
35:BA:292:C:C2	35:BA:349:G:N2	2.64	0.66
4:AD:26:CYS:O	4:AD:31:CYS:HB2	1.96	0.66
37:BC:30:LYS:NZ	37:BC:30:LYS:HA	2.11	0.66
1:AA:799:G:H2'	1:AA:800:G:H8	1.59	0.66
35:BA:1579:A:H2'	35:BA:1580:A:C8	2.31	0.66
41:BG:11:TYR:HA	41:BG:15:VAL:CG2	2.26	0.66
36:BB:98:G:C5	36:BB:99:G:N7	2.64	0.66
35:BA:1317:A:H61	35:BA:1335:U:H3	1.44	0.66
1:AA:520:A:N6	1:AA:521:G:C2	2.64	0.66
24:AY:138:LEU:HD22	24:AY:253:PRO:HG3	1.75	0.65
1:AA:1515:C:O2'	1:AA:1516:G:H5'	1.96	0.65
1:AA:774:G:O2'	1:AA:775:G:H5'	1.96	0.65
35:BA:2014:A:H2'	35:BA:2015:A:C8	2.30	0.65
38:BD:226:MET:O	38:BD:227:ASN:OD1	2.13	0.65
39:BE:172:VAL:O	39:BE:173:VAL:C	2.34	0.65
49:BR:17:ARG:CB	49:BR:17:ARG:NH1	2.60	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:96:ALA:O	52:BU:98:LEU:N	2.29	0.65
15:AO:57:LEU:HB2	15:AO:58:MET:SD	2.36	0.65
19:AS:39:THR:HG22	19:AS:40:ILE:N	2.11	0.65
19:AS:47:HIS:CD2	29:B4:47:GLN:HB2	2.30	0.65
40:BF:102:PRO:HB2	40:BF:105:VAL:CG2	2.26	0.65
1:AA:687:A:N3	1:AA:688:G:H1'	2.11	0.65
29:B4:5:ILE:H	29:B4:5:ILE:HD13	1.61	0.65
1:AA:625:G:H5'	16:AP:10:GLY:HA2	1.77	0.65
36:BB:101:G:H2'	36:BB:102:A:C8	2.31	0.65
36:BB:23:G:C2	36:BB:61:G:C2	2.84	0.65
49:BR:76:VAL:CG2	49:BR:80:PHE:HE2	2.08	0.65
36:BB:98:G:C4	36:BB:99:G:C8	2.84	0.65
35:BA:1277:G:O2'	49:BR:24:GLN:HG2	1.97	0.65
1:AA:258:G:H2'	1:AA:259:G:C8	2.31	0.65
35:BA:1564:C:O2'	35:BA:1565:C:H5'	1.97	0.65
19:AS:21:GLU:HG3	19:AS:22:LEU:N	2.09	0.65
35:BA:132:G:H2'	35:BA:133:C:O4'	1.95	0.65
19:AS:24:ALA:O	19:AS:25:LYS:HG3	1.95	0.65
55:BX:50:LYS:HB3	55:BX:87:GLN:HE22	1.59	0.65
1:AA:933:G:C2	1:AA:1385:G:C2	2.84	0.65
3:AC:108:ASN:HB3	3:AC:111:LEU:HB2	1.78	0.65
35:BA:677:A:H2'	35:BA:678:C:C6	2.31	0.65
1:AA:53:A:C2	1:AA:359:U:O2	2.49	0.65
35:BA:1812:A:H2'	35:BA:1813:G:H8	1.60	0.65
35:BA:2715:C:H2'	35:BA:2716:U:C6	2.31	0.65
38:BD:181:GLU:CG	38:BD:272:ALA:HB1	2.26	0.65
38:BD:65:ILE:HD11	38:BD:88:ARG:HD3	1.77	0.65
45:BN:52:VAL:HG12	45:BN:53:VAL:N	2.10	0.65
45:BN:67:LEU:HA	45:BN:87:LEU:HD12	1.78	0.65
35:BA:1678:G:O5'	35:BA:1678:G:C8	2.45	0.65
6:AF:25:ILE:CA	6:AF:28:ARG:NH1	2.55	0.65
8:AH:32:LYS:O	8:AH:35:ILE:HB	1.95	0.65
2:AB:171:ALA:O	2:AB:174:VAL:HB	1.96	0.65
2:AB:59:GLU:HB2	2:AB:221:LEU:HD11	1.78	0.65
35:BA:2393:A:H2'	35:BA:2394:C:C6	2.24	0.65
1:AA:978:A:HO2'	1:AA:979:C:H6	1.44	0.65
3:AC:55:VAL:HG22	3:AC:68:VAL:HG13	1.77	0.65
42:BH:35:VAL:CG1	42:BH:72:ILE:CD1	2.73	0.65
49:BR:71:GLN:CA	49:BR:71:GLN:HE21	2.07	0.65
54:BW:65:LEU:HD23	54:BW:68:ARG:NE	2.10	0.65
35:BA:2066:C:C2	35:BA:2067:G:N7	2.64	0.65
3:AC:137:ALA:HA	3:AC:140:ARG:NH1	2.11	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:230:G:OP1	16:AP:33:ILE:CD1	2.44	0.65
1:AA:650:G:O2'	1:AA:651:C:H5'	1.95	0.65
22:AV:74:C:H2'	22:AV:75:C:H5'	1.78	0.65
7:AG:151:TYR:HA	7:AG:153:HIS:CE1	2.31	0.65
24:AY:109:CYS:CB	24:AY:137:ILE:CG2	2.47	0.65
24:AY:417:VAL:O	24:AY:421:GLU:N	2.25	0.65
38:BD:224:ALA:HA	38:BD:233:HIS:HB2	1.78	0.65
40:BF:82:ILE:CG1	40:BF:83:PHE:N	2.58	0.65
51:BT:16:ARG:HH12	51:BT:19:LEU:HG	1.61	0.65
15:AO:39:LEU:HB3	15:AO:56:LEU:CD2	2.21	0.65
18:AR:67:ALA:O	18:AR:71:LYS:HG3	1.95	0.65
11:AK:126:ARG:C	11:AK:128:ALA:N	2.48	0.65
48:BQ:140:ALA:HB1	57:BZ:99:TYR:HD2	1.61	0.65
1:AA:1058:G:H2'	1:AA:1059:C:C6	2.30	0.65
1:AA:973:G:H1'	10:AJ:55:LYS:NZ	2.12	0.65
40:BF:177:ALA:HB1	40:BF:178:PRO:HD2	1.77	0.65
37:BC:7:TYR:O	37:BC:10:LEU:HB2	1.96	0.65
35:BA:2306:C:H5	35:BA:2307:G:HO2'	1.42	0.65
1:AA:295:C:N3	1:AA:303:A:C2	2.65	0.65
1:AA:60:A:H4'	1:AA:61:G:O5'	1.96	0.65
1:AA:1403:C:H1'	1:AA:1500:A:N1	2.11	0.65
35:BA:271(M):G:H2'	35:BA:271(N):U:H5''	1.78	0.65
1:AA:1265:G:C4	1:AA:1266:G:N7	2.64	0.65
35:BA:2101:G:H2'	35:BA:2102:U:C4'	2.26	0.65
1:AA:196:A:N3	1:AA:222:U:H1'	2.11	0.65
13:AM:29:ARG:NH2	13:AM:64:TRP:HB3	2.12	0.65
22:AV:17(A):U:H4'	22:AV:18:G:OP1	1.95	0.65
35:BA:720:C:H2'	35:BA:721:C:H4'	1.78	0.65
35:BA:285:C:H2'	35:BA:286:C:C6	2.30	0.65
35:BA:2223:G:H5''	38:BD:269:PHE:CZ	2.32	0.65
35:BA:1789:A:C5'	38:BD:221:VAL:HG12	2.26	0.65
35:BA:1824:G:OP1	38:BD:52:ARG:CD	2.43	0.65
39:BE:105:THR:HG22	39:BE:106:GLY:N	2.11	0.65
39:BE:24:THR:HB	39:BE:184:VAL:HG23	1.79	0.65
39:BE:9:VAL:HG11	39:BE:25:VAL:HB	1.77	0.65
47:BP:50:ARG:HG2	47:BP:50:ARG:HH11	1.62	0.65
47:BP:97:PRO:C	47:BP:99:LEU:N	2.50	0.65
46:BO:4:PRO:HB3	46:BO:22:ILE:O	1.97	0.65
1:AA:824:C:H2'	1:AA:825:G:H8	1.62	0.65
1:AA:597:G:N2	8:AH:94:TYR:CE2	2.64	0.65
15:AO:27:VAL:O	15:AO:30:ALA:N	2.29	0.65
53:BV:5:VAL:HG21	53:BV:35:LEU:CB	2.26	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1910:G:H1	35:BA:1920:C:N4	1.94	0.65
35:BA:918:A:N1	35:BA:919:G:H1'	2.12	0.65
57:BZ:122:ARG:HG2	57:BZ:122:ARG:NH1	2.05	0.65
3:AC:123:GLN:HB3	3:AC:128:PHE:CD2	2.28	0.65
40:BF:202:PHE:O	40:BF:205:ARG:HB3	1.95	0.65
4:AD:96:LEU:N	4:AD:96:LEU:HD12	2.11	0.65
41:BG:96:ARG:O	41:BG:97:ASP:HB2	1.95	0.65
1:AA:319:G:H4'	1:AA:1468:A:H4'	1.77	0.65
1:AA:798:G:C6	1:AA:799:G:N7	2.65	0.65
6:AF:47:ARG:CB	6:AF:47:ARG:CZ	2.73	0.65
35:BA:205:G:O2'	35:BA:206:U:OP2	2.13	0.65
17:AQ:13:ASP:O	17:AQ:15:MET:N	2.28	0.65
11:AK:82:VAL:HG22	11:AK:83:ILE:N	2.11	0.65
11:AK:20:TYR:CE1	11:AK:83:ILE:HD12	2.32	0.65
41:BG:58:GLN:O	41:BG:61:ALA:HB3	1.96	0.65
17:AQ:63:ARG:HG2	17:AQ:64:PRO:HD2	1.77	0.65
1:AA:1316:G:O3'	14:AN:18:VAL:HG22	1.95	0.65
24:AY:168:PRO:CB	24:AY:171:TRP:HZ2	2.02	0.65
30:B5:15:ARG:O	30:B5:18:ALA:HB3	1.97	0.65
35:BA:1999:C:H2'	35:BA:2000:G:C8	2.31	0.65
35:BA:1826:G:H4'	38:BD:242:ARG:HH21	1.59	0.65
38:BD:181:GLU:C	38:BD:272:ALA:HB1	2.17	0.65
39:BE:179:GLU:HG3	39:BE:179:GLU:O	1.97	0.65
52:BU:92:ARG:CD	52:BU:94:ASN:HB3	2.22	0.65
46:BO:26:LYS:HB2	46:BO:30:ALA:HB3	1.79	0.65
1:AA:589:C:H1'	1:AA:653:A:N6	2.11	0.65
1:AA:832:C:O2'	1:AA:833:U:H5'	1.97	0.65
2:AB:97:TRP:HZ3	2:AB:172:ILE:CG2	2.09	0.65
57:BZ:99:TYR:HA	57:BZ:124:ILE:O	1.96	0.65
22:AV:58:A:C6	22:AV:61:C:C4	2.85	0.65
10:AJ:53:PRO:CA	14:AN:41:ARG:NH2	2.58	0.65
40:BF:154:VAL:HG13	40:BF:191:ARG:HB3	1.79	0.65
4:AD:117:ALA:O	4:AD:121:VAL:HG23	1.96	0.65
4:AD:5:ILE:HA	4:AD:115:ARG:HH12	1.60	0.65
41:BG:67:LYS:HZ2	41:BG:67:LYS:H	1.42	0.65
35:BA:616:G:H5''	40:BF:103:LYS:NZ	2.10	0.65
40:BF:33:LEU:HD21	40:BF:112:MET:SD	2.37	0.65
36:BB:105:A:H4'	57:BZ:89:PHE:CE1	2.31	0.65
2:AB:106:LYS:HD3	2:AB:106:LYS:H	1.61	0.65
39:BE:51:PHE:O	39:BE:53:PRO:N	2.30	0.65
3:AC:6:HIS:HD2	3:AC:8:ILE:HB	1.61	0.65
48:BQ:63:LYS:NZ	57:BZ:175:VAL:HG11	2.10	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:159:ARG:HH11	4:AD:159:ARG:HG3	1.61	0.65
48:BQ:60:ARG:HH11	48:BQ:60:ARG:HB2	1.61	0.65
1:AA:1527:C:O2'	1:AA:1528:U:H5'	1.96	0.65
41:BG:117:PHE:O	41:BG:118:ARG:HG3	1.97	0.65
35:BA:1372:U:O2'	35:BA:1373:A:H5'	1.96	0.65
45:BN:12:ARG:HB3	45:BN:50:ASP:OD2	1.97	0.65
46:BO:17:ARG:HH21	46:BO:99:PHE:HE2	1.44	0.65
24:AY:412:LEU:CD2	24:AY:436:LEU:HD12	2.26	0.65
24:AY:89:THR:HB	24:AY:99:THR:CG2	2.26	0.65
35:BA:2350:C:H2'	35:BA:2351:G:O4'	1.96	0.65
35:BA:2619:C:O2'	35:BA:2620:C:H5'	1.97	0.65
38:BD:78:LYS:O	38:BD:95:LEU:HA	1.97	0.65
35:BA:811:U:H6	47:BP:24:GLY:O	1.77	0.65
35:BA:1991:U:H2'	35:BA:1992:G:H5''	1.78	0.65
35:BA:2760:C:H2'	35:BA:2761:G:H5''	1.79	0.65
1:AA:14:U:H2'	1:AA:16:A:OP2	1.95	0.65
2:AB:153:ARG:HG3	2:AB:154:LEU:N	2.10	0.65
48:BQ:27:VAL:HG23	48:BQ:137:TYR:CG	2.32	0.65
48:BQ:72:LYS:HB3	48:BQ:94:VAL:HG22	1.78	0.65
35:BA:324:A:OP2	35:BA:1205:U:N3	2.30	0.65
35:BA:61:G:H1	35:BA:94:C:H42	1.45	0.65
1:AA:781:A:H4'	1:AA:1522:U:O2'	1.97	0.65
38:BD:111:LEU:HD12	38:BD:112:GLN:N	2.10	0.65
35:BA:1241:A:N6	35:BA:1242:A:N6	2.44	0.65
35:BA:396:G:H8	35:BA:396:G:O5'	1.80	0.65
10:AJ:35:SER:OG	10:AJ:73:ASP:HB2	1.97	0.65
56:BY:86:ARG:C	56:BY:88:LYS:HZ2	2.00	0.65
35:BA:81:G:H21	56:BY:2:ARG:NH1	1.92	0.65
31:B6:42:TRP:O	31:B6:44:ARG:N	2.29	0.65
41:BG:115:ARG:HH22	41:BG:136:ARG:CB	2.09	0.65
1:AA:1009:G:H2'	1:AA:1010:G:C8	2.32	0.65
1:AA:32:A:P	1:AA:398:C:H1'	2.36	0.65
1:AA:817:C:C5	1:AA:819:A:H1'	2.32	0.65
1:AA:515:G:O2'	1:AA:516:U:H5'	1.96	0.65
11:AK:79:SER:O	11:AK:80:VAL:HG13	1.96	0.65
24:AY:138:LEU:CD1	24:AY:268:MET:SD	2.85	0.65
24:AY:246:PHE:HA	24:AY:251:ILE:CG1	2.26	0.65
24:AY:389:GLY:O	24:AY:390:ILE:CG1	2.44	0.65
35:BA:1013:C:H2'	35:BA:1014:U:H5'	1.78	0.65
35:BA:745:G:H2'	35:BA:746:A:H5'	1.79	0.65
39:BE:35:GLN:O	39:BE:36:ARG:HD2	1.96	0.65
47:BP:88:LEU:CD2	47:BP:125:VAL:HG21	2.24	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:22:G:H4'	1:AA:885:G:C8	2.31	0.65
6:AF:80:ARG:HG2	6:AF:88:VAL:HG21	1.77	0.65
17:AQ:26:GLN:HG2	17:AQ:37:LYS:HG2	1.77	0.65
2:AB:102:LEU:CD1	2:AB:102:LEU:N	2.59	0.65
22:AV:59:A:H2'	22:AV:60:U:H5'	1.76	0.65
1:AA:1152:A:OP1	10:AJ:70:ARG:NH2	2.30	0.65
10:AJ:53:PRO:HB3	14:AN:42:ILE:HG13	1.79	0.65
19:AS:41:VAL:HB	19:AS:44:MET:HG2	1.79	0.65
40:BF:203:GLN:C	40:BF:205:ARG:H	2.00	0.65
35:BA:2319:G:H1'	35:BA:2320:A:C8	2.32	0.65
54:BW:21:VAL:O	54:BW:24:ILE:HG12	1.97	0.65
39:BE:51:PHE:H	39:BE:74:PRO:HG3	1.61	0.65
1:AA:959:A:H2'	1:AA:960:U:H4'	1.79	0.65
37:BC:74:VAL:HG13	37:BC:112:ALA:HB3	1.79	0.65
35:BA:1914:C:C5'	35:BA:1914:C:O2	2.45	0.65
35:BA:1376:C:C2'	35:BA:1377:G:H5'	2.27	0.65
4:AD:201:GLN:O	4:AD:205:GLU:HG3	1.96	0.65
12:AL:102:ARG:NH2	12:AL:110:VAL:HG22	2.12	0.65
10:AJ:28:ARG:C	10:AJ:30:SER:H	1.99	0.65
17:AQ:86:GLU:O	17:AQ:90:ILE:HG12	1.97	0.65
47:BP:86:LYS:HB2	47:BP:117:GLU:O	1.97	0.65
24:AY:16:PHE:HE2	24:AY:84:VAL:CG1	2.09	0.65
1:AA:774:G:C4	1:AA:775:G:C8	2.85	0.65
35:BA:1791:A:N6	35:BA:1829:A:H5'	2.12	0.65
35:BA:2073:C:O3'	38:BD:228:PRO:HB2	1.96	0.65
35:BA:751:A:C5	35:BA:789:A:C6	2.85	0.65
35:BA:2060:A:H2'	40:BF:68:LYS:HE2	1.78	0.65
51:BT:80:SER:CB	51:BT:81:PRO:CD	2.73	0.65
53:BV:91:TYR:HD1	53:BV:92:THR:N	1.95	0.65
18:AR:36:ASN:HA	18:AR:38:GLU:OE2	1.96	0.65
53:BV:32:THR:HG22	53:BV:33:VAL:N	2.11	0.65
10:AJ:54:PHE:CE2	10:AJ:55:LYS:HD2	2.32	0.65
10:AJ:64:GLU:HG2	14:AN:59:ALA:HA	1.78	0.65
35:BA:329:G:H1'	35:BA:477:A:H1'	1.77	0.65
55:BX:10:ALA:O	55:BX:28:PHE:HB2	1.96	0.65
35:BA:1103:A:H5'	35:BA:1104:C:OP2	1.95	0.65
37:BC:39:GLU:O	37:BC:178:ALA:N	2.30	0.65
57:BZ:108:PRO:HA	57:BZ:141:VAL:CG1	2.27	0.65
35:BA:2180:U:H2'	35:BA:2181:G:H8	1.61	0.65
9:AI:55:ALA:HB1	9:AI:59:PHE:HE2	1.60	0.65
49:BR:58:GLY:HA2	49:BR:80:PHE:CE1	2.32	0.65
1:AA:1423:G:H5''	46:BO:49:ARG:HH12	1.62	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:517:ARG:HG2	24:AY:517:ARG:HH11	1.62	0.65
35:BA:2152:G:O2'	35:BA:2153:G:H5'	1.97	0.65
1:AA:291:C:H2'	1:AA:292:G:C8	2.32	0.65
35:BA:1607:C:H4'	35:BA:1608:A:C5'	2.27	0.65
22:AV:20:U:C2'	22:AV:21:A:H4'	2.27	0.65
35:BA:303:U:H2'	35:BA:304:G:C8	2.31	0.65
17:AQ:82:MET:O	17:AQ:86:GLU:HG2	1.96	0.65
1:AA:484:G:H4'	1:AA:485:G:O5'	1.97	0.65
24:AY:173:ILE:HA	24:AY:227:LEU:HD11	1.77	0.65
24:AY:368:HIS:O	24:AY:369:ASN:HB2	1.96	0.65
37:BC:111:ASP:O	37:BC:136:LEU:HD21	1.97	0.65
35:BA:2365:G:O2'	35:BA:2366:A:C8	2.50	0.65
35:BA:957:A:H2	35:BA:2459:A:OP1	1.80	0.65
35:BA:2578:G:C5	39:BE:140:SER:HB2	2.32	0.65
35:BA:746:A:H2'	35:BA:2612:C:H5''	1.78	0.65
38:BD:33:LEU:CD2	38:BD:34:VAL:HG22	2.27	0.65
38:BD:4:LYS:O	38:BD:17:THR:HG23	1.97	0.65
39:BE:199:ARG:HB2	39:BE:199:ARG:CZ	2.27	0.65
51:BT:51:ARG:CG	51:BT:62:THR:OG1	2.38	0.65
35:BA:1663:C:HO2'	35:BA:1664:A:H8	1.45	0.65
1:AA:658:G:O2'	1:AA:659:U:H5'	1.96	0.65
15:AO:36:ILE:HD12	15:AO:60:VAL:HG22	1.78	0.65
18:AR:44:LEU:O	18:AR:45:SER:O	2.14	0.65
57:BZ:166:SER:HB2	57:BZ:167:PRO:C	2.17	0.65
42:BH:103:LEU:HD22	42:BH:125:VAL:HG22	1.78	0.65
57:BZ:51:ALA:HA	57:BZ:55:HIS:CD2	2.19	0.65
10:AJ:50:ILE:N	10:AJ:50:ILE:HD13	2.10	0.65
1:AA:1318:A:C1'	19:AS:37:ARG:NH2	2.57	0.65
27:B2:36:ARG:O	27:B2:39:ALA:HB3	1.97	0.65
40:BF:154:VAL:HG11	40:BF:193:VAL:CG2	2.27	0.65
1:AA:1299:A:N3	1:AA:1299:A:H5''	2.12	0.65
35:BA:1528:A:H2'	35:BA:1528:A:N3	2.10	0.65
1:AA:28:G:N2	1:AA:556:C:N3	2.45	0.65
50:BS:89:ARG:HB3	50:BS:92:TYR:CB	2.26	0.65
42:BH:94:TYR:CD1	42:BH:108:GLY:N	2.65	0.65
37:BC:120:MET:HE1	37:BC:123:VAL:HG11	1.79	0.65
37:BC:115:ALA:HB3	37:BC:120:MET:HE3	1.78	0.65
54:BW:36:LEU:HD11	54:BW:47:VAL:HG12	1.78	0.65
32:B7:37:LYS:NZ	35:BA:468:G:OP2	2.30	0.65
38:BD:265:PRO:O	38:BD:267:SER:O	2.15	0.65
38:BD:63:ARG:O	38:BD:64:ILE:O	2.15	0.65
40:BF:81:PRO:O	40:BF:82:ILE:O	2.14	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:53:ARG:O	51:BT:59:THR:HA	1.97	0.65
53:BV:46:VAL:O	53:BV:48:GLY:N	2.30	0.65
12:AL:10:LEU:O	17:AQ:32:TYR:CE2	2.49	0.65
2:AB:152:PHE:HD1	2:AB:153:ARG:H	1.45	0.65
2:AB:165:VAL:HG23	2:AB:166:ASP:H	1.62	0.65
35:BA:2787:C:O2	35:BA:2787:C:H2'	1.95	0.65
25:B0:26:TYR:CE2	35:BA:857:C:H1'	2.32	0.65
1:AA:971:G:H4'	1:AA:972:C:H5''	1.78	0.65
3:AC:120:VAL:HG12	3:AC:121:ALA:N	2.11	0.65
3:AC:52:LEU:HB3	3:AC:70:VAL:HG22	1.78	0.65
19:AS:26:GLY:HA2	29:B4:47:GLN:C	2.17	0.65
35:BA:887:A:N3	35:BA:887:A:H2'	2.11	0.65
27:B2:32:LEU:O	27:B2:35:LEU:HB3	1.97	0.65
35:BA:2334:G:H5'	50:BS:13:ARG:HD3	1.78	0.65
37:BC:192:PHE:CZ	37:BC:196:LEU:HD11	2.32	0.65
7:AG:34:GLY:C	7:AG:36:LYS:H	2.00	0.65
35:BA:1525:G:H2'	35:BA:1526:G:H8	1.62	0.65
1:AA:625:G:O2'	1:AA:626:U:H5'	1.97	0.65
42:BH:37:VAL:HG22	42:BH:72:ILE:CD1	2.26	0.65
1:AA:1500:A:H5''	1:AA:1508:G:H5''	1.78	0.65
37:BC:180:PHE:HB3	37:BC:184:LYS:CB	2.23	0.65
35:BA:45:C:OP2	35:BA:215:G:H5''	1.97	0.65
42:BH:147:ASN:O	42:BH:151:ILE:HD11	1.97	0.65
14:AN:13:THR:H	14:AN:14:PRO:HD2	1.54	0.65
25:B0:45:PHE:HB2	25:B0:59:LEU:HD11	1.77	0.65
46:BO:120:GLU:HB2	51:BT:68:TYR:CE2	2.32	0.65
35:BA:1149:G:O2'	35:BA:1150:C:H5'	1.96	0.65
35:BA:271(D):G:O2'	35:BA:271(E):U:H5'	1.95	0.65
55:BX:50:LYS:O	55:BX:83:VAL:HA	1.97	0.65
35:BA:1083:U:H1'	35:BA:1086:A:H61	1.61	0.65
35:BA:560:C:H2'	35:BA:561:G:C8	2.32	0.65
35:BA:366:C:H5''	35:BA:403:U:N3	2.11	0.65
35:BA:1661:G:O2'	35:BA:1662:C:H5'	1.97	0.64
35:BA:1820:U:O2	38:BD:201:HIS:HB3	1.97	0.64
35:BA:1925:C:H2'	35:BA:1926:U:H5'	1.78	0.64
35:BA:629:G:H5'	35:BA:629:G:C8	2.31	0.64
38:BD:148:GLU:CB	38:BD:151:LYS:HD3	2.22	0.64
39:BE:25:VAL:HG22	39:BE:183:LEU:CD1	2.27	0.64
39:BE:62:PRO:C	39:BE:64:LYS:N	2.48	0.64
45:BN:23:LEU:O	45:BN:25:ARG:N	2.30	0.64
47:BP:112:LEU:O	47:BP:128:HIS:HB2	1.98	0.64
48:BQ:27:VAL:HG23	48:BQ:137:TYR:CD2	2.32	0.64

*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''	2.27	0.64
1:AA:1151:A:N3	10:AJ:39:PRO:HG3	2.12	0.64
3:AC:120:VAL:O	3:AC:122:GLU:N	2.29	0.64
1:AA:1060:C:H4'	10:AJ:51:ARG:HB3	1.78	0.64
1:AA:1359:C:C6	14:AN:35:ARG:NH2	2.65	0.64
49:BR:48:VAL:HA	49:BR:51:LEU:CB	2.26	0.64
35:BA:877:U:C2'	35:BA:878:A:H5''	2.27	0.64
38:BD:121:PRO:C	38:BD:123:ALA:H	2.00	0.64
24:AY:123:THR:HA	24:AY:126:LEU:HD12	1.79	0.64
1:AA:1376:U:H2'	1:AA:1377:A:H8	1.61	0.64
13:AM:56:LEU:CD1	13:AM:60:VAL:HG21	2.26	0.64
35:BA:2645:G:H8	35:BA:2645:G:OP2	1.78	0.64
46:BO:11:ALA:O	46:BO:98:VAL:HG23	1.97	0.64
1:AA:1258:G:H2'	1:AA:1259:C:C6	2.32	0.64
1:AA:726:C:O2'	1:AA:727:G:H5'	1.97	0.64
35:BA:1530:C:H2'	35:BA:1531:C:C6	2.32	0.64
42:BH:18:GLU:HB2	42:BH:25:LYS:HG3	1.80	0.64
24:AY:6:TYR:HA	24:AY:360:TYR:CE2	2.28	0.64
33:B8:8:LYS:HZ3	33:B8:11:LYS:HZ1	1.42	0.64
35:BA:1922:G:H2'	35:BA:1923:U:H6	1.62	0.64
35:BA:2076:U:O2	35:BA:2076:U:H2'	1.96	0.64
35:BA:253:C:O2'	35:BA:254:G:H5'	1.98	0.64
35:BA:673:C:C2'	35:BA:674:G:H5'	2.28	0.64
35:BA:744:G:H2'	35:BA:745:G:O4'	1.97	0.64
38:BD:267:SER:HA	38:BD:270:ILE:HG13	1.79	0.64
38:BD:65:ILE:HB	38:BD:67:PHE:CE2	2.31	0.64
38:BD:69:ARG:NH2	38:BD:105:ILE:HG13	2.12	0.64
35:BA:2679:A:P	39:BE:160:TYR:HH	2.20	0.64
39:BE:111:ARG:HD2	39:BE:161:GLY:HA3	1.79	0.64
18:AR:45:SER:OG	18:AR:49:LYS:HB2	1.97	0.64
1:AA:1081:G:O2'	1:AA:1082:G:H5'	1.96	0.64
57:BZ:96:VAL:HG12	57:BZ:130:PRO:HG3	1.80	0.64
57:BZ:28:MET:HG3	57:BZ:37:VAL:HG11	1.79	0.64
13:AM:78:ILE:HG22	13:AM:79:LYS:N	2.12	0.64
1:AA:1118:C:OP1	9:AI:104:ARG:NH1	2.30	0.64
9:AI:100:GLY:O	9:AI:103:THR:N	2.30	0.64
4:AD:96:LEU:HA	4:AD:99:SER:HB2	1.79	0.64
1:AA:109:A:O3'	1:AA:110:C:H6	1.81	0.64
42:BH:41:MET:CG	42:BH:42:ARG:N	2.59	0.64
42:BH:65:HIS:C	42:BH:67:LEU:H	1.99	0.64
38:BD:123:ALA:HB3	38:BD:131:LEU:HD21	1.77	0.64
38:BD:125:ILE:HD12	38:BD:137:PRO:CD	2.26	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:181:PRO:HB2	37:BC:182:PRO:CD	2.28	0.64
5:AE:94:ALA:HB1	5:AE:98:THR:HG21	1.79	0.64
1:AA:1469:G:H2'	1:AA:1470:G:C8	2.32	0.64
41:BG:16:ARG:NH1	41:BG:28:VAL:HG13	2.11	0.64
1:AA:1251:A:O2'	1:AA:1252:A:H5'	1.96	0.64
35:BA:2080:G:C2	35:BA:2241:A:C2	2.85	0.64
2:AB:138:LEU:HD23	2:AB:138:LEU:N	2.11	0.64
24:AY:488:LYS:HD3	24:AY:518:TYR:OH	1.98	0.64
1:AA:33:A:OP2	1:AA:398:C:H5'	1.98	0.64
2:AB:92:TYR:HD1	2:AB:93:VAL:N	1.95	0.64
35:BA:398:G:H2'	35:BA:399:G:C8	2.33	0.64
40:BF:43:LYS:HG3	40:BF:43:LYS:O	1.97	0.64
32:B7:16:HIS:CA	32:B7:21:ARG:HH12	2.10	0.64
32:B7:7:PRO:HG3	35:BA:1612:C:H5'	1.78	0.64
35:BA:2634:G:H2'	35:BA:2635:C:C6	2.33	0.64
46:BO:6:THR:HG22	46:BO:7:TYR:H	1.62	0.64
46:BO:85:VAL:HG21	46:BO:114:ILE:HG12	1.79	0.64
1:AA:719:C:H3'	1:AA:720:C:C6	2.32	0.64
8:AH:5:PRO:O	8:AH:8:ASP:CB	2.45	0.64
35:BA:2158:A:H4'	35:BA:2159:G:H5'	1.77	0.64
57:BZ:77:ASP:O	57:BZ:79:ARG:N	2.30	0.64
37:BC:91:ALA:HB2	37:BC:153:ILE:HG21	1.79	0.64
30:B5:25:LEU:HD12	54:BW:23:LEU:HB2	1.79	0.64
1:AA:783:C:O5'	1:AA:783:C:H6	1.79	0.64
18:AR:30:ASP:OD2	18:AR:32:ARG:HB3	1.97	0.64
2:AB:136:VAL:O	2:AB:140:HIS:HB2	1.97	0.64
35:BA:443:A:N6	40:BF:41:LEU:O	2.24	0.64
46:BO:11:ALA:HB1	46:BO:99:PHE:O	1.97	0.64
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.32	0.64
24:AY:247:LEU:O	24:AY:249:GLY:N	2.30	0.64
24:AY:402:ARG:HG2	24:AY:403:LEU:N	2.12	0.64
35:BA:1267:U:H2'	35:BA:1268:A:C8	2.33	0.64
35:BA:1652:A:H2'	35:BA:1653:G:C8	2.32	0.64
35:BA:1656:C:H2'	35:BA:1657:C:C6	2.31	0.64
35:BA:963:U:H2'	35:BA:964:C:C6	2.33	0.64
38:BD:24:ILE:HG22	38:BD:25:THR:N	2.11	0.64
39:BE:81:ILE:O	39:BE:81:ILE:HG22	1.97	0.64
47:BP:101:VAL:CG2	47:BP:102:ARG:H	2.09	0.64
47:BP:95:VAL:HG23	47:BP:125:VAL:HG23	1.79	0.64
35:BA:18:C:O3'	52:BU:23:GLY:HA2	1.98	0.64
52:BU:83:LEU:HD12	52:BU:83:LEU:H	1.62	0.64
46:BO:7:TYR:C	46:BO:8:LEU:HD12	2.18	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:720:C:H3'	1:AA:721:G:C8	2.32	0.64
15:AO:42:HIS:HD2	15:AO:42:HIS:O	1.80	0.64
1:AA:1075:C:H4'	1:AA:1101:A:H62	1.62	0.64
2:AB:157:ARG:HB3	2:AB:157:ARG:CZ	2.28	0.64
42:BH:162:ILE:CD1	42:BH:162:ILE:O	2.45	0.64
35:BA:498:G:H2'	35:BA:499:U:H6	1.63	0.64
9:AI:46:ALA:HB1	9:AI:77:ILE:HG22	1.79	0.64
4:AD:15:GLU:OE2	4:AD:66:ARG:NH1	2.30	0.64
1:AA:937:A:H2'	1:AA:938:A:C8	2.31	0.64
41:BG:139:LEU:HD22	41:BG:146:TYR:HB3	1.79	0.64
17:AQ:75:ARG:HG3	17:AQ:75:ARG:NH1	2.10	0.64
35:BA:1889:A:H1'	35:BA:2087:G:O4'	1.97	0.64
12:AL:45:PRO:HD2	12:AL:51:ALA:H	1.61	0.64
1:AA:1143:G:H2'	1:AA:1144:G:C8	2.32	0.64
24:AY:431:ILE:N	24:AY:431:ILE:HD13	2.09	0.64
35:BA:1165:U:H2'	35:BA:1166:C:C6	2.32	0.64
26:B1:19:GLN:NE2	35:BA:2081:C:OP1	2.30	0.64
57:BZ:7:ALA:HB3	57:BZ:61:LEU:CD2	2.28	0.64
11:AK:82:VAL:HG22	11:AK:83:ILE:H	1.62	0.64
35:BA:154:G:H2'	35:BA:154(A):C:C6	2.32	0.64
46:BO:36:GLY:HA3	46:BO:109:LYS:HE3	1.79	0.64
17:AQ:8:GLY:HA3	17:AQ:21:VAL:HG12	1.80	0.64
43:BJ:121:UNK:O	43:BJ:122:UNK:O	2.15	0.64
24:AY:241:PHE:HZ	24:AY:275:TRP:CD1	2.16	0.64
35:BA:1310:G:O4'	35:BA:1611:C:H4'	1.97	0.64
35:BA:1925:C:H2'	35:BA:1925:C:O2	1.97	0.64
35:BA:2716:U:H2'	35:BA:2717:G:C8	2.32	0.64
32:B7:12:ARG:NH2	35:BA:465:G:OP1	2.25	0.64
35:BA:783:A:C8	35:BA:784:A:H4'	2.33	0.64
39:BE:31:CYS:O	39:BE:49:LEU:HD12	1.97	0.64
2:AB:17:PHE:CD1	2:AB:17:PHE:O	2.48	0.64
12:AL:36:VAL:HG12	12:AL:82:VAL:HA	1.78	0.64
3:AC:128:PHE:O	3:AC:130:VAL:N	2.31	0.64
19:AS:47:HIS:O	19:AS:62:ILE:HG22	1.97	0.64
11:AK:62:GLN:HG3	11:AK:66:LEU:HD21	1.79	0.64
1:AA:403:C:H4'	4:AD:122:ARG:CZ	2.27	0.64
35:BA:1495:A:H3'	35:BA:1496:A:C2	2.32	0.64
35:BA:1166:C:H2'	35:BA:1167:U:C6	2.33	0.64
16:AP:21:VAL:HG11	16:AP:59:TRP:HE1	1.61	0.64
32:B7:18:PHE:CZ	32:B7:22:MET:SD	2.90	0.64
8:AH:48:TYR:O	8:AH:49:GLU:HB3	1.98	0.64
45:BN:74:ARG:HH21	45:BN:83:LYS:HD3	1.63	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:115:ALA:CB	24:AY:148:ILE:HB	2.28	0.64
4:AD:80:GLU:OE1	4:AD:80:GLU:HA	1.97	0.64
24:AY:369:ASN:HB2	24:AY:373:ILE:CG1	2.26	0.64
24:AY:420:SER:C	24:AY:422:GLU:N	2.48	0.64
42:BH:104:GLU:HG3	42:BH:104:GLU:O	1.98	0.64
25:B0:33:ALA:O	35:BA:2352:A:C2	2.50	0.64
35:BA:2729:G:H1'	39:BE:187:ALA:HB2	1.78	0.64
35:BA:584:C:OP1	52:BU:5:LYS:HB2	1.97	0.64
39:BE:137:HIS:HB3	39:BE:138:PRO:CD	2.27	0.64
51:BT:30:VAL:HA	51:BT:44:ASP:HA	1.77	0.64
18:AR:56:THR:CB	18:AR:58:LEU:HD12	2.27	0.64
2:AB:87:ARG:HE	2:AB:233:SER:HB3	1.62	0.64
35:BA:2323:G:O2'	35:BA:2324:C:H5'	1.97	0.64
36:BB:75:G:H2'	57:BZ:85:HIS:HE1	1.63	0.64
57:BZ:100:VAL:CG1	57:BZ:137:ILE:HG12	2.27	0.64
35:BA:2523:G:O4'	35:BA:2765:A:N7	2.31	0.64
35:BA:310:A:O2'	35:BA:311:A:H2'	1.97	0.64
35:BA:1407:C:H5'	35:BA:1408:C:OP2	1.97	0.64
35:BA:145:G:H3'	35:BA:146:G:H5''	1.78	0.64
37:BC:29:VAL:HG13	37:BC:222:VAL:HG21	1.80	0.64
1:AA:390:C:C4'	16:AP:28:ARG:HH21	2.05	0.64
35:BA:2346:A:H5'	35:BA:2383:G:C1'	2.27	0.64
1:AA:1504:G:OP1	1:AA:1507:A:H4'	1.97	0.64
13:AM:40:ASN:HD22	13:AM:43:THR:CG2	2.11	0.64
26:B1:50:ARG:HG2	26:B1:59:THR:HG22	1.80	0.64
36:BB:22:U:H2'	36:BB:23:G:C8	2.32	0.64
1:AA:1356:G:H2'	1:AA:1357:A:H8	1.57	0.64
14:AN:12:ARG:HB3	14:AN:14:PRO:CD	2.26	0.64
1:AA:1495:U:OP1	13:AM:125:ARG:HD3	1.98	0.64
1:AA:436:C:H2'	1:AA:437:U:C6	2.33	0.64
17:AQ:69:LYS:O	17:AQ:70:ARG:HD2	1.98	0.64
35:BA:2539:C:O2'	35:BA:2540:C:H5'	1.98	0.64
42:BH:154:PRO:O	42:BH:155:SER:CB	2.45	0.64
4:AD:64:LEU:HD22	4:AD:203:VAL:HG21	1.78	0.64
1:AA:259:G:O2'	1:AA:260:G:H5'	1.97	0.64
24:AY:144:LEU:H	24:AY:258:THR:HB	1.62	0.64
24:AY:303:ILE:HG12	24:AY:316:ALA:HB2	1.78	0.64
24:AY:32:LYS:O	24:AY:35:LEU:HB2	1.98	0.64
24:AY:401:ILE:HG12	24:AY:463:TYR:CE2	2.32	0.64
1:AA:949:A:O2'	1:AA:950:U:H5'	1.98	0.64
1:AA:680:C:H2'	1:AA:681:C:C6	2.33	0.64
33:B8:37:SER:O	33:B8:41:ILE:HG22	1.98	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1350:C:N4	35:BA:1382:G:N1	2.45	0.64
35:BA:1837:C:N3	35:BA:1899:G:C6	2.65	0.64
35:BA:661:C:H2'	35:BA:662:G:C8	2.32	0.64
35:BA:962:G:O2'	35:BA:963:U:H5'	1.97	0.64
38:BD:165:ILE:CD1	38:BD:165:ILE:N	2.61	0.64
35:BA:2599:G:N7	38:BD:236:GLY:HA2	2.13	0.64
45:BN:108:PRO:HG2	45:BN:113:GLY:HA3	1.79	0.64
49:BR:14:SER:HA	49:BR:17:ARG:HH21	1.62	0.64
35:BA:1754:C:H5'	51:BT:101:PHE:CZ	2.33	0.64
54:BW:29:LEU:CD2	54:BW:33:ARG:HD2	2.28	0.64
15:AO:74:ASP:C	15:AO:74:ASP:OD1	2.35	0.64
2:AB:187:LEU:HD13	2:AB:205:ASP:HB3	1.79	0.64
35:BA:2632:A:N3	39:BE:61:ARG:NH1	2.46	0.64
35:BA:966:G:O4'	35:BA:2267:A:N6	2.30	0.64
48:BQ:97:VAL:HG13	48:BQ:101:ARG:HG2	1.79	0.64
22:AV:1:C:C2'	22:AV:2:G:H5'	2.28	0.64
1:AA:1066:C:H5'	1:AA:1067:A:OP2	1.98	0.64
35:BA:894:C:O2'	35:BA:895:U:C6	2.49	0.64
56:BY:63:LYS:HG2	56:BY:64:GLU:OE1	1.96	0.64
40:BF:102:PRO:HB2	40:BF:105:VAL:HG23	1.80	0.64
35:BA:2305:A:C2	35:BA:2306:C:C1'	2.80	0.64
41:BG:109:VAL:HG12	41:BG:110:ALA:N	2.11	0.64
5:AE:105:VAL:N	5:AE:106:PRO:HD2	2.13	0.64
1:AA:106:C:N4	20:AT:14:LYS:NZ	2.45	0.64
35:BA:2283:C:N4	35:BA:2389:G:C5	2.66	0.64
5:AE:77:PRO:HG2	5:AE:142:LEU:HD22	1.79	0.64
16:AP:69:THR:CA	16:AP:72:ARG:HB3	2.28	0.64
35:BA:1384:A:N3	35:BA:1405:U:H1'	2.13	0.64
28:B3:5:LYS:HB3	28:B3:57:GLU:HB3	1.80	0.64
19:AS:22:LEU:HD13	19:AS:27:GLU:HB2	1.80	0.64
1:AA:751:U:H3'	1:AA:752:G:H8	1.62	0.64
24:AY:259:ALA:O	24:AY:261:GLY:N	2.30	0.64
24:AY:449:VAL:O	24:AY:453:LEU:HG	1.98	0.64
35:BA:1697:G:H3'	35:BA:1698:A:H5''	1.78	0.64
35:BA:1921:G:O2'	35:BA:1922:G:H5'	1.98	0.64
49:BR:103:ARG:O	49:BR:111:LEU:CD1	2.46	0.64
51:BT:35:LYS:NZ	51:BT:41:ARG:HD2	2.13	0.64
53:BV:74:LYS:O	53:BV:75:PHE:CB	2.45	0.64
8:AH:37:ARG:NH2	8:AH:41:ARG:HH22	1.95	0.64
12:AL:6:THR:H	12:AL:9:GLN:NE2	1.96	0.64
2:AB:204:ASN:HD22	2:AB:205:ASP:N	1.95	0.64
48:BQ:62:GLY:HA3	48:BQ:109:VAL:HG23	1.78	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:21:THR:OG1	48:BQ:99:PRO:O	2.16	0.64
56:BY:14:LEU:HA	56:BY:24:VAL:HG22	1.79	0.64
5:AE:7:GLU:O	5:AE:8:GLU:HB3	1.97	0.64
20:AT:26:ASN:O	20:AT:30:LYS:HB2	1.98	0.64
42:BH:41:MET:CE	42:BH:52:VAL:HG22	2.28	0.64
47:BP:66:GLY:O	47:BP:67:MET:HB2	1.97	0.64
1:AA:958:A:H2	19:AS:54:GLY:O	1.81	0.64
13:AM:60:VAL:HG12	13:AM:61:GLU:N	2.13	0.64
1:AA:429:U:H1'	1:AA:430:A:H5''	1.80	0.64
35:BA:1313:U:H4'	35:BA:1333:C:OP2	1.97	0.64
45:BN:47:ALA:H	45:BN:48:MET:HE2	1.61	0.64
35:BA:1478:G:H2'	35:BA:1479:G:H8	1.62	0.64
35:BA:2008:C:H2'	35:BA:2009:G:C8	2.32	0.64
35:BA:2437:U:H2'	35:BA:2438:U:H6	1.63	0.64
1:AA:865:A:C2	1:AA:866:C:C2	2.86	0.64
35:BA:199:A:C6	35:BA:2433:A:H2'	2.33	0.64
35:BA:862:G:H2'	35:BA:863:A:C8	2.32	0.64
3:AC:64:VAL:CG1	3:AC:66:VAL:HG23	2.28	0.64
40:BF:155:LEU:HD11	40:BF:176:LEU:HD13	1.80	0.64
4:AD:176:LEU:HD12	4:AD:177:ASP:N	2.13	0.64
11:AK:52:GLY:H	11:AK:55:LYS:HE3	1.62	0.64
57:BZ:108:PRO:HA	57:BZ:141:VAL:HG12	1.80	0.64
49:BR:62:ALA:HA	49:BR:65:LEU:CB	2.28	0.64
35:BA:632:A:H2'	35:BA:633:A:C8	2.33	0.64
50:BS:58:LEU:HG	50:BS:59:LYS:H	1.61	0.64
1:AA:185:A:H2'	1:AA:186:C:C6	2.33	0.64
25:B0:37:LEU:HD21	25:B0:60:PHE:C	2.19	0.64
7:AG:144:MET:O	7:AG:147:ALA:HB3	1.97	0.64
7:AG:54:THR:O	7:AG:56:GLN:N	2.31	0.64
39:BE:103:ASP:OD2	39:BE:202:LYS:HE3	1.98	0.64
35:BA:553:G:O2'	35:BA:554:U:H5'	1.97	0.64
35:BA:2168:G:H2'	35:BA:2170:A:OP2	1.96	0.64
24:AY:164:ILE:CD1	24:AY:252:THR:CG2	2.69	0.64
33:B8:8:LYS:NZ	33:B8:11:LYS:HE2	2.13	0.64
35:BA:1199:U:O2'	35:BA:1200:C:O4'	2.16	0.64
35:BA:2639:A:H2'	35:BA:2640:G:O4'	1.97	0.64
35:BA:666:G:H4'	47:BP:49:ARG:HE	1.63	0.64
35:BA:999:U:C2'	35:BA:1000:A:H5'	2.27	0.64
47:BP:23:PRO:O	47:BP:29:LYS:O	2.16	0.64
51:BT:20:PRO:HG2	51:BT:85:LYS:O	1.97	0.64
52:BU:88:ILE:HG13	52:BU:88:ILE:O	1.97	0.64
53:BV:4:ILE:HA	53:BV:12:TYR:O	1.98	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:12:ILE:HD13	15:AO:22:THR:HG22	1.79	0.64
1:AA:243:A:C2	1:AA:246:A:C8	2.86	0.64
1:AA:1075:C:H4'	1:AA:1101:A:N6	2.12	0.64
33:B8:10:ALA:O	33:B8:13:ARG:HG2	1.97	0.64
1:AA:975:A:H4'	1:AA:976:G:C5'	2.20	0.64
3:AC:43:LEU:C	3:AC:45:LYS:H	1.99	0.64
14:AN:50:LYS:O	14:AN:52:GLN:N	2.31	0.64
19:AS:61:TYR:O	19:AS:62:ILE:HB	1.97	0.64
19:AS:31:ILE:O	19:AS:31:ILE:HG23	1.97	0.64
1:AA:622:A:C8	1:AA:623:C:C4	2.86	0.64
35:BA:601:C:C5'	40:BF:108:LYS:NZ	2.61	0.64
31:B6:30:THR:O	31:B6:31:PRO:C	2.36	0.64
35:BA:2391:G:O6	35:BA:2427:C:H1'	1.97	0.64
38:BD:126:GLN:O	38:BD:193:VAL:CG1	2.44	0.64
50:BS:34:HIS:HB2	50:BS:36:TYR:HE1	1.63	0.64
49:BR:100:LEU:HD21	49:BR:112:ALA:O	1.98	0.64
1:AA:189(A):C:H2'	1:AA:189(B):C:H6	1.63	0.64
24:AY:490:GLU:OE2	24:AY:490:GLU:O	2.15	0.64
1:AA:956:U:O2'	1:AA:957:U:H5'	1.98	0.64
36:BB:54:G:H21	36:BB:55:U:H1'	1.63	0.64
24:AY:197:LYS:HB2	24:AY:202:GLN:CG	2.27	0.63
24:AY:395:PRO:CA	24:AY:441:VAL:HG22	2.26	0.63
32:B7:29:LYS:O	32:B7:33:ARG:HB2	1.98	0.63
32:B7:43:THR:O	32:B7:44:PRO:C	2.34	0.63
35:BA:1613:G:H1	35:BA:1617:C:C2'	2.11	0.63
35:BA:2514:U:H3	35:BA:2570:G:H1	1.45	0.63
35:BA:2577:A:O5'	35:BA:2577:A:H8	1.79	0.63
38:BD:31:LYS:O	38:BD:35:LYS:CB	2.46	0.63
51:BT:16:ARG:CB	51:BT:16:ARG:HH11	2.09	0.63
52:BU:108:GLU:O	52:BU:111:GLU:N	2.31	0.63
46:BO:5:GLN:HG3	46:BO:5:GLN:O	1.97	0.63
15:AO:12:ILE:HG23	15:AO:27:VAL:HG11	1.77	0.63
15:AO:30:ALA:O	15:AO:33:THR:HG22	1.98	0.63
35:BA:2807:G:H3'	35:BA:2808:U:H5''	1.79	0.63
12:AL:90:VAL:HG11	12:AL:93:LEU:HD12	1.80	0.63
3:AC:138:VAL:HG23	3:AC:149:ALA:CB	2.28	0.63
40:BF:158:THR:HB	40:BF:195:ASP:HB2	1.80	0.63
49:BR:96:ARG:NH1	49:BR:96:ARG:HB2	2.13	0.63
1:AA:939:G:H5''	7:AG:102:ARG:HH22	1.61	0.63
1:AA:1423:G:C5'	46:BO:49:ARG:HH12	2.11	0.63
1:AA:436:C:C5'	4:AD:156:GLU:OE1	2.46	0.63
35:BA:814:C:H2'	35:BA:815:C:H6	1.63	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BW:57:ASN:O	54:BW:61:ASN:HB2	1.99	0.63
17:AQ:83:ASP:O	17:AQ:86:GLU:HB2	1.97	0.63
24:AY:315:VAL:HG21	24:AY:346:LEU:HD11	1.79	0.63
35:BA:1267:U:C6	35:BA:2012:G:N2	2.66	0.63
35:BA:1845:G:C2	35:BA:1846:G:C4	2.86	0.63
35:BA:2845:G:H2'	35:BA:2846:G:C8	2.33	0.63
40:BF:81:PRO:HG2	40:BF:82:ILE:HG22	1.81	0.63
47:BP:55:ARG:HG2	47:BP:57:THR:H	1.63	0.63
51:BT:50:ILE:HD12	51:BT:50:ILE:N	2.13	0.63
51:BT:85:LYS:HB3	51:BT:85:LYS:HZ2	1.63	0.63
35:BA:1155:A:OP1	52:BU:55:ARG:NE	2.28	0.63
1:AA:907:A:C4	1:AA:908:A:C8	2.85	0.63
2:AB:10:LEU:C	2:AB:10:LEU:HD13	2.18	0.63
48:BQ:135:ASP:O	48:BQ:138:ASP:OD2	2.16	0.63
54:BW:76:VAL:HG23	54:BW:103:ILE:HG23	1.81	0.63
19:AS:63:THR:HG22	19:AS:66:MET:HG2	1.79	0.63
40:BF:159:GLY:N	40:BF:178:PRO:HD3	2.14	0.63
42:BH:118:PRO:HD2	42:BH:121:ILE:CG2	2.28	0.63
7:AG:148:ASN:C	7:AG:150:ALA:N	2.51	0.63
35:BA:2287:A:N6	35:BA:2344:U:N3	2.36	0.63
38:BD:124:PRO:C	38:BD:129:ASN:HD22	2.01	0.63
36:BB:17:C:C2'	36:BB:18:G:H5'	2.28	0.63
50:BS:23:ARG:HB3	50:BS:24:LEU:CD2	2.25	0.63
35:BA:2206:G:C2	35:BA:2207:G:H5'	2.32	0.63
2:AB:30:ARG:O	2:AB:32:ILE:N	2.28	0.63
2:AB:30:ARG:C	2:AB:32:ILE:H	2.01	0.63
1:AA:918:A:N6	1:AA:919:A:N1	2.46	0.63
1:AA:935:A:H2	1:AA:1383:C:H42	1.46	0.63
35:BA:529:A:C5	35:BA:2042:A:C2	2.86	0.63
35:BA:2398:U:H5'	35:BA:2399:G:OP2	1.98	0.63
35:BA:1862:G:N2	35:BA:1881:C:C2	2.67	0.63
19:AS:17:GLU:O	19:AS:17:GLU:HG2	1.97	0.63
30:B5:44:THR:HG22	30:B5:45:VAL:N	2.14	0.63
35:BA:1833:U:C2	35:BA:1834:U:C5	2.86	0.63
35:BA:1904:G:O2'	35:BA:1905:C:H5'	1.99	0.63
38:BD:182:LEU:N	38:BD:272:ALA:HB1	2.13	0.63
45:BN:70:LYS:HB3	45:BN:87:LEU:HB2	1.81	0.63
51:BT:32:TYR:N	51:BT:32:TYR:CD1	2.66	0.63
51:BT:19:LEU:CD1	51:BT:78:LEU:HD23	2.28	0.63
46:BO:14:THR:HG21	46:BO:94:ARG:HB2	1.78	0.63
1:AA:673:G:C5	1:AA:734:G:C2	2.87	0.63
5:AE:12:LEU:HD22	5:AE:13:ILE:O	1.99	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AU:16:GLY:O	21:AU:17:THR:HG23	1.99	0.63
27:B2:32:LEU:HA	27:B2:53:LEU:HD13	1.78	0.63
35:BA:2841:C:H2'	35:BA:2842:G:C8	2.33	0.63
1:AA:688:G:C2'	1:AA:689:C:H5'	2.27	0.63
1:AA:1342:C:O2'	1:AA:1343:G:H5'	1.97	0.63
36:BB:102:A:H5'	36:BB:103:G:OP2	1.97	0.63
36:BB:70:C:O2'	36:BB:71:C:H5'	1.98	0.63
35:BA:2146:C:H4'	35:BA:2147:G:C8	2.33	0.63
54:BW:6:ILE:HA	54:BW:104:THR:HA	1.80	0.63
35:BA:1569:A:C2	35:BA:1570:A:C5	2.86	0.63
35:BA:560:C:H2'	35:BA:561:G:H8	1.64	0.63
35:BA:2796:U:C3'	35:BA:2799:C:H5'	2.28	0.63
24:AY:255:PHE:CZ	24:AY:275:TRP:HH2	2.10	0.63
24:AY:315:VAL:HG12	24:AY:316:ALA:N	2.13	0.63
1:AA:1491:G:C6	1:AA:1492:A:C6	2.87	0.63
32:B7:37:LYS:HZ3	32:B7:39:ARG:HH21	1.46	0.63
35:BA:1846:G:N2	35:BA:1847:A:C6	2.66	0.63
35:BA:2453:A:O2'	35:BA:2572:A:H1'	1.98	0.63
35:BA:531:C:C5	35:BA:2035:G:C2	2.86	0.63
28:B3:11:SER:HB2	35:BA:988:A:O5'	1.98	0.63
38:BD:180:GLY:O	38:BD:182:LEU:HD12	1.98	0.63
34:B9:2:LYS:HD3	34:B9:33:LYS:O	1.98	0.63
2:AB:200:ILE:CG2	2:AB:202:PRO:HD3	2.28	0.63
1:AA:1304:G:H1'	1:AA:1334:G:N2	2.13	0.63
13:AM:90:LEU:O	13:AM:91:ARG:CB	2.45	0.63
1:AA:980:C:OP2	1:AA:981:U:O4	2.16	0.63
35:BA:1061:U:H3	44:BK:55:UNK:C	2.11	0.63
4:AD:175:SER:HB3	4:AD:186:LEU:HD11	1.79	0.63
35:BA:307:G:N2	35:BA:310:A:O5'	2.31	0.63
4:AD:58:LEU:HD12	4:AD:59:ARG:NH1	2.07	0.63
11:AK:91:ARG:O	11:AK:94:ALA:HB3	1.98	0.63
41:BG:60:LEU:O	41:BG:60:LEU:HD13	1.98	0.63
8:AH:44:PHE:HE2	8:AH:109:ILE:HG21	1.62	0.63
36:BB:69:G:N3	36:BB:69:G:H2'	2.13	0.63
1:AA:528:C:H4'	1:AA:535:A:C5	2.34	0.63
13:AM:14:ARG:N	13:AM:44:ARG:HH11	1.96	0.63
41:BG:107:LEU:HD21	41:BG:178:PHE:CE1	2.34	0.63
35:BA:1882:C:C2'	35:BA:1883:G:H5'	2.28	0.63
24:AY:513:LEU:HD22	24:AY:517:ARG:NH2	2.13	0.63
4:AD:125:HIS:O	4:AD:126:ILE:HD12	1.97	0.63
47:BP:94:GLU:HG3	47:BP:124:LYS:HB2	1.80	0.63
35:BA:1569:A:N3	35:BA:1570:A:C8	2.67	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1353:G:C4	1:AA:1354:C:C5	2.85	0.63
31:B6:16:CYS:O	31:B6:16:CYS:SG	2.56	0.63
3:AC:137:ALA:C	3:AC:139:GLN:H	2.02	0.63
35:BA:382:G:O2'	35:BA:383:U:H5'	1.97	0.63
53:BV:3:ALA:CB	53:BV:14:VAL:HG22	2.28	0.63
1:AA:788:U:O2'	1:AA:789:U:H5'	1.98	0.63
11:AK:15:ALA:HA	11:AK:77:MET:HA	1.79	0.63
24:AY:154:LEU:HB3	24:AY:155:LEU:HD12	1.79	0.63
24:AY:197:LYS:HG3	24:AY:202:GLN:HG3	1.79	0.63
24:AY:249:GLY:O	24:AY:250:GLU:CB	2.46	0.63
30:B5:41:PRO:HG2	30:B5:44:THR:CB	2.29	0.63
33:B8:2:PRO:O	33:B8:4:MET:N	2.32	0.63
35:BA:811:U:H4'	35:BA:1251:C:O4'	1.97	0.63
35:BA:1899:G:N2	35:BA:1902:C:N4	2.42	0.63
35:BA:2014:A:C2'	35:BA:2015:A:C8	2.82	0.63
35:BA:2006:C:O2'	35:BA:2823:A:N3	2.26	0.63
39:BE:7:VAL:C	39:BE:26:ILE:HG22	2.19	0.63
45:BN:34:LEU:HD21	45:BN:120:LEU:CD2	2.18	0.63
48:BQ:77:LYS:HD3	48:BQ:81:VAL:HG13	1.80	0.63
51:BT:35:LYS:HZ1	51:BT:41:ARG:HD2	1.63	0.63
51:BT:59:THR:OG1	51:BT:78:LEU:CD1	2.47	0.63
2:AB:97:TRP:HZ3	2:AB:172:ILE:HG22	1.64	0.63
28:B3:52:HIS:CG	36:BB:83:G:H4'	2.33	0.63
3:AC:122:GLU:O	3:AC:125:GLU:N	2.31	0.63
40:BF:18:ARG:NH2	40:BF:199:TRP:HZ3	1.96	0.63
11:AK:43:SER:HB2	11:AK:71:LYS:NZ	2.13	0.63
5:AE:55:VAL:O	5:AE:58:ALA:HB3	1.98	0.63
37:BC:41:VAL:CG1	37:BC:214:VAL:HG13	2.28	0.63
57:BZ:113:ALA:O	57:BZ:114:GLY:C	2.36	0.63
41:BG:25:TYR:CD2	41:BG:31:VAL:HA	2.32	0.63
50:BS:12:PHE:N	50:BS:12:PHE:CD1	2.59	0.63
13:AM:6:GLY:O	13:AM:8:GLU:N	2.26	0.63
24:AY:62:MET:CG	24:AY:451:ALA:HB3	2.29	0.63
35:BA:2240:C:O2'	35:BA:2241:A:H5'	1.98	0.63
35:BA:654(J):A:C8	35:BA:654(L):G:H1'	2.30	0.63
35:BA:1625:C:H2'	35:BA:1626:G:O4'	1.98	0.63
31:B6:15:GLU:OE2	31:B6:41:PRO:CB	2.46	0.63
35:BA:1064:C:H3'	35:BA:1065:U:C5'	2.29	0.63
35:BA:1215:G:O2'	35:BA:1216:G:H5'	1.97	0.63
24:AY:86:LEU:HD12	24:AY:87:LEU:H	1.63	0.63
35:BA:2641:G:H2'	35:BA:2642:G:O4'	1.97	0.63
38:BD:176:ARG:C	38:BD:177:LEU:HD23	2.19	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1568:G:P	38:BD:63:ARG:HH22	2.22	0.63
39:BE:197:ILE:HD11	39:BE:199:ARG:HH22	1.64	0.63
39:BE:77:ILE:CG2	39:BE:78:LEU:H	1.96	0.63
47:BP:16:ARG:HH11	47:BP:16:ARG:HB2	1.61	0.63
49:BR:2:ARG:HG3	49:BR:2:ARG:HH11	1.63	0.63
35:BA:1654:A:OP1	49:BR:3:HIS:N	2.32	0.63
8:AH:11:THR:C	8:AH:13:ILE:N	2.50	0.63
15:AO:68:ARG:HD2	15:AO:72:ARG:HH21	1.63	0.63
2:AB:229:VAL:CG1	2:AB:230:VAL:N	2.61	0.63
35:BA:956:G:OP2	48:BQ:87:LYS:NZ	2.30	0.63
22:AV:15:G:H3'	22:AV:16:C:C5'	2.28	0.63
13:AM:75:ALA:HB1	13:AM:79:LYS:CE	2.25	0.63
19:AS:39:THR:HG22	19:AS:40:ILE:H	1.62	0.63
24:AY:307:MET:HG2	24:AY:313:ASP:N	2.14	0.63
35:BA:55:G:H2'	35:BA:56:A:H8	1.63	0.63
35:BA:1348:G:C2'	35:BA:1349:A:H5''	2.28	0.63
11:AK:63:LEU:HD23	11:AK:63:LEU:N	2.13	0.63
5:AE:51:VAL:HB	5:AE:52:PRO:HD3	1.79	0.63
37:BC:6:ARG:HH22	37:BC:10:LEU:CD2	2.10	0.63
41:BG:83:ARG:HB2	41:BG:84:LYS:HD2	1.79	0.63
1:AA:623:C:H2'	1:AA:624:C:C6	2.33	0.63
40:BF:110:LEU:CD2	40:BF:183:VAL:HG13	2.27	0.63
50:BS:29:PHE:CD1	50:BS:29:PHE:C	2.68	0.63
54:BW:27:LYS:H	54:BW:71:VAL:HG23	1.63	0.63
38:BD:131:LEU:HD22	38:BD:132:PRO:HD2	1.80	0.63
26:B1:76:ARG:NH2	26:B1:95:LEU:CD1	2.62	0.63
36:BB:57:A:H8	41:BG:27:ASN:ND2	1.87	0.63
35:BA:2110:G:O2'	35:BA:2111:C:OP1	2.12	0.63
49:BR:71:GLN:HE21	49:BR:71:GLN:HA	1.63	0.63
12:AL:102:ARG:HH21	12:AL:110:VAL:HG22	1.64	0.63
35:BA:438:G:H2'	35:BA:440:G:H8	1.63	0.63
37:BC:151:GLU:HA	37:BC:154:ARG:HG2	1.81	0.63
24:AY:32:LYS:HZ3	24:AY:260:LEU:HA	1.62	0.63
24:AY:177:LYS:HE2	35:BA:2654:A:OP1	1.99	0.63
35:BA:695:G:C4	35:BA:696:G:C8	2.87	0.63
28:B3:13:ILE:HD11	35:BA:989:G:C4	2.34	0.63
38:BD:62:TYR:CE1	38:BD:64:ILE:HA	2.32	0.63
39:BE:68:ALA:C	39:BE:70:ALA:H	2.02	0.63
52:BU:36:ARG:HG2	52:BU:40:PHE:CE2	2.33	0.63
15:AO:39:LEU:CG	15:AO:56:LEU:HD21	2.27	0.63
15:AO:75:PRO:O	15:AO:79:ARG:HG3	1.98	0.63
41:BG:60:LEU:O	41:BG:63:ILE:HG12	1.98	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:84:PHE:CZ	5:AE:133:TYR:HB3	2.33	0.63
41:BG:7:LEU:O	41:BG:11:TYR:N	2.31	0.63
42:BH:26:VAL:HG22	42:BH:26:VAL:O	1.99	0.63
35:BA:2147:G:H2'	35:BA:2148:G:H5'	1.81	0.63
1:AA:961:U:O2'	1:AA:962:C:O5'	2.17	0.63
36:BB:77:U:C4	36:BB:99:G:N2	2.66	0.63
37:BC:72:VAL:HG22	37:BC:74:VAL:HG23	1.80	0.63
2:AB:130:ARG:NH2	2:AB:134:GLU:HG3	2.14	0.63
1:AA:360:A:H8	1:AA:360:A:O5'	1.80	0.63
24:AY:158:VAL:O	24:AY:164:ILE:N	2.30	0.63
24:AY:201:ILE:HA	24:AY:262:ASN:HD22	1.62	0.63
24:AY:177:LYS:HG2	35:BA:2654:A:OP1	1.98	0.63
1:AA:680:C:O2'	1:AA:681:C:H5'	1.98	0.63
30:B5:19:ARG:HA	35:BA:2046:G:O5'	1.99	0.63
35:BA:1802:A:H2'	35:BA:1803:A:C8	2.34	0.63
35:BA:1922:G:H2'	35:BA:1923:U:C5'	2.29	0.63
35:BA:1927:A:N6	35:BA:1928:A:C2	2.67	0.63
35:BA:1791:A:O3'	38:BD:206:LEU:HD11	1.98	0.63
38:BD:24:ILE:HG23	38:BD:82:ILE:O	1.98	0.63
38:BD:96:HIS:CE1	38:BD:102:LYS:HZ1	2.17	0.63
39:BE:65:GLY:HA2	39:BE:70:ALA:HB1	1.80	0.63
51:BT:26:ASP:CA	51:BT:48:ILE:HG23	2.29	0.63
22:AV:62:C:C3'	22:AV:63:G:H5''	2.29	0.63
19:AS:47:HIS:NE2	29:B4:47:GLN:HB2	2.13	0.63
40:BF:33:LEU:HD21	40:BF:112:MET:CG	2.29	0.63
35:BA:2390:U:O2'	35:BA:2391:G:H5'	1.99	0.63
50:BS:101:LEU:C	50:BS:102:ALA:O	2.33	0.63
35:BA:2080:G:C2	35:BA:2241:A:N3	2.67	0.63
33:B8:53:PRO:CA	33:B8:56:GLU:OE1	2.46	0.63
19:AS:21:GLU:CG	19:AS:22:LEU:N	2.61	0.63
24:AY:415:GLY:HA3	24:AY:457:TYR:CE1	2.34	0.63
24:AY:398:PHE:CE1	24:AY:470:THR:HA	2.33	0.63
25:B0:32:ARG:HA	25:B0:64:ASP:OD1	1.98	0.63
28:B3:13:ILE:HD11	35:BA:989:G:C5	2.34	0.63
30:B5:12:SER:O	30:B5:16:ARG:N	2.31	0.63
33:B8:61:LEU:CD1	33:B8:62:LEU:H	2.12	0.63
35:BA:1799:G:O3'	38:BD:260:ARG:NH2	2.32	0.63
35:BA:991:C:H6	35:BA:991:C:H5'	1.63	0.63
38:BD:165:ILE:HA	38:BD:175:LEU:CD2	2.28	0.63
35:BA:1658:C:OP1	39:BE:132:HIS:ND1	2.32	0.63
40:BF:82:ILE:O	40:BF:83:PHE:HB2	1.98	0.63
51:BT:62:THR:HG22	51:BT:75:ILE:HG13	1.81	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:91:ASP:O	52:BU:95:LEU:HB2	1.99	0.63
45:BN:2:LYS:HZ1	52:BU:95:LEU:HD21	1.62	0.63
2:AB:152:PHE:O	2:AB:153:ARG:CG	2.47	0.63
2:AB:224:GLN:O	2:AB:226:ARG:N	2.31	0.63
35:BA:918:A:N3	36:BB:80:U:O2'	2.26	0.63
48:BQ:65:PHE:O	48:BQ:104:PHE:HB3	1.98	0.63
35:BA:2605:U:C2'	35:BA:2606:C:C6	2.73	0.63
9:AI:99:LEU:O	9:AI:101:PHE:N	2.31	0.63
56:BY:73:ARG:HB3	56:BY:80:GLY:CA	2.29	0.63
35:BA:336:C:O3'	56:BY:7:VAL:HG22	1.99	0.63
28:B3:28:LEU:N	28:B3:28:LEU:HD23	2.14	0.63
16:AP:72:ARG:HG2	16:AP:73:LEU:N	2.14	0.63
35:BA:2111:C:H1'	35:BA:2118:U:C4'	2.29	0.63
56:BY:86:ARG:NH1	56:BY:95:LYS:NZ	2.45	0.63
4:AD:147:ALA:CB	4:AD:182:LYS:HG2	2.29	0.63
54:BW:66:GLU:O	54:BW:68:ARG:N	2.31	0.63
2:AB:122:PHE:HA	2:AB:139:LYS:HZ3	1.64	0.63
16:AP:5:ARG:C	16:AP:6:LEU:HD12	2.19	0.63
35:BA:1044:G:OP2	43:BJ:4:UNK:N	2.31	0.63
35:BA:282:A:HO2'	35:BA:283:A:H8	1.45	0.63
11:AK:111:ASP:O	11:AK:112:THR:C	2.37	0.63
24:AY:171:TRP:N	24:AY:182:VAL:HG13	2.13	0.62
30:B5:40:LYS:HG3	30:B5:41:PRO:O	1.99	0.62
35:BA:2681:C:H5	35:BA:2727:G:C2	2.17	0.62
35:BA:976:C:N3	35:BA:987:G:N2	2.46	0.62
49:BR:38:VAL:HG21	49:BR:110:PRO:HB2	1.81	0.62
52:BU:96:ALA:C	52:BU:98:LEU:N	2.52	0.62
1:AA:16:A:O2'	1:AA:17:U:H5'	1.98	0.62
1:AA:586:C:OP1	17:AQ:34:LYS:NZ	2.32	0.62
35:BA:919:G:H4'	36:BB:81:G:O4'	1.99	0.62
1:AA:1061:G:C2'	1:AA:1062:U:H5'	2.29	0.62
27:B2:47:ASN:O	27:B2:50:ILE:HB	1.99	0.62
27:B2:32:LEU:HD12	27:B2:57:ILE:HG13	1.81	0.62
35:BA:292:C:O2'	35:BA:293:U:H5'	1.99	0.62
19:AS:75:ALA:N	19:AS:76:PRO:HD2	2.14	0.62
5:AE:50:GLU:CG	5:AE:52:PRO:HD2	2.11	0.62
7:AG:40:ALA:HB1	7:AG:44:TYR:CE2	2.34	0.62
41:BG:139:LEU:HB2	41:BG:146:TYR:HD1	1.63	0.62
41:BG:82:LEU:HD21	41:BG:86:MET:HE1	1.81	0.62
35:BA:2289:G:N2	35:BA:2344:U:N3	2.47	0.62
24:AY:21:HIS:HD2	24:AY:122:ARG:CB	2.12	0.62
24:AY:22:PRO:O	24:AY:24:ALA:N	2.32	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BS:89:ARG:NH2	50:BS:91:PRO:HG2	2.13	0.62
41:BG:16:ARG:NE	41:BG:31:VAL:HG11	2.13	0.62
1:AA:1128:C:H2'	1:AA:1139:G:N7	2.14	0.62
51:BT:108:ARG:HB3	51:BT:111:ARG:HH22	1.63	0.62
55:BX:55:ASN:HB2	55:BX:80:ILE:HD11	1.81	0.62
35:BA:1293:C:H2'	35:BA:1294:U:H6	1.64	0.62
35:BA:654:A:C8	35:BA:654(V):A:H4'	2.34	0.62
35:BA:1409:C:H2'	35:BA:1410:G:H8	1.64	0.62
24:AY:305:ALA:CB	24:AY:423:GLY:H	2.12	0.62
24:AY:320:VAL:O	24:AY:361:PRO:HA	1.99	0.62
24:AY:419:LEU:HD23	24:AY:424:ALA:HB3	1.79	0.62
24:AY:420:SER:CB	24:AY:427:VAL:HG22	2.27	0.62
33:B8:42:ARG:HG3	35:BA:2349:G:OP2	1.99	0.62
35:BA:675:A:O2'	40:BF:67:GLN:NE2	2.32	0.62
38:BD:198:ASN:ND2	38:BD:198:ASN:C	2.52	0.62
47:BP:113:LYS:HA	47:BP:129:ALA:O	1.99	0.62
51:BT:92:GLY:C	51:BT:94:ALA:H	2.02	0.62
53:BV:39:LEU:HD22	53:BV:39:LEU:N	2.13	0.62
1:AA:580:U:H5''	15:AO:58:MET:HG3	1.81	0.62
1:AA:730:G:H2'	1:AA:731:G:O4'	1.99	0.62
8:AH:87:SER:OG	8:AH:93:VAL:N	2.32	0.62
1:AA:753:A:H5''	15:AO:69:TYR:CZ	2.34	0.62
35:BA:2811:G:P	39:BE:60:ASN:HB2	2.39	0.62
12:AL:86:ARG:O	12:AL:86:ARG:HG2	1.99	0.62
1:AA:1152:A:P	10:AJ:70:ARG:HH22	2.21	0.62
35:BA:1057:A:H2	35:BA:1082:U:H3	1.41	0.62
35:BA:1484:G:H2'	35:BA:1485:G:C5'	2.18	0.62
35:BA:2311:A:H2'	35:BA:2312:U:C5	2.34	0.62
1:AA:1375:A:H2'	1:AA:1376:U:O4'	1.98	0.62
20:AT:51:GLU:O	20:AT:55:ILE:HG12	1.99	0.62
10:AJ:33:GLN:HB2	10:AJ:75:ILE:HD11	1.80	0.62
35:BA:194:G:H2'	35:BA:195:A:O4'	1.98	0.62
35:BA:2673:G:H5'	35:BA:2673:G:H8	1.64	0.62
35:BA:1605:C:C2'	35:BA:1606:G:H5'	2.29	0.62
31:B6:19:ARG:NH1	31:B6:43:CYS:SG	2.72	0.62
37:BC:120:MET:CE	37:BC:123:VAL:HG11	2.29	0.62
35:BA:1782:C:O5'	35:BA:1782:C:H6	1.82	0.62
35:BA:2564:A:H2'	35:BA:2565:A:O4'	1.99	0.62
1:AA:1447:A:N3	1:AA:1447:A:H2'	2.14	0.62
57:BZ:45:ASP:OD2	57:BZ:49:ARG:NH2	2.32	0.62
16:AP:12:LYS:O	16:AP:13:HIS:HB2	1.98	0.62
1:AA:1134:G:H2'	1:AA:1135:U:H5'	1.80	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:26:LYS:HD3	24:AY:89:THR:O	2.00	0.62
32:B7:2:LYS:HE3	32:B7:6:GLN:CG	2.29	0.62
35:BA:1248:G:OP2	40:BF:92:PRO:HG3	2.00	0.62
35:BA:1286:A:H2'	35:BA:1288:U:OP2	1.99	0.62
35:BA:2292:C:H2'	35:BA:2293:C:H6	1.64	0.62
35:BA:2465:C:O2'	35:BA:2466:C:H5'	2.00	0.62
38:BD:176:ARG:CD	38:BD:182:LEU:HD11	2.29	0.62
38:BD:186:HIS:NE2	38:BD:188:GLU:HB2	2.14	0.62
47:BP:50:ARG:CG	47:BP:51:PHE:H	2.12	0.62
52:BU:70:ARG:HA	52:BU:74:LEU:O	2.00	0.62
1:AA:861:G:O2'	1:AA:862:C:H5'	1.98	0.62
15:AO:42:HIS:CD2	15:AO:42:HIS:C	2.72	0.62
3:AC:35:GLU:OE1	3:AC:59:ARG:NH1	2.31	0.62
3:AC:83:ARG:HG3	3:AC:87:LEU:CD1	2.28	0.62
19:AS:11:VAL:CG2	19:AS:38:SER:HB2	2.27	0.62
11:AK:57:THR:HG22	11:AK:60:ALA:CB	2.29	0.62
29:B4:9:LEU:HD21	29:B4:26:SER:HA	1.81	0.62
40:BF:185:ASP:HA	40:BF:188:ARG:CG	2.28	0.62
35:BA:2230:G:O5'	35:BA:2230:G:H8	1.83	0.62
50:BS:74:ALA:HB1	50:BS:103:GLU:CG	2.29	0.62
1:AA:1376:U:C2	1:AA:1377:A:N7	2.68	0.62
41:BG:33:ARG:N	41:BG:162:THR:HB	2.13	0.62
35:BA:816:C:N3	35:BA:1192:G:C2	2.67	0.62
54:BW:37:ARG:HG3	54:BW:37:ARG:NH1	2.14	0.62
35:BA:360:G:O2'	35:BA:361:G:H5'	1.99	0.62
43:BJ:74:UNK:C	43:BJ:76:UNK:H	2.13	0.62
27:B2:68:ARG:HG2	27:B2:68:ARG:O	1.99	0.62
24:AY:110:LEU:HD12	24:AY:138:LEU:O	1.99	0.62
24:AY:512:ARG:O	24:AY:516:GLU:CG	2.42	0.62
1:AA:1231:G:O2'	1:AA:1232:U:H5'	1.99	0.62
30:B5:45:VAL:HG22	30:B5:51:TYR:CD1	2.35	0.62
35:BA:2043:C:OP1	35:BA:2777:G:O2'	2.15	0.62
35:BA:2444:G:P	40:BF:68:LYS:HE3	2.39	0.62
35:BA:628:G:H2'	35:BA:629:G:H5'	1.81	0.62
35:BA:940:G:H2'	35:BA:941:A:O4'	1.98	0.62
38:BD:31:LYS:N	38:BD:104:TYR:OH	2.32	0.62
38:BD:34:VAL:HG23	38:BD:34:VAL:O	1.98	0.62
45:BN:9:VAL:CG1	45:BN:39:ARG:HH22	2.12	0.62
51:BT:52:ILE:HG12	51:BT:61:PHE:CB	2.29	0.62
53:BV:49:THR:HB	53:BV:50:PRO:CD	2.29	0.62
34:B9:7:VAL:HG22	34:B9:34:GLN:HG3	1.82	0.62
48:BQ:106:VAL:O	48:BQ:107:ALA:HB2	2.00	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:12:GLN:OE1	48:BQ:72:LYS:HA	1.99	0.62
3:AC:43:LEU:O	3:AC:47:LEU:HB2	1.99	0.62
24:AY:308:ASP:O	24:AY:309:PRO:C	2.36	0.62
40:BF:140:LEU:O	40:BF:143:ALA:HB3	1.99	0.62
40:BF:165:ARG:HG2	40:BF:168:ARG:NH2	2.14	0.62
4:AD:3:ARG:HD3	4:AD:3:ARG:O	2.00	0.62
24:AY:342:ILE:HD11	24:AY:345:ALA:HB1	1.78	0.62
18:AR:31:LEU:H	18:AR:31:LEU:HD23	1.64	0.62
26:B1:50:ARG:O	26:B1:51:VAL:HG13	1.98	0.62
41:BG:25:TYR:CE2	41:BG:32:PRO:HD3	2.34	0.62
28:B3:8:LEU:HA	28:B3:54:VAL:HG22	1.79	0.62
57:BZ:175:VAL:HB	57:BZ:176:PRO:CD	2.30	0.62
25:B0:38:VAL:CG1	25:B0:59:LEU:HD12	2.29	0.62
1:AA:125:U:H2'	1:AA:126:G:C8	2.34	0.62
17:AQ:10:VAL:HG12	17:AQ:53:LEU:HA	1.80	0.62
31:B6:44:ARG:C	31:B6:45:LYS:HD3	2.20	0.62
1:AA:306:G:C2'	1:AA:307:C:H5'	2.29	0.62
1:AA:1457:G:H2'	1:AA:1458:G:H8	1.64	0.62
35:BA:271(C):C:H2'	35:BA:271(D):G:H8	1.64	0.62
35:BA:304:G:H1	35:BA:313:C:H42	1.47	0.62
45:BN:46:VAL:HG12	45:BN:48:MET:HG3	1.81	0.62
35:BA:733:G:N7	35:BA:761:A:C6	2.67	0.62
46:BO:35:VAL:HG11	46:BO:103:ALA:HB3	1.80	0.62
35:BA:1137:G:O2'	35:BA:2039:C:H5''	1.99	0.62
32:B7:13:ALA:HB1	35:BA:125:G:H1'	1.81	0.62
35:BA:1286:A:H2	35:BA:1328:G:O2'	1.82	0.62
35:BA:1827:C:O2'	35:BA:1828:G:H5'	2.00	0.62
35:BA:2466:C:O2'	35:BA:2467:C:H5'	1.99	0.62
35:BA:743:G:O3'	39:BE:132:HIS:HB3	1.99	0.62
39:BE:62:PRO:O	39:BE:64:LYS:N	2.32	0.62
45:BN:24:GLY:C	45:BN:26:LEU:N	2.50	0.62
47:BP:126:VAL:HG22	47:BP:145:PRO:HG2	1.79	0.62
51:BT:123:GLN:HA	51:BT:126:ALA:HB3	1.81	0.62
53:BV:40:LEU:HD13	53:BV:46:VAL:H	1.64	0.62
53:BV:4:ILE:CD1	53:BV:40:LEU:HB2	2.30	0.62
1:AA:587:G:OP1	8:AH:92:ARG:NH1	2.32	0.62
18:AR:37:VAL:HG23	18:AR:38:GLU:H	1.62	0.62
2:AB:63:MET:O	2:AB:64:ARG:C	2.38	0.62
33:B8:10:ALA:HA	33:B8:13:ARG:HG2	1.79	0.62
1:AA:1306:A:H61	1:AA:1331:G:H1'	1.63	0.62
21:AU:5:ASP:O	21:AU:7:ARG:N	2.32	0.62
3:AC:153:VAL:O	3:AC:154:SER:CB	2.48	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:58:G:N3	35:BA:73:A:H2	1.97	0.62
55:BX:49:VAL:HG11	55:BX:88:LYS:O	1.98	0.62
4:AD:92:VAL:O	4:AD:96:LEU:HD13	1.98	0.62
35:BA:307:G:H22	35:BA:310:A:C5'	2.13	0.62
50:BS:13:ARG:HA	50:BS:15:ARG:HD2	1.80	0.62
37:BC:186:ALA:HB1	37:BC:190:ARG:CZ	2.29	0.62
41:BG:92:VAL:HG13	41:BG:92:VAL:O	1.98	0.62
5:AE:80:ILE:HD11	5:AE:138:ALA:HA	1.81	0.62
5:AE:82:VAL:HG21	5:AE:138:ALA:N	2.14	0.62
35:BA:1445(A):C:H2'	35:BA:1446:C:H6	1.59	0.62
35:BA:2142:C:O2'	35:BA:2143:C:H5'	1.99	0.62
4:AD:127:THR:N	4:AD:147:ALA:O	2.32	0.62
6:AF:67:MET:HB2	6:AF:68:PRO:CD	2.29	0.62
35:BA:2801(A):A:H4'	35:BA:2802:G:H2'	1.81	0.62
35:BA:1707:G:O2'	35:BA:1708:C:H5'	1.99	0.62
1:AA:1161:C:H2'	1:AA:1162:C:C6	2.35	0.62
15:AO:17:ARG:HB3	15:AO:17:ARG:HH11	1.64	0.62
35:BA:2238:G:H2'	35:BA:2238:G:N3	2.15	0.62
1:AA:397:A:N3	1:AA:397:A:H3'	2.14	0.62
25:B0:25:ARG:HD2	25:B0:29:GLN:NE2	2.13	0.62
39:BE:16:ARG:O	39:BE:17:ASP:C	2.38	0.62
24:AY:349:MET:SD	24:AY:356:VAL:HG13	2.40	0.62
24:AY:391:PRO:O	24:AY:392:ASN:CB	2.46	0.62
24:AY:462:VAL:CG1	24:AY:463:TYR:N	2.52	0.62
35:BA:1161:C:H2'	35:BA:1162:G:H8	1.63	0.62
35:BA:566:U:H4'	35:BA:809:G:P	2.39	0.62
35:BA:750:A:C2'	35:BA:751:A:H5''	2.30	0.62
38:BD:24:ILE:HG23	38:BD:83:GLU:CA	2.29	0.62
38:BD:24:ILE:HD13	38:BD:84:TYR:HA	1.81	0.62
39:BE:24:THR:HB	39:BE:184:VAL:CG2	2.29	0.62
39:BE:31:CYS:HB3	39:BE:49:LEU:HB3	1.81	0.62
52:BU:36:ARG:HB2	52:BU:36:ARG:NH1	2.15	0.62
12:AL:7:ILE:CD1	12:AL:10:LEU:HD12	2.30	0.62
42:BH:98:LEU:CD1	42:BH:102:ALA:O	2.47	0.62
57:BZ:68:PRO:C	57:BZ:91:LEU:HD12	2.20	0.62
12:AL:25:PRO:C	12:AL:27:LEU:H	2.01	0.62
1:AA:980:C:C5	1:AA:981:U:C2	2.87	0.62
3:AC:134:ILE:HG22	3:AC:168:ALA:HB3	1.81	0.62
9:AI:114:TYR:CD1	9:AI:114:TYR:O	2.53	0.62
35:BA:618:C:O2'	35:BA:619:G:H5'	2.00	0.62
35:BA:1070:A:N6	44:BK:7:UNK:C	2.62	0.62
4:AD:96:LEU:HD23	4:AD:139:ARG:HH11	1.65	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2325:G:H2'	35:BA:2326:C:C6	2.34	0.62
31:B6:11:LEU:HD13	31:B6:12:GLU:O	1.99	0.62
1:AA:142:G:O2'	1:AA:196:A:N1	2.31	0.62
2:AB:127:ILE:HD11	2:AB:139:LYS:CE	2.29	0.62
3:AC:137:ALA:C	3:AC:139:GLN:N	2.52	0.62
1:AA:40:C:H2'	1:AA:41:G:C8	2.34	0.62
35:BA:2132:U:H3	37:BC:5:LYS:HB2	1.63	0.62
42:BH:18:GLU:N	42:BH:25:LYS:O	2.33	0.62
1:AA:35:G:H2'	1:AA:36:C:C6	2.35	0.62
35:BA:1231:G:H2'	35:BA:1232:G:C8	2.35	0.62
1:AA:78:G:H1	1:AA:91:C:H42	1.47	0.62
41:BG:21:ARG:NE	41:BG:21:ARG:O	2.33	0.62
24:AY:146:ARG:NH2	24:AY:177:LYS:HE2	2.14	0.62
24:AY:30:THR:HG21	24:AY:88:ASP:HB2	1.81	0.62
35:BA:2620:C:H2'	35:BA:2621:A:O4'	1.98	0.62
35:BA:648:G:H5''	35:BA:2352:A:H5'	1.82	0.62
38:BD:242:ARG:NH1	38:BD:242:ARG:HG2	2.12	0.62
35:BA:636:G:C2'	47:BP:115:LEU:HD12	2.29	0.62
51:BT:27:THR:O	51:BT:28:VAL:HB	2.00	0.62
1:AA:1483:A:C2	35:BA:1960:A:H1'	2.35	0.62
57:BZ:152:ALA:HB1	57:BZ:167:PRO:CB	2.16	0.62
48:BQ:21:THR:HG23	48:BQ:101:ARG:HD2	1.81	0.62
57:BZ:123:ASP:O	57:BZ:124:ILE:HG23	2.00	0.62
1:AA:1152:A:H2'	1:AA:1153:C:C5	2.35	0.62
35:BA:888:C:C4	35:BA:890:A:OP1	2.53	0.62
1:AA:543:C:H5'	4:AD:14:ARG:NH2	2.15	0.62
9:AI:37:PHE:CE2	9:AI:74:ILE:HG12	2.35	0.62
4:AD:118:ARG:O	4:AD:121:VAL:HB	1.99	0.62
7:AG:122:HIS:O	7:AG:125:MET:N	2.33	0.62
1:AA:1500:A:C2'	1:AA:1501:C:H5'	2.30	0.62
35:BA:1887:C:H2'	35:BA:1888:G:H5''	1.82	0.62
5:AE:89:ILE:HG12	5:AE:90:VAL:N	2.15	0.62
35:BA:1498:C:H2'	35:BA:1499:C:H5''	1.82	0.62
35:BA:2106:G:O6	35:BA:2183:C:N3	2.33	0.62
35:BA:2101:G:C3'	35:BA:2102:U:H5''	2.29	0.62
16:AP:19:ILE:HG12	16:AP:38:TYR:N	2.14	0.62
46:BO:64:ARG:HH21	46:BO:100:GLY:HA3	1.64	0.62
7:AG:72:ARG:HB2	7:AG:142:GLU:OE2	2.00	0.62
24:AY:488:LYS:HB3	24:AY:518:TYR:OH	1.99	0.62
26:B1:54:ALA:HB3	26:B1:56:GLN:HG2	1.81	0.62
1:AA:787:A:C2'	1:AA:788:U:H5'	2.30	0.62
35:BA:2749:A:H4'	42:BH:62:LYS:HB3	1.81	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:117:PRO:HG3	37:BC:145:VAL:CG1	2.30	0.62
40:BF:31:HIS:HB2	47:BP:13:ASN:OD1	2.00	0.62
24:AY:503:TYR:CZ	24:AY:514:ALA:HB2	2.35	0.62
24:AY:11:ALA:CA	24:AY:279:PRO:HD2	2.27	0.62
24:AY:315:VAL:HG12	24:AY:316:ALA:H	1.65	0.62
24:AY:327:LYS:NZ	24:AY:344:ASP:HB3	2.14	0.62
1:AA:360:A:P	24:AY:411:GLN:HE22	2.22	0.62
24:AY:453:LEU:CB	24:AY:459:VAL:HG23	2.21	0.62
35:BA:1382:G:H4'	35:BA:1573:G:C2	2.35	0.62
35:BA:2023:G:H2'	35:BA:2024:G:C8	2.33	0.62
35:BA:2043:C:H2'	35:BA:2044:C:C6	2.35	0.62
35:BA:2223:G:H4'	38:BD:269:PHE:HZ	1.64	0.62
35:BA:2681:C:O2	35:BA:2681:C:H2'	1.98	0.62
35:BA:2715:C:O2'	35:BA:2716:U:H5'	1.99	0.62
38:BD:33:LEU:HG	38:BD:34:VAL:N	2.13	0.62
35:BA:1248:G:C5	52:BU:3:ARG:HB2	2.35	0.62
53:BV:75:PHE:CD2	53:BV:82:ARG:HG3	2.34	0.62
53:BV:59:ALA:HA	53:BV:95:LEU:O	1.99	0.62
23:AX:14:A:C2'	23:AX:15:A:H5''	2.30	0.62
42:BH:85:LYS:HZ1	42:BH:87:LEU:HD12	1.65	0.62
35:BA:857:C:N4	35:BA:920:G:H1	1.96	0.62
57:BZ:51:ALA:O	57:BZ:53:ILE:N	2.32	0.62
54:BW:14:PRO:CB	54:BW:101:SER:HB3	2.29	0.62
56:BY:73:ARG:HE	56:BY:73:ARG:CA	2.06	0.62
1:AA:543:C:P	4:AD:10:ARG:HH12	2.23	0.62
1:AA:689:C:O2'	1:AA:690:G:H5'	1.99	0.62
37:BC:186:ALA:HB1	37:BC:190:ARG:NH2	2.14	0.62
37:BC:10:LEU:O	37:BC:32:LEU:HD22	2.00	0.62
57:BZ:151:HIS:HB3	57:BZ:170:THR:HA	1.81	0.62
1:AA:401:C:O2'	1:AA:621:A:N3	2.33	0.62
47:BP:62:LEU:HD22	47:BP:62:LEU:H	1.64	0.62
42:BH:66:GLY:C	42:BH:69:ARG:HB2	2.20	0.62
1:AA:528:C:H41	12:AL:49:ASN:HD21	1.48	0.62
35:BA:1636:C:O2	35:BA:1760:A:H2	1.83	0.62
13:AM:3:ARG:C	13:AM:4:ILE:HG13	2.20	0.62
26:B1:3:LYS:HZ3	26:B1:4:VAL:HG12	1.64	0.62
47:BP:146:VAL:HG13	47:BP:147:LEU:N	2.15	0.62
35:BA:489:G:N2	35:BA:1321:A:OP1	2.31	0.62
1:AA:1134:G:N2	1:AA:1141:C:C2	2.67	0.62
15:AO:41:GLU:HA	15:AO:41:GLU:OE1	1.99	0.62
45:BN:126:PRO:O	45:BN:127:ASP:HB2	1.99	0.62
11:AK:34:ASP:HB2	11:AK:35:PRO:CD	2.30	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:6:TYR:CA	24:AY:360:TYR:HE2	2.13	0.62
28:B3:13:ILE:HD11	35:BA:989:G:C2	2.35	0.62
35:BA:2581:G:C6	35:BA:2610:C:C2	2.88	0.62
35:BA:2681:C:C5	35:BA:2727:G:N2	2.68	0.62
38:BD:164:GLN:HB3	38:BD:176:ARG:HB3	1.82	0.62
38:BD:35:LYS:HG2	38:BD:63:ARG:HG2	1.80	0.62
38:BD:95:LEU:H	38:BD:95:LEU:HD13	1.65	0.62
39:BE:87:GLU:CG	39:BE:87:GLU:O	2.48	0.62
46:BO:4:PRO:HA	46:BO:21:CYS:O	1.99	0.62
2:AB:162:ILE:O	2:AB:185:ILE:CD1	2.47	0.62
2:AB:80:ILE:H	2:AB:80:ILE:CD1	2.12	0.62
25:B0:21:LEU:HD11	25:B0:41:ARG:HD3	1.82	0.62
35:BA:863:A:H2'	35:BA:864:G:C8	2.35	0.62
48:BQ:57:HIS:O	48:BQ:57:HIS:ND1	2.33	0.62
35:BA:880:G:H8	35:BA:880:G:O5'	1.83	0.62
1:AA:393:A:O2'	1:AA:394:G:H5'	1.98	0.62
56:BY:26:LYS:HB2	56:BY:40:GLU:OE2	1.99	0.62
24:AY:487:ARG:C	24:AY:489:ASN:N	2.50	0.62
1:AA:699:C:O2'	1:AA:700:G:H5'	2.00	0.62
38:BD:111:LEU:HD13	38:BD:115:GLN:NE2	2.14	0.62
5:AE:70:PRO:HG2	5:AE:142:LEU:HD13	1.82	0.62
38:BD:72:LYS:CD	38:BD:97:TYR:CE2	2.83	0.62
54:BW:4:LYS:HD3	54:BW:6:ILE:CD1	2.28	0.62
28:B3:35:ARG:NH1	28:B3:35:ARG:HG3	2.15	0.62
22:AV:26:G:H22	22:AV:44:A:N6	1.98	0.62
1:AA:1351:U:H4'	7:AG:33:ASP:OD2	1.99	0.62
50:BS:83:LYS:HG2	50:BS:105:ALA:CB	2.28	0.62
35:BA:1106:G:C2'	35:BA:1107:G:H5'	2.30	0.62
1:AA:817:C:H5'	1:AA:820:U:OP2	2.00	0.62
35:BA:271(T):C:H2'	35:BA:271(U):G:H8	1.65	0.62
26:B1:20:ARG:HG3	26:B1:32:LYS:HD3	1.82	0.62
24:AY:181:GLY:HA3	24:AY:263:PHE:CE1	2.21	0.62
24:AY:305:ALA:HA	24:AY:422:GLU:HB3	1.80	0.62
24:AY:316:ALA:O	24:AY:317:PHE:O	2.18	0.62
24:AY:10:VAL:HG22	24:AY:360:TYR:CD2	2.35	0.62
35:BA:1661:G:C5	35:BA:1662:C:C5	2.88	0.62
35:BA:2688:U:C4	35:BA:2719:G:H2'	2.34	0.62
35:BA:644:A:N1	35:BA:2369:A:H1'	2.14	0.62
38:BD:53:PHE:CA	38:BD:218:ARG:HB2	2.30	0.62
45:BN:62:VAL:O	45:BN:63:THR:O	2.17	0.62
47:BP:50:ARG:HG3	47:BP:51:PHE:H	1.65	0.62
1:AA:667:G:O2'	15:AO:49:ASP:HA	1.99	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:892:A:H2'	1:AA:893:C:H6	1.63	0.62
35:BA:2474:C:H5''	35:BA:2475:C:C5	2.35	0.62
2:AB:15:VAL:HG21	2:AB:209:ARG:HE	1.65	0.62
2:AB:8:LYS:NZ	2:AB:217:ARG:NH1	2.48	0.62
2:AB:69:LEU:O	2:AB:162:ILE:CG1	2.44	0.62
1:AA:1332:A:O2'	1:AA:1333:A:H5'	2.00	0.62
12:AL:33:ARG:NH2	12:AL:62:SER:HB3	2.15	0.62
1:AA:1180:A:OP1	9:AI:103:THR:HG23	1.99	0.62
10:AJ:89:ASP:HB3	10:AJ:91:PRO:HD3	1.82	0.62
35:BA:94:C:H5'	35:BA:94(A):G:OP2	2.00	0.62
4:AD:5:ILE:HA	4:AD:115:ARG:NH1	2.15	0.62
45:BN:55:VAL:HG22	45:BN:125:GLY:CA	2.23	0.62
35:BA:2325:G:H2'	35:BA:2326:C:H6	1.64	0.62
42:BH:51:ARG:HG2	42:BH:52:VAL:N	2.14	0.62
18:AR:31:LEU:HG	18:AR:31:LEU:O	2.00	0.62
26:B1:82:LEU:O	26:B1:83:GLU:HG3	2.00	0.62
13:AM:11:ARG:HG2	13:AM:12:ASN:H	1.64	0.62
35:BA:2065:C:O2'	35:BA:2066:C:H5'	2.00	0.62
46:BO:89:ASN:O	46:BO:91:LEU:N	2.32	0.62
6:AF:43:LEU:HD22	6:AF:43:LEU:N	2.14	0.62
15:AO:15:PHE:CD1	15:AO:15:PHE:N	2.67	0.62
24:AY:142:ASN:HD21	58:AY:1000:GCP:C5	2.13	0.61
24:AY:18:ILE:HD12	24:AY:30:THR:OG1	2.00	0.61
30:B5:19:ARG:HA	35:BA:2046:G:C5'	2.30	0.61
35:BA:2572:A:N7	39:BE:144:ARG:HG2	2.14	0.61
38:BD:186:HIS:NE2	38:BD:188:GLU:CD	2.53	0.61
39:BE:116:VAL:HG22	39:BE:122:PHE:HB2	1.82	0.61
39:BE:47:VAL:HB	39:BE:84:PHE:HD1	1.65	0.61
40:BF:84:VAL:CG1	40:BF:85:GLY:N	2.63	0.61
47:BP:16:ARG:NH2	47:BP:18:ARG:HG3	2.15	0.61
51:BT:23:ARG:HB2	51:BT:24:PRO:HD2	1.82	0.61
52:BU:13:LYS:O	52:BU:17:ILE:HD13	2.00	0.61
52:BU:36:ARG:HA	52:BU:39:LEU:CG	2.29	0.61
53:BV:39:LEU:CD1	53:BV:51:VAL:HA	2.30	0.61
1:AA:763:G:O2'	1:AA:764:C:H5'	2.00	0.61
1:AA:736:C:O2'	6:AF:90:VAL:O	2.17	0.61
8:AH:13:ILE:C	8:AH:17:THR:HG23	2.20	0.61
8:AH:1:MET:HE1	8:AH:3:THR:HG23	1.81	0.61
53:BV:95:LEU:HD13	53:BV:97:LYS:HE2	1.80	0.61
34:B9:30:PRO:O	34:B9:32:HIS:N	2.33	0.61
2:AB:69:LEU:HD23	2:AB:159:PRO:CG	2.30	0.61
35:BA:1917:U:H6	35:BA:1917:U:O5'	1.83	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1911:U:C2'	35:BA:1918:A:C2	2.77	0.61
48:BQ:133:ARG:NH1	48:BQ:133:ARG:HB3	2.12	0.61
13:AM:94:ARG:HG2	19:AS:82:GLY:N	2.15	0.61
3:AC:70:VAL:CG1	3:AC:71:ALA:N	2.63	0.61
9:AI:114:TYR:HE2	10:AJ:60:ARG:H	1.47	0.61
10:AJ:64:GLU:OE2	10:AJ:66:ARG:CZ	2.48	0.61
1:AA:1048:G:H5''	14:AN:2:ALA:HB1	1.83	0.61
19:AS:23:ASN:HB2	29:B4:47:GLN:CG	2.29	0.61
40:BF:170:LEU:HB3	40:BF:173:VAL:HG23	1.81	0.61
7:AG:148:ASN:C	7:AG:150:ALA:H	2.03	0.61
41:BG:56:ALA:CA	41:BG:153:ARG:HH21	2.12	0.61
50:BS:58:LEU:HD23	50:BS:65:VAL:HG13	1.82	0.61
50:BS:62:LYS:H	50:BS:65:VAL:CG2	2.13	0.61
35:BA:1747(A):G:C2	35:BA:1748:G:C8	2.87	0.61
35:BA:1221:C:H2'	35:BA:1221(A):C:C5	2.34	0.61
38:BD:68:LYS:HB3	38:BD:70:TRP:CZ3	2.34	0.61
13:AM:73:GLU:O	13:AM:76:ALA:HB3	1.98	0.61
1:AA:277:C:H5''	17:AQ:68:ARG:HH22	1.65	0.61
29:B4:35:VAL:CG1	29:B4:36:CYS:H	2.12	0.61
42:BH:92:ILE:CD1	42:BH:95:ARG:NH2	2.62	0.61
1:AA:902:G:O2'	1:AA:903:G:H5'	2.00	0.61
47:BP:127:ALA:O	47:BP:148:LEU:HD12	2.00	0.61
35:BA:2131:G:H5''	35:BA:2132:U:O5'	1.99	0.61
1:AA:1134:G:C2'	1:AA:1135:U:H5'	2.30	0.61
1:AA:339:C:H2'	1:AA:340:U:C6	2.34	0.61
35:BA:1514:U:H2'	35:BA:1515:G:C8	2.35	0.61
4:AD:65:ARG:HB2	4:AD:75:PHE:CE2	2.34	0.61
24:AY:98:ASP:O	24:AY:102:THR:OG1	2.18	0.61
37:BC:104:LEU:O	37:BC:105:ASP:HB2	2.00	0.61
1:AA:952:U:O5'	1:AA:952:U:H6	1.83	0.61
30:B5:5:PRO:HB3	35:BA:2614:A:C4	2.35	0.61
33:B8:28:GLY:O	33:B8:32:LEU:HG	2.00	0.61
35:BA:1753:G:N2	35:BA:1755:A:H2'	2.14	0.61
35:BA:2577:A:H5''	35:BA:2578:G:C5'	2.30	0.61
35:BA:2777:G:C5'	35:BA:2778:A:H5'	2.30	0.61
35:BA:447:A:O4'	35:BA:449:A:N6	2.33	0.61
38:BD:66:ASP:HB2	38:BD:103:ARG:HD2	1.83	0.61
38:BD:173:VAL:HG13	38:BD:185:VAL:O	1.99	0.61
38:BD:26:LYS:NZ	38:BD:113:VAL:CG2	2.54	0.61
35:BA:2054:A:OP1	39:BE:145:LYS:HE3	1.98	0.61
52:BU:112:ARG:CZ	53:BV:46:VAL:HG21	2.30	0.61
15:AO:63:ARG:HG2	15:AO:64:ARG:N	2.14	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:AR:55:ARG:HG3	18:AR:55:ARG:HH11	1.64	0.61
34:B9:29:ASN:HD21	34:B9:32:HIS:CD2	2.19	0.61
2:AB:43:ASP:O	2:AB:44:LEU:C	2.39	0.61
22:AV:71:C:H3'	22:AV:72:A:H8	1.65	0.61
1:AA:981:U:H6	1:AA:981:U:O5'	1.83	0.61
3:AC:73:PRO:O	3:AC:76:VAL:HG22	2.00	0.61
10:AJ:50:ILE:CD1	10:AJ:60:ARG:HD3	2.28	0.61
27:B2:36:ARG:HA	27:B2:39:ALA:CB	2.30	0.61
27:B2:62:THR:O	27:B2:65:ASN:HB2	2.00	0.61
27:B2:69:ARG:NH2	35:BA:111:A:H4'	2.15	0.61
27:B2:54:LYS:HE2	35:BA:73:A:P	2.41	0.61
35:BA:2315:G:H2'	35:BA:2316:C:H6	1.64	0.61
41:BG:114:ILE:HA	41:BG:137:GLU:OE1	2.00	0.61
36:BB:7:G:H4'	50:BS:29:PHE:CD2	2.35	0.61
1:AA:354:G:H21	1:AA:388:G:H2'	1.65	0.61
35:BA:2391:G:H1'	35:BA:2429:G:N2	2.16	0.61
1:AA:1402:C:H2'	1:AA:1403:C:C6	2.35	0.61
35:BA:2143:C:H5''	35:BA:2182:G:H4'	1.82	0.61
4:AD:201:GLN:HA	4:AD:204:ILE:HD12	1.82	0.61
35:BA:392:C:OP1	35:BA:409:C:OP1	2.17	0.61
35:BA:1244:G:O2'	35:BA:1245:G:H5'	1.99	0.61
35:BA:2338:G:O5'	35:BA:2338:G:H8	1.84	0.61
4:AD:112:VAL:HG12	4:AD:116:GLN:OE1	1.99	0.61
24:AY:16:PHE:CE2	24:AY:84:VAL:HG11	2.35	0.61
24:AY:225:GLN:HA	24:AY:228:ARG:CB	2.27	0.61
35:BA:1796:U:O2'	35:BA:1797:C:O4'	2.18	0.61
35:BA:2462:U:H1'	35:BA:2491:U:O4	2.01	0.61
35:BA:2781:A:H5''	35:BA:2782:G:H5'	1.81	0.61
35:BA:463:G:C2	35:BA:467:G:C6	2.88	0.61
35:BA:769:G:H2'	35:BA:770:G:H8	1.66	0.61
35:BA:962:G:C2	35:BA:963:U:H1'	2.35	0.61
35:BA:977:G:C6	35:BA:987:G:C5	2.88	0.61
38:BD:26:LYS:HZ2	38:BD:113:VAL:CG2	2.14	0.61
39:BE:101:ARG:HD2	39:BE:169:ASN:HD22	1.64	0.61
52:BU:102:GLU:HB2	52:BU:105:VAL:HG21	1.83	0.61
52:BU:83:LEU:CD1	52:BU:83:LEU:H	2.13	0.61
2:AB:9:GLU:N	2:AB:9:GLU:OE1	2.33	0.61
12:AL:33:ARG:O	12:AL:84:LEU:HD23	2.00	0.61
1:AA:1118:C:H42	1:AA:1155:G:H1	1.46	0.61
1:AA:1195:C:H5''	1:AA:1196:U:OP2	2.00	0.61
40:BF:143:ALA:O	40:BF:148:LEU:HB2	2.00	0.61
19:AS:51:VAL:HG11	19:AS:75:ALA:CB	2.30	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:118:ARG:CZ	4:AD:136:PRO:HG2	2.30	0.61
1:AA:940:C:H2'	1:AA:941:G:C8	2.34	0.61
50:BS:88:ASP:CG	50:BS:89:ARG:N	2.53	0.61
50:BS:40:ILE:HB	50:BS:46:VAL:O	1.99	0.61
35:BA:2100:G:C3'	35:BA:2101:G:C8	2.81	0.61
51:BT:107:ASP:N	51:BT:110:ILE:HG12	2.13	0.61
13:AM:9:ILE:HD12	13:AM:9:ILE:N	2.14	0.61
1:AA:894:G:H2'	1:AA:895:G:C5'	2.29	0.61
1:AA:503:C:O2'	1:AA:504:C:H5'	2.01	0.61
1:AA:601:C:H2'	1:AA:602:A:C8	2.33	0.61
4:AD:65:ARG:HB2	4:AD:75:PHE:CD2	2.35	0.61
24:AY:303:ILE:CG1	24:AY:375:ILE:CD1	2.78	0.61
13:AM:102:ARG:HD3	13:AM:105:THR:OG1	2.01	0.61
30:B5:11:THR:OG1	35:BA:1264:G:H5'	2.00	0.61
35:BA:1776:G:C8	35:BA:1776:G:O5'	2.53	0.61
35:BA:1803:A:C2'	35:BA:1804:C:H6	2.12	0.61
35:BA:2514:U:H2'	35:BA:2515:C:C6	2.32	0.61
39:BE:113:PHE:HE1	39:BE:158:GLY:HA2	1.64	0.61
39:BE:164:ARG:O	39:BE:165:VAL:HG23	2.00	0.61
45:BN:52:VAL:O	45:BN:53:VAL:HG23	1.99	0.61
52:BU:9:VAL:HG23	52:BU:10:ARG:N	2.15	0.61
52:BU:112:ARG:NH1	53:BV:46:VAL:HG21	2.16	0.61
52:BU:88:ILE:HG22	53:BV:48:GLY:O	2.01	0.61
1:AA:582:U:C2	1:AA:583:A:C8	2.88	0.61
1:AA:728:A:N6	15:AO:51:HIS:CD2	2.69	0.61
18:AR:35:ARG:O	18:AR:37:VAL:N	2.34	0.61
48:BQ:137:TYR:OH	57:BZ:81:ARG:NE	2.33	0.61
22:AV:53:G:H22	22:AV:61:C:H42	1.49	0.61
21:AU:9:ARG:NH2	21:AU:23:PRO:HD2	2.15	0.61
40:BF:28:ILE:CG2	40:BF:116:ASP:HB2	2.29	0.61
35:BA:1057:A:H2'	35:BA:1058:G:H5'	1.83	0.61
35:BA:2870:C:H2'	35:BA:2871:C:H5'	1.83	0.61
54:BW:17:VAL:O	54:BW:20:VAL:HG22	2.01	0.61
38:BD:117:VAL:CG2	38:BD:129:ASN:OD1	2.48	0.61
1:AA:1355:G:H2'	1:AA:1356:G:C8	2.35	0.61
51:BT:11:GLU:C	51:BT:13:ARG:H	2.04	0.61
1:AA:600:C:H2'	1:AA:601:C:H6	1.66	0.61
51:BT:130:ALA:O	51:BT:132:LYS:HE2	2.00	0.61
35:BA:2521:C:H42	35:BA:2544:G:H1	1.45	0.61
1:AA:1477:C:O2'	1:AA:1478:C:H5'	1.99	0.61
49:BR:83:ILE:HA	49:BR:86:ARG:HD3	1.83	0.61
24:AY:12:LYS:O	24:AY:13:ARG:O	2.17	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:402:ARG:C	24:AY:461:ALA:HB1	2.21	0.61
30:B5:49:CYS:O	30:B5:56:LYS:CD	2.47	0.61
35:BA:1754:C:H2'	35:BA:1755:A:O4'	2.01	0.61
35:BA:2688:U:H2'	35:BA:2719:G:N2	2.16	0.61
35:BA:624:C:H5	47:BP:107:LYS:NZ	1.97	0.61
35:BA:693:C:H1'	35:BA:1354:A:H1'	1.81	0.61
35:BA:946:G:O2'	35:BA:947:G:H5'	2.01	0.61
38:BD:224:ALA:O	38:BD:234:GLY:HA2	1.99	0.61
38:BD:248:SER:CB	38:BD:252:TRP:CE2	2.83	0.61
38:BD:44:ASN:ND2	38:BD:47:GLY:C	2.54	0.61
47:BP:106:LEU:O	47:BP:107:LYS:HG2	2.00	0.61
51:BT:25:GLY:O	51:BT:49:VAL:HG12	1.99	0.61
46:BO:61:VAL:HG22	46:BO:62:VAL:O	2.00	0.61
1:AA:1079:G:H2'	1:AA:1080:A:C8	2.36	0.61
1:AA:672:U:HO2'	1:AA:673:G:H8	1.49	0.61
2:AB:210:SER:O	2:AB:213:LEU:HB3	1.99	0.61
2:AB:36:ARG:NE	2:AB:36:ARG:HA	2.15	0.61
25:B0:21:LEU:CD1	25:B0:41:ARG:HD3	2.31	0.61
35:BA:909:A:O2'	35:BA:910:A:H5'	2.00	0.61
57:BZ:48:PHE:C	57:BZ:50:GLN:H	2.03	0.61
1:AA:1308:U:H2'	1:AA:1309:G:C8	2.32	0.61
21:AU:18:TYR:CZ	21:AU:24:ARG:NH1	2.69	0.61
1:AA:1200:C:OP1	1:AA:1201:A:H2'	2.01	0.61
3:AC:113:ALA:HB1	3:AC:200:ALA:O	2.01	0.61
35:BA:327:G:C2	35:BA:336:C:N3	2.68	0.61
55:BX:14:SER:OG	55:BX:17:ALA:CB	2.49	0.61
40:BF:165:ARG:CA	40:BF:168:ARG:HH21	2.13	0.61
35:BA:1056:G:N3	35:BA:1102:C:H5	1.97	0.61
35:BA:2839:G:OP1	49:BR:46:GLY:CA	2.47	0.61
37:BC:6:ARG:NH2	37:BC:10:LEU:CD2	2.64	0.61
35:BA:1720:U:C3'	35:BA:1721:G:H5''	2.30	0.61
1:AA:1004:A:N6	1:AA:1035:A:C8	2.69	0.61
28:B3:35:ARG:HG2	28:B3:36:VAL:H	1.64	0.61
28:B3:7:LYS:HG3	28:B3:32:GLN:O	1.99	0.61
1:AA:1494:G:H2'	1:AA:1495:U:H5'	1.83	0.61
13:AM:54:VAL:HG22	13:AM:57:ARG:CZ	2.31	0.61
1:AA:255:G:H1'	17:AQ:16:GLN:NE2	2.15	0.61
37:BC:72:VAL:HG11	37:BC:156:ILE:O	2.00	0.61
35:BA:372:G:H1'	35:BA:373:U:H5	1.65	0.61
35:BA:8:A:H2'	35:BA:9:U:C5	2.35	0.61
42:BH:18:GLU:CB	42:BH:25:LYS:HG3	2.30	0.61
57:BZ:45:ASP:CG	57:BZ:49:ARG:HE	2.03	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2496:C:H2'	35:BA:2497:A:C8	2.35	0.61
35:BA:40:C:H2'	35:BA:41:C:C6	2.35	0.61
24:AY:101:ARG:NH1	24:AY:390:ILE:HG23	2.15	0.61
24:AY:72:THR:CG2	24:AY:90:PRO:HD3	2.27	0.61
24:AY:70:ILE:O	24:AY:90:PRO:HG3	1.99	0.61
35:BA:2656:U:C2'	35:BA:2657:A:H5''	2.31	0.61
1:AA:773:G:C2	1:AA:774:G:C8	2.89	0.61
35:BA:1573:G:H3'	35:BA:1574:C:H6	1.66	0.61
39:BE:46:ALA:O	39:BE:47:VAL:HG23	2.01	0.61
51:BT:42:ILE:O	51:BT:42:ILE:HG13	1.99	0.61
51:BT:72:VAL:HG12	51:BT:73:GLU:N	2.15	0.61
53:BV:78:LYS:O	53:BV:79:VAL:HG22	2.00	0.61
35:BA:2244:U:H1'	35:BA:2434:A:C5	2.36	0.61
35:BA:2246:G:O2'	35:BA:2247:A:H5'	2.01	0.61
1:AA:1195:C:C4	1:AA:1197:G:N7	2.68	0.61
35:BA:886:C:C2'	35:BA:887:A:O5'	2.47	0.61
35:BA:336:C:H4'	56:BY:7:VAL:HG21	1.81	0.61
35:BA:482:A:H4'	56:BY:47:LYS:HG2	1.83	0.61
37:BC:185:LEU:O	37:BC:189:ILE:HG13	2.01	0.61
41:BG:93:THR:O	41:BG:94:LEU:HD23	2.01	0.61
30:B5:25:LEU:HB3	54:BW:23:LEU:HD13	1.80	0.61
6:AF:98:LEU:CD1	6:AF:98:LEU:N	2.60	0.61
26:B1:44:PRO:CG	26:B1:46:LEU:HD23	2.30	0.61
26:B1:44:PRO:HG2	26:B1:46:LEU:HD23	1.83	0.61
35:BA:2695:C:H2'	35:BA:2696:U:C6	2.34	0.61
54:BW:88:ARG:NH1	54:BW:88:ARG:HG2	2.14	0.61
7:AG:124:LEU:O	7:AG:127:ALA:HB3	2.01	0.61
1:AA:338:A:H2'	1:AA:339:C:O4'	1.99	0.61
35:BA:1996:C:H6	35:BA:1996:C:OP1	1.84	0.61
1:AA:545:C:O2'	1:AA:546:G:H5'	2.00	0.61
24:AY:421:GLU:HA	24:AY:529:HIS:CE1	2.36	0.61
24:AY:76:GLN:HB2	24:AY:348:PHE:HB3	1.81	0.61
35:BA:1257:C:O2'	40:BF:84:VAL:N	2.34	0.61
35:BA:2581:G:N2	35:BA:2610:C:H2'	2.16	0.61
35:BA:583:G:P	52:BU:10:ARG:HH11	2.24	0.61
39:BE:38:THR:HG22	39:BE:40:GLU:H	1.64	0.61
35:BA:1287:A:O4'	49:BR:104:ARG:NH2	2.33	0.61
1:AA:737:A:H2'	1:AA:738:C:H6	1.62	0.61
1:AA:859:A:H2'	1:AA:860:A:O4'	2.01	0.61
3:AC:54:ARG:O	3:AC:55:VAL:CG2	2.43	0.61
10:AJ:43:ARG:HB2	10:AJ:67:THR:CG2	2.28	0.61
1:AA:394:G:H2'	1:AA:395:C:C6	2.35	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BF:7:TYR:HD2	40:BF:16:GLY:N	1.99	0.61
1:AA:619:U:O2'	4:AD:133:VAL:HG13	2.00	0.61
37:BC:65:PRO:HG2	37:BC:187:ASP:O	1.99	0.61
57:BZ:104:PHE:HA	57:BZ:139:VAL:HB	1.82	0.61
41:BG:82:LEU:HD21	41:BG:86:MET:CE	2.31	0.61
42:BH:40:GLU:O	42:BH:41:MET:HB3	2.00	0.61
24:AY:19:ILE:HG13	24:AY:19:ILE:O	2.00	0.61
36:BB:66:A:N6	36:BB:108:U:C6	2.69	0.61
2:AB:106:LYS:HD3	2:AB:106:LYS:N	2.14	0.61
13:AM:47:ASP:O	13:AM:48:LEU:HD23	2.00	0.61
1:AA:229:U:OP1	16:AP:59:TRP:HH2	1.83	0.61
13:AM:53:VAL:O	13:AM:56:LEU:HB3	2.00	0.61
1:AA:274:A:O2'	1:AA:275:G:O4'	2.18	0.61
54:BW:68:ARG:O	54:BW:109:GLU:HA	2.00	0.61
9:AI:5:TYR:CG	9:AI:6:GLY:N	2.69	0.61
35:BA:391:G:O2'	35:BA:392:C:H5'	2.01	0.61
57:BZ:116:VAL:C	57:BZ:174:VAL:HG13	2.20	0.61
4:AD:148:VAL:CG2	4:AD:181:MET:HB3	2.30	0.61
24:AY:272:LEU:O	24:AY:276:ALA:HB2	2.01	0.61
24:AY:303:ILE:HG13	24:AY:375:ILE:HD12	1.83	0.61
24:AY:416:LEU:HD13	24:AY:427:VAL:CG1	2.30	0.61
28:B3:16:PRO:HB3	28:B3:18:ASP:OD1	2.01	0.61
35:BA:2023:G:H5'	35:BA:2617:C:H4'	1.82	0.61
35:BA:2049:G:H1'	39:BE:113:PHE:HZ	1.66	0.61
35:BA:2460:U:C2'	35:BA:2461:C:H5'	2.31	0.61
35:BA:2692:C:H2'	35:BA:2693:A:H8	1.65	0.61
35:BA:2821:A:H2'	35:BA:2822:G:C8	2.36	0.61
35:BA:523:C:O2'	35:BA:524:U:H5'	2.01	0.61
35:BA:528:A:H2	35:BA:2043:C:C4'	2.10	0.61
35:BA:833:U:H2'	35:BA:834:C:H6	1.65	0.61
38:BD:10:THR:O	38:BD:11:PRO:C	2.39	0.61
47:BP:50:ARG:CG	47:BP:51:PHE:N	2.61	0.61
51:BT:80:SER:OG	51:BT:81:PRO:HD3	2.00	0.61
46:BO:62:VAL:HA	46:BO:84:ALA:HB2	1.82	0.61
17:AQ:29:HIS:HB3	17:AQ:33:GLY:N	2.16	0.61
35:BA:1029:A:O2'	35:BA:1030:G:H5'	2.00	0.61
35:BA:1030:G:C6	35:BA:1125:G:N2	2.69	0.61
1:AA:1103:C:H2'	1:AA:1104:G:O4'	2.01	0.61
35:BA:2808:U:H5'	35:BA:2891:G:O6	2.01	0.61
35:BA:1919:A:C3'	35:BA:1920:C:H5''	2.28	0.61
3:AC:157:ILE:HB	3:AC:164:ARG:HH21	1.64	0.61
35:BA:1089:G:N2	35:BA:1102:C:N3	2.48	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AK:28:THR:HG22	11:AK:29:ILE:H	1.66	0.61
37:BC:141:LYS:HZ3	37:BC:164:ARG:HH21	1.47	0.61
37:BC:64:LEU:HD11	37:BC:174:PRO:O	2.01	0.61
37:BC:25:ALA:HA	37:BC:222:VAL:HG11	1.81	0.61
7:AG:29:LYS:HE2	7:AG:102:ARG:CA	2.22	0.61
35:BA:2306:C:H5	35:BA:2307:G:O2'	1.83	0.61
35:BA:2315:G:H2'	35:BA:2316:C:C6	2.35	0.61
41:BG:78:SER:C	41:BG:80:PHE:H	2.04	0.61
1:AA:404:U:H5''	4:AD:122:ARG:HD3	1.83	0.61
35:BA:271(H):G:O2'	35:BA:271(I):G:H8	1.83	0.61
35:BA:615:G:OP2	40:BF:40:GLN:HG3	2.00	0.61
1:AA:1030(A):G:H2'	1:AA:1030(C):G:OP2	2.00	0.61
28:B3:8:LEU:HD23	28:B3:8:LEU:C	2.21	0.61
36:BB:115:G:C4	36:BB:116:G:C8	2.89	0.61
27:B2:34:GLU:O	27:B2:38:GLN:HG2	2.00	0.61
28:B3:22:ALA:O	28:B3:25:ALA:HB3	2.01	0.61
35:BA:271(T):C:H2'	35:BA:271(U):G:C8	2.35	0.61
35:BA:2519:U:C4	35:BA:2542:A:C2	2.88	0.61
3:AC:63:ASN:HA	3:AC:98:ASN:O	2.01	0.61
24:AY:106:VAL:CG2	24:AY:107:ASP:H	2.13	0.61
24:AY:421:GLU:HA	24:AY:529:HIS:HE1	1.66	0.61
37:BC:103:ILE:HG23	37:BC:107:TRP:NE1	2.15	0.61
35:BA:2012:G:C5'	54:BW:96:ILE:HD11	2.30	0.61
33:B8:8:LYS:NZ	35:BA:244:A:OP2	2.33	0.61
35:BA:2461:C:H2'	35:BA:2462:U:C6	2.36	0.61
35:BA:583:G:P	52:BU:10:ARG:NH1	2.73	0.61
35:BA:673:C:H2'	35:BA:674:G:H5'	1.82	0.61
38:BD:144:ALA:HB3	38:BD:192:THR:CG2	2.30	0.61
39:BE:138:PRO:HD2	39:BE:139:GLY:H	1.65	0.61
39:BE:28:ALA:CB	39:BE:182:LEU:HD22	2.30	0.61
39:BE:198:VAL:CG1	39:BE:199:ARG:N	2.64	0.61
39:BE:48:GLN:HE22	39:BE:64:LYS:NZ	1.99	0.61
45:BN:44:PRO:HG3	52:BU:60:LEU:HD21	1.83	0.61
55:BX:78:LYS:HG3	55:BX:78:LYS:O	2.00	0.61
46:BO:39:ILE:HG12	46:BO:60:ALA:O	2.01	0.61
8:AH:119:LEU:HB3	8:AH:123:GLU:HB3	1.83	0.61
2:AB:238:LEU:HG	2:AB:238:LEU:O	2.00	0.61
48:BQ:64:ILE:CG2	48:BQ:65:PHE:N	2.64	0.61
57:BZ:10:ARG:NE	57:BZ:36:LYS:HB2	2.14	0.61
21:AU:9:ARG:HH22	21:AU:23:PRO:HD2	1.65	0.61
1:AA:973:G:H1'	10:AJ:55:LYS:HZ1	1.65	0.61
1:AA:980:C:H5	1:AA:981:U:O2	1.84	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:17:ASP:O	3:AC:54:ARG:NH2	2.34	0.61
3:AC:35:GLU:OE2	3:AC:97:LYS:NZ	2.23	0.61
10:AJ:94:VAL:HG12	10:AJ:95:GLU:N	2.16	0.61
37:BC:45:ALA:O	37:BC:47:LEU:HD12	2.01	0.61
37:BC:46:LYS:O	37:BC:46:LYS:HG3	2.01	0.61
35:BA:1721:G:C6	35:BA:1739:U:H5'	2.36	0.61
45:BN:16:ILE:HG23	45:BN:54:VAL:HG22	1.82	0.61
5:AE:39:GLY:O	5:AE:69:VAL:HG23	2.01	0.61
8:AH:109:ILE:HG23	8:AH:137:VAL:O	2.00	0.61
36:BB:68:C:H2'	36:BB:69:G:O4'	2.01	0.61
17:AQ:91:ARG:HB3	17:AQ:91:ARG:HH11	1.66	0.61
1:AA:675:A:O2'	1:AA:676:A:H5'	2.00	0.61
35:BA:677:A:H2'	35:BA:678:C:H6	1.64	0.61
18:AR:25:THR:O	18:AR:26:LEU:HG	2.01	0.61
35:BA:2887:U:O2'	35:BA:2888:C:H5'	2.01	0.61
24:AY:149:ARG:O	24:AY:150:ASP:HB2	2.00	0.61
24:AY:223:LEU:O	24:AY:227:LEU:HG	2.01	0.61
24:AY:303:ILE:O	24:AY:305:ALA:N	2.34	0.61
24:AY:416:LEU:O	24:AY:419:LEU:N	2.33	0.61
24:AY:70:ILE:HG23	24:AY:95:PHE:CE1	2.35	0.61
35:BA:1695:G:H2'	35:BA:1696:G:C5'	2.27	0.61
35:BA:2027:G:O2'	35:BA:2028:U:C5'	2.49	0.61
30:B5:4:HIS:CG	35:BA:2577:A:HO2'	2.19	0.61
35:BA:444:C:H2'	35:BA:445:C:C5	2.36	0.61
35:BA:961:C:C5	35:BA:2031:A:C2	2.89	0.61
45:BN:18:ALA:HB1	45:BN:21:LYS:CB	2.29	0.61
35:BA:2484:G:O2'	48:BQ:124:LYS:HB3	2.00	0.61
52:BU:92:ARG:O	52:BU:95:LEU:N	2.25	0.61
8:AH:86:ILE:CG1	8:AH:135:CYS:HA	2.27	0.61
53:BV:19:LYS:HE2	53:BV:19:LYS:HA	1.82	0.61
53:BV:57:VAL:HG23	53:BV:98:GLU:O	2.01	0.61
57:BZ:99:TYR:CE1	57:BZ:125:LEU:HD12	2.33	0.61
22:AV:7:G:H2'	22:AV:49:G:OP2	2.01	0.61
35:BA:111:A:H2'	35:BA:112:U:C6	2.35	0.61
35:BA:1087:G:H8	35:BA:1088:A:H4'	1.65	0.61
57:BZ:151:HIS:HA	57:BZ:171:ILE:CG1	2.30	0.61
1:AA:1298:C:N4	7:AG:114:ARG:HB3	2.15	0.61
16:AP:73:LEU:O	16:AP:76:GLN:HB3	2.00	0.61
35:BA:1418:G:O6	35:BA:1578:U:H5''	2.00	0.61
37:BC:166:ASP:O	37:BC:168:THR:N	2.26	0.61
22:AV:35:A:O2'	22:AV:36:U:H5'	2.01	0.61
1:AA:253:U:O2	1:AA:275:G:H1'	2.01	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:13:A:HO2'	36:BB:14:U:H3'	1.65	0.61
17:AQ:10:VAL:HG11	17:AQ:53:LEU:HA	1.83	0.61
4:AD:36:ARG:N	4:AD:37:PRO:HD3	2.15	0.61
1:AA:429:U:OP2	4:AD:36:ARG:NH1	2.34	0.61
1:AA:697:U:O4'	1:AA:786:G:H4'	2.00	0.61
36:BB:111:G:C2'	36:BB:112:U:H5'	2.30	0.61
35:BA:363(E):U:C5	35:BA:363(F):A:C2	2.89	0.61
20:AT:37:SER:O	20:AT:41:ILE:HG12	2.01	0.61
24:AY:68:ILE:O	24:AY:68:ILE:HG13	2.00	0.60
30:B5:41:PRO:HG2	30:B5:44:THR:HB	1.83	0.60
35:BA:1789:A:OP1	38:BD:222:ARG:N	2.32	0.60
38:BD:215:LEU:HB2	38:BD:217:ARG:HG3	1.83	0.60
39:BE:109:LYS:O	39:BE:111:ARG:NE	2.34	0.60
39:BE:127:ASP:HA	39:BE:135:HIS:CD2	2.36	0.60
39:BE:13:ARG:HB3	39:BE:22:PRO:CA	2.26	0.60
39:BE:25:VAL:HA	39:BE:182:LEU:O	2.01	0.60
45:BN:60:ILE:HD13	45:BN:99:LEU:HD23	1.83	0.60
1:AA:881:G:C2'	1:AA:882:C:H5'	2.31	0.60
35:BA:2801:A:C8	35:BA:2894:G:OP1	2.48	0.60
9:AI:114:TYR:HE2	10:AJ:59:SER:CA	2.14	0.60
1:AA:1047:G:C5'	14:AN:4:LYS:HE2	2.28	0.60
19:AS:44:MET:O	19:AS:62:ILE:HG12	2.01	0.60
56:BY:39:VAL:HG12	56:BY:40:GLU:N	2.16	0.60
27:B2:36:ARG:C	27:B2:39:ALA:HB3	2.21	0.60
19:AS:51:VAL:HB	19:AS:58:VAL:HG21	1.80	0.60
51:BT:121:ILE:C	51:BT:124:ASP:HB2	2.20	0.60
35:BA:1542:A:H5'	35:BA:1543:C:OP2	2.01	0.60
29:B4:6:HIS:HA	41:BG:67:LYS:CE	2.31	0.60
41:BG:57:ALA:HA	41:BG:90:LEU:HD21	1.83	0.60
1:AA:505:G:OP1	1:AA:535:A:H5'	2.01	0.60
35:BA:2185:C:H2'	35:BA:2186:G:H5'	1.82	0.60
20:AT:79:ARG:O	20:AT:83:ARG:HG3	2.00	0.60
49:BR:76:VAL:HG22	49:BR:80:PHE:CD2	2.35	0.60
1:AA:1494:G:C2'	1:AA:1495:U:H5'	2.31	0.60
42:BH:94:TYR:HE1	42:BH:108:GLY:HA3	1.66	0.60
1:AA:1319:A:H5'	1:AA:1320:C:OP1	2.01	0.60
55:BX:18:TYR:C	55:BX:20:GLY:H	2.04	0.60
35:BA:1003:G:N3	35:BA:1010:A:H2	1.98	0.60
1:AA:1009:G:H2'	1:AA:1010:G:H8	1.65	0.60
45:BN:48:MET:H	45:BN:48:MET:CE	2.14	0.60
35:BA:2097:C:C2	35:BA:2193:G:N1	2.68	0.60
25:B0:22:GLY:N	25:B0:39:ARG:O	2.30	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:327:LYS:HD3	24:AY:357:GLU:HG3	1.82	0.60
24:AY:359:ALA:HB1	24:AY:363:ASP:HB3	1.83	0.60
24:AY:469:ALA:C	24:AY:470:THR:HG22	2.21	0.60
24:AY:9:GLU:OE1	24:AY:360:TYR:OH	2.17	0.60
35:BA:1975:G:C6	35:BA:1976:U:C4	2.88	0.60
35:BA:2049:G:O2'	35:BA:2050:C:H5'	2.02	0.60
38:BD:160:GLY:H	38:BD:196:VAL:HG12	1.65	0.60
38:BD:87:ASN:HD22	38:BD:88:ARG:CZ	2.14	0.60
39:BE:47:VAL:HG12	39:BE:49:LEU:HD22	1.82	0.60
45:BN:93:THR:HG23	45:BN:93:THR:O	2.01	0.60
35:BA:833:U:C5'	47:BP:48:PRO:HG3	2.20	0.60
52:BU:113:ALA:C	52:BU:115:ALA:H	2.04	0.60
53:BV:40:LEU:HA	53:BV:45:THR:HB	1.84	0.60
6:AF:87:ARG:NH1	6:AF:87:ARG:HG2	1.99	0.60
15:AO:31:LEU:O	15:AO:35:ARG:HG3	2.01	0.60
15:AO:58:MET:O	15:AO:61:GLY:N	2.33	0.60
2:AB:8:LYS:C	2:AB:10:LEU:H	2.04	0.60
33:B8:10:ALA:O	33:B8:13:ARG:N	2.27	0.60
10:AJ:53:PRO:C	14:AN:41:ARG:NH2	2.53	0.60
27:B2:55:ARG:O	27:B2:58:ALA:HB3	2.01	0.60
40:BF:156:LEU:HD23	40:BF:167:ALA:CB	2.31	0.60
35:BA:2319:G:H4'	35:BA:2319:G:OP1	2.01	0.60
2:AB:117:GLU:O	2:AB:120:ALA:HB3	2.01	0.60
1:AA:528:C:H4'	1:AA:535:A:C6	2.36	0.60
26:B1:46:LEU:HA	26:B1:63:ALA:HA	1.82	0.60
35:BA:2147:G:C2'	35:BA:2148:G:H5'	2.30	0.60
48:BQ:63:LYS:CG	57:BZ:175:VAL:HG21	2.29	0.60
1:AA:790:A:H2'	1:AA:791:G:C8	2.35	0.60
35:BA:80:G:O2'	35:BA:81:G:H5'	2.00	0.60
33:B8:49:VAL:O	33:B8:50:LEU:HB2	2.00	0.60
35:BA:67:U:H2'	35:BA:68:G:H8	1.65	0.60
49:BR:99:LYS:HA	49:BR:112:ALA:HA	1.83	0.60
1:AA:265:G:H2'	1:AA:266:G:H5''	1.83	0.60
10:AJ:27:ALA:HA	10:AJ:30:SER:HB3	1.83	0.60
35:BA:1041:G:C2	35:BA:1042:G:C8	2.89	0.60
8:AH:20:TYR:CE1	8:AH:76:PRO:HG2	2.36	0.60
35:BA:1710:C:O2	35:BA:1749:A:C2	2.54	0.60
6:AF:16:GLN:HA	6:AF:19:LEU:HB3	1.81	0.60
24:AY:473:TRP:N	24:AY:524:HIS:O	2.34	0.60
35:BA:2529:G:OP2	35:BA:2530:A:H8	1.83	0.60
35:BA:1934:C:O2'	35:BA:1935:G:H5'	2.01	0.60
35:BA:2223:G:C2'	35:BA:2224:G:H5'	2.31	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2361:A:H2'	35:BA:2362:G:C8	2.33	0.60
35:BA:962:G:C2	35:BA:963:U:C2	2.89	0.60
35:BA:972:G:H3'	35:BA:973:A:H2'	1.83	0.60
38:BD:182:LEU:H	38:BD:272:ALA:CB	2.15	0.60
38:BD:208:LYS:O	38:BD:210:GLY:O	2.20	0.60
38:BD:268:ARG:H	38:BD:270:ILE:HD12	1.66	0.60
49:BR:38:VAL:HG23	49:BR:110:PRO:HB2	1.82	0.60
51:BT:72:VAL:HG12	51:BT:73:GLU:H	1.66	0.60
15:AO:49:ASP:OD2	15:AO:52:SER:CB	2.47	0.60
53:BV:93:GLU:O	53:BV:94:LEU:HD23	2.01	0.60
35:BA:2268:A:C2'	35:BA:2269:A:H5'	2.32	0.60
35:BA:916:G:C2'	35:BA:917:A:H5''	2.31	0.60
22:AV:48:C:O2'	22:AV:59:A:H1'	2.01	0.60
5:AE:30:ALA:N	5:AE:46:GLY:O	2.32	0.60
41:BG:97:ASP:H	41:BG:100:TRP:HD1	1.47	0.60
40:BF:110:LEU:HD22	40:BF:183:VAL:HG12	1.83	0.60
42:BH:43:VAL:HG11	42:BH:52:VAL:CG2	2.24	0.60
1:AA:1500:A:OP1	1:AA:1508:G:OP1	2.20	0.60
1:AA:507:C:OP1	1:AA:508:C:H3'	2.01	0.60
35:BA:2199:A:N3	35:BA:2199:A:H2'	2.16	0.60
50:BS:101:LEU:HD12	50:BS:102:ALA:O	2.02	0.60
35:BA:2109:U:H1'	35:BA:2181:G:C2	2.36	0.60
35:BA:2875:C:H4'	51:BT:5:ALA:HB2	1.83	0.60
16:AP:35:LYS:O	16:AP:36:ILE:HG23	2.02	0.60
14:AN:14:PRO:O	14:AN:15:LYS:O	2.19	0.60
14:AN:15:LYS:O	14:AN:16:PHE:O	2.19	0.60
29:B4:35:VAL:CG1	29:B4:36:CYS:N	2.64	0.60
1:AA:1168:A:OP1	1:AA:1168:A:H8	1.85	0.60
35:BA:90:U:H2'	35:BA:90:U:O2	2.02	0.60
35:BA:30:G:H2'	35:BA:31:C:H6	1.62	0.60
28:B3:46:ASN:C	28:B3:46:ASN:ND2	2.54	0.60
24:AY:13:ARG:HD2	24:AY:363:ASP:OD2	2.01	0.60
24:AY:255:PHE:CD1	24:AY:268:MET:SD	2.95	0.60
24:AY:326:GLU:HA	24:AY:357:GLU:O	2.02	0.60
24:AY:72:THR:O	24:AY:74:VAL:N	2.34	0.60
35:BA:1266:G:O2'	35:BA:2012:G:O6	2.17	0.60
35:BA:2598:A:N7	35:BA:2599:G:H1'	2.16	0.60
35:BA:445:C:OP1	52:BU:3:ARG:N	2.35	0.60
35:BA:685:A:C4	35:BA:689:A:N6	2.69	0.60
39:BE:167:VAL:HG12	39:BE:189:PRO:HD2	1.83	0.60
2:AB:102:LEU:CD1	2:AB:102:LEU:H	2.15	0.60
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.84	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2807:G:H2'	35:BA:2808:U:C5'	2.31	0.60
48:BQ:32:TYR:HA	48:BQ:133:ARG:HA	1.82	0.60
48:BQ:64:ILE:HG22	48:BQ:65:PHE:N	2.16	0.60
42:BH:132:ARG:O	42:BH:133:VAL:CG2	2.49	0.60
37:BC:4:GLY:O	37:BC:7:TYR:N	2.33	0.60
7:AG:39:ALA:O	7:AG:42:ILE:HB	2.01	0.60
1:AA:495:A:H1'	1:AA:496:A:C8	2.36	0.60
34:B9:16:VAL:O	34:B9:17:ILE:O	2.18	0.60
35:BA:1491:G:N1	35:BA:1500:G:C2	2.69	0.60
41:BG:25:TYR:CZ	41:BG:32:PRO:HD3	2.37	0.60
37:BC:167:LYS:O	37:BC:168:THR:HG23	2.00	0.60
33:B8:56:GLU:N	33:B8:56:GLU:CD	2.51	0.60
35:BA:1569:A:C2	35:BA:1570:A:C4	2.88	0.60
22:AV:17(A):U:H1'	22:AV:18:G:O5'	2.01	0.60
50:BS:17:ARG:C	50:BS:19:LYS:H	2.03	0.60
35:BA:1335:U:H2'	35:BA:1336:A:C8	2.37	0.60
24:AY:115:ALA:HB1	24:AY:148:ILE:HB	1.83	0.60
35:BA:1409:C:H2'	35:BA:1410:G:C8	2.37	0.60
24:AY:346:LEU:O	24:AY:348:PHE:CZ	2.54	0.60
35:BA:1019:U:H1'	35:BA:1144:G:H22	1.65	0.60
35:BA:1653:G:H5''	35:BA:2822:G:N1	2.17	0.60
35:BA:1803:A:H2'	35:BA:1804:C:O4'	2.02	0.60
35:BA:824:A:H1'	35:BA:2358:G:N7	2.17	0.60
35:BA:2553:G:C2	35:BA:2583:G:H1'	2.36	0.60
35:BA:696:G:H2'	35:BA:697:C:C6	2.37	0.60
28:B3:13:ILE:HD11	35:BA:989:G:C6	2.37	0.60
38:BD:95:LEU:HD13	38:BD:103:ARG:O	2.00	0.60
40:BF:82:ILE:O	40:BF:83:PHE:CB	2.49	0.60
45:BN:101:HIS:O	45:BN:102:ALA:C	2.39	0.60
45:BN:23:LEU:HB3	45:BN:60:ILE:CG2	2.26	0.60
47:BP:16:ARG:CD	47:BP:18:ARG:H	2.09	0.60
46:BO:2:ILE:CB	46:BO:33:ALA:HB3	2.20	0.60
6:AF:22:GLU:OE2	6:AF:82:ARG:NE	2.35	0.60
57:BZ:166:SER:HB2	57:BZ:168:GLU:HB3	1.83	0.60
25:B0:41:ARG:HB3	35:BA:2330:G:H1'	1.83	0.60
35:BA:922:U:H2'	35:BA:923:C:C6	2.37	0.60
48:BQ:18:LYS:HB2	48:BQ:18:LYS:NZ	2.16	0.60
57:BZ:28:MET:HE3	57:BZ:35:ARG:O	2.01	0.60
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.02	0.60
37:BC:59:ARG:NH1	37:BC:164:ARG:NH1	2.49	0.60
37:BC:49:ILE:CG2	37:BC:208:PHE:HE1	2.14	0.60
17:AQ:3:LYS:O	17:AQ:4:LYS:O	2.19	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:111:LEU:CD1	38:BD:115:GLN:HE21	2.14	0.60
36:BB:68:C:C2	36:BB:69:G:C8	2.89	0.60
2:AB:118:LEU:HB3	2:AB:142:LEU:HD12	1.82	0.60
35:BA:1491:G:O2'	35:BA:1492:G:H5'	2.02	0.60
1:AA:1321:C:C5'	1:AA:1322:C:H5''	2.30	0.60
55:BX:55:ASN:HB2	55:BX:80:ILE:HG12	1.81	0.60
9:AI:89:ASN:O	9:AI:92:TYR:HB2	2.02	0.60
22:AV:36:U:C2'	22:AV:37:A:H5'	2.31	0.60
1:AA:253:U:N3	1:AA:274:A:H2	2.00	0.60
35:BA:711:G:N2	35:BA:721:C:O2'	2.34	0.60
1:AA:1351:U:C2	1:AA:1352:C:C5	2.89	0.60
35:BA:66:C:H2'	35:BA:67:U:O4'	2.01	0.60
10:AJ:38:ILE:HG13	10:AJ:40:LEU:CD2	2.31	0.60
24:AY:189:GLU:HB2	24:AY:206:ILE:CG2	2.31	0.60
24:AY:231:LEU:HD12	24:AY:231:LEU:O	2.01	0.60
24:AY:444:LEU:O	24:AY:447:ASP:N	2.34	0.60
35:BA:2358:G:H2'	35:BA:2359:C:H6	1.67	0.60
35:BA:730:C:H2'	35:BA:731:C:H6	1.64	0.60
38:BD:147:LEU:O	38:BD:189:CYS:SG	2.58	0.60
35:BA:1814:G:C4'	38:BD:51:VAL:HG21	2.31	0.60
1:AA:19:C:O2'	1:AA:20:U:H5'	2.01	0.60
8:AH:9:MET:SD	8:AH:36:LEU:HD21	2.42	0.60
53:BV:5:VAL:CG2	53:BV:35:LEU:HB3	2.30	0.60
1:AA:285:G:O2'	1:AA:286:G:H5'	2.01	0.60
34:B9:26:ILE:CG2	34:B9:27:CYS:H	2.14	0.60
2:AB:74:LYS:NZ	2:AB:74:LYS:HB2	2.15	0.60
35:BA:2268:A:O2'	35:BA:2269:A:C5'	2.48	0.60
1:AA:1305:G:H22	1:AA:1331:G:H2'	1.66	0.60
1:AA:1177:G:O2'	1:AA:1178:G:H5'	2.01	0.60
3:AC:142:MET:O	3:AC:144:SER:N	2.34	0.60
3:AC:58:GLU:C	3:AC:59:ARG:HG2	2.21	0.60
1:AA:1060:C:P	14:AN:45:ARG:HH22	2.25	0.60
35:BA:1205:U:H4'	35:BA:1206:G:OP2	2.00	0.60
4:AD:13:ARG:HA	4:AD:33:MET:HE2	1.82	0.60
35:BA:1061:U:C5'	35:BA:1070:A:H1'	2.31	0.60
37:BC:59:ARG:NE	37:BC:164:ARG:HD2	2.17	0.60
1:AA:405:U:C3'	1:AA:406:G:H5'	2.23	0.60
54:BW:21:VAL:C	54:BW:23:LEU:H	2.04	0.60
50:BS:30:ARG:HH22	50:BS:62:LYS:CB	2.12	0.60
46:BO:43:VAL:HG21	46:BO:52:VAL:CG1	2.31	0.60
2:AB:148:TYR:C	2:AB:149:LEU:HD23	2.22	0.60
35:BA:1494:A:O2'	35:BA:1495:A:H5''	2.01	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1528(A):A:C8	35:BA:1529:G:C8	2.90	0.60
35:BA:1222:C:C2'	35:BA:1223:G:H5''	2.28	0.60
28:B3:7:LYS:HA	28:B3:34:GLU:HA	1.82	0.60
1:AA:169:C:H2'	1:AA:170:U:H5'	1.83	0.60
25:B0:45:PHE:HE1	25:B0:77:ARG:HE	1.49	0.60
13:AM:68:GLY:C	13:AM:70:LEU:H	2.05	0.60
1:AA:225:C:H2'	1:AA:226:G:H8	1.66	0.60
4:AD:200:GLU:O	4:AD:204:ILE:HG13	2.01	0.60
10:AJ:33:GLN:O	10:AJ:75:ILE:HG12	2.01	0.60
35:BA:1317:A:C2	35:BA:1336:A:C2	2.90	0.60
35:BA:204:A:H8	35:BA:204:A:OP1	1.84	0.60
1:AA:369:C:H6	1:AA:369:C:O5'	1.84	0.60
35:BA:2557:G:H2'	35:BA:2558:C:C6	2.36	0.60
1:AA:1491:G:H3'	1:AA:1492:A:C8	2.35	0.60
30:B5:4:HIS:CB	30:B5:5:PRO:CD	2.78	0.60
35:BA:1326:U:O2'	35:BA:1327:C:H5'	2.02	0.60
35:BA:1754:C:C5	35:BA:1755:A:N7	2.69	0.60
35:BA:2689:U:H4'	35:BA:2690:C:OP2	2.01	0.60
35:BA:977:G:O2'	35:BA:978:G:H5'	2.02	0.60
38:BD:183:ARG:HB2	38:BD:270:ILE:HG22	1.84	0.60
38:BD:213:ARG:HH11	38:BD:219:PRO:HD3	1.62	0.60
38:BD:265:PRO:O	38:BD:267:SER:N	2.35	0.60
38:BD:183:ARG:NH2	38:BD:269:PHE:HD2	2.00	0.60
38:BD:43:ARG:HD2	38:BD:49:ILE:HD13	1.84	0.60
35:BA:2579:C:C4'	39:BE:134:ILE:HG21	2.32	0.60
51:BT:59:THR:OG1	51:BT:78:LEU:HD12	2.02	0.60
1:AA:764:C:H2'	1:AA:765:G:O4'	2.01	0.60
1:AA:668:G:O4'	15:AO:49:ASP:HB2	2.02	0.60
53:BV:5:VAL:HG23	53:BV:37:VAL:O	2.01	0.60
2:AB:12:GLU:C	2:AB:14:GLY:N	2.53	0.60
35:BA:2469:A:H3'	35:BA:2470:G:O4'	2.02	0.60
27:B2:33:MET:SD	55:BX:5:TYR:HB3	2.41	0.60
40:BF:28:ILE:CD1	40:BF:28:ILE:H	2.14	0.60
1:AA:706:A:H1'	11:AK:29:ILE:HD11	1.83	0.60
30:B5:25:LEU:HD12	54:BW:19:LEU:O	2.01	0.60
41:BG:171:ALA:O	41:BG:172:LEU:C	2.39	0.60
35:BA:2070:G:C2	35:BA:2071:A:C4	2.90	0.60
1:AA:1374:A:O2'	1:AA:1375:A:H5'	2.02	0.60
22:AV:23:C:O5'	22:AV:23:C:H6	1.84	0.60
42:BH:12:PRO:HD2	42:BH:15:VAL:HG11	1.84	0.60
36:BB:30:C:H2'	36:BB:31:C:O4'	2.01	0.60
1:AA:1339:A:H2'	1:AA:1340:A:O4'	2.02	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:221:A:O2'	35:BA:222:A:OP2	2.18	0.60
35:BA:1068:G:OP1	44:BK:22:UNK:N	2.35	0.60
1:AA:751:U:H3'	1:AA:752:G:C8	2.36	0.60
24:AY:349:MET:HE3	24:AY:358:GLU:CG	2.29	0.60
24:AY:305:ALA:HB2	24:AY:423:GLY:H	1.65	0.60
33:B8:21:LYS:HD2	35:BA:651:G:OP1	2.02	0.60
35:BA:2626:C:H2'	35:BA:2627:G:H8	1.67	0.60
35:BA:588:U:O4	35:BA:670:A:H1'	2.01	0.60
35:BA:824:A:H2'	35:BA:825:C:H6	1.66	0.60
38:BD:80:ALA:CB	38:BD:96:HIS:NE2	2.65	0.60
39:BE:195:LEU:O	39:BE:196:VAL:HG13	2.01	0.60
51:BT:32:TYR:O	51:BT:42:ILE:HA	2.00	0.60
51:BT:52:ILE:HG12	51:BT:61:PHE:HB3	1.84	0.60
52:BU:27:LEU:HA	52:BU:30:LYS:CG	2.32	0.60
30:B5:28:PRO:CG	54:BW:35:ILE:HG23	2.32	0.60
1:AA:670:G:O2'	1:AA:671:G:H5'	2.01	0.60
1:AA:920:U:C1'	1:AA:1080:A:C2	2.84	0.60
1:AA:247:G:OP2	17:AQ:99:SER:HB2	2.01	0.60
34:B9:7:VAL:O	35:BA:1031:G:O2'	2.14	0.60
35:BA:1919:A:H2'	35:BA:1920:C:C5'	2.21	0.60
42:BH:106:THR:CB	42:BH:112:PRO:HA	2.32	0.60
21:AU:23:PRO:C	21:AU:25:LYS:N	2.55	0.60
1:AA:1049:U:HO2'	14:AN:2:ALA:N	2.00	0.60
35:BA:483:A:H4'	56:BY:48:ALA:O	2.01	0.60
27:B2:2:LYS:O	27:B2:5:GLU:HG2	2.00	0.60
27:B2:35:LEU:CD1	27:B2:50:ILE:HG13	2.23	0.60
49:BR:96:ARG:HB2	49:BR:96:ARG:CZ	2.29	0.60
11:AK:32:ILE:HD13	11:AK:72:ALA:HB2	1.84	0.60
11:AK:91:ARG:NH1	11:AK:91:ARG:HG3	2.13	0.60
37:BC:59:ARG:NH2	37:BC:142:ALA:HB2	2.17	0.60
57:BZ:120:ILE:CG1	57:BZ:172:ALA:HA	2.27	0.60
40:BF:109:GLY:O	40:BF:112:MET:HB3	2.02	0.60
39:BE:51:PHE:HD1	39:BE:52:LEU:N	1.96	0.60
41:BG:52:ILE:CG1	41:BG:53:LEU:H	2.07	0.60
1:AA:1423:G:H5''	46:BO:49:ARG:NH1	2.16	0.60
49:BR:24:GLN:HA	49:BR:27:SER:HB2	1.84	0.60
22:AV:42:G:H2'	22:AV:43:A:O4'	2.02	0.60
35:BA:1050:A:H1'	35:BA:2751:G:N2	2.16	0.60
6:AF:71:ARG:HG3	6:AF:71:ARG:HH11	1.66	0.60
5:AE:136:MET:HA	5:AE:139:LEU:HD12	1.84	0.60
32:B7:32:LYS:HE2	35:BA:180:G:OP2	2.01	0.60
35:BA:2300:G:H2'	35:BA:2301:C:C6	2.37	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:141:A:C4'	1:AA:182:U:H1'	2.32	0.60
1:AA:359:U:H2'	1:AA:360:A:C8	2.35	0.60
24:AY:135:THR:HG22	24:AY:136:PRO:CD	2.25	0.60
24:AY:281:PRO:HB3	24:AY:290:GLU:HA	1.83	0.60
24:AY:302:LYS:O	24:AY:316:ALA:C	2.39	0.60
24:AY:325:TYR:CE2	24:AY:357:GLU:OE2	2.54	0.60
35:BA:532:A:H5''	52:BU:28:ARG:NH2	2.15	0.60
35:BA:729:G:O6	38:BD:208:LYS:HB2	2.01	0.60
38:BD:33:LEU:HD23	38:BD:34:VAL:H	1.67	0.60
39:BE:9:VAL:O	39:BE:192:ASN:OD1	2.20	0.60
47:BP:80:TYR:HA	47:BP:111:ARG:CB	2.32	0.60
51:BT:32:TYR:HD1	51:BT:32:TYR:N	1.99	0.60
35:BA:2845:G:H5''	51:BT:54:ARG:O	2.01	0.60
1:AA:742:G:O2'	1:AA:743:U:H5'	2.02	0.60
8:AH:4:ASP:OD1	8:AH:6:ILE:HB	2.00	0.60
11:AK:115:PRO:C	11:AK:117:ASN:N	2.52	0.60
1:AA:245:C:O2'	1:AA:246:A:H5'	2.01	0.60
35:BA:2801:A:O2'	35:BA:2895:U:H5'	2.01	0.60
35:BA:955:C:C2'	35:BA:956:G:H5'	2.32	0.60
1:AA:1060:C:H5'	14:AN:45:ARG:HH21	1.66	0.60
35:BA:479:A:N3	35:BA:481:G:O4'	2.35	0.60
56:BY:43:ASN:CB	56:BY:64:GLU:HA	2.30	0.60
55:BX:54:VAL:HG22	55:BX:81:VAL:HG12	1.84	0.60
40:BF:26:ALA:C	40:BF:27:GLU:HG3	2.22	0.60
37:BC:47:LEU:CD1	37:BC:171:ILE:HD12	2.30	0.60
37:BC:41:VAL:HG12	37:BC:43:VAL:HG23	1.84	0.60
15:AO:3:ILE:HG12	15:AO:8:LYS:HE2	1.80	0.60
7:AG:118:VAL:HG23	7:AG:119:ARG:H	1.62	0.60
35:BA:1526:G:O2'	35:BA:1527:G:H5'	2.02	0.60
49:BR:61:HIS:CE1	49:BR:65:LEU:HD22	2.36	0.60
41:BG:42:GLY:CA	41:BG:90:LEU:H	2.10	0.60
26:B1:45:ASN:HB2	35:BA:397:G:H5''	1.83	0.60
35:BA:2180:U:H2'	35:BA:2181:G:C8	2.36	0.60
1:AA:1220:G:H2'	1:AA:1221:G:C8	2.33	0.60
4:AD:126:ILE:CG2	4:AD:127:THR:N	2.64	0.60
1:AA:1480:G:C6	1:AA:1481:U:C4	2.89	0.60
1:AA:848:C:H2'	1:AA:849:C:H6	1.66	0.60
1:AA:836:G:C6	1:AA:851:G:C6	2.90	0.60
10:AJ:38:ILE:HG13	10:AJ:40:LEU:HD21	1.82	0.60
26:B1:87:PRO:HG2	26:B1:88:LYS:N	2.17	0.60
42:BH:86:GLU:N	42:BH:86:GLU:OE1	2.34	0.60
54:BW:43:GLY:O	54:BW:45:TYR:N	2.35	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:79:TYR:CD1	24:AY:80:HIS:N	2.68	0.60
1:AA:950:U:H2'	1:AA:951:G:H8	1.64	0.60
30:B5:8:LYS:HG2	35:BA:2054:A:C2	2.37	0.60
35:BA:2573:C:OP1	35:BA:2574:G:OP1	2.19	0.60
52:BU:115:ALA:O	52:BU:117:GLN:N	2.35	0.60
52:BU:92:ARG:HD3	52:BU:94:ASN:CB	2.24	0.60
53:BV:39:LEU:HA	53:BV:47:VAL:HG11	1.84	0.60
53:BV:52:VAL:CG1	53:BV:55:ALA:HB3	2.29	0.60
35:BA:2472:G:N2	35:BA:2478:A:H62	1.97	0.60
2:AB:222:ILE:H	2:AB:222:ILE:HD13	1.67	0.60
3:AC:5:ILE:HG21	14:AN:58:LYS:NZ	2.17	0.60
35:BA:2879:C:H4'	35:BA:2880:C:OP1	2.02	0.60
5:AE:50:GLU:HA	5:AE:50:GLU:OE1	2.02	0.60
35:BA:879:G:N1	35:BA:898:C:N4	2.50	0.60
7:AG:49:ILE:O	7:AG:50:ILE:C	2.40	0.60
41:BG:125:PHE:HD2	41:BG:131:TYR:HB2	1.67	0.60
1:AA:59:A:H3'	1:AA:331:G:H22	1.66	0.60
54:BW:26:GLY:C	54:BW:27:LYS:HG3	2.22	0.60
31:B6:33:LYS:O	31:B6:34:LEU:HB2	2.01	0.60
1:AA:1393:U:H2'	1:AA:1395:C:C5	2.32	0.60
24:AY:21:HIS:HA	24:AY:122:ARG:HB2	1.84	0.60
1:AA:507:C:OP2	1:AA:508:C:C2'	2.46	0.60
35:BA:1498:C:C2'	35:BA:1499:C:H5'	2.31	0.60
50:BS:106:ARG:HD2	50:BS:107:GLU:N	2.17	0.60
47:BP:92:GLU:HA	47:BP:123:LEU:CD1	2.32	0.60
1:AA:1284:C:H2'	1:AA:1285:A:C8	2.36	0.60
35:BA:2052:G:O4'	39:BE:142:GLY:HA3	2.01	0.60
40:BF:132:VAL:HG22	40:BF:133:ASN:ND2	2.17	0.60
16:AP:3:LYS:HA	16:AP:65:GLN:H	1.66	0.60
33:B8:30:ARG:HA	33:B8:30:ARG:HE	1.66	0.60
1:AA:570:G:O4'	1:AA:820:U:C2	2.55	0.60
35:BA:438:G:H2'	35:BA:440:G:C8	2.37	0.60
35:BA:1600:C:H6	35:BA:1600:C:O5'	1.85	0.60
24:AY:13:ARG:HD3	24:AY:363:ASP:OD2	1.98	0.59
35:BA:2653:U:H5''	35:BA:2654:A:H2'	1.84	0.59
35:BA:2769:C:H2'	35:BA:2770:G:C8	2.37	0.59
35:BA:640:C:N4	35:BA:641:C:H41	2.00	0.59
35:BA:762:U:H5'	35:BA:763:G:H21	1.66	0.59
38:BD:93:ALA:N	38:BD:105:ILE:O	2.35	0.59
38:BD:106:ILE:O	38:BD:108:PRO:CD	2.49	0.59
39:BE:3:GLY:O	39:BE:4:ILE:CB	2.49	0.59
47:BP:107:LYS:O	47:BP:109:GLY:N	2.35	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:62:THR:HA	51:BT:75:ILE:HA	1.83	0.59
51:BT:48:ILE:O	51:BT:63:VAL:HG13	2.01	0.59
52:BU:112:ARG:O	52:BU:115:ALA:HB3	2.01	0.59
52:BU:92:ARG:HB2	53:BV:11:GLN:NE2	2.17	0.59
53:BV:28:GLU:HB3	53:BV:29:PRO:CD	2.32	0.59
2:AB:54:THR:CG2	2:AB:201:ILE:HD11	2.19	0.59
2:AB:222:ILE:O	2:AB:226:ARG:HG3	2.02	0.59
35:BA:2393:A:C2	35:BA:2394:C:H1'	2.37	0.59
42:BH:85:LYS:NZ	42:BH:87:LEU:CD1	2.63	0.59
48:BQ:75:THR:HG21	48:BQ:87:LYS:HZ3	1.65	0.59
1:AA:1309:G:O2'	1:AA:1310:G:H5'	2.02	0.59
1:AA:980:C:C5	1:AA:981:U:O2	2.55	0.59
19:AS:63:THR:CG2	19:AS:66:MET:HG2	2.32	0.59
40:BF:179:GLU:O	40:BF:181:LEU:N	2.34	0.59
49:BR:48:VAL:HA	49:BR:51:LEU:CG	2.32	0.59
35:BA:1598:C:H5'	55:BX:36:LYS:HD3	1.84	0.59
11:AK:94:ALA:O	11:AK:97:ALA:HB3	2.02	0.59
45:BN:56:ASN:H	45:BN:125:GLY:H	1.49	0.59
42:BH:41:MET:HG3	42:BH:42:ARG:O	2.02	0.59
1:AA:1395:C:H4'	1:AA:1401:G:H21	1.66	0.59
35:BA:2219:G:O2'	35:BA:2220:G:H5'	2.02	0.59
38:BD:70:TRP:NE1	38:BD:150:LYS:HE3	2.16	0.59
16:AP:45:THR:C	16:AP:47:ASP:N	2.53	0.59
1:AA:1371:G:O3'	9:AI:69:GLY:HA3	2.01	0.59
38:BD:45:ASN:CG	38:BD:46:GLN:N	2.51	0.59
35:BA:654(I):C:H5''	35:BA:654(J):A:OP1	2.02	0.59
35:BA:1149:G:H2'	35:BA:1150:C:C6	2.36	0.59
45:BN:74:ARG:NH2	45:BN:83:LYS:HD3	2.17	0.59
4:AD:70:ILE:HG22	4:AD:71:SER:N	2.16	0.59
1:AA:966:G:C2	1:AA:967:C:C2	2.90	0.59
42:BH:137:ASP:O	42:BH:141:VAL:HG13	2.02	0.59
24:AY:4:SER:OG	24:AY:5:PRO:HD2	2.01	0.59
35:BA:1264:G:C8	35:BA:1265:A:C8	2.90	0.59
35:BA:1266:G:O2'	35:BA:2012:G:C6	2.55	0.59
35:BA:1286:A:C2	35:BA:1329:U:C6	2.90	0.59
39:BE:1:MET:HB3	39:BE:200:GLU:CD	2.22	0.59
39:BE:67:PHE:HD1	39:BE:68:ALA:H	1.50	0.59
35:BA:2741:A:H2'	35:BA:2742:C:H5'	1.84	0.59
35:BA:2744:G:H22	42:BH:143:GLN:NE2	1.84	0.59
1:AA:574:A:N3	1:AA:883:C:H1'	2.17	0.59
53:BV:58:VAL:CG1	53:BV:59:ALA:H	2.12	0.59
1:AA:1179:A:H2'	1:AA:1180:A:O5'	2.01	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:165:THR:O	3:AC:165:THR:HG23	2.00	0.59
14:AN:53:LEU:CB	14:AN:56:VAL:HG21	2.30	0.59
24:AY:307:MET:HG2	24:AY:313:ASP:H	1.67	0.59
7:AG:15:ASP:HB3	7:AG:19:GLY:C	2.23	0.59
40:BF:123:LEU:HD12	40:BF:124:LEU:N	2.17	0.59
37:BC:47:LEU:CD1	37:BC:47:LEU:N	2.63	0.59
37:BC:49:ILE:HG23	37:BC:208:PHE:CD1	2.37	0.59
36:BB:40:U:H3'	36:BB:41:U:C5'	2.30	0.59
1:AA:332:G:H2'	1:AA:333:G:C8	2.34	0.59
35:BA:271(L):U:H5''	35:BA:271(M):G:C5'	2.26	0.59
41:BG:15:VAL:HG12	41:BG:19:LEU:HD11	1.84	0.59
35:BA:1297:C:OP2	35:BA:2710:C:H4'	2.02	0.59
4:AD:52:SER:O	4:AD:53:ASP:C	2.40	0.59
54:BW:3:ALA:O	54:BW:106:ILE:HA	2.02	0.59
23:AX:16:A:H2'	23:AX:17:U:H6	1.67	0.59
57:BZ:45:ASP:O	57:BZ:46:LYS:C	2.40	0.59
26:B1:22:GLY:O	26:B1:32:LYS:HE2	2.01	0.59
24:AY:303:ILE:CG1	24:AY:375:ILE:HD11	2.32	0.59
35:BA:15:G:H2'	35:BA:16:G:H8	1.67	0.59
35:BA:687:C:H42	35:BA:787:U:H4'	1.66	0.59
38:BD:37:LEU:HD13	38:BD:62:TYR:CD1	2.38	0.59
47:BP:33:ARG:O	47:BP:34:GLY:O	2.20	0.59
48:BQ:78:PRO:O	48:BQ:81:VAL:HG12	2.02	0.59
51:BT:62:THR:CG2	51:BT:75:ILE:HG23	2.31	0.59
51:BT:77:PRO:O	51:BT:78:LEU:HB2	2.02	0.59
52:BU:6:THR:HG21	52:BU:10:ARG:NH2	2.17	0.59
52:BU:43:GLY:O	53:BV:73:SER:O	2.20	0.59
5:AE:12:LEU:O	5:AE:13:ILE:HD12	2.00	0.59
18:AR:69:THR:HA	18:AR:72:ARG:HD2	1.84	0.59
2:AB:33:TYR:CE1	2:AB:43:ASP:OD1	2.54	0.59
36:BB:82:G:H2'	36:BB:83:G:C8	2.37	0.59
21:AU:24:ARG:O	21:AU:24:ARG:CG	2.50	0.59
12:AL:43:VAL:N	12:AL:53:ARG:O	2.27	0.59
1:AA:1359:C:H3'	14:AN:35:ARG:NH2	2.17	0.59
19:AS:43:GLU:HG2	29:B4:47:GLN:NE2	2.17	0.59
1:AA:55:A:C4	24:AY:311:HIS:NE2	2.69	0.59
56:BY:15:VAL:HB	56:BY:23:ARG:O	2.02	0.59
27:B2:21:LEU:O	27:B2:24:LEU:HB3	2.02	0.59
19:AS:29:ARG:HD2	19:AS:29:ARG:N	2.16	0.59
35:BA:2312:U:OP1	41:BG:73:ALA:CA	2.50	0.59
1:AA:1393:U:H5'	1:AA:1502:A:OP1	2.02	0.59
38:BD:117:VAL:HG22	38:BD:118:VAL:H	1.67	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:48:A:C6	36:BB:49:C:N4	2.70	0.59
50:BS:34:HIS:C	50:BS:35:ILE:HG22	2.22	0.59
16:AP:20:VAL:HA	16:AP:36:ILE:CG1	2.31	0.59
6:AF:74:ASP:HB3	6:AF:77:ARG:NH2	2.14	0.59
35:BA:1645:G:H5''	35:BA:1646:C:H5'	1.84	0.59
26:B1:54:ALA:HB1	26:B1:56:GLN:HE21	1.66	0.59
57:BZ:63:ASP:HB3	57:BZ:65:GLN:NE2	2.17	0.59
1:AA:1296:C:H4'	1:AA:1302:U:C5	2.36	0.59
35:BA:271(E):U:H2'	35:BA:271(F):C:C6	2.37	0.59
35:BA:1041:G:H22	35:BA:1114:G:N2	2.00	0.59
35:BA:2737:G:O5'	35:BA:2737:G:H8	1.86	0.59
57:BZ:177:PRO:O	57:BZ:178:GLU:OE1	2.19	0.59
7:AG:64:GLN:HE21	7:AG:68:ASN:ND2	1.99	0.59
24:AY:178:LEU:O	24:AY:180:LYS:HG3	2.01	0.59
24:AY:25:GLY:O	24:AY:29:ILE:N	2.26	0.59
24:AY:473:TRP:CD2	24:AY:527:ARG:HG2	2.37	0.59
37:BC:103:ILE:HD12	37:BC:127:MET:CE	2.32	0.59
35:BA:1753:G:N2	35:BA:1758:G:N7	2.47	0.59
35:BA:2628:C:O2'	35:BA:2781:A:H2'	2.02	0.59
35:BA:2847:U:H5''	51:BT:97:ALA:HB2	1.85	0.59
35:BA:13:A:H61	35:BA:525:U:H3'	1.66	0.59
35:BA:782:A:H2	38:BD:226:MET:CG	2.10	0.59
38:BD:24:ILE:HG12	38:BD:82:ILE:HG21	1.85	0.59
35:BA:2685:G:H4'	46:BO:67:LYS:NZ	2.17	0.59
51:BT:16:ARG:HH22	51:BT:19:LEU:HD21	1.66	0.59
51:BT:62:THR:HG22	51:BT:75:ILE:CG1	2.32	0.59
35:BA:2385:C:O2	35:BA:2386:C:C6	2.55	0.59
48:BQ:55:VAL:HA	48:BQ:58:PHE:HE1	1.63	0.59
57:BZ:43:GLU:O	57:BZ:47:VAL:HG23	2.03	0.59
3:AC:87:LEU:HD23	3:AC:87:LEU:N	2.17	0.59
10:AJ:8:LEU:N	10:AJ:8:LEU:HD12	2.18	0.59
19:AS:45:VAL:HA	19:AS:62:ILE:HG12	1.83	0.59
40:BF:199:TRP:O	40:BF:202:PHE:HB3	2.02	0.59
35:BA:1061:U:O4	44:BK:55:UNK:HA	2.02	0.59
7:AG:115:ARG:O	7:AG:118:VAL:HG22	2.01	0.59
17:AQ:59:ILE:HG22	17:AQ:60:ILE:N	2.18	0.59
36:BB:69:G:C2	36:BB:70:C:C6	2.90	0.59
12:AL:45:PRO:CD	12:AL:51:ALA:O	2.50	0.59
26:B1:43:TYR:O	35:BA:396:G:O2'	2.17	0.59
35:BA:44:G:H21	35:BA:435:C:N4	2.00	0.59
28:B3:8:LEU:HD22	28:B3:31:LEU:HA	1.84	0.59
1:AA:1013:G:O2'	1:AA:1015:A:N7	2.34	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:32:GLU:O	13:AM:35:GLU:HG2	2.02	0.59
1:AA:896:C:H2'	1:AA:897:C:H5'	1.84	0.59
22:AV:27:U:H2'	22:AV:27:U:O2	2.00	0.59
25:B0:72:ARG:HB2	25:B0:75:LEU:HB3	1.84	0.59
19:AS:16:LEU:C	19:AS:18:LYS:H	2.04	0.59
19:AS:16:LEU:H	19:AS:16:LEU:CD1	2.13	0.59
35:BA:271(Y):U:OP2	35:BA:272(D):G:H5''	2.01	0.59
53:BV:3:ALA:HB3	53:BV:14:VAL:O	2.02	0.59
35:BA:233:A:H2'	35:BA:234:C:H6	1.66	0.59
12:AL:37:CYS:SG	12:AL:81:SER:O	2.59	0.59
35:BA:1055:G:N2	35:BA:1085:A:H1'	2.17	0.59
37:BC:11:LEU:C	37:BC:13:LYS:H	2.05	0.59
24:AY:403:LEU:CD2	24:AY:403:LEU:H	2.13	0.59
24:AY:446:PHE:O	24:AY:449:VAL:HG23	2.01	0.59
35:BA:1308:A:H2'	35:BA:1309:G:O4'	2.03	0.59
35:BA:2635:C:OP1	39:BE:77:ILE:HD12	2.03	0.59
35:BA:940:G:H2'	35:BA:941:A:H5''	1.85	0.59
38:BD:235:GLY:O	38:BD:236:GLY:O	2.21	0.59
35:BA:1826:G:C4'	38:BD:242:ARG:NH2	2.66	0.59
53:BV:72:VAL:CG2	53:BV:85:LYS:HB3	2.27	0.59
46:BO:87:ILE:HG22	46:BO:92:GLU:N	2.18	0.59
6:AF:11:ASN:ND2	6:AF:86:ARG:HH22	1.99	0.59
34:B9:30:PRO:C	34:B9:32:HIS:H	2.05	0.59
3:AC:68:VAL:HG23	3:AC:102:ASN:O	2.02	0.59
40:BF:113:ALA:HB1	40:BF:186:ILE:HG21	1.84	0.59
35:BA:597:U:H2'	35:BA:598:G:C8	2.36	0.59
35:BA:601:C:C4'	40:BF:108:LYS:HZ1	2.16	0.59
40:BF:110:LEU:HD12	40:BF:206:ILE:CD1	2.32	0.59
50:BS:35:ILE:HD11	50:BS:99:LYS:CE	2.28	0.59
35:BA:1858:G:C6	35:BA:1883:G:C6	2.90	0.59
35:BA:1193:G:H2'	35:BA:1194:A:O4'	2.02	0.59
20:AT:53:LEU:HD22	20:AT:100:ILE:O	2.02	0.59
35:BA:104:U:H2'	35:BA:105:C:C5'	2.33	0.59
3:AC:108:ASN:O	3:AC:111:LEU:HB2	2.03	0.59
1:AA:547:A:OP2	4:AD:2:GLY:N	2.34	0.59
24:AY:128:GLU:O	24:AY:131:ARG:HG3	2.01	0.59
24:AY:34:LEU:HD21	24:AY:86:LEU:HD23	1.85	0.59
35:BA:1894:C:O2	35:BA:1894:C:H2'	2.02	0.59
35:BA:2498:C:H2'	35:BA:2499:C:H5''	1.85	0.59
32:B7:2:LYS:CE	35:BA:687:C:H5''	2.32	0.59
35:BA:988:A:C2	35:BA:989:G:N2	2.71	0.59
35:BA:1971:A:N7	38:BD:241:PRO:HG3	2.17	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:24:ILE:HG21	38:BD:84:TYR:N	2.18	0.59
39:BE:1:MET:HB3	39:BE:200:GLU:OE2	2.03	0.59
49:BR:101:ALA:O	49:BR:102:GLU:HB2	2.02	0.59
1:AA:866:C:H2'	1:AA:867:G:O4'	2.01	0.59
15:AO:23:GLY:O	15:AO:24:SER:CB	2.50	0.59
15:AO:55:GLY:O	15:AO:59:MET:HG3	2.02	0.59
34:B9:29:ASN:ND2	34:B9:32:HIS:CE1	2.70	0.59
35:BA:912:C:C2'	35:BA:913:U:H5'	2.32	0.59
1:AA:1054:C:OP2	1:AA:1197:G:OP2	2.20	0.59
35:BA:482:A:N6	35:BA:506:G:C8	2.70	0.59
55:BX:30:VAL:HG21	55:BX:39:ILE:HD11	1.83	0.59
19:AS:29:ARG:HB2	19:AS:48:THR:HB	1.84	0.59
19:AS:58:VAL:HG23	19:AS:58:VAL:O	2.03	0.59
49:BR:20:LEU:O	49:BR:22:ARG:N	2.36	0.59
57:BZ:117:LEU:HD12	57:BZ:118:GLN:H	1.68	0.59
15:AO:3:ILE:CD1	15:AO:8:LYS:HE2	2.32	0.59
41:BG:71:THR:CG2	41:BG:72:ARG:N	2.65	0.59
5:AE:41:VAL:O	5:AE:66:MET:CA	2.48	0.59
50:BS:69:VAL:O	50:BS:72:ALA:HB3	2.01	0.59
1:AA:505:G:H2'	1:AA:506:G:H8	1.67	0.59
45:BN:4:TYR:CD1	45:BN:4:TYR:N	2.68	0.59
36:BB:57:A:H2'	36:BB:57:A:N3	2.17	0.59
35:BA:432:A:H2'	35:BA:433:C:H6	1.66	0.59
9:AI:87:GLN:HG2	9:AI:88:TYR:HD1	1.67	0.59
13:AM:70:LEU:HA	13:AM:73:GLU:CB	2.33	0.59
35:BA:1516:C:C2'	35:BA:1517:G:H5''	2.31	0.59
1:AA:1284:C:H2'	1:AA:1285:A:H8	1.68	0.59
25:B0:20:ARG:HD3	35:BA:2356:C:O3'	2.03	0.59
1:AA:345:C:H4'	1:AA:346:G:OP2	2.03	0.59
5:AE:47:LYS:O	5:AE:48:ALA:CB	2.51	0.59
1:AA:46:G:O2'	1:AA:365:U:H1'	2.03	0.59
18:AR:86:VAL:O	18:AR:87:ARG:HB3	2.01	0.59
24:AY:164:ILE:HD11	24:AY:251:ILE:O	2.01	0.59
24:AY:299:PHE:HE2	24:AY:319:ARG:CG	2.16	0.59
24:AY:359:ALA:CA	24:AY:363:ASP:OD2	2.50	0.59
35:BA:783:A:C5	35:BA:785:G:C8	2.90	0.59
38:BD:91:ARG:C	38:BD:107:ALA:HB2	2.23	0.59
38:BD:11:PRO:O	38:BD:12:SER:OG	2.18	0.59
52:BU:68:ALA:HB1	52:BU:106:PHE:HE2	1.67	0.59
52:BU:22:LYS:NZ	52:BU:29:SER:O	2.33	0.59
1:AA:575:G:C5	1:AA:881:G:C2	2.91	0.59
1:AA:597:G:C2'	1:AA:598:U:H5'	2.31	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:AH:2:LEU:HD22	8:AH:5:PRO:HA	1.85	0.59
12:AL:84:LEU:O	12:AL:101:VAL:HG23	2.03	0.59
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.85	0.59
19:AS:40:ILE:HG21	19:AS:66:MET:O	2.02	0.59
40:BF:195:ASP:O	40:BF:199:TRP:N	2.36	0.59
40:BF:3:GLU:HA	40:BF:24:LEU:CB	2.33	0.59
35:BA:1503:U:H2'	35:BA:1504:C:C6	2.37	0.59
37:BC:171:ILE:HD13	37:BC:196:LEU:HD22	1.85	0.59
37:BC:22:ILE:O	37:BC:22:ILE:HG22	2.02	0.59
37:BC:53:ARG:NH1	37:BC:56:GLN:NE2	2.49	0.59
35:BA:601:C:H5'	40:BF:108:LYS:NZ	2.18	0.59
31:B6:27:LYS:O	31:B6:28:ARG:C	2.41	0.59
42:BH:71:LEU:HD22	42:BH:72:ILE:HD13	1.80	0.59
38:BD:124:PRO:HD2	38:BD:129:ASN:ND2	2.18	0.59
50:BS:97:ARG:HH22	50:BS:98:VAL:HA	1.58	0.59
26:B1:69:LYS:O	26:B1:72:GLU:N	2.32	0.59
35:BA:1417:C:O2'	35:BA:1418:G:H5'	2.02	0.59
51:BT:110:ILE:HG22	51:BT:111:ARG:N	2.16	0.59
35:BA:1272:A:OP2	35:BA:1647:G:OP1	2.20	0.59
56:BY:101:LYS:CG	56:BY:102:CYS:N	2.65	0.59
7:AG:138:LYS:O	7:AG:141:VAL:HB	2.03	0.59
1:AA:376:G:O3'	16:AP:5:ARG:HD3	2.02	0.59
12:AL:115:LYS:O	12:AL:117:ARG:HG3	2.02	0.59
24:AY:527:ARG:HH12	24:AY:529:HIS:HA	1.62	0.59
35:BA:1135:C:O2	35:BA:1135:C:H2'	2.01	0.59
35:BA:2820:A:H62	39:BE:192:ASN:CB	2.08	0.59
35:BA:572:A:C2'	35:BA:573:G:O4'	2.50	0.59
38:BD:13:ARG:HA	38:BD:16:MET:SD	2.42	0.59
38:BD:143:HIS:O	38:BD:144:ALA:HB3	2.02	0.59
38:BD:208:LYS:HG3	38:BD:210:GLY:H	1.67	0.59
39:BE:48:GLN:CG	39:BE:78:LEU:HD13	2.33	0.59
52:BU:112:ARG:HG3	52:BU:112:ARG:HH11	1.67	0.59
46:BO:13:ASN:C	46:BO:15:GLY:H	2.06	0.59
6:AF:18:GLN:HA	6:AF:21:LEU:HB2	1.85	0.59
6:AF:22:GLU:O	6:AF:25:ILE:HG22	2.02	0.59
15:AO:68:ARG:HG3	15:AO:72:ARG:HE	1.68	0.59
35:BA:2331:G:N2	35:BA:2385:C:C5	2.71	0.59
57:BZ:24:LEU:HD21	57:BZ:86:VAL:HG21	1.83	0.59
35:BA:2524:G:H8	35:BA:2524:G:H5'	1.67	0.59
12:AL:93:LEU:O	12:AL:96:VAL:HG23	2.03	0.59
9:AI:33:PHE:O	9:AI:35:GLU:N	2.36	0.59
19:AS:29:ARG:HB3	19:AS:48:THR:H	1.68	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1210:A:H8	35:BA:1210:A:H5'	1.65	0.59
49:BR:87:TYR:CE2	49:BR:94:TYR:HB3	2.37	0.59
37:BC:49:ILE:HG23	37:BC:208:PHE:CE1	2.37	0.59
7:AG:50:ILE:HD11	7:AG:121:ALA:HA	1.85	0.59
5:AE:43:LEU:HD21	5:AE:132:ALA:CB	2.23	0.59
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.38	0.59
38:BD:129:ASN:N	38:BD:193:VAL:CG1	2.66	0.59
50:BS:51:ALA:HB2	50:BS:73:LEU:HB2	1.84	0.59
35:BA:2713:A:H3'	35:BA:2714:G:H5'	1.83	0.59
1:AA:986:A:H2'	1:AA:987:G:O4'	2.03	0.59
9:AI:85:LEU:C	9:AI:85:LEU:HD12	2.23	0.59
57:BZ:19:ARG:C	57:BZ:21:ALA:H	2.05	0.59
54:BW:64:MET:O	54:BW:65:LEU:O	2.20	0.59
42:BH:107:VAL:O	42:BH:152:ARG:NH1	2.36	0.59
16:AP:5:ARG:HE	16:AP:22:THR:HG21	1.67	0.59
43:BJ:24:UNK:HA	43:BJ:85:LEU:O	2.02	0.59
24:AY:336:THR:O	24:AY:337:ALA:HB3	2.03	0.59
1:AA:1503:A:H2'	23:AX:12:A:N6	2.18	0.59
45:BN:46:VAL:O	45:BN:47:ALA:HB3	2.03	0.59
36:BB:54:G:N2	36:BB:55:U:C2	2.70	0.59
35:BA:1214:A:H5'	35:BA:1239:G:H4'	1.84	0.59
24:AY:155:LEU:CD1	24:AY:155:LEU:H	2.14	0.59
24:AY:210:LEU:HD22	24:AY:210:LEU:N	2.18	0.59
24:AY:259:ALA:C	24:AY:261:GLY:H	2.06	0.59
24:AY:282:ARG:NE	24:AY:319:ARG:HH12	2.00	0.59
33:B8:8:LYS:HZ3	33:B8:11:LYS:HZ3	1.50	0.59
35:BA:1926:U:H3'	35:BA:1927:A:H5''	1.85	0.59
35:BA:961:C:N4	35:BA:2031:A:H1'	2.18	0.59
35:BA:23:G:H1	35:BA:517:C:H42	1.48	0.59
35:BA:588:U:H2'	35:BA:589:C:H6	1.68	0.59
35:BA:824:A:H2'	35:BA:825:C:C6	2.37	0.59
38:BD:11:PRO:O	38:BD:12:SER:CB	2.50	0.59
38:BD:21:PHE:O	38:BD:25:THR:OG1	2.21	0.59
39:BE:12:THR:HG23	39:BE:13:ARG:H	1.66	0.59
45:BN:62:VAL:HG11	45:BN:67:LEU:HD21	1.84	0.59
47:BP:70:GLN:HB3	47:BP:72:PRO:CD	2.32	0.59
1:AA:883:C:N3	1:AA:884:U:C4	2.70	0.59
8:AH:1:MET:HG2	8:AH:1:MET:O	2.01	0.59
15:AO:68:ARG:CG	15:AO:72:ARG:NE	2.66	0.59
18:AR:34:TYR:CD1	18:AR:35:ARG:HG3	2.38	0.59
48:BQ:31:ASP:HB3	48:BQ:32:TYR:CD1	2.38	0.59
35:BA:2590:A:O2'	35:BA:2591:C:H5'	2.03	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2606:C:O2'	35:BA:2607:G:H5'	2.03	0.59
1:AA:1201:A:H4'	1:AA:1202:G:C5'	2.32	0.59
3:AC:145:GLY:O	3:AC:146:ALA:HB3	2.01	0.59
14:AN:47:LEU:HD13	14:AN:52:GLN:CB	2.29	0.59
37:BC:161:ILE:HG21	37:BC:174:PRO:HG2	1.85	0.59
20:AT:10:LEU:HD12	20:AT:11:SER:H	1.67	0.59
17:AQ:7:THR:HA	17:AQ:58:GLU:HA	1.85	0.59
42:BH:67:LEU:O	42:BH:71:LEU:HB2	2.02	0.59
2:AB:146:GLN:O	2:AB:148:TYR:N	2.36	0.59
35:BA:1496:A:C8	35:BA:1498:C:N4	2.71	0.59
41:BG:6:ALA:O	41:BG:10:LYS:N	2.28	0.59
49:BR:72:ASP:OD2	49:BR:75:LEU:HD23	2.03	0.59
25:B0:52:GLY:HA3	25:B0:60:PHE:CZ	2.37	0.59
35:BA:1670:C:O5'	35:BA:1670:C:H6	1.85	0.59
35:BA:7:G:O2'	35:BA:8:A:H5'	2.03	0.59
24:AY:518:TYR:HD1	24:AY:518:TYR:N	2.00	0.59
1:AA:344:A:H5''	1:AA:345:C:H5	1.68	0.59
35:BA:443:A:C2	35:BA:1245:G:N3	2.70	0.59
17:AQ:63:ARG:HG2	17:AQ:64:PRO:CD	2.33	0.59
1:AA:34:C:H2'	1:AA:35:G:H8	1.68	0.59
42:BH:22:GLY:C	42:BH:23:ARG:HD3	2.23	0.59
43:BJ:91:UNK:O	43:BJ:93:UNK:N	2.36	0.59
35:BA:2068:U:H3	35:BA:2430:A:H2	1.47	0.59
24:AY:470:THR:CG2	24:AY:472:ARG:NH2	2.65	0.59
35:BA:2656:U:H2'	35:BA:2657:A:H5''	1.83	0.59
32:B7:11:LYS:HE3	35:BA:686:G:N2	2.18	0.59
33:B8:32:LEU:HB3	33:B8:36:LYS:HE2	1.85	0.59
35:BA:1133:U:O2'	35:BA:1137:G:OP1	2.17	0.59
35:BA:989:G:C5'	35:BA:1157:G:H4'	2.27	0.59
35:BA:1190:G:OP1	47:BP:32:THR:OG1	2.20	0.59
35:BA:2581:G:C6	35:BA:2610:C:N3	2.71	0.59
35:BA:2716:U:H2'	35:BA:2717:G:H8	1.68	0.59
35:BA:531:C:H5''	35:BA:532:A:C5	2.38	0.59
38:BD:10:THR:C	38:BD:11:PRO:O	2.41	0.59
38:BD:227:ASN:HB3	38:BD:229:VAL:HG12	1.85	0.59
39:BE:114:ALA:O	39:BE:119:ARG:HB2	2.03	0.59
1:AA:826:C:C5	1:AA:827:U:H5	2.21	0.59
1:AA:862:C:O2'	1:AA:863:U:H5'	2.03	0.59
1:AA:874:G:C6	1:AA:875:C:C4	2.90	0.59
1:AA:914:A:H2'	1:AA:915:A:H8	1.67	0.59
8:AH:1:MET:HE3	8:AH:2:LEU:C	2.22	0.59
12:AL:7:ILE:CG1	12:AL:10:LEU:HD12	2.33	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:16:PRO:O	53:BV:96:ILE:O	2.21	0.59
2:AB:41:ILE:HG22	2:AB:42:ILE:O	2.03	0.59
2:AB:51:LEU:CD2	2:AB:55:PHE:HE2	2.12	0.59
35:BA:2394:C:OP1	47:BP:63:PRO:HD2	2.03	0.59
25:B0:27:GLU:CD	35:BA:856:C:H1'	2.23	0.59
48:BQ:54:MET:C	48:BQ:56:ARG:N	2.56	0.59
57:BZ:54:HIS:HA	57:BZ:98:MET:HE3	1.84	0.59
3:AC:174:PRO:C	3:AC:176:HIS:N	2.56	0.59
1:AA:355:C:N4	1:AA:356:A:N6	2.51	0.59
40:BF:154:VAL:CG2	40:BF:191:ARG:HB3	2.29	0.59
19:AS:49:ILE:O	19:AS:60:VAL:HG13	2.02	0.59
35:BA:2839:G:H2'	35:BA:2840:C:H6	1.67	0.59
35:BA:145:G:H2'	35:BA:146:G:O4'	2.03	0.59
57:BZ:120:ILE:HD13	57:BZ:120:ILE:N	2.18	0.59
35:BA:616:G:H5''	40:BF:103:LYS:HZ3	1.64	0.59
31:B6:25:LYS:NZ	35:BA:2285:C:H41	2.01	0.59
1:AA:1392:G:N2	1:AA:1502:A:H8	2.00	0.59
24:AY:19:ILE:C	24:AY:126:LEU:HD13	2.23	0.59
35:BA:1498:C:O2'	35:BA:1499:C:H5''	2.03	0.59
1:AA:1124:G:C2	1:AA:1127:G:N2	2.71	0.59
9:AI:20:ARG:O	9:AI:22:GLY:N	2.36	0.59
1:AA:1494:G:C5	1:AA:1495:U:C4	2.90	0.59
1:AA:275:G:H2'	1:AA:276:G:C8	2.35	0.59
47:BP:92:GLU:HA	47:BP:123:LEU:HD11	1.84	0.59
35:BA:9:U:HO2'	35:BA:10:G:H8	1.50	0.59
22:AV:26:G:C2'	22:AV:27:U:OP2	2.51	0.59
53:BV:3:ALA:HB1	53:BV:14:VAL:HG22	1.84	0.59
35:BA:603:A:C2	35:BA:604:G:H1'	2.38	0.59
45:BN:46:VAL:CG1	45:BN:48:MET:HG3	2.33	0.59
7:AG:21:VAL:O	7:AG:23:VAL:N	2.35	0.59
24:AY:106:VAL:CG2	24:AY:107:ASP:N	2.65	0.58
35:BA:1025:G:H1	35:BA:1140:C:N4	2.00	0.58
35:BA:1909:C:H42	35:BA:1921:G:H1	1.50	0.58
35:BA:670:A:H4'	35:BA:671:C:H5''	1.86	0.58
35:BA:811:U:O2	35:BA:1251:C:C5	2.56	0.58
35:BA:817:C:O2'	35:BA:839:U:H5''	2.02	0.58
35:BA:729:G:C5	38:BD:208:LYS:HD2	2.38	0.58
38:BD:66:ASP:OD2	38:BD:103:ARG:CZ	2.51	0.58
40:BF:89:VAL:HG12	40:BF:90:PHE:CD2	2.37	0.58
1:AA:18:C:P	5:AE:14:ARG:HH12	2.26	0.58
8:AH:30:ARG:HB3	8:AH:30:ARG:NH1	2.18	0.58
15:AO:62:GLN:HA	15:AO:65:ARG:CD	2.33	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:29:PRO:O	53:BV:61:VAL:HG23	2.03	0.58
2:AB:12:GLU:C	2:AB:14:GLY:H	2.06	0.58
2:AB:162:ILE:CG1	2:AB:163:PHE:N	2.65	0.58
48:BQ:21:THR:HA	48:BQ:98:LYS:HB2	1.83	0.58
22:AV:8:U:H1'	22:AV:48:C:H1'	1.85	0.58
21:AU:13:ILE:O	21:AU:16:GLY:N	2.35	0.58
3:AC:53:ALA:HB2	3:AC:114:PRO:HB2	1.84	0.58
10:AJ:61:GLU:OE2	14:AN:58:LYS:HD3	2.03	0.58
56:BY:79:CYS:O	56:BY:81:LYS:N	2.36	0.58
19:AS:75:ALA:N	19:AS:76:PRO:CD	2.66	0.58
4:AD:140:VAL:HG11	4:AD:146:ILE:HD11	1.84	0.58
29:B4:8:LYS:O	29:B4:9:LEU:HB2	2.03	0.58
35:BA:616:G:H5'	40:BF:103:LYS:HZ3	1.67	0.58
39:BE:52:LEU:HD23	39:BE:75:VAL:CB	2.27	0.58
1:AA:170:U:O2'	1:AA:171:A:H5'	2.03	0.58
1:AA:277:C:H5'	17:AQ:68:ARG:NH1	2.17	0.58
35:BA:1439:A:H3'	35:BA:1440:G:H8	1.68	0.58
35:BA:2672:G:C2'	35:BA:2673:G:H5''	2.33	0.58
48:BQ:131:ILE:N	48:BQ:131:ILE:CD1	2.66	0.58
35:BA:2399:G:O6	35:BA:2417:C:N3	2.36	0.58
35:BA:1216:G:O2'	35:BA:1217:C:H5'	2.03	0.58
25:B0:25:ARG:HG2	25:B0:25:ARG:HH11	1.68	0.58
35:BA:317:G:N2	35:BA:318:C:H1'	2.18	0.58
24:AY:138:LEU:HD22	24:AY:275:TRP:HZ3	1.67	0.58
24:AY:14:ARG:CG	24:AY:276:ALA:HB1	2.33	0.58
24:AY:259:ALA:C	24:AY:261:GLY:N	2.57	0.58
24:AY:443:VAL:CG2	24:AY:444:LEU:HD22	2.33	0.58
24:AY:508:MET:HA	24:AY:511:LEU:HB3	1.84	0.58
13:AM:103:THR:O	13:AM:105:THR:N	2.36	0.58
35:BA:1287:A:C2'	35:BA:1288:U:H5'	2.33	0.58
35:BA:1341:U:OP1	35:BA:1397:U:N3	2.36	0.58
35:BA:2008:C:H2'	35:BA:2009:G:H8	1.69	0.58
38:BD:147:LEU:CD2	38:BD:183:ARG:CZ	2.80	0.58
38:BD:6:PHE:CE2	38:BD:17:THR:HA	2.38	0.58
35:BA:2514:U:O4'	39:BE:151:TYR:HE2	1.87	0.58
35:BA:2680:C:H5'	39:BE:189:PRO:HA	1.85	0.58
45:BN:112:LEU:O	45:BN:115:ARG:HB3	2.02	0.58
45:BN:90:MET:HE2	45:BN:94:HIS:HB2	1.85	0.58
49:BR:5:LYS:O	49:BR:6:SER:HB2	2.03	0.58
51:BT:65:LYS:HE3	51:BT:66:VAL:H	1.69	0.58
52:BU:109:LEU:O	52:BU:113:ALA:N	2.36	0.58
52:BU:57:PHE:O	52:BU:58:ARG:C	2.41	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1665:A:H8	35:BA:1665:A:O5'	1.85	0.58
1:AA:18:C:H2'	1:AA:19:C:C6	2.38	0.58
1:AA:913:A:H4'	1:AA:914:A:C4'	2.33	0.58
15:AO:65:ARG:NH1	15:AO:65:ARG:HG2	2.17	0.58
1:AA:892:A:O2'	1:AA:1415:G:H4'	2.02	0.58
2:AB:155:LEU:HD13	2:AB:157:ARG:O	2.03	0.58
2:AB:200:ILE:HG22	2:AB:202:PRO:CD	2.28	0.58
2:AB:187:LEU:HD23	2:AB:201:ILE:O	2.02	0.58
35:BA:2787:C:O2	39:BE:61:ARG:HD3	2.03	0.58
25:B0:40:GLN:OE1	25:B0:44:ARG:HB2	2.03	0.58
57:BZ:71:VAL:HG12	57:BZ:73:GLN:O	2.03	0.58
22:AV:50:U:H2'	22:AV:51:C:C6	2.37	0.58
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.17	0.58
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.19	0.58
3:AC:21:ARG:O	3:AC:22:TRP:CD1	2.56	0.58
49:BR:47:PHE:O	49:BR:49:ASP:N	2.36	0.58
35:BA:2282:G:H5''	35:BA:2283:C:O4'	2.03	0.58
35:BA:1887:C:C2'	35:BA:1888:G:H5''	2.33	0.58
5:AE:115:VAL:CG1	5:AE:116:THR:N	2.65	0.58
26:B1:48:LYS:CE	26:B1:59:THR:HB	2.33	0.58
22:AV:39:C:H2'	22:AV:39:C:O2	2.03	0.58
37:BC:74:VAL:HG13	37:BC:112:ALA:CB	2.32	0.58
2:AB:127:ILE:HD11	2:AB:139:LYS:HE3	1.85	0.58
35:BA:2672:G:H2'	35:BA:2673:G:H5''	1.84	0.58
16:AP:3:LYS:HB3	16:AP:65:GLN:O	2.02	0.58
35:BA:20:C:H2'	35:BA:21:A:C8	2.38	0.58
19:AS:55:LYS:HG2	19:AS:56:GLN:NE2	2.18	0.58
26:B1:53:VAL:O	26:B1:54:ALA:HB3	2.03	0.58
4:AD:91:SER:O	4:AD:94:LEU:HB2	2.03	0.58
46:BO:17:ARG:NH2	46:BO:99:PHE:CE2	2.71	0.58
24:AY:215:LEU:HD23	24:AY:216:ASP:H	1.68	0.58
24:AY:223:LEU:HA	24:AY:226:GLN:OE1	2.02	0.58
24:AY:446:PHE:HA	24:AY:449:VAL:HG22	1.85	0.58
1:AA:769:G:N2	1:AA:811:C:H1'	2.18	0.58
35:BA:1799:G:OP1	38:BD:260:ARG:NE	2.36	0.58
38:BD:226:MET:SD	38:BD:230:ASP:O	2.61	0.58
35:BA:2579:C:O4'	39:BE:134:ILE:HG21	2.03	0.58
39:BE:38:THR:HB	39:BE:41:LYS:HG2	1.85	0.58
39:BE:81:ILE:O	39:BE:82:ARG:O	2.20	0.58
47:BP:114:ILE:CG2	47:BP:130:PHE:CD1	2.86	0.58
47:BP:71:VAL:H	47:BP:72:PRO:HD2	1.64	0.58
52:BU:57:PHE:HD1	52:BU:60:LEU:HD12	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AF:80:ARG:HA	6:AF:85:VAL:HG11	1.85	0.58
8:AH:5:PRO:HD2	8:AH:6:ILE:HD12	1.85	0.58
15:AO:70:LEU:O	15:AO:74:ASP:O	2.21	0.58
57:BZ:48:PHE:O	57:BZ:52:SER:N	2.36	0.58
57:BZ:48:PHE:O	57:BZ:50:GLN:N	2.36	0.58
27:B2:47:ASN:HA	27:B2:50:ILE:HD13	1.85	0.58
40:BF:158:THR:C	40:BF:160:ASN:H	2.07	0.58
40:BF:178:PRO:C	40:BF:201:VAL:HG11	2.22	0.58
40:BF:101:LEU:CD1	40:BF:102:PRO:HD2	2.20	0.58
35:BA:1070:A:C6	35:BA:1097:U:H4'	2.37	0.58
51:BT:121:ILE:O	51:BT:124:ASP:CB	2.48	0.58
1:AA:622:A:H3'	1:AA:623:C:C6	2.38	0.58
1:AA:1404:C:H1'	1:AA:1499:A:N1	2.18	0.58
28:B3:45:GLY:C	28:B3:47:VAL:N	2.55	0.58
39:BE:52:LEU:CD2	39:BE:75:VAL:HB	2.26	0.58
12:AL:41:ARG:CZ	12:AL:41:ARG:CB	2.80	0.58
35:BA:1304:C:H2'	35:BA:1305:C:H6	1.67	0.58
35:BA:1003:G:N2	35:BA:1004:C:O2	2.37	0.58
35:BA:2277:G:C6	35:BA:2278:A:N7	2.71	0.58
35:BA:1218:C:C2'	35:BA:1219:G:H5'	2.33	0.58
1:AA:945:G:H2'	1:AA:946:A:H5'	1.84	0.58
35:BA:1683:C:H6	35:BA:1683:C:O5'	1.86	0.58
35:BA:2795:G:N3	35:BA:2795:G:H2'	2.18	0.58
35:BA:1045:A:OP1	35:BA:1046:A:H3'	2.04	0.58
35:BA:1691:C:H2'	35:BA:1692:U:C6	2.37	0.58
35:BA:2576:G:OP1	35:BA:2577:A:OP1	2.21	0.58
35:BA:2868:A:H2'	35:BA:2869:G:H8	1.66	0.58
35:BA:254:G:O2'	35:BA:384:U:H5'	2.03	0.58
38:BD:36:PRO:O	38:BD:37:LEU:CB	2.48	0.58
39:BE:167:VAL:O	39:BE:167:VAL:HG13	2.03	0.58
40:BF:65:TRP:CH2	40:BF:75:HIS:HD2	2.21	0.58
40:BF:63:LYS:HZ1	40:BF:67:GLN:HA	1.69	0.58
45:BN:90:MET:CE	45:BN:90:MET:HA	2.33	0.58
45:BN:90:MET:HE3	45:BN:90:MET:HA	1.85	0.58
1:AA:914:A:O2'	1:AA:915:A:H5'	2.02	0.58
1:AA:878:G:P	8:AH:88:LYS:HD2	2.44	0.58
35:BA:2243:U:O2	35:BA:2434:A:C2	2.56	0.58
22:AV:72:A:O2'	35:BA:1852:C:H4'	2.02	0.58
12:AL:53:ARG:NH1	12:AL:53:ARG:HG2	2.17	0.58
12:AL:35:GLY:C	12:AL:58:VAL:HG13	2.23	0.58
12:AL:82:VAL:HG22	24:AY:406:PRO:HB3	1.84	0.58
3:AC:64:VAL:HG12	3:AC:66:VAL:HG23	1.85	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B2:2:LYS:NZ	27:B2:5:GLU:CD	2.56	0.58
35:BA:85:G:OP1	56:BY:30:VAL:HB	2.02	0.58
4:AD:30:LYS:C	4:AD:32:ALA:H	2.06	0.58
35:BA:1057:A:C2'	35:BA:1058:G:H5'	2.33	0.58
35:BA:1070:A:C6	44:BK:7:UNK:C	2.86	0.58
11:AK:28:THR:HG22	11:AK:29:ILE:N	2.17	0.58
35:BA:1463:C:H2'	35:BA:1464:C:C6	2.38	0.58
41:BG:71:THR:HB	41:BG:89:GLY:CA	2.32	0.58
42:BH:65:HIS:CD2	42:BH:65:HIS:C	2.76	0.58
36:BB:68:C:C2'	36:BB:69:G:H8	2.15	0.58
50:BS:49:VAL:HG12	50:BS:50:SER:N	2.18	0.58
54:BW:6:ILE:HG23	54:BW:104:THR:HG22	1.86	0.58
47:BP:94:GLU:HG3	47:BP:124:LYS:CB	2.34	0.58
42:BH:109:PHE:CD2	42:BH:152:ARG:NH1	2.72	0.58
35:BA:30:G:O2'	35:BA:31:C:H5'	2.04	0.58
31:B6:19:ARG:HG3	31:B6:19:ARG:HH11	1.67	0.58
1:AA:840:C:H5'	1:AA:841:U:OP1	2.03	0.58
2:AB:92:TYR:CD1	2:AB:93:VAL:N	2.71	0.58
35:BA:981:A:H8	35:BA:982:C:C5	2.22	0.58
45:BN:76:SER:N	45:BN:81:GLY:O	2.35	0.58
11:AK:95:ILE:O	11:AK:98:LEU:HB2	2.04	0.58
24:AY:325:TYR:O	24:AY:358:GLU:HA	2.02	0.58
24:AY:470:THR:OG1	24:AY:471:ALA:N	2.37	0.58
35:BA:2360:A:O2'	35:BA:2361:A:O4'	2.21	0.58
35:BA:2461:C:N3	35:BA:2490:G:N2	2.51	0.58
35:BA:2689:U:H5''	35:BA:2690:C:C5'	2.25	0.58
35:BA:448:U:H5'	35:BA:449:A:C8	2.37	0.58
35:BA:627:A:H61	35:BA:636:G:H2'	1.67	0.58
35:BA:568:U:C5'	35:BA:945:A:N6	2.67	0.58
38:BD:182:LEU:CA	38:BD:272:ALA:HB2	2.33	0.58
39:BE:45:THR:O	39:BE:46:ALA:HB2	2.02	0.58
39:BE:4:ILE:HG22	39:BE:198:VAL:HB	1.85	0.58
52:BU:108:GLU:O	52:BU:109:LEU:C	2.41	0.58
52:BU:92:ARG:NH2	53:BV:10:LYS:HG2	2.19	0.58
53:BV:40:LEU:CD1	53:BV:46:VAL:H	2.16	0.58
35:BA:1951:U:O2	35:BA:1954:G:H8	1.86	0.58
15:AO:60:VAL:O	15:AO:63:ARG:HB3	2.03	0.58
1:AA:1088:G:H2'	1:AA:1089:G:H8	1.68	0.58
2:AB:213:LEU:C	2:AB:213:LEU:HD23	2.24	0.58
57:BZ:72:ARG:O	57:BZ:73:GLN:HB3	2.02	0.58
1:AA:980:C:O2'	14:AN:19:ARG:HG2	2.04	0.58
3:AC:83:ARG:O	3:AC:87:LEU:HG	2.04	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AS:9:VAL:CG1	19:AS:11:VAL:HG12	2.24	0.58
9:AI:46:ALA:HB1	9:AI:77:ILE:CG2	2.33	0.58
35:BA:143:G:H5''	35:BA:1598:C:O2'	2.03	0.58
1:AA:938:A:H2'	1:AA:939:G:O4'	2.04	0.58
1:AA:1266:G:N2	1:AA:1268:A:H3'	2.18	0.58
5:AE:72:GLN:O	5:AE:73:ASN:CB	2.49	0.58
1:AA:67:C:H6	1:AA:67:C:H3'	1.68	0.58
22:AV:34:C:H2'	22:AV:35:A:C8	2.37	0.58
13:AM:23:TYR:HB3	13:AM:67:GLU:CB	2.33	0.58
35:BA:2796:U:OP1	35:BA:2799:C:C5	2.56	0.58
30:B5:59:GLU:O	30:B5:59:GLU:HG3	2.04	0.58
56:BY:6:HIS:CD2	56:BY:6:HIS:H	2.21	0.58
35:BA:742:G:H4'	35:BA:1675:C:O2'	2.03	0.58
35:BA:654(Q):C:O2'	35:BA:654(R):C:H5'	2.04	0.58
24:AY:138:LEU:CD2	24:AY:275:TRP:CE3	2.84	0.58
24:AY:210:LEU:H	24:AY:210:LEU:HD22	1.67	0.58
24:AY:28:THR:O	24:AY:32:LYS:HG3	2.03	0.58
24:AY:446:PHE:O	24:AY:449:VAL:HG22	2.04	0.58
1:AA:777:A:H2'	1:AA:778:G:H8	1.68	0.58
35:BA:1012:U:O5'	35:BA:1013:C:H5''	2.02	0.58
35:BA:1655:A:C2	35:BA:2049:G:H4'	2.39	0.58
35:BA:225:A:C2'	35:BA:226:G:H5'	2.33	0.58
38:BD:90:ALA:HB3	38:BD:106:ILE:CG2	2.32	0.58
39:BE:200:GLU:H	39:BE:200:GLU:CD	2.06	0.58
45:BN:57:ALA:HB3	45:BN:124:ALA:HA	1.86	0.58
1:AA:18:C:H2'	1:AA:19:C:H6	1.69	0.58
15:AO:68:ARG:HG3	15:AO:72:ARG:CG	2.33	0.58
53:BV:6:LYS:O	53:BV:37:VAL:HG21	2.04	0.58
57:BZ:69:THR:C	57:BZ:70:LEU:HD22	2.23	0.58
57:BZ:8:TYR:HB2	57:BZ:38:TYR:CZ	2.38	0.58
1:AA:1014:A:H5'	19:AS:14:HIS:CD2	2.39	0.58
4:AD:29:PRO:C	4:AD:30:LYS:HG2	2.24	0.58
40:BF:179:GLU:C	40:BF:181:LEU:H	2.05	0.58
49:BR:117:VAL:HG22	49:BR:118:GLU:H	1.68	0.58
5:AE:115:VAL:HG13	5:AE:116:THR:N	2.18	0.58
36:BB:73:A:H2'	36:BB:74:U:O4'	2.04	0.58
35:BA:2115:G:C3'	35:BA:2116:G:H5''	2.34	0.58
41:BG:7:LEU:HD22	41:BG:176:LEU:HD21	1.84	0.58
42:BH:30:LYS:HB2	42:BH:79:VAL:O	2.03	0.58
35:BA:2177:C:HO2'	37:BC:168:THR:HG21	1.69	0.58
20:AT:73:HIS:HB3	20:AT:74:LYS:HD3	1.86	0.58
37:BC:155:GLU:HG3	37:BC:160:ARG:HD3	1.84	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2439:A:C5'	35:BA:2439:A:H8	2.16	0.58
24:AY:518:TYR:CD1	24:AY:518:TYR:N	2.71	0.58
1:AA:383:A:H2'	1:AA:384:G:H5'	1.83	0.58
26:B1:90:ILE:O	26:B1:94:LEU:HD13	2.03	0.58
5:AE:24:ARG:HD3	5:AE:26:PHE:CE2	2.39	0.58
35:BA:154:G:H1	35:BA:172:C:H42	1.50	0.58
7:AG:76:ARG:HG2	7:AG:76:ARG:HH11	1.69	0.58
16:AP:40:ASP:OD1	16:AP:43:LYS:N	2.37	0.58
16:AP:61:SER:O	16:AP:62:VAL:HG13	2.03	0.58
42:BH:54:ARG:HH11	42:BH:54:ARG:HG2	1.68	0.58
1:AA:951:G:O2'	1:AA:952:U:H5'	2.02	0.58
1:AA:679:C:H2'	1:AA:680:C:C6	2.39	0.58
35:BA:2443:C:H3'	35:BA:2443:C:H6	1.69	0.58
35:BA:2680:C:OP2	39:BE:111:ARG:NH2	2.36	0.58
51:BT:47:GLY:C	51:BT:48:ILE:HD12	2.24	0.58
52:BU:13:LYS:HD3	52:BU:13:LYS:N	2.17	0.58
53:BV:39:LEU:HB3	53:BV:47:VAL:CG2	2.27	0.58
42:BH:33:LEU:HD21	42:BH:136:ILE:CG2	2.32	0.58
35:BA:2739:U:H5	35:BA:2763:G:C5	2.21	0.58
8:AH:85:ARG:NH1	8:AH:85:ARG:HG3	2.18	0.58
35:BA:913:U:HO2'	35:BA:915:C:H5	1.50	0.58
1:AA:1327:C:H2'	1:AA:1328:C:C6	2.39	0.58
12:AL:36:VAL:CB	12:AL:82:VAL:HA	2.34	0.58
12:AL:82:VAL:O	12:AL:83:VAL:HG13	2.03	0.58
1:AA:1108:G:H5'	3:AC:176:HIS:CD2	2.38	0.58
40:BF:165:ARG:HA	40:BF:168:ARG:NH2	2.19	0.58
40:BF:154:VAL:HG12	40:BF:193:VAL:HG23	1.84	0.58
49:BR:42:LYS:O	49:BR:45:ARG:HG2	2.03	0.58
57:BZ:110:GLY:O	57:BZ:115:GLY:HA2	2.04	0.58
20:AT:13:LEU:HD23	20:AT:13:LEU:H	1.68	0.58
42:BH:67:LEU:CD2	42:BH:71:LEU:HD12	2.34	0.58
35:BA:1491:G:C6	35:BA:1500:G:C2	2.92	0.58
41:BG:25:TYR:CE2	41:BG:32:PRO:CD	2.86	0.58
35:BA:182:A:H2'	35:BA:183:C:C6	2.39	0.58
35:BA:1642:G:O2'	35:BA:1643:G:H5'	2.03	0.58
10:AJ:35:SER:O	10:AJ:36:GLY:O	2.22	0.58
35:BA:81:G:H3'	35:BA:82:G:H8	1.68	0.58
46:BO:89:ASN:C	46:BO:91:LEU:N	2.55	0.58
35:BA:1150:C:O2'	35:BA:1151:G:H5'	2.04	0.58
35:BA:2563:U:H1'	35:BA:2566:A:N6	2.19	0.58
17:AQ:11:VAL:HG22	17:AQ:20:THR:O	2.03	0.58
35:BA:1238:G:N2	35:BA:1239:G:H1'	2.19	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B1:20:ARG:HB2	26:B1:33:LYS:O	2.03	0.58
1:AA:415:A:H2'	1:AA:416:G:C8	2.38	0.58
35:BA:406:G:H2'	35:BA:407:G:C8	2.39	0.58
24:AY:227:LEU:O	24:AY:231:LEU:HB3	2.04	0.58
24:AY:386:LYS:HD2	24:AY:386:LYS:C	2.24	0.58
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.37	0.58
1:AA:1513:A:O2'	1:AA:1514:C:H5'	2.03	0.58
35:BA:1270:C:O4'	35:BA:1325:G:C6	2.56	0.58
35:BA:1651:G:H5'	49:BR:39:PRO:HG2	1.86	0.58
35:BA:2459:A:N1	35:BA:2494:G:N3	2.51	0.58
35:BA:977:G:C6	35:BA:987:G:C6	2.92	0.58
45:BN:2:LYS:NZ	52:BU:95:LEU:CD2	2.65	0.58
47:BP:113:LYS:CE	47:BP:131:SER:HB3	2.33	0.58
47:BP:112:LEU:HD22	47:BP:113:LYS:H	1.67	0.58
35:BA:2406:U:N3	47:BP:72:PRO:HB2	2.18	0.58
51:BT:64:ARG:NH1	51:BT:103:ARG:HA	2.19	0.58
1:AA:586:C:O3'	8:AH:89:PRO:HB2	2.04	0.58
6:AF:4:TYR:HD1	6:AF:92:LYS:HA	1.69	0.58
53:BV:33:VAL:O	53:BV:58:VAL:HG13	2.04	0.58
53:BV:96:ILE:H	53:BV:96:ILE:CD1	1.92	0.58
2:AB:155:LEU:CD1	2:AB:157:ARG:O	2.51	0.58
2:AB:17:PHE:HB3	2:AB:44:LEU:HD21	1.86	0.58
35:BA:2394:C:OP1	47:BP:63:PRO:CG	2.51	0.58
48:BQ:125:LEU:HD22	48:BQ:125:LEU:N	2.17	0.58
57:BZ:123:ASP:O	57:BZ:124:ILE:HG12	2.03	0.58
48:BQ:141:GLN:OXT	57:BZ:53:ILE:HB	2.04	0.58
1:AA:357:G:OP1	1:AA:367:U:H2'	2.04	0.58
40:BF:20:LEU:O	40:BF:24:LEU:HD23	2.03	0.58
42:BH:83:TYR:CB	42:BH:135:GLY:H	2.16	0.58
57:BZ:151:HIS:CG	57:BZ:170:THR:HA	2.38	0.58
7:AG:42:ILE:HG22	7:AG:43:PHE:N	2.18	0.58
35:BA:2307:G:N2	35:BA:2308:G:H5''	2.18	0.58
35:BA:1556:C:O2'	35:BA:1557:C:H5'	2.04	0.58
47:BP:7:ARG:HB3	47:BP:8:PRO:CD	2.33	0.58
36:BB:47:C:H5'	36:BB:48:A:OP2	2.04	0.58
35:BA:1859:A:N6	35:BA:1883:G:H1'	2.19	0.58
13:AM:120:LYS:HE3	13:AM:120:LYS:HA	1.84	0.58
35:BA:848:G:H8	35:BA:848:G:H5'	1.68	0.58
35:BA:931:G:N2	35:BA:933:A:N7	2.51	0.58
35:BA:201:C:H2'	35:BA:202:U:C5'	2.34	0.58
35:BA:341:G:H2'	35:BA:342:G:O4'	2.03	0.58
54:BW:36:LEU:HD12	54:BW:48:ALA:HB2	1.86	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1228:G:N2	35:BA:1229:G:H1'	2.19	0.58
1:AA:452:A:H62	1:AA:480:U:H3	1.51	0.58
24:AY:284:THR:HG23	24:AY:385:MET:HE1	1.86	0.58
35:BA:1328:G:H2'	35:BA:1330:C:C5	2.39	0.58
35:BA:1771:C:H2'	35:BA:1772:G:C8	2.39	0.58
1:AA:702:A:H61	35:BA:1846:G:C5'	2.14	0.58
35:BA:1697:G:H5''	35:BA:1979:C:OP1	2.04	0.58
35:BA:2025:C:H2'	35:BA:2026:C:H6	1.68	0.58
35:BA:2046:G:H2'	35:BA:2047:U:C6	2.38	0.58
35:BA:2722:G:O2'	49:BR:5:LYS:CB	2.52	0.58
38:BD:53:PHE:C	38:BD:218:ARG:HB2	2.24	0.58
35:BA:2619:C:H5'	39:BE:150:VAL:O	2.04	0.58
45:BN:18:ALA:HB3	45:BN:26:LEU:CD2	2.34	0.58
45:BN:27:ALA:O	45:BN:30:ILE:N	2.36	0.58
46:BO:76:ALA:HB3	51:BT:75:ILE:HD13	1.85	0.58
1:AA:833:U:C2	1:AA:834:C:C5	2.91	0.58
1:AA:1102:A:O2'	1:AA:1103:C:H5'	2.04	0.58
2:AB:8:LYS:HE2	2:AB:217:ARG:NH2	2.19	0.58
22:AV:14:A:C2	22:AV:15:G:H1'	2.39	0.58
22:AV:15:G:O6	22:AV:48:C:O2	2.22	0.58
1:AA:1152:A:C6	1:AA:1153:C:N4	2.72	0.58
3:AC:174:PRO:C	3:AC:176:HIS:H	2.08	0.58
10:AJ:5:ARG:HG2	10:AJ:71:LEU:CD1	2.30	0.58
35:BA:335:C:OP1	35:BA:335:C:H6	1.87	0.58
40:BF:5:ALA:HB2	40:BF:24:LEU:CD1	2.28	0.58
5:AE:50:GLU:HG3	5:AE:52:PRO:CD	2.12	0.58
37:BC:37:PHE:HZ	37:BC:217:THR:HG21	1.68	0.58
41:BG:76:SER:HA	41:BG:83:ARG:HA	1.85	0.58
50:BS:29:PHE:HE1	50:BS:31:SER:CB	2.04	0.58
35:BA:2389:G:H5''	35:BA:2390:U:C4'	2.34	0.58
33:B8:12:LYS:CD	47:BP:68:GLN:HG3	2.32	0.58
1:AA:8:A:C5	4:AD:209:ARG:HB3	2.39	0.58
35:BA:1202:C:H2'	35:BA:1203:G:H5'	1.86	0.58
34:B9:16:VAL:HG11	35:BA:1032:A:O3'	2.04	0.58
2:AB:95:GLN:O	2:AB:96:ARG:HD2	2.04	0.58
36:BB:57:A:H2	36:BB:58:A:C4	2.22	0.58
35:BA:2103:C:H2'	35:BA:2104:G:H5''	1.85	0.58
46:BO:120:GLU:HB2	51:BT:68:TYR:HE2	1.68	0.58
1:AA:114:U:H2'	1:AA:115:G:C8	2.38	0.58
33:B8:50:LEU:O	33:B8:51:ALA:HB2	2.03	0.58
20:AT:39:LYS:O	20:AT:43:LEU:HG	2.04	0.58
35:BA:9:U:O2'	35:BA:10:G:H8	1.87	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:80:G:H5''	1:AA:81:U:C5	2.38	0.58
10:AJ:40:LEU:HB3	10:AJ:41:PRO:HD2	1.85	0.58
57:BZ:63:ASP:HB3	57:BZ:65:GLN:HE21	1.68	0.58
17:AQ:52:LYS:O	17:AQ:55:ASP:OD2	2.22	0.58
35:BA:2091:U:H3	35:BA:2228:G:H1	1.52	0.58
44:BK:86:UNK:O	44:BK:87:UNK:CB	2.51	0.58
24:AY:452:ARG:C	24:AY:454:LYS:H	2.06	0.58
35:BA:1817:G:H2'	35:BA:1818:U:H5'	1.85	0.58
35:BA:1826:G:OP1	38:BD:224:ALA:HB2	2.04	0.58
35:BA:1976:U:O2'	35:BA:1977:A:C8	2.56	0.58
35:BA:2580:U:C5	35:BA:2581:G:C5	2.92	0.58
35:BA:628:G:H2'	35:BA:629:G:H8	1.69	0.58
38:BD:147:LEU:C	38:BD:189:CYS:SG	2.82	0.58
38:BD:226:MET:SD	38:BD:230:ASP:HB3	2.44	0.58
40:BF:64:ILE:HG23	40:BF:65:TRP:N	2.18	0.58
45:BN:121:LYS:O	45:BN:122:VAL:HG23	2.04	0.58
35:BA:2744:G:H21	42:BH:143:GLN:NE2	2.02	0.58
6:AF:22:GLU:OE1	6:AF:22:GLU:HA	2.03	0.58
1:AA:750:G:O2'	15:AO:21:ASP:HB2	2.04	0.58
15:AO:24:SER:OG	15:AO:27:VAL:HG23	2.04	0.58
53:BV:57:VAL:HG22	53:BV:58:VAL:O	2.04	0.58
2:AB:157:ARG:NH1	2:AB:157:ARG:CB	2.67	0.58
48:BQ:18:LYS:HG2	48:BQ:19:GLY:N	2.17	0.58
1:AA:1300:G:C5	1:AA:1334:G:N7	2.71	0.58
1:AA:974:A:OP1	1:AA:974:A:C8	2.56	0.58
3:AC:206:GLU:O	3:AC:207:VAL:O	2.22	0.58
35:BA:886:C:C4	35:BA:887:A:N7	2.72	0.58
40:BF:24:LEU:O	40:BF:26:ALA:N	2.36	0.58
35:BA:2839:G:H4'	49:BR:49:ASP:HB3	1.84	0.58
35:BA:878:A:C2	35:BA:879:G:C8	2.91	0.58
57:BZ:151:HIS:HA	57:BZ:171:ILE:HG23	1.85	0.58
35:BA:2304:G:C2	35:BA:2313:C:N3	2.71	0.58
5:AE:105:VAL:H	5:AE:106:PRO:HD2	1.69	0.58
47:BP:68:GLN:N	47:BP:68:GLN:OE1	2.37	0.58
35:BA:2235:G:H2'	35:BA:2236:C:H6	1.69	0.58
31:B6:11:LEU:HD21	31:B6:51:GLU:CG	2.32	0.58
1:AA:1314:C:OP2	19:AS:6:LYS:HG3	2.03	0.58
1:AA:279:A:H2'	17:AQ:95:TYR:CE1	2.39	0.58
1:AA:1372:U:H5''	9:AI:71:SER:HB2	1.84	0.58
20:AT:48:LYS:O	20:AT:52:ALA:CB	2.52	0.58
1:AA:1277:C:O2'	1:AA:1279:A:H8	1.86	0.58
27:B2:19:VAL:CG1	27:B2:23:LYS:HE3	2.33	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1794:U:H2'	35:BA:1795:C:H6	1.68	0.58
10:AJ:24:VAL:O	10:AJ:28:ARG:HG3	2.04	0.58
35:BA:761:A:H8	35:BA:761:A:O5'	1.86	0.58
1:AA:1206:G:H4'	3:AC:192:THR:O	2.03	0.58
24:AY:114:ASP:OD2	24:AY:143:LYS:HG3	2.04	0.57
24:AY:222:ASP:C	24:AY:226:GLN:HB2	2.22	0.57
24:AY:76:GLN:HG3	24:AY:85:ASN:ND2	2.19	0.57
24:AY:86:LEU:HD12	24:AY:87:LEU:N	2.19	0.57
35:BA:2582:G:OP2	35:BA:2583:G:OP2	2.21	0.57
35:BA:751:A:C6	35:BA:789:A:C5	2.91	0.57
28:B3:17:LYS:HG2	35:BA:969:U:OP1	2.04	0.57
35:BA:2222:G:O4'	38:BD:149:PRO:HG3	2.04	0.57
38:BD:80:ALA:CB	38:BD:94:LEU:CD1	2.82	0.57
47:BP:100:LEU:H	47:BP:100:LEU:HD22	1.69	0.57
35:BA:625:G:O6	47:BP:107:LYS:HD2	2.04	0.57
47:BP:125:VAL:O	47:BP:125:VAL:HG13	2.04	0.57
49:BR:104:ARG:HD3	49:BR:107:ASP:OD1	2.04	0.57
52:BU:99:ALA:HB2	52:BU:106:PHE:CZ	2.38	0.57
52:BU:66:ASN:ND2	52:BU:70:ARG:HG3	2.19	0.57
52:BU:69:CYS:HB2	52:BU:74:LEU:HD12	1.85	0.57
42:BH:27:LYS:HG2	42:BH:32:GLU:CG	2.31	0.57
1:AA:580:U:H4'	15:AO:58:MET:HG3	1.85	0.57
18:AR:41:LYS:C	18:AR:43:PHE:H	2.08	0.57
18:AR:76:LEU:C	18:AR:78:LEU:H	2.06	0.57
2:AB:162:ILE:HG23	2:AB:184:VAL:HA	1.84	0.57
42:BH:103:LEU:O	42:BH:105:LEU:HD22	2.04	0.57
1:AA:1312:G:H2'	1:AA:1313:U:H6	1.69	0.57
3:AC:172:ARG:NH2	3:AC:206:GLU:OE1	2.37	0.57
19:AS:43:GLU:C	19:AS:45:VAL:N	2.57	0.57
24:AY:309:PRO:HG2	24:AY:311:HIS:O	2.04	0.57
40:BF:126:VAL:CG1	40:BF:142:TRP:HH2	2.00	0.57
40:BF:7:TYR:CD2	40:BF:16:GLY:CA	2.87	0.57
35:BA:1070:A:N6	44:BK:8:UNK:HA	2.18	0.57
35:BA:2837:G:H8	35:BA:2837:G:O5'	1.87	0.57
1:AA:1298:C:H4'	1:AA:1299:A:C4	2.39	0.57
35:BA:2307:G:N2	35:BA:2308:G:C5'	2.67	0.57
41:BG:36:LYS:HE2	41:BG:38:VAL:CG2	2.34	0.57
40:BF:110:LEU:HD22	40:BF:183:VAL:HG13	1.85	0.57
42:BH:66:GLY:O	42:BH:69:ARG:HB2	2.04	0.57
1:AA:1395:C:C4'	1:AA:1401:G:H21	2.17	0.57
41:BG:107:LEU:HD11	41:BG:178:PHE:HE1	1.69	0.57
50:BS:101:LEU:O	50:BS:101:LEU:HG	2.03	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2830:G:OP1	39:BE:75:VAL:HG13	2.04	0.57
29:B4:14:ILE:HG13	29:B4:31:ILE:CG2	2.34	0.57
13:AM:18:ALA:O	13:AM:21:TYR:HB2	2.04	0.57
51:BT:10:VAL:O	51:BT:13:ARG:HG2	2.03	0.57
35:BA:471:A:C2'	35:BA:472:A:H5''	2.31	0.57
37:BC:74:VAL:HA	37:BC:112:ALA:HB3	1.85	0.57
35:BA:68:G:C2	35:BA:69:C:C2	2.91	0.57
40:BF:132:VAL:CG2	40:BF:133:ASN:H	2.16	0.57
3:AC:136:GLN:O	3:AC:140:ARG:NH1	2.37	0.57
35:BA:150:C:O2'	35:BA:151:C:H5'	2.03	0.57
35:BA:152:G:H2'	35:BA:153:C:C6	2.39	0.57
49:BR:33:ARG:O	49:BR:34:ILE:HD13	2.04	0.57
24:AY:189:GLU:HA	24:AY:208:LYS:HA	1.86	0.57
24:AY:412:LEU:O	24:AY:414:LYS:N	2.37	0.57
24:AY:526:THR:OG1	24:AY:527:ARG:N	2.37	0.57
24:AY:78:PRO:CA	24:AY:83:LEU:HA	2.34	0.57
37:BC:103:ILE:HG22	37:BC:103:ILE:O	2.04	0.57
35:BA:2290:G:O2'	35:BA:2291:U:H5'	2.04	0.57
35:BA:2514:U:H2'	35:BA:2515:C:O4'	2.03	0.57
35:BA:252:G:O2'	35:BA:253:C:H5'	2.04	0.57
35:BA:2724:C:H2'	35:BA:2725:A:C8	2.39	0.57
35:BA:578:A:OP1	35:BA:1255:U:O2'	2.20	0.57
38:BD:108:PRO:CB	38:BD:143:HIS:CE1	2.82	0.57
35:BA:1818:U:O2'	38:BD:155:LEU:HA	2.04	0.57
38:BD:43:ARG:HH11	38:BD:49:ILE:CD1	2.16	0.57
35:BA:2821:A:P	39:BE:110:GLY:H	2.24	0.57
39:BE:4:ILE:CG2	39:BE:96:PHE:HE2	2.14	0.57
52:BU:13:LYS:H	52:BU:13:LYS:CD	2.16	0.57
6:AF:25:ILE:HG23	6:AF:26:ILE:N	2.18	0.57
6:AF:46:ARG:HB2	6:AF:60:PHE:HE1	1.69	0.57
2:AB:201:ILE:O	2:AB:202:PRO:O	2.21	0.57
2:AB:233:SER:O	2:AB:234:PRO:C	2.41	0.57
35:BA:2393:A:C4	35:BA:2394:C:C5	2.92	0.57
48:BQ:12:GLN:CG	48:BQ:73:PRO:HD2	2.29	0.57
40:BF:10:PRO:HD2	40:BF:13:SER:O	2.04	0.57
42:BH:122:THR:C	42:BH:123:PHE:CD1	2.77	0.57
41:BG:64:THR:CG2	41:BG:65:GLY:H	2.16	0.57
16:AP:7:ALA:HA	16:AP:28:ARG:HG3	1.86	0.57
35:BA:1495:A:H3'	35:BA:1496:A:H2	1.67	0.57
35:BA:1519:G:H5'	35:BA:1520:G:P	2.43	0.57
41:BG:178:PHE:HB3	41:BG:180:PHE:CE1	2.38	0.57
41:BG:52:ILE:H	41:BG:52:ILE:CD1	2.08	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:852:G:C5	35:BA:926:A:C2	2.92	0.57
38:BD:70:TRP:CD1	38:BD:70:TRP:C	2.76	0.57
35:BA:2152:G:C2'	35:BA:2153:G:H5'	2.35	0.57
35:BA:456:C:O2'	55:BX:68:ARG:NH1	2.37	0.57
35:BA:200:U:H2'	35:BA:201:C:H5'	1.86	0.57
35:BA:2792:G:O2'	35:BA:2793:G:H5'	2.03	0.57
1:AA:559:A:H4'	1:AA:560:U:H5''	1.86	0.57
35:BA:2095:C:H2'	35:BA:2096:U:C6	2.39	0.57
24:AY:138:LEU:HD23	24:AY:253:PRO:HG2	1.83	0.57
24:AY:264:GLY:HA2	24:AY:267:HIS:CE1	2.39	0.57
24:AY:74:VAL:HG11	24:AY:317:PHE:HE2	1.68	0.57
1:AA:774:G:N2	1:AA:775:G:H1'	2.18	0.57
35:BA:1894:C:C2'	35:BA:1895:C:H5''	2.34	0.57
35:BA:2072:G:H8	35:BA:2072:G:O5'	1.87	0.57
35:BA:527:C:O5'	35:BA:2779:U:C5	2.57	0.57
35:BA:650:C:H5'	35:BA:651:G:OP2	2.04	0.57
35:BA:994:C:OP2	52:BU:54:LYS:NZ	2.36	0.57
38:BD:206:LEU:HB2	38:BD:211:ARG:HG2	1.85	0.57
39:BE:119:ARG:HD3	39:BE:120:TRP:NE1	2.19	0.57
39:BE:9:VAL:HG13	39:BE:10:GLY:N	2.19	0.57
35:BA:943:U:OP2	47:BP:38:GLN:HB3	2.04	0.57
51:BT:51:ARG:O	51:BT:61:PHE:HA	2.04	0.57
52:BU:112:ARG:NH1	52:BU:112:ARG:HG3	2.19	0.57
52:BU:35:ALA:O	52:BU:38:THR:N	2.38	0.57
8:AH:14:ARG:NE	8:AH:83:ILE:CG2	2.67	0.57
25:B0:43:THR:CG2	25:B0:43:THR:O	2.53	0.57
3:AC:131:ARG:HH11	3:AC:166:GLU:CD	2.07	0.57
35:BA:884:C:C2'	35:BA:885:C:H5''	2.33	0.57
27:B2:25:VAL:CG2	27:B2:60:LEU:HB3	2.35	0.57
35:BA:332:A:O2'	35:BA:333:G:O5'	2.23	0.57
35:BA:2818:G:H4'	35:BA:2837:G:O4'	2.04	0.57
35:BA:2703:C:O2	35:BA:2703:C:H2'	2.03	0.57
16:AP:15:PRO:O	16:AP:16:HIS:ND1	2.38	0.57
40:BF:183:VAL:O	40:BF:187:VAL:HG23	2.04	0.57
5:AE:64:ARG:O	5:AE:65:ASN:HB2	2.04	0.57
45:BN:56:ASN:N	45:BN:125:GLY:H	2.01	0.57
35:BA:2281:C:H4'	35:BA:2389:G:H21	1.69	0.57
35:BA:2758:A:O2'	35:BA:2759:G:O4'	2.22	0.57
38:BD:134:ARG:HG2	38:BD:135:PHE:N	2.19	0.57
31:B6:35:GLU:HB3	31:B6:51:GLU:HB2	1.87	0.57
46:BO:19:ILE:CG2	46:BO:43:VAL:HA	2.25	0.57
55:BX:55:ASN:HB2	55:BX:80:ILE:CD1	2.34	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:53:MET:HA	25:B0:58:THR:O	2.04	0.57
42:BH:107:VAL:HG21	42:BH:152:ARG:HG2	1.85	0.57
40:BF:132:VAL:HG22	40:BF:133:ASN:HD22	1.70	0.57
1:AA:517:G:H4'	1:AA:519:C:C5	2.39	0.57
35:BA:154:G:H2'	35:BA:154(A):C:H6	1.68	0.57
37:BC:117:PRO:HG3	37:BC:145:VAL:HG12	1.85	0.57
42:BH:20:ALA:HB3	42:BH:23:ARG:O	2.04	0.57
42:BH:54:ARG:HD3	42:BH:57:ASP:OD2	2.05	0.57
1:AA:471:G:H8	1:AA:471:G:O5'	1.86	0.57
24:AY:113:ILE:CG2	24:AY:118:GLY:HA2	2.34	0.57
30:B5:41:PRO:HD3	54:BW:38:TYR:CZ	2.39	0.57
35:BA:2051:A:H5''	35:BA:2578:G:O5'	2.04	0.57
35:BA:571:A:H1'	35:BA:573:G:C8	2.39	0.57
38:BD:17:THR:N	38:BD:205:VAL:O	2.37	0.57
39:BE:116:VAL:O	39:BE:117:MET:CB	2.51	0.57
35:BA:1663:C:O2'	35:BA:1664:A:H8	1.87	0.57
35:BA:1666:G:C8	35:BA:1667:G:N7	2.72	0.57
15:AO:23:GLY:O	15:AO:27:VAL:HG21	2.05	0.57
11:AK:122:LYS:O	11:AK:126:ARG:HB2	2.04	0.57
35:BA:915:C:N4	35:BA:916:G:C6	2.72	0.57
1:AA:1310:G:H2'	1:AA:1311:G:H8	1.66	0.57
21:AU:18:TYR:N	21:AU:18:TYR:CD1	2.71	0.57
3:AC:142:MET:HA	3:AC:145:GLY:O	2.03	0.57
35:BA:56:A:H2'	35:BA:57:C:C6	2.38	0.57
55:BX:12:VAL:HG12	55:BX:27:THR:O	2.04	0.57
35:BA:2317:C:H2'	35:BA:2318:G:H5'	1.86	0.57
35:BA:145:G:H2'	35:BA:146:G:H5''	1.85	0.57
41:BG:56:ALA:HA	41:BG:153:ARG:NH2	2.15	0.57
20:AT:10:LEU:C	20:AT:12:ALA:H	2.07	0.57
1:AA:1499:A:H1'	1:AA:1520:G:H5'	1.86	0.57
26:B1:50:ARG:HD3	26:B1:57:GLU:OE2	2.04	0.57
35:BA:1493:C:C4	35:BA:2206:G:O2'	2.58	0.57
35:BA:1712:C:H2'	35:BA:1713:U:H5'	1.87	0.57
1:AA:1377:A:H2'	7:AG:7:ALA:HB2	1.84	0.57
1:AA:954:G:H4'	13:AM:120:LYS:CD	2.34	0.57
22:AV:27:U:C2'	22:AV:28:C:H5'	2.33	0.57
1:AA:538:G:H2'	1:AA:539:A:H8	1.69	0.57
35:BA:1335:U:OP1	55:BX:65:ARG:NH2	2.37	0.57
11:AK:92:GLU:OE2	11:AK:95:ILE:HD12	2.05	0.57
1:AA:1444:C:O5'	1:AA:1444:C:H6	1.88	0.57
1:AA:855:G:O2'	1:AA:856:C:H5'	2.05	0.57
24:AY:94:ASP:OD1	24:AY:442:GLY:O	2.23	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1405:G:H1'	1:AA:1519:A:H4'	1.87	0.57
30:B5:19:ARG:C	30:B5:21:SER:N	2.53	0.57
35:BA:1351:C:H4'	35:BA:1572:A:O4'	2.05	0.57
35:BA:390:A:H5'	35:BA:412:A:O4'	2.04	0.57
32:B7:34:ARG:NH2	35:BA:467:G:N7	2.51	0.57
35:BA:586:A:C5'	40:BF:89:VAL:HG11	2.34	0.57
35:BA:591:C:H2'	35:BA:592:G:H8	1.68	0.57
38:BD:242:ARG:HG2	38:BD:246:PRO:HG3	1.85	0.57
38:BD:44:ASN:HD22	38:BD:47:GLY:C	2.07	0.57
39:BE:79:ARG:HH11	39:BE:79:ARG:HG2	1.69	0.57
47:BP:83:VAL:O	47:BP:114:ILE:HD12	2.04	0.57
52:BU:28:ARG:HD3	52:BU:38:THR:OG1	2.03	0.57
52:BU:92:ARG:O	52:BU:94:ASN:N	2.38	0.57
1:AA:737:A:H1'	6:AF:73:ASN:OD1	2.04	0.57
15:AO:9:GLN:O	15:AO:13:GLN:HG2	2.03	0.57
15:AO:54:ARG:HG3	15:AO:58:MET:HE2	1.83	0.57
35:BA:2267:A:H5''	35:BA:2268:A:H5''	1.86	0.57
48:BQ:133:ARG:CB	48:BQ:133:ARG:NH1	2.66	0.57
57:BZ:119:GLU:O	57:BZ:119:GLU:HG2	2.04	0.57
57:BZ:8:TYR:HB2	57:BZ:38:TYR:CE2	2.40	0.57
22:AV:57:A:O2'	22:AV:58:A:C5'	2.53	0.57
1:AA:357:G:H2'	1:AA:358:U:C6	2.38	0.57
27:B2:54:LYS:HG2	35:BA:73:A:OP1	2.05	0.57
55:BX:8:ILE:H	55:BX:8:ILE:CD1	2.14	0.57
40:BF:122:LYS:CB	40:BF:191:ARG:HG3	2.35	0.57
37:BC:161:ILE:HG21	37:BC:174:PRO:CG	2.35	0.57
41:BG:151:ALA:HB3	41:BG:153:ARG:NH1	2.19	0.57
41:BG:36:LYS:HE2	41:BG:38:VAL:HG22	1.86	0.57
5:AE:31:LEU:CD2	5:AE:43:LEU:HD11	2.34	0.57
31:B6:7:ILE:HB	31:B6:27:LYS:HZ2	1.70	0.57
5:AE:84:PHE:CD1	5:AE:133:TYR:HB3	2.40	0.57
36:BB:66:A:N6	36:BB:108:U:C5	2.72	0.57
1:AA:236:G:OP1	17:AQ:42:TYR:HE1	1.87	0.57
35:BA:44:G:H2'	35:BA:215:G:N7	2.20	0.57
35:BA:1296:G:H2'	35:BA:1297:C:C6	2.39	0.57
35:BA:2709:G:O2'	35:BA:2710:C:H5'	2.03	0.57
32:B7:46:VAL:CG1	32:B7:47:ARG:H	2.12	0.57
35:BA:48:G:H4'	35:BA:52:A:O4'	2.05	0.57
1:AA:1440:C:H2'	1:AA:1441:G:H5'	1.85	0.57
2:AB:196:LEU:HD12	2:AB:197:VAL:CG2	2.33	0.57
35:BA:66:C:C4	35:BA:67:U:C5	2.93	0.57
35:BA:1386:C:H2'	35:BA:1387:C:C6	2.40	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BN:74:ARG:NH2	45:BN:85:ILE:HD11	2.20	0.57
35:BA:981:A:C8	35:BA:982:C:C5	2.92	0.57
18:AR:61:LYS:O	18:AR:62:GLU:C	2.41	0.57
24:AY:246:PHE:CD2	24:AY:247:LEU:HD23	2.39	0.57
24:AY:327:LYS:HZ1	24:AY:344:ASP:HB3	1.68	0.57
30:B5:39:MET:O	54:BW:38:TYR:HE2	1.88	0.57
35:BA:1309:G:O2'	35:BA:1310:G:H5'	2.04	0.57
35:BA:1789:A:H5''	38:BD:221:VAL:CA	2.32	0.57
35:BA:1834:U:H4'	35:BA:1969:A:C6	2.39	0.57
35:BA:2444:G:OP2	40:BF:68:LYS:NZ	2.29	0.57
33:B8:17:THR:HG21	35:BA:650:C:O3'	2.04	0.57
38:BD:242:ARG:CD	38:BD:242:ARG:N	2.68	0.57
39:BE:63:LEU:O	39:BE:65:GLY:N	2.37	0.57
45:BN:27:ALA:HA	45:BN:30:ILE:HB	1.87	0.57
45:BN:97:ARG:O	45:BN:99:LEU:N	2.37	0.57
51:BT:54:ARG:HA	51:BT:59:THR:CG2	2.34	0.57
35:BA:1666:G:H3'	35:BA:1667:G:H8	1.69	0.57
35:BA:1666:G:H5'	35:BA:1666:G:H8	1.69	0.57
46:BO:60:ALA:CB	46:BO:85:VAL:O	2.51	0.57
1:AA:880:C:O2'	1:AA:881:G:H5'	2.05	0.57
8:AH:11:THR:HG22	8:AH:15:ASN:ND2	2.20	0.57
18:AR:34:TYR:HD1	18:AR:35:ARG:HG3	1.68	0.57
2:AB:157:ARG:HB3	2:AB:157:ARG:NH1	2.19	0.57
33:B8:13:ARG:HH11	47:BP:61:ARG:CD	2.15	0.57
48:BQ:133:ARG:CG	48:BQ:134:ARG:N	2.61	0.57
57:BZ:41:LEU:HD11	57:BZ:82:ARG:NH2	2.19	0.57
12:AL:27:LEU:O	12:AL:28:LYS:C	2.43	0.57
12:AL:69:TYR:CE1	12:AL:71:PRO:HA	2.38	0.57
12:AL:88:GLY:H	12:AL:98:TYR:HA	1.68	0.57
3:AC:121:ALA:HB2	3:AC:187:ALA:HB1	1.85	0.57
3:AC:96:GLY:O	3:AC:97:LYS:HG2	2.04	0.57
56:BY:45:VAL:HA	56:BY:62:GLU:HB2	1.85	0.57
27:B2:24:LEU:HD22	27:B2:60:LEU:CD2	2.35	0.57
24:AY:487:ARG:C	24:AY:489:ASN:H	2.08	0.57
4:AD:170:VAL:HG21	4:AD:176:LEU:HB2	1.87	0.57
4:AD:5:ILE:H	4:AD:115:ARG:HH12	1.52	0.57
41:BG:140:ILE:CD1	41:BG:140:ILE:C	2.73	0.57
41:BG:39:ILE:HG13	41:BG:156:ASP:O	2.04	0.57
40:BF:33:LEU:HD11	40:BF:109:GLY:O	2.05	0.57
5:AE:34:VAL:O	5:AE:41:VAL:HA	2.04	0.57
20:AT:72:LEU:HD21	20:AT:80:ARG:HH21	1.69	0.57
35:BA:2281:C:H4'	35:BA:2389:G:N2	2.19	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:37:VAL:HG22	42:BH:72:ILE:HD13	1.85	0.57
35:BA:271(I):G:H2'	35:BA:271(J):C:H6	1.68	0.57
37:BC:66:HIS:CG	37:BC:184:LYS:HD2	2.39	0.57
5:AE:80:ILE:HG13	5:AE:81:GLU:N	2.20	0.57
47:BP:6:LEU:HG	47:BP:9:ASN:CB	2.34	0.57
35:BA:2745:C:H2'	35:BA:2746:U:C6	2.39	0.57
1:AA:67:C:C6	1:AA:67:C:H3'	2.40	0.57
12:AL:41:ARG:HG2	12:AL:42:THR:O	2.03	0.57
42:BH:12:PRO:CG	42:BH:15:VAL:HG13	2.34	0.57
35:BA:845:G:O2'	35:BA:846:C:H5	1.87	0.57
1:AA:837:G:C2	1:AA:850:U:O2	2.57	0.57
1:AA:398:C:C3'	1:AA:398:C:C6	2.86	0.57
35:BA:603:A:O3'	47:BP:90:ARG:NH2	2.37	0.57
36:BB:53:A:C5	36:BB:54:G:N7	2.73	0.57
1:AA:47:C:C6	1:AA:365:U:H2'	2.39	0.57
1:AA:415:A:H2'	1:AA:416:G:H8	1.69	0.57
1:AA:1256:A:O4'	1:AA:1256:A:OP2	2.23	0.57
24:AY:219:VAL:CG2	24:AY:224:ALA:HB2	2.32	0.57
24:AY:10:VAL:O	24:AY:279:PRO:CD	2.52	0.57
24:AY:10:VAL:CG1	24:AY:291:ALA:HB1	2.33	0.57
24:AY:299:PHE:HE1	24:AY:387:PHE:CE1	2.23	0.57
30:B5:6:VAL:HG22	35:BA:2016:U:O2	2.04	0.57
35:BA:2781:A:H5'	35:BA:2782:G:O4'	2.05	0.57
35:BA:568:U:O4	35:BA:973:A:OP2	2.21	0.57
35:BA:783:A:C6	35:BA:785:G:C8	2.93	0.57
38:BD:25:THR:HG22	38:BD:26:LYS:H	1.69	0.57
52:BU:27:LEU:O	52:BU:31:SER:N	2.27	0.57
52:BU:74:LEU:CD1	52:BU:79:PHE:HB2	2.34	0.57
18:AR:37:VAL:CG2	18:AR:38:GLU:H	2.17	0.57
34:B9:1:MET:HG3	34:B9:32:HIS:HA	1.85	0.57
35:BA:2274:A:H5''	35:BA:2275:C:OP2	2.04	0.57
22:AV:52:G:C2'	22:AV:53:G:H8	2.15	0.57
13:AM:86:CYS:SG	13:AM:88:ARG:N	2.78	0.57
12:AL:34:ARG:O	12:AL:61:THR:HG23	2.04	0.57
12:AL:36:VAL:CG1	12:AL:82:VAL:HA	2.34	0.57
12:AL:91:LYS:O	12:AL:92:ASP:CB	2.49	0.57
1:AA:1152:A:H5'	10:AJ:70:ARG:HH21	1.70	0.57
1:AA:1113:C:C6	3:AC:178:LEU:HD23	2.40	0.57
1:AA:357:G:H2'	1:AA:358:U:H6	1.69	0.57
56:BY:28:LYS:HG2	56:BY:39:VAL:N	2.19	0.57
56:BY:46:LYS:HG2	56:BY:47:LYS:H	1.70	0.57
4:AD:9:CYS:HB3	4:AD:32:ALA:HB3	1.86	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AS:58:VAL:O	19:AS:60:VAL:HG12	2.05	0.57
35:BA:2850:A:H2	49:BR:61:HIS:CD2	2.22	0.57
20:AT:19:SER:HA	20:AT:22:ARG:CD	2.34	0.57
47:BP:67:MET:O	47:BP:69:GLY:N	2.38	0.57
24:AY:21:HIS:CD2	24:AY:122:ARG:N	2.59	0.57
50:BS:87:PHE:CD1	50:BS:88:ASP:N	2.67	0.57
45:BN:3:THR:HG22	45:BN:4:TYR:N	2.20	0.57
1:AA:1219:U:H2'	1:AA:1220:G:H8	1.70	0.57
13:AM:30:ALA:O	13:AM:33:ALA:N	2.37	0.57
9:AI:117:HIS:HB2	9:AI:121:ARG:O	2.04	0.57
35:BA:2423:U:H5''	35:BA:2423:U:H6	1.69	0.57
35:BA:2045:C:C2	35:BA:2624:G:N2	2.73	0.57
11:AK:103:LEU:N	11:AK:103:LEU:HD22	2.19	0.57
24:AY:324:LYS:HG3	24:AY:360:TYR:CG	2.40	0.57
1:AA:360:A:OP1	24:AY:411:GLN:NE2	2.37	0.57
24:AY:419:LEU:HD21	24:AY:424:ALA:HB3	1.87	0.57
35:BA:2532:G:H2'	35:BA:2533:A:O4'	2.05	0.57
30:B5:45:VAL:HG12	30:B5:50:GLY:HA2	1.86	0.57
35:BA:1020:A:H5'	35:BA:1021:A:N3	2.20	0.57
35:BA:2459:A:N7	35:BA:2460:U:C4	2.72	0.57
35:BA:2493:U:H6	35:BA:2493:U:O5'	1.88	0.57
35:BA:2599:G:H2'	35:BA:2600:A:H8	1.70	0.57
35:BA:556:G:C6	35:BA:557:U:C4	2.93	0.57
35:BA:744:G:OP1	39:BE:132:HIS:HB3	2.03	0.57
38:BD:186:HIS:ND1	38:BD:187:GLY:N	2.52	0.57
38:BD:229:VAL:CG1	38:BD:230:ASP:N	2.65	0.57
38:BD:265:PRO:C	38:BD:267:SER:N	2.58	0.57
38:BD:31:LYS:O	38:BD:35:LYS:HB3	2.05	0.57
39:BE:82:ARG:O	39:BE:83:ASP:C	2.41	0.57
40:BF:51:THR:OG1	40:BF:88:VAL:HG11	2.04	0.57
45:BN:103:VAL:O	45:BN:104:LYS:C	2.42	0.57
45:BN:27:ALA:O	45:BN:30:ILE:HB	2.05	0.57
45:BN:95:PRO:O	45:BN:98:VAL:CG2	2.52	0.57
51:BT:19:LEU:HD12	51:BT:78:LEU:HD23	1.86	0.57
51:BT:60:THR:HG22	51:BT:77:PRO:CA	2.25	0.57
53:BV:12:TYR:HE2	53:BV:22:VAL:HG12	1.69	0.57
2:AB:45:GLN:HG2	2:AB:46:LYS:N	2.19	0.57
2:AB:51:LEU:O	2:AB:55:PHE:HD2	1.87	0.57
22:AV:49:G:C2	22:AV:50:U:C6	2.93	0.57
1:AA:1308:U:O2'	1:AA:1309:G:H5'	2.05	0.57
1:AA:1202:G:C1'	14:AN:29:ARG:HD3	2.35	0.57
4:AD:11:LEU:N	4:AD:11:LEU:HD23	2.20	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:59:ARG:CZ	37:BC:164:ARG:HD2	2.35	0.57
7:AG:122:HIS:O	7:AG:125:MET:HB2	2.05	0.57
41:BG:99:MET:HG2	41:BG:103:LEU:HD12	1.87	0.57
1:AA:298:A:H2'	1:AA:299:G:O4'	2.03	0.57
31:B6:32:ASN:CG	31:B6:33:LYS:N	2.58	0.57
26:B1:80:LEU:HD22	26:B1:82:LEU:CD2	2.34	0.57
36:BB:57:A:N7	41:BG:29:TRP:CD1	2.72	0.57
35:BA:1297:C:H2'	35:BA:1298:C:C6	2.39	0.57
54:BW:6:ILE:HG12	54:BW:104:THR:HG22	1.87	0.57
54:BW:4:LYS:CA	54:BW:106:ILE:HG22	2.29	0.57
1:AA:1497:G:H2'	1:AA:1498:U:C5'	2.35	0.57
4:AD:147:ALA:HA	4:AD:182:LYS:HA	1.87	0.57
35:BA:2241:A:O2'	35:BA:2242:G:H5'	2.04	0.57
7:AG:137:LYS:O	7:AG:141:VAL:HG23	2.05	0.57
1:AA:1351:U:C2	1:AA:1352:C:H5	2.23	0.57
1:AA:630:G:H5'	1:AA:631:G:OP1	2.04	0.57
1:AA:429:U:H2'	4:AD:25:ARG:NH1	2.19	0.57
35:BA:603:A:N3	35:BA:604:G:H1'	2.20	0.57
37:BC:78:ALA:HB1	37:BC:82:LYS:O	2.04	0.57
42:BH:59:ARG:CB	42:BH:59:ARG:HH11	2.17	0.57
35:BA:2753:A:O2'	35:BA:2754:U:H5'	2.04	0.57
45:BN:76:SER:OG	45:BN:77:GLY:N	2.38	0.57
20:AT:57:ARG:HB2	20:AT:57:ARG:NH1	2.20	0.57
38:BD:28:GLU:N	38:BD:29:PRO:CD	2.67	0.57
45:BN:10:GLU:OE2	45:BN:11:PRO:HD2	2.04	0.57
24:AY:303:ILE:HA	24:AY:316:ALA:HA	1.87	0.57
35:BA:579:G:H1'	35:BA:2017:U:N3	2.18	0.57
35:BA:2629:A:OP2	35:BA:2629:A:H3'	2.04	0.57
35:BA:783:A:N3	35:BA:785:G:H1'	2.20	0.57
35:BA:950:G:C2	35:BA:951:C:C2	2.93	0.57
38:BD:229:VAL:CG1	38:BD:230:ASP:H	2.17	0.57
35:BA:1814:G:O3'	38:BD:54:ARG:NH2	2.37	0.57
39:BE:195:LEU:HD11	39:BE:197:ILE:HG22	1.86	0.57
45:BN:52:VAL:CG1	45:BN:53:VAL:H	2.17	0.57
52:BU:13:LYS:O	52:BU:17:ILE:CD1	2.53	0.57
35:BA:2739:U:C5	35:BA:2763:G:C5	2.93	0.57
17:AQ:27:PHE:O	17:AQ:36:ILE:HG13	2.04	0.57
2:AB:163:PHE:HD1	2:AB:185:ILE:HB	1.69	0.57
2:AB:228:GLY:O	2:AB:229:VAL:O	2.23	0.57
48:BQ:31:ASP:HB3	48:BQ:32:TYR:CE1	2.39	0.57
1:AA:1368:G:OP2	9:AI:112:LYS:CD	2.53	0.57
3:AC:11:ARG:HE	3:AC:180:ALA:HB3	1.69	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AN:45:ARG:O	14:AN:49:HIS:CD2	2.57	0.57
35:BA:484:C:P	56:BY:49:VAL:HG22	2.45	0.57
40:BF:2:LYS:HG3	40:BF:25:PRO:CG	2.35	0.57
37:BC:175:VAL:HG13	37:BC:188:ASN:CB	2.34	0.57
37:BC:175:VAL:HG22	37:BC:189:ILE:HA	1.85	0.57
37:BC:21:THR:HA	37:BC:225:ASN:HB2	1.86	0.57
35:BA:900:A:N3	35:BA:900:A:H2'	2.20	0.57
41:BG:110:ALA:HB1	41:BG:140:ILE:HD13	1.86	0.57
1:AA:109:A:H5'	1:AA:110:C:C5	2.40	0.57
30:B5:25:LEU:CD1	54:BW:19:LEU:O	2.52	0.57
38:BD:117:VAL:HG13	38:BD:118:VAL:N	2.18	0.57
35:BA:631:A:H4'	47:BP:65:ARG:HD3	1.85	0.57
8:AH:121:ASP:OD1	8:AH:122:ARG:N	2.38	0.57
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.40	0.57
47:BP:9:ASN:N	47:BP:10:PRO:HD2	2.14	0.57
1:AA:528:C:H41	12:AL:49:ASN:ND2	2.03	0.57
26:B1:48:LYS:NZ	26:B1:60:PHE:C	2.59	0.57
35:BA:2711:A:OP1	35:BA:2712(A):A:P	2.61	0.57
54:BW:69:LEU:HD22	54:BW:107:LEU:HB2	1.87	0.57
1:AA:1374:A:C2'	1:AA:1375:A:H5'	2.35	0.57
22:AV:27:U:C2'	22:AV:28:C:C5'	2.82	0.57
1:AA:1283:G:O2'	1:AA:1284:C:P	2.63	0.57
35:BA:2673:G:O2'	35:BA:2674:G:H5'	2.05	0.57
35:BA:2791:C:N4	35:BA:2801(A):A:H62	2.03	0.57
35:BA:219:G:C6	35:BA:220:G:C6	2.93	0.57
35:BA:74:A:O2'	35:BA:75:G:OP2	2.20	0.57
24:AY:103:LEU:N	24:AY:103:LEU:HD12	2.18	0.57
24:AY:103:LEU:HD23	24:AY:109:CYS:SG	2.45	0.57
24:AY:97:GLU:HB3	24:AY:392:ASN:ND2	2.19	0.57
35:BA:1661:G:H2'	35:BA:1662:C:C6	2.36	0.57
35:BA:1925:C:C3'	35:BA:1926:U:H5''	2.28	0.57
35:BA:1971:A:C8	38:BD:241:PRO:CB	2.85	0.57
35:BA:729:G:H5'	35:BA:730:C:H5''	1.86	0.57
38:BD:65:ILE:HD11	38:BD:88:ARG:HH11	1.70	0.57
47:BP:31:ALA:O	47:BP:33:ARG:N	2.31	0.57
47:BP:40:SER:OG	47:BP:45:LEU:HD21	2.04	0.57
54:BW:12:ILE:HG13	54:BW:42:ARG:NH1	2.19	0.57
35:BA:1667:G:H22	35:BA:1991:U:H3'	1.69	0.57
35:BA:1676:A:C6	35:BA:1677:A:C6	2.93	0.57
1:AA:728:A:N6	15:AO:51:HIS:HD2	2.03	0.57
1:AA:754:C:O2'	15:AO:66:LEU:HD23	2.04	0.57
2:AB:223:ILE:HG21	2:AB:230:VAL:HG22	1.87	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:914:C:H2'	35:BA:915:C:C5'	2.17	0.57
48:BQ:65:PHE:HD2	48:BQ:105:GLU:O	1.88	0.57
3:AC:124:ILE:HG12	3:AC:130:VAL:HG22	1.87	0.57
3:AC:52:LEU:HB2	3:AC:69:HIS:O	2.04	0.57
40:BF:116:ASP:O	40:BF:120:GLU:HG2	2.05	0.57
35:BA:1060:U:C4'	35:BA:1061:U:H5	2.17	0.57
4:AD:89:THR:O	4:AD:93:PHE:N	2.38	0.57
35:BA:2880:C:O3'	49:BR:90:ARG:NH1	2.38	0.57
1:AA:706:A:O4'	11:AK:29:ILE:HD11	2.05	0.57
37:BC:44:HIS:HA	37:BC:171:ILE:O	2.05	0.57
35:BA:871:U:O2	35:BA:871:U:H2'	2.04	0.57
35:BA:601:C:C5'	40:BF:108:LYS:HZ1	2.18	0.57
5:AE:41:VAL:HG11	5:AE:113:ALA:HA	1.86	0.57
36:BB:101:G:H2'	36:BB:102:A:H8	1.68	0.57
13:AM:16:ASP:HB2	13:AM:31:LYS:HG2	1.87	0.57
1:AA:1031:G:H2'	1:AA:1032:G:O4'	2.04	0.57
1:AA:986:A:H1'	19:AS:54:GLY:O	2.05	0.57
54:BW:5:ALA:O	54:BW:6:ILE:HB	2.04	0.57
1:AA:1423:G:OP1	46:BO:48:PRO:HB3	2.05	0.57
1:AA:1353:G:C6	1:AA:1354:C:N4	2.73	0.57
35:BA:322:A:H5'	35:BA:340:A:C1'	2.35	0.57
54:BW:36:LEU:CD1	54:BW:48:ALA:HB2	2.35	0.57
35:BA:134:C:C2	35:BA:135:G:C8	2.93	0.57
2:AB:181:PHE:CE1	8:AH:70:GLN:HB3	2.39	0.57
41:BG:166:ASP:O	41:BG:168:GLU:N	2.38	0.57
24:AY:193:TYR:HB3	24:AY:263:PHE:CE1	2.37	0.56
24:AY:72:THR:HA	24:AY:89:THR:HA	1.87	0.56
33:B8:6:THR:HG22	33:B8:61:LEU:CD1	2.34	0.56
35:BA:1256:G:H2'	35:BA:1257:C:C6	2.40	0.56
35:BA:2020:A:C2	35:BA:2022:U:C6	2.92	0.56
35:BA:2057:A:H2'	35:BA:2058:A:H8	1.64	0.56
35:BA:2292:C:O2'	35:BA:2293:C:H5'	2.04	0.56
35:BA:2359:C:C2'	35:BA:2360:A:H5'	2.34	0.56
35:BA:2455:G:C6	35:BA:2456:C:N4	2.73	0.56
35:BA:747:U:C4	35:BA:2613:U:C5	2.93	0.56
35:BA:639:U:O2'	35:BA:640:C:H5'	2.04	0.56
38:BD:31:LYS:O	38:BD:35:LYS:HB2	2.05	0.56
47:BP:16:ARG:HD3	47:BP:17:LYS:N	2.20	0.56
52:BU:65:ILE:CD1	52:BU:96:ALA:HB3	2.35	0.56
35:BA:1954:G:H22	35:BA:1986:A:P	2.28	0.56
35:BA:1665:A:H4'	46:BO:66:LYS:O	2.04	0.56
1:AA:730:G:O6	15:AO:51:HIS:HE1	1.88	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:48:MET:O	2:AB:51:LEU:N	2.38	0.56
21:AU:5:ASP:C	21:AU:7:ARG:N	2.56	0.56
3:AC:43:LEU:C	3:AC:45:LYS:N	2.57	0.56
40:BF:119:ARG:NH2	40:BF:120:GLU:OE2	2.38	0.56
35:BA:1060:U:C4'	35:BA:1061:U:C5	2.88	0.56
49:BR:47:PHE:O	49:BR:50:HIS:N	2.38	0.56
4:AD:58:LEU:CD1	4:AD:62:GLN:HG3	2.34	0.56
51:BT:121:ILE:CA	51:BT:124:ASP:HB2	2.34	0.56
57:BZ:108:PRO:HG2	57:BZ:111:VAL:CG2	2.34	0.56
57:BZ:143:GLY:C	57:BZ:144:LEU:HD22	2.26	0.56
5:AE:33:VAL:CG2	5:AE:43:LEU:CD1	2.81	0.56
24:AY:127:MET:O	24:AY:130:THR:HG22	2.05	0.56
50:BS:89:ARG:HG2	50:BS:92:TYR:HA	1.87	0.56
35:BA:2101:G:H2'	35:BA:2102:U:O4'	2.05	0.56
22:AV:40:C:H2'	22:AV:41:C:H6	1.70	0.56
28:B3:8:LEU:CD1	28:B3:30:ARG:O	2.53	0.56
13:AM:107:ALA:O	13:AM:111:LYS:HD3	2.04	0.56
47:BP:121:LYS:O	47:BP:123:LEU:HD23	2.05	0.56
1:AA:1389:C:O2'	1:AA:1390:U:H5'	2.04	0.56
46:BO:35:VAL:HG23	46:BO:65:THR:HG23	1.85	0.56
1:AA:79:G:H3'	1:AA:83:U:OP1	2.05	0.56
45:BN:10:GLU:CG	45:BN:11:PRO:HD2	2.35	0.56
16:AP:50:LYS:HE2	16:AP:50:LYS:O	2.05	0.56
24:AY:14:ARG:HD3	24:AY:276:ALA:HB1	1.85	0.56
24:AY:416:LEU:O	24:AY:417:VAL:C	2.44	0.56
1:AA:680:C:H2'	1:AA:681:C:H6	1.69	0.56
32:B7:37:LYS:HZ3	32:B7:39:ARG:NH2	2.03	0.56
33:B8:7:HIS:O	33:B8:7:HIS:ND1	2.38	0.56
35:BA:1257:C:H4'	40:BF:83:PHE:CD1	2.39	0.56
35:BA:573:G:N2	35:BA:2029:G:N2	2.54	0.56
35:BA:2506:U:H4'	35:BA:2507:C:OP1	2.04	0.56
35:BA:2578:G:O2'	35:BA:2579:C:H5'	2.05	0.56
39:BE:171:GLU:C	39:BE:173:VAL:H	2.08	0.56
45:BN:62:VAL:HG11	45:BN:67:LEU:CD2	2.35	0.56
51:BT:77:PRO:O	51:BT:78:LEU:CB	2.52	0.56
35:BA:1954:G:H21	35:BA:1956:U:H3	1.53	0.56
1:AA:826:C:C4	1:AA:827:U:H5	2.21	0.56
8:AH:2:LEU:CD2	8:AH:5:PRO:HA	2.35	0.56
15:AO:27:VAL:O	15:AO:30:ALA:CB	2.54	0.56
15:AO:60:VAL:HA	15:AO:63:ARG:HD2	1.87	0.56
53:BV:5:VAL:HG21	53:BV:35:LEU:CG	2.34	0.56
2:AB:201:ILE:O	2:AB:202:PRO:C	2.40	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:105:LEU:N	42:BH:105:LEU:HD22	2.13	0.56
1:AA:1115:C:H2'	1:AA:1116:C:C6	2.39	0.56
3:AC:183:ASP:O	3:AC:202:ILE:N	2.33	0.56
3:AC:70:VAL:O	3:AC:106:VAL:HG23	2.04	0.56
35:BA:482:A:H1'	35:BA:498:G:N2	2.20	0.56
40:BF:118:ALA:HA	40:BF:123:LEU:HB3	1.85	0.56
35:BA:1092:C:OP2	35:BA:1093:G:N7	2.38	0.56
12:AL:129:ALA:N	24:AY:487:ARG:NH1	2.54	0.56
35:BA:1349:A:N6	35:BA:1598:C:H42	2.02	0.56
7:AG:50:ILE:HD11	7:AG:121:ALA:CA	2.35	0.56
40:BF:33:LEU:HD21	40:BF:112:MET:HG2	1.87	0.56
35:BA:2281:C:H2'	35:BA:2282:G:C8	2.40	0.56
1:AA:781:A:H2'	1:AA:782:A:H5'	1.86	0.56
38:BD:126:GLN:O	38:BD:193:VAL:HG21	2.04	0.56
38:BD:79:VAL:HG23	38:BD:114:GLY:N	2.20	0.56
5:AE:73:ASN:ND2	5:AE:73:ASN:O	2.38	0.56
36:BB:15:A:H1'	36:BB:110:G:C5	2.40	0.56
35:BA:704:G:N3	35:BA:726:G:C2	2.73	0.56
35:BA:1422:G:H2'	35:BA:1423:G:H8	1.70	0.56
9:AI:23:ASN:OD1	9:AI:24:GLY:N	2.38	0.56
1:AA:232:G:C2	1:AA:233:C:C2	2.93	0.56
1:AA:628:G:O2'	1:AA:629:G:H5'	2.05	0.56
35:BA:1322:A:OP1	54:BW:11:ARG:HG3	2.04	0.56
8:AH:95:VAL:CG2	8:AH:133:LEU:HD13	2.35	0.56
29:B4:40:HIS:CG	29:B4:41:PRO:HA	2.40	0.56
17:AQ:83:ASP:CG	17:AQ:84:LEU:N	2.58	0.56
35:BA:1478:G:C2	35:BA:1479:G:N7	2.72	0.56
1:AA:458:C:N4	1:AA:474:G:N1	2.53	0.56
35:BA:1508:A:H2'	35:BA:1508:A:N3	2.19	0.56
24:AY:281:PRO:C	24:AY:282:ARG:HD2	2.24	0.56
24:AY:403:LEU:N	24:AY:403:LEU:CD2	2.68	0.56
24:AY:103:LEU:CD1	24:AY:103:LEU:H	2.17	0.56
35:BA:1007:C:O2'	45:BN:108:PRO:HA	2.04	0.56
35:BA:2640:G:H2'	35:BA:2641:G:H5''	1.87	0.56
35:BA:942:G:C6	35:BA:943:U:C4	2.93	0.56
38:BD:146:GLU:OE1	38:BD:152:GLY:N	2.38	0.56
38:BD:95:LEU:N	38:BD:95:LEU:HD13	2.20	0.56
39:BE:23:VAL:CG1	39:BE:173:VAL:HG21	2.35	0.56
47:BP:39:LYS:C	47:BP:41:ARG:HG2	2.23	0.56
52:BU:49:HIS:O	52:BU:53:ARG:N	2.33	0.56
30:B5:7:PRO:HA	35:BA:2615:U:C6	2.41	0.56
32:B7:34:ARG:O	32:B7:39:ARG:HB2	2.05	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B8:38:GLY:O	33:B8:41:ILE:HG23	2.06	0.56
35:BA:2014:A:C4	35:BA:2015:A:N6	2.74	0.56
35:BA:786:C:C2	35:BA:787:U:C5	2.94	0.56
38:BD:92:ILE:CB	38:BD:106:ILE:HA	2.34	0.56
35:BA:674:G:N3	40:BF:74:ARG:NH1	2.54	0.56
45:BN:115:ARG:HA	45:BN:118:LYS:HE2	1.87	0.56
49:BR:102:GLU:OE1	49:BR:105:ARG:NH2	2.37	0.56
51:BT:29:ARG:NE	51:BT:86:ILE:HG23	2.12	0.56
52:BU:104:GLN:C	52:BU:106:PHE:N	2.59	0.56
52:BU:66:ASN:HD21	52:BU:70:ARG:HG3	1.71	0.56
46:BO:14:THR:CG2	46:BO:94:ARG:HB2	2.35	0.56
1:AA:1484:C:HO2'	35:BA:1961:C:H5'	1.70	0.56
8:AH:32:LYS:O	8:AH:36:LEU:HG	2.05	0.56
1:AA:834:C:C4	1:AA:853:G:N1	2.73	0.56
6:AF:22:GLU:HA	6:AF:25:ILE:HG22	1.85	0.56
1:AA:244:U:H4'	1:AA:245:C:H5''	1.88	0.56
57:BZ:24:LEU:N	57:BZ:39:VAL:O	2.27	0.56
25:B0:26:TYR:N	25:B0:26:TYR:CD1	2.72	0.56
28:B3:52:HIS:CE1	36:BB:83:G:H5''	2.39	0.56
1:AA:1267:C:C2	21:AU:20:LYS:HD2	2.40	0.56
1:AA:1068:G:N2	1:AA:1069:C:C2	2.73	0.56
1:AA:1366:C:O2'	10:AJ:60:ARG:NH2	2.36	0.56
10:AJ:91:PRO:O	10:AJ:92:THR:C	2.43	0.56
9:AI:33:PHE:CZ	9:AI:43:ALA:HB1	2.36	0.56
40:BF:165:ARG:CB	40:BF:168:ARG:HH21	2.18	0.56
4:AD:5:ILE:N	4:AD:115:ARG:HH12	2.02	0.56
50:BS:13:ARG:CG	50:BS:14:VAL:N	2.50	0.56
35:BA:1408:C:C2	35:BA:1595:G:N2	2.74	0.56
11:AK:29:ILE:O	11:AK:29:ILE:HG12	2.05	0.56
11:AK:57:THR:HG22	11:AK:60:ALA:HB3	1.87	0.56
37:BC:49:ILE:CG2	37:BC:208:PHE:CE1	2.88	0.56
7:AG:99:LEU:HD23	7:AG:102:ARG:CZ	2.35	0.56
1:AA:939:G:H1	1:AA:1344:C:H42	1.50	0.56
37:BC:76:ALA:HA	37:BC:114:VAL:HG23	1.86	0.56
1:AA:402:G:O2'	1:AA:403:C:H5'	2.05	0.56
1:AA:404:U:C5'	4:AD:122:ARG:HD3	2.35	0.56
1:AA:1399:C:C2	1:AA:1502:A:N6	2.74	0.56
1:AA:1504:G:O2'	1:AA:1505:G:OP2	2.23	0.56
35:BA:631:A:H2'	35:BA:632:A:C8	2.40	0.56
35:BA:1887:C:H2'	35:BA:1888:G:C4'	2.35	0.56
35:BA:2085:C:H2'	35:BA:2086:U:C6	2.41	0.56
1:AA:507:C:OP1	1:AA:508:C:O3'	2.23	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1496:A:C2'	35:BA:1498:C:H41	2.15	0.56
1:AA:1001(A):G:C8	1:AA:1002:G:C8	2.88	0.56
25:B0:51:VAL:HG21	25:B0:80:HIS:HA	1.86	0.56
9:AI:89:ASN:HB3	9:AI:92:TYR:CD1	2.40	0.56
1:AA:197:A:C6	1:AA:221:C:H4'	2.38	0.56
17:AQ:95:TYR:HD1	17:AQ:98:LEU:CD1	2.14	0.56
22:AV:32:C:H2'	22:AV:33:U:C5'	2.34	0.56
35:BA:1569:A:O2'	38:BD:38:LYS:HG2	2.04	0.56
35:BA:185:U:C2	35:BA:212:G:N2	2.74	0.56
35:BA:721:C:O2	35:BA:721:C:H2'	2.05	0.56
20:AT:48:LYS:HD2	20:AT:51:GLU:OE2	2.05	0.56
1:AA:162:A:C5	1:AA:163:C:H1'	2.40	0.56
55:BX:24:GLY:HA3	55:BX:82:GLN:NE2	2.20	0.56
35:BA:201:C:H2'	35:BA:202:U:H5'	1.88	0.56
35:BA:2794:C:N4	35:BA:2801(A):A:N6	2.53	0.56
24:AY:336:THR:O	24:AY:337:ALA:HB2	2.05	0.56
1:AA:1019:C:C2'	1:AA:1020:U:H5'	2.35	0.56
39:BE:55:ASN:O	39:BE:56:PRO:O	2.23	0.56
35:BA:1313:U:H3'	35:BA:1313:U:O2	2.06	0.56
35:BA:1047:G:C2	35:BA:1110:G:H2'	2.40	0.56
1:AA:956:U:C2'	1:AA:957:U:H5'	2.34	0.56
35:BA:203:C:H3'	35:BA:204:A:H5''	1.87	0.56
35:BA:2097:C:H1'	35:BA:2193:G:N2	2.20	0.56
42:BH:145:ALA:HB1	42:BH:164:TYR:OH	2.05	0.56
1:AA:1206:G:H2'	1:AA:1207:G:O4'	2.05	0.56
35:BA:219:G:H2'	35:BA:220:G:C8	2.41	0.56
35:BA:74:A:H4'	35:BA:75:G:O5'	2.05	0.56
2:AB:28:PHE:O	2:AB:28:PHE:CD1	2.58	0.56
32:B7:9:ARG:HG3	32:B7:9:ARG:HH11	1.69	0.56
18:AR:83:GLU:C	18:AR:84:LYS:HZ3	2.09	0.56
1:AA:796:C:H2'	1:AA:797:C:H6	1.70	0.56
1:AA:822:C:O2'	1:AA:823:G:H5'	2.04	0.56
24:AY:284:THR:HG22	24:AY:287:ARG:O	2.06	0.56
24:AY:344:ASP:CG	24:AY:344:ASP:O	2.43	0.56
24:AY:416:LEU:HD13	24:AY:427:VAL:HG11	1.88	0.56
35:BA:1429:G:H2'	35:BA:1430:C:C6	2.39	0.56
35:BA:2352:A:N7	35:BA:2366:A:C6	2.73	0.56
38:BD:177:LEU:HD23	38:BD:177:LEU:N	2.20	0.56
38:BD:206:LEU:HB3	38:BD:211:ARG:HG2	1.88	0.56
38:BD:212:SER:HA	38:BD:215:LEU:CD1	2.33	0.56
45:BN:95:PRO:O	45:BN:98:VAL:HB	2.06	0.56
51:BT:65:LYS:NZ	51:BT:66:VAL:H	2.03	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:996:A:H4'	52:BU:92:ARG:CZ	2.35	0.56
35:BA:1669:A:O3'	35:BA:2549:G:H5'	2.06	0.56
35:BA:2764:A:H2'	35:BA:2766:G:C8	2.41	0.56
1:AA:575:G:C8	1:AA:881:G:N2	2.73	0.56
15:AO:60:VAL:HG13	15:AO:63:ARG:HD2	1.86	0.56
23:AX:14:A:C3'	23:AX:15:A:C5'	2.73	0.56
48:BQ:141:GLN:HE22	57:BZ:72:ARG:C	2.07	0.56
57:BZ:8:TYR:HD2	57:BZ:38:TYR:OH	1.76	0.56
1:AA:1332:A:C2'	1:AA:1333:A:H5'	2.35	0.56
3:AC:47:LEU:HD11	3:AC:76:VAL:HG12	1.87	0.56
27:B2:25:VAL:CG2	27:B2:60:LEU:HD13	2.21	0.56
19:AS:32:LYS:HB3	19:AS:57:HIS:CE1	2.40	0.56
4:AD:173:TRP:HB3	4:AD:187:ARG:HH22	1.71	0.56
4:AD:59:ARG:CZ	4:AD:59:ARG:CA	2.72	0.56
50:BS:29:PHE:CE1	50:BS:31:SER:CB	2.82	0.56
1:AA:299:G:H2'	1:AA:300:A:N7	2.21	0.56
17:AQ:76:LEU:CD1	17:AQ:78:GLU:H	2.19	0.56
35:BA:1168:G:H2'	35:BA:1169:G:H8	1.71	0.56
35:BA:1473:G:O6	35:BA:1519:G:C2	2.59	0.56
39:BE:126:PRO:O	39:BE:128:SER:N	2.38	0.56
51:BT:106:SER:O	51:BT:107:ASP:HB3	2.05	0.56
49:BR:67:LEU:CD1	49:BR:71:GLN:O	2.53	0.56
1:AA:279:A:H2'	17:AQ:95:TYR:HE1	1.69	0.56
1:AA:116:A:O2'	1:AA:117:G:H5'	2.04	0.56
26:B1:19:GLN:HB2	26:B1:35:THR:HG23	1.86	0.56
2:AB:122:PHE:HA	2:AB:139:LYS:HZ2	1.70	0.56
20:AT:40:ALA:HB2	20:AT:55:ILE:CG2	2.34	0.56
1:AA:122:G:C2	1:AA:123:C:C2	2.94	0.56
1:AA:1480:G:C2	1:AA:1481:U:C2	2.94	0.56
48:BQ:60:ARG:CB	48:BQ:60:ARG:NH1	2.63	0.56
43:BJ:56:UNK:O	43:BJ:57:UNK:O	2.22	0.56
44:BK:23:UNK:O	44:BK:25:UNK:N	2.38	0.56
1:AA:374:A:H4'	1:AA:451:A:OP1	2.05	0.56
47:BP:77:ARG:HH11	47:BP:77:ARG:HG2	1.71	0.56
38:BD:109:ASP:OD1	38:BD:110:GLY:N	2.38	0.56
24:AY:269:LEU:O	24:AY:273:VAL:HG23	2.06	0.56
24:AY:335:ARG:NE	24:AY:374:GLN:OE1	2.38	0.56
24:AY:506:THR:HG22	24:AY:506:THR:O	2.06	0.56
30:B5:46:CYS:HB2	30:B5:48:GLU:HG2	1.88	0.56
35:BA:1904:G:H1'	35:BA:1927:A:N6	2.17	0.56
35:BA:2512:C:H2'	35:BA:2513:G:O4'	2.06	0.56
35:BA:2629:A:N3	35:BA:2629:A:H2'	2.21	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:584:C:O2'	35:BA:585:G:H5'	2.04	0.56
35:BA:687:C:H2'	35:BA:688:U:H5'	1.87	0.56
28:B3:10:LYS:NZ	35:BA:987:G:OP1	2.34	0.56
51:BT:65:LYS:CE	51:BT:66:VAL:N	2.68	0.56
46:BO:87:ILE:HG22	46:BO:92:GLU:H	1.70	0.56
35:BA:2760:C:C3'	35:BA:2761:G:H5''	2.36	0.56
2:AB:223:ILE:O	2:AB:226:ARG:CB	2.49	0.56
57:BZ:155:LEU:N	57:BZ:155:LEU:HD23	2.20	0.56
14:AN:22:THR:HB	14:AN:33:VAL:HG21	1.88	0.56
19:AS:23:ASN:HA	29:B4:47:GLN:HB3	1.87	0.56
35:BA:884:C:H2'	35:BA:885:C:H5''	1.88	0.56
7:AG:17:VAL:HG12	7:AG:18:TYR:N	2.19	0.56
35:BA:607:U:H5	35:BA:619:G:C4	2.23	0.56
19:AS:31:ILE:CG2	19:AS:49:ILE:HA	2.36	0.56
49:BR:48:VAL:C	49:BR:51:LEU:HB2	2.26	0.56
35:BA:145:G:C2'	35:BA:146:G:H5''	2.36	0.56
29:B4:9:LEU:HA	29:B4:26:SER:O	2.04	0.56
40:BF:29:ASN:O	40:BF:33:LEU:HD23	2.06	0.56
1:AA:712:A:H5'	38:BD:139:GLY:HA3	1.87	0.56
35:BA:2745:C:H2'	35:BA:2746:U:H6	1.71	0.56
35:BA:2115:G:N2	35:BA:2119:A:OP1	2.36	0.56
35:BA:1223:G:C2	35:BA:1227:G:C5	2.94	0.56
35:BA:2101:G:C6	35:BA:2102:U:C5	2.94	0.56
35:BA:117:G:H2'	35:BA:119:A:C8	2.41	0.56
1:AA:195:A:OP1	20:AT:68:LYS:NZ	2.37	0.56
37:BC:72:VAL:HG22	37:BC:74:VAL:CG2	2.34	0.56
1:AA:192:U:O4'	20:AT:103:GLY:HA2	2.06	0.56
1:AA:1286:A:O2'	1:AA:1287:A:C5'	2.53	0.56
35:BA:2673:G:H2'	35:BA:2674:G:H8	1.71	0.56
31:B6:40:CYS:SG	31:B6:45:LYS:HB2	2.44	0.56
3:AC:139:GLN:OE1	3:AC:139:GLN:HA	2.04	0.56
25:B0:7:LEU:HD13	48:BQ:85:LYS:NZ	2.20	0.56
11:AK:83:ILE:HA	11:AK:109:VAL:O	2.04	0.56
35:BA:682:G:H2'	35:BA:683:C:C6	2.41	0.56
44:BK:91:UNK:O	44:BK:92:UNK:CB	2.54	0.56
24:AY:208:LYS:O	24:AY:209:GLY:C	2.43	0.56
24:AY:138:LEU:CD1	24:AY:272:LEU:HB3	2.31	0.56
24:AY:473:TRP:O	24:AY:524:HIS:O	2.22	0.56
32:B7:14:LYS:HD2	35:BA:125:G:H5'	1.86	0.56
35:BA:2464:C:C2	35:BA:2465:C:C6	2.93	0.56
35:BA:2821:A:O2'	35:BA:2822:G:H5'	2.05	0.56
33:B8:4:MET:CE	35:BA:592:G:H21	2.19	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:672:C:H2'	35:BA:673:C:C5'	2.35	0.56
38:BD:184:LYS:HG3	38:BD:269:PHE:O	2.06	0.56
40:BF:57:VAL:HG12	40:BF:59:TYR:N	2.15	0.56
45:BN:24:GLY:O	45:BN:28:THR:HG22	2.05	0.56
47:BP:84:ASN:HA	47:BP:115:LEU:O	2.04	0.56
47:BP:71:VAL:N	47:BP:72:PRO:CD	2.47	0.56
51:BT:53:ARG:HB2	51:BT:53:ARG:HH11	1.70	0.56
52:BU:79:PHE:HE1	52:BU:83:LEU:CD2	2.19	0.56
35:BA:1667:G:H5'	46:BO:5:GLN:O	2.06	0.56
18:AR:22:VAL:CG1	18:AR:43:PHE:HE1	2.18	0.56
2:AB:101:MET:O	2:AB:105:PHE:HD1	1.89	0.56
35:BA:1911:U:O5'	35:BA:1911:U:H6	1.88	0.56
48:BQ:106:VAL:HG21	48:BQ:114:ALA:CB	2.35	0.56
21:AU:20:LYS:HG2	21:AU:20:LYS:O	2.04	0.56
3:AC:23:TYR:CD1	3:AC:23:TYR:C	2.79	0.56
3:AC:52:LEU:HD12	3:AC:55:VAL:CG2	2.35	0.56
35:BA:71:A:H3'	35:BA:71:A:OP2	2.05	0.56
40:BF:8:GLN:CG	40:BF:9:ILE:H	2.18	0.56
35:BA:1057:A:C2	35:BA:1082:U:N3	2.64	0.56
35:BA:1058:G:OP1	44:BK:1:UNK:C	2.54	0.56
4:AD:100:ARG:O	4:AD:104:VAL:HG23	2.05	0.56
35:BA:2334:G:H4'	35:BA:2335:A:OP2	2.05	0.56
37:BC:141:LYS:NZ	37:BC:164:ARG:HH21	2.00	0.56
37:BC:28:LEU:HG	37:BC:28:LEU:O	2.06	0.56
37:BC:53:ARG:NH1	37:BC:55:ASP:HB2	2.13	0.56
37:BC:6:ARG:CZ	37:BC:7:TYR:HA	2.35	0.56
57:BZ:140:ASP:OD1	57:BZ:150:LEU:HD13	2.05	0.56
7:AG:114:ARG:O	7:AG:119:ARG:NH1	2.39	0.56
35:BA:1458:C:H6	35:BA:1458:C:O5'	1.89	0.56
37:BC:75:LEU:HB2	37:BC:93:TYR:O	2.05	0.56
16:AP:9:PHE:HB2	16:AP:16:HIS:O	2.05	0.56
40:BF:110:LEU:C	40:BF:110:LEU:HD13	2.25	0.56
5:AE:35:GLY:CA	5:AE:40:ARG:O	2.54	0.56
1:AA:107:G:C2	1:AA:108:G:H1'	2.41	0.56
5:AE:138:ALA:O	5:AE:141:GLN:N	2.36	0.56
8:AH:112:LEU:HB2	8:AH:132:GLU:O	2.05	0.56
50:BS:57:LYS:HD2	50:BS:57:LYS:O	2.05	0.56
35:BA:1119:C:O2'	35:BA:1120:G:H5'	2.05	0.56
35:BA:44:G:H21	35:BA:435:C:H41	1.52	0.56
35:BA:2179:C:H5''	35:BA:2180:U:OP1	2.06	0.56
35:BA:803:U:HO2'	35:BA:804:A:H5'	1.69	0.56
49:BR:27:SER:O	49:BR:30:THR:HG22	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:614(A):U:H4'	35:BA:614(B):G:H5''	1.86	0.56
35:BA:1370:C:H3'	35:BA:1371:G:H8	1.71	0.56
30:B5:29:THR:HG21	35:BA:2814:C:O2'	2.06	0.56
4:AD:163:GLU:OE1	4:AD:163:GLU:HA	2.06	0.56
24:AY:221:GLU:O	24:AY:222:ASP:C	2.42	0.56
24:AY:282:ARG:O	24:AY:283:GLN:CB	2.54	0.56
35:BA:2462:U:H2'	35:BA:2463:C:O4'	2.06	0.56
35:BA:2692:C:O2'	35:BA:2693:A:H5'	2.06	0.56
35:BA:27:G:O2'	35:BA:28:A:OP2	2.24	0.56
35:BA:774:A:H2	35:BA:787:U:O2'	1.89	0.56
39:BE:7:VAL:O	39:BE:26:ILE:HG22	2.06	0.56
45:BN:67:LEU:O	45:BN:68:GLU:HB2	2.05	0.56
49:BR:38:VAL:HG23	49:BR:110:PRO:O	2.05	0.56
51:BT:78:LEU:O	51:BT:78:LEU:HD23	2.06	0.56
35:BA:1667:G:N3	35:BA:1991:U:C4	2.74	0.56
42:BH:27:LYS:CG	42:BH:32:GLU:HG2	2.33	0.56
35:BA:2764:A:H3'	35:BA:2766:G:N7	2.20	0.56
6:AF:12:PRO:HG2	6:AF:13:ASN:ND2	2.20	0.56
8:AH:83:ILE:HG23	8:AH:83:ILE:O	2.05	0.56
15:AO:39:LEU:CB	15:AO:56:LEU:CD2	2.74	0.56
2:AB:153:ARG:CG	2:AB:154:LEU:H	2.19	0.56
2:AB:19:HIS:HD2	2:AB:20:GLU:OE1	1.89	0.56
42:BH:103:LEU:O	42:BH:105:LEU:HD13	2.04	0.56
35:BA:2590:A:P	38:BD:238:GLY:HA2	2.46	0.56
1:AA:1113:C:O2'	1:AA:1114:C:H5'	2.06	0.56
1:AA:1117:G:C2	1:AA:1184:G:C2	2.94	0.56
3:AC:14:ILE:HD11	3:AC:178:LEU:HG	1.86	0.56
3:AC:34:LEU:O	3:AC:38:ARG:HG2	2.05	0.56
14:AN:22:THR:HB	14:AN:33:VAL:CG2	2.35	0.56
19:AS:23:ASN:CB	29:B4:47:GLN:HG2	2.33	0.56
49:BR:21:TYR:HB3	49:BR:47:PHE:CE2	2.41	0.56
41:BG:42:GLY:O	41:BG:43:LEU:HB2	2.06	0.56
31:B6:28:ARG:HA	31:B6:32:ASN:ND2	2.21	0.56
33:B8:12:LYS:HG2	47:BP:68:GLN:HE21	1.70	0.56
5:AE:77:PRO:HB2	5:AE:78:HIS:HD2	1.71	0.56
35:BA:1203:G:C5	35:BA:1204:A:N1	2.74	0.56
47:BP:7:ARG:O	47:BP:10:PRO:HD2	2.05	0.56
1:AA:505:G:H2'	1:AA:506:G:C8	2.41	0.56
41:BG:34:LEU:CA	41:BG:161:THR:HG22	2.25	0.56
20:AT:91:LEU:C	20:AT:93:GLU:N	2.55	0.56
28:B3:31:LEU:CD2	28:B3:32:GLN:HE21	2.18	0.56
35:BA:1166:C:O2	35:BA:1184:G:C2	2.59	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AV:34:C:H6	22:AV:34:C:O5'	1.89	0.56
1:AA:127:G:C2	1:AA:235:C:N3	2.74	0.56
35:BA:720:C:N3	35:BA:721:C:H1'	2.20	0.56
36:BB:10:C:C4	36:BB:11:C:C5	2.94	0.56
1:AA:929:G:O5'	1:AA:929:G:H8	1.89	0.56
35:BA:353:G:C2	35:BA:354:G:C8	2.93	0.56
46:BO:17:ARG:O	46:BO:18:LYS:HG3	2.04	0.56
35:BA:1479:G:N2	35:BA:1480:G:H1'	2.20	0.56
32:B7:35:ARG:NH1	32:B7:42:LEU:HD11	2.21	0.56
12:AL:18:VAL:O	12:AL:19:ARG:HB3	2.06	0.56
35:BA:377:C:O2'	35:BA:378:C:H5'	2.04	0.56
24:AY:221:GLU:HG2	24:AY:222:ASP:H	1.70	0.56
24:AY:527:ARG:CD	24:AY:528:GLU:H	2.15	0.56
35:BA:1803:A:H3'	35:BA:1804:C:C6	2.41	0.56
35:BA:2039:C:C2	35:BA:2040:C:C5	2.94	0.56
35:BA:2639:A:H3'	35:BA:2640:G:C8	2.41	0.56
35:BA:2784:C:O2'	39:BE:37:ARG:NH1	2.38	0.56
35:BA:564:C:H2'	35:BA:565:C:H6	1.70	0.56
32:B7:2:LYS:HE2	35:BA:687:C:H5''	1.88	0.56
39:BE:34:VAL:CG1	39:BE:48:GLN:HE21	2.17	0.56
39:BE:48:GLN:HA	39:BE:79:ARG:O	2.06	0.56
40:BF:57:VAL:HG12	40:BF:58:ALA:N	2.20	0.56
45:BN:99:LEU:HD13	45:BN:103:VAL:HG23	1.86	0.56
45:BN:6:PRO:O	45:BN:9:VAL:HG23	2.06	0.56
47:BP:85:LEU:CD1	47:BP:120:ALA:HB2	2.35	0.56
53:BV:72:VAL:HG23	53:BV:85:LYS:HB2	1.85	0.56
1:AA:824:C:H2'	1:AA:825:G:C8	2.40	0.56
6:AF:25:ILE:N	6:AF:28:ARG:NH1	2.53	0.56
8:AH:35:ILE:O	8:AH:36:LEU:C	2.43	0.56
15:AO:62:GLN:HA	15:AO:65:ARG:CG	2.36	0.56
18:AR:34:TYR:HD2	18:AR:72:ARG:HH11	1.54	0.56
2:AB:221:LEU:O	2:AB:222:ILE:C	2.42	0.56
25:B0:27:GLU:OE2	35:BA:856:C:H1'	2.05	0.56
3:AC:123:GLN:CB	3:AC:128:PHE:HD2	2.18	0.56
4:AD:30:LYS:O	4:AD:32:ALA:N	2.38	0.56
40:BF:156:LEU:O	40:BF:157:VAL:CG1	2.54	0.56
37:BC:37:PHE:HE1	37:BC:39:GLU:HG3	1.68	0.56
45:BN:134:ARG:NH2	45:BN:136:GLU:HB2	2.21	0.56
1:AA:300:A:O5'	1:AA:300:A:H8	1.89	0.56
31:B6:6:ARG:NH1	31:B6:7:ILE:HG13	2.20	0.56
38:BD:79:VAL:CG2	38:BD:115:GLN:N	2.69	0.56
1:AA:509:A:C2	1:AA:510:A:C2	2.93	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:41:ARG:CG	12:AL:42:THR:H	2.07	0.56
35:BA:2163:C:H2'	35:BA:2164:C:O4'	2.04	0.56
35:BA:2521:C:N4	35:BA:2544:G:H1	2.03	0.56
1:AA:189(I):G:H2'	1:AA:189(J):G:H8	1.71	0.56
24:AY:138:LEU:CD2	24:AY:275:TRP:HE3	2.19	0.56
24:AY:254:VAL:HG12	24:AY:256:PHE:CE1	2.41	0.56
30:B5:41:PRO:HD3	54:BW:38:TYR:CE1	2.41	0.56
35:BA:2023:G:H2'	35:BA:2024:G:H8	1.70	0.56
35:BA:2030:A:H4'	35:BA:2031:A:H8	1.70	0.56
35:BA:242:G:H1'	35:BA:243:U:C5	2.39	0.56
35:BA:961:C:H42	35:BA:2031:A:H1'	1.70	0.56
38:BD:108:PRO:CG	38:BD:143:HIS:NE2	2.69	0.56
35:BA:2572:A:C4	39:BE:144:ARG:NH1	2.74	0.56
39:BE:9:VAL:CG1	39:BE:10:GLY:N	2.68	0.56
52:BU:26:GLY:O	52:BU:28:ARG:N	2.39	0.56
52:BU:46:ALA:O	52:BU:49:HIS:N	2.38	0.56
53:BV:39:LEU:CD1	53:BV:47:VAL:HG11	2.36	0.56
8:AH:13:ILE:HD13	8:AH:13:ILE:N	2.20	0.56
15:AO:36:ILE:CG1	15:AO:59:MET:HE1	2.31	0.56
15:AO:60:VAL:HG13	15:AO:63:ARG:CD	2.36	0.56
18:AR:22:VAL:HG11	18:AR:43:PHE:CE1	2.41	0.56
35:BA:2810:A:N3	39:BE:61:ARG:NH2	2.54	0.56
35:BA:1910:G:N2	35:BA:1920:C:N3	2.45	0.56
42:BH:126:PRO:HD2	42:BH:131:VAL:HA	1.88	0.56
57:BZ:41:LEU:O	57:BZ:44:PHE:CB	2.53	0.56
57:BZ:57:ILE:CD1	57:BZ:57:ILE:H	2.19	0.56
1:AA:1303:C:H2'	1:AA:1304:G:H5'	1.88	0.56
1:AA:1324:A:H2'	1:AA:1325:C:O4'	2.05	0.56
9:AI:104:ARG:HG3	9:AI:104:ARG:NH1	2.18	0.56
10:AJ:53:PRO:HA	14:AN:42:ILE:HD11	1.87	0.56
14:AN:52:GLN:O	14:AN:54:PRO:HD3	2.05	0.56
35:BA:485:C:C4	35:BA:486:C:N4	2.74	0.56
40:BF:154:VAL:HG13	40:BF:191:ARG:C	2.26	0.56
19:AS:51:VAL:HG11	19:AS:75:ALA:HB2	1.88	0.56
37:BC:47:LEU:CD2	37:BC:171:ILE:HD12	2.35	0.56
15:AO:5:LYS:HA	15:AO:8:LYS:HG3	1.87	0.56
45:BN:55:VAL:HG13	45:BN:56:ASN:N	2.19	0.56
2:AB:142:LEU:HA	2:AB:145:LEU:HB3	1.87	0.56
9:AI:16:ARG:HG3	9:AI:16:ARG:HH11	1.71	0.56
25:B0:38:VAL:HG11	25:B0:59:LEU:HD12	1.88	0.56
35:BA:1278:A:C2	35:BA:1293:C:N3	2.73	0.56
1:AA:1371:G:OP2	9:AI:11:LYS:HD2	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B1:87:PRO:CG	26:B1:88:LYS:H	2.19	0.56
35:BA:1050:A:H1'	35:BA:2751:G:C2	2.41	0.56
35:BA:1514:U:H2'	35:BA:1515:G:H8	1.71	0.56
35:BA:419:C:H2'	35:BA:420:C:H6	1.71	0.56
35:BA:1432:C:O2	35:BA:1562:A:C2	2.59	0.56
1:AA:771:G:H2'	1:AA:772:U:H6	1.70	0.56
24:AY:454:LYS:O	24:AY:454:LYS:HD3	2.06	0.56
35:BA:2043:C:H2'	35:BA:2044:C:H6	1.69	0.56
35:BA:241:A:H5'	35:BA:243:U:H1'	1.87	0.56
38:BD:24:ILE:HD13	38:BD:84:TYR:CA	2.34	0.56
39:BE:144:ARG:CG	39:BE:145:LYS:N	2.69	0.56
15:AO:49:ASP:CG	15:AO:52:SER:HB3	2.26	0.56
18:AR:34:TYR:HD2	18:AR:72:ARG:HD3	1.69	0.56
18:AR:53:ARG:C	18:AR:55:ARG:H	2.09	0.56
2:AB:18:GLY:O	2:AB:19:HIS:HB2	2.04	0.56
57:BZ:128:VAL:CG1	57:BZ:133:ILE:HD13	2.36	0.56
57:BZ:6:LYS:O	57:BZ:39:VAL:HG12	2.06	0.56
22:AV:71:C:H3'	22:AV:72:A:C8	2.40	0.56
12:AL:86:ARG:HH21	12:AL:99:HIS:CD2	2.23	0.56
9:AI:100:GLY:O	9:AI:102:LEU:N	2.39	0.56
40:BF:6:VAL:HG11	40:BF:124:LEU:CD1	2.36	0.56
50:BS:14:VAL:O	50:BS:15:ARG:C	2.44	0.56
35:BA:876:C:N3	35:BA:901:A:N6	2.54	0.56
41:BG:83:ARG:NH1	41:BG:84:LYS:HZ1	2.04	0.56
1:AA:622:A:C8	1:AA:623:C:C5	2.94	0.56
31:B6:33:LYS:HA	31:B6:33:LYS:CE	2.19	0.56
26:B1:80:LEU:HD22	26:B1:82:LEU:HD22	1.87	0.56
26:B1:43:TYR:HB2	35:BA:2230:G:O3'	2.06	0.56
35:BA:2110:G:H22	35:BA:2178:C:H5	1.54	0.56
35:BA:925:C:C3'	35:BA:926:A:H5''	2.36	0.56
35:BA:1712:C:N4	35:BA:1747:G:N1	2.54	0.56
35:BA:1747(A):G:H2'	35:BA:1748:G:H5''	1.87	0.56
29:B4:14:ILE:CG1	29:B4:31:ILE:HB	2.30	0.56
1:AA:220:G:C2'	1:AA:221:C:H5'	2.35	0.56
13:AM:106:ASN:O	13:AM:107:ALA:HB3	2.04	0.56
35:BA:1367:A:H2'	35:BA:1368:G:C5'	2.35	0.56
22:AV:17(A):U:C4'	22:AV:18:G:OP1	2.54	0.56
35:BA:723:G:C2	35:BA:724:U:C2	2.94	0.56
20:AT:100:ILE:HD12	20:AT:100:ILE:N	2.21	0.56
50:BS:67:ARG:NH2	50:BS:100:ALA:CB	2.69	0.56
50:BS:42:ASP:C	50:BS:44:LYS:N	2.54	0.56
25:B0:10:THR:HG22	25:B0:12:ASN:N	2.18	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:377:G:H2'	1:AA:378:G:H8	1.71	0.56
1:AA:945:G:C2'	1:AA:946:A:H5'	2.36	0.56
1:AA:929:G:C8	1:AA:929:G:O5'	2.59	0.56
44:BK:125:UNK:HA	44:BK:129:UNK:CB	2.36	0.56
35:BA:1964:G:C6	35:BA:1967:C:N4	2.74	0.56
1:AA:184:G:O4'	1:AA:224:C:H5''	2.05	0.56
24:AY:147:ASP:HA	24:AY:175:CYS:HB3	1.88	0.55
24:AY:279:PRO:HB2	24:AY:361:PRO:O	2.06	0.55
24:AY:423:GLY:O	24:AY:425:VAL:N	2.38	0.55
35:BA:1799:G:H5'	35:BA:1819:A:H61	1.72	0.55
35:BA:1774:C:H4'	35:BA:1979:C:O2	2.06	0.55
35:BA:2035:G:H3'	35:BA:2036:C:C5'	2.33	0.55
35:BA:2366:A:H2'	35:BA:2367:G:O4'	2.06	0.55
35:BA:2487:G:H2'	35:BA:2488:A:C8	2.42	0.55
35:BA:2639:A:H3'	35:BA:2640:G:H8	1.71	0.55
35:BA:648:G:H4'	35:BA:2351:G:H5''	1.88	0.55
38:BD:33:LEU:HD23	38:BD:34:VAL:HG22	1.88	0.55
38:BD:64:ILE:HG13	38:BD:65:ILE:N	2.21	0.55
39:BE:34:VAL:O	39:BE:34:VAL:HG13	2.06	0.55
39:BE:37:ARG:O	39:BE:45:THR:HA	2.06	0.55
45:BN:58:ASP:C	45:BN:60:ILE:N	2.56	0.55
45:BN:94:HIS:N	45:BN:95:PRO:CD	2.69	0.55
51:BT:30:VAL:HA	51:BT:43:GLN:O	2.06	0.55
1:AA:1074:G:H2'	1:AA:1075:C:H6	1.72	0.55
1:AA:1102:A:H2'	1:AA:1103:C:C6	2.40	0.55
1:AA:1109:C:C2	1:AA:1110:A:C8	2.94	0.55
25:B0:26:TYR:HB3	25:B0:27:GLU:OE2	2.06	0.55
12:AL:88:GLY:O	12:AL:99:HIS:ND1	2.37	0.55
1:AA:1318:A:O3'	19:AS:10:PHE:CD2	2.60	0.55
1:AA:990:C:H2'	1:AA:991:U:C1'	2.35	0.55
56:BY:15:VAL:CG1	56:BY:17:SER:OG	2.54	0.55
27:B2:2:LYS:HB2	35:BA:97:C:C5'	2.22	0.55
55:BX:26:TYR:HD2	55:BX:92:LEU:HD12	1.70	0.55
7:AG:15:ASP:OD1	7:AG:16:LEU:N	2.39	0.55
40:BF:195:ASP:OD2	40:BF:197:ASP:HB2	2.05	0.55
40:BF:8:GLN:CG	40:BF:9:ILE:N	2.66	0.55
35:BA:797:C:C2'	35:BA:798:G:H8	2.00	0.55
57:BZ:120:ILE:HG12	57:BZ:172:ALA:N	2.20	0.55
41:BG:159:VAL:CG2	41:BG:159:VAL:O	2.53	0.55
5:AE:103:GLY:HA3	5:AE:122:GLU:OE1	2.06	0.55
38:BD:131:LEU:CB	38:BD:136:ILE:HG13	2.27	0.55
50:BS:102:ALA:C	50:BS:103:GLU:OE1	2.45	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BS:24:LEU:HD13	50:BS:41:ASP:OD1	2.05	0.55
35:BA:1590:U:C3'	35:BA:1591:G:H5''	2.36	0.55
1:AA:274:A:O2'	1:AA:275:G:C8	2.60	0.55
7:AG:140:ASP:O	7:AG:143:ARG:HB2	2.06	0.55
20:AT:56:MET:HA	20:AT:59:ALA:HB3	1.88	0.55
47:BP:146:VAL:HG13	47:BP:147:LEU:H	1.71	0.55
35:BA:272(D):G:H1	35:BA:364:C:H42	1.54	0.55
48:BQ:39:PRO:O	48:BQ:40:ALA:HB2	2.06	0.55
1:AA:748:C:O2'	1:AA:749:C:P	2.64	0.55
1:AA:1210:C:H5'	1:AA:1214:C:N4	2.21	0.55
24:AY:170:THR:HG22	24:AY:184:HIS:CA	2.16	0.55
24:AY:78:PRO:CB	24:AY:83:LEU:HA	2.35	0.55
35:BA:1286:A:C2	35:BA:1329:U:C5	2.94	0.55
35:BA:1653:G:O2'	35:BA:1654:A:OP2	2.17	0.55
35:BA:2021:C:H4'	35:BA:2022:U:OP2	2.06	0.55
35:BA:2049:G:C2'	35:BA:2050:C:H5'	2.37	0.55
45:BN:116:LEU:O	45:BN:119:ARG:N	2.38	0.55
47:BP:85:LEU:HD12	47:BP:120:ALA:HB2	1.88	0.55
51:BT:50:ILE:HA	51:BT:99:LEU:HD11	1.88	0.55
51:BT:62:THR:HG22	51:BT:75:ILE:CB	2.36	0.55
1:AA:913:A:H4'	1:AA:914:A:H4'	1.88	0.55
2:AB:97:TRP:CZ2	2:AB:173:ALA:HA	2.42	0.55
48:BQ:53:ALA:C	48:BQ:56:ARG:HB2	2.26	0.55
12:AL:28:LYS:O	12:AL:30:ALA:N	2.39	0.55
12:AL:89:ARG:HA	12:AL:97:ARG:HA	1.88	0.55
27:B2:2:LYS:HZ3	27:B2:5:GLU:CD	2.10	0.55
37:BC:59:ARG:NH1	37:BC:164:ARG:CZ	2.69	0.55
37:BC:186:ALA:HB1	37:BC:190:ARG:NH1	2.20	0.55
37:BC:6:ARG:NH1	37:BC:34:THR:O	2.39	0.55
41:BG:66:GLN:O	41:BG:68:PRO:HD3	2.06	0.55
41:BG:76:SER:HB3	41:BG:83:ARG:HG2	1.89	0.55
1:AA:1392:G:N2	1:AA:1502:A:C8	2.74	0.55
5:AE:80:ILE:HA	8:AH:104:ARG:HH22	1.65	0.55
13:AM:41:PRO:O	13:AM:42:ALA:C	2.45	0.55
35:BA:1036:G:C2	35:BA:1120:G:C6	2.94	0.55
4:AD:52:SER:O	4:AD:56:VAL:HG23	2.06	0.55
7:AG:94:ARG:O	7:AG:97:GLN:N	2.40	0.55
1:AA:193:C:O2'	1:AA:194:C:H5'	2.06	0.55
1:AA:192:U:C4'	20:AT:103:GLY:HA2	2.36	0.55
35:BA:723:G:H2'	35:BA:724:U:H6	1.64	0.55
7:AG:129:GLU:OE1	7:AG:131:LYS:HE2	2.06	0.55
53:BV:2:PHE:HB3	53:BV:41:GLY:C	2.27	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1244:G:H4'	47:BP:11:GLY:CA	2.35	0.55
35:BA:1054:A:H2	35:BA:1055:G:C5	2.24	0.55
36:BB:54:G:N2	36:BB:55:U:N1	2.53	0.55
7:AG:13:GLN:O	7:AG:14:PRO:C	2.45	0.55
41:BG:123:ASN:HB2	41:BG:126:ASP:OD2	2.06	0.55
6:AF:36:ARG:HB3	6:AF:66:GLU:HB3	1.88	0.55
24:AY:109:CYS:C	24:AY:137:ILE:HG22	2.27	0.55
24:AY:413:LEU:O	24:AY:417:VAL:HG23	2.05	0.55
35:BA:811:U:O2	35:BA:1251:C:C4	2.59	0.55
35:BA:1770:G:C2'	35:BA:1771:C:H5'	2.36	0.55
35:BA:1922:G:H2'	35:BA:1923:U:C6	2.41	0.55
35:BA:2050:C:N4	35:BA:2051:A:C6	2.74	0.55
30:B5:8:LYS:CB	35:BA:2054:A:C2	2.90	0.55
35:BA:2493:U:H2'	35:BA:2494:G:O4'	2.06	0.55
35:BA:2692:C:H1'	35:BA:2847:U:H1'	1.88	0.55
35:BA:449:A:H2'	35:BA:450:G:H8	1.71	0.55
35:BA:635:C:O2'	35:BA:636:G:H5'	2.05	0.55
38:BD:90:ALA:CB	38:BD:106:ILE:HG23	2.36	0.55
38:BD:208:LYS:HG3	38:BD:210:GLY:CA	2.36	0.55
39:BE:8:LYS:HA	39:BE:26:ILE:CG2	2.36	0.55
52:BU:104:GLN:C	52:BU:106:PHE:H	2.10	0.55
1:AA:754:C:C5'	15:AO:72:ARG:HH12	2.19	0.55
1:AA:834:C:O2'	1:AA:835:U:H5'	2.05	0.55
15:AO:10:LYS:O	15:AO:13:GLN:HB2	2.06	0.55
2:AB:152:PHE:O	2:AB:153:ARG:CB	2.54	0.55
2:AB:167:PRO:O	2:AB:171:ALA:HB2	2.07	0.55
2:AB:68:ILE:HB	2:AB:70:PHE:HE1	1.71	0.55
35:BA:2394:C:O2	35:BA:2394:C:H2'	2.06	0.55
57:BZ:96:VAL:CG1	57:BZ:130:PRO:HG3	2.36	0.55
12:AL:97:ARG:C	12:AL:98:TYR:CD1	2.80	0.55
9:AI:48:GLU:N	9:AI:49:PRO:CD	2.68	0.55
40:BF:179:GLU:O	40:BF:205:ARG:NH1	2.39	0.55
4:AD:96:LEU:CD1	4:AD:96:LEU:H	2.18	0.55
37:BC:47:LEU:HD22	37:BC:58:VAL:HG21	1.87	0.55
35:BA:598:G:C6	35:BA:599:G:C6	2.95	0.55
31:B6:10:LEU:HD13	33:B8:34:TRP:HD1	1.70	0.55
33:B8:25:MET:SD	47:BP:64:LYS:HD3	2.46	0.55
35:BA:1889:A:O2'	35:BA:2087:G:H5'	2.05	0.55
24:AY:21:HIS:CD2	24:AY:122:ARG:HB2	2.41	0.55
1:AA:1363(A):A:H4'	1:AA:1364:U:C5'	2.27	0.55
35:BA:1344:G:H4'	35:BA:1384:A:C5	2.41	0.55
36:BB:116:G:C2	36:BB:117:G:C5	2.94	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B8:23:VAL:HG12	33:B8:46:ARG:NH1	2.20	0.55
10:AJ:27:ALA:CA	10:AJ:30:SER:HB3	2.37	0.55
35:BA:2519:U:C5	35:BA:2542:A:C2	2.94	0.55
35:BA:2857:G:H2'	35:BA:2858:C:O5'	2.07	0.55
48:BQ:76:LYS:HB3	48:BQ:91:GLU:HG3	1.88	0.55
24:AY:18:ILE:HD11	24:AY:30:THR:OG1	2.06	0.55
24:AY:360:TYR:HB3	24:AY:361:PRO:CD	2.27	0.55
38:BD:165:ILE:HA	38:BD:175:LEU:HD22	1.88	0.55
38:BD:44:ASN:HD22	38:BD:48:ARG:N	2.04	0.55
52:BU:12:ARG:HB2	52:BU:13:LYS:NZ	2.22	0.55
1:AA:1418:A:C2	1:AA:1483:A:C2	2.94	0.55
1:AA:882:C:H2'	1:AA:883:C:H6	1.70	0.55
1:AA:657:G:H4'	15:AO:28:GLN:HG2	1.88	0.55
15:AO:45:VAL:CG1	15:AO:46:HIS:N	2.69	0.55
6:AF:62:TRP:CD2	18:AR:35:ARG:NH2	2.75	0.55
35:BA:2159:G:C2'	35:BA:2160:G:C5'	2.81	0.55
53:BV:98:GLU:OE2	53:BV:100:ARG:HD3	2.06	0.55
35:BA:955:C:OP1	48:BQ:87:LYS:HE3	2.06	0.55
57:BZ:100:VAL:HG11	57:BZ:137:ILE:HG13	1.89	0.55
1:AA:1063:C:H42	1:AA:1193:G:H1	1.54	0.55
3:AC:142:MET:C	3:AC:144:SER:N	2.59	0.55
3:AC:73:PRO:HG3	3:AC:105:GLU:HB2	1.87	0.55
10:AJ:51:ARG:HG3	10:AJ:51:ARG:HH11	1.71	0.55
7:AG:19:GLY:O	7:AG:20:ASP:C	2.44	0.55
40:BF:154:VAL:HG12	40:BF:155:LEU:H	1.71	0.55
40:BF:18:ARG:CZ	40:BF:199:TRP:CZ3	2.88	0.55
40:BF:6:VAL:CG1	40:BF:7:TYR:N	2.52	0.55
49:BR:47:PHE:C	49:BR:49:ASP:N	2.59	0.55
35:BA:2839:G:C4'	49:BR:49:ASP:OD2	2.53	0.55
35:BA:139:G:C6	35:BA:140:G:H2'	2.41	0.55
35:BA:1720:U:H2'	35:BA:1721:G:C4'	2.36	0.55
16:AP:7:ALA:HB1	16:AP:29:ASP:HA	1.87	0.55
1:AA:1436:U:C5	1:AA:1437:C:C5	2.94	0.55
41:BG:171:ALA:CA	41:BG:174:GLU:HB3	2.36	0.55
35:BA:1712:C:C2'	35:BA:1713:U:H5'	2.36	0.55
16:AP:74:LEU:CB	16:AP:79:VAL:HG21	2.36	0.55
54:BW:72:LYS:HE3	54:BW:108:GLY:HA3	1.87	0.55
2:AB:123:ALA:O	2:AB:124:SER:HB2	2.07	0.55
1:AA:948:C:P	13:AM:108:ARG:H	2.29	0.55
1:AA:1371:G:H5''	9:AI:69:GLY:N	2.21	0.55
54:BW:1:MET:HG3	54:BW:64:MET:CE	2.36	0.55
35:BA:848:G:N3	35:BA:933:A:HI'	2.21	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B3:59:VAL:CG1	28:B3:60:GLU:N	2.67	0.55
1:AA:30:U:H1'	1:AA:31:G:OP1	2.06	0.55
30:B5:32:PRO:HD2	35:BA:2886:G:O2'	2.05	0.55
1:AA:797:C:O2	1:AA:797:C:H2'	2.05	0.55
9:AI:29:ASN:OD1	9:AI:64:THR:HA	2.06	0.55
24:AY:236:GLY:O	24:AY:237:ALA:CB	2.54	0.55
24:AY:28:THR:N	58:AY:1000:GCP:O1A	2.31	0.55
24:AY:241:PHE:CZ	24:AY:275:TRP:NE1	2.74	0.55
24:AY:72:THR:OG1	24:AY:302:LYS:NZ	2.35	0.55
24:AY:425:VAL:HG21	24:AY:449:VAL:HG13	1.88	0.55
1:AA:951:G:C2'	1:AA:952:U:C6	2.66	0.55
30:B5:40:LYS:NZ	30:B5:45:VAL:HA	2.22	0.55
35:BA:1806:C:H2'	35:BA:1807:G:H8	1.72	0.55
35:BA:1826:G:C6	35:BA:1827:C:C4	2.95	0.55
35:BA:35:G:C4	35:BA:454:A:C2	2.94	0.55
38:BD:62:TYR:HE1	38:BD:64:ILE:CA	2.19	0.55
40:BF:70:THR:C	40:BF:72:ARG:N	2.59	0.55
45:BN:94:HIS:HA	45:BN:96:GLU:OE2	2.06	0.55
1:AA:575:G:C5	1:AA:881:G:N2	2.75	0.55
1:AA:874:G:C6	1:AA:875:C:N4	2.75	0.55
1:AA:22:G:H5''	1:AA:885:G:OP2	2.07	0.55
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.06	0.55
3:AC:38:ARG:O	3:AC:39:ILE:C	2.43	0.55
10:AJ:91:PRO:O	10:AJ:93:GLY:N	2.40	0.55
19:AS:40:ILE:HG13	19:AS:69:HIS:O	2.07	0.55
19:AS:63:THR:HG23	19:AS:65:ASN:N	2.19	0.55
27:B2:27:GLU:O	27:B2:30:ARG:N	2.38	0.55
27:B2:8:LYS:O	27:B2:12:GLU:HB2	2.05	0.55
35:BA:1718:G:H8	35:BA:1718:G:H5'	1.70	0.55
35:BA:2706:G:H5''	35:BA:2851:A:H5''	1.89	0.55
1:AA:622:A:H3'	1:AA:623:C:C5	2.41	0.55
20:AT:26:ASN:HB3	20:AT:71:THR:OG1	2.07	0.55
17:AQ:7:THR:O	17:AQ:23:VAL:HG13	2.07	0.55
31:B6:9:LEU:HD22	31:B6:10:LEU:N	2.20	0.55
35:BA:271(M):G:O2'	35:BA:271(O):C:H5'	2.05	0.55
2:AB:142:LEU:O	2:AB:146:GLN:N	2.39	0.55
1:AA:1432:G:HO2'	1:AA:1433:A:H8	1.52	0.55
41:BG:28:VAL:O	41:BG:29:TRP:CG	2.60	0.55
41:BG:5:VAL:CG1	41:BG:6:ALA:H	2.09	0.55
35:BA:1528(A):A:H8	35:BA:1529:G:C8	2.24	0.55
3:AC:7:PRO:HG2	3:AC:8:ILE:H	1.71	0.55
28:B3:5:LYS:CB	28:B3:36:VAL:HG12	2.37	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:127:G:N2	1:AA:235:C:C2	2.75	0.55
36:BB:31:C:H2'	36:BB:31:C:O2	2.05	0.55
36:BB:31:C:N4	36:BB:51:G:H1	2.04	0.55
35:BA:535:C:O2'	35:BA:536:A:H5'	2.07	0.55
35:BA:341:G:O2'	35:BA:342:G:H5'	2.06	0.55
12:AL:75:HIS:HD2	12:AL:77:LEU:HB2	1.70	0.55
35:BA:1054:A:C2	35:BA:1055:G:C5	2.94	0.55
45:BN:47:ALA:N	45:BN:48:MET:HE2	2.21	0.55
26:B1:18:ILE:HG21	26:B1:20:ARG:CZ	2.36	0.55
35:BA:184:C:O3'	35:BA:217:G:N2	2.39	0.55
38:BD:40:THR:O	38:BD:41:GLY:O	2.24	0.55
24:AY:289:VAL:HG12	24:AY:322:SER:HB3	1.87	0.55
24:AY:473:TRP:HZ3	24:AY:500:ASN:CB	1.93	0.55
32:B7:8:ASN:HA	35:BA:1309:G:H5'	1.89	0.55
35:BA:1429:G:H5'	35:BA:1568:G:O2'	2.05	0.55
35:BA:1773:A:C2	35:BA:1978:A:C2	2.95	0.55
35:BA:2008:C:O2'	35:BA:2009:G:H5'	2.07	0.55
38:BD:211:ARG:HH11	38:BD:211:ARG:HG3	1.71	0.55
51:BT:23:ARG:CZ	51:BT:120:ARG:HD3	2.37	0.55
51:BT:57:PHE:O	51:BT:79:HIS:CE1	2.59	0.55
51:BT:80:SER:OG	51:BT:81:PRO:CD	2.55	0.55
30:B5:28:PRO:HG2	54:BW:35:ILE:CD1	2.35	0.55
6:AF:80:ARG:NH1	6:AF:88:VAL:O	2.39	0.55
53:BV:57:VAL:HG22	53:BV:58:VAL:N	2.22	0.55
2:AB:152:PHE:HD1	2:AB:153:ARG:N	2.04	0.55
2:AB:185:ILE:N	2:AB:185:ILE:CD1	2.69	0.55
2:AB:208:ILE:O	2:AB:209:ARG:C	2.45	0.55
48:BQ:50:ALA:O	48:BQ:52:VAL:N	2.40	0.55
48:BQ:19:GLY:O	48:BQ:98:LYS:HD3	2.07	0.55
57:BZ:127:LYS:HG2	57:BZ:162:GLU:HG3	1.88	0.55
19:AS:20:LEU:CA	19:AS:23:ASN:HB3	2.34	0.55
19:AS:61:TYR:O	19:AS:62:ILE:CB	2.54	0.55
1:AA:482:A:H2'	1:AA:483:C:O4'	2.07	0.55
35:BA:83:G:H22	35:BA:102:G:H2'	1.69	0.55
55:BX:12:VAL:HG12	55:BX:27:THR:CA	2.36	0.55
4:AD:134:ASP:OD1	4:AD:134:ASP:N	2.40	0.55
4:AD:4:TYR:O	4:AD:5:ILE:CB	2.55	0.55
1:AA:1030:C:N4	1:AA:1032:G:H21	2.05	0.55
1:AA:1030:C:N4	1:AA:1032:G:N2	2.54	0.55
9:AI:52:ALA:HB3	9:AI:95:LYS:NZ	2.21	0.55
35:BA:126:A:C6	35:BA:127:A:C2	2.94	0.55
35:BA:116:C:OP1	35:BA:128:C:N4	2.40	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:37:LEU:HD23	25:B0:37:LEU:N	2.20	0.55
56:BY:88:LYS:NZ	56:BY:93:GLY:N	2.54	0.55
35:BA:2646:C:H2'	35:BA:2646:C:O2	2.06	0.55
35:BA:2450:A:O2'	35:BA:2451:A:H5'	2.06	0.55
12:AL:113:ARG:HG3	12:AL:114:LYS:N	2.22	0.55
12:AL:121:GLY:O	12:AL:122:THR:O	2.25	0.55
35:BA:2864:G:OP1	51:BT:119:LYS:HG3	2.06	0.55
1:AA:1055:A:C6	1:AA:1206:G:C5	2.95	0.55
35:BA:2586:C:O5'	35:BA:2586:C:H6	1.90	0.55
24:AY:186:TYR:OH	24:AY:241:PHE:N	2.40	0.55
24:AY:472:ARG:HD3	24:AY:525:GLN:HB3	1.87	0.55
30:B5:4:HIS:HB2	30:B5:5:PRO:HD3	1.89	0.55
35:BA:1018:C:H2'	35:BA:1019:U:O4'	2.07	0.55
35:BA:1754:C:H4'	51:BT:101:PHE:CD1	2.42	0.55
35:BA:578:A:C8	35:BA:2018:G:H5'	2.41	0.55
38:BD:143:HIS:O	38:BD:192:THR:HG23	2.07	0.55
38:BD:242:ARG:HD2	38:BD:242:ARG:H	1.70	0.55
39:BE:12:THR:HG23	39:BE:13:ARG:N	2.21	0.55
39:BE:59:VAL:HG11	39:BE:63:LEU:HG	1.88	0.55
39:BE:62:PRO:C	39:BE:64:LYS:H	2.09	0.55
49:BR:17:ARG:HB2	49:BR:17:ARG:CZ	2.37	0.55
2:AB:189:ASP:OD1	2:AB:189:ASP:C	2.44	0.55
36:BB:75:G:HO2'	57:BZ:85:HIS:CE1	2.25	0.55
1:AA:1200:C:H1'	1:AA:1205:U:O4	2.07	0.55
27:B2:27:GLU:O	27:B2:30:ARG:HB3	2.06	0.55
4:AD:9:CYS:HA	4:AD:12:CYS:SG	2.46	0.55
35:BA:1070:A:H8	35:BA:1070:A:OP1	1.89	0.55
35:BA:1061:U:P	44:BK:1:UNK:H2	2.30	0.55
35:BA:2839:G:O2'	35:BA:2840:C:H5'	2.07	0.55
11:AK:66:LEU:O	11:AK:69:ALA:HB3	2.06	0.55
11:AK:96:ARG:O	11:AK:97:ALA:C	2.45	0.55
37:BC:30:LYS:HZ1	37:BC:30:LYS:HA	1.71	0.55
35:BA:2305:A:C8	41:BG:135:LEU:O	2.60	0.55
35:BA:2309:A:H2'	35:BA:2310:A:C5'	2.36	0.55
35:BA:2282:G:H1	35:BA:2427:C:H42	1.54	0.55
8:AH:82:HIS:HD2	8:AH:138:TRP:NE1	1.99	0.55
50:BS:56:LEU:O	50:BS:57:LYS:C	2.45	0.55
50:BS:97:ARG:O	50:BS:97:ARG:CZ	2.55	0.55
26:B1:48:LYS:HZ2	26:B1:60:PHE:C	2.09	0.55
41:BG:7:LEU:HD22	41:BG:176:LEU:CD2	2.36	0.55
1:AA:1226:C:C6	13:AM:104:ARG:HA	2.41	0.55
35:BA:1451:C:H5'	35:BA:1452:A:H5'	1.88	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AP:38:TYR:OH	16:AP:47:ASP:OD1	2.24	0.55
35:BA:575:A:O2'	35:BA:576:U:C5'	2.54	0.55
35:BA:1607:C:N4	35:BA:1621:U:H2'	2.22	0.55
12:AL:103:GLY:HA3	12:AL:121:GLY:HA2	1.87	0.55
35:BA:1345:C:H4'	35:BA:1396:U:N3	2.22	0.55
1:AA:1241:G:H2'	1:AA:1242:C:H6	1.72	0.55
42:BH:20:ALA:HB1	42:BH:21:PRO:CD	2.37	0.55
32:B7:35:ARG:HG2	32:B7:35:ARG:HH11	1.72	0.55
49:BR:9:LYS:O	49:BR:10:LEU:HD23	2.06	0.55
36:BB:89:G:H2'	36:BB:90:A:C8	2.42	0.55
35:BA:2615:U:H2'	35:BA:2616:C:C6	2.42	0.55
51:BT:53:ARG:NH1	51:BT:53:ARG:CB	2.70	0.55
52:BU:27:LEU:HA	52:BU:30:LYS:CB	2.36	0.55
1:AA:1418:A:H2	1:AA:1483:A:C2	2.25	0.55
1:AA:741:G:O2'	1:AA:742:G:H5'	2.07	0.55
6:AF:72:VAL:O	6:AF:75:LEU:N	2.38	0.55
18:AR:58:LEU:CD1	18:AR:66:LEU:HD22	2.27	0.55
34:B9:36:GLN:OE1	35:BA:1124:C:H1'	2.06	0.55
35:BA:2631:G:H1	39:BE:61:ARG:HH12	1.54	0.55
35:BA:1919:A:C2'	35:BA:1920:C:C5'	2.82	0.55
35:BA:2266:A:H8	35:BA:2266:A:OP1	1.90	0.55
22:AV:51:C:H6	22:AV:51:C:O5'	1.90	0.55
12:AL:35:GLY:CA	12:AL:59:ARG:O	2.54	0.55
1:AA:1067:A:O2'	1:AA:1068:G:C8	2.59	0.55
40:BF:7:TYR:HD2	40:BF:16:GLY:H	1.53	0.55
44:BK:55:UNK:CB	44:BK:69:UNK:HA	2.37	0.55
4:AD:96:LEU:HA	4:AD:99:SER:CB	2.37	0.55
37:BC:193:ILE:HG22	37:BC:193:ILE:O	2.07	0.55
35:BA:2314:C:H5''	41:BG:38:VAL:HG21	1.89	0.55
1:AA:105:G:H2'	1:AA:106:C:H6	1.65	0.55
35:BA:1887:C:H2'	35:BA:1888:G:O4'	2.06	0.55
46:BO:43:VAL:O	46:BO:54:GLU:HA	2.07	0.55
1:AA:236:G:H5''	17:AQ:42:TYR:OH	2.07	0.55
1:AA:1221:G:OP1	1:AA:1321:C:N3	2.39	0.55
25:B0:51:VAL:HG23	25:B0:80:HIS:HA	1.87	0.55
35:BA:453:C:O4'	35:BA:457:A:C2	2.60	0.55
1:AA:1423:G:OP1	46:BO:49:ARG:NH2	2.40	0.55
13:AM:23:TYR:HE1	13:AM:70:LEU:HD22	1.70	0.55
13:AM:70:LEU:HA	13:AM:73:GLU:HB3	1.87	0.55
10:AJ:32:ALA:HB3	10:AJ:76:ASN:HB2	1.89	0.55
35:BA:1389:G:C2	35:BA:1399:C:O2	2.60	0.55
1:AA:928:G:H2'	1:AA:929:G:C8	2.41	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B8:30:ARG:HA	33:B8:30:ARG:NE	2.22	0.55
1:AA:131:C:H2'	1:AA:131:C:O2	2.05	0.55
46:BO:105:GLU:HG3	46:BO:108:GLU:OE2	2.07	0.55
35:BA:1357:U:H2'	35:BA:1358:G:O4'	2.07	0.55
24:AY:150:ASP:OD1	24:AY:151:PRO:HD2	2.07	0.55
24:AY:176:GLY:O	24:AY:179:PHE:HB2	2.07	0.55
24:AY:138:LEU:CD1	24:AY:268:MET:CE	2.82	0.55
24:AY:327:LYS:NZ	24:AY:344:ASP:CB	2.69	0.55
24:AY:99:THR:HA	24:AY:102:THR:CB	2.36	0.55
37:BC:131:LEU:HD22	37:BC:136:LEU:CD1	2.37	0.55
33:B8:29:LYS:HA	33:B8:32:LEU:HB2	1.88	0.55
35:BA:1160:G:O2'	35:BA:1161:C:H5'	2.07	0.55
35:BA:818:G:N2	35:BA:1188:U:OP2	2.36	0.55
35:BA:2222:G:H5'	38:BD:149:PRO:HG3	1.89	0.55
35:BA:807:U:O2'	35:BA:2060:A:N1	2.40	0.55
38:BD:158:ALA:O	38:BD:196:VAL:CG1	2.47	0.55
39:BE:154:LYS:O	39:BE:155:LYS:C	2.44	0.55
39:BE:189:PRO:O	39:BE:190:GLY:O	2.25	0.55
47:BP:100:LEU:CD2	47:BP:100:LEU:H	2.20	0.55
52:BU:12:ARG:HD2	52:BU:13:LYS:NZ	2.22	0.55
53:BV:69:LYS:HA	53:BV:87:HIS:O	2.07	0.55
8:AH:11:THR:C	8:AH:13:ILE:H	2.10	0.55
53:BV:28:GLU:O	53:BV:61:VAL:CG2	2.55	0.55
1:AA:909:A:OP1	12:AL:21:LYS:NZ	2.35	0.55
57:BZ:44:PHE:C	57:BZ:44:PHE:HD1	2.10	0.55
1:AA:1111:A:H2'	1:AA:1112:C:C6	2.41	0.55
3:AC:154:SER:HA	3:AC:165:THR:HA	1.88	0.55
35:BA:485:C:H2'	35:BA:486:C:C5	2.42	0.55
27:B2:25:VAL:C	27:B2:27:GLU:H	2.10	0.55
40:BF:123:LEU:HD11	40:BF:125:LEU:HD22	1.89	0.55
19:AS:51:VAL:HG23	19:AS:60:VAL:HG11	1.89	0.55
41:BG:137:GLU:O	41:BG:138:GLN:HB3	2.07	0.55
17:AQ:76:LEU:HD12	17:AQ:78:GLU:H	1.72	0.55
35:BA:2391:G:H1'	35:BA:2429:G:H21	1.71	0.55
42:BH:43:VAL:CG1	42:BH:52:VAL:CG2	2.83	0.55
5:AE:82:VAL:HG11	5:AE:134:ALA:O	2.07	0.55
50:BS:89:ARG:O	50:BS:92:TYR:CB	2.54	0.55
41:BG:19:LEU:O	41:BG:22:ARG:N	2.40	0.55
35:BA:1528(A):A:H62	35:BA:1541:G:H21	1.49	0.55
51:BT:107:ASP:H	51:BT:110:ILE:HG13	1.66	0.55
35:BA:459:U:H2'	35:BA:460:A:C8	2.42	0.55
38:BD:70:TRP:CD1	38:BD:150:LYS:HE3	2.42	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BR:58:GLY:HA2	49:BR:80:PHE:HE1	1.71	0.55
33:B8:50:LEU:O	33:B8:51:ALA:CB	2.55	0.55
2:AB:138:LEU:N	2:AB:138:LEU:CD2	2.67	0.55
35:BA:931:G:C2	35:BA:933:A:C5	2.94	0.55
38:BD:3:VAL:HG22	38:BD:200:ASP:OD1	2.07	0.55
35:BA:1625:C:H2'	35:BA:1626:G:C5'	2.37	0.55
35:BA:391:G:C2	35:BA:392:C:C2	2.95	0.55
17:AQ:91:ARG:CB	17:AQ:91:ARG:HH11	2.20	0.55
1:AA:1503:A:H2'	23:AX:12:A:H62	1.72	0.55
35:BA:131:G:H2'	35:BA:132:G:C8	2.42	0.55
35:BA:734:A:H2'	35:BA:735:A:O4'	2.06	0.55
1:AA:452:A:N7	1:AA:480:U:O4	2.39	0.55
1:AA:534:U:H5'	1:AA:534:U:H6	1.71	0.55
37:BC:134:ARG:HD2	37:BC:134:ARG:H	1.72	0.55
1:AA:992:U:O2	1:AA:992:U:H2'	2.07	0.55
24:AY:194:GLN:HB3	24:AY:202:GLN:HG2	1.89	0.55
24:AY:12:LYS:O	24:AY:82:CYS:CB	2.55	0.55
30:B5:47:PRO:HG2	30:B5:48:GLU:OE1	2.07	0.55
35:BA:974:G:P	35:BA:1186:G:H21	2.29	0.55
35:BA:1827:C:H2'	35:BA:1828:G:H8	1.72	0.55
35:BA:257:A:H2'	35:BA:258:G:H5'	1.89	0.55
35:BA:2684:U:H1'	46:BO:70:LYS:CD	2.33	0.55
35:BA:762:U:H5'	35:BA:763:G:N3	2.22	0.55
35:BA:1815:A:P	38:BD:54:ARG:HH22	2.30	0.55
39:BE:116:VAL:HG22	39:BE:122:PHE:CB	2.36	0.55
39:BE:38:THR:C	39:BE:40:GLU:H	2.09	0.55
49:BR:103:ARG:O	49:BR:111:LEU:HD13	2.07	0.55
45:BN:6:PRO:HG3	52:BU:64:ARG:HH22	1.72	0.55
52:BU:93:LYS:H	52:BU:93:LYS:HD2	1.72	0.55
46:BO:92:GLU:CG	46:BO:93:PRO:HD2	2.31	0.55
1:AA:758:G:H4'	1:AA:880:C:H4'	1.89	0.55
8:AH:27:PRO:HG3	8:AH:58:TYR:CE1	2.42	0.55
2:AB:36:ARG:HB3	2:AB:41:ILE:HD11	1.89	0.55
2:AB:57:PHE:O	2:AB:61:LEU:N	2.32	0.55
1:AA:1303:C:C2'	1:AA:1304:G:H5'	2.37	0.55
13:AM:78:ILE:O	13:AM:81:LEU:HB2	2.07	0.55
12:AL:85:ILE:HG22	12:AL:86:ARG:N	2.22	0.55
3:AC:39:ILE:O	3:AC:43:LEU:HG	2.06	0.55
19:AS:62:ILE:HG23	19:AS:62:ILE:O	2.07	0.55
35:BA:476:G:N2	35:BA:479:A:C8	2.74	0.55
56:BY:28:LYS:HB3	56:BY:37:VAL:HB	1.88	0.55
4:AD:12:CYS:SG	4:AD:19:LEU:C	2.84	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:4:THR:O	15:AO:7:GLU:N	2.40	0.55
29:B4:11:PRO:HB3	29:B4:25:TYR:CE2	2.42	0.55
50:BS:27:SER:O	50:BS:28:VAL:HG22	2.07	0.55
5:AE:35:GLY:HA2	5:AE:40:ARG:O	2.07	0.55
47:BP:62:LEU:N	47:BP:62:LEU:CD2	2.70	0.55
35:BA:2428:G:H5''	35:BA:2429:G:O5'	2.07	0.55
35:BA:1467:C:C2	35:BA:1468:C:C5	2.95	0.55
41:BG:171:ALA:O	41:BG:174:GLU:HB3	2.06	0.55
35:BA:2147:G:H2'	35:BA:2148:G:C4'	2.37	0.55
20:AT:77:ALA:O	20:AT:81:LYS:HG3	2.07	0.55
50:BS:24:LEU:HB3	50:BS:85:VAL:HG12	1.88	0.55
16:AP:74:LEU:C	16:AP:79:VAL:HG23	2.28	0.55
35:BA:2699:C:O2'	35:BA:2700:C:H5'	2.07	0.55
28:B3:31:LEU:HD22	28:B3:32:GLN:HG2	1.88	0.55
49:BR:76:VAL:CG2	49:BR:80:PHE:CE2	2.86	0.55
1:AA:1423:G:H5''	46:BO:49:ARG:CZ	2.36	0.55
1:AA:790:A:N6	1:AA:1498:U:OP1	2.39	0.55
1:AA:896:C:C2'	1:AA:897:C:H5'	2.36	0.55
40:BF:130:ALA:C	40:BF:132:VAL:H	2.10	0.55
1:AA:538:G:H5''	12:AL:114:LYS:CB	2.36	0.55
35:BA:1683:C:C4	35:BA:1684:C:N4	2.75	0.55
1:AA:443:C:H6	1:AA:443:C:O5'	1.89	0.55
24:AY:142:ASN:O	24:AY:143:LYS:HB2	2.07	0.54
24:AY:424:ALA:O	24:AY:445:GLN:HB2	2.07	0.54
24:AY:512:ARG:HA	24:AY:515:GLN:CG	2.36	0.54
24:AY:74:VAL:CG1	24:AY:317:PHE:CE2	2.91	0.54
32:B7:11:LYS:CE	35:BA:686:G:N2	2.71	0.54
35:BA:1260:G:O2'	35:BA:1261:C:H5'	2.07	0.54
35:BA:1287:A:O2'	35:BA:1288:U:H5'	2.06	0.54
35:BA:1827:C:H5''	35:BA:1971:A:O3'	2.07	0.54
35:BA:2718:G:H5'	51:BT:100:TYR:CE2	2.40	0.54
35:BA:385:C:O2'	35:BA:388:G:N2	2.39	0.54
35:BA:570:G:O6	35:BA:2499:C:OP1	2.26	0.54
35:BA:970:C:H2'	35:BA:971:C:C6	2.41	0.54
39:BE:119:ARG:HG2	39:BE:120:TRP:N	2.22	0.54
45:BN:95:PRO:O	45:BN:98:VAL:HG23	2.07	0.54
47:BP:39:LYS:O	47:BP:41:ARG:CG	2.51	0.54
52:BU:80:ILE:HG22	52:BU:80:ILE:O	2.05	0.54
53:BV:68:LYS:HD2	53:BV:69:LYS:H	1.72	0.54
1:AA:1078:U:H5	1:AA:1079:G:C5	2.25	0.54
1:AA:881:G:H2'	1:AA:882:C:O4'	2.07	0.54
6:AF:48:LEU:HD12	6:AF:55:ASP:O	2.06	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:33:THR:CG2	15:AO:34:LEU:H	2.20	0.54
35:BA:2393:A:C2'	35:BA:2394:C:H6	2.13	0.54
48:BQ:54:MET:O	48:BQ:55:VAL:C	2.45	0.54
57:BZ:54:HIS:HB3	57:BZ:101:PRO:HD3	1.89	0.54
14:AN:19:ARG:O	14:AN:20:ALA:O	2.25	0.54
35:BA:481:G:OP2	56:BY:47:LYS:CD	2.54	0.54
24:AY:487:ARG:O	24:AY:489:ASN:N	2.40	0.54
35:BA:2882:A:OP1	49:BR:96:ARG:NE	2.35	0.54
41:BG:64:THR:CG2	41:BG:65:GLY:N	2.70	0.54
35:BA:2312:U:OP1	41:BG:74:LYS:N	2.41	0.54
41:BG:83:ARG:CZ	41:BG:84:LYS:NZ	2.70	0.54
35:BA:271(I):G:H2'	35:BA:271(J):C:C6	2.41	0.54
41:BG:11:TYR:HD1	41:BG:15:VAL:CB	2.20	0.54
35:BA:2184:G:H2'	35:BA:2185:C:O4'	2.06	0.54
1:AA:1037:C:O5'	1:AA:1037:C:H6	1.90	0.54
1:AA:186:C:H2'	1:AA:187:C:H6	1.72	0.54
54:BW:5:ALA:N	54:BW:105:VAL:O	2.39	0.54
13:AM:107:ALA:O	13:AM:108:ARG:HD2	2.07	0.54
1:AA:1260:C:OP1	1:AA:1284:C:H4'	2.07	0.54
31:B6:15:GLU:CD	31:B6:18:ARG:CZ	2.75	0.54
46:BO:107:ARG:HH11	51:BT:36:GLU:HG3	1.72	0.54
35:BA:2126:A:N6	35:BA:2163:C:C4'	2.70	0.54
1:AA:441:A:H3'	1:AA:442:C:H6	1.70	0.54
1:AA:943:U:C2'	1:AA:944:G:H5'	2.37	0.54
19:AS:22:LEU:CD1	19:AS:27:GLU:HB2	2.37	0.54
35:BA:151:C:H2'	35:BA:152:G:C8	2.42	0.54
35:BA:1411:C:H2'	35:BA:1412:A:C8	2.42	0.54
35:BA:1631(A):A:O2'	35:BA:1632:A:H5'	2.06	0.54
35:BA:1632:A:C6	35:BA:1633:G:C6	2.95	0.54
48:BQ:79:LEU:O	48:BQ:80:GLU:HB2	2.06	0.54
35:BA:2661:G:O2'	35:BA:2662:A:H5'	2.08	0.54
35:BA:1260:G:H2'	35:BA:1261:C:H6	1.73	0.54
35:BA:2454:G:H2'	35:BA:2455:G:H8	1.72	0.54
38:BD:209:ALA:O	38:BD:210:GLY:C	2.44	0.54
38:BD:267:SER:HA	38:BD:270:ILE:CG1	2.36	0.54
47:BP:50:ARG:HG2	47:BP:50:ARG:NH1	2.21	0.54
35:BA:2012:G:H4'	54:BW:96:ILE:HD11	1.90	0.54
35:BA:2761:G:H8	35:BA:2761:G:H5'	1.72	0.54
18:AR:44:LEU:HA	18:AR:49:LYS:O	2.08	0.54
2:AB:16:HIS:HD2	2:AB:209:ARG:C	2.09	0.54
2:AB:69:LEU:HD12	2:AB:71:VAL:HG22	1.89	0.54
25:B0:41:ARG:O	25:B0:42:GLY:O	2.24	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BZ:98:MET:O	57:BZ:126:VAL:HG22	2.07	0.54
35:BA:2591:C:OP1	38:BD:239:ARG:HG3	2.07	0.54
21:AU:6:ARG:HG2	21:AU:15:ARG:NH1	2.21	0.54
10:AJ:64:GLU:OE1	14:AN:59:ALA:HA	2.07	0.54
9:AI:45:ALA:C	9:AI:47:LEU:H	2.10	0.54
35:BA:1503:U:O2'	35:BA:1504:C:H5'	2.08	0.54
57:BZ:118:GLN:O	57:BZ:172:ALA:HB1	2.07	0.54
7:AG:107:ALA:HB1	7:AG:123:GLU:OE1	2.07	0.54
35:BA:1462:C:C5'	35:BA:2703:C:O4'	2.55	0.54
1:AA:621:A:C5	1:AA:622:A:N7	2.75	0.54
16:AP:27:LYS:HG2	16:AP:30:GLY:HA3	1.89	0.54
35:BA:2289:G:N2	35:BA:2344:U:C2	2.75	0.54
5:AE:89:ILE:CG1	5:AE:90:VAL:N	2.70	0.54
36:BB:67:G:O2'	36:BB:68:C:O5'	2.24	0.54
50:BS:63:THR:O	50:BS:65:VAL:N	2.40	0.54
2:AB:118:LEU:HD11	2:AB:141:GLU:OE2	2.07	0.54
35:BA:2108:C:O2	35:BA:2108:C:C2'	2.55	0.54
48:BQ:10:ARG:CB	48:BQ:10:ARG:NH1	2.66	0.54
1:AA:1124:G:O5'	10:AJ:35:SER:HB2	2.06	0.54
9:AI:57:GLY:O	9:AI:58:ARG:HB3	2.08	0.54
16:AP:58:TYR:HE2	16:AP:59:TRP:CZ3	2.23	0.54
56:BY:90:LEU:O	56:BY:91:GLU:HG2	2.08	0.54
1:AA:436:C:H2'	1:AA:437:U:H6	1.70	0.54
9:AI:70:LYS:HA	9:AI:73:GLN:NE2	2.22	0.54
1:AA:272:C:C4	1:AA:273:A:N7	2.75	0.54
35:BA:2791:C:C5	35:BA:2793:G:O6	2.60	0.54
1:AA:1040:U:O2'	1:AA:1041:A:H5'	2.07	0.54
35:BA:1563:G:C2'	35:BA:1564:C:H5'	2.37	0.54
28:B3:19:GLN:O	28:B3:22:ALA:HB3	2.08	0.54
35:BA:1334:G:O2'	35:BA:1335:U:H5'	2.07	0.54
1:AA:519:C:H2'	1:AA:520:A:O4'	2.07	0.54
35:BA:2228:G:H2'	35:BA:2229:C:C6	2.43	0.54
18:AR:83:GLU:C	18:AR:84:LYS:NZ	2.61	0.54
35:BA:712:G:O2'	35:BA:713:G:H5'	2.06	0.54
8:AH:126:LYS:HG2	8:AH:127:LEU:N	2.22	0.54
10:AJ:78:ASN:ND2	10:AJ:80:LYS:HB3	2.22	0.54
24:AY:314:ARG:NH1	24:AY:418:GLN:OE1	2.40	0.54
33:B8:17:THR:HG1	33:B8:21:LYS:HB2	1.71	0.54
35:BA:768:G:O2'	35:BA:1379:A:N6	2.40	0.54
35:BA:1791:A:N1	35:BA:1829:A:C4'	2.71	0.54
35:BA:2348:U:H5	35:BA:2382:G:N2	2.05	0.54
45:BN:118:LYS:C	45:BN:120:LEU:H	2.11	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BN:57:ALA:H	45:BN:124:ALA:HA	1.72	0.54
49:BR:14:SER:HA	49:BR:17:ARG:CZ	2.34	0.54
35:BA:1667:G:C2	35:BA:1991:U:C5	2.95	0.54
6:AF:33:TYR:CG	6:AF:75:LEU:HD13	2.42	0.54
2:AB:16:HIS:HD2	2:AB:210:SER:N	2.05	0.54
35:BA:2395:C:C2'	35:BA:2396:G:O5'	2.55	0.54
25:B0:27:GLU:CA	25:B0:67:VAL:O	2.56	0.54
48:BQ:12:GLN:OE1	48:BQ:73:PRO:HD3	2.07	0.54
54:BW:14:PRO:CG	54:BW:78:GLU:HG3	2.18	0.54
1:AA:1155:G:O2'	1:AA:1156:G:H5'	2.07	0.54
3:AC:157:ILE:HG21	3:AC:164:ARG:NH2	2.21	0.54
3:AC:58:GLU:N	3:AC:65:ALA:CB	2.67	0.54
19:AS:42:PRO:HG3	19:AS:67:VAL:HG11	1.90	0.54
35:BA:484:C:O2'	35:BA:485:C:H5'	2.08	0.54
35:BA:77:C:H2'	35:BA:78:A:C8	2.42	0.54
40:BF:3:GLU:C	40:BF:24:LEU:HG	2.28	0.54
35:BA:1061:U:H5'	35:BA:1070:A:H1'	1.89	0.54
4:AD:6:GLY:N	4:AD:115:ARG:HH22	2.05	0.54
55:BX:35:THR:C	55:BX:37:THR:H	2.11	0.54
11:AK:42:TRP:O	11:AK:71:LYS:NZ	2.38	0.54
2:AB:40:HIS:HB3	2:AB:190:THR:HG21	1.90	0.54
1:AA:323:U:H4'	20:AT:22:ARG:HD3	1.87	0.54
54:BW:21:VAL:O	54:BW:23:LEU:N	2.40	0.54
17:AQ:3:LYS:O	17:AQ:60:ILE:CG1	2.45	0.54
17:AQ:3:LYS:HB3	17:AQ:61:GLU:HB3	1.89	0.54
36:BB:101:G:C4	36:BB:102:A:C8	2.96	0.54
50:BS:56:LEU:O	50:BS:56:LEU:CD2	2.53	0.54
50:BS:92:TYR:O	50:BS:93:LYS:CB	2.54	0.54
38:BD:138:VAL:HG23	38:BD:168:ARG:NE	2.23	0.54
35:BA:43:A:O2'	35:BA:44:G:H5'	2.07	0.54
35:BA:2142:C:H2'	35:BA:2143:C:C6	2.43	0.54
1:AA:1004:A:C3'	1:AA:1005:A:H5'	2.37	0.54
1:AA:959:A:H2'	1:AA:960:U:C4'	2.37	0.54
49:BR:67:LEU:HD11	49:BR:71:GLN:O	2.06	0.54
13:AM:51:ALA:O	13:AM:52:GLU:C	2.46	0.54
47:BP:123:LEU:N	47:BP:123:LEU:CD2	2.70	0.54
19:AS:16:LEU:N	19:AS:16:LEU:CD1	2.71	0.54
1:AA:1396:A:O4'	1:AA:1398:A:H1'	2.07	0.54
17:AQ:46:ASP:OD2	17:AQ:51:TYR:CD2	2.55	0.54
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.42	0.54
12:AL:20:LYS:N	12:AL:20:LYS:HD3	2.21	0.54
35:BA:682:G:H2'	35:BA:683:C:H6	1.71	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:109:PRO:C	3:AC:111:LEU:H	2.10	0.54
15:AO:11:VAL:HG12	15:AO:15:PHE:CE1	2.42	0.54
1:AA:141:A:H4'	1:AA:182:U:H1'	1.89	0.54
5:AE:10:MET:O	5:AE:10:MET:HG2	2.07	0.54
43:BJ:16:UNK:O	43:BJ:20:UNK:CB	2.56	0.54
35:BA:2139:C:H2'	35:BA:2140:C:C6	2.41	0.54
24:AY:114:ASP:O	24:AY:118:GLY:CA	2.53	0.54
24:AY:440:ALA:HA	24:AY:445:GLN:NE2	2.22	0.54
24:AY:508:MET:CA	24:AY:511:LEU:HB3	2.38	0.54
24:AY:86:LEU:HD12	24:AY:88:ASP:H	1.71	0.54
35:BA:2007:C:O4'	35:BA:2824:C:H4'	2.06	0.54
35:BA:2460:U:H2'	35:BA:2461:C:H5'	1.89	0.54
35:BA:2847:U:C5	35:BA:2848:G:C5	2.95	0.54
39:BE:63:LEU:O	39:BE:64:LYS:C	2.45	0.54
40:BF:78:ILE:C	40:BF:80:ALA:H	2.10	0.54
35:BA:2718:G:P	51:BT:100:TYR:HD2	2.30	0.54
53:BV:81:TYR:HE1	53:BV:83:ARG:HH21	1.54	0.54
53:BV:91:TYR:CD1	53:BV:92:THR:N	2.74	0.54
1:AA:740:U:HO2'	1:AA:741:G:C5'	2.21	0.54
1:AA:825:G:O2'	1:AA:826:C:H5'	2.07	0.54
6:AF:25:ILE:CG2	6:AF:26:ILE:N	2.70	0.54
18:AR:55:ARG:HG3	18:AR:55:ARG:NH1	2.22	0.54
1:AA:1072:G:C6	1:AA:1073:U:C4	2.95	0.54
35:BA:910:A:H5'	35:BA:911:A:OP2	2.08	0.54
48:BQ:101:ARG:NH1	48:BQ:102:VAL:O	2.40	0.54
48:BQ:58:PHE:CZ	48:BQ:64:ILE:HD11	2.43	0.54
10:AJ:43:ARG:O	10:AJ:67:THR:CG2	2.55	0.54
1:AA:1049:U:H2'	14:AN:2:ALA:HA	1.88	0.54
56:BY:13:VAL:O	56:BY:24:VAL:HG13	2.07	0.54
35:BA:396:G:C8	35:BA:396:G:O5'	2.60	0.54
35:BA:1882:C:C3'	35:BA:1883:G:H5'	2.38	0.54
50:BS:25:ARG:HG2	50:BS:25:ARG:HH11	1.73	0.54
35:BA:2146:C:H4'	35:BA:2147:G:N7	2.21	0.54
20:AT:91:LEU:O	20:AT:93:GLU:N	2.40	0.54
1:AA:1254:C:H6	1:AA:1254:C:O5'	1.90	0.54
1:AA:1314:C:H2'	1:AA:1315:U:O4'	2.08	0.54
47:BP:146:VAL:O	47:BP:147:LEU:C	2.45	0.54
1:AA:1238:A:H2	1:AA:1241:G:N3	2.04	0.54
35:BA:1107:G:OP1	43:BJ:59:UNK:N	2.39	0.54
35:BA:1479:G:H2'	35:BA:1480:G:C8	2.42	0.54
35:BA:1705:G:O2'	35:BA:1706:U:H5'	2.07	0.54
1:AA:289:G:N2	1:AA:312:C:C2	2.75	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2441:C:OP1	35:BA:2441:C:H4'	2.08	0.54
24:AY:12:LYS:O	24:AY:82:CYS:HB3	2.07	0.54
24:AY:261:GLY:C	24:AY:263:PHE:H	2.11	0.54
24:AY:440:ALA:CB	24:AY:446:PHE:CE1	2.90	0.54
1:AA:951:G:O2'	1:AA:952:U:C5'	2.56	0.54
32:B7:11:LYS:O	32:B7:13:ALA:N	2.40	0.54
35:BA:1903:G:N2	35:BA:1927:A:C2	2.73	0.54
35:BA:637:A:N1	35:BA:652:C:H5'	2.23	0.54
38:BD:182:LEU:O	38:BD:271:ILE:HG13	2.08	0.54
38:BD:66:ASP:OD1	38:BD:103:ARG:NH1	2.40	0.54
38:BD:92:ILE:HB	38:BD:105:ILE:O	2.08	0.54
52:BU:6:THR:CB	52:BU:10:ARG:NH2	2.71	0.54
53:BV:77:ALA:O	53:BV:79:VAL:HG23	2.07	0.54
35:BA:1947:C:C2'	35:BA:1948:G:C5'	2.58	0.54
46:BO:2:ILE:HB	46:BO:33:ALA:CB	2.22	0.54
1:AA:18:C:H1'	1:AA:1079:G:N2	2.23	0.54
1:AA:920:U:H1'	1:AA:1080:A:N3	2.22	0.54
1:AA:663:A:O2'	1:AA:664:G:H5'	2.07	0.54
1:AA:1100:C:O2	1:AA:1102:A:H5''	2.08	0.54
2:AB:219:VAL:HA	2:AB:222:ILE:HG12	1.89	0.54
2:AB:50:GLU:O	2:AB:54:THR:N	2.39	0.54
35:BA:2394:C:OP1	47:BP:63:PRO:CD	2.56	0.54
48:BQ:109:VAL:O	48:BQ:110:THR:C	2.44	0.54
35:BA:1851:U:O2'	35:BA:1852:C:H5'	2.07	0.54
1:AA:1057:G:H2'	1:AA:1058:G:H5'	1.89	0.54
1:AA:1106:G:H2'	1:AA:1107:C:C6	2.42	0.54
1:AA:981:U:O5'	1:AA:981:U:C6	2.60	0.54
35:BA:325:G:O2'	35:BA:326:G:H5'	2.07	0.54
11:AK:33:THR:HB	11:AK:38:ASN:C	2.28	0.54
11:AK:21:ILE:HD13	11:AK:94:ALA:HB1	1.89	0.54
37:BC:58:VAL:O	37:BC:59:ARG:HB2	2.08	0.54
51:BT:124:ASP:HB3	51:BT:125:ARG:HH11	1.61	0.54
35:BA:1720:U:C2'	35:BA:1721:G:C5'	2.77	0.54
35:BA:2870:C:H2'	35:BA:2871:C:C5'	2.38	0.54
1:AA:109:A:O2'	1:AA:110:C:OP1	2.19	0.54
1:AA:1266:G:N2	1:AA:1268:A:OP2	2.40	0.54
50:BS:33:LYS:O	50:BS:34:HIS:HD2	1.91	0.54
35:BA:1930:G:O2'	35:BA:1968:G:N1	2.32	0.54
35:BA:1225:G:H2'	35:BA:1226:A:C8	2.42	0.54
35:BA:2208:A:H1'	35:BA:2219:G:C6	2.43	0.54
16:AP:67:THR:H	16:AP:70:ALA:CB	2.21	0.54
38:BD:70:TRP:NE1	38:BD:150:LYS:CE	2.70	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:37:LEU:HG	25:B0:59:LEU:C	2.27	0.54
7:AG:75:VAL:CG2	7:AG:144:MET:HB3	2.37	0.54
7:AG:65:ALA:HB1	7:AG:124:LEU:HD23	1.90	0.54
47:BP:122:PRO:CB	47:BP:141:ALA:HB3	2.35	0.54
5:AE:145:LYS:HD2	8:AH:107:LEU:CD2	2.37	0.54
35:BA:204:A:C8	35:BA:204:A:OP1	2.61	0.54
35:BA:981:A:H5''	35:BA:982:C:OP1	2.08	0.54
1:AA:771:G:H2'	1:AA:772:U:C6	2.43	0.54
20:AT:104:LEU:C	20:AT:104:LEU:HD23	2.28	0.54
35:BA:1714:G:H2'	35:BA:1717:G:O4'	2.07	0.54
1:AA:119:A:H4'	1:AA:120:A:O5'	2.07	0.54
24:AY:173:ILE:CD1	24:AY:190:THR:HG23	2.37	0.54
1:AA:949:A:C6	1:AA:950:U:C4	2.95	0.54
33:B8:8:LYS:HD3	33:B8:11:LYS:CD	2.34	0.54
35:BA:1022:G:C5	35:BA:1140:C:C4	2.95	0.54
35:BA:2011:U:H2'	35:BA:2012:G:H5'	1.89	0.54
35:BA:2687:U:C4	35:BA:2688:U:C5	2.95	0.54
35:BA:27:G:H22	35:BA:512:G:H2'	1.71	0.54
35:BA:13:A:C2	35:BA:526:A:C8	2.96	0.54
39:BE:33:VAL:HG13	39:BE:69:LYS:HD2	1.89	0.54
35:BA:1665:A:C3'	35:BA:1666:G:H5''	2.36	0.54
1:AA:673:G:H4'	6:AF:87:ARG:HH21	1.73	0.54
15:AO:12:ILE:O	15:AO:16:ALA:N	2.40	0.54
15:AO:12:ILE:HG23	15:AO:27:VAL:HG13	1.87	0.54
47:BP:58:THR:C	47:BP:61:ARG:HE	2.09	0.54
25:B0:27:GLU:OE1	35:BA:856:C:H1'	2.07	0.54
35:BA:958:U:H5''	48:BQ:14:ARG:HH11	1.73	0.54
57:BZ:162:GLU:C	57:BZ:163:LEU:HD23	2.27	0.54
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.08	0.54
1:AA:1215:G:O2'	1:AA:1216:G:H5'	2.07	0.54
10:AJ:12:ASP:C	10:AJ:14:LYS:H	2.11	0.54
10:AJ:7:LYS:HA	10:AJ:70:ARG:O	2.07	0.54
56:BY:37:VAL:O	56:BY:38:ILE:HD13	2.08	0.54
56:BY:46:LYS:HG2	56:BY:47:LYS:N	2.22	0.54
56:BY:45:VAL:HG11	56:BY:60:PHE:HD2	1.71	0.54
56:BY:46:LYS:CA	56:BY:62:GLU:HG2	2.37	0.54
35:BA:94(A):G:H2'	35:BA:95:G:C4'	2.38	0.54
4:AD:18:LYS:HG3	4:AD:33:MET:CB	2.38	0.54
4:AD:8:VAL:O	4:AD:10:ARG:N	2.40	0.54
40:BF:154:VAL:HG22	40:BF:191:ARG:CB	2.32	0.54
11:AK:37:GLY:C	11:AK:38:ASN:HD22	2.09	0.54
37:BC:70:LYS:O	37:BC:71:GLN:O	2.26	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:49:ILE:O	7:AG:52:GLU:N	2.37	0.54
40:BF:32:LEU:C	40:BF:32:LEU:HD23	2.28	0.54
54:BW:24:ILE:O	54:BW:71:VAL:HG21	2.08	0.54
24:AY:21:HIS:HD2	24:AY:122:ARG:HB2	1.73	0.54
35:BA:1499:C:O2'	35:BA:1500:G:C5'	2.55	0.54
35:BA:2124:G:H3'	35:BA:2125:G:H8	1.73	0.54
35:BA:1638:C:H5''	35:BA:2710:C:O2'	2.08	0.54
20:AT:90:GLN:O	20:AT:91:LEU:HD23	2.06	0.54
1:AA:66:G:H4'	1:AA:173:U:C5	2.43	0.54
1:AA:1372:U:OP1	9:AI:71:SER:HB3	2.07	0.54
19:AS:15:LEU:HD13	19:AS:19:VAL:CG2	2.38	0.54
1:AA:600:C:OP2	8:AH:97:VAL:HG12	2.07	0.54
35:BA:2563:U:H1'	35:BA:2566:A:C6	2.43	0.54
1:AA:413:G:H21	1:AA:428:G:H1'	1.72	0.54
35:BA:491:G:N2	35:BA:492:A:H1'	2.23	0.54
35:BA:2075:U:H2'	35:BA:2238:G:N2	2.23	0.54
1:AA:264:U:O2'	17:AQ:64:PRO:HB2	2.08	0.54
35:BA:1478:G:H2'	35:BA:1479:G:C8	2.42	0.54
35:BA:203:C:C3'	35:BA:204:A:H5''	2.38	0.54
1:AA:38:G:H5'	1:AA:547:A:N6	2.23	0.54
47:BP:139:LYS:HG2	47:BP:139:LYS:O	2.08	0.54
1:AA:493:G:H8	1:AA:493:G:O5'	1.89	0.54
24:AY:16:PHE:CA	24:AY:106:VAL:HG23	2.34	0.54
24:AY:16:PHE:HA	24:AY:106:VAL:HG21	1.85	0.54
24:AY:227:LEU:HA	24:AY:230:GLU:HB2	1.88	0.54
24:AY:444:LEU:O	24:AY:446:PHE:N	2.41	0.54
35:BA:1839:G:N9	35:BA:1927:A:H1'	2.21	0.54
35:BA:2010:G:H4'	54:BW:42:ARG:HB2	1.88	0.54
35:BA:2637:U:C2'	35:BA:2638:G:H5'	2.37	0.54
35:BA:673:C:O2'	35:BA:674:G:H5'	2.08	0.54
38:BD:80:ALA:CB	38:BD:94:LEU:HD12	2.37	0.54
39:BE:82:ARG:HG3	39:BE:83:ASP:N	2.19	0.54
52:BU:107:ALA:O	52:BU:111:GLU:HG2	2.08	0.54
35:BA:1948:G:C2'	35:BA:1949:G:H5'	2.36	0.54
46:BO:6:THR:CG2	46:BO:7:TYR:N	2.70	0.54
15:AO:65:ARG:HH11	15:AO:65:ARG:HG2	1.71	0.54
2:AB:57:PHE:O	2:AB:60:ASP:N	2.39	0.54
2:AB:87:ARG:NH1	2:AB:219:VAL:HB	2.22	0.54
3:AC:95:THR:HG22	3:AC:97:LYS:HB2	1.88	0.54
35:BA:324:A:C2	35:BA:325:G:H1'	2.42	0.54
56:BY:12:THR:HG22	56:BY:13:VAL:N	2.23	0.54
11:AK:65:ALA:O	11:AK:68:ALA:N	2.40	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:39:GLU:HG3	37:BC:217:THR:OG1	2.08	0.54
41:BG:106:LEU:HD12	41:BG:106:LEU:O	2.08	0.54
1:AA:404:U:H5'	4:AD:122:ARG:HE	1.72	0.54
17:AQ:58:GLU:O	17:AQ:59:ILE:HG12	2.07	0.54
1:AA:1501:C:N3	1:AA:1504:G:C6	2.76	0.54
1:AA:1502:A:N1	1:AA:1504:G:C2	2.75	0.54
5:AE:89:ILE:HG22	5:AE:134:ALA:HB1	1.90	0.54
8:AH:109:ILE:HG13	8:AH:110:ALA:N	2.21	0.54
35:BA:182:A:H2'	35:BA:183:C:H6	1.71	0.54
10:AJ:4:ILE:CB	10:AJ:74:ILE:HD11	2.37	0.54
9:AI:53:VAL:C	9:AI:55:ALA:H	2.10	0.54
35:BA:49:A:H5''	35:BA:51:G:O4'	2.08	0.54
28:B3:5:LYS:HE2	28:B3:34:GLU:OE2	2.07	0.54
1:AA:123:C:H5''	1:AA:311:C:C2'	2.37	0.54
35:BA:2650:U:H2'	35:BA:2651:C:C6	2.43	0.54
5:AE:149:GLU:C	5:AE:151:LEU:H	2.11	0.54
8:AH:73:ASP:OD1	8:AH:75:ARG:NE	2.41	0.54
35:BA:359:A:H2'	35:BA:360:G:O4'	2.06	0.54
7:AG:21:VAL:C	7:AG:23:VAL:H	2.11	0.54
1:AA:906:G:O5'	1:AA:906:G:H8	1.90	0.54
24:AY:479:ALA:O	24:AY:482:PHE:HB3	2.07	0.54
57:BZ:105:VAL:HG22	57:BZ:106:GLY:N	2.23	0.54
1:AA:132:C:O2'	1:AA:133:U:H5'	2.07	0.54
24:AY:108:CYS:CA	24:AY:136:PRO:HG2	2.37	0.54
24:AY:223:LEU:HD23	24:AY:226:GLN:OE1	2.08	0.54
24:AY:305:ALA:HA	24:AY:422:GLU:CG	2.38	0.54
24:AY:300:VAL:HG13	24:AY:316:ALA:HB1	1.89	0.54
24:AY:76:GLN:OE1	24:AY:349:MET:HA	2.07	0.54
24:AY:78:PRO:HG3	24:AY:350:ALA:HB2	1.88	0.54
24:AY:16:PHE:CE2	24:AY:86:LEU:HB2	2.43	0.54
35:BA:1310:G:C4'	35:BA:1611:C:H5''	2.37	0.54
35:BA:1772:G:H2'	35:BA:1773:A:H4'	1.89	0.54
35:BA:1934:C:H2'	35:BA:1935:G:H5'	1.90	0.54
35:BA:2688:U:O4	35:BA:2719:G:H3'	2.08	0.54
35:BA:962:G:C2	35:BA:963:U:C1'	2.91	0.54
38:BD:63:ARG:O	38:BD:64:ILE:C	2.45	0.54
39:BE:164:ARG:O	39:BE:165:VAL:CG2	2.55	0.54
39:BE:102:VAL:HB	39:BE:199:ARG:O	2.08	0.54
47:BP:29:LYS:O	47:BP:30:THR:O	2.26	0.54
47:BP:95:VAL:HG23	47:BP:95:VAL:O	2.06	0.54
52:BU:105:VAL:O	52:BU:109:LEU:HG	2.08	0.54
35:BA:2018:G:H21	52:BU:34:LYS:NZ	2.05	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:12:TYR:CE2	53:BV:22:VAL:HG12	2.41	0.54
53:BV:46:VAL:O	53:BV:46:VAL:HG13	2.08	0.54
53:BV:47:VAL:HG12	53:BV:52:VAL:CB	2.30	0.54
1:AA:874:G:O2'	1:AA:875:C:H5'	2.08	0.54
2:AB:14:GLY:HA3	2:AB:16:HIS:HE1	1.72	0.54
2:AB:229:VAL:CG1	2:AB:230:VAL:H	2.21	0.54
35:BA:955:C:H2'	35:BA:956:G:H5'	1.90	0.54
48:BQ:27:VAL:HG12	48:BQ:29:PHE:H	1.72	0.54
57:BZ:35:ARG:O	57:BZ:37:VAL:HG13	2.08	0.54
3:AC:58:GLU:CB	3:AC:65:ALA:HB2	2.37	0.54
35:BA:883:G:N2	35:BA:893:C:N3	2.56	0.54
35:BA:57:C:C2'	35:BA:58:G:H5'	2.38	0.54
40:BF:159:GLY:HA2	40:BF:178:PRO:HD3	1.88	0.54
35:BA:1061:U:O2'	44:BK:9:UNK:CB	2.56	0.54
35:BA:1094:U:H1'	35:BA:1097:U:C5	2.41	0.54
49:BR:21:TYR:HB3	49:BR:47:PHE:CZ	2.43	0.54
37:BC:10:LEU:HD11	37:BC:34:THR:OG1	2.08	0.54
35:BA:2415:G:H4'	47:BP:66:GLY:CA	2.37	0.54
26:B1:62:VAL:HG21	26:B1:66:HIS:O	2.07	0.54
9:AI:4:TYR:CE2	9:AI:88:TYR:HB2	2.42	0.54
49:BR:67:LEU:CD2	49:BR:76:VAL:HB	2.38	0.54
46:BO:64:ARG:HE	46:BO:101:PRO:HG2	1.72	0.54
6:AF:77:ARG:HG2	6:AF:77:ARG:HH11	1.73	0.54
36:BB:116:G:H2'	36:BB:116:G:N3	2.22	0.54
1:AA:1337:G:H5''	1:AA:1338:G:OP2	2.07	0.54
1:AA:928:G:H2'	1:AA:929:G:H8	1.72	0.54
35:BA:1411:C:H2'	35:BA:1412:A:H8	1.73	0.54
35:BA:1600:C:O5'	35:BA:1600:C:C6	2.61	0.54
35:BA:135:G:O2'	35:BA:136:G:H5'	2.08	0.54
41:BG:163:ALA:HB1	41:BG:168:GLU:CB	2.38	0.54
1:AA:723:U:H2'	1:AA:723:U:O2	2.06	0.54
40:BF:62:ARG:HH11	40:BF:62:ARG:HG2	1.72	0.54
35:BA:985:C:H6	35:BA:985:C:O5'	1.91	0.54
24:AY:144:LEU:O	24:AY:179:PHE:CD1	2.60	0.54
24:AY:198:GLY:O	24:AY:262:ASN:ND2	2.37	0.54
24:AY:285:ASP:HB3	24:AY:387:PHE:HB3	1.89	0.54
24:AY:284:THR:O	24:AY:287:ARG:O	2.25	0.54
24:AY:402:ARG:O	24:AY:461:ALA:CB	2.54	0.54
24:AY:74:VAL:CG1	24:AY:317:PHE:HE2	2.21	0.54
24:AY:74:VAL:HA	24:AY:87:LEU:HA	1.89	0.54
35:BA:2626:C:H2'	35:BA:2627:G:C8	2.43	0.54
35:BA:2689:U:C4'	35:BA:2690:C:H5'	2.38	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1799:G:OP1	38:BD:260:ARG:HB2	2.07	0.54
49:BR:17:ARG:HH11	49:BR:17:ARG:HB3	1.72	0.54
51:BT:92:GLY:O	51:BT:94:ALA:N	2.40	0.54
52:BU:17:ILE:N	52:BU:17:ILE:CD1	2.70	0.54
46:BO:86:ILE:HG22	46:BO:94:ARG:CG	2.07	0.54
35:BA:2741:A:C2'	35:BA:2742:C:H5'	2.37	0.54
1:AA:730:G:O6	15:AO:51:HIS:CE1	2.61	0.54
1:AA:756:C:H2'	1:AA:757:U:O4'	2.08	0.54
35:BA:2420:C:H2'	35:BA:2421:G:H8	1.73	0.54
42:BH:129:THR:O	42:BH:131:VAL:HG22	2.08	0.54
35:BA:2385:C:C2	35:BA:2386:C:C5	2.96	0.54
1:AA:1202:G:C2	14:AN:42:ILE:HG22	2.42	0.54
1:AA:1204:A:C2'	1:AA:1205:U:H6	2.16	0.54
1:AA:368:U:C6	24:AY:370:HIS:NE2	2.73	0.54
56:BY:14:LEU:N	56:BY:73:ARG:O	2.41	0.54
35:BA:55:G:H2'	35:BA:56:A:C8	2.42	0.54
9:AI:63:ILE:HD13	9:AI:77:ILE:HD13	1.90	0.54
4:AD:133:VAL:CG1	4:AD:135:LEU:HD22	2.38	0.54
35:BA:2839:G:H4'	49:BR:49:ASP:CB	2.37	0.54
1:AA:688:G:O2'	1:AA:689:C:H5'	2.08	0.54
57:BZ:141:VAL:O	57:BZ:141:VAL:HG12	2.07	0.54
7:AG:46:ALA:O	7:AG:50:ILE:HG12	2.08	0.54
37:BC:76:ALA:CB	37:BC:153:ILE:HD11	2.35	0.54
54:BW:83:LYS:NZ	54:BW:97:LYS:HD3	2.23	0.54
25:B0:14:ARG:HB2	35:BA:2279:G:O6	2.08	0.54
42:BH:68:THR:HA	42:BH:71:LEU:CB	2.32	0.54
31:B6:38:LYS:HD2	35:BA:2344:U:OP1	2.08	0.54
1:AA:1508:G:C2	1:AA:1509:C:C2	2.96	0.54
35:BA:1436:G:N2	35:BA:1557:C:O2	2.40	0.54
1:AA:1236:A:P	21:AU:3:LYS:HD2	2.48	0.54
46:BO:50:GLY:O	46:BO:52:VAL:N	2.41	0.54
38:BD:97:TYR:O	38:BD:99:ASP:N	2.41	0.54
35:BA:2092:U:H4'	35:BA:2093:G:C5'	2.32	0.54
3:AC:6:HIS:O	3:AC:7:PRO:C	2.44	0.54
35:BA:118:A:OP2	35:BA:119:A:H5''	2.08	0.54
13:AM:56:LEU:HD22	13:AM:60:VAL:CG2	2.38	0.54
13:AM:74:VAL:C	13:AM:76:ALA:N	2.62	0.54
35:BA:1366:A:N6	35:BA:1367:A:C6	2.76	0.54
54:BW:1:MET:HG3	54:BW:64:MET:HE3	1.89	0.54
54:BW:88:ARG:NH1	54:BW:88:ARG:CG	2.67	0.54
1:AA:123:C:O2'	1:AA:290:C:O2	2.21	0.54
16:AP:39:TYR:O	16:AP:41:PRO:HD3	2.08	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2791:C:H5	35:BA:2793:G:O6	1.90	0.54
48:BQ:59:ARG:HD2	48:BQ:59:ARG:O	2.08	0.54
51:BT:132:LYS:O	51:BT:134:GLU:N	2.36	0.54
41:BG:58:GLN:HE22	41:BG:62:LEU:HD13	1.72	0.54
46:BO:108:GLU:O	46:BO:108:GLU:HG2	2.07	0.54
24:AY:480:LYS:O	24:AY:480:LYS:HE2	2.08	0.54
1:AA:447:G:N2	1:AA:486:U:C5	2.76	0.54
6:AF:54:LYS:O	6:AF:56:PRO:HD3	2.07	0.54
24:AY:215:LEU:HD23	24:AY:216:ASP:N	2.22	0.54
24:AY:360:TYR:CB	24:AY:361:PRO:CD	2.86	0.54
35:BA:1847:A:H61	35:BA:1893:C:N4	2.06	0.54
35:BA:990:A:O5'	35:BA:991:C:OP2	2.25	0.54
38:BD:247:ALA:HB2	38:BD:253:GLN:HA	1.86	0.54
38:BD:9:TYR:CD1	38:BD:9:TYR:N	2.72	0.54
35:BA:2578:G:C6	39:BE:140:SER:HB2	2.43	0.54
47:BP:107:LYS:C	47:BP:109:GLY:H	2.11	0.54
51:BT:64:ARG:NH1	51:BT:102:ILE:O	2.41	0.54
52:BU:9:VAL:O	52:BU:13:LYS:HG2	2.08	0.54
52:BU:92:ARG:NH1	53:BV:11:GLN:H	2.05	0.54
1:AA:669:U:H2'	1:AA:670:G:C8	2.43	0.54
1:AA:741:G:C5'	15:AO:39:LEU:HD21	2.37	0.54
15:AO:49:ASP:OD1	15:AO:52:SER:N	2.34	0.54
1:AA:1104:G:O5'	2:AB:111:ARG:HD2	2.08	0.54
2:AB:162:ILE:CG2	2:AB:184:VAL:HA	2.38	0.54
31:B6:52:VAL:CG2	31:B6:53:LYS:N	2.57	0.54
22:AV:3:C:C4	22:AV:4:G:N7	2.76	0.54
12:AL:89:ARG:HD2	12:AL:91:LYS:H	1.73	0.54
3:AC:148:GLY:O	3:AC:203:PHE:HB3	2.08	0.54
3:AC:48:TYR:O	3:AC:50:ALA:N	2.42	0.54
3:AC:52:LEU:HD12	3:AC:55:VAL:HG21	1.90	0.54
1:AA:55:A:C4	24:AY:311:HIS:CD2	2.96	0.54
56:BY:46:LYS:H	56:BY:62:GLU:CG	2.16	0.54
4:AD:30:LYS:O	4:AD:31:CYS:C	2.46	0.54
42:BH:118:PRO:HD2	42:BH:121:ILE:HB	1.89	0.54
35:BA:1598:C:H5'	55:BX:36:LYS:HG2	1.90	0.54
4:AD:59:ARG:NH1	4:AD:59:ARG:CA	2.71	0.54
37:BC:49:ILE:HG21	37:BC:208:PHE:HE1	1.73	0.54
41:BG:135:LEU:O	41:BG:154:GLY:HA3	2.07	0.54
45:BN:16:ILE:O	45:BN:54:VAL:HG13	2.08	0.54
1:AA:1402:C:H2'	1:AA:1403:C:H6	1.71	0.54
33:B8:12:LYS:O	47:BP:65:ARG:HB2	2.07	0.54
1:AA:1236:A:OP1	21:AU:3:LYS:HG3	2.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:705:A:O2'	35:BA:706:A:H5'	2.07	0.54
50:BS:97:ARG:NH2	50:BS:98:VAL:CA	2.62	0.54
35:BA:1859:A:H1'	35:BA:1884:A:C2	2.43	0.54
1:AA:64:G:H4'	1:AA:65:U:C5'	2.37	0.54
13:AM:70:LEU:O	13:AM:73:GLU:CB	2.55	0.54
6:AF:1:MET:N	6:AF:67:MET:O	2.41	0.54
20:AT:53:LEU:O	20:AT:56:MET:N	2.41	0.54
16:AP:17:TYR:HE1	16:AP:41:PRO:HG3	1.73	0.54
1:AA:293:G:H5'	1:AA:610:G:N2	2.23	0.54
31:B6:15:GLU:CG	31:B6:18:ARG:CZ	2.86	0.54
1:AA:1238:A:C2	1:AA:1241:G:N3	2.76	0.54
11:AK:82:VAL:CG1	11:AK:108:ILE:HA	2.38	0.54
35:BA:1864:U:H2'	35:BA:1865:G:C8	2.42	0.54
1:AA:817:C:C4	1:AA:819:A:C1'	2.90	0.54
35:BA:352:G:N3	35:BA:352:G:H2'	2.22	0.54
4:AD:164:ALA:O	4:AD:168:ARG:HD3	2.08	0.54
35:BA:1964:G:H4'	35:BA:1965:C:OP2	2.07	0.54
24:AY:170:THR:OG1	24:AY:182:VAL:HG11	2.08	0.53
24:AY:210:LEU:CD2	24:AY:210:LEU:N	2.71	0.53
24:AY:505:ALA:HB2	24:AY:511:LEU:HD12	1.91	0.53
35:BA:693:C:C1'	35:BA:1354:A:H1'	2.37	0.53
35:BA:1803:A:H3'	35:BA:1804:C:C5	2.43	0.53
35:BA:1805:U:H5'	38:BD:250:TRP:CZ3	2.43	0.53
35:BA:1927:A:N6	35:BA:1928:A:N1	2.56	0.53
35:BA:2009:G:H5'	54:BW:40:ASN:ND2	2.22	0.53
35:BA:2769:C:H2'	35:BA:2770:G:H8	1.71	0.53
35:BA:2773:C:H2'	35:BA:2774:C:C6	2.44	0.53
35:BA:940:G:H2'	35:BA:941:A:C4'	2.37	0.53
35:BA:1812:A:H2	38:BD:50:THR:HG21	1.72	0.53
39:BE:44:TYR:HD2	39:BE:45:THR:O	1.91	0.53
35:BA:245:G:O3'	47:BP:71:VAL:HG23	2.08	0.53
51:BT:65:LYS:HA	51:BT:65:LYS:NZ	2.22	0.53
52:BU:66:ASN:C	52:BU:66:ASN:HD22	2.08	0.53
52:BU:97:ASP:O	52:BU:100:VAL:CB	2.55	0.53
46:BO:8:LEU:HD23	46:BO:84:ALA:CB	2.38	0.53
1:AA:880:C:H5	12:AL:9:GLN:NE2	2.06	0.53
6:AF:53:ALA:C	6:AF:55:ASP:H	2.11	0.53
53:BV:18:LEU:CD2	53:BV:19:LYS:H	2.21	0.53
48:BQ:18:LYS:HZ3	48:BQ:18:LYS:HB2	1.73	0.53
48:BQ:50:ALA:O	48:BQ:53:ALA:N	2.40	0.53
3:AC:189:ALA:O	3:AC:195:VAL:HA	2.08	0.53
10:AJ:16:LEU:CD1	10:AJ:70:ARG:HG3	2.34	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B2:29:LYS:HA	27:B2:32:LEU:HB2	1.90	0.53
35:BA:1406:U:H2'	35:BA:1407:C:C1'	2.38	0.53
35:BA:904:C:O2'	57:BZ:169:GLU:OE1	2.23	0.53
35:BA:2311:A:C2'	35:BA:2312:U:C5	2.92	0.53
41:BG:114:ILE:O	41:BG:114:ILE:HG23	2.08	0.53
40:BF:109:GLY:HA2	40:BF:112:MET:CB	2.38	0.53
1:AA:61:G:H2'	1:AA:62:U:C6	2.43	0.53
50:BS:66:ALA:HA	50:BS:69:VAL:CG1	2.39	0.53
50:BS:92:TYR:O	50:BS:93:LYS:HB3	2.08	0.53
50:BS:97:ARG:C	50:BS:97:ARG:CZ	2.76	0.53
35:BA:2122:U:C2	35:BA:2123:G:N7	2.76	0.53
35:BA:2187:G:C2'	35:BA:2188:C:H5'	2.33	0.53
28:B3:31:LEU:CD2	28:B3:32:GLN:HG2	2.38	0.53
1:AA:1426:C:O2'	1:AA:1427:U:H5'	2.08	0.53
4:AD:123:HIS:N	4:AD:123:HIS:CD2	2.76	0.53
17:AQ:67:LYS:HG2	17:AQ:68:ARG:CG	2.37	0.53
56:BY:3:VAL:HG12	56:BY:3:VAL:O	2.09	0.53
32:B7:23:ARG:O	32:B7:24:THR:HG22	2.09	0.53
42:BH:94:TYR:CD1	42:BH:107:VAL:HB	2.43	0.53
35:BA:654(N):G:H2'	35:BA:654(O):G:O4'	2.08	0.53
22:AV:27:U:OP2	22:AV:27:U:O4'	2.26	0.53
4:AD:199:ASN:ND2	4:AD:202:LEU:HG	2.23	0.53
35:BA:2801(A):A:H5''	35:BA:2802:G:H5'	1.89	0.53
35:BA:382:G:H2'	35:BA:383:U:H5'	1.87	0.53
6:AF:63:TYR:O	6:AF:64:GLN:HB2	2.08	0.53
51:BT:133:GLU:O	51:BT:133:GLU:HG2	2.08	0.53
18:AR:46:GLU:HA	18:AR:46:GLU:OE1	2.08	0.53
35:BA:54:G:H8	35:BA:54:G:OP1	1.90	0.53
1:AA:130:A:H4'	1:AA:189(G):G:C2	2.42	0.53
24:AY:246:PHE:CD2	24:AY:247:LEU:CD2	2.91	0.53
24:AY:316:ALA:O	24:AY:317:PHE:C	2.46	0.53
24:AY:10:VAL:HG13	24:AY:360:TYR:HB2	1.89	0.53
35:BA:1840:G:N2	35:BA:1902:C:N3	2.52	0.53
30:B5:4:HIS:O	35:BA:2056:G:N2	2.41	0.53
35:BA:2489:G:C8	35:BA:2489:G:O5'	2.53	0.53
38:BD:146:GLU:CB	38:BD:152:GLY:O	2.57	0.53
38:BD:33:LEU:CG	38:BD:34:VAL:N	2.72	0.53
39:BE:120:TRP:NE1	39:BE:156:MET:O	2.41	0.53
39:BE:34:VAL:HG11	39:BE:78:LEU:HD21	1.87	0.53
45:BN:63:THR:HB	45:BN:66:LYS:CE	2.38	0.53
47:BP:97:PRO:CA	47:BP:100:LEU:HD23	2.39	0.53
35:BA:1248:G:N1	52:BU:3:ARG:HD2	2.23	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:6:THR:O	52:BU:9:VAL:HG22	2.09	0.53
6:AF:14:LEU:HD12	6:AF:18:GLN:HB2	1.89	0.53
8:AH:30:ARG:CZ	8:AH:30:ARG:HB3	2.37	0.53
8:AH:30:ARG:O	8:AH:33:GLU:HB2	2.09	0.53
15:AO:12:ILE:HG13	15:AO:31:LEU:CD1	2.37	0.53
48:BQ:1:MET:HE1	48:BQ:48:GLU:CB	2.35	0.53
57:BZ:44:PHE:C	57:BZ:44:PHE:CD1	2.81	0.53
35:BA:1982:C:O5'	35:BA:1982:C:H6	1.91	0.53
1:AA:1151:A:H1'	1:AA:1152:A:C8	2.43	0.53
1:AA:1155:G:H2'	1:AA:1156:G:O4'	2.09	0.53
14:AN:4:LYS:HZ3	14:AN:4:LYS:HB2	1.72	0.53
49:BR:50:HIS:O	49:BR:53:HIS:HB3	2.08	0.53
42:BH:122:THR:O	42:BH:123:PHE:CD1	2.62	0.53
35:BA:2317:C:C2'	35:BA:2318:G:H5'	2.37	0.53
35:BA:141:A:C6	35:BA:142:A:N6	2.76	0.53
37:BC:222:VAL:O	37:BC:224:ILE:N	2.41	0.53
38:BD:124:PRO:CB	38:BD:129:ASN:ND2	2.69	0.53
38:BD:73:VAL:O	38:BD:75:ILE:CD1	2.56	0.53
35:BA:632:A:H2'	35:BA:633:A:H8	1.73	0.53
8:AH:109:ILE:CG1	8:AH:110:ALA:N	2.70	0.53
35:BA:1494:A:H2'	35:BA:1495:A:H5''	1.89	0.53
35:BA:2230:G:H2'	35:BA:2231:C:C6	2.43	0.53
1:AA:1031:G:O2'	1:AA:1032:G:H5'	2.08	0.53
16:AP:71:ARG:HG2	16:AP:75:ARG:NH2	2.23	0.53
4:AD:52:SER:H	4:AD:55:ALA:HB3	1.73	0.53
4:AD:155:LEU:O	4:AD:159:ARG:HG2	2.09	0.53
26:B1:4:VAL:O	26:B1:4:VAL:HG13	2.08	0.53
1:AA:895:G:C6	1:AA:904:C:N3	2.77	0.53
1:AA:135:C:O2	16:AP:1:MET:HB3	2.07	0.53
1:AA:929:G:H2'	1:AA:930:C:O4'	2.09	0.53
48:BQ:90:VAL:HG12	48:BQ:91:GLU:N	2.23	0.53
37:BC:96:GLY:O	37:BC:97:GLU:HG2	2.08	0.53
24:AY:430:PRO:C	24:AY:432:SER:H	2.12	0.53
24:AY:171:TRP:HB3	24:AY:172:PRO:CD	2.38	0.53
24:AY:170:THR:CB	24:AY:182:VAL:CG1	2.86	0.53
33:B8:2:PRO:O	33:B8:3:LYS:C	2.46	0.53
35:BA:1144:G:H2'	35:BA:1145:C:C6	2.43	0.53
35:BA:28:A:H1'	35:BA:513:A:N1	2.24	0.53
39:BE:135:HIS:O	39:BE:136:ARG:HG2	2.08	0.53
39:BE:199:ARG:HG2	39:BE:200:GLU:H	1.72	0.53
49:BR:6:SER:OG	49:BR:8:ARG:NH2	2.36	0.53
52:BU:79:PHE:CE1	52:BU:83:LEU:HD11	2.43	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:AH:2:LEU:HD11	8:AH:8:ASP:OD2	2.07	0.53
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.08	0.53
2:AB:15:VAL:N	2:AB:16:HIS:CE1	2.76	0.53
2:AB:97:TRP:CH2	2:AB:176:GLU:CG	2.91	0.53
2:AB:51:LEU:O	2:AB:55:PHE:HB2	2.08	0.53
35:BA:2393:A:C5	35:BA:2394:C:C5	2.97	0.53
36:BB:87:G:H2'	36:BB:88:C:H5''	1.91	0.53
1:AA:1368:G:OP1	9:AI:114:TYR:HB3	2.07	0.53
35:BA:893:C:H2'	35:BA:894:C:C5'	2.39	0.53
40:BF:162:LEU:CD1	40:BF:162:LEU:H	2.18	0.53
37:BC:40:THR:O	37:BC:216:THR:HG22	2.08	0.53
37:BC:75:LEU:HD12	37:BC:76:ALA:N	2.23	0.53
1:AA:693:G:H2'	1:AA:694:A:C8	2.44	0.53
54:BW:20:VAL:O	54:BW:23:LEU:HB3	2.09	0.53
38:BD:136:ILE:CD1	38:BD:191:ALA:HB3	2.38	0.53
35:BA:706:A:H2'	35:BA:707:G:O4'	2.09	0.53
34:B9:16:VAL:HG12	34:B9:16:VAL:O	2.07	0.53
50:BS:74:ALA:HB1	50:BS:103:GLU:HG3	1.89	0.53
35:BA:2145:C:OP2	35:BA:2146:C:H5	1.92	0.53
38:BD:263:ARG:CG	38:BD:263:ARG:NH1	2.61	0.53
35:BA:1747:G:C4	35:BA:1747(A):G:C8	2.96	0.53
9:AI:22:GLY:HA3	9:AI:60:ASP:OD2	2.08	0.53
1:AA:1493:A:C3'	1:AA:1493:A:N3	2.70	0.53
1:AA:1494:G:C4	1:AA:1495:U:C5	2.97	0.53
35:BA:2077:A:H2'	35:BA:2078:C:H6	1.73	0.53
2:AB:131:PRO:O	2:AB:135:GLN:HG3	2.07	0.53
35:BA:195:A:N7	35:BA:197:A:OP1	2.42	0.53
35:BA:1003:G:N3	35:BA:1010:A:C2	2.76	0.53
1:AA:550:G:C5	1:AA:551:U:C5	2.95	0.53
1:AA:280:C:N4	17:AQ:91:ARG:HE	2.07	0.53
35:BA:1275:A:N7	49:BR:13:HIS:CE1	2.76	0.53
24:AY:269:LEU:O	24:AY:273:VAL:CG2	2.57	0.53
24:AY:79:TYR:CG	24:AY:80:HIS:N	2.76	0.53
33:B8:5:LYS:HG2	35:BA:242:G:C8	2.43	0.53
35:BA:15:G:H2'	35:BA:16:G:C8	2.44	0.53
35:BA:1827:C:H2'	35:BA:1828:G:C8	2.43	0.53
35:BA:1844:C:C2	35:BA:1845:G:C8	2.96	0.53
30:B5:19:ARG:HG3	35:BA:2046:G:H5'	1.89	0.53
35:BA:2447:G:C5	35:BA:2501:C:C2	2.97	0.53
35:BA:2688:U:H6	35:BA:2721:A:H62	1.55	0.53
35:BA:2872:G:O2'	35:BA:2873:A:H5'	2.09	0.53
35:BA:662:G:C2	35:BA:663:G:N7	2.76	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:810:U:OP1	35:BA:1253:A:N7	2.42	0.53
38:BD:53:PHE:HE2	38:BD:220:HIS:CE1	2.27	0.53
38:BD:80:ALA:CB	38:BD:96:HIS:CD2	2.90	0.53
40:BF:63:LYS:NZ	40:BF:65:TRP:O	2.41	0.53
40:BF:90:PHE:O	40:BF:91:GLY:O	2.27	0.53
51:BT:28:VAL:CG1	51:BT:46:GLU:HA	2.39	0.53
1:AA:1418:A:C8	1:AA:1419:G:C1'	2.92	0.53
8:AH:114:THR:HG22	8:AH:130:GLY:O	2.09	0.53
2:AB:222:ILE:N	2:AB:222:ILE:HD13	2.24	0.53
1:AA:1107:C:OP1	3:AC:174:PRO:HG3	2.08	0.53
10:AJ:54:PHE:CE1	10:AJ:55:LYS:NZ	2.76	0.53
9:AI:114:TYR:HE2	10:AJ:60:ARG:N	2.07	0.53
56:BY:31:LEU:HB2	56:BY:32:PRO:HA	1.90	0.53
9:AI:77:ILE:C	9:AI:79:LEU:H	2.12	0.53
1:AA:1442(A):G:N2	51:BT:121:ILE:O	2.42	0.53
35:BA:2314:C:OP1	41:BG:38:VAL:HG11	2.07	0.53
41:BG:142:PRO:C	41:BG:143:GLU:HG2	2.28	0.53
16:AP:69:THR:HA	16:AP:72:ARG:CB	2.37	0.53
1:AA:186:C:H2'	1:AA:187:C:C6	2.43	0.53
51:BT:108:ARG:HB3	51:BT:111:ARG:CZ	2.36	0.53
25:B0:45:PHE:HD1	25:B0:77:ARG:O	1.92	0.53
25:B0:36:ILE:HD11	35:BA:2355:C:C1'	2.39	0.53
1:AA:437:U:H5''	4:AD:155:LEU:HD21	1.90	0.53
35:BA:2251:G:C8	35:BA:2450:A:H4'	2.44	0.53
49:BR:35:THR:HG23	49:BR:112:ALA:O	2.08	0.53
10:AJ:32:ALA:CB	10:AJ:76:ASN:HB2	2.38	0.53
1:AA:280:C:N4	17:AQ:91:ARG:HH21	2.05	0.53
35:BA:2521:C:C2	35:BA:2545:G:C2	2.96	0.53
1:AA:796:C:N3	1:AA:797:C:C5	2.76	0.53
47:BP:149:GLU:O	47:BP:150:ALA:HB2	2.08	0.53
24:AY:142:ASN:OD1	58:AY:1000:GCP:O6	2.27	0.53
24:AY:141:MET:O	24:AY:257:GLY:O	2.25	0.53
24:AY:168:PRO:HB3	24:AY:171:TRP:CE2	2.42	0.53
24:AY:207:VAL:O	24:AY:208:LYS:C	2.47	0.53
1:AA:681:C:H4'	38:BD:174:ILE:CD1	2.38	0.53
35:BA:1000:A:C2	35:BA:1155:A:C5	2.97	0.53
35:BA:1791:A:C6	35:BA:1829:A:H5'	2.43	0.53
35:BA:586:A:H2	35:BA:809:G:N3	2.06	0.53
35:BA:973:A:H5'	35:BA:1188:U:H1'	1.90	0.53
39:BE:170:LEU:HD21	39:BE:187:ALA:O	2.09	0.53
40:BF:37:VAL:HG12	40:BF:38:ARG:N	2.24	0.53
47:BP:88:LEU:HD11	47:BP:95:VAL:HG21	1.91	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1484:C:H4'	35:BA:1961:C:H4'	1.89	0.53
1:AA:863:U:C5	1:AA:867:G:N1	2.77	0.53
1:AA:740:U:OP1	15:AO:38:ARG:HG3	2.09	0.53
15:AO:64:ARG:HG2	15:AO:65:ARG:N	2.23	0.53
35:BA:906:G:O2'	48:BQ:67:ARG:NH1	2.41	0.53
48:BQ:55:VAL:O	48:BQ:58:PHE:O	2.27	0.53
35:BA:1939:U:O2	35:BA:2592:G:H5'	2.07	0.53
1:AA:979:C:C2	1:AA:1318:A:N6	2.75	0.53
3:AC:53:ALA:CB	3:AC:114:PRO:HB2	2.38	0.53
10:AJ:56:HIS:O	10:AJ:58:ASP:N	2.42	0.53
10:AJ:90:LEU:H	10:AJ:91:PRO:CD	2.18	0.53
10:AJ:89:ASP:CB	10:AJ:91:PRO:HD3	2.39	0.53
19:AS:47:HIS:O	19:AS:61:TYR:O	2.27	0.53
56:BY:28:LYS:HG2	56:BY:39:VAL:CA	2.39	0.53
27:B2:51:ARG:HB2	27:B2:55:ARG:NH1	2.23	0.53
40:BF:127:GLU:HB2	40:BF:196:LEU:HD12	1.90	0.53
19:AS:29:ARG:O	19:AS:48:THR:O	2.26	0.53
35:BA:1087:G:O2'	35:BA:1089:G:H5'	2.09	0.53
55:BX:41:ASN:O	55:BX:45:THR:OG1	2.27	0.53
37:BC:30:LYS:HD3	37:BC:185:LEU:CD1	2.38	0.53
37:BC:222:VAL:O	37:BC:224:ILE:HG23	2.09	0.53
37:BC:42:GLU:N	37:BC:215:THR:O	2.39	0.53
57:BZ:151:HIS:HD2	57:BZ:170:THR:HG23	1.73	0.53
57:BZ:151:HIS:CD2	57:BZ:170:THR:HA	2.43	0.53
38:BD:75:ILE:O	38:BD:118:VAL:CG2	2.57	0.53
38:BD:134:ARG:HG2	38:BD:135:PHE:CD1	2.44	0.53
35:BA:702:G:O2'	35:BA:703:U:H5'	2.09	0.53
35:BA:2756:U:H1'	35:BA:2757:A:H5''	1.90	0.53
13:AM:15:VAL:HG13	13:AM:43:THR:O	2.09	0.53
35:BA:2712:U:H1'	35:BA:2712(A):A:C8	2.43	0.53
49:BR:71:GLN:NE2	49:BR:71:GLN:HA	2.22	0.53
14:AN:12:ARG:NH1	14:AN:14:PRO:CG	2.67	0.53
1:AA:273:A:N1	1:AA:274:A:C2	2.76	0.53
26:B1:3:LYS:HA	35:BA:1365:A:OP2	2.08	0.53
35:BA:185:U:H4'	35:BA:218:A:H4'	1.91	0.53
1:AA:1165:C:O2'	1:AA:1166:G:H5'	2.08	0.53
50:BS:17:ARG:O	50:BS:20:ARG:HB2	2.09	0.53
31:B6:19:ARG:O	31:B6:20:ASN:O	2.25	0.53
7:AG:64:GLN:NE2	7:AG:68:ASN:ND2	2.56	0.53
35:BA:1356:G:O2'	35:BA:1357:U:H5'	2.09	0.53
1:AA:1290:G:O2'	9:AI:40:LEU:HD21	2.09	0.53
24:AY:103:LEU:CD2	24:AY:109:CYS:SG	2.97	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:139:THR:O	24:AY:255:PHE:N	2.34	0.53
24:AY:169:ILE:C	24:AY:170:THR:HG23	2.29	0.53
24:AY:139:THR:HB	24:AY:254:VAL:HA	1.90	0.53
24:AY:282:ARG:HG3	24:AY:319:ARG:NH1	2.23	0.53
24:AY:327:LYS:HZ2	24:AY:344:ASP:CB	2.21	0.53
1:AA:778:G:C2'	1:AA:779:C:O4'	2.57	0.53
1:AA:769:G:H22	1:AA:811:C:H1'	1.73	0.53
33:B8:61:LEU:C	33:B8:63:PRO:HD2	2.28	0.53
35:BA:770:G:N3	35:BA:1354:A:C2	2.73	0.53
35:BA:252:G:O2'	35:BA:253:C:C5'	2.57	0.53
35:BA:2628:C:OP1	35:BA:2629:A:H5''	2.09	0.53
35:BA:673:C:H6	35:BA:673:C:C5'	2.19	0.53
35:BA:692:C:H2'	35:BA:693:C:C6	2.38	0.53
38:BD:169:GLU:O	38:BD:170:GLY:C	2.47	0.53
38:BD:183:ARG:HG3	38:BD:270:ILE:HG23	1.89	0.53
38:BD:201:HIS:O	38:BD:201:HIS:ND1	2.41	0.53
39:BE:138:PRO:CD	39:BE:139:GLY:H	2.21	0.53
39:BE:4:ILE:HG23	39:BE:198:VAL:HB	1.90	0.53
40:BF:82:ILE:CG1	40:BF:83:PHE:H	2.21	0.53
47:BP:20:GLY:O	47:BP:21:ARG:HB2	2.09	0.53
8:AH:88:LYS:HB3	8:AH:89:PRO:HD2	1.89	0.53
17:AQ:26:GLN:HE21	17:AQ:37:LYS:HD3	1.74	0.53
48:BQ:56:ARG:O	48:BQ:57:HIS:C	2.47	0.53
57:BZ:54:HIS:HA	57:BZ:98:MET:CE	2.38	0.53
13:AM:82:MET:O	13:AM:83:ASP:O	2.26	0.53
1:AA:1057:G:C2'	1:AA:1058:G:H5'	2.39	0.53
1:AA:1183:A:HO2'	1:AA:1184:G:P	2.31	0.53
1:AA:973:G:H2'	1:AA:974:A:OP1	2.07	0.53
3:AC:117:ALA:O	3:AC:187:ALA:HB2	2.09	0.53
3:AC:51:GLY:O	3:AC:70:VAL:HG13	2.08	0.53
19:AS:23:ASN:CB	29:B4:47:GLN:CG	2.86	0.53
27:B2:35:LEU:HD13	27:B2:35:LEU:C	2.29	0.53
27:B2:54:LYS:O	27:B2:57:ILE:HB	2.09	0.53
40:BF:195:ASP:CB	40:BF:198:ALA:HB3	2.37	0.53
35:BA:130:C:O3'	35:BA:1349:A:H1'	2.08	0.53
37:BC:29:VAL:HG12	37:BC:222:VAL:CG2	2.38	0.53
37:BC:23:ASP:O	37:BC:27:HIS:N	2.41	0.53
37:BC:37:PHE:CE1	37:BC:217:THR:HG21	2.43	0.53
45:BN:133:GLN:CG	45:BN:135:PRO:HD3	2.24	0.53
29:B4:26:SER:HB3	41:BG:105:LYS:HE3	1.91	0.53
42:BH:66:GLY:CA	42:BH:69:ARG:HB2	2.39	0.53
26:B1:76:ARG:HH22	26:B1:95:LEU:CD1	2.21	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:57:A:C2	36:BB:58:A:N9	2.77	0.53
41:BG:11:TYR:HA	41:BG:15:VAL:HG23	1.90	0.53
1:AA:1030(D):A:H2'	1:AA:1031:G:H5'	1.91	0.53
35:BA:1297:C:P	35:BA:2710:C:H4'	2.49	0.53
1:AA:179:A:O2'	1:AA:180:U:H5'	2.08	0.53
1:AA:1346:A:H5''	9:AI:120:ARG:HH12	1.70	0.53
35:BA:1305:C:O2'	35:BA:1306:C:H5'	2.09	0.53
1:AA:398:C:O2'	1:AA:399:G:H5'	2.09	0.53
1:AA:266:G:H5''	1:AA:267:C:C5	2.44	0.53
1:AA:1294:G:O2'	1:AA:1295:G:H5'	2.08	0.53
56:BY:54:LYS:HE3	56:BY:55:TYR:CD2	2.44	0.53
35:BA:849:A:C8	35:BA:850:C:C5	2.96	0.53
35:BA:2423:U:H6	35:BA:2423:U:C5'	2.22	0.53
35:BA:1064:C:C3'	35:BA:1065:U:H5''	2.38	0.53
35:BA:1744:C:H5''	35:BA:1744:C:H6	1.73	0.53
35:BA:2666:C:C5	35:BA:2667:C:C4	2.96	0.53
35:BA:2812:G:N2	35:BA:2889:C:C2	2.77	0.53
24:AY:169:ILE:O	24:AY:170:THR:CG2	2.56	0.53
35:BA:1754:C:N4	35:BA:1755:A:N6	2.56	0.53
35:BA:2000:G:H2'	35:BA:2001:A:H8	1.73	0.53
38:BD:90:ALA:CB	38:BD:106:ILE:CG2	2.86	0.53
45:BN:23:LEU:HB2	45:BN:99:LEU:CD2	2.38	0.53
45:BN:52:VAL:O	45:BN:53:VAL:CG2	2.56	0.53
52:BU:95:LEU:CD1	53:BV:4:ILE:HG23	2.37	0.53
46:BO:62:VAL:HG12	46:BO:63:VAL:N	2.24	0.53
35:BA:2760:C:C2'	35:BA:2761:G:H5''	2.39	0.53
1:AA:826:C:H1'	8:AH:15:ASN:ND2	2.24	0.53
2:AB:164:VAL:HG12	2:AB:166:ASP:N	2.24	0.53
57:BZ:39:VAL:HB	57:BZ:43:GLU:OE2	2.07	0.53
22:AV:48:C:C5'	22:AV:49:G:H5''	2.39	0.53
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.44	0.53
35:BA:895:U:H3'	35:BA:896:A:H5''	1.90	0.53
56:BY:8:LYS:HE2	56:BY:72:VAL:HG23	1.91	0.53
37:BC:56:GLN:HG2	37:BC:204:ALA:HB2	1.89	0.53
37:BC:67:GLY:N	37:BC:188:ASN:HD21	2.06	0.53
50:BS:26:LEU:HD23	50:BS:27:SER:O	2.07	0.53
1:AA:112:G:C4'	1:AA:389:A:H4'	2.37	0.53
31:B6:7:ILE:HB	31:B6:27:LYS:NZ	2.23	0.53
36:BB:50:G:P	50:BS:63:THR:HG23	2.49	0.53
35:BA:2102:U:C5	35:BA:2103:C:C4	2.97	0.53
9:AI:24:GLY:HA2	9:AI:59:PHE:O	2.09	0.53
16:AP:19:ILE:HD13	16:AP:19:ILE:N	2.24	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1250:A:H4'	9:AI:68:GLY:N	2.23	0.53
1:AA:255:G:H1'	17:AQ:16:GLN:HE22	1.74	0.53
35:BA:1428:C:H2'	35:BA:1569:A:OP1	2.09	0.53
42:BH:94:TYR:HD1	42:BH:107:VAL:C	2.11	0.53
1:AA:1253:G:N1	1:AA:1285:A:N6	2.56	0.53
1:AA:1351:U:N3	1:AA:1352:C:H5	2.07	0.53
35:BA:928:G:H8	35:BA:928:G:O5'	1.92	0.53
35:BA:1010:A:H8	35:BA:1010:A:O5'	1.91	0.53
35:BA:271(Y):U:OP2	35:BA:272(D):G:C5'	2.55	0.53
1:AA:1010:G:H2'	1:AA:1011:G:H8	1.73	0.53
1:AA:412:A:C2	4:AD:35:ARG:HG3	2.43	0.53
5:AE:145:LYS:O	5:AE:148:VAL:HB	2.09	0.53
5:AE:150:ARG:O	5:AE:150:ARG:HG2	2.08	0.53
17:AQ:62:SER:HB3	17:AQ:72:ARG:HG3	1.90	0.53
35:BA:2796:U:O2'	35:BA:2799:C:H5'	2.09	0.53
1:AA:77:G:H5'	1:AA:78:G:OP2	2.08	0.53
1:AA:532:A:H2	3:AC:156:ARG:HH22	1.56	0.53
1:AA:102:G:H2'	1:AA:103:C:H6	1.74	0.53
24:AY:158:VAL:HG12	24:AY:162:LEU:HB3	1.91	0.53
24:AY:247:LEU:C	24:AY:249:GLY:N	2.61	0.53
35:BA:811:U:H2'	47:BP:24:GLY:O	2.08	0.53
35:BA:818:G:C8	35:BA:818:G:O5'	2.54	0.53
35:BA:962:G:C2	35:BA:963:U:N1	2.77	0.53
35:BA:989:G:H5'	35:BA:1157:G:C4'	2.30	0.53
38:BD:20:ASP:OD2	38:BD:22:SER:OG	2.19	0.53
38:BD:43:ARG:NH1	38:BD:49:ILE:HD11	2.22	0.53
38:BD:65:ILE:HB	38:BD:67:PHE:CZ	2.44	0.53
38:BD:80:ALA:HB1	38:BD:96:HIS:NE2	2.23	0.53
40:BF:51:THR:O	40:BF:52:LYS:HG3	2.08	0.53
46:BO:66:LYS:HE3	46:BO:80:ASP:HA	1.90	0.53
1:AA:653:A:O5'	8:AH:56:LYS:HE3	2.09	0.53
1:AA:762:C:H2'	1:AA:763:G:H8	1.72	0.53
1:AA:909:A:P	12:AL:21:LYS:NZ	2.82	0.53
1:AA:1075:C:C4'	1:AA:1101:A:N6	2.72	0.53
2:AB:46:LYS:O	2:AB:47:THR:C	2.47	0.53
36:BB:93:G:N2	36:BB:94:C:C2	2.77	0.53
48:BQ:109:VAL:HG12	48:BQ:113:GLN:HB2	1.91	0.53
57:BZ:28:MET:O	57:BZ:29:TYR:HB3	2.08	0.53
57:BZ:33:LEU:CD1	57:BZ:34:ASN:N	2.53	0.53
22:AV:64:G:C2	22:AV:65:C:C2	2.97	0.53
1:AA:1304:G:C1'	1:AA:1334:G:H22	2.21	0.53
1:AA:979:C:H1'	1:AA:1318:A:N1	2.24	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:179:ARG:HD2	3:AC:207:VAL:HA	1.91	0.53
10:AJ:91:PRO:C	10:AJ:93:GLY:N	2.59	0.53
1:AA:1047:G:O3'	14:AN:4:LYS:HB3	2.07	0.53
35:BA:476:G:O4'	35:BA:505:A:C2	2.62	0.53
4:AD:19:LEU:CG	4:AD:21:LEU:HD21	2.38	0.53
24:AY:485:PHE:O	24:AY:489:ASN:O	2.25	0.53
4:AD:89:THR:HA	4:AD:92:VAL:CB	2.34	0.53
11:AK:32:ILE:HD11	11:AK:68:ALA:O	2.08	0.53
5:AE:30:ALA:HB3	5:AE:54:ALA:O	2.08	0.53
37:BC:175:VAL:CG2	37:BC:189:ILE:HG12	2.17	0.53
35:BA:874:G:C2	35:BA:875:G:C4	2.97	0.53
2:AB:118:LEU:HB3	2:AB:142:LEU:CD1	2.38	0.53
35:BA:2120:G:H1	35:BA:2177:C:H42	1.57	0.53
20:AT:45:GLN:HB2	20:AT:91:LEU:HD13	1.91	0.53
1:AA:1375:A:C2	1:AA:1376:U:C2	2.97	0.53
35:BA:1510:G:H2'	35:BA:1511:C:C6	2.43	0.53
35:BA:2701:C:H2'	35:BA:2702:U:H2'	1.90	0.53
20:AT:25:ARG:O	20:AT:29:LYS:HG3	2.09	0.53
22:AV:32:C:C2'	22:AV:33:U:H5''	2.39	0.53
35:BA:106:C:H2'	35:BA:107:C:C6	2.44	0.53
34:B9:35:ARG:NE	34:B9:35:ARG:O	2.42	0.53
1:AA:1288:A:H1'	1:AA:1353:G:O4'	2.08	0.53
55:BX:20:GLY:O	55:BX:25:LYS:O	2.26	0.53
35:BA:176:G:C2'	35:BA:177:G:H5'	2.38	0.53
35:BA:2735:G:H2'	35:BA:2736:G:C8	2.41	0.53
1:AA:928:G:H8	1:AA:928:G:O5'	1.91	0.53
36:BB:54:G:H21	36:BB:55:U:C1'	2.22	0.53
7:AG:21:VAL:C	7:AG:23:VAL:N	2.62	0.53
1:AA:431:A:H2'	1:AA:432:A:C8	2.43	0.53
8:AH:90:GLY:O	8:AH:91:ARG:HB2	2.07	0.53
24:AY:194:GLN:CB	24:AY:202:GLN:HG2	2.39	0.53
24:AY:391:PRO:O	24:AY:392:ASN:HB3	2.08	0.53
24:AY:515:GLN:HB3	24:AY:523:PHE:CG	2.44	0.53
35:BA:1019:U:H3	35:BA:1142(A):A:N6	2.05	0.53
35:BA:974:G:C6	35:BA:1186:G:C6	2.97	0.53
35:BA:1188:U:C2'	35:BA:1189:A:H5'	2.38	0.53
35:BA:1842:G:C4	35:BA:1901:A:C2	2.97	0.53
35:BA:2030:A:H4'	35:BA:2031:A:C8	2.44	0.53
35:BA:2352:A:H2'	35:BA:2353:G:H5'	1.90	0.53
35:BA:2574:G:H2'	35:BA:2575:C:C6	2.44	0.53
35:BA:257:A:C2'	35:BA:258:G:H5'	2.38	0.53
35:BA:2823:A:H2'	35:BA:2824:C:O4'	2.09	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:589:C:H2'	35:BA:590:A:C8	2.36	0.53
38:BD:146:GLU:HB2	38:BD:152:GLY:O	2.09	0.53
38:BD:147:LEU:CD1	38:BD:155:LEU:CD1	2.87	0.53
38:BD:87:ASN:CB	38:BD:88:ARG:NH2	2.69	0.53
39:BE:45:THR:HG22	39:BE:46:ALA:N	2.24	0.53
39:BE:36:ARG:NH2	39:BE:88:GLY:HA2	2.23	0.53
47:BP:111:ARG:HA	47:BP:128:HIS:HD2	1.72	0.53
52:BU:91:ASP:O	52:BU:92:ARG:O	2.26	0.53
6:AF:10:LEU:O	6:AF:11:ASN:C	2.45	0.53
15:AO:69:TYR:HA	15:AO:72:ARG:HB2	1.90	0.53
2:AB:168:THR:HG23	2:AB:192:SER:HA	1.90	0.53
35:BA:2435:A:C6	35:BA:2436:G:C5	2.97	0.53
35:BA:2588:G:C6	35:BA:2607:G:C2	2.97	0.53
1:AA:1367:C:H5'	10:AJ:60:ARG:NH2	2.24	0.53
35:BA:483:A:H1'	56:BY:60:PHE:CE1	2.44	0.53
27:B2:30:ARG:CZ	55:BX:5:TYR:OH	2.57	0.53
35:BA:70:G:H21	35:BA:71:A:H62	1.57	0.53
40:BF:155:LEU:O	40:BF:193:VAL:N	2.38	0.53
35:BA:310:A:P	56:BY:18:GLY:HA2	2.49	0.53
37:BC:37:PHE:O	37:BC:39:GLU:OE2	2.26	0.53
35:BA:868:U:H6	35:BA:868:U:O5'	1.92	0.53
7:AG:69:VAL:HG11	7:AG:104:LEU:CD2	2.39	0.53
36:BB:40:U:O2	36:BB:43:C:H5''	2.09	0.53
41:BG:37:VAL:HG13	41:BG:158:ALA:O	2.08	0.53
16:AP:28:ARG:NH1	16:AP:29:ASP:OD1	2.42	0.53
1:AA:556:C:O2'	1:AA:557:G:H5'	2.08	0.53
5:AE:6:PHE:HB2	5:AE:34:VAL:CG2	2.38	0.53
26:B1:78:LYS:HG3	26:B1:79:GLY:H	1.74	0.53
36:BB:16:G:O2'	36:BB:17:C:H6	1.92	0.53
26:B1:48:LYS:HZ2	26:B1:61:ARG:N	2.06	0.53
1:AA:1223:C:OP2	19:AS:78:ARG:NH2	2.41	0.53
16:AP:80:PHE:CD1	16:AP:80:PHE:N	2.76	0.53
51:BT:11:GLU:N	51:BT:11:GLU:CD	2.58	0.53
51:BT:13:ARG:HA	51:BT:13:ARG:CZ	2.39	0.53
9:AI:4:TYR:CD2	9:AI:88:TYR:HB2	2.44	0.53
46:BO:64:ARG:NH1	46:BO:81:ASP:OD2	2.42	0.53
35:BA:107:C:H2'	35:BA:108:U:C6	2.44	0.53
22:AV:24:U:C2'	22:AV:25:C:H5'	2.38	0.53
25:B0:72:ARG:HD3	36:BB:11:C:OP2	2.09	0.53
35:BA:1332:G:N2	35:BA:1609:A:O2'	2.42	0.53
12:AL:75:HIS:CG	12:AL:76:ASN:N	2.77	0.53
1:AA:101:A:C2'	1:AA:102:G:O5'	2.57	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:98:GLU:HG3	37:BC:98:GLU:O	2.09	0.53
35:BA:1549:C:H6	35:BA:1549:C:H5''	1.74	0.53
43:BJ:100:UNK:CB	43:BJ:132:UNK:CB	2.87	0.53
24:AY:296:PHE:CD2	24:AY:331:LEU:HD21	2.44	0.53
24:AY:412:LEU:C	24:AY:414:LYS:N	2.59	0.53
24:AY:84:VAL:HG12	24:AY:85:ASN:N	2.23	0.53
33:B8:28:GLY:C	33:B8:32:LEU:HG	2.30	0.53
35:BA:2345:G:N3	35:BA:2381:C:H2'	2.23	0.53
35:BA:2723:C:O3'	49:BR:2:ARG:NH2	2.41	0.53
35:BA:515:A:C2'	35:BA:516:C:H5'	2.37	0.53
35:BA:638:G:C6	35:BA:639:U:C4	2.97	0.53
35:BA:650:C:H3'	35:BA:651:G:H5''	1.91	0.53
38:BD:260:ARG:HG2	38:BD:261:LYS:O	2.09	0.53
39:BE:200:GLU:N	39:BE:200:GLU:OE1	2.42	0.53
40:BF:64:ILE:CG2	40:BF:65:TRP:N	2.72	0.53
45:BN:57:ALA:O	45:BN:58:ASP:O	2.27	0.53
52:BU:79:PHE:CE1	52:BU:83:LEU:CD1	2.92	0.53
53:BV:21:ARG:HG2	53:BV:91:TYR:CD2	2.44	0.53
35:BA:1665:A:C5'	46:BO:66:LYS:O	2.57	0.53
35:BA:1953:A:C2	35:BA:2550:G:O4'	2.62	0.53
8:AH:2:LEU:HD21	8:AH:8:ASP:HB2	1.91	0.53
15:AO:25:THR:OG1	15:AO:26:GLU:N	2.41	0.53
1:AA:658:G:H5''	15:AO:31:LEU:CD2	2.38	0.53
48:BQ:128:LYS:O	48:BQ:129:THR:HG23	2.08	0.53
2:AB:71:VAL:N	2:AB:163:PHE:O	2.42	0.53
2:AB:47:THR:C	2:AB:51:LEU:HD12	2.29	0.53
57:BZ:153:SER:HA	57:BZ:155:LEU:HD23	1.90	0.53
35:BA:855:G:N2	35:BA:923:C:O2	2.42	0.53
48:BQ:48:GLU:CA	48:BQ:51:ARG:HB3	2.38	0.53
22:AV:47:U:C3'	22:AV:47:U:O2	2.57	0.53
12:AL:36:VAL:HB	12:AL:82:VAL:HA	1.91	0.53
19:AS:11:VAL:HG23	19:AS:38:SER:CB	2.30	0.53
19:AS:20:LEU:HD22	19:AS:23:ASN:ND2	2.24	0.53
35:BA:70:G:H2'	35:BA:113:G:O2'	2.08	0.53
40:BF:174:VAL:HG12	40:BF:176:LEU:HD11	1.90	0.53
35:BA:331:A:N6	35:BA:1209:G:H2'	2.24	0.53
35:BA:1598:C:O3'	55:BX:35:THR:HG23	2.08	0.53
29:B4:7:PRO:HG2	41:BG:65:GLY:HA2	1.90	0.53
1:AA:405:U:H5''	1:AA:495:A:C2	2.43	0.53
1:AA:618:C:H42	1:AA:623:C:N4	2.04	0.53
45:BN:56:ASN:H	45:BN:125:GLY:N	2.07	0.53
1:AA:1234:C:O4'	1:AA:1364:U:HI'	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:18:G:H2'	36:BB:19:G:H8	1.74	0.53
1:AA:437:U:H5''	4:AD:155:LEU:CD2	2.39	0.53
22:AV:17(A):U:HO2'	22:AV:18:G:H4'	1.72	0.53
47:BP:89:ALA:HA	47:BP:121:LYS:HD3	1.91	0.53
1:AA:1286:A:H1'	1:AA:1287:A:H4'	1.90	0.53
55:BX:24:GLY:H	55:BX:82:GLN:HE22	1.55	0.53
7:AG:24:THR:CA	7:AG:27:ILE:HB	2.37	0.53
1:AA:1398:A:H61	5:AE:22:GLY:N	2.05	0.53
35:BA:496:G:C1'	54:BW:61:ASN:ND2	2.71	0.53
46:BO:17:ARG:NH2	46:BO:99:PHE:HE2	2.07	0.53
35:BA:203:C:C5'	35:BA:204:A:H5''	2.39	0.53
1:AA:458:C:C2'	1:AA:460:G:H5'	2.39	0.53
18:AR:20:ALA:O	18:AR:21:LYS:C	2.47	0.53
24:AY:144:LEU:O	24:AY:179:PHE:CG	2.61	0.52
24:AY:216:ASP:HA	24:AY:224:ALA:HB2	1.86	0.52
24:AY:508:MET:C	24:AY:511:LEU:HB3	2.29	0.52
35:BA:1651:G:H2'	35:BA:1652:A:C8	2.44	0.52
35:BA:1832:C:C4	35:BA:1833:U:C5	2.96	0.52
35:BA:1839:G:H5'	35:BA:1839:G:H8	1.74	0.52
35:BA:2374:C:H2'	35:BA:2375:G:O4'	2.09	0.52
35:BA:820:A:N3	35:BA:943:U:O2'	2.37	0.52
35:BA:983:A:H2'	35:BA:984:A:O4'	2.09	0.52
38:BD:246:PRO:O	38:BD:247:ALA:HB2	2.09	0.52
38:BD:87:ASN:ND2	38:BD:88:ARG:CZ	2.71	0.52
39:BE:45:THR:CG2	39:BE:46:ALA:N	2.72	0.52
35:BA:586:A:H5'	40:BF:89:VAL:HG21	1.91	0.52
45:BN:6:PRO:O	45:BN:9:VAL:CG2	2.58	0.52
49:BR:2:ARG:HG3	49:BR:2:ARG:NH1	2.22	0.52
51:BT:120:ARG:O	51:BT:123:GLN:HG2	2.08	0.52
35:BA:1991:U:C6	35:BA:1991:U:H5''	2.44	0.52
1:AA:664:G:N2	1:AA:742:G:N2	2.56	0.52
53:BV:31:ALA:O	53:BV:61:VAL:CG2	2.54	0.52
2:AB:88:ALA:HB2	2:AB:219:VAL:CG1	2.39	0.52
42:BH:126:PRO:O	42:BH:127:GLU:CB	2.56	0.52
35:BA:2262:U:C4'	35:BA:2328:A:C2	2.86	0.52
35:BA:2603:G:H21	35:BA:2604:U:H1'	1.74	0.52
1:AA:1324:A:OP2	1:AA:1324:A:H8	1.92	0.52
27:B2:56:GLN:O	27:B2:59:ARG:HG3	2.08	0.52
35:BA:85:G:O5'	56:BY:30:VAL:HB	2.08	0.52
40:BF:141:ALA:C	40:BF:143:ALA:H	2.10	0.52
19:AS:49:ILE:O	19:AS:60:VAL:HG12	2.09	0.52
4:AD:59:ARG:CG	4:AD:59:ARG:HH11	2.22	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2850:A:C2	49:BR:61:HIS:CD2	2.98	0.52
29:B4:5:ILE:N	29:B4:5:ILE:HD13	2.23	0.52
41:BG:111:LEU:H	41:BG:112:PRO:HD2	1.73	0.52
41:BG:101:ILE:O	41:BG:104:GLU:HB3	2.08	0.52
1:AA:298:A:H3'	1:AA:299:G:C8	2.44	0.52
1:AA:1505:G:H5''	1:AA:1506:U:OP1	2.09	0.52
1:AA:1265:G:H2'	1:AA:1266:G:H8	1.73	0.52
31:B6:11:LEU:HD13	31:B6:12:GLU:N	2.24	0.52
36:BB:66:A:C6	36:BB:108:U:C4	2.97	0.52
26:B1:44:PRO:HA	35:BA:396:G:O3'	2.09	0.52
41:BG:120:LEU:HD12	41:BG:179:PRO:HD2	1.91	0.52
35:BA:2189:U:H2'	35:BA:2190:G:H4'	1.91	0.52
1:AA:1005:A:H4'	1:AA:1037:C:O2	2.09	0.52
1:AA:960:U:C5	19:AS:78:ARG:HD3	2.44	0.52
35:BA:1930:G:HO2'	35:BA:1968:G:H1	1.38	0.52
28:B3:5:LYS:HD2	28:B3:57:GLU:OE1	2.09	0.52
1:AA:197:A:N6	1:AA:221:C:C4'	2.67	0.52
33:B8:51:ALA:N	33:B8:53:PRO:HD2	2.24	0.52
20:AT:50:GLU:O	20:AT:53:LEU:N	2.42	0.52
1:AA:901:A:H2'	1:AA:902:G:H5'	1.91	0.52
38:BD:2:ALA:C	38:BD:3:VAL:CG2	2.77	0.52
35:BA:2271:G:O2'	35:BA:2272:U:H5'	2.09	0.52
26:B1:54:ALA:CB	26:B1:56:GLN:HE21	2.21	0.52
5:AE:24:ARG:HH11	5:AE:24:ARG:CG	2.21	0.52
35:BA:716:A:H2'	35:BA:717:G:O5'	2.09	0.52
26:B1:29:GLY:O	26:B1:31:GLY:N	2.40	0.52
19:AS:72:GLY:O	19:AS:74:PHE:N	2.42	0.52
24:AY:305:ALA:HA	24:AY:422:GLU:CD	2.29	0.52
24:AY:380:THR:CG2	24:AY:383:GLU:HB2	2.39	0.52
24:AY:260:LEU:CD2	35:BA:2655:G:H5''	2.39	0.52
33:B8:36:LYS:O	33:B8:37:SER:O	2.27	0.52
35:BA:1827:C:OP1	35:BA:1971:A:O2'	2.20	0.52
35:BA:621:A:C2'	35:BA:622:G:H5'	2.32	0.52
32:B7:11:LYS:HE2	35:BA:686:G:H5''	1.91	0.52
35:BA:729:G:H1'	35:BA:763:G:O3'	2.09	0.52
39:BE:27:LEU:HD13	39:BE:180:ASN:O	2.09	0.52
47:BP:23:PRO:HB2	47:BP:33:ARG:HG3	1.91	0.52
35:BA:2822:G:O6	49:BR:4:LEU:HD23	2.08	0.52
52:BU:29:SER:O	52:BU:30:LYS:HD3	2.09	0.52
53:BV:38:LEU:C	53:BV:39:LEU:HD22	2.30	0.52
53:BV:21:ARG:HA	53:BV:92:THR:O	2.09	0.52
1:AA:15:G:C5	1:AA:16:A:N7	2.78	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:868:C:O2'	1:AA:869:G:H5'	2.08	0.52
15:AO:82:ILE:CG2	15:AO:83:GLU:N	2.72	0.52
35:BA:2133:G:H1'	35:BA:2158:A:H61	1.73	0.52
2:AB:11:LEU:O	2:AB:16:HIS:CE1	2.62	0.52
2:AB:80:ILE:N	2:AB:80:ILE:HD12	2.16	0.52
25:B0:27:GLU:HG3	25:B0:69:PHE:CD1	2.44	0.52
57:BZ:10:ARG:HB3	57:BZ:36:LYS:C	2.29	0.52
57:BZ:48:PHE:HZ	57:BZ:74:VAL:HG21	1.74	0.52
48:BQ:20:ALA:H	57:BZ:79:ARG:HH21	1.58	0.52
22:AV:15:G:H3'	22:AV:16:C:H5''	1.91	0.52
22:AV:59:A:O2'	22:AV:60:U:H5'	2.08	0.52
35:BA:2590:A:O3'	38:BD:239:ARG:HG3	2.09	0.52
12:AL:90:VAL:O	12:AL:92:ASP:N	2.42	0.52
1:AA:1188:A:O5'	1:AA:1188:A:H8	1.91	0.52
3:AC:70:VAL:C	3:AC:106:VAL:HG23	2.30	0.52
10:AJ:58:ASP:OD1	10:AJ:58:ASP:N	2.42	0.52
35:BA:880:G:H2'	35:BA:881:G:C8	2.44	0.52
1:AA:357:G:OP1	1:AA:367:U:H5''	2.09	0.52
24:AY:310:LYS:HB2	24:AY:311:HIS:CD2	2.45	0.52
35:BA:482:A:H4'	56:BY:47:LYS:CG	2.40	0.52
40:BF:203:GLN:C	40:BF:205:ARG:N	2.62	0.52
37:BC:29:VAL:HG12	37:BC:32:LEU:HD12	1.92	0.52
37:BC:68:LEU:CD2	37:BC:174:PRO:HB2	2.39	0.52
41:BG:128:ARG:O	41:BG:129:GLY:O	2.26	0.52
20:AT:14:LYS:O	20:AT:16:HIS:N	2.42	0.52
17:AQ:5:VAL:HG13	17:AQ:59:ILE:O	2.09	0.52
31:B6:25:LYS:HZ3	35:BA:2285:C:H41	1.56	0.52
38:BD:125:ILE:CD1	38:BD:137:PRO:HD3	2.34	0.52
1:AA:518:C:C5	1:AA:530:G:C8	2.98	0.52
1:AA:1254:C:H5'	1:AA:1356:G:H4'	1.91	0.52
35:BA:1223:G:N2	35:BA:1226:A:OP2	2.42	0.52
1:AA:1494:G:C5	1:AA:1495:U:C5	2.97	0.52
13:AM:54:VAL:HG12	13:AM:58:GLU:CD	2.30	0.52
49:BR:29:LEU:CD2	49:BR:52:ILE:HD11	2.39	0.52
17:AQ:69:LYS:C	17:AQ:70:ARG:HD2	2.29	0.52
35:BA:2153:G:C2	35:BA:2154:G:H1'	2.43	0.52
35:BA:654(M):C:C2'	35:BA:654(N):G:C8	2.89	0.52
36:BB:115:G:N3	36:BB:116:G:C8	2.77	0.52
35:BA:1683:C:H2'	35:BA:1684:C:H6	1.72	0.52
46:BO:10:VAL:HG22	46:BO:17:ARG:HA	1.91	0.52
1:AA:1258:G:H2'	1:AA:1259:C:H6	1.72	0.52
35:BA:151:C:H2'	35:BA:152:G:H8	1.72	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:116:THR:HG22	13:AM:117:VAL:N	2.24	0.52
24:AY:196:GLY:O	24:AY:197:LYS:CG	2.52	0.52
37:BC:100:ILE:CG2	37:BC:126:LYS:HE3	2.39	0.52
1:AA:1516:G:N1	1:AA:1519:A:OP2	2.41	0.52
35:BA:1248:G:OP1	35:BA:1248:G:H8	1.92	0.52
35:BA:1351:C:H2'	35:BA:1352:U:C6	2.43	0.52
35:BA:2222:G:O4'	38:BD:149:PRO:CG	2.56	0.52
35:BA:2291:U:OP1	35:BA:2381:C:H5'	2.09	0.52
35:BA:2459:A:C8	35:BA:2460:U:C5	2.97	0.52
35:BA:2822:G:O2'	35:BA:2823:A:O5'	2.26	0.52
35:BA:580:C:H2'	35:BA:581:C:C6	2.44	0.52
32:B7:12:ARG:HG3	35:BA:686:G:O6	2.09	0.52
35:BA:963:U:H2'	35:BA:964:C:H6	1.73	0.52
38:BD:147:LEU:CD1	38:BD:155:LEU:HD13	2.40	0.52
38:BD:169:GLU:HG2	38:BD:169:GLU:O	2.07	0.52
38:BD:85:ASP:OD1	38:BD:88:ARG:CD	2.34	0.52
39:BE:38:THR:HG23	39:BE:39:PRO:HD2	1.92	0.52
39:BE:82:ARG:O	39:BE:84:PHE:N	2.42	0.52
45:BN:24:GLY:C	45:BN:26:LEU:H	2.12	0.52
45:BN:68:GLU:HA	45:BN:86:PRO:HB2	1.90	0.52
51:BT:50:ILE:HA	51:BT:99:LEU:HD12	1.92	0.52
52:BU:115:ALA:C	52:BU:117:GLN:N	2.59	0.52
1:AA:1078:U:C5	1:AA:1079:G:C5	2.97	0.52
6:AF:13:ASN:O	6:AF:14:LEU:HD22	2.10	0.52
1:AA:1088:G:H2'	1:AA:1089:G:C8	2.44	0.52
2:AB:103:THR:OG1	2:AB:104:ASN:N	2.43	0.52
35:BA:2244:U:H1'	35:BA:2434:A:C4	2.45	0.52
48:BQ:125:LEU:CD2	48:BQ:125:LEU:H	2.22	0.52
22:AV:68:C:O2	22:AV:68:C:H2'	2.08	0.52
1:AA:1117:G:N2	1:AA:1184:G:C4	2.77	0.52
27:B2:29:LYS:O	27:B2:32:LEU:HB3	2.10	0.52
55:BX:10:ALA:HB1	55:BX:11:PRO:HD2	1.91	0.52
35:BA:1485:G:O2'	35:BA:1486:A:H5'	2.09	0.52
51:BT:128:GLU:C	51:BT:128:GLU:CD	2.68	0.52
29:B4:7:PRO:HD3	41:BG:67:LYS:HE3	1.92	0.52
41:BG:133:LEU:CD1	41:BG:157:ILE:HB	2.39	0.52
40:BF:109:GLY:HA2	40:BF:112:MET:HB3	1.90	0.52
17:AQ:56:VAL:O	17:AQ:57:VAL:HG12	2.08	0.52
17:AQ:59:ILE:HG22	17:AQ:60:ILE:H	1.73	0.52
31:B6:6:ARG:NH1	31:B6:6:ARG:HB3	2.24	0.52
35:BA:1202:C:C2'	35:BA:1203:G:H5'	2.39	0.52
41:BG:180:PHE:C	41:BG:182:LYS:N	2.62	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:16:ARG:NH1	41:BG:28:VAL:CG1	2.73	0.52
20:AT:73:HIS:CB	20:AT:74:LYS:HD3	2.39	0.52
1:AA:1321:C:C3'	1:AA:1322:C:H5''	2.37	0.52
1:AA:1127:G:H1	1:AA:1145:C:H42	1.58	0.52
35:BA:474:G:C6	35:BA:510:C:N4	2.77	0.52
35:BA:1184:G:O2'	35:BA:1185:C:H5'	2.09	0.52
46:BO:100:GLY:O	46:BO:119:PRO:HD2	2.09	0.52
33:B8:49:VAL:HB	33:B8:53:PRO:HD3	1.92	0.52
35:BA:2648:C:H2'	35:BA:2649:U:H6	1.71	0.52
35:BA:1151:G:N2	35:BA:1152:C:O2	2.42	0.52
1:AA:381:C:H2'	1:AA:382:A:H8	1.71	0.52
45:BN:75:TYR:HA	45:BN:82:LEU:HA	1.90	0.52
35:BA:289:A:H2'	35:BA:290:G:C8	2.44	0.52
10:AJ:18:ALA:C	10:AJ:20:ALA:H	2.13	0.52
35:BA:2338:G:O5'	35:BA:2338:G:C8	2.62	0.52
41:BG:166:ASP:O	41:BG:167:GLU:C	2.46	0.52
1:AA:992:U:O2'	1:AA:993:G:P	2.67	0.52
35:BA:718:A:H2'	35:BA:719:C:H5'	1.90	0.52
35:BA:653:A:N3	35:BA:653:A:H2'	2.23	0.52
57:BZ:154:ASP:N	57:BZ:154:ASP:OD1	2.42	0.52
24:AY:171:TRP:O	24:AY:182:VAL:HG13	2.08	0.52
24:AY:169:ILE:O	24:AY:185:LEU:N	2.43	0.52
24:AY:413:LEU:O	24:AY:417:VAL:CG2	2.57	0.52
1:AA:1230:C:H2'	1:AA:1231:G:H8	1.73	0.52
35:BA:1892:C:C3'	35:BA:1893:C:C5'	2.87	0.52
35:BA:2366:A:N7	35:BA:2367:G:C5	2.77	0.52
35:BA:2734:A:H62	35:BA:2770:G:N2	2.06	0.52
35:BA:467:G:H2'	35:BA:468:G:H8	1.74	0.52
38:BD:169:GLU:OE1	38:BD:184:LYS:CD	2.53	0.52
39:BE:120:TRP:O	39:BE:121:ASN:CB	2.58	0.52
39:BE:116:VAL:HG21	39:BE:122:PHE:CD2	2.44	0.52
39:BE:198:VAL:CG1	39:BE:199:ARG:H	2.21	0.52
45:BN:68:GLU:H	45:BN:87:LEU:HB3	1.75	0.52
1:AA:575:G:C4'	1:AA:576:G:O5'	2.55	0.52
1:AA:22:G:H5'	1:AA:885:G:O4'	2.09	0.52
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.41	0.52
1:AA:1091:U:O2	1:AA:1095:U:C2	2.62	0.52
2:AB:200:ILE:HD12	2:AB:200:ILE:N	2.25	0.52
36:BB:93:G:O2'	36:BB:94:C:H5'	2.10	0.52
48:BQ:31:ASP:C	48:BQ:32:TYR:CD1	2.83	0.52
22:AV:49:G:N2	22:AV:50:U:C1'	2.72	0.52
1:AA:1191:A:OP2	3:AC:4:LYS:NZ	2.41	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1192:C:H2'	1:AA:1193:G:O4'	2.09	0.52
19:AS:43:GLU:O	19:AS:45:VAL:N	2.42	0.52
35:BA:886:C:C2	35:BA:887:A:C8	2.97	0.52
27:B2:16:LEU:O	27:B2:21:LEU:HG	2.08	0.52
37:BC:175:VAL:HG13	37:BC:188:ASN:HB2	1.90	0.52
35:BA:2305:A:C2'	35:BA:2306:C:O5'	2.58	0.52
35:BA:2833:G:C3'	35:BA:2834:G:C5'	2.72	0.52
29:B4:9:LEU:HD13	29:B4:26:SER:O	2.09	0.52
1:AA:8:A:N6	4:AD:209:ARG:OXT	2.43	0.52
13:AM:13:LYS:O	13:AM:14:ARG:C	2.48	0.52
26:B1:46:LEU:HD13	26:B1:62:VAL:O	2.09	0.52
35:BA:1417:C:C2'	35:BA:1418:G:H5'	2.39	0.52
20:AT:74:LYS:CG	20:AT:75:ASN:H	2.22	0.52
24:AY:483:GLU:HA	24:AY:486:LYS:HE3	1.91	0.52
54:BW:107:LEU:H	54:BW:107:LEU:HD12	1.73	0.52
56:BY:86:ARG:HB3	56:BY:88:LYS:CE	2.36	0.52
1:AA:436:C:O2'	4:AD:157:LEU:HD11	2.09	0.52
13:AM:73:GLU:OE1	13:AM:73:GLU:O	2.27	0.52
2:AB:194:PRO:O	2:AB:196:LEU:N	2.43	0.52
1:AA:918:A:C5	1:AA:919:A:C5	2.98	0.52
35:BA:1441:G:H4'	35:BA:1628:G:OP1	2.09	0.52
1:AA:1169:A:O5'	1:AA:1169:A:H8	1.92	0.52
12:AL:75:HIS:CD2	12:AL:77:LEU:H	2.27	0.52
35:BA:1053:C:O2'	35:BA:1054:A:H5'	2.09	0.52
35:BA:1230:C:H2'	35:BA:1231:G:C8	2.44	0.52
49:BR:43:GLU:OE1	49:BR:43:GLU:HA	2.09	0.52
44:BK:30:UNK:O	44:BK:31:UNK:CB	2.57	0.52
24:AY:222:ASP:O	24:AY:226:GLN:N	2.42	0.52
24:AY:29:ILE:HG12	24:AY:259:ALA:HB3	1.90	0.52
24:AY:78:PRO:HB2	24:AY:83:LEU:CD2	2.39	0.52
1:AA:1406:U:O2	1:AA:1518:A:C1'	2.55	0.52
32:B7:12:ARG:HA	35:BA:686:G:O6	2.10	0.52
35:BA:946:G:C2'	35:BA:947:G:H5'	2.40	0.52
38:BD:108:PRO:HG3	38:BD:143:HIS:NE2	2.25	0.52
35:BA:1799:G:O6	38:BD:179:SER:CB	2.57	0.52
38:BD:80:ALA:HB3	38:BD:94:LEU:CD1	2.40	0.52
39:BE:117:MET:H	39:BE:122:PHE:HB2	1.73	0.52
40:BF:97:TYR:O	40:BF:98:SER:O	2.26	0.52
35:BA:2684:U:O2'	46:BO:68:GLU:HG3	2.09	0.52
51:BT:65:LYS:CE	51:BT:66:VAL:H	2.22	0.52
52:BU:65:ILE:HG23	52:BU:106:PHE:HZ	1.75	0.52
52:BU:92:ARG:CB	53:BV:11:GLN:NE2	2.72	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:92:ARG:C	52:BU:94:ASN:N	2.62	0.52
53:BV:72:VAL:O	53:BV:85:LYS:HB2	2.10	0.52
35:BA:1951:U:O2	35:BA:1954:G:C8	2.62	0.52
6:AF:45:LEU:CD1	6:AF:59:TYR:HD1	2.23	0.52
15:AO:12:ILE:HD11	15:AO:31:LEU:HD21	1.91	0.52
1:AA:754:C:C4'	15:AO:72:ARG:NH1	2.66	0.52
18:AR:50:ILE:HD11	18:AR:70:ILE:HG21	1.90	0.52
34:B9:10:ILE:HD13	34:B9:32:HIS:HB3	1.91	0.52
2:AB:170:GLU:C	2:AB:172:ILE:H	2.13	0.52
2:AB:219:VAL:O	2:AB:222:ILE:HG12	2.10	0.52
35:BA:2787:C:H1'	39:BE:61:ARG:HD3	1.91	0.52
25:B0:56:ASP:O	25:B0:57:PHE:HB2	2.08	0.52
35:BA:2275:C:H5'	35:BA:2275:C:C6	2.45	0.52
35:BA:2386:C:H2'	35:BA:2387:U:C6	2.45	0.52
35:BA:906:G:C6	35:BA:907:U:C5	2.97	0.52
1:AA:1317:C:H2'	1:AA:1318:A:H5'	1.91	0.52
3:AC:71:ALA:O	3:AC:73:PRO:CD	2.57	0.52
10:AJ:52:GLY:O	14:AN:41:ARG:NH2	2.33	0.52
35:BA:886:C:HO2'	35:BA:887:A:P	2.32	0.52
27:B2:2:LYS:N	35:BA:98:G:P	2.83	0.52
40:BF:124:LEU:O	40:BF:193:VAL:HA	2.10	0.52
19:AS:75:ALA:O	19:AS:76:PRO:O	2.28	0.52
4:AD:15:GLU:OE1	4:AD:59:ARG:NE	2.43	0.52
37:BC:201:PRO:HD2	37:BC:208:PHE:CE1	2.44	0.52
37:BC:47:LEU:HD23	37:BC:208:PHE:CE1	2.42	0.52
15:AO:5:LYS:HG2	15:AO:8:LYS:HD2	1.91	0.52
7:AG:104:LEU:O	7:AG:107:ALA:CB	2.58	0.52
35:BA:1543:C:O5'	35:BA:1543:C:H6	1.93	0.52
50:BS:28:VAL:CG1	50:BS:29:PHE:H	2.08	0.52
1:AA:1506:U:O4	1:AA:1521:G:H5''	2.10	0.52
38:BD:120:GLY:O	38:BD:123:ALA:HB2	2.08	0.52
12:AL:45:PRO:CG	12:AL:51:ALA:HB3	2.29	0.52
35:BA:1036:G:N2	35:BA:1119:C:O2	2.43	0.52
26:B1:45:ASN:ND2	35:BA:2230:G:H1'	2.24	0.52
41:BG:175:LEU:O	41:BG:176:LEU:HB2	2.09	0.52
35:BA:433:C:C2	35:BA:434:U:C5	2.97	0.52
20:AT:73:HIS:ND1	20:AT:74:LYS:HD3	2.24	0.52
9:AI:52:ALA:CB	9:AI:95:LYS:NZ	2.73	0.52
56:BY:95:LYS:HA	56:BY:101:LYS:CA	2.40	0.52
35:BA:1570:A:O4'	38:BD:38:LYS:HD3	2.09	0.52
27:B2:41:ILE:CG1	27:B2:42:GLY:N	2.72	0.52
1:AA:502:G:O5'	1:AA:502:G:H8	1.93	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1243:C:H2'	1:AA:1244:C:C6	2.45	0.52
35:BA:2128:C:O2'	35:BA:2129:C:H5'	2.10	0.52
1:AA:787:A:H2'	1:AA:788:U:H5'	1.91	0.52
36:BB:111:G:H2'	36:BB:112:U:H5'	1.91	0.52
46:BO:113:LYS:HB3	46:BO:113:LYS:NZ	2.24	0.52
35:BA:237:C:O2'	35:BA:238:C:H5'	2.09	0.52
8:AH:40:ALA:HA	8:AH:45:ILE:HG13	1.90	0.52
35:BA:321:G:OP1	40:BF:135:LYS:HD2	2.10	0.52
12:AL:55:VAL:HG22	12:AL:56:ALA:N	2.24	0.52
1:AA:52:G:N2	1:AA:360:A:H1'	2.24	0.52
24:AY:121:ASP:O	24:AY:125:LYS:HB2	2.10	0.52
24:AY:135:THR:O	24:AY:137:ILE:CG1	2.57	0.52
24:AY:194:GLN:HB2	24:AY:202:GLN:CB	2.40	0.52
24:AY:303:ILE:CD1	24:AY:375:ILE:CD1	2.87	0.52
24:AY:68:ILE:HD13	24:AY:92:HIS:NE2	2.25	0.52
35:BA:1614:A:H61	54:BW:87:PRO:CA	2.15	0.52
35:BA:2461:C:H1'	35:BA:2492:U:C4	2.44	0.52
35:BA:2615:U:H2'	35:BA:2616:C:H6	1.75	0.52
35:BA:2777:G:C4'	35:BA:2778:A:H5'	2.40	0.52
35:BA:634:C:H2'	35:BA:635:C:C6	2.44	0.52
35:BA:674:G:OP1	40:BF:76:GLY:HA3	2.10	0.52
35:BA:819:A:C8	35:BA:1188:U:O4	2.62	0.52
38:BD:17:THR:CG2	38:BD:18:VAL:N	2.44	0.52
38:BD:213:ARG:HH12	38:BD:219:PRO:CG	2.22	0.52
38:BD:35:LYS:HG2	38:BD:63:ARG:HG3	1.88	0.52
38:BD:6:PHE:CE1	38:BD:13:ARG:NH2	2.70	0.52
39:BE:35:GLN:NE2	39:BE:36:ARG:O	2.29	0.52
47:BP:96:THR:C	47:BP:97:PRO:O	2.45	0.52
51:BT:29:ARG:CD	51:BT:30:VAL:H	2.22	0.52
51:BT:50:ILE:HG23	51:BT:99:LEU:HD12	1.92	0.52
52:BU:79:PHE:HE1	52:BU:83:LEU:HD21	1.75	0.52
52:BU:88:ILE:CG1	52:BU:88:ILE:O	2.57	0.52
53:BV:82:ARG:HD2	53:BV:82:ARG:N	2.24	0.52
35:BA:1663:C:N3	35:BA:1992:G:N7	2.58	0.52
46:BO:4:PRO:O	46:BO:5:GLN:CB	2.56	0.52
1:AA:753:A:O4'	1:AA:754:C:N3	2.42	0.52
6:AF:22:GLU:O	6:AF:26:ILE:HB	2.09	0.52
8:AH:33:GLU:O	8:AH:34:GLU:C	2.48	0.52
1:AA:246:A:O3'	1:AA:247:G:C4'	2.58	0.52
1:AA:907:A:C5	1:AA:908:A:N7	2.78	0.52
34:B9:10:ILE:O	34:B9:11:CYS:CB	2.57	0.52
57:BZ:152:ALA:O	57:BZ:155:LEU:CD2	2.56	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:37:LEU:O	48:BQ:99:PRO:HB3	2.09	0.52
57:BZ:102:LEU:HD21	57:BZ:124:ILE:CD1	2.31	0.52
57:BZ:102:LEU:HB2	57:BZ:122:ARG:C	2.29	0.52
57:BZ:24:LEU:HD13	57:BZ:44:PHE:HD2	1.74	0.52
57:BZ:29:TYR:O	57:BZ:90:VAL:HG23	2.09	0.52
12:AL:43:VAL:O	12:AL:53:ARG:N	2.42	0.52
54:BW:76:VAL:O	54:BW:76:VAL:HG13	2.10	0.52
1:AA:1179:A:C2'	1:AA:1180:A:O5'	2.58	0.52
3:AC:113:ALA:N	3:AC:202:ILE:HD12	2.25	0.52
35:BA:481:G:OP2	56:BY:47:LYS:HD3	2.09	0.52
55:BX:12:VAL:HG22	55:BX:13:LEU:H	1.72	0.52
40:BF:7:TYR:HB3	40:BF:16:GLY:C	2.30	0.52
4:AD:100:ARG:HB3	4:AD:103:ASN:CB	2.40	0.52
37:BC:175:VAL:CG2	37:BC:189:ILE:HA	2.39	0.52
35:BA:870:A:C2	35:BA:871:U:H1'	2.44	0.52
35:BA:872:A:H2'	35:BA:873:G:C8	2.43	0.52
1:AA:691:G:H2'	1:AA:692:U:C6	2.44	0.52
54:BW:25:ARG:HA	54:BW:71:VAL:CB	2.39	0.52
35:BA:271(M):G:C2'	35:BA:271(N):U:H5''	2.39	0.52
5:AE:94:ALA:HB1	5:AE:98:THR:CB	2.39	0.52
8:AH:106:GLY:C	8:AH:108:GLY:H	2.13	0.52
36:BB:69:G:N2	36:BB:70:C:H1'	2.25	0.52
50:BS:89:ARG:CG	50:BS:92:TYR:HB3	2.38	0.52
35:BA:2147:G:O2'	35:BA:2148:G:H5'	2.09	0.52
49:BR:73:VAL:O	49:BR:76:VAL:HG12	2.10	0.52
56:BY:95:LYS:HA	56:BY:101:LYS:C	2.30	0.52
20:AT:61:SER:OG	20:AT:62:LEU:N	2.38	0.52
4:AD:159:ARG:CG	4:AD:159:ARG:HH11	2.22	0.52
33:B8:51:ALA:H	33:B8:53:PRO:HD2	1.73	0.52
9:AI:17:VAL:HG11	9:AI:81:ILE:HD13	1.92	0.52
35:BA:2154:G:C6	35:BA:2155:G:N7	2.78	0.52
20:AT:53:LEU:HD11	20:AT:92:LEU:CD1	2.39	0.52
1:AA:841:U:O2'	1:AA:848:C:H5'	2.10	0.52
26:B1:58:ILE:HG23	26:B1:58:ILE:O	2.08	0.52
1:AA:945:G:C2	1:AA:1337:G:N2	2.77	0.52
1:AA:652:U:O4	1:AA:752:G:O2'	2.23	0.52
35:BA:1881:C:H2'	35:BA:1881:C:O2	2.10	0.52
1:AA:547:A:O2'	1:AA:548:G:OP2	2.28	0.52
1:AA:1055:A:C5	1:AA:1206:G:C2	2.98	0.52
2:AB:79:ASP:OD1	2:AB:79:ASP:N	2.42	0.52
49:BR:84:ALA:N	49:BR:85:PRO:CD	2.73	0.52
24:AY:177:LYS:NZ	42:BH:110:SER:HB3	2.24	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:74:VAL:HG13	24:AY:74:VAL:O	2.10	0.52
1:AA:1406:U:O2'	1:AA:1407:C:H5'	2.09	0.52
30:B5:6:VAL:O	35:BA:2615:U:C4	2.62	0.52
35:BA:1198:U:H2'	35:BA:1199:U:C6	2.45	0.52
35:BA:1657:C:H2'	35:BA:1658:C:C6	2.45	0.52
35:BA:2011:U:C2'	35:BA:2012:G:H5'	2.40	0.52
35:BA:2367:G:H2'	35:BA:2368:C:H6	1.75	0.52
35:BA:2681:C:H5	35:BA:2727:G:N2	2.08	0.52
35:BA:636:G:H2'	47:BP:115:LEU:CD1	2.34	0.52
35:BA:771:G:C2	35:BA:772:C:C5	2.97	0.52
38:BD:44:ASN:HB3	38:BD:49:ILE:HA	1.92	0.52
39:BE:46:ALA:O	39:BE:84:PHE:O	2.28	0.52
39:BE:93:VAL:HG11	39:BE:182:LEU:HD13	1.90	0.52
51:BT:72:VAL:O	51:BT:73:GLU:HG3	2.09	0.52
52:BU:62:ILE:HG23	52:BU:76:TYR:CE2	2.45	0.52
53:BV:39:LEU:CB	53:BV:47:VAL:HG21	2.31	0.52
35:BA:565:C:P	53:BV:78:LYS:H	2.32	0.52
1:AA:669:U:H2'	1:AA:670:G:H8	1.74	0.52
1:AA:597:G:N2	8:AH:94:TYR:HE2	2.08	0.52
18:AR:22:VAL:CG1	18:AR:43:PHE:CE1	2.93	0.52
18:AR:70:ILE:O	18:AR:73:ALA:HB3	2.10	0.52
53:BV:32:THR:HG22	53:BV:33:VAL:H	1.75	0.52
35:BA:955:C:C5	35:BA:956:G:N7	2.77	0.52
48:BQ:109:VAL:CG1	48:BQ:113:GLN:HB2	2.39	0.52
57:BZ:128:VAL:HG22	57:BZ:129:SER:N	2.25	0.52
35:BA:1785:A:H4'	35:BA:1982:C:H1'	1.92	0.52
1:AA:1119:C:H6	1:AA:1119:C:O5'	1.93	0.52
14:AN:50:LYS:C	14:AN:52:GLN:N	2.59	0.52
24:AY:312:ARG:HH12	24:AY:370:HIS:HB3	1.73	0.52
27:B2:35:LEU:HD11	27:B2:50:ILE:CD1	2.39	0.52
40:BF:159:GLY:CA	40:BF:164:ARG:HH21	2.20	0.52
44:BK:7:UNK:O	44:BK:8:UNK:CB	2.55	0.52
4:AD:173:TRP:HB3	4:AD:187:ARG:NH2	2.25	0.52
4:AD:58:LEU:HD13	4:AD:62:GLN:HG3	1.91	0.52
1:AA:687:A:HO2'	1:AA:688:G:P	2.32	0.52
1:AA:660:G:C2	1:AA:746:A:C2	2.97	0.52
1:AA:1240:U:OP1	7:AG:116:ALA:HB2	2.10	0.52
29:B4:22:ILE:HG22	29:B4:24:THR:HG23	1.91	0.52
1:AA:1435:G:H2'	1:AA:1436:U:C5	2.45	0.52
31:B6:26:ASN:O	31:B6:27:LYS:HB2	2.09	0.52
31:B6:28:ARG:CA	31:B6:32:ASN:HD22	2.22	0.52
6:AF:97:PHE:O	18:AR:31:LEU:HD23	2.08	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:15:VAL:O	41:BG:19:LEU:HG	2.10	0.52
41:BG:22:ARG:HD2	41:BG:23:PHE:CE1	2.44	0.52
35:BA:2180:U:C6	35:BA:2181:G:N7	2.77	0.52
39:BE:74:PRO:O	39:BE:75:VAL:C	2.48	0.52
54:BW:72:LYS:CD	54:BW:108:GLY:HA3	2.40	0.52
1:AA:1375:A:C4	1:AA:1376:U:C6	2.98	0.52
35:BA:81:G:H3'	35:BA:82:G:C8	2.45	0.52
54:BW:66:GLU:C	54:BW:68:ARG:H	2.13	0.52
35:BA:2732:G:O2'	35:BA:2733:A:H5'	2.10	0.52
16:AP:6:LEU:HD23	16:AP:17:TYR:CG	2.43	0.52
16:AP:5:ARG:HE	16:AP:22:THR:HG23	1.73	0.52
1:AA:895:G:O2'	1:AA:896:C:H5'	2.09	0.52
22:AV:26:G:H2'	22:AV:27:U:OP2	2.10	0.52
35:BA:68:G:C6	35:BA:69:C:C4	2.98	0.52
7:AG:27:ILE:O	7:AG:27:ILE:HG22	2.09	0.52
47:BP:147:LEU:O	47:BP:148:LEU:CB	2.57	0.52
35:BA:177:G:H3'	35:BA:178:G:C8	2.45	0.52
26:B1:53:VAL:O	26:B1:54:ALA:CB	2.57	0.52
1:AA:413:G:N2	1:AA:428:G:H1'	2.24	0.52
17:AQ:13:ASP:C	17:AQ:15:MET:N	2.63	0.52
51:BT:83:ILE:O	51:BT:84:GLN:C	2.48	0.52
17:AQ:81:ARG:C	17:AQ:83:ASP:H	2.12	0.52
1:AA:957:U:O5'	1:AA:957:U:H6	1.92	0.52
1:AA:408:A:H2'	1:AA:409:G:C8	2.44	0.52
32:B7:35:ARG:HH12	32:B7:42:LEU:HD11	1.74	0.52
1:AA:446:G:O2'	1:AA:447:G:H5'	2.09	0.52
35:BA:38:A:H5'	40:BF:50:SER:OG	2.09	0.52
24:AY:168:PRO:CB	24:AY:171:TRP:CE2	2.92	0.52
24:AY:284:THR:HG22	24:AY:287:ARG:H	1.75	0.52
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.92	0.52
30:B5:50:GLY:HA3	30:B5:56:LYS:HD3	1.91	0.52
38:BD:212:SER:O	38:BD:217:ARG:HB2	2.09	0.52
47:BP:105:LEU:HD12	47:BP:105:LEU:N	2.25	0.52
51:BT:22:PHE:HE2	51:BT:85:LYS:CE	2.22	0.52
52:BU:15:LYS:CA	52:BU:18:LEU:HD23	2.31	0.52
1:AA:664:G:N2	1:AA:742:G:C2	2.77	0.52
1:AA:673:G:N2	1:AA:674:G:C2	2.78	0.52
1:AA:834:C:OP1	18:AR:60:ALA:HB2	2.09	0.52
1:AA:244:U:H4'	1:AA:245:C:C5'	2.40	0.52
2:AB:8:LYS:HZ1	2:AB:217:ARG:NH1	2.08	0.52
2:AB:52:GLU:O	2:AB:56:ARG:HG3	2.09	0.52
1:AA:1189:C:O3'	3:AC:5:ILE:CD1	2.57	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1057:G:O3'	3:AC:197:GLY:HA3	2.09	0.52
3:AC:34:LEU:CD2	3:AC:38:ARG:HD2	2.39	0.52
40:BF:174:VAL:HG12	40:BF:176:LEU:CD1	2.40	0.52
4:AD:98:GLU:C	4:AD:100:ARG:H	2.13	0.52
37:BC:177:LYS:O	37:BC:185:LEU:HD21	2.09	0.52
7:AG:52:GLU:O	7:AG:53:LYS:C	2.48	0.52
31:B6:26:ASN:ND2	31:B6:32:ASN:HD21	2.04	0.52
35:BA:2283:C:C5	35:BA:2389:G:C4	2.98	0.52
36:BB:102:A:N3	36:BB:102:A:H2'	2.25	0.52
2:AB:109:SER:O	2:AB:113:HIS:CE1	2.63	0.52
1:AA:527:G:N2	1:AA:528:C:C2	2.78	0.52
41:BG:52:ILE:O	41:BG:53:LEU:HB2	2.10	0.52
35:BA:851:U:H3	35:BA:926:A:H61	1.57	0.52
51:BT:11:GLU:O	51:BT:13:ARG:N	2.37	0.52
17:AQ:92:ARG:HA	17:AQ:95:TYR:HD2	1.71	0.52
56:BY:88:LYS:O	56:BY:89:PHE:HB2	2.09	0.52
13:AM:57:ARG:O	13:AM:60:VAL:HB	2.10	0.52
13:AM:8:GLU:OE1	13:AM:67:GLU:HG2	2.10	0.52
49:BR:27:SER:C	49:BR:30:THR:HG22	2.30	0.52
7:AG:136:LYS:O	7:AG:138:LYS:N	2.43	0.52
35:BA:8:A:H2'	35:BA:9:U:H5	1.73	0.52
1:AA:895:G:N1	1:AA:904:C:O2	2.32	0.52
16:AP:2:VAL:O	16:AP:2:VAL:HG13	2.09	0.52
26:B1:94:LEU:HD13	26:B1:94:LEU:H	1.73	0.52
19:AS:53:ASN:OD1	19:AS:55:LYS:HB3	2.09	0.52
28:B3:19:GLN:HG2	28:B3:49:LYS:HE3	1.90	0.52
11:AK:34:ASP:HB2	11:AK:35:PRO:HD2	1.91	0.52
35:BA:2097:C:O2'	35:BA:2098:U:H5'	2.09	0.52
38:BD:109:ASP:N	38:BD:195:ALA:O	2.42	0.52
46:BO:105:GLU:HA	46:BO:108:GLU:OE1	2.10	0.52
1:AA:492:G:O2'	1:AA:493:G:H5'	2.10	0.52
35:BA:2551:C:H2'	35:BA:2552:U:O4'	2.10	0.52
35:BA:1062:G:H1'	44:BK:73:UNK:CB	2.40	0.52
24:AY:138:LEU:CD2	24:AY:253:PRO:HG2	2.40	0.52
24:AY:146:ARG:HA	24:AY:176:GLY:HA2	1.91	0.52
24:AY:320:VAL:HG11	24:AY:359:ALA:O	2.10	0.52
24:AY:146:ARG:NE	35:BA:2656:U:H1'	2.24	0.52
35:BA:2046:G:C2	35:BA:2047:U:C2	2.98	0.52
30:B5:8:LYS:HB2	35:BA:2054:A:C2	2.44	0.52
35:BA:748:G:O6	35:BA:751:A:H4'	2.09	0.52
35:BA:976:C:O2'	35:BA:977:G:H5'	2.09	0.52
39:BE:33:VAL:HG23	39:BE:47:VAL:HG13	1.91	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BP:106:LEU:O	47:BP:107:LYS:CG	2.58	0.52
47:BP:24:GLY:HA3	47:BP:33:ARG:NH1	2.25	0.52
35:BA:1286:A:OP1	49:BR:105:ARG:CZ	2.58	0.52
52:BU:26:GLY:C	52:BU:28:ARG:N	2.63	0.52
52:BU:68:ALA:O	52:BU:71:GLN:HB3	2.10	0.52
6:AF:28:ARG:O	6:AF:32:ASN:HB2	2.10	0.52
15:AO:79:ARG:O	15:AO:82:ILE:HG22	2.10	0.52
18:AR:76:LEU:C	18:AR:78:LEU:N	2.63	0.52
2:AB:77:ALA:CA	2:AB:80:ILE:HD13	2.39	0.52
2:AB:97:TRP:HH2	2:AB:176:GLU:CG	2.22	0.52
48:BQ:58:PHE:HZ	48:BQ:64:ILE:HD11	1.75	0.52
57:BZ:48:PHE:C	57:BZ:50:GLN:N	2.63	0.52
35:BA:1783:A:O2'	35:BA:2607:G:O2'	2.06	0.52
12:AL:34:ARG:HD3	12:AL:105:TYR:HH	1.71	0.52
14:AN:39:LEU:HD12	14:AN:44:LEU:HD12	1.91	0.52
19:AS:35:SER:O	19:AS:38:SER:OG	2.22	0.52
35:BA:1057:A:O2'	35:BA:1058:G:H5'	2.10	0.52
35:BA:1060:U:H4'	35:BA:1061:U:C5	2.45	0.52
42:BH:121:ILE:CG2	42:BH:122:THR:N	2.72	0.52
11:AK:90:GLY:O	11:AK:94:ALA:N	2.43	0.52
37:BC:25:ALA:CB	37:BC:224:ILE:HG22	2.40	0.52
40:BF:110:LEU:HD12	40:BF:206:ILE:HD11	1.92	0.52
35:BA:2280:G:N1	35:BA:2281:C:C4	2.77	0.52
38:BD:77:ALA:HA	38:BD:97:TYR:HA	1.91	0.52
39:BE:128:SER:O	39:BE:129:HIS:HB2	2.10	0.52
28:B3:8:LEU:CD2	28:B3:8:LEU:C	2.79	0.52
24:AY:513:LEU:O	24:AY:517:ARG:HB2	2.09	0.52
1:AA:66:G:N2	1:AA:172:A:H2	2.08	0.52
1:AA:64:G:C2	1:AA:67:C:N4	2.77	0.52
56:BY:90:LEU:O	56:BY:90:LEU:HG	2.10	0.52
22:AV:34:C:C6	22:AV:34:C:O5'	2.63	0.52
7:AG:145:ALA:O	7:AG:147:ALA:N	2.43	0.52
7:AG:26:PHE:CZ	7:AG:124:LEU:HD11	2.45	0.52
31:B6:20:ASN:OD1	31:B6:21:TYR:N	2.43	0.52
35:BA:206:U:H2'	35:BA:207:A:H8	1.74	0.52
12:AL:113:ARG:HG3	12:AL:114:LYS:H	1.75	0.52
1:AA:1242:C:H2'	1:AA:1243:C:C6	2.45	0.52
35:BA:1108:U:OP1	43:BJ:80:UNK:HA	2.09	0.52
4:AD:116:GLN:HG2	4:AD:116:GLN:O	2.08	0.52
35:BA:223:A:N1	35:BA:407:G:O2'	2.39	0.52
25:B0:31:VAL:HG22	25:B0:65:GLY:O	2.10	0.52
24:AY:29:ILE:O	24:AY:32:LYS:N	2.43	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:7:LEU:HA	24:AY:10:VAL:CG2	2.40	0.52
1:AA:1409:C:C2	1:AA:1410:G:N7	2.78	0.52
30:B5:17:ASP:HA	30:B5:20:ARG:HD2	1.92	0.52
35:BA:1000:A:C6	35:BA:1155:A:C8	2.98	0.52
35:BA:1308:A:C6	35:BA:1309:G:C2	2.98	0.52
35:BA:2370:G:H2'	35:BA:2371:G:C8	2.45	0.52
35:BA:388:G:H2'	35:BA:390:A:N7	2.25	0.52
35:BA:388:G:C4	35:BA:390:A:C6	2.98	0.52
35:BA:586:A:OP1	40:BF:89:VAL:HG21	2.10	0.52
35:BA:630:G:N2	35:BA:634:C:N3	2.58	0.52
35:BA:773:U:H4'	38:BD:47:GLY:HA3	1.91	0.52
35:BA:1799:G:N2	38:BD:155:LEU:HG	2.24	0.52
51:BT:53:ARG:HH11	51:BT:53:ARG:CB	2.23	0.52
2:AB:55:PHE:O	2:AB:56:ARG:C	2.49	0.52
2:AB:61:LEU:N	2:AB:64:ARG:NH2	2.57	0.52
35:BA:861:A:C2'	35:BA:862:G:H5'	2.40	0.52
13:AM:97:PRO:N	13:AM:110:ARG:HD3	2.24	0.52
1:AA:979:C:H41	1:AA:1360:A:N6	2.08	0.52
10:AJ:62:HIS:HB2	14:AN:59:ALA:HB3	1.91	0.52
35:BA:480:A:H3'	35:BA:481:G:H5''	1.91	0.52
35:BA:479:A:HO2'	35:BA:481:G:H8	1.56	0.52
35:BA:1070:A:H62	35:BA:1096:A:H2'	1.73	0.52
35:BA:2319:G:H1'	35:BA:2320:A:N7	2.25	0.52
35:BA:1598:C:H5'	55:BX:36:LYS:CG	2.39	0.52
37:BC:65:PRO:HD2	37:BC:188:ASN:HA	1.90	0.52
35:BA:1543:C:C3'	35:BA:1544:A:C5'	2.81	0.52
41:BG:125:PHE:CD2	41:BG:131:TYR:CD1	2.97	0.52
35:BA:2280:G:O2'	35:BA:2281:C:H5'	2.10	0.52
1:AA:1393:U:C5'	1:AA:1502:A:OP1	2.58	0.52
5:AE:70:PRO:O	5:AE:72:GLN:HG3	2.10	0.52
50:BS:97:ARG:O	50:BS:99:LYS:HG2	2.09	0.52
35:BA:2747:G:C2	35:BA:2756:U:C5	2.96	0.52
35:BA:1169:G:H1	35:BA:1180:C:N4	2.08	0.52
42:BH:16:SER:O	42:BH:26:VAL:HG23	2.10	0.52
39:BE:51:PHE:O	39:BE:52:LEU:C	2.47	0.52
3:AC:6:HIS:CE1	3:AC:184:TYR:CE2	2.98	0.52
1:AA:169:C:C2'	1:AA:170:U:H5'	2.39	0.52
56:BY:2:ARG:HG2	56:BY:2:ARG:HH11	1.73	0.52
1:AA:309:G:O2'	1:AA:310:G:H5'	2.09	0.52
1:AA:838:G:C6	1:AA:840:C:H1'	2.44	0.52
48:BQ:68:ILE:HD13	48:BQ:103:MET:HB3	1.92	0.52
53:BV:2:PHE:CE1	53:BV:13:ARG:HD2	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:147:ASP:HA	5:AE:150:ARG:NH1	2.24	0.52
35:BA:2707:G:H2'	35:BA:2708:G:H8	1.72	0.52
32:B7:32:LYS:HE2	35:BA:180:G:P	2.50	0.52
45:BN:10:GLU:HG3	45:BN:11:PRO:HD2	1.92	0.52
35:BA:1173:G:H3'	35:BA:1174:A:C5'	2.40	0.52
35:BA:230:U:O2'	35:BA:231:C:H5'	2.10	0.52
1:AA:52:G:C6	1:AA:360:A:C2	2.98	0.51
24:AY:225:GLN:O	24:AY:228:ARG:CB	2.58	0.51
24:AY:315:VAL:CG1	24:AY:316:ALA:H	2.22	0.51
24:AY:386:LYS:HD2	24:AY:387:PHE:N	2.26	0.51
1:AA:1230:C:O2'	1:AA:1231:G:H5'	2.10	0.51
30:B5:51:TYR:HD2	30:B5:52:TYR:CE1	2.28	0.51
33:B8:35:GLN:O	33:B8:36:LYS:HG3	2.10	0.51
35:BA:1139:G:N3	35:BA:1143:A:H2	2.08	0.51
35:BA:770:G:O2'	35:BA:1354:A:N1	2.36	0.51
35:BA:2048:G:H1'	35:BA:2823:A:N6	2.25	0.51
35:BA:2461:C:H2'	35:BA:2462:U:H6	1.74	0.51
35:BA:2572:A:C2	39:BE:144:ARG:NH1	2.78	0.51
35:BA:2687:U:O2'	35:BA:2688:U:H5'	2.10	0.51
32:B7:5:TRP:CH2	35:BA:464:U:H4'	2.45	0.51
33:B8:4:MET:HE2	35:BA:592:G:H21	1.75	0.51
35:BA:627:A:O2'	35:BA:628:G:C8	2.62	0.51
35:BA:636:G:C8	47:BP:113:LYS:NZ	2.74	0.51
39:BE:167:VAL:CG1	39:BE:188:VAL:HA	2.33	0.51
35:BA:586:A:OP1	40:BF:89:VAL:CG2	2.58	0.51
45:BN:98:VAL:O	45:BN:102:ALA:HB2	2.09	0.51
47:BP:80:TYR:HA	47:BP:111:ARG:HB3	1.92	0.51
52:BU:6:THR:OG1	52:BU:10:ARG:NH2	2.43	0.51
52:BU:17:ILE:O	52:BU:18:LEU:C	2.47	0.51
52:BU:66:ASN:C	52:BU:66:ASN:ND2	2.62	0.51
1:AA:588:G:C8	1:AA:753:A:C2	2.99	0.51
8:AH:1:MET:H3	8:AH:1:MET:HE2	1.73	0.51
2:AB:170:GLU:O	2:AB:172:ILE:N	2.43	0.51
2:AB:70:PHE:CD1	2:AB:70:PHE:N	2.77	0.51
2:AB:178:ARG:NH1	8:AH:71:GLY:O	2.42	0.51
11:AK:126:ARG:CB	11:AK:126:ARG:HH11	2.02	0.51
35:BA:2331:G:N2	35:BA:2385:C:C4	2.78	0.51
57:BZ:70:LEU:CD2	57:BZ:70:LEU:N	2.72	0.51
22:AV:7:G:H8	22:AV:7:G:OP2	1.93	0.51
1:AA:1327:C:OP1	21:AU:20:LYS:HB3	2.10	0.51
13:AM:88:ARG:HA	13:AM:98:VAL:HG13	1.93	0.51
1:AA:1155:G:C2'	1:AA:1156:G:H5'	2.40	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1188:A:C2'	1:AA:1189:C:H5'	2.40	0.51
3:AC:11:ARG:HH21	3:AC:180:ALA:HB3	1.75	0.51
52:BU:101:ARG:HG3	52:BU:101:ARG:NH1	2.25	0.51
56:BY:76:CYS:O	56:BY:77:PRO:C	2.48	0.51
55:BX:26:TYR:N	55:BX:26:TYR:CD1	2.76	0.51
35:BA:606:U:H4'	35:BA:658:C:O4'	2.10	0.51
19:AS:30:LEU:HD23	19:AS:30:LEU:C	2.31	0.51
35:BA:2877:G:C5	35:BA:2878:U:C4	2.98	0.51
49:BR:48:VAL:O	49:BR:51:LEU:HB2	2.10	0.51
37:BC:28:LEU:O	37:BC:32:LEU:HG	2.10	0.51
57:BZ:118:GLN:N	57:BZ:173:ALA:O	2.35	0.51
2:AB:22:LYS:CE	2:AB:40:HIS:CE1	2.94	0.51
5:AE:34:VAL:O	5:AE:42:GLY:N	2.43	0.51
45:BN:56:ASN:H	45:BN:125:GLY:CA	2.23	0.51
35:BA:271(L):U:H4'	35:BA:271(M):G:C8	2.45	0.51
33:B8:12:LYS:HD3	47:BP:68:GLN:CG	2.38	0.51
26:B1:23:LYS:CE	26:B1:28:GLY:HA3	2.40	0.51
50:BS:106:ARG:HD2	50:BS:106:ARG:C	2.30	0.51
50:BS:106:ARG:CD	50:BS:107:GLU:O	2.58	0.51
35:BA:852:G:O6	35:BA:926:A:C6	2.63	0.51
35:BA:2875:C:O2'	51:BT:6:LEU:HG	2.10	0.51
3:AC:6:HIS:CE1	3:AC:184:TYR:HE2	2.28	0.51
9:AI:52:ALA:C	9:AI:95:LYS:HZ1	2.13	0.51
12:AL:39:VAL:HG11	12:AL:41:ARG:NH2	2.25	0.51
7:AG:24:THR:HA	7:AG:27:ILE:CG1	2.40	0.51
35:BA:197:A:H5'	35:BA:197:A:C8	2.45	0.51
1:AA:633:G:C5'	1:AA:634:C:OP2	2.58	0.51
35:BA:2751:G:N3	35:BA:2751:G:H2'	2.25	0.51
17:AQ:90:ILE:O	17:AQ:93:GLN:HB3	2.10	0.51
16:AP:40:ASP:C	16:AP:40:ASP:OD1	2.48	0.51
1:AA:855:G:H2'	1:AA:856:C:H6	1.74	0.51
35:BA:1963:U:H2'	35:BA:1963:U:O2	2.10	0.51
24:AY:173:ILE:HA	24:AY:227:LEU:CD1	2.40	0.51
24:AY:25:GLY:HA3	24:AY:29:ILE:CG1	2.40	0.51
24:AY:272:LEU:O	24:AY:276:ALA:N	2.33	0.51
1:AA:969:A:C2'	1:AA:970:C:H5'	2.40	0.51
35:BA:514:A:N3	35:BA:581:C:O2'	2.33	0.51
35:BA:687:C:H2'	35:BA:688:U:C5'	2.40	0.51
35:BA:947:G:H2'	35:BA:948:G:C8	2.42	0.51
35:BA:962:G:C4	35:BA:963:U:C6	2.97	0.51
38:BD:108:PRO:CB	38:BD:143:HIS:NE2	2.73	0.51
38:BD:233:HIS:NE2	38:BD:246:PRO:HA	2.25	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2512:C:H4'	39:BE:122:PHE:CE2	2.45	0.51
39:BE:188:VAL:O	39:BE:189:PRO:O	2.28	0.51
39:BE:195:LEU:HD11	39:BE:197:ILE:HG23	1.91	0.51
35:BA:807:U:H5	47:BP:39:LYS:HZ1	1.57	0.51
47:BP:48:PRO:O	47:BP:49:ARG:C	2.48	0.51
35:BA:1947:C:O2'	35:BA:1948:G:H5''	2.07	0.51
1:AA:1483:A:C2	35:BA:1960:A:C1'	2.92	0.51
1:AA:575:G:N7	1:AA:881:G:N2	2.58	0.51
1:AA:668:G:H4'	15:AO:48:LYS:CB	2.38	0.51
6:AF:82:ARG:CB	6:AF:85:VAL:HG23	2.39	0.51
15:AO:65:ARG:NH1	15:AO:65:ARG:CG	2.61	0.51
2:AB:80:ILE:CG2	2:AB:212:GLN:HA	2.40	0.51
2:AB:68:ILE:HB	2:AB:70:PHE:CE1	2.45	0.51
35:BA:199:A:N1	35:BA:2433:A:C2'	2.73	0.51
35:BA:2245:U:O2	35:BA:2435:A:C8	2.63	0.51
57:BZ:72:ARG:NH2	57:BZ:97:GLU:O	2.43	0.51
22:AV:15:G:H5''	22:AV:16:C:H5'	1.92	0.51
1:AA:1204:A:C2'	1:AA:1205:U:O4'	2.59	0.51
19:AS:10:PHE:CE1	19:AS:70:LYS:HD2	2.42	0.51
27:B2:37:PHE:C	27:B2:39:ALA:N	2.61	0.51
40:BF:156:LEU:C	40:BF:157:VAL:HG13	2.30	0.51
5:AE:55:VAL:HG12	5:AE:56:GLN:N	2.25	0.51
35:BA:868:U:C4	35:BA:869:G:N7	2.78	0.51
41:BG:125:PHE:CD2	41:BG:131:TYR:HB2	2.44	0.51
50:BS:35:ILE:N	50:BS:53:SER:HB2	2.25	0.51
36:BB:61:G:H2'	36:BB:62:C:C6	2.45	0.51
35:BA:2110:G:H1	35:BA:2178:C:N4	2.06	0.51
41:BG:51:ARG:NH1	41:BG:53:LEU:HD21	2.25	0.51
35:BA:925:C:H2'	35:BA:926:A:C5'	2.29	0.51
35:BA:803:U:C2'	35:BA:804:A:C5'	2.84	0.51
9:AI:94:ALA:O	9:AI:95:LYS:HB3	2.10	0.51
4:AD:152:SER:CB	4:AD:155:LEU:HD12	2.35	0.51
57:BZ:15:PRO:HA	57:BZ:18:LEU:HD23	1.92	0.51
35:BA:1010:A:H1'	35:BA:1153:C:C1'	2.37	0.51
35:BA:1315:C:C2'	35:BA:1316:U:H5'	2.41	0.51
35:BA:1862:G:O2'	35:BA:1863:G:H5'	2.09	0.51
35:BA:1215:G:H2'	35:BA:1216:G:H8	1.74	0.51
38:BD:274:ARG:HH11	38:BD:274:ARG:CG	2.24	0.51
35:BA:295:G:C6	35:BA:344:G:C2	2.98	0.51
43:BJ:64:UNK:C	43:BJ:66:UNK:N	2.72	0.51
35:BA:1764:G:H2'	35:BA:1765:C:C6	2.45	0.51
6:AF:3:ARG:HH11	6:AF:3:ARG:HG3	1.76	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:7:LEU:HA	24:AY:10:VAL:HG21	1.91	0.51
24:AY:210:LEU:C	24:AY:212:ASN:H	2.11	0.51
1:AA:679:C:C4	1:AA:680:C:N4	2.78	0.51
30:B5:48:GLU:O	30:B5:49:CYS:HB3	2.10	0.51
35:BA:817:C:H42	35:BA:1190:G:H1	1.59	0.51
35:BA:1261:C:C2	35:BA:1262:A:C8	2.99	0.51
35:BA:1695:G:H3'	35:BA:1695:G:N3	2.25	0.51
35:BA:1934:C:H5'	35:BA:1974:C:H4'	1.91	0.51
35:BA:2223:G:H2'	35:BA:2224:G:C5'	2.39	0.51
35:BA:2581:G:N1	35:BA:2610:C:C2	2.78	0.51
35:BA:695:G:N3	35:BA:696:G:C8	2.78	0.51
35:BA:744:G:P	39:BE:132:HIS:HB3	2.50	0.51
40:BF:81:PRO:C	40:BF:82:ILE:O	2.49	0.51
47:BP:16:ARG:NE	47:BP:18:ARG:HB2	2.26	0.51
35:BA:942:G:H5''	47:BP:36:LYS:HA	1.91	0.51
51:BT:123:GLN:HA	51:BT:126:ALA:HB2	1.93	0.51
51:BT:28:VAL:HG13	51:BT:45:PHE:O	2.09	0.51
51:BT:50:ILE:HD11	51:BT:64:ARG:CB	2.40	0.51
52:BU:76:TYR:HD1	52:BU:77:SER:N	2.08	0.51
46:BO:60:ALA:CA	46:BO:87:ILE:HG12	2.25	0.51
6:AF:12:PRO:HB3	6:AF:58:GLY:CA	2.40	0.51
6:AF:26:ILE:HG22	6:AF:27:GLN:N	2.26	0.51
34:B9:10:ILE:HG21	35:BA:2477:C:H5	1.76	0.51
1:AA:1097:C:O5'	1:AA:1097:C:H6	1.94	0.51
2:AB:60:ASP:C	2:AB:64:ARG:HH21	2.13	0.51
25:B0:40:GLN:HE22	25:B0:43:THR:HA	1.75	0.51
12:AL:26:ALA:O	12:AL:27:LEU:O	2.28	0.51
1:AA:973:G:OP2	1:AA:974:A:H2'	2.10	0.51
3:AC:11:ARG:O	3:AC:14:ILE:O	2.27	0.51
3:AC:70:VAL:CG1	3:AC:71:ALA:H	2.23	0.51
3:AC:86:VAL:HA	3:AC:89:GLU:HB3	1.92	0.51
1:AA:1192:C:C2'	5:AE:25:ARG:HH22	2.24	0.51
10:AJ:90:LEU:N	10:AJ:91:PRO:HD3	2.24	0.51
14:AN:27:CYS:SG	14:AN:43:CYS:SG	3.05	0.51
14:AN:50:LYS:C	14:AN:52:GLN:H	2.13	0.51
35:BA:897:C:H5''	35:BA:897:C:C6	2.41	0.51
35:BA:327:G:C2	35:BA:328:U:C2	2.98	0.51
27:B2:51:ARG:O	27:B2:54:LYS:N	2.42	0.51
35:BA:2838:G:H4'	49:BR:45:ARG:HD2	1.91	0.51
49:BR:45:ARG:C	49:BR:49:ASP:HB2	2.29	0.51
11:AK:32:ILE:CD1	11:AK:72:ALA:HB2	2.41	0.51
37:BC:173:ALA:HB3	37:BC:192:PHE:CZ	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:46:ALA:HB1	7:AG:121:ALA:HB2	1.92	0.51
37:BC:114:VAL:HG12	37:BC:144:THR:CB	2.41	0.51
1:AA:781:A:N7	1:AA:801:U:O4	2.43	0.51
5:AE:82:VAL:HG21	5:AE:138:ALA:CA	2.39	0.51
5:AE:152:ARG:NH2	8:AH:44:PHE:CE1	2.79	0.51
1:AA:1235:U:O3'	21:AU:3:LYS:HB2	2.10	0.51
50:BS:89:ARG:O	50:BS:90:GLY:C	2.47	0.51
34:B9:16:VAL:HG21	35:BA:1033:U:OP1	2.11	0.51
1:AA:508:C:H1'	1:AA:509:A:N7	2.25	0.51
41:BG:12:TYR:O	41:BG:17:PRO:HD2	2.11	0.51
39:BE:51:PHE:N	39:BE:74:PRO:HG3	2.25	0.51
42:BH:144:VAL:O	42:BH:148:ILE:HG12	2.10	0.51
1:AA:115:G:O2'	1:AA:116:A:C8	2.58	0.51
7:AG:141:VAL:O	7:AG:144:MET:HB2	2.10	0.51
1:AA:1353:G:C2	1:AA:1354:C:C5	2.98	0.51
1:AA:1320:C:C5'	1:AA:1320:C:H6	2.21	0.51
1:AA:1010:G:H2'	1:AA:1011:G:C8	2.46	0.51
35:BA:392:C:H5''	35:BA:409:C:H5''	1.92	0.51
1:AA:1241:G:C4	1:AA:1242:C:C5	2.98	0.51
37:BC:77:ILE:HG13	37:BC:115:ALA:CB	2.40	0.51
9:AI:121:ARG:CG	9:AI:121:ARG:HH11	2.22	0.51
1:AA:144:G:H2'	1:AA:145:G:O4'	2.10	0.51
3:AC:108:ASN:HB3	3:AC:111:LEU:CG	2.40	0.51
1:AA:407:G:H1	1:AA:435:C:H42	1.58	0.51
35:BA:2812:G:N2	35:BA:2889:C:N3	2.58	0.51
35:BA:1015:G:C5	35:BA:1148:A:C2	2.98	0.51
44:BK:97:UNK:O	44:BK:134:UNK:O	2.29	0.51
1:AA:146:G:N2	1:AA:177:C:C2	2.79	0.51
24:AY:380:THR:CB	24:AY:383:GLU:HB2	2.40	0.51
24:AY:401:ILE:CG2	24:AY:412:LEU:HD21	2.40	0.51
24:AY:438:VAL:O	24:AY:446:PHE:HE2	1.93	0.51
30:B5:13:LYS:O	30:B5:16:ARG:CB	2.54	0.51
30:B5:4:HIS:HB3	30:B5:5:PRO:CD	2.35	0.51
35:BA:1825:A:OP2	38:BD:220:HIS:NE2	2.32	0.51
35:BA:2770:G:H5'	35:BA:2771:C:OP2	2.10	0.51
35:BA:558:G:P	45:BN:111:PRO:HD2	2.50	0.51
38:BD:226:MET:HB3	38:BD:230:ASP:HB2	1.93	0.51
39:BE:171:GLU:C	39:BE:173:VAL:N	2.62	0.51
45:BN:44:PRO:O	45:BN:45:ASN:CB	2.55	0.51
52:BU:83:LEU:HD12	52:BU:83:LEU:N	2.24	0.51
35:BA:1666:G:H3'	35:BA:1667:G:C8	2.45	0.51
46:BO:13:ASN:C	46:BO:15:GLY:N	2.63	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BO:4:PRO:HB3	46:BO:22:ILE:C	2.31	0.51
1:AA:878:G:C6	1:AA:879:C:N4	2.78	0.51
15:AO:21:ASP:O	15:AO:21:ASP:OD1	2.28	0.51
2:AB:153:ARG:HG2	2:AB:154:LEU:H	1.75	0.51
2:AB:204:ASN:ND2	2:AB:204:ASN:C	2.59	0.51
35:BA:2469:A:N7	35:BA:2482:G:C1'	2.68	0.51
35:BA:864:G:C6	35:BA:865:C:N4	2.79	0.51
57:BZ:119:GLU:CG	57:BZ:122:ARG:CZ	2.89	0.51
3:AC:131:ARG:NH1	3:AC:166:GLU:HG3	2.23	0.51
3:AC:157:ILE:HD13	3:AC:166:GLU:HB2	1.91	0.51
56:BY:81:LYS:O	56:BY:82:PRO:O	2.28	0.51
27:B2:16:LEU:O	27:B2:17:SER:O	2.28	0.51
1:AA:938:A:O2'	1:AA:939:G:H5'	2.09	0.51
35:BA:2703:C:HO2'	35:BA:2704:C:H5'	1.69	0.51
1:AA:9:G:C2	1:AA:26:A:C2	2.99	0.51
31:B6:9:LEU:HD13	31:B6:10:LEU:N	2.25	0.51
42:BH:41:MET:HE1	42:BH:53:GLU:H	1.75	0.51
38:BD:111:LEU:HD11	38:BD:115:GLN:NE2	2.21	0.51
36:BB:105:A:O2'	36:BB:106:G:H5'	2.10	0.51
50:BS:58:LEU:CD2	50:BS:65:VAL:HG13	2.40	0.51
1:AA:1431:C:N3	1:AA:1470:G:C2	2.78	0.51
35:BA:1402:C:O2'	35:BA:1403:C:H5'	2.11	0.51
35:BA:1882:C:O2	35:BA:1882:C:H2'	2.11	0.51
50:BS:102:ALA:HB3	50:BS:103:GLU:OE1	2.11	0.51
50:BS:51:ALA:HB3	50:BS:73:LEU:HB2	1.91	0.51
35:BA:2143:C:H5''	35:BA:2182:G:C4'	2.40	0.51
35:BA:1759:A:N7	35:BA:2696:U:H1'	2.25	0.51
35:BA:2206:G:N2	35:BA:2207:G:H4'	2.26	0.51
1:AA:148:G:C2	1:AA:175:C:N3	2.78	0.51
57:BZ:14:LYS:O	57:BZ:17:ALA:HB3	2.10	0.51
35:BA:813:U:C2	35:BA:814:C:C4	2.99	0.51
40:BF:42:ALA:CA	40:BF:45:ARG:HG3	2.33	0.51
7:AG:75:VAL:HG21	7:AG:144:MET:HB3	1.93	0.51
35:BA:382:G:N2	35:BA:393:C:C2	2.79	0.51
1:AA:944:G:C2	1:AA:1340:A:C6	2.99	0.51
1:AA:241:C:N3	1:AA:242:C:C5	2.79	0.51
35:BA:363(E):U:H2'	35:BA:363(F):A:C1'	2.40	0.51
35:BA:1083:U:O2	35:BA:1086:A:N1	2.44	0.51
35:BA:171:G:O2'	35:BA:172:C:H5'	2.10	0.51
57:BZ:157:LEU:O	57:BZ:158:PRO:C	2.48	0.51
24:AY:475:GLU:O	24:AY:522:GLN:OE1	2.29	0.51
24:AY:136:PRO:O	24:AY:137:ILE:CG1	2.54	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:420:SER:CB	24:AY:427:VAL:CG2	2.88	0.51
1:AA:951:G:N1	1:AA:1231:G:C6	2.78	0.51
1:AA:950:U:H3'	13:AM:102:ARG:HH22	1.75	0.51
35:BA:2459:A:N7	35:BA:2460:U:C5	2.79	0.51
35:BA:2489:G:O2'	35:BA:2490:G:H5'	2.11	0.51
35:BA:2619:C:O3'	39:BE:152:LYS:HA	2.10	0.51
35:BA:526:A:OP1	35:BA:527:C:OP1	2.27	0.51
35:BA:649:G:H2'	35:BA:650:C:C6	2.45	0.51
35:BA:668:G:H2'	35:BA:670:A:N6	2.24	0.51
35:BA:948:G:C6	35:BA:949:C:C4	2.99	0.51
47:BP:95:VAL:CG2	47:BP:125:VAL:HG23	2.41	0.51
51:BT:28:VAL:CG2	51:BT:46:GLU:HA	2.40	0.51
51:BT:91:ARG:HA	51:BT:117:ASP:H	1.75	0.51
54:BW:42:ARG:O	54:BW:42:ARG:HG2	2.11	0.51
35:BA:1674:G:H1'	35:BA:1676:A:N6	2.25	0.51
1:AA:585:G:C4'	12:AL:8:ASN:ND2	2.71	0.51
2:AB:67:THR:HG22	2:AB:90:MET:HE3	1.92	0.51
48:BQ:54:MET:CE	48:BQ:64:ILE:HD13	2.40	0.51
1:AA:1333:A:N6	1:AA:1334:G:C2	2.79	0.51
12:AL:24:VAL:CG1	12:AL:98:TYR:CE2	2.91	0.51
1:AA:971:G:H4'	1:AA:972:C:C5'	2.41	0.51
1:AA:1152:A:C5'	10:AJ:13:HIS:HD2	2.19	0.51
35:BA:85:G:P	56:BY:30:VAL:HB	2.49	0.51
19:AS:51:VAL:O	19:AS:58:VAL:N	2.44	0.51
35:BA:310:A:O2'	35:BA:311:A:C2'	2.57	0.51
35:BA:2838:G:O4'	49:BR:45:ARG:NH1	2.44	0.51
50:BS:15:ARG:HH11	50:BS:15:ARG:CB	2.24	0.51
37:BC:59:ARG:HB2	37:BC:164:ARG:HG3	1.92	0.51
37:BC:64:LEU:HD12	37:BC:159:GLY:O	2.10	0.51
35:BA:2308:G:N7	35:BA:2310:A:H5'	2.25	0.51
41:BG:86:MET:N	41:BG:87:PRO:CD	2.73	0.51
20:AT:14:LYS:C	20:AT:16:HIS:H	2.13	0.51
35:BA:2325:G:C6	35:BA:2326:C:N4	2.78	0.51
5:AE:84:PHE:CZ	5:AE:133:TYR:CD2	2.98	0.51
35:BA:1202:C:H2'	35:BA:1203:G:C5'	2.40	0.51
36:BB:20:C:C2'	36:BB:21:G:H5''	2.30	0.51
35:BA:116:C:N4	35:BA:117:G:C6	2.78	0.51
7:AG:70:LYS:O	7:AG:138:LYS:HE3	2.10	0.51
35:BA:2630:G:HO2'	35:BA:2892:A:HO2'	1.57	0.51
35:BA:2131:G:OP1	35:BA:2132:U:H3'	2.10	0.51
1:AA:408:A:H2'	1:AA:409:G:H8	1.76	0.51
35:BA:134:C:C4	35:BA:135:G:N7	2.79	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:163:ALA:HB1	41:BG:168:GLU:HB2	1.92	0.51
1:AA:101:A:H2'	1:AA:102:G:O5'	2.11	0.51
1:AA:683:G:H3'	1:AA:684:A:H8	1.75	0.51
24:AY:369:ASN:ND2	24:AY:373:ILE:CG1	2.59	0.51
24:AY:412:LEU:HA	24:AY:459:VAL:HG11	1.92	0.51
35:BA:752:A:C8	35:BA:1781:C:O2	2.63	0.51
35:BA:1806:C:H2'	35:BA:1807:G:C8	2.45	0.51
30:B5:8:LYS:CG	35:BA:2054:A:C2	2.94	0.51
35:BA:2464:C:O2'	35:BA:2465:C:P	2.68	0.51
35:BA:523:C:C2'	35:BA:524:U:H5'	2.41	0.51
35:BA:530:G:H21	35:BA:2021:C:H1'	1.76	0.51
33:B8:4:MET:HE2	35:BA:592:G:N3	2.26	0.51
35:BA:998:C:OP2	52:BU:93:LYS:NZ	2.39	0.51
39:BE:116:VAL:CG2	39:BE:122:PHE:CD2	2.93	0.51
51:BT:25:GLY:O	51:BT:48:ILE:HG22	2.10	0.51
52:BU:21:ALA:HB2	52:BU:39:LEU:CD2	2.29	0.51
52:BU:17:ILE:CG2	52:BU:39:LEU:HD11	2.41	0.51
1:AA:576:G:OP2	1:AA:576:G:H3'	2.09	0.51
8:AH:6:ILE:N	8:AH:6:ILE:CD1	2.70	0.51
15:AO:77:ARG:O	15:AO:81:LEU:HB3	2.11	0.51
2:AB:159:PRO:HB2	2:AB:161:ALA:O	2.10	0.51
2:AB:209:ARG:O	2:AB:213:LEU:HB2	2.11	0.51
2:AB:236:TYR:CD1	2:AB:236:TYR:N	2.76	0.51
57:BZ:153:SER:HA	57:BZ:155:LEU:CD2	2.40	0.51
35:BA:2631:G:N2	39:BE:61:ARG:HH22	2.09	0.51
35:BA:2243:U:H2'	35:BA:2244:U:H6	1.72	0.51
35:BA:917:A:H2'	35:BA:918:A:O4'	2.11	0.51
36:BB:80:U:H2'	36:BB:81:G:N2	2.24	0.51
48:BQ:70:PRO:HA	48:BQ:94:VAL:O	2.09	0.51
57:BZ:30:ASN:O	57:BZ:32:HIS:N	2.43	0.51
1:AA:1014:A:N3	19:AS:34:TRP:CD2	2.78	0.51
1:AA:1068:G:N7	1:AA:1108:G:N2	2.59	0.51
3:AC:157:ILE:CG2	3:AC:164:ARG:NH2	2.66	0.51
1:AA:1060:C:C5'	10:AJ:51:ARG:HD3	2.28	0.51
27:B2:65:ASN:HD21	35:BA:112:U:H5'	1.76	0.51
1:AA:1249:C:H4'	9:AI:36:TYR:OH	2.11	0.51
12:AL:126:LYS:CB	24:AY:487:ARG:HE	2.19	0.51
49:BR:42:LYS:O	49:BR:45:ARG:CG	2.58	0.51
42:BH:83:TYR:HB2	42:BH:134:SER:HA	1.91	0.51
35:BA:875:G:O2'	35:BA:876:C:H5'	2.09	0.51
36:BB:42:C:O2'	36:BB:43:C:O5'	2.29	0.51
41:BG:113:ARG:HB3	41:BG:140:ILE:HB	1.93	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:B4:9:LEU:CD1	29:B4:10:VAL:H	2.21	0.51
35:BA:271(J):C:H2'	35:BA:271(J):C:O2	2.10	0.51
50:BS:63:THR:O	50:BS:66:ALA:N	2.42	0.51
35:BA:2123:G:C2	35:BA:2124:G:C8	2.98	0.51
35:BA:1577:C:H2'	35:BA:1578:U:C6	2.45	0.51
35:BA:1636:C:O5'	35:BA:1636:C:H6	1.93	0.51
20:AT:76:ALA:O	20:AT:77:ALA:C	2.49	0.51
35:BA:2206:G:N2	35:BA:2208:A:C2	2.78	0.51
9:AI:57:GLY:O	9:AI:58:ARG:CB	2.59	0.51
13:AM:8:GLU:C	13:AM:9:ILE:HD12	2.31	0.51
20:AT:88:VAL:HG12	20:AT:92:LEU:CD1	2.40	0.51
1:AA:80:G:C2'	1:AA:81:U:H5'	2.41	0.51
33:B8:45:GLY:O	33:B8:46:ARG:CB	2.55	0.51
2:AB:83:MET:O	2:AB:86:GLU:N	2.44	0.51
35:BA:614(C):A:H8	35:BA:614(C):A:O5'	1.94	0.51
35:BA:438:G:O2'	35:BA:440:G:H5'	2.11	0.51
6:AF:43:LEU:CD2	6:AF:43:LEU:H	2.23	0.51
38:BD:141:VAL:O	38:BD:194:GLY:O	2.29	0.51
43:BJ:68:UNK:C	43:BJ:70:UNK:N	2.69	0.51
30:B5:45:VAL:HG13	30:B5:51:TYR:H	1.76	0.51
35:BA:1248:G:OP1	40:BF:92:PRO:HG3	2.10	0.51
35:BA:572:A:C2	35:BA:2033:A:C2	2.98	0.51
35:BA:412:A:C2	35:BA:413:C:H1'	2.46	0.51
35:BA:942:G:H5''	47:BP:36:LYS:N	2.26	0.51
35:BA:977:G:H2'	35:BA:978:G:C8	2.43	0.51
39:BE:112:GLY:HA2	39:BE:159:HIS:CD2	2.46	0.51
35:BA:943:U:OP2	47:BP:38:GLN:NE2	2.44	0.51
47:BP:47:ASP:CB	47:BP:48:PRO:CA	2.76	0.51
2:AB:7:VAL:CG1	2:AB:11:LEU:HD12	2.41	0.51
13:AM:97:PRO:HB2	13:AM:101:GLN:HE21	1.75	0.51
3:AC:52:LEU:CB	3:AC:70:VAL:HG22	2.39	0.51
55:BX:6:ASP:O	55:BX:9:LEU:CD2	2.59	0.51
19:AS:31:ILE:HG23	19:AS:49:ILE:HA	1.93	0.51
48:BQ:5:ARG:C	48:BQ:6:ARG:HG2	2.30	0.51
35:BA:2870:C:C2'	35:BA:2871:C:H5'	2.41	0.51
1:AA:9:G:OP2	5:AE:121:LYS:HD2	2.11	0.51
26:B1:83:GLU:OE1	26:B1:83:GLU:N	2.44	0.51
35:BA:2143:C:O2'	35:BA:2144:U:H5'	2.11	0.51
51:BT:8:LYS:CA	51:BT:11:GLU:OE2	2.59	0.51
14:AN:12:ARG:CB	14:AN:14:PRO:HD2	2.37	0.51
1:AA:66:G:O4'	1:AA:173:U:C4	2.64	0.51
22:AV:17(A):U:O2'	22:AV:18:G:C4'	2.54	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:108:GLY:O	42:BH:109:PHE:C	2.49	0.51
1:AA:80:G:H1	1:AA:90:U:H5'	1.76	0.51
1:AA:260:G:O2'	1:AA:261:U:H5'	2.11	0.51
35:BA:391:G:C2'	35:BA:392:C:H5'	2.41	0.51
1:AA:805:C:C2'	1:AA:806:C:H5'	2.41	0.51
35:BA:296:C:H42	35:BA:342:G:H1	1.58	0.51
35:BA:699:A:C8	35:BA:734:A:C2	2.99	0.51
35:BA:1231:G:H2'	35:BA:1232:G:H8	1.72	0.51
35:BA:2196:C:O2'	35:BA:2197:U:H5'	2.10	0.51
35:BA:593:G:H2'	35:BA:594:U:O4'	2.10	0.51
24:AY:15:THR:O	24:AY:106:VAL:HG23	2.11	0.51
25:B0:35:ASN:OD1	35:BA:2353:G:O2'	2.23	0.51
35:BA:1264:G:H3'	35:BA:1265:A:H5''	1.93	0.51
35:BA:1907:G:C5	35:BA:1908:C:C4	2.98	0.51
35:BA:2026:C:C2	35:BA:2027:G:C8	2.99	0.51
35:BA:2072:G:H2'	35:BA:2073:C:O4'	2.10	0.51
33:B8:26:LYS:NZ	35:BA:2361:A:OP2	2.29	0.51
35:BA:2580:U:H5	35:BA:2581:G:C6	2.25	0.51
35:BA:572:A:OP2	53:BV:78:LYS:NZ	2.44	0.51
35:BA:754:C:H2'	35:BA:755:C:H6	1.66	0.51
38:BD:4:LYS:CE	38:BD:20:ASP:OD1	2.57	0.51
38:BD:248:SER:CB	38:BD:252:TRP:CZ2	2.94	0.51
38:BD:247:ALA:HB2	38:BD:253:GLN:HG2	1.93	0.51
39:BE:96:PHE:HD1	39:BE:100:GLU:OE1	1.94	0.51
45:BN:57:ALA:CB	45:BN:124:ALA:HA	2.41	0.51
39:BE:111:ARG:HA	49:BR:2:ARG:HG2	1.92	0.51
45:BN:40:PRO:HB3	52:BU:64:ARG:O	2.10	0.51
52:BU:66:ASN:O	52:BU:66:ASN:ND2	2.41	0.51
35:BA:2766:G:H2'	35:BA:2767:C:C6	2.46	0.51
17:AQ:29:HIS:HA	17:AQ:36:ILE:HD11	1.93	0.51
1:AA:1414:U:C2'	1:AA:1415:G:H8	2.21	0.51
1:AA:1109:C:H2'	1:AA:1110:A:O4'	2.10	0.51
2:AB:187:LEU:CD1	2:AB:205:ASP:HB3	2.40	0.51
2:AB:42:ILE:CD1	2:AB:203:GLY:HA2	2.40	0.51
35:BA:249:C:H2'	35:BA:2395:C:P	2.51	0.51
42:BH:162:ILE:CG1	42:BH:162:ILE:O	2.59	0.51
57:BZ:100:VAL:HG23	57:BZ:126:VAL:HG22	1.89	0.51
22:AV:48:C:H6	22:AV:48:C:P	2.34	0.51
13:AM:90:LEU:H	13:AM:90:LEU:CD2	2.03	0.51
12:AL:82:VAL:C	12:AL:83:VAL:HG22	2.30	0.51
1:AA:1179:A:OP2	9:AI:93:ARG:NH2	2.44	0.51
1:AA:976:G:H5'	1:AA:1358:U:O2'	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:92:ALA:O	3:AC:95:THR:N	2.29	0.51
56:BY:15:VAL:CG1	56:BY:15:VAL:O	2.59	0.51
56:BY:96:ILE:HG13	56:BY:99:CYS:HB2	1.93	0.51
9:AI:63:ILE:HD13	9:AI:77:ILE:CD1	2.41	0.51
49:BR:92:GLY:C	49:BR:94:TYR:CE1	2.84	0.51
35:BA:144:C:H2'	35:BA:145:G:H8	1.76	0.51
35:BA:874:G:H2'	35:BA:875:G:H8	1.75	0.51
37:BC:75:LEU:O	37:BC:76:ALA:HB2	2.11	0.51
41:BG:102:PHE:HD1	41:BG:103:LEU:N	2.08	0.51
1:AA:623:C:H3'	1:AA:624:C:H6	1.76	0.51
20:AT:12:ALA:C	20:AT:14:LYS:N	2.61	0.51
37:BC:180:PHE:CD2	37:BC:184:LYS:HG3	2.41	0.51
50:BS:34:HIS:HB3	50:BS:53:SER:HB3	1.93	0.51
19:AS:7:LYS:HB2	19:AS:7:LYS:HZ2	1.76	0.51
22:AV:40:C:H2'	22:AV:41:C:C6	2.46	0.51
35:BA:1453:U:H5	35:BA:2702:U:O4	1.94	0.51
56:BY:95:LYS:HA	56:BY:101:LYS:HA	1.93	0.51
35:BA:1551:C:H2'	35:BA:1552:G:H5'	1.92	0.51
1:AA:1382:C:O2'	1:AA:1383:C:H5'	2.10	0.51
1:AA:1319:A:OP1	19:AS:5:LEU:HD23	2.11	0.51
36:BB:116:G:N3	36:BB:117:G:C8	2.79	0.51
31:B6:42:TRP:CE3	31:B6:42:TRP:HA	2.45	0.51
57:BZ:65:GLN:HB3	57:BZ:67:LEU:HD11	1.93	0.51
3:AC:88:ARG:CG	3:AC:88:ARG:HH11	2.24	0.51
12:AL:75:HIS:CD2	12:AL:77:LEU:HB2	2.46	0.51
53:BV:66:ARG:HA	53:BV:90:PRO:HA	1.92	0.51
35:BA:1108:U:H5'	35:BA:1109:C:OP2	2.11	0.51
35:BA:139(A):G:N2	55:BX:44:GLU:OE1	2.33	0.51
35:BA:401:A:H2'	35:BA:402:A:H8	1.76	0.51
24:AY:445:GLN:O	24:AY:448:VAL:CB	2.53	0.51
35:BA:1777:U:O2'	35:BA:1778:U:H5'	2.11	0.51
33:B8:8:LYS:HZ3	35:BA:243:U:H5'	1.76	0.51
38:BD:155:LEU:O	38:BD:156:ALA:HB3	2.11	0.51
38:BD:214:TRP:CD1	38:BD:214:TRP:N	2.79	0.51
38:BD:35:LYS:CG	38:BD:63:ARG:HG2	2.40	0.51
45:BN:25:ARG:C	45:BN:28:THR:HG22	2.32	0.51
35:BA:2684:U:O4'	46:BO:70:LYS:HD2	2.10	0.51
35:BA:832:G:P	47:BP:40:SER:HB3	2.50	0.51
51:BT:27:THR:O	51:BT:28:VAL:CB	2.59	0.51
51:BT:16:ARG:NH2	51:BT:82:LEU:O	2.43	0.51
52:BU:85:LYS:HG2	52:BU:116:ALA:HB1	1.93	0.51
52:BU:19:LYS:C	52:BU:21:ALA:N	2.59	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:74:LEU:HD13	52:BU:75:ASN:N	2.24	0.51
52:BU:76:TYR:CE1	52:BU:80:ILE:HG13	2.45	0.51
46:BO:24:VAL:CG2	46:BO:24:VAL:O	2.59	0.51
8:AH:1:MET:H2	8:AH:1:MET:HE2	1.73	0.51
1:AA:1071:C:H2'	1:AA:1072:G:H8	1.74	0.51
1:AA:1093:A:H2	1:AA:1109:C:O2	1.93	0.51
42:BH:103:LEU:O	42:BH:105:LEU:N	2.44	0.51
35:BA:958:U:H3'	35:BA:958:U:C6	2.45	0.51
48:BQ:31:ASP:O	48:BQ:32:TYR:CD1	2.64	0.51
35:BA:334:C:P	35:BA:335:C:H41	2.33	0.51
56:BY:28:LYS:HG2	56:BY:39:VAL:HA	1.93	0.51
56:BY:82:PRO:O	56:BY:96:ILE:HG22	2.11	0.51
4:AD:111:ALA:HB3	4:AD:117:ALA:HB2	1.93	0.51
37:BC:14:VAL:HG23	37:BC:32:LEU:HD21	1.92	0.51
37:BC:45:ALA:HB3	37:BC:171:ILE:HG21	1.93	0.51
15:AO:3:ILE:HD11	15:AO:8:LYS:HE2	1.93	0.51
15:AO:3:ILE:HG13	15:AO:8:LYS:HG2	1.93	0.51
35:BA:2306:C:C5	35:BA:2307:G:O2'	2.58	0.51
28:B3:45:GLY:O	28:B3:48:GLU:N	2.44	0.51
40:BF:185:ASP:O	40:BF:188:ARG:HG2	2.10	0.51
35:BA:2125:G:N2	35:BA:2172:U:OP1	2.42	0.51
35:BA:2187:G:H2'	35:BA:2188:C:C5'	2.34	0.51
1:AA:1357:A:HO2'	14:AN:34:TYR:HE1	1.58	0.51
35:BA:459:U:C2	35:BA:460:A:C8	2.99	0.51
9:AI:53:VAL:O	9:AI:55:ALA:N	2.44	0.51
35:BA:1293:C:H2'	35:BA:1294:U:C6	2.43	0.51
38:BD:45:ASN:N	38:BD:45:ASN:HD22	2.09	0.51
2:AB:129:GLU:O	2:AB:130:ARG:O	2.29	0.51
20:AT:53:LEU:O	20:AT:54:LYS:C	2.49	0.51
35:BA:654(M):C:H2'	35:BA:654(N):G:H8	1.72	0.51
19:AS:16:LEU:C	19:AS:18:LYS:N	2.64	0.51
35:BA:2825:C:H2'	35:BA:2826:A:O4'	2.09	0.51
15:AO:11:VAL:O	15:AO:15:PHE:HD1	1.93	0.51
24:AY:131:ARG:HH22	24:AY:162:LEU:HD13	1.76	0.51
24:AY:15:THR:O	24:AY:106:VAL:CG2	2.59	0.51
24:AY:144:LEU:HD12	24:AY:179:PHE:HE1	1.71	0.51
24:AY:198:GLY:HA2	24:AY:262:ASN:CG	2.31	0.51
1:AA:1518:A:C2	1:AA:1519:A:C2	2.99	0.51
25:B0:32:ARG:H	25:B0:35:ASN:ND2	2.08	0.51
35:BA:1011:G:C2	35:BA:1013:C:C2	2.99	0.51
35:BA:1826:G:C2	35:BA:1827:C:C6	2.99	0.51
35:BA:1977:A:C2'	35:BA:1978:A:O4'	2.55	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:527:C:O5'	35:BA:2779:U:H5	1.92	0.51
38:BD:17:THR:O	38:BD:211:ARG:NH2	2.38	0.51
35:BA:2223:G:C4'	38:BD:269:PHE:HZ	2.23	0.51
45:BN:118:LYS:O	45:BN:120:LEU:N	2.44	0.51
51:BT:91:ARG:O	51:BT:117:ASP:CB	2.58	0.51
51:BT:92:GLY:C	51:BT:94:ALA:N	2.63	0.51
53:BV:38:LEU:C	53:BV:39:LEU:HD13	2.31	0.51
1:AA:868:C:H2'	1:AA:869:G:C5'	2.40	0.51
1:AA:882:C:O2'	1:AA:883:C:H5'	2.11	0.51
6:AF:26:ILE:O	6:AF:29:ALA:HB3	2.11	0.51
15:AO:42:HIS:O	15:AO:45:VAL:HG12	2.11	0.51
35:BA:2249:U:H4'	35:BA:2275:C:C5	2.46	0.51
54:BW:14:PRO:HG3	54:BW:101:SER:CB	2.29	0.51
1:AA:1149:C:H2'	1:AA:1150:U:H6	1.70	0.51
3:AC:173:VAL:N	3:AC:174:PRO:HD3	2.24	0.51
10:AJ:6:ILE:C	10:AJ:71:LEU:HD12	2.30	0.51
1:AA:356:A:H2	1:AA:368:U:O2	1.94	0.51
56:BY:60:PHE:HA	56:BY:62:GLU:OE1	2.11	0.51
27:B2:57:ILE:O	27:B2:60:LEU:HB2	2.10	0.51
7:AG:17:VAL:C	7:AG:19:GLY:H	2.14	0.51
40:BF:203:GLN:O	40:BF:205:ARG:N	2.43	0.51
35:BA:2305:A:C5'	41:BG:134:GLY:HA3	2.05	0.51
1:AA:42:G:H2'	1:AA:43:C:C6	2.46	0.51
1:AA:300:A:H1'	1:AA:565:U:O2	2.11	0.51
37:BC:181:PRO:CB	37:BC:182:PRO:CD	2.87	0.51
5:AE:91:LEU:CD1	5:AE:120:THR:HB	2.41	0.51
35:BA:1494:A:C3'	35:BA:1494:A:N3	2.74	0.51
1:AA:1432:G:N2	1:AA:1469:G:C6	2.79	0.51
35:BA:2199:A:C5'	35:BA:2200:C:OP2	2.49	0.51
38:BD:263:ARG:NH1	38:BD:263:ARG:HB3	2.26	0.51
35:BA:2830:G:OP1	39:BE:75:VAL:CG1	2.58	0.51
28:B3:54:VAL:CG1	28:B3:55:ARG:N	2.74	0.51
1:AA:1013:G:N2	1:AA:1016:A:OP2	2.44	0.51
13:AM:4:ILE:HG23	13:AM:57:ARG:HB2	1.93	0.51
38:BD:45:ASN:ND2	38:BD:46:GLN:H	2.09	0.51
20:AT:53:LEU:HD11	20:AT:92:LEU:HD13	1.93	0.51
35:BA:7:G:H2'	35:BA:8:A:H8	1.76	0.51
35:BA:847:U:C2'	35:BA:848:G:H5'	2.38	0.51
10:AJ:75:ILE:HG13	10:AJ:76:ASN:N	2.20	0.51
54:BW:10:VAL:O	54:BW:11:ARG:CB	2.59	0.51
26:B1:85:LEU:O	26:B1:87:PRO:HD3	2.10	0.51
35:BA:363:G:H2'	35:BA:363(A):A:H8	1.76	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:491:G:H2'	35:BA:492:A:C8	2.46	0.51
54:BW:43:GLY:C	54:BW:45:TYR:H	2.13	0.51
2:AB:28:PHE:O	2:AB:28:PHE:HD1	1.93	0.51
13:AM:46:LYS:HG2	13:AM:46:LYS:O	2.11	0.51
37:BC:80:GLY:O	37:BC:83:ILE:HD12	2.10	0.51
1:AA:1187:G:N3	1:AA:1187:G:H2'	2.26	0.51
1:AA:1026:G:H5'	1:AA:1027:C:OP2	2.10	0.51
43:BJ:118:UNK:O	43:BJ:119:UNK:CB	2.59	0.51
24:AY:186:TYR:N	24:AY:186:TYR:CD1	2.79	0.50
24:AY:267:HIS:H	24:AY:267:HIS:CD2	2.28	0.50
24:AY:378:THR:OG1	24:AY:386:LYS:HG2	2.11	0.50
24:AY:389:GLY:O	24:AY:390:ILE:CB	2.59	0.50
24:AY:226:GLN:HE22	42:BH:97:ARG:CZ	2.24	0.50
35:BA:2009:G:C5'	54:BW:40:ASN:ND2	2.74	0.50
35:BA:2455:G:O2'	35:BA:2456:C:H5'	2.12	0.50
35:BA:2464:C:N3	35:BA:2487:G:C2	2.79	0.50
32:B7:38:GLY:O	35:BA:458:G:H5''	2.11	0.50
35:BA:779:U:H2'	35:BA:780:G:O4'	2.10	0.50
39:BE:198:VAL:HG12	39:BE:199:ARG:H	1.72	0.50
39:BE:33:VAL:HG11	39:BE:88:GLY:C	2.31	0.50
39:BE:9:VAL:HG12	39:BE:25:VAL:C	2.31	0.50
35:BA:1138:G:O2'	45:BN:102:ALA:O	2.29	0.50
45:BN:28:THR:N	45:BN:106:MET:HE3	2.26	0.50
52:BU:88:ILE:HD12	52:BU:90:VAL:HG23	1.93	0.50
52:BU:96:ALA:O	52:BU:99:ALA:N	2.38	0.50
53:BV:39:LEU:HA	53:BV:47:VAL:CG1	2.40	0.50
46:BO:8:LEU:N	46:BO:8:LEU:HD12	2.26	0.50
6:AF:25:ILE:O	6:AF:25:ILE:HD13	2.11	0.50
12:AL:6:THR:O	12:AL:8:ASN:N	2.45	0.50
18:AR:22:VAL:HG11	18:AR:43:PHE:CD1	2.46	0.50
2:AB:163:PHE:CD1	2:AB:185:ILE:HB	2.46	0.50
2:AB:15:VAL:HG21	2:AB:209:ARG:NE	2.26	0.50
35:BA:2247:A:H2'	35:BA:2248:C:C6	2.47	0.50
35:BA:908:C:O2'	35:BA:909:A:C5'	2.57	0.50
35:BA:910:A:N6	48:BQ:13:GLN:H	2.09	0.50
48:BQ:111:GLU:O	48:BQ:113:GLN:N	2.44	0.50
35:BA:954:G:OP1	48:BQ:15:GLY:HA2	2.11	0.50
48:BQ:16:ARG:CG	48:BQ:17:LEU:H	2.24	0.50
1:AA:1309:G:C2'	1:AA:1310:G:H5'	2.40	0.50
1:AA:1151:A:C4	1:AA:1152:A:C8	2.99	0.50
1:AA:1201:A:H4'	1:AA:1202:G:H5''	1.93	0.50
14:AN:55:GLY:O	14:AN:56:VAL:C	2.48	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:312:ARG:NH1	24:AY:370:HIS:HB3	2.25	0.50
35:BA:328:U:H4'	56:BY:68:HIS:CE1	2.47	0.50
40:BF:158:THR:HG23	40:BF:160:ASN:H	1.76	0.50
40:BF:194:MET:SD	40:BF:199:TRP:HD1	2.34	0.50
35:BA:1060:U:H5'	35:BA:1061:U:H5	1.75	0.50
4:AD:175:SER:OG	4:AD:186:LEU:HD21	2.11	0.50
11:AK:57:THR:HG23	11:AK:60:ALA:N	2.19	0.50
57:BZ:109:ALA:O	57:BZ:111:VAL:N	2.45	0.50
1:AA:1342:C:C5'	9:AI:125:TYR:HB3	2.38	0.50
35:BA:1720:U:H2'	35:BA:1721:G:O4'	2.11	0.50
37:BC:114:VAL:HG12	37:BC:144:THR:HB	1.93	0.50
35:BA:1473:G:O6	35:BA:1519:G:N2	2.45	0.50
39:BE:126:PRO:C	39:BE:128:SER:H	2.14	0.50
35:BA:1164:G:H1	35:BA:1185:C:H42	1.59	0.50
1:AA:229:U:OP1	16:AP:59:TRP:CH2	2.64	0.50
1:AA:279:A:C8	1:AA:281:G:N2	2.78	0.50
1:AA:1369:C:H2'	1:AA:1370:G:H8	1.69	0.50
1:AA:276:G:O3'	17:AQ:68:ARG:NH1	2.45	0.50
5:AE:87:SER:OG	5:AE:131:ILE:CD1	2.57	0.50
42:BH:154:PRO:O	42:BH:155:SER:OG	2.26	0.50
35:BA:30:G:H2'	35:BA:31:C:O4'	2.11	0.50
49:BR:99:LYS:N	49:BR:99:LYS:HD2	2.22	0.50
35:BA:845:G:HO2'	35:BA:846:C:H5	1.57	0.50
1:AA:346:G:O2'	1:AA:347:G:C8	2.64	0.50
1:AA:265:G:H2'	1:AA:267:C:C5	2.38	0.50
35:BA:2535:G:H2'	35:BA:2536:G:O4'	2.12	0.50
6:AF:71:ARG:NH1	6:AF:71:ARG:HG3	2.26	0.50
1:AA:966:G:N2	1:AA:967:C:C2	2.78	0.50
35:BA:2090:G:C6	35:BA:2091:U:C4	2.99	0.50
28:B3:41:PRO:O	28:B3:44:ARG:HB3	2.11	0.50
1:AA:88:A:C2	1:AA:89:C:H5	2.28	0.50
50:BS:94:TYR:CD1	50:BS:94:TYR:O	2.63	0.50
33:B8:61:LEU:HD13	33:B8:62:LEU:HG	1.93	0.50
35:BA:999:U:C6	35:BA:1154:G:C6	2.99	0.50
35:BA:1160:G:C2'	35:BA:1161:C:H5'	2.42	0.50
35:BA:792:G:H2'	35:BA:2440:C:O2	2.11	0.50
35:BA:12:U:H1'	35:BA:2627:G:OP1	2.12	0.50
35:BA:646:A:N3	35:BA:646:A:H5'	2.26	0.50
35:BA:792:G:N7	35:BA:2440:C:H1'	2.26	0.50
38:BD:227:ASN:HD22	38:BD:228:PRO:HD2	1.76	0.50
38:BD:33:LEU:HD21	38:BD:34:VAL:HG22	1.93	0.50
38:BD:35:LYS:N	38:BD:36:PRO:CD	2.59	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:21:PHE:CD1	38:BD:91:ARG:NH2	2.79	0.50
39:BE:116:VAL:HG22	39:BE:122:PHE:CG	2.46	0.50
39:BE:186:GLY:O	39:BE:187:ALA:HB3	2.11	0.50
40:BF:65:TRP:HZ3	40:BF:73:ALA:O	1.94	0.50
46:BO:71:ARG:NH2	46:BO:77:ILE:HB	2.26	0.50
52:BU:108:GLU:O	52:BU:110:VAL:N	2.44	0.50
52:BU:113:ALA:C	52:BU:115:ALA:N	2.65	0.50
1:AA:834:C:C2	1:AA:853:G:C2	2.99	0.50
1:AA:833:U:H3	1:AA:853:G:H1	1.58	0.50
6:AF:14:LEU:CD1	6:AF:18:GLN:HB2	2.40	0.50
8:AH:56:LYS:O	8:AH:58:TYR:HD2	1.94	0.50
2:AB:69:LEU:HD12	2:AB:71:VAL:CG2	2.41	0.50
2:AB:67:THR:HG22	2:AB:90:MET:CE	2.41	0.50
35:BA:2264:C:C4	35:BA:2265:U:C4	3.00	0.50
35:BA:827:U:O2	35:BA:2246:G:H4'	2.11	0.50
57:BZ:24:LEU:HD21	57:BZ:86:VAL:HG23	1.93	0.50
22:AV:64:G:H2'	22:AV:65:C:O4'	2.10	0.50
1:AA:1068:G:N7	1:AA:1094:G:H2'	2.26	0.50
1:AA:981:U:H2'	1:AA:982:U:C6	2.47	0.50
19:AS:38:SER:O	19:AS:70:LYS:HA	2.10	0.50
4:AD:12:CYS:SG	4:AD:19:LEU:CB	2.98	0.50
9:AI:46:ALA:HB2	9:AI:74:ILE:HG23	1.94	0.50
42:BH:120:GLY:O	42:BH:121:ILE:HG12	2.11	0.50
37:BC:175:VAL:CG1	37:BC:188:ASN:HB2	2.41	0.50
37:BC:67:GLY:H	37:BC:188:ASN:HD21	1.60	0.50
41:BG:43:LEU:HB3	41:BG:45:GLU:HG2	1.92	0.50
1:AA:62:U:H4'	1:AA:385:C:O2	2.11	0.50
1:AA:783:C:O2'	1:AA:784:C:H5'	2.11	0.50
36:BB:106:G:O2'	36:BB:107:G:H5'	2.10	0.50
26:B1:7:ILE:HD13	26:B1:69:LYS:CG	2.41	0.50
6:AF:47:ARG:HB3	6:AF:47:ARG:HH11	1.68	0.50
1:AA:1355:G:H2'	1:AA:1356:G:H8	1.75	0.50
35:BA:2101:G:H3'	35:BA:2102:U:H5''	1.93	0.50
28:B3:30:ARG:HG3	35:BA:1184:G:OP1	2.12	0.50
22:AV:37:A:C2'	22:AV:38:A:H5'	2.41	0.50
57:BZ:16:SER:C	57:BZ:20:ARG:HG2	2.31	0.50
49:BR:37:THR:HG23	49:BR:40:LYS:HE2	1.93	0.50
1:AA:1371:G:H2'	1:AA:1372:U:H6	1.72	0.50
40:BF:42:ALA:C	40:BF:44:ARG:H	2.15	0.50
1:AA:708:C:H2'	1:AA:709:G:H8	1.76	0.50
9:AI:6:GLY:HA3	9:AI:84:ALA:HB2	1.92	0.50
35:BA:209:C:C4'	35:BA:681:G:H4'	2.42	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:10:C:N4	36:BB:11:C:H41	2.10	0.50
49:BR:99:LYS:CD	49:BR:99:LYS:H	2.21	0.50
1:AA:552:U:C2	1:AA:553:A:C8	3.00	0.50
1:AA:347:G:H21	1:AA:348:G:H1'	1.77	0.50
35:BA:1385:G:HO2'	35:BA:1396:U:H6	1.60	0.50
35:BA:1399:C:O5'	35:BA:1399:C:H6	1.94	0.50
26:B1:91:LYS:O	26:B1:93:GLU:N	2.44	0.50
35:BA:2564:A:N6	35:BA:2565:A:N6	2.59	0.50
46:BO:11:ALA:O	46:BO:98:VAL:HA	2.11	0.50
39:BE:202:LYS:HD2	39:BE:202:LYS:N	2.26	0.50
38:BD:274:ARG:HG3	38:BD:274:ARG:NH1	2.25	0.50
1:AA:1397:C:O4'	1:AA:1397:C:O2	2.29	0.50
24:AY:113:ILE:HG22	24:AY:118:GLY:HA2	1.92	0.50
24:AY:108:CYS:HA	24:AY:136:PRO:HG2	1.94	0.50
24:AY:282:ARG:O	24:AY:283:GLN:HB2	2.10	0.50
35:BA:2352:A:C2'	35:BA:2353:G:H5'	2.41	0.50
35:BA:582:G:H2'	35:BA:583:G:C8	2.46	0.50
35:BA:591:C:C2	35:BA:592:G:C8	2.99	0.50
35:BA:673:C:C2	35:BA:808:G:N2	2.80	0.50
35:BA:812:C:H1'	35:BA:1250:G:C2	2.46	0.50
35:BA:996:A:OP1	53:BV:10:LYS:HD2	2.11	0.50
38:BD:144:ALA:H	38:BD:156:ALA:HB3	1.75	0.50
47:BP:16:ARG:HD3	47:BP:16:ARG:C	2.32	0.50
47:BP:83:VAL:CG1	47:BP:112:LEU:HD21	2.41	0.50
51:BT:45:PHE:CE1	51:BT:74:ARG:HG3	2.45	0.50
51:BT:89:VAL:CG1	51:BT:91:ARG:HE	2.24	0.50
53:BV:23:GLU:OE2	53:BV:89:GLN:NE2	2.45	0.50
54:BW:40:ASN:O	54:BW:41:LYS:HG2	2.11	0.50
1:AA:18:C:C1'	1:AA:1079:G:H21	2.25	0.50
34:B9:11:CYS:SG	34:B9:27:CYS:SG	3.09	0.50
35:BA:2787:C:C1'	39:BE:61:ARG:HD3	2.41	0.50
57:BZ:129:SER:HB3	57:BZ:131:ARG:HD3	1.93	0.50
1:AA:1269:A:H61	1:AA:1312:G:C2'	2.24	0.50
3:AC:114:PRO:O	3:AC:117:ALA:HB3	2.10	0.50
3:AC:9:GLY:HA2	3:AC:12:LEU:HG	1.92	0.50
9:AI:99:LEU:C	9:AI:101:PHE:H	2.14	0.50
10:AJ:90:LEU:N	10:AJ:91:PRO:CD	2.73	0.50
35:BA:888:C:H2'	35:BA:888:C:O2	2.11	0.50
56:BY:46:LYS:CG	56:BY:47:LYS:H	2.23	0.50
40:BF:195:ASP:HB3	40:BF:198:ALA:H	1.75	0.50
40:BF:5:ALA:HB1	40:BF:123:LEU:HD21	1.93	0.50
35:BA:1060:U:H1'	35:BA:1061:U:O5'	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:118:PRO:HD2	42:BH:121:ILE:CB	2.41	0.50
37:BC:3:HIS:CG	37:BC:7:TYR:CD2	2.99	0.50
57:BZ:151:HIS:HA	57:BZ:171:ILE:CG2	2.41	0.50
1:AA:405:U:H5''	1:AA:406:G:O4'	2.11	0.50
1:AA:59:A:H5'	1:AA:60:A:H5''	1.91	0.50
38:BD:123:ALA:HB3	38:BD:131:LEU:CD2	2.41	0.50
34:B9:16:VAL:CG1	35:BA:1032:A:H4'	2.40	0.50
35:BA:1296:G:OP1	35:BA:2709:G:H4'	2.11	0.50
1:AA:1128:C:O2'	1:AA:1130:A:C8	2.64	0.50
35:BA:1453:U:H4'	35:BA:1455:G:OP1	2.12	0.50
37:BC:128:GLY:HA3	37:BC:137:LEU:HD23	1.90	0.50
35:BA:1605:C:H2'	35:BA:1606:G:C5'	2.41	0.50
31:B6:42:TRP:HA	31:B6:42:TRP:HE3	1.77	0.50
12:AL:113:ARG:CB	12:AL:122:THR:HG21	2.41	0.50
1:AA:280:C:N4	17:AQ:91:ARG:NE	2.60	0.50
35:BA:289:A:C6	35:BA:290:G:C6	2.99	0.50
35:BA:1214:A:H2'	35:BA:1215:G:O4'	2.11	0.50
6:AF:43:LEU:CD2	6:AF:43:LEU:N	2.75	0.50
1:AA:604:G:C6	1:AA:605:U:N3	2.80	0.50
44:BK:82:UNK:CB	44:BK:98:UNK:N	2.73	0.50
24:AY:10:VAL:HG12	24:AY:279:PRO:HG3	1.87	0.50
24:AY:162:LEU:O	24:AY:163:LYS:HB2	2.11	0.50
1:AA:1408:A:O2'	1:AA:1409:C:H5'	2.11	0.50
32:B7:1:MET:O	32:B7:2:LYS:C	2.49	0.50
35:BA:1259:G:H2'	35:BA:1260:G:H8	1.76	0.50
35:BA:1287:A:H2'	35:BA:1288:U:H5'	1.92	0.50
35:BA:1394:U:H5''	35:BA:1603:A:O3'	2.12	0.50
35:BA:649:G:C2	35:BA:650:C:C2	3.00	0.50
35:BA:1257:C:O2'	40:BF:83:PHE:HD1	1.93	0.50
51:BT:60:THR:HG22	51:BT:76:PHE:O	2.11	0.50
1:AA:577:G:H8	1:AA:577:G:OP1	1.95	0.50
1:AA:744:C:O2'	1:AA:745:C:H5'	2.10	0.50
1:AA:858:G:H8	1:AA:858:G:O5'	1.95	0.50
2:AB:102:LEU:O	2:AB:105:PHE:CB	2.58	0.50
48:BQ:26:TYR:O	48:BQ:102:VAL:HG21	2.11	0.50
57:BZ:99:TYR:CD1	57:BZ:125:LEU:HA	2.46	0.50
1:AA:49:U:C4	1:AA:364:A:C5	2.99	0.50
12:AL:86:ARG:NH2	12:AL:99:HIS:CD2	2.80	0.50
12:AL:89:ARG:HD3	12:AL:90:VAL:H	1.74	0.50
1:AA:1057:G:C6	1:AA:1058:G:C4	3.00	0.50
1:AA:976:G:OP2	1:AA:1358:U:O2'	2.29	0.50
1:AA:980:C:H5	1:AA:981:U:C2	2.29	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:95:THR:HG22	3:AC:95:THR:O	2.11	0.50
14:AN:38:GLY:O	14:AN:39:LEU:HD23	2.11	0.50
19:AS:12:ASP:OD2	19:AS:14:HIS:CE1	2.64	0.50
19:AS:42:PRO:O	19:AS:43:GLU:CB	2.59	0.50
35:BA:1206:G:C2	35:BA:1207:C:C2	2.99	0.50
35:BA:1060:U:O3'	44:BK:1:UNK:N	2.44	0.50
42:BH:83:TYR:HB3	42:BH:135:GLY:H	1.76	0.50
35:BA:143:G:OP1	35:BA:1598:C:H1'	2.11	0.50
37:BC:21:THR:O	37:BC:25:ALA:HB3	2.11	0.50
37:BC:25:ALA:HB2	37:BC:224:ILE:HG22	1.91	0.50
7:AG:119:ARG:O	7:AG:120:ILE:C	2.50	0.50
35:BA:2315:G:H4'	41:BG:130:ASN:ND2	2.27	0.50
35:BA:2280:G:C2	35:BA:2281:C:C6	2.99	0.50
47:BP:65:ARG:HB3	47:BP:68:GLN:NE2	2.26	0.50
35:BA:272(H):C:O5'	35:BA:272(H):C:C6	2.63	0.50
50:BS:34:HIS:CB	50:BS:36:TYR:HE1	2.24	0.50
50:BS:96:GLY:O	50:BS:98:VAL:N	2.39	0.50
35:BA:2180:U:H6	35:BA:2181:G:N7	2.09	0.50
35:BA:2093:G:C6	35:BA:2225:A:C8	2.98	0.50
35:BA:1510:G:C2	35:BA:1511:C:C2	3.00	0.50
35:BA:2154:G:N1	35:BA:2155:G:N7	2.60	0.50
42:BH:92:ILE:HD11	42:BH:95:ARG:NH2	2.26	0.50
7:AG:65:ALA:HB3	7:AG:124:LEU:HD23	1.91	0.50
36:BB:114:C:H2'	36:BB:115:G:C8	2.46	0.50
35:BA:2132:U:O5'	35:BA:2132:U:H6	1.94	0.50
1:AA:571:U:OP1	1:AA:819:A:N3	2.44	0.50
48:BQ:76:LYS:HB3	48:BQ:91:GLU:CG	2.41	0.50
46:BO:105:GLU:HA	46:BO:108:GLU:CD	2.31	0.50
1:AA:1485:U:O2'	1:AA:1486:G:H5'	2.11	0.50
37:BC:51:PRO:HG2	37:BC:52:ARG:HD3	1.92	0.50
24:AY:138:LEU:HD22	24:AY:253:PRO:CG	2.34	0.50
24:AY:155:LEU:HD12	24:AY:155:LEU:N	2.23	0.50
35:BA:1902:C:C5'	38:BD:246:PRO:HD3	2.42	0.50
35:BA:2044:C:C2	35:BA:2625:G:C2	2.99	0.50
35:BA:2293:C:N4	35:BA:2294:C:N4	2.59	0.50
35:BA:2506:U:OP2	35:BA:2576:G:N1	2.42	0.50
35:BA:2689:U:H4'	35:BA:2690:C:H5'	1.92	0.50
35:BA:2692:C:C1'	35:BA:2847:U:O2'	2.59	0.50
35:BA:513:A:H2	35:BA:582:G:H4'	1.76	0.50
35:BA:969:U:O5'	35:BA:969:U:H6	1.94	0.50
1:AA:773:G:C5'	38:BD:203:ASN:ND2	2.74	0.50
38:BD:80:ALA:HB2	38:BD:96:HIS:NE2	2.25	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BU:98:LEU:C	52:BU:100:VAL:N	2.62	0.50
52:BU:18:LEU:O	52:BU:22:LYS:HG2	2.11	0.50
52:BU:74:LEU:HD21	52:BU:79:PHE:HA	1.92	0.50
53:BV:87:HIS:NE2	53:BV:89:GLN:HG2	2.27	0.50
1:AA:575:G:OP1	1:AA:576:G:OP1	2.30	0.50
1:AA:764:C:H5''	15:AO:50:HIS:CD2	2.46	0.50
1:AA:828:A:H3'	1:AA:828:A:C8	2.45	0.50
2:AB:170:GLU:C	2:AB:172:ILE:N	2.64	0.50
2:AB:97:TRP:CZ3	2:AB:172:ILE:HB	2.47	0.50
35:BA:2244:U:O4'	35:BA:2434:A:C6	2.65	0.50
35:BA:2420:C:H2'	35:BA:2421:G:C8	2.47	0.50
35:BA:2261:C:O2'	35:BA:2262:U:H5'	2.11	0.50
35:BA:2322:A:N6	35:BA:2323:G:C6	2.80	0.50
57:BZ:162:GLU:O	57:BZ:163:LEU:O	2.29	0.50
57:BZ:71:VAL:HG12	57:BZ:73:GLN:H	1.76	0.50
35:BA:2589:A:H2'	35:BA:2590:A:H8	1.76	0.50
3:AC:122:GLU:O	3:AC:125:GLU:HB2	2.12	0.50
1:AA:1106:G:H5''	3:AC:172:ARG:HG2	1.93	0.50
40:BF:123:LEU:HD11	40:BF:125:LEU:CD2	2.41	0.50
4:AD:121:VAL:O	4:AD:134:ASP:CB	2.59	0.50
35:BA:310:A:O2'	35:BA:311:A:H3'	2.11	0.50
35:BA:2881:C:C5'	49:BR:117:VAL:HG21	2.42	0.50
49:BR:48:VAL:N	49:BR:51:LEU:HD13	2.26	0.50
11:AK:58:PRO:O	11:AK:61:ALA:HB3	2.12	0.50
35:BA:869:G:C2'	35:BA:870:A:H5'	2.41	0.50
35:BA:1456:G:C2	35:BA:2704:C:C2	3.00	0.50
41:BG:83:ARG:CZ	41:BG:84:LYS:HZ2	2.25	0.50
54:BW:97:LYS:HE3	54:BW:99:ARG:NH1	2.27	0.50
35:BA:1887:C:H2'	35:BA:1888:G:C5'	2.42	0.50
5:AE:91:LEU:HD12	5:AE:120:THR:HB	1.93	0.50
35:BA:2167:U:H3	35:BA:2171:A:H62	1.60	0.50
26:B1:44:PRO:HB2	26:B1:46:LEU:HD23	1.93	0.50
50:BS:85:VAL:H	50:BS:106:ARG:CA	2.24	0.50
55:BX:55:ASN:O	55:BX:80:ILE:HG12	2.12	0.50
1:AA:67:C:C6	1:AA:67:C:C3'	2.95	0.50
13:AM:64:TRP:O	13:AM:66:LEU:CD1	2.60	0.50
57:BZ:19:ARG:NH1	57:BZ:84:GLU:HG2	2.26	0.50
35:BA:186:G:O2'	35:BA:187:G:H5'	2.12	0.50
19:AS:4:SER:O	19:AS:5:LEU:O	2.29	0.50
16:AP:3:LYS:HD2	16:AP:24:ALA:HB2	1.92	0.50
1:AA:11:G:H2'	1:AA:12:U:O4'	2.11	0.50
35:BA:2163:C:C2'	35:BA:2164:C:H5'	2.41	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:B4:40:HIS:HD2	29:B4:42:PHE:CE1	2.30	0.50
42:BH:138:LYS:O	42:BH:141:VAL:HG22	2.11	0.50
1:AA:46:G:HO2'	1:AA:365:U:H1'	1.76	0.50
9:AI:18:PHE:HB2	9:AI:62:TYR:HB3	1.92	0.50
24:AY:146:ARG:HG2	35:BA:2656:U:H4'	1.94	0.50
24:AY:154:LEU:C	24:AY:156:ASP:H	2.14	0.50
24:AY:403:LEU:CD1	24:AY:461:ALA:HB2	2.34	0.50
24:AY:76:GLN:HG2	24:AY:77:PHE:N	2.27	0.50
1:AA:1230:C:OP1	22:AV:30:G:H5''	2.12	0.50
1:AA:1491:G:C3'	1:AA:1492:A:H8	2.22	0.50
30:B5:36:CYS:SG	30:B5:48:GLU:O	2.69	0.50
35:BA:1264:G:O3'	35:BA:2615:U:H5'	2.11	0.50
35:BA:1310:G:H4'	35:BA:1611:C:H5''	1.94	0.50
35:BA:1805:U:C2	35:BA:1806:C:C5	2.98	0.50
35:BA:1924:C:HO2'	35:BA:1925:C:H6	1.46	0.50
35:BA:1926:U:O2	35:BA:1926:U:C2'	2.58	0.50
35:BA:2514:U:O4'	39:BE:151:TYR:CE2	2.64	0.50
35:BA:2726:U:HO2'	35:BA:2727:G:H8	1.57	0.50
35:BA:824:A:C5	35:BA:825:C:C5	2.99	0.50
35:BA:949:C:O2'	35:BA:950:G:H5'	2.11	0.50
39:BE:9:VAL:CG1	39:BE:25:VAL:CB	2.89	0.50
35:BA:1991:U:H5''	35:BA:1991:U:H6	1.76	0.50
46:BO:4:PRO:HD3	46:BO:24:VAL:CG1	2.41	0.50
35:BA:2762:G:H8	35:BA:2762:G:C5'	2.24	0.50
6:AF:50:TYR:CD1	6:AF:50:TYR:C	2.84	0.50
1:AA:759:A:C1'	12:AL:12:ARG:HH22	2.23	0.50
15:AO:53:HIS:HD1	15:AO:53:HIS:C	2.15	0.50
18:AR:37:VAL:CG2	18:AR:38:GLU:N	2.73	0.50
35:BA:1029:A:H2'	35:BA:1030:G:O4'	2.12	0.50
34:B9:36:GLN:CD	35:BA:1124:C:H1'	2.32	0.50
35:BA:1125:G:H3'	35:BA:1126:A:C8	2.45	0.50
2:AB:63:MET:HG3	2:AB:64:ARG:H	1.76	0.50
42:BH:85:LYS:HZ2	42:BH:87:LEU:CD1	2.17	0.50
21:AU:18:TYR:CE1	21:AU:24:ARG:NH2	2.79	0.50
1:AA:1014:A:H5''	19:AS:14:HIS:CG	2.46	0.50
3:AC:39:ILE:O	3:AC:42:LEU:HB3	2.12	0.50
3:AC:55:VAL:CG2	3:AC:68:VAL:HG13	2.41	0.50
56:BY:46:LYS:HB3	56:BY:62:GLU:HG3	1.94	0.50
56:BY:78:ALA:HB2	56:BY:81:LYS:NZ	2.27	0.50
27:B2:29:LYS:HA	27:B2:32:LEU:CB	2.41	0.50
4:AD:31:CYS:O	4:AD:32:ALA:CB	2.59	0.50
35:BA:1058:G:OP2	44:BK:1:UNK:HA	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:123:LYS:O	12:AL:125:PRO:HD3	2.12	0.50
11:AK:33:THR:HG22	11:AK:39:PRO:HG3	1.93	0.50
37:BC:14:VAL:HG21	37:BC:32:LEU:HD11	1.94	0.50
35:BA:871:U:O3'	48:BQ:69:PHE:CE2	2.64	0.50
35:BA:879:G:C6	35:BA:898:C:N4	2.80	0.50
41:BG:124:SER:HB2	41:BG:131:TYR:CZ	2.47	0.50
5:AE:107:ARG:C	5:AE:109:ILE:N	2.62	0.50
17:AQ:74:LEU:HD12	17:AQ:75:ARG:HG2	1.94	0.50
1:AA:782:A:C8	1:AA:783:C:C5	3.00	0.50
36:BB:101:G:C2'	36:BB:102:A:O4'	2.55	0.50
37:BC:180:PHE:CB	37:BC:184:LYS:HB3	2.28	0.50
1:AA:1005:A:H5''	1:AA:1038:C:O2	2.11	0.50
35:BA:2697:G:H2'	35:BA:2698:U:O4'	2.12	0.50
25:B0:80:HIS:N	25:B0:80:HIS:CD2	2.79	0.50
1:AA:1493:A:H2'	1:AA:1494:G:C8	2.46	0.50
1:AA:1493:A:HO2'	1:AA:1494:G:C1'	2.25	0.50
36:BB:117:G:N2	36:BB:118:G:H1'	2.26	0.50
25:B0:10:THR:HG21	35:BA:2277:G:OP2	2.11	0.50
1:AA:552:U:H2'	1:AA:553:A:H8	1.77	0.50
35:BA:1794:U:O4'	35:BA:1900:A:C2	2.64	0.50
4:AD:148:VAL:HG23	4:AD:181:MET:HB3	1.93	0.50
8:AH:22:GLU:O	8:AH:63:LEU:HD23	2.12	0.50
54:BW:36:LEU:CD1	54:BW:47:VAL:HG12	2.41	0.50
35:BA:40:C:H2'	35:BA:41:C:H6	1.77	0.50
40:BF:60:SER:OG	40:BF:61:GLY:N	2.44	0.50
24:AY:135:THR:O	24:AY:136:PRO:O	2.30	0.50
24:AY:315:VAL:HG22	24:AY:367:LEU:O	2.11	0.50
24:AY:331:LEU:HD22	24:AY:379:PHE:CG	2.31	0.50
24:AY:387:PHE:HD1	24:AY:387:PHE:N	2.05	0.50
24:AY:63:GLU:OE2	24:AY:70:ILE:HB	2.11	0.50
1:AA:1406:U:C2'	1:AA:1407:C:H5'	2.42	0.50
26:B1:25:LYS:HB2	35:BA:388:G:OP1	2.12	0.50
30:B5:34:PRO:O	30:B5:35:GLU:HG2	2.11	0.50
35:BA:1247:A:O2'	35:BA:1248:G:H5''	2.12	0.50
35:BA:693:C:H4'	35:BA:1353:A:O2'	2.11	0.50
35:BA:13:A:C2	35:BA:526:A:N7	2.80	0.50
35:BA:1926:U:H3'	35:BA:1927:A:C5'	2.42	0.50
35:BA:225:A:H2'	35:BA:226:G:H5'	1.94	0.50
35:BA:2721:A:H2'	35:BA:2722:G:O4'	2.12	0.50
35:BA:524:U:O2'	35:BA:555:U:H4'	2.12	0.50
35:BA:1826:G:H4'	38:BD:242:ARG:NE	2.26	0.50
38:BD:24:ILE:CG2	38:BD:83:GLU:CA	2.88	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BP:115:LEU:HD23	47:BP:115:LEU:N	2.26	0.50
47:BP:47:ASP:HB2	47:BP:51:PHE:CD2	2.43	0.50
51:BT:48:ILE:CD1	51:BT:48:ILE:N	2.72	0.50
51:BT:72:VAL:O	51:BT:73:GLU:CG	2.60	0.50
46:BO:71:ARG:HH12	51:BT:74:ARG:NH2	2.09	0.50
51:BT:80:SER:HB3	51:BT:81:PRO:CD	2.33	0.50
52:BU:55:ARG:HG3	52:BU:55:ARG:HH11	1.76	0.50
1:AA:572:A:P	1:AA:573:A:OP1	2.70	0.50
5:AE:12:LEU:CD2	5:AE:13:ILE:O	2.60	0.50
2:AB:97:TRP:HZ3	2:AB:172:ILE:CB	2.24	0.50
2:AB:21:ARG:HB3	2:AB:39:ILE:HA	1.93	0.50
2:AB:88:ALA:O	2:AB:89:GLY:C	2.49	0.50
35:BA:954:G:OP1	48:BQ:15:GLY:N	2.44	0.50
48:BQ:29:PHE:HB2	48:BQ:105:GLU:OE2	2.12	0.50
12:AL:24:VAL:O	12:AL:24:VAL:HG12	2.12	0.50
56:BY:15:VAL:C	56:BY:17:SER:H	2.15	0.50
56:BY:10:GLY:CA	56:BY:27:VAL:HG13	2.42	0.50
40:BF:141:ALA:C	40:BF:143:ALA:N	2.65	0.50
40:BF:157:VAL:O	40:BF:158:THR:HB	2.12	0.50
4:AD:3:ARG:O	4:AD:5:ILE:HG13	2.12	0.50
35:BA:331:A:H1'	35:BA:332:A:OP1	2.12	0.50
35:BA:1484:G:C2	35:BA:1506:C:N3	2.79	0.50
35:BA:2835:A:H62	35:BA:2878:U:H3'	1.75	0.50
11:AK:63:LEU:HA	11:AK:66:LEU:HG	1.94	0.50
15:AO:5:LYS:HA	15:AO:8:LYS:CG	2.41	0.50
35:BA:1719:G:C6	35:BA:1720:U:C4	2.99	0.50
37:BC:114:VAL:HG21	37:BC:149:ILE:HD11	1.93	0.50
40:BF:33:LEU:N	40:BF:33:LEU:HD22	2.27	0.50
20:AT:71:THR:HG22	20:AT:72:LEU:N	2.27	0.50
17:AQ:57:VAL:HG21	17:AQ:73:VAL:CG1	2.41	0.50
42:BH:37:VAL:HG12	42:BH:38:SER:N	2.27	0.50
42:BH:67:LEU:O	42:BH:71:LEU:N	2.39	0.50
38:BD:111:LEU:HD22	38:BD:127:VAL:HB	1.92	0.50
8:AH:111:ILE:HG22	8:AH:112:LEU:N	2.26	0.50
42:BH:29:PRO:HG2	42:BH:30:LYS:H	1.76	0.50
50:BS:101:LEU:O	50:BS:102:ALA:O	2.29	0.50
1:AA:1003:G:C2	1:AA:1039:C:N3	2.80	0.50
25:B0:48:GLY:HA3	25:B0:80:HIS:HA	1.94	0.50
19:AS:6:LYS:CD	19:AS:6:LYS:N	2.64	0.50
10:AJ:34:VAL:HG12	10:AJ:35:SER:N	2.26	0.50
51:BT:107:ASP:CG	51:BT:108:ARG:N	2.65	0.50
42:BH:94:TYR:CG	42:BH:107:VAL:HB	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1345:U:H5''	9:AI:120:ARG:NH1	2.27	0.50
7:AG:24:THR:HA	7:AG:27:ILE:CB	2.39	0.50
16:AP:1:MET:O	16:AP:24:ALA:HB2	2.12	0.50
35:BA:761:A:C8	35:BA:761:A:O5'	2.64	0.50
1:AA:455:C:O2	1:AA:477:A:C2	2.64	0.50
24:AY:183:TYR:CD2	24:AY:189:GLU:C	2.85	0.50
24:AY:315:VAL:CG1	24:AY:316:ALA:N	2.73	0.50
24:AY:412:LEU:HD23	24:AY:436:LEU:CD1	2.39	0.50
32:B7:4:THR:CG2	35:BA:789:A:H5'	2.41	0.50
35:BA:1267:U:C5	35:BA:2012:G:C2	2.99	0.50
35:BA:2498:C:C3'	35:BA:2499:C:H5''	2.42	0.50
35:BA:2687:U:C2'	35:BA:2688:U:H5'	2.42	0.50
35:BA:962:G:N1	35:BA:963:U:C2	2.80	0.50
35:BA:991:C:OP2	35:BA:1186:G:OP2	2.29	0.50
35:BA:994:C:O2'	35:BA:996:A:OP1	2.30	0.50
38:BD:158:ALA:CB	38:BD:161:THR:OG1	2.56	0.50
38:BD:92:ILE:CG2	38:BD:106:ILE:HG12	2.42	0.50
39:BE:105:THR:HG23	39:BE:165:VAL:O	2.12	0.50
39:BE:111:ARG:O	39:BE:112:GLY:O	2.30	0.50
39:BE:33:VAL:HG11	39:BE:89:ASP:N	2.26	0.50
39:BE:70:ALA:O	39:BE:72:VAL:N	2.40	0.50
40:BF:65:TRP:CZ3	40:BF:72:ARG:HB3	2.47	0.50
45:BN:97:ARG:O	45:BN:98:VAL:C	2.49	0.50
52:BU:28:ARG:HD3	52:BU:38:THR:HG21	1.92	0.50
53:BV:4:ILE:HB	53:BV:39:LEU:O	2.12	0.50
1:AA:658:G:O4'	15:AO:22:THR:HB	2.11	0.50
1:AA:719:C:H3'	1:AA:720:C:H6	1.74	0.50
1:AA:827:U:O2	1:AA:827:U:H2'	2.11	0.50
15:AO:80:ALA:O	15:AO:83:GLU:N	2.45	0.50
18:AR:76:LEU:O	18:AR:78:LEU:N	2.45	0.50
34:B9:31:LYS:O	34:B9:32:HIS:HD2	1.95	0.50
2:AB:171:ALA:HA	2:AB:174:VAL:HG21	1.93	0.50
2:AB:219:VAL:CA	2:AB:222:ILE:HG12	2.42	0.50
2:AB:58:ILE:O	2:AB:62:ALA:N	2.29	0.50
35:BA:2787:C:C2	39:BE:61:ARG:HD3	2.46	0.50
33:B8:13:ARG:NH1	47:BP:59:LEU:HD23	2.23	0.50
36:BB:81:G:N1	36:BB:97:G:N1	2.60	0.50
48:BQ:24:GLY:O	48:BQ:26:TYR:N	2.45	0.50
48:BQ:58:PHE:CD1	48:BQ:58:PHE:O	2.63	0.50
22:AV:53:G:H22	22:AV:61:C:N4	2.10	0.50
22:AV:55:U:N3	22:AV:58:A:OP2	2.45	0.50
22:AV:64:G:H2'	22:AV:65:C:C6	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1308:U:C5	13:AM:99:ARG:NH1	2.80	0.50
13:AM:97:PRO:HB2	13:AM:101:GLN:NE2	2.27	0.50
12:AL:31:PRO:O	12:AL:32:PHE:CG	2.65	0.50
12:AL:82:VAL:HG12	12:AL:83:VAL:N	2.27	0.50
35:BA:886:C:O2'	35:BA:887:A:OP1	2.30	0.50
27:B2:25:VAL:C	27:B2:27:GLU:N	2.64	0.50
27:B2:37:PHE:O	27:B2:40:SER:N	2.35	0.50
35:BA:94(A):G:C2'	35:BA:95:G:C5'	2.79	0.50
19:AS:50:ALA:HA	19:AS:58:VAL:O	2.12	0.50
4:AD:165:MET:HE2	4:AD:176:LEU:CD2	2.42	0.50
51:BT:128:GLU:O	51:BT:129:ARG:C	2.50	0.50
35:BA:869:G:H1'	48:BQ:8:LYS:HD2	1.94	0.50
57:BZ:110:GLY:O	57:BZ:115:GLY:CA	2.59	0.50
40:BF:107:LYS:O	40:BF:206:ILE:HG23	2.11	0.50
31:B6:25:LYS:HD2	35:BA:2285:C:H42	1.77	0.50
31:B6:28:ARG:O	31:B6:32:ASN:HB3	2.12	0.50
38:BD:117:VAL:HG21	38:BD:128:GLY:C	2.32	0.50
8:AH:103:VAL:O	8:AH:104:ARG:C	2.50	0.50
1:AA:961:U:OP2	1:AA:1223:C:O4'	2.29	0.50
35:BA:1712:C:N3	35:BA:1747:G:N2	2.59	0.50
10:AJ:4:ILE:HB	10:AJ:74:ILE:HD11	1.93	0.50
32:B7:40:TRP:CH2	35:BA:459:U:C4'	2.88	0.50
9:AI:87:GLN:HG2	9:AI:88:TYR:CD1	2.47	0.50
1:AA:1374:A:C2	1:AA:1375:A:C8	3.00	0.50
28:B3:6:VAL:CG1	28:B3:56:VAL:HA	2.38	0.50
1:AA:627:G:OP1	16:AP:38:TYR:HE2	1.94	0.50
1:AA:279:A:C2'	17:AQ:95:TYR:HE1	2.25	0.50
22:AV:33:U:C6	22:AV:33:U:H5'	2.43	0.50
13:AM:70:LEU:O	13:AM:73:GLU:N	2.45	0.50
15:AO:85:LEU:H	15:AO:85:LEU:HD23	1.74	0.50
1:AA:280:C:N4	17:AQ:91:ARG:NH2	2.59	0.50
1:AA:499:A:O3'	1:AA:500:G:C8	2.59	0.50
1:AA:500:G:H8	1:AA:500:G:P	2.35	0.50
35:BA:1244:G:H2'	35:BA:1245:G:H8	1.77	0.50
35:BA:1244:G:C4'	47:BP:11:GLY:HA2	2.42	0.50
25:B0:50:ASN:O	25:B0:62:LEU:CD2	2.60	0.50
1:AA:1052:U:O2	1:AA:1207:G:N2	2.45	0.50
35:BA:376:C:H2'	35:BA:377:C:C6	2.46	0.50
24:AY:480:LYS:HA	24:AY:480:LYS:HE2	1.94	0.50
35:BA:53:A:H8	35:BA:53:A:O5'	1.95	0.50
35:BA:88:G:N3	35:BA:88:G:H2'	2.27	0.50
35:BA:938:G:H2'	35:BA:939:G:H8	1.77	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BJ:61:UNK:O	43:BJ:65:UNK:CB	2.59	0.50
12:AL:111:LYS:HG2	12:AL:112:ASP:OD1	2.12	0.50
35:BA:2340:G:O2'	35:BA:2341:G:H5'	2.12	0.50
35:BA:1048:A:OP2	35:BA:1048:A:C8	2.64	0.50
24:AY:170:THR:CA	24:AY:183:TYR:O	2.56	0.50
24:AY:425:VAL:HG13	24:AY:445:GLN:HG3	1.93	0.50
32:B7:34:ARG:NE	35:BA:467:G:OP2	2.45	0.50
33:B8:35:GLN:C	33:B8:36:LYS:HG3	2.32	0.50
35:BA:565:C:C4'	35:BA:1253:A:N1	2.65	0.50
35:BA:1286:A:H2	35:BA:1328:G:HO2'	1.60	0.50
35:BA:1835:G:C2	35:BA:1836:C:C5	3.00	0.50
35:BA:2000:G:C2	35:BA:2001:A:N7	2.80	0.50
35:BA:244:A:N1	35:BA:255:A:H1'	2.27	0.50
35:BA:534:U:O2'	52:BU:49:HIS:CD2	2.61	0.50
35:BA:627:A:N6	35:BA:636:G:H2'	2.27	0.50
38:BD:183:ARG:HG3	38:BD:270:ILE:HA	1.93	0.50
35:BA:1820:U:N1	38:BD:202:LYS:HD3	2.27	0.50
39:BE:102:VAL:HG23	39:BE:104:VAL:HG23	1.94	0.50
39:BE:175:VAL:HG23	39:BE:182:LEU:CD1	2.42	0.50
40:BF:65:TRP:HB2	40:BF:66:PRO:HD2	1.92	0.50
35:BA:1141:U:H5	45:BN:66:LYS:NZ	2.10	0.50
46:BO:76:ALA:HB3	51:BT:75:ILE:HB	1.93	0.50
51:BT:41:ARG:HG2	51:BT:41:ARG:NH1	2.27	0.50
35:BA:2559:C:H2'	35:BA:2560:C:C6	2.43	0.50
46:BO:12:ASP:OD1	46:BO:12:ASP:N	2.44	0.50
46:BO:12:ASP:OD2	46:BO:85:VAL:HG13	2.11	0.50
5:AE:12:LEU:HD22	5:AE:13:ILE:C	2.33	0.50
6:AF:52:ILE:HG21	6:AF:87:ARG:HH12	1.77	0.50
18:AR:38:GLU:CD	18:AR:38:GLU:H	2.15	0.50
53:BV:5:VAL:HG21	53:BV:35:LEU:HG	1.93	0.50
2:AB:20:GLU:HG2	2:AB:189:ASP:CG	2.32	0.50
33:B8:13:ARG:NH1	47:BP:61:ARG:HD2	2.23	0.50
35:BA:952:G:C4	35:BA:966:G:C2	2.99	0.50
57:BZ:101:PRO:HG2	57:BZ:135:GLU:O	2.11	0.50
57:BZ:128:VAL:HG13	57:BZ:133:ILE:HD13	1.93	0.50
1:AA:1114:C:O2'	1:AA:1115:C:H5'	2.12	0.50
1:AA:1151:A:HO2'	1:AA:1152:A:H8	1.57	0.50
3:AC:77:ILE:HG23	3:AC:84:ILE:HG21	1.94	0.50
10:AJ:43:ARG:CB	10:AJ:67:THR:HG23	2.34	0.50
10:AJ:9:ARG:HA	10:AJ:68:HIS:O	2.11	0.50
3:AC:40:ARG:NE	14:AN:52:GLN:OE1	2.44	0.50
55:BX:39:ILE:CG2	55:BX:54:VAL:HG11	2.40	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:26:CYS:HA	4:AD:31:CYS:CB	2.42	0.50
19:AS:32:LYS:O	19:AS:33:THR:HB	2.12	0.50
19:AS:51:VAL:O	19:AS:58:VAL:HG22	2.12	0.50
49:BR:47:PHE:C	49:BR:49:ASP:H	2.16	0.50
49:BR:96:ARG:NH1	49:BR:96:ARG:CB	2.75	0.50
35:BA:679:C:O2'	35:BA:680:G:H5'	2.11	0.50
4:AD:15:GLU:HG2	4:AD:63:LYS:HG3	1.94	0.50
11:AK:71:LYS:O	11:AK:75:TYR:HD1	1.95	0.50
37:BC:173:ALA:HB3	37:BC:192:PHE:CE1	2.47	0.50
37:BC:22:ILE:HD13	37:BC:189:ILE:HG22	1.94	0.50
1:AA:624:C:H4'	16:AP:11:SER:HB3	1.93	0.50
1:AA:1507:A:H2'	1:AA:1508:G:C8	2.47	0.50
35:BA:1240:U:H2'	35:BA:1241:A:OP2	2.11	0.50
36:BB:49:C:H2'	36:BB:50:G:H8	1.77	0.50
42:BH:151:ILE:H	42:BH:151:ILE:CD1	2.09	0.50
35:BA:803:U:H2'	35:BA:804:A:O4'	2.11	0.50
9:AI:4:TYR:CD2	9:AI:85:LEU:HA	2.38	0.50
22:AV:33:U:O2	22:AV:35:A:C8	2.65	0.50
47:BP:138:LEU:HD21	47:BP:143:GLY:O	2.12	0.50
35:BA:2861:G:C2	35:BA:2862:G:C8	3.00	0.50
1:AA:277:C:OP1	17:AQ:41:LYS:HE3	2.12	0.50
36:BB:115:G:H2'	36:BB:116:G:C8	2.36	0.50
35:BA:1625:C:C2'	35:BA:1626:G:C5'	2.89	0.50
26:B1:13:ILE:HG12	26:B1:14:VAL:O	2.12	0.50
11:AK:108:ILE:HD12	11:AK:108:ILE:H	1.76	0.50
35:BA:491:G:C2	35:BA:492:A:H1'	2.46	0.50
10:AJ:30:SER:OG	10:AJ:81:THR:HG22	2.12	0.50
15:AO:11:VAL:O	15:AO:14:GLU:N	2.44	0.50
1:AA:217:C:H5''	1:AA:217:C:H6	1.76	0.50
35:BA:1099:G:H2'	35:BA:1100:C:C6	2.47	0.50
4:AD:39:PRO:HB3	4:AD:40:PRO:HD2	1.94	0.50
24:AY:104:THR:O	24:AY:104:THR:HG22	2.11	0.49
1:AA:970:C:C2	1:AA:1231:G:H1'	2.46	0.49
35:BA:1024:G:C3'	35:BA:1025:G:H5''	2.21	0.49
35:BA:1379:A:H5'	35:BA:1380:G:N7	2.27	0.49
35:BA:1657:C:H6	35:BA:1657:C:O5'	1.94	0.49
35:BA:752:A:N7	35:BA:1781:C:O2	2.45	0.49
33:B8:11:LYS:HZ1	35:BA:243:U:H5''	1.76	0.49
35:BA:2443:C:H2'	35:BA:2444:G:C5'	2.42	0.49
35:BA:2491:U:O2'	35:BA:2492:U:H5'	2.12	0.49
35:BA:2579:C:O2'	35:BA:2580:U:H5'	2.12	0.49
35:BA:444:C:H2'	35:BA:445:C:C6	2.47	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:158:ALA:O	38:BD:161:THR:CB	2.60	0.49
39:BE:24:THR:HG21	39:BE:188:VAL:CG1	2.33	0.49
47:BP:17:LYS:HG2	47:BP:17:LYS:O	2.12	0.49
35:BA:941:A:H4'	47:BP:35:HIS:CE1	2.47	0.49
53:BV:49:THR:O	53:BV:50:PRO:C	2.50	0.49
8:AH:14:ARG:HE	8:AH:83:ILE:CG2	2.21	0.49
8:AH:6:ILE:O	8:AH:7:ALA:C	2.49	0.49
15:AO:24:SER:O	15:AO:25:THR:C	2.50	0.49
18:AR:34:TYR:O	18:AR:34:TYR:HD1	1.95	0.49
2:AB:69:LEU:H	2:AB:162:ILE:HA	1.77	0.49
2:AB:221:LEU:O	2:AB:225:ALA:N	2.45	0.49
2:AB:33:TYR:CD1	2:AB:43:ASP:OD1	2.64	0.49
2:AB:9:GLU:HA	2:AB:12:GLU:HB2	1.93	0.49
33:B8:13:ARG:NH1	47:BP:61:ARG:O	2.45	0.49
35:BA:2393:A:N3	35:BA:2394:C:C6	2.80	0.49
22:AV:61:C:C5'	22:AV:62:C:OP2	2.60	0.49
1:AA:1151:A:H1'	1:AA:1152:A:H8	1.75	0.49
3:AC:179:ARG:CD	3:AC:207:VAL:HA	2.42	0.49
9:AI:9:ARG:CG	9:AI:14:VAL:HG22	2.42	0.49
19:AS:20:LEU:O	19:AS:23:ASN:HB3	2.11	0.49
56:BY:38:ILE:HD13	56:BY:66:PRO:HG3	1.94	0.49
40:BF:127:GLU:CB	40:BF:196:LEU:HD12	2.41	0.49
15:AO:4:THR:HG22	15:AO:7:GLU:H	1.76	0.49
1:AA:404:U:H5'	4:AD:122:ARG:NE	2.26	0.49
40:BF:110:LEU:HD23	40:BF:183:VAL:HG13	1.93	0.49
42:BH:37:VAL:CG2	42:BH:72:ILE:HG12	2.43	0.49
1:AA:781:A:C8	1:AA:801:U:O4	2.65	0.49
5:AE:115:VAL:HG13	5:AE:117:ASP:H	1.77	0.49
50:BS:58:LEU:HG	50:BS:59:LYS:N	2.26	0.49
38:BD:72:LYS:HD3	38:BD:97:TYR:CD2	2.47	0.49
35:BA:2114:A:H2'	35:BA:2167:U:O2'	2.12	0.49
50:BS:106:ARG:NH1	50:BS:109:GLY:N	2.56	0.49
16:AP:75:ARG:N	16:AP:80:PHE:HE1	2.10	0.49
9:AI:55:ALA:HB1	9:AI:59:PHE:CD2	2.46	0.49
54:BW:70:TYR:O	54:BW:107:LEU:CB	2.58	0.49
13:AM:74:VAL:C	13:AM:76:ALA:H	2.14	0.49
36:BB:77:U:C5	36:BB:99:G:N2	2.80	0.49
1:AA:253:U:N3	1:AA:274:A:C2	2.80	0.49
35:BA:539:G:C6	35:BA:540:C:C4	3.00	0.49
9:AI:17:VAL:HG21	9:AI:80:GLY:HA3	1.94	0.49
35:BA:1442:G:H5'	35:BA:1628:G:H5''	1.94	0.49
35:BA:189:G:H2'	35:BA:205:G:H22	1.76	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:332:ARG:CB	24:AY:339:ASP:OD1	2.59	0.49
35:BA:176:G:C5	35:BA:177:G:C6	3.00	0.49
36:BB:54:G:C2	36:BB:55:U:C6	2.99	0.49
35:BA:2796:U:C2'	35:BA:2799:C:H5'	2.41	0.49
39:BE:95:ILE:N	39:BE:95:ILE:HD13	2.26	0.49
8:AH:67:PRO:C	8:AH:68:ARG:O	2.46	0.49
24:AY:182:VAL:CG1	24:AY:183:TYR:N	2.51	0.49
28:B3:13:ILE:HG22	28:B3:13:ILE:O	2.11	0.49
35:BA:2010:G:C6	35:BA:2011:U:C5	3.00	0.49
35:BA:746:A:C2'	35:BA:2612:C:H5''	2.42	0.49
39:BE:172:VAL:O	39:BE:174:ASP:N	2.45	0.49
47:BP:105:LEU:O	47:BP:106:LEU:HB2	2.12	0.49
35:BA:1188:U:C4'	53:BV:79:VAL:HG12	2.42	0.49
35:BA:1666:G:O3'	46:BO:6:THR:HG23	2.11	0.49
46:BO:86:ILE:C	46:BO:87:ILE:HD13	2.33	0.49
8:AH:11:THR:HG22	8:AH:15:ASN:HD21	1.75	0.49
18:AR:73:ALA:HB3	18:AR:79:LEU:HD12	1.94	0.49
35:BA:2134:A:H1'	35:BA:2159:G:N3	2.27	0.49
1:AA:244:U:O4	1:AA:893:C:N3	2.45	0.49
1:AA:1086:U:O2'	1:AA:1087:G:H5'	2.12	0.49
2:AB:21:ARG:HD2	2:AB:39:ILE:CG1	2.42	0.49
2:AB:51:LEU:O	2:AB:55:PHE:CD2	2.65	0.49
42:BH:98:LEU:HB2	42:BH:103:LEU:HD13	1.94	0.49
25:B0:42:GLY:HA3	35:BA:2331:G:C1'	2.42	0.49
36:BB:86:G:N2	36:BB:92:C:C2	2.81	0.49
48:BQ:141:GLN:C	57:BZ:53:ILE:HB	2.32	0.49
48:BQ:48:GLU:HG3	48:BQ:51:ARG:HD3	1.93	0.49
22:AV:51:C:O2	22:AV:63:G:N1	2.44	0.49
35:BA:1779:U:C6	35:BA:1783:A:N7	2.81	0.49
19:AS:47:HIS:N	19:AS:62:ILE:CG2	2.76	0.49
4:AD:98:GLU:HA	4:AD:103:ASN:HD21	1.75	0.49
4:AD:63:LYS:O	4:AD:67:ILE:HG13	2.11	0.49
35:BA:2594:C:O2'	35:BA:2595:G:H5'	2.12	0.49
37:BC:7:TYR:O	37:BC:10:LEU:CD2	2.60	0.49
31:B6:35:GLU:OE1	31:B6:35:GLU:CA	2.53	0.49
2:AB:112:VAL:O	2:AB:115:LEU:N	2.45	0.49
35:BA:2173:A:H2'	35:BA:2173:A:N3	2.27	0.49
41:BG:10:LYS:O	41:BG:14:GLU:HB2	2.12	0.49
41:BG:34:LEU:HA	41:BG:161:THR:CG2	2.28	0.49
16:AP:70:ALA:O	16:AP:74:LEU:HG	2.12	0.49
22:AV:39:C:C2'	22:AV:40:C:H5'	2.39	0.49
13:AM:23:TYR:CE1	13:AM:70:LEU:HD22	2.46	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B7:19:ARG:HH21	32:B7:23:ARG:HH22	1.61	0.49
33:B8:46:ARG:NH1	33:B8:46:ARG:HG2	2.26	0.49
19:AS:15:LEU:HD13	19:AS:19:VAL:HG21	1.94	0.49
1:AA:502:G:C5	1:AA:503:C:C5	3.00	0.49
35:BA:2126:A:O2'	35:BA:2127:G:P	2.70	0.49
35:BA:2128:C:O2'	35:BA:2129:C:C5'	2.59	0.49
35:BA:1052:C:O2'	35:BA:1053:C:P	2.70	0.49
35:BA:2496:C:O5'	35:BA:2496:C:H6	1.95	0.49
1:AA:748:C:O2'	1:AA:749:C:O5'	2.30	0.49
16:AP:53:VAL:HG12	16:AP:78:GLY:O	2.12	0.49
43:BJ:95:UNK:O	43:BJ:99:UNK:CB	2.60	0.49
24:AY:14:ARG:O	24:AY:85:ASN:N	2.42	0.49
24:AY:131:ARG:NH2	24:AY:162:LEU:O	2.45	0.49
24:AY:136:PRO:CB	24:AY:246:PHE:CZ	2.96	0.49
1:AA:951:G:C2	1:AA:1231:G:C2	3.01	0.49
30:B5:30:LEU:HD13	30:B5:39:MET:HB2	1.94	0.49
35:BA:1133:U:H5	35:BA:2026:C:HO2'	1.58	0.49
35:BA:1187:G:H5''	53:BV:81:TYR:HE1	1.73	0.49
35:BA:1799:G:H4'	35:BA:1800:C:H6	1.76	0.49
35:BA:2455:G:N1	35:BA:2498:C:N4	2.61	0.49
35:BA:413:C:H2'	35:BA:414:C:C6	2.47	0.49
35:BA:444:C:OP2	52:BU:2:PRO:HD3	2.12	0.49
35:BA:660:G:C2	35:BA:661:C:C2	3.00	0.49
35:BA:783:A:C3'	35:BA:783:A:C8	2.95	0.49
38:BD:9:TYR:HH	38:BD:13:ARG:CZ	2.24	0.49
38:BD:158:ALA:O	38:BD:161:THR:HB	2.12	0.49
38:BD:53:PHE:CE2	38:BD:220:HIS:ND1	2.80	0.49
38:BD:268:ARG:H	38:BD:270:ILE:HD11	1.75	0.49
45:BN:39:ARG:C	45:BN:41:ASP:H	2.16	0.49
45:BN:62:VAL:HG11	45:BN:67:LEU:HG	1.94	0.49
46:BO:76:ALA:CB	51:BT:75:ILE:HD13	2.42	0.49
51:BT:61:PHE:CZ	51:BT:76:PHE:HB2	2.47	0.49
53:BV:40:LEU:HD23	53:BV:47:VAL:HG22	1.94	0.49
53:BV:39:LEU:HD11	53:BV:51:VAL:HA	1.93	0.49
53:BV:52:VAL:O	53:BV:54:GLY:N	2.45	0.49
46:BO:87:ILE:HA	46:BO:92:GLU:O	2.12	0.49
1:AA:719:C:H2'	18:AR:50:ILE:HB	1.94	0.49
1:AA:867:G:H2'	1:AA:868:C:C6	2.47	0.49
8:AH:9:MET:O	8:AH:11:THR:N	2.46	0.49
18:AR:50:ILE:CD1	18:AR:70:ILE:HG21	2.42	0.49
1:AA:719:C:O2	18:AR:50:ILE:N	2.45	0.49
2:AB:161:ALA:HB1	2:AB:185:ILE:HD11	1.94	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:97:TRP:CZ2	2:AB:176:GLU:OE2	2.65	0.49
2:AB:46:LYS:O	2:AB:49:GLU:HB2	2.12	0.49
48:BQ:2:LEU:O	48:BQ:3:MET:HB3	2.11	0.49
1:AA:1307:U:N3	1:AA:1308:U:C4	2.80	0.49
12:AL:90:VAL:HG11	12:AL:93:LEU:CD1	2.41	0.49
1:AA:1059:C:O2'	1:AA:1060:C:H5'	2.12	0.49
9:AI:100:GLY:O	9:AI:101:PHE:C	2.51	0.49
27:B2:9:GLN:HG2	27:B2:56:GLN:HE22	1.76	0.49
55:BX:4:ALA:C	55:BX:6:ASP:H	2.14	0.49
55:BX:4:ALA:C	55:BX:6:ASP:N	2.64	0.49
4:AD:8:VAL:C	4:AD:10:ARG:N	2.63	0.49
35:BA:2835:A:C2	35:BA:2879:C:C4	3.00	0.49
49:BR:114:VAL:HG23	49:BR:114:VAL:O	2.13	0.49
50:BS:18:ILE:HD12	50:BS:18:ILE:H	1.76	0.49
37:BC:30:LYS:HD3	37:BC:185:LEU:HD12	1.92	0.49
7:AG:118:VAL:O	7:AG:119:ARG:C	2.50	0.49
29:B4:5:ILE:O	29:B4:5:ILE:CG1	2.60	0.49
29:B4:11:PRO:HA	29:B4:25:TYR:CD2	2.47	0.49
29:B4:9:LEU:HD13	29:B4:10:VAL:N	2.22	0.49
1:AA:321:A:C2	1:AA:333:G:C2	3.00	0.49
20:AT:23:ARG:HG2	20:AT:23:ARG:HH11	1.76	0.49
1:AA:923:A:O2'	1:AA:1399:C:OP2	2.31	0.49
38:BD:75:ILE:O	38:BD:118:VAL:HG23	2.11	0.49
35:BA:1242:A:H3'	35:BA:1243:G:H8	1.77	0.49
2:AB:146:GLN:O	2:AB:149:LEU:N	2.33	0.49
54:BW:4:LYS:HG3	54:BW:106:ILE:CG2	2.41	0.49
35:BA:2700:C:C2	35:BA:2701:C:C5	3.00	0.49
51:BT:67:SER:O	51:BT:68:TYR:O	2.30	0.49
13:AM:74:VAL:O	13:AM:76:ALA:N	2.45	0.49
35:BA:1670:C:OP2	35:BA:1671:U:C5	2.65	0.49
42:BH:92:ILE:CD1	42:BH:95:ARG:HH21	2.26	0.49
33:B8:46:ARG:HH11	33:B8:46:ARG:HG2	1.77	0.49
35:BA:2651:C:O2'	35:BA:2652:C:H5'	2.11	0.49
35:BA:2649:U:C2	35:BA:2672:G:N2	2.80	0.49
35:BA:1307:A:N3	35:BA:1307:A:H2'	2.27	0.49
35:BA:2801(A):A:C5'	35:BA:2802:G:H5'	2.41	0.49
35:BA:1387:C:C2	35:BA:1388:G:C8	3.00	0.49
35:BA:408:G:O2'	35:BA:409:C:H5'	2.12	0.49
35:BA:495:G:C6	35:BA:496:G:C5	3.01	0.49
29:B4:40:HIS:HD2	29:B4:42:PHE:HD1	1.60	0.49
46:BO:10:VAL:HG21	46:BO:16:ALA:O	2.12	0.49
35:BA:1433:U:O2	35:BA:1433:U:H2'	2.11	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:4:LYS:HE3	48:BQ:82:ARG:HD2	1.94	0.49
5:AE:101:ILE:N	5:AE:101:ILE:HD13	2.27	0.49
24:AY:25:GLY:HA3	24:AY:29:ILE:CD1	2.42	0.49
24:AY:457:TYR:C	24:AY:459:VAL:H	2.16	0.49
35:BA:2657:A:H5'	35:BA:2657:A:N3	2.26	0.49
24:AY:223:LEU:CD2	42:BH:97:ARG:HH22	2.24	0.49
1:AA:774:G:H2'	1:AA:775:G:O4'	2.13	0.49
35:BA:1842:G:C2	35:BA:1901:A:C2	2.99	0.49
35:BA:2292:C:H2'	35:BA:2293:C:C6	2.45	0.49
35:BA:2641:G:O2'	35:BA:2642:G:H5'	2.13	0.49
35:BA:627:A:C6	35:BA:637:A:C8	3.00	0.49
35:BA:833:U:H2'	35:BA:834:C:C6	2.45	0.49
38:BD:24:ILE:HG23	38:BD:83:GLU:N	2.27	0.49
47:BP:16:ARG:CZ	47:BP:18:ARG:HB2	2.42	0.49
47:BP:55:ARG:C	47:BP:57:THR:H	2.14	0.49
47:BP:83:VAL:HG13	47:BP:114:ILE:CD1	2.42	0.49
52:BU:13:LYS:HA	52:BU:16:LYS:HD2	1.95	0.49
8:AH:4:ASP:O	8:AH:5:PRO:C	2.50	0.49
1:AA:1413:A:C2	1:AA:1414:U:C2	3.01	0.49
42:BH:98:LEU:HD23	42:BH:125:VAL:HG23	1.95	0.49
22:AV:69:C:O2'	22:AV:70:G:H8	1.95	0.49
1:AA:1068:G:H5'	1:AA:1388:C:OP1	2.12	0.49
19:AS:23:ASN:HA	29:B4:47:GLN:CG	2.43	0.49
1:AA:356:A:N3	1:AA:368:U:O2'	2.40	0.49
1:AA:356:A:O3'	1:AA:367:U:H2'	2.13	0.49
55:BX:12:VAL:HA	55:BX:27:THR:O	2.12	0.49
55:BX:3:THR:O	55:BX:4:ALA:HB2	2.13	0.49
40:BF:26:ALA:O	40:BF:27:GLU:CG	2.55	0.49
35:BA:1058:G:N2	35:BA:1080:C:H42	2.11	0.49
37:BC:46:LYS:HD2	37:BC:47:LEU:O	2.12	0.49
37:BC:62:VAL:HG13	37:BC:62:VAL:O	2.12	0.49
37:BC:8:ARG:C	37:BC:10:LEU:H	2.15	0.49
35:BA:1462:C:H5'	35:BA:2703:C:O4'	2.12	0.49
29:B4:5:ILE:O	41:BG:67:LYS:HD2	2.12	0.49
36:BB:42:C:O2'	36:BB:43:C:P	2.69	0.49
41:BG:46:ALA:O	41:BG:47:LYS:HD2	2.11	0.49
1:AA:332:G:C4	1:AA:333:G:C8	3.00	0.49
1:AA:323:U:O2'	20:AT:22:ARG:NE	2.45	0.49
36:BB:102:A:C2'	36:BB:103:G:H8	2.24	0.49
35:BA:701:G:H2'	35:BA:702:G:H8	1.76	0.49
50:BS:35:ILE:H	50:BS:53:SER:HB2	1.77	0.49
26:B1:48:LYS:NZ	26:B1:61:ARG:HG2	2.27	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:57:A:C8	41:BG:27:ASN:ND2	2.69	0.49
35:BA:214:G:H1'	35:BA:216:A:O2'	2.13	0.49
1:AA:554:C:OP1	12:AL:22:SER:CB	2.59	0.49
35:BA:1414:G:N2	35:BA:1589:C:C2	2.81	0.49
9:AI:53:VAL:C	9:AI:55:ALA:N	2.65	0.49
35:BA:816:C:N3	35:BA:1192:G:N2	2.59	0.49
7:AG:139:GLU:HA	7:AG:142:GLU:HB2	1.93	0.49
20:AT:36:LEU:CD1	20:AT:55:ILE:HG22	2.43	0.49
4:AD:199:ASN:OD1	4:AD:201:GLN:HB2	2.12	0.49
1:AA:839:U:O2	1:AA:839:U:C2'	2.60	0.49
35:BA:2543:G:C8	35:BA:2543:G:H5'	2.38	0.49
33:B8:30:ARG:O	33:B8:31:HIS:HB3	2.11	0.49
35:BA:1065:U:O2'	35:BA:1066:U:H5''	2.13	0.49
42:BH:18:GLU:HB2	42:BH:25:LYS:O	2.13	0.49
4:AD:70:ILE:CG2	4:AD:71:SER:N	2.75	0.49
1:AA:452:A:O2'	1:AA:453:A:H5'	2.11	0.49
40:BF:144:LYS:HG2	40:BF:144:LYS:O	2.12	0.49
1:AA:592:G:O2'	1:AA:593:G:H5'	2.11	0.49
24:AY:136:PRO:HB2	24:AY:246:PHE:CZ	2.48	0.49
24:AY:79:TYR:O	24:AY:80:HIS:C	2.51	0.49
1:AA:1230:C:O5'	1:AA:1230:C:H6	1.94	0.49
32:B7:2:LYS:HE3	32:B7:6:GLN:HG3	1.94	0.49
35:BA:1188:U:O2'	35:BA:1189:A:H5'	2.11	0.49
35:BA:1830:C:H6	35:BA:1830:C:O5'	1.95	0.49
35:BA:2456:C:H2'	35:BA:2457:U:C6	2.40	0.49
45:BN:67:LEU:O	45:BN:68:GLU:CB	2.60	0.49
45:BN:72:TYR:HE1	45:BN:87:LEU:HD23	1.77	0.49
47:BP:47:ASP:CG	47:BP:49:ARG:N	2.65	0.49
51:BT:32:TYR:O	51:BT:41:ARG:O	2.30	0.49
35:BA:1951:U:C6	35:BA:1953:A:OP2	2.66	0.49
1:AA:672:U:O2'	1:AA:673:G:H8	1.96	0.49
1:AA:22:G:O2'	1:AA:913:A:N1	2.46	0.49
6:AF:15:ASP:OD1	6:AF:18:GLN:HG3	2.12	0.49
8:AH:85:ARG:CZ	8:AH:87:SER:O	2.60	0.49
8:AH:85:ARG:O	8:AH:86:ILE:HD13	2.11	0.49
15:AO:36:ILE:HG12	15:AO:59:MET:CE	2.35	0.49
18:AR:71:LYS:O	18:AR:72:ARG:C	2.51	0.49
53:BV:99:ILE:CD1	53:BV:99:ILE:N	2.74	0.49
25:B0:27:GLU:H	25:B0:27:GLU:CD	2.15	0.49
35:BA:2267:A:H3'	35:BA:2267:A:N3	2.28	0.49
35:BA:906:G:O2'	48:BQ:67:ARG:NH2	2.46	0.49
57:BZ:8:TYR:CB	57:BZ:38:TYR:CZ	2.95	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AV:55:U:H2'	22:AV:56:C:H3'	1.93	0.49
22:AV:62:C:H3'	22:AV:63:G:H5''	1.94	0.49
1:AA:1048:G:N3	1:AA:1050:G:N7	2.60	0.49
1:AA:1106:G:C4	1:AA:1107:C:C5	3.01	0.49
3:AC:47:LEU:HD23	3:AC:52:LEU:CD1	2.39	0.49
9:AI:99:LEU:HB2	9:AI:101:PHE:HD1	1.77	0.49
35:BA:895:U:H3'	35:BA:896:A:C5'	2.43	0.49
1:AA:357:G:P	1:AA:367:U:H2'	2.52	0.49
55:BX:4:ALA:N	55:BX:6:ASP:OD2	2.41	0.49
4:AD:187:ARG:CZ	4:AD:187:ARG:HB3	2.42	0.49
35:BA:143(A):C:H4'	55:BX:38:GLU:OE2	2.12	0.49
57:BZ:144:LEU:N	57:BZ:144:LEU:HD22	2.27	0.49
1:AA:109:A:C8	1:AA:327:A:O4'	2.65	0.49
35:BA:2343:C:O2'	35:BA:2344:U:H5'	2.11	0.49
26:B1:67:ILE:C	26:B1:69:LYS:H	2.15	0.49
35:BA:1859:A:H61	35:BA:1883:G:H1'	1.77	0.49
35:BA:2180:U:C6	35:BA:2181:G:C8	2.95	0.49
50:BS:85:VAL:CG2	50:BS:106:ARG:HB2	2.43	0.49
50:BS:85:VAL:HG22	50:BS:106:ARG:HB2	1.93	0.49
3:AC:7:PRO:HG3	3:AC:184:TYR:HB2	1.93	0.49
56:BY:88:LYS:HZ3	56:BY:93:GLY:N	2.09	0.49
22:AV:37:A:O2'	22:AV:38:A:H5'	2.13	0.49
13:AM:70:LEU:O	13:AM:71:ARG:C	2.50	0.49
7:AG:70:LYS:HG2	7:AG:96:GLN:HG2	1.93	0.49
1:AA:537:G:H2'	1:AA:538:G:C8	2.47	0.49
1:AA:23:C:O2'	1:AA:24:U:C5'	2.58	0.49
35:BA:2521:C:H5'	35:BA:2522:U:OP2	2.12	0.49
7:AG:54:THR:HG23	7:AG:54:THR:O	2.12	0.49
1:AA:571:U:H5''	1:AA:819:A:C4	2.47	0.49
1:AA:570:G:H1'	1:AA:820:U:N3	2.27	0.49
24:AY:430:PRO:HD2	24:AY:435:ASP:O	2.13	0.49
30:B5:43:HIS:CD2	30:B5:43:HIS:N	2.80	0.49
5:AE:143:ARG:HG3	5:AE:143:ARG:HH11	1.78	0.49
37:BC:132:GLY:N	37:BC:133:PRO:CD	2.75	0.49
24:AY:242:ASP:OD1	24:AY:245:LEU:HG	2.12	0.49
53:BV:43:GLU:C	53:BV:44:LYS:HG3	2.33	0.49
24:AY:509:VAL:O	24:AY:512:ARG:HB2	2.13	0.49
37:BC:100:ILE:CG2	37:BC:127:MET:HG3	2.27	0.49
33:B8:21:LYS:HD2	35:BA:651:G:P	2.51	0.49
35:BA:2822:G:H8	35:BA:2822:G:O5'	1.95	0.49
35:BA:636:G:H4'	35:BA:638:G:H4'	1.94	0.49
35:BA:745:G:C2'	35:BA:746:A:H5'	2.43	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:65:ILE:O	38:BD:67:PHE:N	2.45	0.49
39:BE:59:VAL:HG22	39:BE:63:LEU:HA	1.95	0.49
45:BN:62:VAL:HG11	45:BN:67:LEU:CG	2.42	0.49
47:BP:17:LYS:C	47:BP:19:VAL:N	2.65	0.49
52:BU:49:HIS:O	52:BU:50:ARG:C	2.50	0.49
53:BV:39:LEU:HD12	53:BV:47:VAL:HG11	1.93	0.49
35:BA:2761:G:H2'	35:BA:2762:G:C5'	2.41	0.49
15:AO:49:ASP:CG	15:AO:52:SER:CB	2.80	0.49
1:AA:246:A:O2'	17:AQ:99:SER:HB2	2.12	0.49
1:AA:1101:A:O2'	1:AA:1102:A:OP2	2.31	0.49
35:BA:2785:C:H2'	35:BA:2786:U:H6	1.71	0.49
35:BA:199:A:H61	35:BA:2433:A:C2'	2.24	0.49
25:B0:42:GLY:HA3	35:BA:2331:G:C4'	2.42	0.49
35:BA:861:A:H2'	35:BA:862:G:H5'	1.94	0.49
48:BQ:29:PHE:HE2	48:BQ:67:ARG:CZ	2.23	0.49
48:BQ:45:GLN:H	48:BQ:45:GLN:HE21	1.59	0.49
22:AV:58:A:N1	22:AV:61:C:C5	2.80	0.49
54:BW:18:ARG:NH1	54:BW:76:VAL:HG13	2.28	0.49
27:B2:29:LYS:HZ3	27:B2:57:ILE:HG21	1.77	0.49
40:BF:101:LEU:HD12	40:BF:102:PRO:CD	2.21	0.49
19:AS:60:VAL:O	19:AS:60:VAL:HG13	2.12	0.49
2:AB:22:LYS:CA	2:AB:22:LYS:CE	2.86	0.49
1:AA:302:G:O2'	1:AA:556:C:H5''	2.12	0.49
5:AE:107:ARG:HG2	5:AE:108:ALA:N	2.27	0.49
5:AE:36:ASP:OD2	5:AE:40:ARG:HB2	2.12	0.49
20:AT:19:SER:O	20:AT:20:LEU:C	2.51	0.49
1:AA:1438:G:OP1	20:AT:34:LYS:HD3	2.12	0.49
35:BA:1886:C:H2'	35:BA:1887:C:C6	2.48	0.49
40:BF:184:TYR:HE1	47:BP:7:ARG:HH21	1.60	0.49
46:BO:53:LYS:O	46:BO:56:ASP:HB2	2.12	0.49
1:AA:1038:C:O2'	1:AA:1039:C:H5'	2.13	0.49
50:BS:85:VAL:HG23	50:BS:86:ALA:H	1.77	0.49
25:B0:49:LYS:HG3	25:B0:80:HIS:HD1	1.77	0.49
54:BW:72:LYS:HD2	54:BW:108:GLY:HA3	1.92	0.49
35:BA:1167:U:N3	35:BA:1183:G:N1	2.60	0.49
24:AY:517:ARG:O	24:AY:519:PRO:HD3	2.12	0.49
36:BB:76:G:O2'	57:BZ:19:ARG:NH2	2.45	0.49
35:BA:1291:C:O2'	35:BA:1292:U:H5'	2.12	0.49
1:AA:1372:U:P	9:AI:69:GLY:HA3	2.52	0.49
35:BA:81:G:N2	56:BY:2:ARG:NH1	2.57	0.49
1:AA:1452:C:OP2	1:AA:1456:G:O6	2.30	0.49
22:AV:26:G:C5	22:AV:27:U:H5	2.30	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1282:C:H2'	1:AA:1283:G:H5'	1.93	0.49
1:AA:1345:U:H5''	9:AI:120:ARG:HH11	1.78	0.49
49:BR:59:ASP:O	49:BR:63:ARG:HB2	2.13	0.49
35:BA:2792:G:C2	35:BA:2805:G:N2	2.80	0.49
10:AJ:29:ARG:O	10:AJ:29:ARG:CG	2.60	0.49
10:AJ:38:ILE:O	10:AJ:40:LEU:HD23	2.13	0.49
35:BA:1766:U:H6	35:BA:1766:U:O5'	1.96	0.49
25:B0:62:LEU:HD23	25:B0:62:LEU:N	2.27	0.49
35:BA:1047:G:H2'	35:BA:1110:G:N2	2.26	0.49
35:BA:1315:C:C2	35:BA:1338:G:N2	2.81	0.49
11:AK:80:VAL:HG22	11:AK:104:GLN:O	2.12	0.49
35:BA:154:G:N1	35:BA:173:G:C6	2.80	0.49
35:BA:2068:U:N3	35:BA:2430:A:C2	2.73	0.49
35:BA:431:U:H6	35:BA:431:U:O5'	1.95	0.49
1:AA:724:G:O2'	1:AA:725:G:H5'	2.13	0.49
38:BD:153:ALA:HB1	38:BD:157:ARG:HH11	1.77	0.49
24:AY:505:ALA:C	24:AY:507:SER:H	2.15	0.49
24:AY:90:PRO:HD2	24:AY:99:THR:CG2	2.36	0.49
33:B8:62:LEU:HD22	35:BA:242:G:H5'	1.94	0.49
35:BA:1326:U:C4	35:BA:1648:C:H4'	2.48	0.49
35:BA:1792:G:C6	35:BA:1793:C:C5	3.00	0.49
35:BA:1902:C:C5'	38:BD:246:PRO:CD	2.90	0.49
35:BA:2581:G:H22	35:BA:2610:C:H2'	1.77	0.49
35:BA:2771:C:C2	35:BA:2772:C:C5	3.00	0.49
35:BA:587:C:H4'	35:BA:588:U:H6	1.76	0.49
35:BA:640:C:N4	35:BA:641:C:N4	2.61	0.49
35:BA:685:A:N3	35:BA:689:A:N6	2.61	0.49
38:BD:95:LEU:N	38:BD:95:LEU:CD1	2.75	0.49
39:BE:117:MET:HA	39:BE:122:PHE:CA	2.42	0.49
35:BA:1258:C:O4'	40:BF:84:VAL:HG21	2.13	0.49
47:BP:83:VAL:HG13	47:BP:114:ILE:HD12	1.93	0.49
51:BT:61:PHE:CE2	51:BT:63:VAL:HG23	2.48	0.49
52:BU:17:ILE:H	52:BU:17:ILE:CD1	2.26	0.49
53:BV:76:LYS:O	53:BV:79:VAL:HG23	2.13	0.49
8:AH:29:SER:HB3	8:AH:32:LYS:CD	2.42	0.49
1:AA:243:A:H4'	1:AA:244:U:O5'	2.13	0.49
35:BA:1029:A:C2'	35:BA:1030:G:H5'	2.42	0.49
35:BA:2474:C:H5''	35:BA:2475:C:H5	1.76	0.49
1:AA:1073:U:O5'	1:AA:1073:U:H6	1.96	0.49
2:AB:20:GLU:HG3	2:AB:191:ASP:HB2	1.95	0.49
35:BA:954:G:N3	35:BA:2274:A:C2	2.81	0.49
36:BB:85:G:N2	36:BB:93:G:C4	2.81	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:12:GLN:CD	48:BQ:73:PRO:HD3	2.33	0.49
57:BZ:37:VAL:HG23	57:BZ:38:TYR:N	2.28	0.49
12:AL:34:ARG:HB3	12:AL:61:THR:HG21	1.94	0.49
1:AA:1117:G:H1'	9:AI:106:ALA:HB1	1.95	0.49
1:AA:1117:G:C5'	1:AA:1117:G:H8	2.24	0.49
1:AA:1199:U:C4'	10:AJ:54:PHE:CE2	2.92	0.49
3:AC:71:ALA:O	3:AC:73:PRO:HD3	2.13	0.49
10:AJ:8:LEU:N	10:AJ:70:ARG:O	2.46	0.49
35:BA:884:C:O5'	35:BA:884:C:C6	2.63	0.49
40:BF:157:VAL:HG21	40:BF:194:MET:HG2	1.95	0.49
40:BF:155:LEU:HB3	40:BF:192:LEU:HA	1.94	0.49
37:BC:21:THR:HG22	37:BC:225:ASN:CB	2.43	0.49
37:BC:58:VAL:O	37:BC:59:ARG:CB	2.60	0.49
2:AB:22:LYS:HE3	2:AB:40:HIS:CE1	2.48	0.49
5:AE:9:LYS:HB3	5:AE:112:LEU:HD11	1.94	0.49
1:AA:106:C:H42	20:AT:14:LYS:NZ	2.09	0.49
42:BH:38:SER:HB3	42:BH:64:LEU:HD11	1.89	0.49
35:BA:1241:A:N7	35:BA:1242:A:C5	2.81	0.49
2:AB:146:GLN:O	2:AB:147:LYS:C	2.50	0.49
35:BA:1403:C:H5''	35:BA:1471:A:C1'	2.40	0.49
1:AA:986:A:H2'	1:AA:987:G:C8	2.48	0.49
35:BA:803:U:H2'	35:BA:804:A:C5'	2.43	0.49
35:BA:116:C:O2'	35:BA:117:G:H5'	2.12	0.49
35:BA:471:A:N6	35:BA:472:A:C2	2.81	0.49
25:B0:45:PHE:HB2	25:B0:59:LEU:CD1	2.41	0.49
35:BA:1292:U:H2'	35:BA:1293:C:H6	1.74	0.49
2:AB:32:ILE:O	2:AB:32:ILE:CG2	2.60	0.49
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.48	0.49
4:AD:199:ASN:C	4:AD:199:ASN:OD1	2.50	0.49
35:BA:2630:G:O2'	35:BA:2892:A:O2'	2.26	0.49
47:BP:146:VAL:O	47:BP:148:LEU:HG	2.13	0.49
10:AJ:38:ILE:O	10:AJ:40:LEU:CD2	2.61	0.49
1:AA:1348:U:H5'	9:AI:110:GLU:HB2	1.94	0.49
35:BA:342:G:HO2'	35:BA:343:C:H6	1.58	0.49
35:BA:153:C:N4	35:BA:154:G:O6	2.46	0.49
4:AD:65:ARG:HB2	4:AD:75:PHE:CZ	2.47	0.49
42:BH:141:VAL:O	42:BH:145:ALA:N	2.43	0.49
56:BY:6:HIS:HD2	56:BY:6:HIS:H	1.60	0.49
49:BR:82:GLU:C	49:BR:85:PRO:HD2	2.33	0.49
10:AJ:17:ASP:O	10:AJ:21:GLN:HB2	2.13	0.49
57:BZ:146:ILE:O	57:BZ:147:GLY:O	2.30	0.49
1:AA:52:G:O2'	1:AA:53:A:H5'	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:141:MET:O	24:AY:144:LEU:HD23	2.13	0.49
24:AY:169:ILE:O	24:AY:169:ILE:HG22	2.13	0.49
24:AY:197:LYS:HD2	24:AY:200:THR:HG23	1.94	0.49
24:AY:200:THR:HG23	24:AY:200:THR:O	2.11	0.49
24:AY:138:LEU:CA	24:AY:253:PRO:HG2	2.36	0.49
24:AY:282:ARG:CD	24:AY:319:ARG:HH12	2.26	0.49
24:AY:449:VAL:HG21	24:AY:463:TYR:HH	1.76	0.49
24:AY:469:ALA:O	24:AY:470:THR:HG22	2.13	0.49
35:BA:1772:G:N2	35:BA:1774:C:C5'	2.75	0.49
35:BA:2014:A:O2'	35:BA:2015:A:C8	2.65	0.49
35:BA:2020:A:OP1	52:BU:27:LEU:HD13	2.12	0.49
35:BA:960:A:H5'	35:BA:2457:U:H4'	1.94	0.49
35:BA:2489:G:C6	35:BA:2490:G:C6	3.01	0.49
35:BA:2599:G:H2'	35:BA:2600:A:C8	2.48	0.49
35:BA:662:G:H4'	47:BP:19:VAL:O	2.13	0.49
38:BD:267:SER:O	38:BD:268:ARG:HB2	2.12	0.49
39:BE:49:LEU:HD11	39:BE:91:VAL:CG2	2.43	0.49
40:BF:54:ARG:HB2	40:BF:79:GLY:O	2.12	0.49
47:BP:79:ARG:O	47:BP:79:ARG:HG3	2.12	0.49
51:BT:120:ARG:HA	51:BT:123:GLN:CD	2.33	0.49
51:BT:27:THR:HG23	51:BT:28:VAL:N	2.27	0.49
35:BA:1947:C:C4	35:BA:1948:G:N7	2.80	0.49
35:BA:1678:G:H1'	35:BA:1991:U:H1'	1.94	0.49
35:BA:2743:C:C2	35:BA:2762:G:C2	3.01	0.49
53:BV:19:LYS:HB3	53:BV:94:LEU:O	2.13	0.49
34:B9:31:LYS:HE2	35:BA:2478:A:H5'	1.93	0.49
2:AB:103:THR:HA	2:AB:180:LEU:CD1	2.40	0.49
35:BA:2811:G:H5'	39:BE:60:ASN:CG	2.32	0.49
35:BA:2396:G:C2	35:BA:2397:G:N7	2.81	0.49
42:BH:87:LEU:HB2	42:BH:131:VAL:O	2.13	0.49
35:BA:2262:U:O2'	35:BA:2263:C:H5'	2.13	0.49
48:BQ:21:THR:HG22	48:BQ:23:GLY:O	2.13	0.49
57:BZ:33:LEU:CG	57:BZ:34:ASN:N	2.75	0.49
12:AL:35:GLY:C	12:AL:58:VAL:CG1	2.80	0.49
1:AA:1195:C:C5	1:AA:1197:G:C8	3.01	0.49
3:AC:14:ILE:CD1	3:AC:178:LEU:HG	2.43	0.49
3:AC:35:GLU:HB2	3:AC:59:ARG:HH22	1.77	0.49
9:AI:99:LEU:CD2	9:AI:99:LEU:N	2.71	0.49
1:AA:1014:A:C5'	19:AS:14:HIS:CD2	2.96	0.49
27:B2:35:LEU:CD1	27:B2:36:ARG:N	2.73	0.49
4:AD:175:SER:CB	4:AD:186:LEU:HD11	2.42	0.49
49:BR:19:ALA:O	49:BR:23:ASN:HB2	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:10:LEU:CD1	37:BC:32:LEU:O	2.60	0.49
37:BC:7:TYR:HA	37:BC:10:LEU:HD23	1.94	0.49
45:BN:132:ALA:O	45:BN:133:GLN:HB2	2.13	0.49
45:BN:15:LEU:O	45:BN:136:GLU:HA	2.12	0.49
41:BG:125:PHE:CB	41:BG:130:ASN:O	2.60	0.49
41:BG:125:PHE:CD1	41:BG:125:PHE:N	2.76	0.49
41:BG:139:LEU:HA	41:BG:144:ILE:HD13	1.95	0.49
41:BG:69:ALA:O	41:BG:90:LEU:HD12	2.13	0.49
1:AA:623:C:H2'	1:AA:624:C:H6	1.76	0.49
16:AP:27:LYS:HG2	16:AP:30:GLY:CA	2.43	0.49
20:AT:19:SER:O	20:AT:22:ARG:N	2.46	0.49
5:AE:79:GLU:OE1	5:AE:92:LYS:HE3	2.13	0.49
47:BP:9:ASN:O	47:BP:10:PRO:C	2.51	0.49
50:BS:34:HIS:O	50:BS:35:ILE:HG22	2.13	0.49
50:BS:70:GLY:C	50:BS:72:ALA:N	2.66	0.49
13:AM:11:ARG:HG2	13:AM:12:ASN:N	2.27	0.49
35:BA:2199:A:C2	35:BA:2200:C:H1'	2.48	0.49
35:BA:1416:G:H1'	35:BA:1417:C:C6	2.48	0.49
35:BA:2110:G:N2	35:BA:2180:U:H3	2.11	0.49
35:BA:2111:C:H1'	35:BA:2118:U:H4'	1.94	0.49
35:BA:2185:C:N3	35:BA:2186:G:N7	2.61	0.49
35:BA:1038:C:C3'	35:BA:1039:G:C5'	2.89	0.49
1:AA:1127:G:O2'	1:AA:1128:C:H5'	2.13	0.49
16:AP:52:ASP:O	16:AP:56:ALA:HB2	2.13	0.49
16:AP:67:THR:CA	16:AP:70:ALA:HB3	2.43	0.49
35:BA:2875:C:H4'	51:BT:5:ALA:CB	2.43	0.49
35:BA:1184:G:C2'	35:BA:1185:C:H5'	2.42	0.49
1:AA:66:G:C4'	1:AA:173:U:C4	2.96	0.49
20:AT:43:LEU:O	20:AT:48:LYS:HB2	2.13	0.49
35:BA:2052:G:C4'	39:BE:143:ASN:O	2.57	0.49
1:AA:837:G:O2'	1:AA:838:G:H5'	2.12	0.49
1:AA:803:G:C5	1:AA:804:U:C4	3.00	0.49
35:BA:286:C:H42	35:BA:355:G:H1	1.61	0.49
26:B1:18:ILE:HD12	35:BA:380:U:OP2	2.13	0.49
4:AD:112:VAL:HG12	4:AD:116:GLN:CD	2.32	0.49
49:BR:78:LYS:O	49:BR:83:ILE:HG12	2.12	0.49
57:BZ:158:PRO:O	57:BZ:159:PRO:C	2.51	0.49
1:AA:665:A:C8	1:AA:725:G:C2	3.01	0.49
35:BA:1878:G:H2'	35:BA:1879:C:C6	2.48	0.49
1:AA:1261:A:N6	1:AA:1275:A:C8	2.81	0.49
19:AS:79:THR:CG2	19:AS:80:TYR:N	2.75	0.49
24:AY:145:ASP:O	24:AY:176:GLY:O	2.31	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:377:ASP:OD2	24:AY:378:THR:N	2.45	0.49
24:AY:415:GLY:CA	24:AY:457:TYR:CE1	2.95	0.49
30:B5:28:PRO:HG2	54:BW:35:ILE:HD13	1.94	0.49
33:B8:38:GLY:O	33:B8:42:ARG:HB2	2.12	0.49
33:B8:6:THR:OG1	35:BA:243:U:OP1	2.26	0.49
35:BA:259:G:H21	35:BA:621:A:H8	1.61	0.49
35:BA:832:G:N2	35:BA:833:U:C2	2.81	0.49
35:BA:2221:G:N2	38:BD:151:LYS:HE3	2.27	0.49
38:BD:224:ALA:CB	38:BD:233:HIS:HB3	2.42	0.49
38:BD:71:ASP:HB3	38:BD:103:ARG:NH1	2.22	0.49
35:BA:1567:A:C4	38:BD:84:TYR:CD2	3.00	0.49
38:BD:9:TYR:OH	38:BD:13:ARG:NE	2.45	0.49
46:BO:68:GLU:N	46:BO:68:GLU:OE1	2.44	0.49
51:BT:45:PHE:CZ	51:BT:74:ARG:HB2	2.46	0.49
51:BT:64:ARG:HG3	51:BT:73:GLU:HG2	1.95	0.49
52:BU:79:PHE:C	52:BU:79:PHE:CD1	2.86	0.49
1:AA:878:G:H5'	8:AH:89:PRO:HG2	1.95	0.49
1:AA:740:U:H4'	15:AO:42:HIS:ND1	2.27	0.49
2:AB:60:ASP:HB3	2:AB:64:ARG:HH21	1.77	0.49
35:BA:956:G:C8	48:BQ:14:ARG:NH2	2.81	0.49
57:BZ:68:PRO:O	57:BZ:91:LEU:HB2	2.13	0.49
35:BA:2603:G:C2	35:BA:2604:U:N1	2.81	0.49
3:AC:155:GLY:O	3:AC:157:ILE:N	2.45	0.49
14:AN:54:PRO:O	14:AN:56:VAL:HG23	2.13	0.49
19:AS:44:MET:SD	29:B4:47:GLN:NE2	2.86	0.49
35:BA:324:A:H2'	35:BA:325:G:O4'	2.12	0.49
56:BY:28:LYS:CG	56:BY:39:VAL:HA	2.42	0.49
35:BA:78:A:H8	35:BA:78:A:O5'	1.96	0.49
9:AI:77:ILE:C	9:AI:79:LEU:N	2.66	0.49
35:BA:1060:U:H3'	44:BK:1:UNK:CB	2.42	0.49
41:BG:139:LEU:C	41:BG:141:PHE:H	2.15	0.49
24:AY:340:VAL:HG12	24:AY:342:ILE:HG22	1.95	0.49
17:AQ:58:GLU:OE1	17:AQ:75:ARG:NE	2.45	0.49
42:BH:66:GLY:HA2	42:BH:69:ARG:CG	2.42	0.49
1:AA:782:A:C2	1:AA:801:U:C2	3.01	0.49
50:BS:54:LEU:O	50:BS:55:ALA:C	2.51	0.49
50:BS:95:HIS:CG	50:BS:96:GLY:N	2.80	0.49
46:BO:50:GLY:C	46:BO:52:VAL:H	2.16	0.49
35:BA:1169:G:H2'	35:BA:1170:G:O4'	2.13	0.49
41:BG:161:THR:CG2	41:BG:172:LEU:CD1	2.90	0.49
20:AT:73:HIS:ND1	20:AT:74:LYS:CD	2.76	0.49
29:B4:30:GLU:O	29:B4:31:ILE:HD12	2.12	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2103:C:H2'	35:BA:2104:G:C5'	2.42	0.49
9:AI:53:VAL:HG13	9:AI:95:LYS:HZ2	1.77	0.49
54:BW:5:ALA:HB3	54:BW:105:VAL:H	1.77	0.49
49:BR:26:LYS:HG3	49:BR:70:LEU:HD23	1.95	0.49
56:BY:85:VAL:HG12	56:BY:86:ARG:N	2.28	0.49
1:AA:1493:A:C2'	1:AA:1494:G:C8	2.96	0.49
1:AA:1494:G:O6	1:AA:1495:U:O4	2.31	0.49
35:BA:1277:G:O2'	35:BA:1278:A:H5'	2.13	0.49
35:BA:2232:U:O2'	35:BA:2233:U:H5'	2.13	0.49
1:AA:1166:G:H2'	1:AA:1169:A:OP2	2.13	0.49
31:B6:45:LYS:N	31:B6:45:LYS:CD	2.74	0.49
1:AA:1294:G:H2'	1:AA:1295:G:H8	1.77	0.49
17:AQ:81:ARG:HB3	17:AQ:84:LEU:HD12	1.95	0.49
35:BA:151:C:O2'	35:BA:152:G:H5'	2.13	0.49
8:AH:48:TYR:CD2	8:AH:49:GLU:N	2.80	0.49
8:AH:39:LEU:HB3	8:AH:45:ILE:HG12	1.95	0.49
35:BA:1821:A:H8	35:BA:1821:A:O5'	1.96	0.49
11:AK:105:VAL:HG23	11:AK:105:VAL:O	2.13	0.49
1:AA:1530:G:H2'	1:AA:1531:A:H8	1.77	0.49
1:AA:1442(B):A:HO2'	1:AA:1443:G:H8	1.61	0.49
43:BJ:15:UNK:HA	43:BJ:18:UNK:CB	2.43	0.49
8:AH:100:ILE:O	8:AH:102:ARG:NH1	2.46	0.49
35:BA:602:G:N3	35:BA:602:G:H2'	2.28	0.49
24:AY:142:ASN:O	24:AY:143:LYS:CB	2.61	0.49
24:AY:198:GLY:HA2	24:AY:262:ASN:ND2	2.28	0.49
24:AY:79:TYR:HE2	24:AY:269:LEU:HD13	1.78	0.49
1:AA:775:G:C2'	1:AA:776:G:H5'	2.42	0.49
35:BA:1350:C:C4	35:BA:1382:G:C2	3.01	0.49
35:BA:1844:C:C2'	35:BA:1845:G:C5'	2.80	0.49
35:BA:1842:G:N3	35:BA:1901:A:C2	2.80	0.49
35:BA:2345:G:C2	35:BA:2381:C:H2'	2.48	0.49
35:BA:2447:G:O6	35:BA:2504:U:O4	2.31	0.49
35:BA:625:G:O2'	35:BA:626:U:H5'	2.12	0.49
35:BA:824:A:C5	35:BA:825:C:C4	3.01	0.49
35:BA:840:C:H2'	35:BA:841:A:C8	2.47	0.49
35:BA:948:G:OP1	35:BA:962:G:OP1	2.29	0.49
47:BP:115:LEU:HD23	47:BP:115:LEU:H	1.77	0.49
51:BT:27:THR:HG23	51:BT:28:VAL:H	1.78	0.49
52:BU:6:THR:HG21	52:BU:10:ARG:CZ	2.43	0.49
35:BA:1991:U:C2'	35:BA:1992:G:H5''	2.41	0.49
46:BO:8:LEU:HD23	46:BO:84:ALA:HB2	1.94	0.49
1:AA:578:C:H4'	1:AA:729:A:O4'	2.13	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AF:8:ILE:HG22	6:AF:10:LEU:HD12	1.94	0.49
18:AR:76:LEU:O	18:AR:78:LEU:HG	2.13	0.49
53:BV:58:VAL:O	53:BV:59:ALA:HB2	2.13	0.49
2:AB:222:ILE:H	2:AB:222:ILE:CD1	2.25	0.49
2:AB:55:PHE:HE1	2:AB:218:ALA:CB	2.25	0.49
2:AB:72:GLY:O	2:AB:94:ASN:HA	2.13	0.49
42:BH:125:VAL:HA	42:BH:131:VAL:CG1	2.24	0.49
57:BZ:126:VAL:HA	57:BZ:163:LEU:HB2	1.94	0.49
57:BZ:24:LEU:HD13	57:BZ:44:PHE:CD2	2.48	0.49
57:BZ:29:TYR:HB2	57:BZ:33:LEU:O	2.12	0.49
36:BB:104:U:O2'	57:BZ:72:ARG:CG	2.59	0.49
3:AC:66:VAL:HB	3:AC:100:ALA:O	2.13	0.49
3:AC:55:VAL:HG12	3:AC:55:VAL:O	2.12	0.49
14:AN:57:ARG:HH11	14:AN:57:ARG:CG	2.26	0.49
56:BY:64:GLU:O	56:BY:65:ALA:HB2	2.13	0.49
56:BY:67:LEU:CD2	56:BY:71:LYS:HB2	2.39	0.49
40:BF:205:ARG:O	40:BF:205:ARG:CG	2.60	0.49
4:AD:174:LEU:HD23	4:AD:185:PHE:HA	1.93	0.49
35:BA:680:G:N2	35:BA:798:G:C4	2.80	0.49
35:BA:1598:C:C5'	55:BX:36:LYS:HD3	2.43	0.49
54:BW:7:ALA:O	54:BW:102:HIS:CB	2.61	0.49
41:BG:60:LEU:HD12	41:BG:68:PRO:HG3	1.95	0.49
5:AE:76:ILE:CG2	5:AE:118:ILE:HD12	2.43	0.49
46:BO:43:VAL:HG23	46:BO:56:ASP:O	2.12	0.49
35:BA:1168:G:H2'	35:BA:1169:G:C8	2.48	0.49
35:BA:1301:A:O2'	35:BA:1302:A:H2'	2.13	0.49
35:BA:2713:A:OP2	35:BA:2713:A:H4'	2.13	0.49
35:BA:1224:C:N4	35:BA:1225:G:C6	2.81	0.49
1:AA:1314:C:C2	1:AA:1315:U:C6	3.01	0.49
51:BT:8:LYS:O	51:BT:11:GLU:OE1	2.30	0.49
42:BH:148:ILE:N	42:BH:148:ILE:HD13	2.27	0.49
33:B8:56:GLU:N	33:B8:56:GLU:OE1	2.45	0.49
1:AA:225:C:O2'	1:AA:226:G:H5'	2.13	0.49
35:BA:724:U:O2'	35:BA:725:G:H5'	2.13	0.49
35:BA:2864:G:O2'	35:BA:2865:U:H5'	2.13	0.49
1:AA:1465:C:H2'	1:AA:1466:C:O4'	2.12	0.49
35:BA:2422:A:C2	35:BA:2424:C:C2	3.00	0.49
35:BA:2557:G:H2'	35:BA:2558:C:H6	1.77	0.49
1:AA:141:A:H4'	1:AA:182:U:C1'	2.42	0.49
1:AA:1055:A:C6	1:AA:1206:G:C4	3.01	0.49
49:BR:9:LYS:C	49:BR:10:LEU:HD23	2.33	0.49
40:BF:53:THR:O	40:BF:55:GLY:N	2.46	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:46:GLU:O	42:BH:47:GLU:HB2	2.11	0.49
24:AY:184:HIS:HE1	24:AY:191:TYR:CZ	2.30	0.48
24:AY:317:PHE:HA	24:AY:365:LEU:O	2.13	0.48
35:BA:999:U:C5	35:BA:1154:G:C6	3.01	0.48
35:BA:695:G:H4'	35:BA:1380:G:H5'	1.94	0.48
35:BA:1612:C:C2'	35:BA:1613:G:O5'	2.61	0.48
35:BA:740:U:H5''	35:BA:1784:A:OP1	2.13	0.48
35:BA:2290:G:N2	35:BA:2373:G:O2'	2.46	0.48
35:BA:2373:G:O2'	35:BA:2374:C:H5'	2.12	0.48
35:BA:245:G:O2'	35:BA:246:C:H5'	2.13	0.48
35:BA:447:A:C5	35:BA:454:A:N7	2.81	0.48
35:BA:650:C:C5'	35:BA:651:G:OP2	2.61	0.48
35:BA:729:G:H5'	35:BA:730:C:C5'	2.42	0.48
35:BA:751:A:N7	35:BA:789:A:C6	2.81	0.48
35:BA:998:C:C2'	35:BA:999:U:O5'	2.61	0.48
39:BE:46:ALA:HB2	39:BE:82:ARG:HA	1.94	0.48
45:BN:103:VAL:O	45:BN:106:MET:N	2.29	0.48
45:BN:121:LYS:O	45:BN:122:VAL:CG2	2.61	0.48
35:BA:1954:G:H1'	35:BA:1956:U:O4	2.12	0.48
42:BH:143:GLN:OE1	42:BH:143:GLN:CA	2.59	0.48
1:AA:580:U:N3	1:AA:581:G:C4	2.81	0.48
25:B0:27:GLU:HA	25:B0:67:VAL:C	2.34	0.48
1:AA:1112:C:O2	3:AC:179:ARG:HG2	2.13	0.48
14:AN:27:CYS:C	14:AN:29:ARG:H	2.16	0.48
14:AN:29:ARG:NH1	14:AN:31:ARG:O	2.46	0.48
14:AN:40:CYS:O	14:AN:41:ARG:C	2.52	0.48
19:AS:9:VAL:HG12	19:AS:11:VAL:CG1	2.25	0.48
35:BA:896:A:H4'	35:BA:897:C:OP2	2.13	0.48
27:B2:61:LEU:O	27:B2:65:ASN:N	2.46	0.48
35:BA:62:C:O5'	35:BA:62:C:H6	1.95	0.48
35:BA:94(A):G:C2'	35:BA:95:G:O4'	2.60	0.48
40:BF:20:LEU:H	40:BF:24:LEU:HD21	1.78	0.48
19:AS:51:VAL:CA	19:AS:58:VAL:HG22	2.43	0.48
50:BS:18:ILE:HD12	50:BS:18:ILE:N	2.28	0.48
55:BX:35:THR:HG22	55:BX:37:THR:H	1.78	0.48
1:AA:699:C:C2'	1:AA:700:G:H5'	2.43	0.48
37:BC:114:VAL:HG12	37:BC:144:THR:HG22	1.95	0.48
38:BD:124:PRO:O	38:BD:126:GLN:N	2.46	0.48
18:AR:29:PHE:CE1	18:AR:31:LEU:HB3	2.48	0.48
18:AR:29:PHE:HE1	18:AR:31:LEU:HB3	1.78	0.48
35:BA:2234:G:C2	35:BA:2235:G:C8	3.01	0.48
50:BS:85:VAL:CG2	50:BS:86:ALA:H	2.26	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BO:64:ARG:HD3	46:BO:79:PHE:CD2	2.47	0.48
35:BA:185:U:O2'	35:BA:186:G:H5'	2.12	0.48
20:AT:53:LEU:O	20:AT:55:ILE:N	2.46	0.48
35:BA:1914:C:C4'	35:BA:1914:C:O2	2.61	0.48
28:B3:3:ARG:HB2	28:B3:59:VAL:O	2.12	0.48
26:B1:14:VAL:HG22	35:BA:188:G:H5'	1.94	0.48
35:BA:2794:C:N4	35:BA:2801(A):A:H61	2.11	0.48
16:AP:33:ILE:N	16:AP:33:ILE:HD13	2.27	0.48
11:AK:108:ILE:CD1	11:AK:108:ILE:N	2.75	0.48
35:BA:1477:A:C6	35:BA:1478:G:C5	3.01	0.48
1:AA:722:A:H2'	1:AA:722:A:N3	2.28	0.48
37:BC:99:ILE:O	37:BC:99:ILE:HG22	2.13	0.48
48:BQ:66:ILE:HG13	48:BQ:66:ILE:O	2.12	0.48
24:AY:15:THR:O	24:AY:107:ASP:N	2.36	0.48
24:AY:158:VAL:O	24:AY:163:LYS:N	2.47	0.48
35:BA:2662:A:H2'	35:BA:2663:G:O4'	2.13	0.48
1:AA:1407:C:O2'	1:AA:1408:A:H5''	2.13	0.48
35:BA:1382:G:H4'	35:BA:1573:G:N3	2.28	0.48
35:BA:2721:A:C2	35:BA:2873:A:C5	3.01	0.48
35:BA:2685:G:N2	35:BA:2724:C:O2	2.45	0.48
35:BA:589:C:O2'	35:BA:590:A:H5'	2.13	0.48
35:BA:691:C:O5'	35:BA:691:C:H6	1.95	0.48
38:BD:186:HIS:CE1	38:BD:188:GLU:H	2.30	0.48
38:BD:218:ARG:HG3	38:BD:218:ARG:HH11	1.78	0.48
38:BD:31:LYS:HG2	38:BD:33:LEU:HD22	1.95	0.48
6:AF:22:GLU:O	6:AF:23:LYS:C	2.49	0.48
6:AF:52:ILE:CG2	6:AF:87:ARG:HH12	2.26	0.48
53:BV:15:GLU:O	53:BV:16:PRO:C	2.52	0.48
1:AA:1412:C:C2	1:AA:1413:A:N7	2.80	0.48
1:AA:1413:A:O2'	1:AA:1414:U:H5'	2.13	0.48
1:AA:1082:G:H2'	1:AA:1083:U:O4'	2.12	0.48
2:AB:12:GLU:O	2:AB:13:ALA:C	2.50	0.48
2:AB:25:ASN:HB2	2:AB:191:ASP:O	2.13	0.48
2:AB:47:THR:HA	2:AB:202:PRO:HG2	1.95	0.48
35:BA:920:G:C2	35:BA:921:G:C5	3.01	0.48
35:BA:920:G:N3	35:BA:921:G:C8	2.80	0.48
35:BA:854:G:N2	35:BA:924:C:C2	2.81	0.48
36:BB:86:G:N2	36:BB:92:C:O2	2.46	0.48
57:BZ:23:LYS:HD3	57:BZ:38:TYR:CE1	2.49	0.48
22:AV:49:G:H2'	22:AV:50:U:C6	2.44	0.48
3:AC:121:ALA:HA	3:AC:124:ILE:HD12	1.95	0.48
14:AN:23:ARG:O	14:AN:24:CYS:C	2.50	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AS:42:PRO:HG3	19:AS:67:VAL:CG1	2.43	0.48
1:AA:368:U:H6	24:AY:370:HIS:HE2	1.58	0.48
35:BA:483:A:H4'	56:BY:48:ALA:C	2.33	0.48
56:BY:8:LYS:CE	56:BY:72:VAL:HG23	2.43	0.48
56:BY:76:CYS:O	56:BY:78:ALA:N	2.46	0.48
27:B2:24:LEU:HD22	27:B2:60:LEU:HD21	1.95	0.48
35:BA:349:G:C6	35:BA:350:U:C2	3.01	0.48
40:BF:6:VAL:O	40:BF:7:TYR:HB2	2.13	0.48
35:BA:607:U:O4	35:BA:619:G:H2'	2.13	0.48
35:BA:1087:G:C4	35:BA:1089:G:N7	2.81	0.48
4:AD:100:ARG:HB3	4:AD:103:ASN:HB3	1.95	0.48
4:AD:121:VAL:O	4:AD:134:ASP:HB3	2.13	0.48
35:BA:141:A:C6	35:BA:142:A:C6	3.01	0.48
7:AG:99:LEU:O	7:AG:100:ALA:C	2.52	0.48
41:BG:78:SER:O	41:BG:80:PHE:N	2.47	0.48
5:AE:36:ASP:CG	5:AE:40:ARG:HB2	2.33	0.48
47:BP:65:ARG:O	47:BP:68:GLN:OE1	2.30	0.48
35:BA:2236:C:H2'	35:BA:2237:G:O4'	2.12	0.48
35:BA:1539:G:C2	35:BA:1540:U:C1'	2.83	0.48
36:BB:107:G:C2	36:BB:108:U:C5	3.02	0.48
36:BB:72:G:C2'	36:BB:73:A:H5''	2.43	0.48
13:AM:44:ARG:O	13:AM:48:LEU:HD21	2.13	0.48
41:BG:180:PHE:O	41:BG:182:LYS:N	2.45	0.48
35:BA:182:A:O2'	35:BA:183:C:H5'	2.12	0.48
35:BA:2185:C:O2	35:BA:2185:C:H2'	2.13	0.48
35:BA:2710:C:N4	35:BA:2711:A:N6	2.61	0.48
1:AA:1375:A:C4	1:AA:1376:U:C5	3.01	0.48
16:AP:55:ARG:O	16:AP:58:TYR:HB3	2.12	0.48
4:AD:182:LYS:HE3	4:AD:182:LYS:HB2	1.58	0.48
1:AA:1353:G:C4	1:AA:1354:C:H5	2.32	0.48
47:BP:122:PRO:HG3	47:BP:140:ALA:O	2.13	0.48
28:B3:3:ARG:HB2	28:B3:59:VAL:C	2.33	0.48
35:BA:201:C:C2'	35:BA:202:U:C5'	2.89	0.48
35:BA:1624:G:C6	35:BA:1625:C:C4	3.01	0.48
1:AA:135:C:O2	16:AP:1:MET:N	2.39	0.48
1:AA:538:G:H5''	12:AL:114:LYS:CG	2.42	0.48
35:BA:322:A:C5'	35:BA:340:A:H1'	2.40	0.48
49:BR:11:ASN:O	49:BR:12:ARG:CB	2.60	0.48
17:AQ:9:VAL:O	17:AQ:11:VAL:HG13	2.13	0.48
4:AD:70:ILE:HG22	4:AD:71:SER:O	2.13	0.48
47:BP:77:ARG:HG3	47:BP:77:ARG:O	2.12	0.48
32:B7:31:LEU:CD2	32:B7:42:LEU:HB3	2.43	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1419:A:O2'	35:BA:1420:U:H5''	2.13	0.48
36:BB:63:G:H2'	36:BB:64:C:C6	2.48	0.48
24:AY:155:LEU:C	24:AY:158:VAL:HG23	2.33	0.48
24:AY:198:GLY:C	24:AY:262:ASN:ND2	2.65	0.48
24:AY:445:GLN:C	24:AY:448:VAL:HB	2.32	0.48
37:BC:100:ILE:O	37:BC:104:LEU:HG	2.13	0.48
35:BA:2499:C:H2'	35:BA:2500:U:O4'	2.13	0.48
35:BA:2690:C:OP2	49:BR:14:SER:OG	2.24	0.48
35:BA:2729:G:C2	35:BA:2730:C:C2	3.00	0.48
35:BA:585:G:H2'	35:BA:586:A:N7	2.28	0.48
35:BA:831:G:C6	35:BA:832:G:N7	2.81	0.48
38:BD:85:ASP:OD2	38:BD:87:ASN:ND2	2.47	0.48
40:BF:78:ILE:O	40:BF:80:ALA:N	2.38	0.48
47:BP:50:ARG:NH2	47:BP:51:PHE:CE2	2.81	0.48
51:BT:41:ARG:HG2	51:BT:41:ARG:HH11	1.79	0.48
51:BT:22:PHE:CE2	51:BT:85:LYS:HE3	2.48	0.48
52:BU:92:ARG:HH22	53:BV:10:LYS:CG	2.23	0.48
53:BV:91:TYR:C	53:BV:91:TYR:CD1	2.86	0.48
53:BV:22:VAL:HG22	53:BV:92:THR:O	2.13	0.48
35:BA:1667:G:O2'	35:BA:1991:U:O4	2.25	0.48
6:AF:11:ASN:HA	6:AF:86:ARG:CZ	2.43	0.48
8:AH:33:GLU:O	8:AH:36:LEU:N	2.47	0.48
18:AR:38:GLU:HG2	18:AR:39:VAL:HG23	1.95	0.48
2:AB:201:ILE:HG21	2:AB:214:ILE:HG21	1.93	0.48
2:AB:36:ARG:O	2:AB:39:ILE:N	2.39	0.48
42:BH:125:VAL:N	42:BH:126:PRO:HD3	2.27	0.48
35:BA:2257:U:H2'	35:BA:2258:C:C6	2.48	0.48
22:AV:8:U:O2	22:AV:48:C:O2	2.31	0.48
35:BA:1786:A:C6	35:BA:1938:A:H2	2.29	0.48
21:AU:13:ILE:O	21:AU:14:TRP:C	2.52	0.48
1:AA:1203:C:C4	1:AA:1204:A:N7	2.81	0.48
3:AC:120:VAL:O	3:AC:121:ALA:C	2.51	0.48
3:AC:31:HIS:O	3:AC:32:LEU:C	2.52	0.48
10:AJ:12:ASP:O	10:AJ:14:LYS:N	2.46	0.48
1:AA:1248:A:C5	1:AA:1249:C:C5	3.01	0.48
9:AI:42:ARG:NH1	9:AI:74:ILE:HD12	2.27	0.48
40:BF:6:VAL:HG11	40:BF:124:LEU:HD13	1.95	0.48
35:BA:1056:G:C4	35:BA:1102:C:H5	2.32	0.48
4:AD:82:ALA:HB2	4:AD:92:VAL:HG12	1.95	0.48
35:BA:1484:G:C3'	35:BA:1485:G:H5''	2.42	0.48
37:BC:28:LEU:HD21	37:BC:222:VAL:HG22	1.95	0.48
35:BA:1543:C:O5'	35:BA:1543:C:C6	2.67	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:B4:6:HIS:HB3	41:BG:67:LYS:CE	2.43	0.48
35:BA:655:A:H4'	35:BA:656:G:C5'	2.22	0.48
36:BB:8:U:H5'	36:BB:8:U:H6	1.79	0.48
1:AA:333:G:H2'	1:AA:334:C:C6	2.48	0.48
31:B6:25:LYS:HD2	35:BA:2285:C:N4	2.28	0.48
1:AA:925:G:H1'	1:AA:1502:A:N9	2.27	0.48
24:AY:22:PRO:O	24:AY:23:ASP:C	2.51	0.48
34:B9:8:LYS:HB3	34:B9:8:LYS:HE2	1.72	0.48
34:B9:8:LYS:HE3	35:BA:1032:A:OP1	2.14	0.48
35:BA:1469:A:H2'	35:BA:1470:G:O4'	2.14	0.48
41:BG:51:ARG:CZ	41:BG:53:LEU:HD21	2.44	0.48
24:AY:513:LEU:O	24:AY:517:ARG:CG	2.62	0.48
13:AM:3:ARG:O	13:AM:4:ILE:HG13	2.13	0.48
35:BA:2077:A:C2	35:BA:2078:C:C5	3.01	0.48
35:BA:2052:G:O3'	39:BE:143:ASN:O	2.32	0.48
35:BA:2547:U:O4'	35:BA:2566:A:C2	2.66	0.48
35:BA:2525:G:N1	35:BA:2526:G:C5	2.81	0.48
38:BD:28:GLU:H	38:BD:29:PRO:CD	2.26	0.48
41:BG:167:GLU:H	41:BG:167:GLU:CD	2.17	0.48
24:AY:492:GLN:HB3	24:AY:504:ILE:HB	1.94	0.48
35:BA:2516:G:C6	35:BA:2517:C:N4	2.82	0.48
24:AY:120:GLU:O	24:AY:121:ASP:C	2.51	0.48
24:AY:26:LYS:HG3	24:AY:88:ASP:OD1	2.13	0.48
24:AY:10:VAL:C	24:AY:279:PRO:CD	2.81	0.48
24:AY:289:VAL:HB	24:AY:321:VAL:O	2.13	0.48
24:AY:511:LEU:HD23	24:AY:515:GLN:OE1	2.13	0.48
1:AA:770:C:O4'	1:AA:900:A:H2	1.96	0.48
35:BA:999:U:HO2'	35:BA:1000:A:H5'	1.76	0.48
35:BA:1140:C:H1'	35:BA:1143:A:C2	2.48	0.48
35:BA:1688:U:H2'	35:BA:1698:A:N6	2.28	0.48
35:BA:1814:G:H2'	35:BA:1815:A:N7	2.29	0.48
35:BA:1799:G:N1	35:BA:1819:A:C8	2.81	0.48
35:BA:2437:U:C2	35:BA:2438:U:C5	3.02	0.48
35:BA:2681:C:O2	35:BA:2681:C:C2'	2.62	0.48
35:BA:2628:C:HO2'	35:BA:2781:A:H3'	1.78	0.48
35:BA:589:C:H42	35:BA:668:G:H1	1.61	0.48
35:BA:590:A:C2	35:BA:591:C:C2	3.02	0.48
38:BD:33:LEU:CD2	38:BD:102:LYS:HB2	2.34	0.48
38:BD:148:GLU:C	38:BD:189:CYS:SG	2.92	0.48
38:BD:80:ALA:CB	38:BD:94:LEU:HD13	2.44	0.48
45:BN:116:LEU:O	45:BN:117:PHE:C	2.51	0.48
45:BN:65:LYS:HD3	45:BN:69:GLN:NE2	2.28	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BW:33:ARG:C	54:BW:34:ASN:HD22	2.15	0.48
6:AF:24:GLU:O	6:AF:27:GLN:N	2.45	0.48
6:AF:86:ARG:O	6:AF:87:ARG:HG2	2.12	0.48
15:AO:82:ILE:HA	15:AO:82:ILE:HD12	1.60	0.48
35:BA:1124:C:N4	35:BA:1125:G:C6	2.82	0.48
1:AA:1076:C:C2	1:AA:1082:G:C2	3.01	0.48
1:AA:1090:U:H2'	1:AA:1091:U:C6	2.45	0.48
2:AB:165:VAL:CG2	2:AB:166:ASP:N	2.75	0.48
25:B0:26:TYR:HE2	35:BA:857:C:C1'	2.20	0.48
48:BQ:46:GLN:C	48:BQ:49:ALA:HB3	2.33	0.48
48:BQ:74:TYR:HD1	48:BQ:75:THR:N	2.11	0.48
57:BZ:125:LEU:HD23	57:BZ:164:ALA:HB3	1.94	0.48
22:AV:53:G:N2	22:AV:61:C:H42	2.11	0.48
1:AA:965:A:OP1	1:AA:1198:G:H5''	2.11	0.48
10:AJ:42:THR:HG23	10:AJ:68:HIS:HA	1.95	0.48
14:AN:58:LYS:O	14:AN:59:ALA:C	2.51	0.48
35:BA:300:A:O5'	56:BY:97:ARG:NH1	2.46	0.48
35:BA:1082:U:O5'	35:BA:1082:U:H6	1.96	0.48
4:AD:187:ARG:CB	4:AD:187:ARG:HH11	2.25	0.48
11:AK:67:ASP:O	11:AK:70:LYS:N	2.46	0.48
37:BC:14:VAL:CG2	37:BC:32:LEU:HD21	2.43	0.48
37:BC:161:ILE:HD12	37:BC:161:ILE:O	2.13	0.48
41:BG:60:LEU:O	41:BG:64:THR:HG22	2.14	0.48
41:BG:96:ARG:H	41:BG:99:MET:HE2	1.77	0.48
50:BS:70:GLY:O	50:BS:72:ALA:N	2.47	0.48
35:BA:1447:G:H4'	35:BA:1545:A:C4'	2.43	0.48
13:AM:15:VAL:HG23	13:AM:16:ASP:N	2.28	0.48
13:AM:19:LEU:HB3	13:AM:25:ILE:HG21	1.95	0.48
35:BA:2177:C:H3'	35:BA:2178:C:O2	2.13	0.48
1:AA:1219:U:H2'	1:AA:1220:G:O4'	2.13	0.48
1:AA:960:U:C5	1:AA:1225:A:C8	3.01	0.48
13:AM:107:ALA:O	13:AM:111:LYS:CD	2.62	0.48
13:AM:68:GLY:O	13:AM:70:LEU:N	2.46	0.48
36:BB:76:G:C5	36:BB:77:U:C5	3.01	0.48
17:AQ:18:THR:HG23	17:AQ:44:ALA:O	2.13	0.48
35:BA:1368:G:C2	35:BA:1369:G:N7	2.82	0.48
35:BA:7:G:C8	35:BA:7:G:O5'	2.66	0.48
1:AA:1283:G:O2'	1:AA:1284:C:C6	2.43	0.48
26:B1:14:VAL:CG1	26:B1:39:LYS:HD2	2.43	0.48
35:BA:1150:C:C2'	35:BA:1151:G:H5'	2.43	0.48
1:AA:502:G:C6	1:AA:503:C:C4	3.02	0.48
26:B1:87:PRO:CG	26:B1:88:LYS:N	2.77	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:62:LEU:C	25:B0:63:VAL:HG22	2.34	0.48
36:BB:111:G:H2'	36:BB:112:U:C5'	2.43	0.48
35:BA:285:C:H2'	35:BA:286:C:H6	1.75	0.48
1:AA:35:G:H2'	1:AA:36:C:H6	1.79	0.48
37:BC:145:VAL:O	37:BC:145:VAL:HG12	2.14	0.48
20:AT:57:ARG:HB2	20:AT:57:ARG:HH11	1.77	0.48
35:BA:2392:A:H5'	35:BA:2392:A:N3	2.28	0.48
5:AE:137:GLU:HA	5:AE:140:ARG:NH1	2.28	0.48
13:AM:37:THR:O	13:AM:39:ILE:HG13	2.14	0.48
1:AA:889:A:H4'	1:AA:890:G:OP1	2.13	0.48
1:AA:1407:C:H2'	1:AA:1408:A:H5''	1.90	0.48
30:B5:40:LYS:HZ2	30:B5:45:VAL:HA	1.78	0.48
35:BA:1832:C:H2'	35:BA:1833:U:O4'	2.14	0.48
35:BA:1909:C:N4	35:BA:1921:G:H1	2.11	0.48
30:B5:8:LYS:HE2	35:BA:2054:A:H2'	1.95	0.48
35:BA:2464:C:HO2'	35:BA:2465:C:P	2.36	0.48
35:BA:2720:U:H3'	35:BA:2721:A:C8	2.38	0.48
35:BA:2730:C:O2'	35:BA:2731:G:H5'	2.13	0.48
35:BA:2873:A:H3'	35:BA:2874:C:C5	2.48	0.48
35:BA:465:G:C6	35:BA:466:A:N6	2.82	0.48
35:BA:774:A:N1	35:BA:787:U:O2'	2.40	0.48
35:BA:818:G:H5'	35:BA:839:U:OP1	2.13	0.48
38:BD:186:HIS:NE2	38:BD:188:GLU:CG	2.77	0.48
39:BE:22:PRO:O	39:BE:23:VAL:CG1	2.60	0.48
39:BE:7:VAL:HA	39:BE:194:GLY:O	2.13	0.48
51:BT:53:ARG:NH1	51:BT:53:ARG:HB3	2.27	0.48
35:BA:2848:G:C8	51:BT:97:ALA:HB2	2.49	0.48
52:BU:75:ASN:O	52:BU:76:TYR:C	2.50	0.48
1:AA:863:U:C5	1:AA:867:G:C6	3.02	0.48
6:AF:9:VAL:HG22	6:AF:60:PHE:CD2	2.49	0.48
15:AO:45:VAL:HG13	15:AO:46:HIS:N	2.28	0.48
2:AB:177:ALA:CB	2:AB:184:VAL:HG22	2.43	0.48
2:AB:76:GLN:OE1	2:AB:206:ASP:O	2.32	0.48
57:BZ:25:PRO:HA	57:BZ:38:TYR:HB2	1.95	0.48
22:AV:5:G:H1	22:AV:68:C:N4	2.06	0.48
3:AC:15:THR:HG23	3:AC:181:ASN:HA	1.96	0.48
3:AC:34:LEU:HD22	3:AC:38:ARG:HD2	1.95	0.48
19:AS:12:ASP:HB2	19:AS:35:SER:OG	2.13	0.48
24:AY:308:ASP:O	24:AY:308:ASP:OD1	2.32	0.48
24:AY:310:LYS:C	24:AY:311:HIS:CD2	2.87	0.48
35:BA:349:G:C6	35:BA:350:U:N3	2.81	0.48
35:BA:58:G:N3	35:BA:73:A:C2	2.79	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:BX:10:ALA:HB3	55:BX:29:TRP:HB2	1.94	0.48
4:AD:12:CYS:HA	4:AD:19:LEU:CB	2.35	0.48
50:BS:18:ILE:O	50:BS:18:ILE:HG22	2.14	0.48
4:AD:11:LEU:HB3	4:AD:66:ARG:HD3	1.96	0.48
57:BZ:141:VAL:HA	57:BZ:144:LEU:CD2	2.31	0.48
1:AA:939:G:H1	1:AA:1344:C:N4	2.12	0.48
29:B4:27:THR:O	29:B4:28:LYS:HB3	2.13	0.48
35:BA:1890:A:O5'	35:BA:1890:A:H8	1.97	0.48
8:AH:110:ALA:O	8:AH:112:LEU:HD23	2.13	0.48
36:BB:18:G:H2'	36:BB:19:G:C8	2.48	0.48
38:BD:97:TYR:C	38:BD:99:ASP:N	2.63	0.48
35:BA:1119:C:H2'	35:BA:1120:G:H8	1.77	0.48
26:B1:42:GLN:OE1	35:BA:396:G:H1'	2.13	0.48
38:BD:14:ARG:HG3	38:BD:14:ARG:O	2.12	0.48
1:AA:1004:A:H2'	1:AA:1005:A:H5'	1.96	0.48
9:AI:88:TYR:O	9:AI:89:ASN:CB	2.61	0.48
13:AM:32:GLU:HA	13:AM:35:GLU:HG2	1.96	0.48
7:AG:135:VAL:O	7:AG:138:LYS:CB	2.53	0.48
33:B8:55:ALA:O	33:B8:58:ILE:N	2.44	0.48
35:BA:1604:C:O2'	35:BA:1605:C:H5'	2.14	0.48
26:B1:14:VAL:HG21	35:BA:188:G:H5'	1.91	0.48
35:BA:1337:G:N7	55:BX:62:LYS:NZ	2.61	0.48
35:BA:363:G:C5	35:BA:363(A):A:N7	2.81	0.48
4:AD:65:ARG:HA	4:AD:75:PHE:CE1	2.48	0.48
35:BA:742:G:C5'	35:BA:1675:C:O2'	2.61	0.48
1:AA:415:A:O2'	1:AA:416:G:H5'	2.14	0.48
35:BA:54:G:C8	35:BA:54:G:OP1	2.66	0.48
1:AA:431:A:O2'	1:AA:432:A:H5'	2.13	0.48
28:B3:40:THR:O	28:B3:41:PRO:C	2.51	0.48
42:BH:44:VAL:HG13	42:BH:45:VAL:N	2.29	0.48
24:AY:468:VAL:HG13	24:AY:506:THR:HA	1.94	0.48
35:BA:2658:C:H42	35:BA:2663:G:H1	1.61	0.48
35:BA:1131:G:N7	35:BA:2025:C:C1'	2.76	0.48
35:BA:1259:G:H2'	35:BA:1260:G:C8	2.48	0.48
35:BA:1935:G:H3'	35:BA:1962:C:H42	1.79	0.48
35:BA:2057:A:O2'	35:BA:2058:A:H5'	2.14	0.48
35:BA:2726:U:O2'	35:BA:2727:G:O4'	2.31	0.48
35:BA:2779:U:H1'	35:BA:2781:A:C5	2.48	0.48
35:BA:624:C:C5	47:BP:107:LYS:NZ	2.80	0.48
32:B7:11:LYS:CE	35:BA:686:G:C2	2.97	0.48
35:BA:993:G:C6	35:BA:994:C:C5	3.02	0.48
38:BD:211:ARG:O	38:BD:214:TRP:N	2.47	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BE:38:THR:HG22	39:BE:40:GLU:N	2.27	0.48
39:BE:9:VAL:HG11	39:BE:25:VAL:CB	2.43	0.48
40:BF:64:ILE:HG23	40:BF:65:TRP:CD2	2.48	0.48
45:BN:22:THR:N	45:BN:61:ARG:HB2	2.29	0.48
49:BR:14:SER:CA	49:BR:17:ARG:NH2	2.64	0.48
52:BU:59:ARG:O	52:BU:62:ILE:N	2.46	0.48
52:BU:90:VAL:O	52:BU:92:ARG:N	2.47	0.48
53:BV:81:TYR:C	53:BV:82:ARG:HD2	2.33	0.48
1:AA:1484:C:O4'	35:BA:1960:A:O2'	2.31	0.48
1:AA:1484:C:H4'	35:BA:1961:C:C4'	2.43	0.48
8:AH:11:THR:O	8:AH:13:ILE:N	2.45	0.48
18:AR:35:ARG:O	18:AR:37:VAL:HG13	2.13	0.48
18:AR:73:ALA:HB1	18:AR:79:LEU:HG	1.94	0.48
2:AB:236:TYR:HB3	2:AB:239:VAL:CG2	2.43	0.48
42:BH:105:LEU:CD2	42:BH:105:LEU:N	2.61	0.48
48:BQ:101:ARG:HG3	48:BQ:101:ARG:NH1	2.28	0.48
48:BQ:125:LEU:HD22	48:BQ:125:LEU:H	1.77	0.48
35:BA:1786:A:C4	35:BA:1938:A:N1	2.81	0.48
3:AC:182:ILE:HG12	3:AC:203:PHE:CD1	2.49	0.48
19:AS:20:LEU:HD22	19:AS:23:ASN:HD22	1.78	0.48
19:AS:9:VAL:HG13	19:AS:39:THR:CB	2.44	0.48
27:B2:50:ILE:HG22	27:B2:51:ARG:H	1.73	0.48
19:AS:75:ALA:H	19:AS:76:PRO:CD	2.27	0.48
37:BC:20:TYR:O	37:BC:225:ASN:HB2	2.14	0.48
37:BC:56:GLN:HA	37:BC:201:PRO:CB	2.37	0.48
1:AA:939:G:N2	1:AA:940:C:C2	2.82	0.48
42:BH:41:MET:HE2	42:BH:52:VAL:HG22	1.95	0.48
31:B6:37:ARG:O	31:B6:49:HIS:N	2.46	0.48
5:AE:98:THR:HG21	5:AE:119:LEU:CD2	2.39	0.48
24:AY:21:HIS:CE1	24:AY:22:PRO:HD2	2.43	0.48
50:BS:89:ARG:CG	50:BS:92:TYR:HA	2.44	0.48
2:AB:141:GLU:O	2:AB:145:LEU:N	2.40	0.48
50:BS:38:GLN:O	50:BS:39:ILE:HG13	2.12	0.48
35:BA:1295:C:C2	35:BA:1296:G:C8	3.01	0.48
19:AS:78:ARG:CB	19:AS:81:ARG:HH11	2.17	0.48
51:BT:13:ARG:NE	51:BT:13:ARG:CA	2.76	0.48
9:AI:55:ALA:C	9:AI:57:GLY:N	2.65	0.48
24:AY:431:ILE:HD11	24:AY:493:LEU:HB3	1.94	0.48
1:AA:1424:C:H2'	1:AA:1425:U:O4'	2.14	0.48
1:AA:10:A:OP2	5:AE:126:ARG:HD2	2.14	0.48
38:BD:45:ASN:ND2	38:BD:46:GLN:N	2.61	0.48
35:BA:1551:C:C2'	35:BA:1552:G:H5'	2.43	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2645:G:C2'	35:BA:2646:C:H5'	2.44	0.48
42:BH:91:GLY:HA3	42:BH:94:TYR:CE2	2.48	0.48
1:AA:344:A:C5'	1:AA:345:C:H5	2.26	0.48
35:BA:1389:G:H2'	35:BA:1390:U:O4'	2.13	0.48
1:AA:767:A:H2'	1:AA:768:A:O4'	2.12	0.48
1:AA:945:G:N1	1:AA:1337:G:C2	2.82	0.48
35:BA:2074:U:O2'	35:BA:2597:G:H1'	2.14	0.48
35:BA:354:G:H2'	35:BA:355:G:C8	2.48	0.48
11:AK:79:SER:HA	11:AK:104:GLN:HB3	1.95	0.48
1:AA:796:C:C2	1:AA:797:C:C5	3.01	0.48
41:BG:121:ASN:ND2	41:BG:123:ASN:H	2.11	0.48
39:BE:15:PHE:HA	39:BE:19:ARG:O	2.13	0.48
24:AY:221:GLU:HA	24:AY:225:GLN:NE2	2.15	0.48
24:AY:305:ALA:CA	24:AY:422:GLU:HB3	2.44	0.48
24:AY:68:ILE:HB	24:AY:92:HIS:CE1	2.48	0.48
30:B5:16:ARG:HD2	30:B5:20:ARG:NH2	2.29	0.48
30:B5:51:TYR:HB3	30:B5:52:TYR:H	1.50	0.48
35:BA:1799:G:H5'	35:BA:1819:A:N6	2.29	0.48
35:BA:1811:G:H2'	35:BA:1812:A:H8	1.78	0.48
35:BA:2222:G:C2'	35:BA:2223:G:H5'	2.44	0.48
35:BA:2382:G:H3'	35:BA:2382:G:OP1	2.14	0.48
35:BA:2407:G:H2'	35:BA:2408:U:C6	2.48	0.48
35:BA:2692:C:H2'	35:BA:2693:A:C8	2.46	0.48
35:BA:2726:U:O2	35:BA:2726:U:H5'	2.13	0.48
38:BD:92:ILE:HA	38:BD:107:ALA:H	1.78	0.48
39:BE:37:ARG:HH11	39:BE:42:ASP:CG	2.16	0.48
45:BN:112:LEU:O	45:BN:115:ARG:N	2.46	0.48
52:BU:65:ILE:HG23	52:BU:106:PHE:CZ	2.49	0.48
52:BU:76:TYR:O	52:BU:79:PHE:HB3	2.13	0.48
18:AR:41:LYS:O	18:AR:43:PHE:N	2.47	0.48
1:AA:1071:C:H2'	1:AA:1072:G:C8	2.48	0.48
2:AB:15:VAL:CG2	2:AB:209:ARG:HE	2.27	0.48
2:AB:208:ILE:O	2:AB:210:SER:N	2.47	0.48
2:AB:61:LEU:O	2:AB:62:ALA:C	2.51	0.48
35:BA:2807:G:H2'	35:BA:2808:U:C4'	2.42	0.48
35:BA:2243:U:O2	35:BA:2434:A:H2	1.95	0.48
42:BH:103:LEU:HG	42:BH:105:LEU:CD1	2.39	0.48
48:BQ:125:LEU:N	48:BQ:125:LEU:CD2	2.77	0.48
1:AA:1305:G:H5''	21:AU:5:ASP:N	2.29	0.48
13:AM:81:LEU:C	13:AM:93:ARG:HH11	2.17	0.48
35:BA:109:G:O2'	35:BA:110:G:H5'	2.14	0.48
4:AD:170:VAL:O	4:AD:171:GLY:C	2.51	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BT:118:ARG:HA	51:BT:121:ILE:CG2	2.44	0.48
7:AG:40:ALA:HB1	7:AG:44:TYR:HE2	1.74	0.48
35:BA:599:G:C2	35:BA:600:G:N7	2.82	0.48
35:BA:601:C:C5'	40:BF:108:LYS:HZ2	2.26	0.48
5:AE:105:VAL:O	5:AE:109:ILE:HG13	2.13	0.48
1:AA:109:A:C6	1:AA:327:A:C5	3.01	0.48
1:AA:59:A:C4	1:AA:331:G:N2	2.81	0.48
17:AQ:77:VAL:O	17:AQ:77:VAL:HG12	2.14	0.48
35:BA:1853:A:O2'	35:BA:1854:A:H5'	2.13	0.48
35:BA:1856:G:H2'	35:BA:1857:G:O4'	2.13	0.48
36:BB:71:C:H2'	36:BB:72:G:H5'	1.96	0.48
35:BA:1422:G:C4	35:BA:1423:G:C8	3.01	0.48
41:BG:25:TYR:C	41:BG:26:GLN:OE1	2.52	0.48
1:AA:1133:G:H22	1:AA:1143:G:H1'	1.79	0.48
35:BA:2093:G:C6	35:BA:2225:A:N7	2.81	0.48
24:AY:517:ARG:HG2	24:AY:517:ARG:NH1	2.28	0.48
17:AQ:95:TYR:HA	17:AQ:98:LEU:HD12	1.96	0.48
4:AD:126:ILE:HG22	4:AD:127:THR:N	2.28	0.48
49:BR:29:LEU:CG	49:BR:52:ILE:HD11	2.44	0.48
1:AA:115:G:O2'	1:AA:116:A:OP2	2.31	0.48
7:AG:136:LYS:NZ	7:AG:140:ASP:OD1	2.40	0.48
35:BA:1438:U:H5'	35:BA:1516:C:O3'	2.13	0.48
1:AA:901:A:H2'	1:AA:902:G:C5'	2.43	0.48
1:AA:80:G:H5''	1:AA:81:U:C6	2.49	0.48
35:BA:845:G:O2'	35:BA:846:C:C5	2.64	0.48
35:BA:197:A:H5'	35:BA:197:A:H8	1.77	0.48
35:BA:2132:U:N3	37:BC:5:LYS:HB2	2.27	0.48
24:AY:115:ALA:CB	24:AY:148:ILE:CB	2.91	0.48
35:BA:2884:U:C5	35:BA:2885:C:C5	3.02	0.48
24:AY:16:PHE:HE2	24:AY:84:VAL:HG12	1.78	0.48
24:AY:267:HIS:CD2	24:AY:267:HIS:N	2.80	0.48
1:AA:951:G:C6	1:AA:1231:G:N1	2.81	0.48
28:B3:16:PRO:CB	28:B3:18:ASP:OD1	2.62	0.48
35:BA:2049:G:H2'	35:BA:2050:C:H5'	1.95	0.48
35:BA:2463:C:O2	35:BA:2488:A:C2	2.66	0.48
38:BD:224:ALA:HA	38:BD:233:HIS:CB	2.44	0.48
35:BA:2579:C:H4'	39:BE:134:ILE:CG2	2.43	0.48
39:BE:47:VAL:HB	39:BE:84:PHE:CD1	2.46	0.48
40:BF:84:VAL:O	40:BF:85:GLY:C	2.48	0.48
45:BN:108:PRO:HG2	45:BN:113:GLY:CA	2.43	0.48
45:BN:65:LYS:CD	45:BN:69:GLN:HE21	2.26	0.48
46:BO:68:GLU:OE1	46:BO:78:ARG:HD3	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BP:106:LEU:HD11	47:BP:112:LEU:CG	2.39	0.48
47:BP:17:LYS:C	47:BP:19:VAL:H	2.16	0.48
47:BP:35:HIS:O	47:BP:36:LYS:O	2.31	0.48
47:BP:47:ASP:CB	47:BP:51:PHE:HB2	2.43	0.48
51:BT:102:ILE:O	51:BT:102:ILE:HD12	2.14	0.48
51:BT:41:ARG:HH11	51:BT:41:ARG:CG	2.27	0.48
1:AA:1418:A:C8	1:AA:1419:G:H1'	2.49	0.48
35:BA:1956:U:C2'	35:BA:1957:C:H5'	2.44	0.48
6:AF:45:LEU:HD13	6:AF:59:TYR:CD1	2.45	0.48
8:AH:14:ARG:O	8:AH:15:ASN:C	2.52	0.48
15:AO:68:ARG:O	15:AO:71:GLN:N	2.47	0.48
34:B9:10:ILE:O	34:B9:11:CYS:HB3	2.12	0.48
42:BH:106:THR:HG21	42:BH:112:PRO:C	2.29	0.48
35:BA:907:U:H2'	35:BA:907:U:O2	2.13	0.48
48:BQ:113:GLN:O	48:BQ:114:ALA:C	2.52	0.48
48:BQ:87:LYS:HG2	48:BQ:88:GLY:O	2.14	0.48
57:BZ:102:LEU:HD11	57:BZ:124:ILE:CD1	2.44	0.48
57:BZ:133:ILE:O	57:BZ:134:PRO:C	2.50	0.48
13:AM:88:ARG:HA	13:AM:98:VAL:CG1	2.43	0.48
12:AL:70:ILE:O	12:AL:71:PRO:O	2.32	0.48
1:AA:1046:A:C2	1:AA:1047:G:H1'	2.49	0.48
3:AC:130:VAL:O	3:AC:134:ILE:HG13	2.14	0.48
3:AC:36:ASP:HA	3:AC:39:ILE:HD12	1.95	0.48
14:AN:59:ALA:O	14:AN:60:SER:CB	2.62	0.48
27:B2:6:VAL:O	27:B2:10:LEU:HG	2.14	0.48
9:AI:42:ARG:HH12	9:AI:74:ILE:HD12	1.78	0.48
40:BF:119:ARG:NH1	40:BF:119:ARG:HG2	2.27	0.48
35:BA:1502:C:H6	35:BA:1502:C:H5''	1.79	0.48
49:BR:97:VAL:HG13	49:BR:114:VAL:HG12	1.96	0.48
42:BH:83:TYR:O	42:BH:84:SER:O	2.31	0.48
35:BA:141:A:C2	35:BA:142:A:N1	2.81	0.48
11:AK:46:GLY:O	11:AK:48:ILE:O	2.32	0.48
11:AK:59:TYR:CZ	11:AK:63:LEU:HD11	2.48	0.48
35:BA:879:G:H1	35:BA:898:C:N4	2.12	0.48
35:BA:900:A:H5''	35:BA:901:A:C8	2.49	0.48
1:AA:296:U:C2	1:AA:302:G:N2	2.81	0.48
5:AE:110:LEU:HA	5:AE:113:ALA:CB	2.44	0.48
5:AE:115:VAL:HG13	5:AE:116:THR:H	1.78	0.48
5:AE:152:ARG:CZ	8:AH:44:PHE:CE1	2.97	0.48
50:BS:56:LEU:O	50:BS:56:LEU:CG	2.62	0.48
35:BA:2114:A:H2'	35:BA:2167:U:HO2'	1.78	0.48
41:BG:181:ARG:O	41:BG:182:LYS:OXT	2.32	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1001(A):G:C8	1:AA:1002:G:C5	3.01	0.48
1:AA:171:A:H2'	1:AA:172:A:O4'	2.14	0.48
57:BZ:19:ARG:HH12	57:BZ:84:GLU:CB	2.25	0.48
17:AQ:67:LYS:HG2	17:AQ:68:ARG:HG2	1.94	0.48
35:BA:2078:C:C2'	35:BA:2079:U:H5'	2.43	0.48
7:AG:133:GLY:O	7:AG:136:LYS:HB2	2.14	0.48
33:B8:14:VAL:HG21	33:B8:22:VAL:HG13	1.96	0.48
35:BA:1425:G:C6	35:BA:1426:G:C2	3.01	0.48
35:BA:2645:G:C8	35:BA:2645:G:OP2	2.63	0.48
55:BX:20:GLY:C	55:BX:22:ALA:H	2.17	0.48
17:AQ:46:ASP:CG	17:AQ:51:TYR:HD2	2.17	0.48
10:AJ:40:LEU:HD23	10:AJ:40:LEU:H	1.79	0.48
2:AB:179:LYS:HA	8:AH:72:PRO:CD	2.42	0.48
31:B6:22:ALA:HB2	31:B6:39:TYR:CE2	2.49	0.48
45:BN:74:ARG:HH22	45:BN:85:ILE:HD11	1.78	0.48
1:AA:102:G:H2'	1:AA:103:C:C6	2.49	0.48
35:BA:2252:G:O2'	35:BA:2253:G:H5'	2.13	0.48
1:AA:1261:A:C2	1:AA:1262:C:H1'	2.49	0.48
35:BA:1113:U:H6	35:BA:1113:U:O5'	1.97	0.48
4:AD:128:VAL:HA	4:AD:145:GLU:O	2.14	0.48
24:AY:154:LEU:CB	24:AY:155:LEU:HD12	2.43	0.48
24:AY:170:THR:CB	24:AY:182:VAL:HG11	2.43	0.48
1:AA:1407:C:C2'	1:AA:1408:A:H5'	2.36	0.48
30:B5:16:ARG:NH1	30:B5:17:ASP:OD1	2.47	0.48
30:B5:16:ARG:NH2	35:BA:517:C:OP1	2.47	0.48
35:BA:1381:G:H2'	35:BA:1382:G:C8	2.49	0.48
35:BA:1429:G:C4'	35:BA:1568:G:HO2'	2.26	0.48
35:BA:1798:U:OP1	38:BD:260:ARG:N	2.45	0.48
35:BA:2866:U:C6	35:BA:2868:A:H1'	2.48	0.48
35:BA:388:G:H5'	35:BA:389:G:OP2	2.13	0.48
38:BD:71:ASP:CG	38:BD:103:ARG:NH1	2.65	0.48
40:BF:81:PRO:CG	40:BF:82:ILE:H	2.27	0.48
35:BA:660:G:H5'	40:BF:99:TYR:CE1	2.49	0.48
48:BQ:77:LYS:HD3	48:BQ:81:VAL:CG1	2.44	0.48
52:BU:112:ARG:HA	52:BU:115:ALA:HB2	1.96	0.48
1:AA:598:U:C2'	1:AA:599:C:H6	2.22	0.48
6:AF:46:ARG:HB2	6:AF:60:PHE:CE1	2.47	0.48
1:AA:246:A:O3'	1:AA:247:G:H4'	2.14	0.48
2:AB:57:PHE:O	2:AB:60:ASP:HB3	2.14	0.48
36:BB:94:C:O2'	36:BB:95:C:H5'	2.14	0.48
1:AA:972:C:H4'	10:AJ:57:LYS:CG	2.42	0.48
3:AC:80:GLY:C	3:AC:82:GLU:H	2.17	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1060:C:C5'	14:AN:45:ARG:NH2	2.77	0.48
56:BY:68:HIS:C	56:BY:70:SER:H	2.16	0.48
56:BY:8:LYS:H	56:BY:8:LYS:CD	2.18	0.48
40:BF:164:ARG:O	40:BF:165:ARG:C	2.52	0.48
40:BF:156:LEU:CD2	40:BF:167:ALA:CB	2.91	0.48
35:BA:1071:G:H1'	35:BA:1089:G:H2'	1.95	0.48
37:BC:45:ALA:N	37:BC:171:ILE:O	2.47	0.48
35:BA:1542:A:C8	35:BA:1542:A:H3'	2.49	0.48
41:BG:125:PHE:CD2	41:BG:131:TYR:HD1	2.30	0.48
41:BG:43:LEU:HD11	41:BG:153:ARG:HG3	1.96	0.48
29:B4:9:LEU:CD1	29:B4:26:SER:H	2.26	0.48
1:AA:326:G:H2'	1:AA:327:A:H5'	1.92	0.48
17:AQ:58:GLU:OE1	17:AQ:74:LEU:HD12	2.14	0.48
35:BA:2428:G:O4'	35:BA:2429:G:C5	2.67	0.48
42:BH:38:SER:HB3	42:BH:64:LEU:HD21	1.96	0.48
1:AA:8:A:C6	4:AD:209:ARG:HB3	2.49	0.48
5:AE:118:ILE:CG1	5:AE:119:LEU:N	2.77	0.48
24:AY:23:ASP:N	24:AY:23:ASP:OD1	2.47	0.48
36:BB:73:A:C8	36:BB:105:A:C6	3.02	0.48
26:B1:48:LYS:HA	26:B1:48:LYS:HD2	1.63	0.48
41:BG:7:LEU:O	41:BG:10:LYS:N	2.46	0.48
35:BA:2695:C:H2'	35:BA:2696:U:H6	1.78	0.48
50:BS:84:GLN:HB2	50:BS:106:ARG:HA	1.96	0.48
24:AY:513:LEU:HD22	24:AY:517:ARG:NE	2.29	0.48
1:AA:126:G:H2'	1:AA:127:G:O4'	2.14	0.48
35:BA:1363:C:C2	35:BA:1369:G:N1	2.82	0.48
35:BA:1426:G:H2'	35:BA:1427:A:C8	2.49	0.48
35:BA:2539:C:H2'	35:BA:2540:C:H6	1.79	0.48
42:BH:92:ILE:HD12	42:BH:95:ARG:NH2	2.28	0.48
35:BA:2376:A:C2	35:BA:2377:A:C1'	2.97	0.48
35:BA:2400:G:C2	35:BA:2401:U:O2	2.67	0.48
1:AA:838:G:N2	1:AA:849:C:C2	2.82	0.48
35:BA:2789:C:O2'	35:BA:2790:A:H1'	2.14	0.48
1:AA:413:G:H1'	1:AA:428:G:H21	1.79	0.48
35:BA:441:U:C2'	40:BF:46:ARG:HE	2.26	0.48
35:BA:1865:G:H5'	35:BA:1866:C:OP1	2.14	0.48
14:AN:21:TYR:N	14:AN:21:TYR:CD1	2.81	0.48
43:BJ:127:UNK:HA	43:BJ:130:UNK:CB	2.44	0.48
20:AT:96:GLY:O	20:AT:97:ALA:O	2.32	0.48
37:BC:129:ARG:O	37:BC:129:ARG:HG3	2.12	0.48
24:AY:108:CYS:SG	24:AY:109:CYS:N	2.87	0.48
24:AY:142:ASN:ND2	58:AY:1000:GCP:C6	2.75	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:144:LEU:HD12	24:AY:179:PHE:CZ	2.49	0.48
24:AY:216:ASP:O	24:AY:220:GLY:N	2.47	0.48
24:AY:253:PRO:HB2	24:AY:275:TRP:CZ3	2.49	0.48
24:AY:304:GLN:HG2	24:AY:304:GLN:O	2.13	0.48
24:AY:398:PHE:C	24:AY:399:ARG:HG2	2.30	0.48
30:B5:8:LYS:NZ	35:BA:2055:C:OP1	2.45	0.48
35:BA:2443:C:H2'	35:BA:2444:G:H5'	1.92	0.48
35:BA:2769:C:H2'	35:BA:2770:G:O4'	2.13	0.48
35:BA:783:A:H8	35:BA:784:A:O5'	1.96	0.48
35:BA:834:C:H2'	35:BA:835:A:O4'	2.14	0.48
35:BA:940:G:H2'	35:BA:941:A:C5'	2.44	0.48
38:BD:61:LEU:HD12	38:BD:62:TYR:O	2.14	0.48
39:BE:62:PRO:O	39:BE:63:LEU:C	2.52	0.48
45:BN:6:PRO:HG3	45:BN:41:ASP:O	2.14	0.48
35:BA:2685:G:H4'	46:BO:67:LYS:HZ2	1.77	0.48
51:BT:72:VAL:C	51:BT:73:GLU:HG3	2.33	0.48
53:BV:39:LEU:O	53:BV:40:LEU:CB	2.58	0.48
53:BV:78:LYS:C	53:BV:79:VAL:CG2	2.83	0.48
1:AA:735:C:H2'	1:AA:736:C:C5	2.47	0.48
18:AR:56:THR:O	18:AR:58:LEU:N	2.47	0.48
17:AQ:99:SER:OG	17:AQ:100:LYS:N	2.46	0.48
1:AA:1091:U:O2	1:AA:1093:A:C8	2.67	0.48
2:AB:14:GLY:O	2:AB:15:VAL:HG13	2.14	0.48
35:BA:2247:A:C2	35:BA:2257:U:O2	2.67	0.48
25:B0:16:SER:OG	35:BA:2262:U:OP2	2.28	0.48
57:BZ:126:VAL:HA	57:BZ:163:LEU:CB	2.44	0.48
22:AV:47:U:N1	22:AV:50:U:OP1	2.47	0.48
1:AA:1305:G:HO2'	1:AA:1306:A:H8	1.62	0.48
1:AA:1190:G:OP1	3:AC:5:ILE:HD13	2.14	0.48
9:AI:9:ARG:HG3	9:AI:14:VAL:HG22	1.96	0.48
10:AJ:64:GLU:OE2	10:AJ:66:ARG:NH2	2.46	0.48
19:AS:42:PRO:O	19:AS:43:GLU:HB3	2.14	0.48
27:B2:29:LYS:NZ	27:B2:57:ILE:CG2	2.77	0.48
55:BX:8:ILE:O	55:BX:9:LEU:HD23	2.14	0.48
55:BX:6:ASP:O	55:BX:9:LEU:HD21	2.14	0.48
35:BA:2334:G:C6	50:BS:15:ARG:NH2	2.81	0.48
37:BC:175:VAL:HG11	37:BC:189:ILE:CG1	2.38	0.48
37:BC:186:ALA:O	37:BC:190:ARG:NH1	2.47	0.48
7:AG:71:PRO:HG3	7:AG:103:TRP:HZ3	1.79	0.48
35:BA:1462:C:H5''	35:BA:2703:C:H5'	1.96	0.48
35:BA:1527:G:H5''	35:BA:1528:A:OP2	2.14	0.48
41:BG:111:LEU:HB2	41:BG:112:PRO:HD3	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:B4:5:ILE:O	41:BG:67:LYS:HE2	2.14	0.48
1:AA:42:G:H2'	1:AA:43:C:H6	1.78	0.48
20:AT:18:GLN:NE2	20:AT:22:ARG:NH1	2.51	0.48
1:AA:711:G:H4'	38:BD:138:VAL:CG1	2.43	0.48
26:B1:48:LYS:HZ2	26:B1:61:ARG:HG2	1.79	0.48
1:AA:1000:U:H3	1:AA:1042:G:N2	2.12	0.48
20:AT:93:GLU:CD	20:AT:94:ALA:N	2.68	0.48
1:AA:1440:C:C2'	1:AA:1441:G:H5'	2.44	0.48
28:B3:37:LEU:CD2	28:B3:38:GLU:H	2.17	0.48
13:AM:73:GLU:O	13:AM:76:ALA:CB	2.62	0.48
11:AK:121:PRO:HB2	11:AK:125:PHE:HB2	1.95	0.48
1:AA:277:C:OP2	17:AQ:41:LYS:NZ	2.45	0.48
1:AA:708:C:O2'	1:AA:709:G:H5'	2.14	0.48
35:BA:654(H):G:O6	35:BA:654(L):G:N7	2.46	0.48
1:AA:1346:A:C5'	9:AI:120:ARG:NH1	2.68	0.48
19:AS:16:LEU:HA	19:AS:19:VAL:HB	1.96	0.48
1:AA:377:G:H2'	1:AA:378:G:C8	2.49	0.48
1:AA:601:C:C2	1:AA:638:G:N2	2.82	0.48
53:BV:2:PHE:CD1	53:BV:13:ARG:NH1	2.81	0.48
11:AK:80:VAL:CG2	11:AK:104:GLN:O	2.61	0.48
10:AJ:81:THR:O	10:AJ:82:ILE:C	2.52	0.48
35:BA:1996:C:OP1	35:BA:1996:C:C6	2.66	0.48
54:BW:43:GLY:C	54:BW:45:TYR:N	2.67	0.48
11:AK:101:SER:OG	11:AK:103:LEU:HD23	2.14	0.48
32:B7:9:ARG:NH1	32:B7:9:ARG:HG3	2.29	0.48
35:BA:1964:G:C6	35:BA:1967:C:C4	3.02	0.48
24:AY:498:GLY:O	24:AY:499:ASP:HB2	2.13	0.48
44:BK:116:UNK:C	44:BK:118:UNK:N	2.76	0.48
24:AY:111:MET:SD	24:AY:113:ILE:CD1	2.98	0.47
24:AY:149:ARG:O	24:AY:150:ASP:CB	2.62	0.47
24:AY:172:PRO:O	24:AY:227:LEU:HD13	2.14	0.47
24:AY:25:GLY:O	24:AY:29:ILE:HB	2.14	0.47
24:AY:346:LEU:N	24:AY:366:GLY:O	2.44	0.47
24:AY:403:LEU:HD11	24:AY:412:LEU:HD22	1.96	0.47
24:AY:449:VAL:CG2	24:AY:463:TYR:HH	2.26	0.47
24:AY:223:LEU:HD21	42:BH:97:ARG:HH22	1.78	0.47
1:AA:773:G:C6	1:AA:774:G:N7	2.82	0.47
35:BA:1773:A:N3	35:BA:1978:A:C2	2.82	0.47
35:BA:1812:A:C2	35:BA:1813:G:C4	3.02	0.47
35:BA:1799:G:N2	35:BA:1819:A:OP2	2.36	0.47
30:B5:7:PRO:HA	35:BA:2615:U:C4	2.49	0.47
35:BA:646:A:H3'	35:BA:647:G:H8	1.78	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:666:G:H4'	47:BP:49:ARG:NE	2.29	0.47
35:BA:831:G:C6	35:BA:832:G:C5	3.02	0.47
38:BD:143:HIS:O	38:BD:144:ALA:CB	2.62	0.47
38:BD:248:SER:OG	38:BD:252:TRP:CD1	2.65	0.47
38:BD:69:ARG:CZ	38:BD:105:ILE:HG13	2.44	0.47
45:BN:107:LEU:HB3	45:BN:108:PRO:HD2	1.96	0.47
47:BP:100:LEU:HD22	47:BP:100:LEU:N	2.28	0.47
51:BT:28:VAL:HG22	51:BT:46:GLU:HA	1.96	0.47
52:BU:27:LEU:O	52:BU:28:ARG:C	2.51	0.47
52:BU:95:LEU:O	52:BU:98:LEU:HG	2.15	0.47
1:AA:863:U:H5	1:AA:867:G:C6	2.31	0.47
1:AA:884:U:H4'	1:AA:885:G:H5''	1.95	0.47
6:AF:33:TYR:CE2	6:AF:75:LEU:HA	2.49	0.47
35:BA:906:G:H4'	48:BQ:67:ARG:HH22	1.77	0.47
48:BQ:3:MET:O	48:BQ:4:PRO:O	2.32	0.47
35:BA:1787:A:C2	35:BA:1788:C:C4	3.02	0.47
56:BY:13:VAL:HG23	56:BY:74:PRO:CA	2.35	0.47
56:BY:25:GLY:HA3	56:BY:39:VAL:CG1	2.44	0.47
56:BY:47:LYS:O	56:BY:48:ALA:HB2	2.14	0.47
35:BA:1464:C:O2'	35:BA:1528:A:C8	2.66	0.47
29:B4:8:LYS:O	29:B4:9:LEU:CB	2.61	0.47
35:BA:600:G:H2'	35:BA:601:C:C6	2.49	0.47
5:AE:36:ASP:OD1	5:AE:40:ARG:HB2	2.14	0.47
38:BD:134:ARG:HG2	38:BD:135:PHE:HD1	1.78	0.47
37:BC:66:HIS:CE1	37:BC:184:LYS:NZ	2.82	0.47
5:AE:115:VAL:HG11	5:AE:118:ILE:HG22	1.97	0.47
36:BB:48:A:H2'	36:BB:49:C:C6	2.48	0.47
50:BS:30:ARG:NH2	50:BS:62:LYS:HB3	2.21	0.47
34:B9:19:ARG:NH1	35:BA:2755:C:H2'	2.29	0.47
36:BB:58:A:H2'	36:BB:59:A:O4'	2.13	0.47
41:BG:11:TYR:CD2	41:BG:12:TYR:CD1	3.02	0.47
35:BA:2147:G:C2'	35:BA:2148:G:C5'	2.89	0.47
1:AA:186:C:O5'	1:AA:186:C:H6	1.97	0.47
16:AP:79:VAL:HB	16:AP:80:PHE:CE1	2.49	0.47
49:BR:28:LEU:C	49:BR:30:THR:H	2.16	0.47
1:AA:126:G:H1	1:AA:235:C:H42	1.62	0.47
35:BA:90:U:C2'	35:BA:90:U:O2	2.61	0.47
8:AH:46:LYS:HG3	8:AH:64:LYS:HB2	1.96	0.47
1:AA:1011:G:O2'	1:AA:1012:U:H5'	2.14	0.47
9:AI:82:ALA:CB	9:AI:96:LEU:HD21	2.42	0.47
8:AH:72:PRO:O	8:AH:73:ASP:C	2.52	0.47
1:AA:945:G:N2	1:AA:1337:G:N2	2.61	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:491:G:H2'	35:BA:492:A:H8	1.78	0.47
1:AA:817:C:H42	1:AA:1529:G:H1	1.60	0.47
1:AA:1210:C:O4'	1:AA:1214:C:C4	2.66	0.47
7:AG:37:ASN:ND2	9:AI:40:LEU:HD23	2.28	0.47
1:AA:282:A:C6	1:AA:283:C:C2	3.02	0.47
35:BA:595:C:C4	35:BA:596:G:N7	2.82	0.47
16:AP:48:TRP:N	16:AP:48:TRP:CD1	2.82	0.47
24:AY:251:ILE:HD12	24:AY:252:THR:CA	2.43	0.47
24:AY:472:ARG:HG3	24:AY:523:PHE:CE2	2.49	0.47
35:BA:14:A:N6	35:BA:15:G:C2	2.81	0.47
35:BA:2374:C:O2'	35:BA:2375:G:H5'	2.13	0.47
35:BA:2514:U:H1'	39:BE:151:TYR:OH	2.13	0.47
35:BA:2637:U:H5''	39:BE:82:ARG:HH21	1.78	0.47
35:BA:969:U:C4	35:BA:970:C:N4	2.83	0.47
38:BD:248:SER:OG	38:BD:252:TRP:CG	2.65	0.47
35:BA:1800:C:OP1	38:BD:266:SER:HB2	2.14	0.47
39:BE:1:MET:O	39:BE:3:GLY:N	2.47	0.47
52:BU:65:ILE:HG12	52:BU:96:ALA:HB1	1.95	0.47
52:BU:93:LYS:H	52:BU:93:LYS:CD	2.27	0.47
35:BA:2010:G:H5''	54:BW:42:ARG:CB	2.44	0.47
35:BA:1947:C:C2	35:BA:1948:G:C8	3.02	0.47
35:BA:2739:U:C5	35:BA:2763:G:C6	3.02	0.47
6:AF:2:ARG:HD3	6:AF:92:LYS:CE	2.43	0.47
18:AR:44:LEU:O	18:AR:45:SER:C	2.52	0.47
2:AB:7:VAL:HA	2:AB:11:LEU:HD12	1.96	0.47
2:AB:49:GLU:O	2:AB:52:GLU:HB3	2.14	0.47
2:AB:8:LYS:HZ3	2:AB:217:ARG:NH1	2.12	0.47
35:BA:2247:A:H2	35:BA:2257:U:O2	1.98	0.47
57:BZ:52:SER:OG	57:BZ:53:ILE:HG12	2.15	0.47
21:AU:20:LYS:CG	21:AU:20:LYS:O	2.61	0.47
1:AA:1305:G:OP1	21:AU:2:GLY:HA3	2.15	0.47
1:AA:1149:C:OP1	9:AI:14:VAL:HG21	2.14	0.47
10:AJ:12:ASP:C	10:AJ:14:LYS:N	2.66	0.47
10:AJ:6:ILE:HG13	10:AJ:72:VAL:O	2.14	0.47
10:AJ:8:LEU:HB2	10:AJ:70:ARG:HB2	1.95	0.47
14:AN:42:ILE:HA	14:AN:42:ILE:HD13	1.71	0.47
19:AS:44:MET:O	19:AS:47:HIS:HB2	2.14	0.47
24:AY:309:PRO:CG	24:AY:313:ASP:OD2	2.57	0.47
35:BA:1057:A:N6	35:BA:1087:G:OP2	2.48	0.47
4:AD:108:LEU:O	4:AD:165:MET:HE2	2.14	0.47
11:AK:44:SER:HA	11:AK:64:ALA:HB1	1.95	0.47
1:AA:690:G:N7	11:AK:55:LYS:NZ	2.62	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AK:32:ILE:CD1	11:AK:68:ALA:O	2.62	0.47
1:AA:938:A:C2'	1:AA:939:G:H5'	2.44	0.47
41:BG:125:PHE:O	41:BG:128:ARG:O	2.31	0.47
41:BG:146:TYR:O	41:BG:149:VAL:HG22	2.14	0.47
41:BG:133:LEU:HD21	41:BG:157:ILE:HD12	1.96	0.47
1:AA:28:G:C2	1:AA:556:C:N3	2.82	0.47
17:AQ:57:VAL:HG21	17:AQ:73:VAL:HG13	1.96	0.47
35:BA:2389:G:C5'	35:BA:2390:U:H5'	2.37	0.47
1:AA:795:C:H4'	1:AA:1506:U:O2	2.14	0.47
35:BA:1853:A:C6	35:BA:1889:A:C5	3.02	0.47
36:BB:69:G:N2	36:BB:70:C:C1'	2.77	0.47
35:BA:1417:C:H2'	35:BA:1418:G:O4'	2.14	0.47
41:BG:25:TYR:CE2	41:BG:32:PRO:HD2	2.49	0.47
50:BS:39:ILE:HD12	50:BS:73:LEU:HD21	1.96	0.47
35:BA:2177:C:H2'	35:BA:2178:C:O2	2.14	0.47
1:AA:1143:G:H2'	1:AA:1144:G:H8	1.78	0.47
35:BA:2103:C:C2'	35:BA:2104:G:H5''	2.45	0.47
22:AV:39:C:C4	22:AV:40:C:C5	3.02	0.47
35:BA:1512:U:O2	35:BA:1512:U:H2'	2.13	0.47
1:AA:1015:A:C5	1:AA:1016:A:C5	3.02	0.47
1:AA:1015:A:H2'	1:AA:1016:A:O4'	2.15	0.47
1:AA:180:U:O4	1:AA:195:A:C8	2.67	0.47
36:BB:98:G:O2'	36:BB:99:G:H5'	2.13	0.47
1:AA:113:G:C2	1:AA:114:U:C2	3.02	0.47
54:BW:88:ARG:HB3	54:BW:92:ARG:HB2	1.96	0.47
35:BA:2646:C:H5	35:BA:2732:G:C4	2.32	0.47
1:AA:1009:G:C6	1:AA:1021:G:C6	3.02	0.47
10:AJ:40:LEU:CD2	10:AJ:40:LEU:N	2.72	0.47
38:BD:142:VAL:O	38:BD:163:ALA:CB	2.60	0.47
22:AV:21:A:C5	22:AV:46:G:C6	3.02	0.47
35:BA:271(C):C:C2	35:BA:271(D):G:C8	3.03	0.47
5:AE:15:ARG:HD2	5:AE:26:PHE:CD2	2.48	0.47
1:AA:817:C:C4	1:AA:819:A:H1'	2.49	0.47
1:AA:338:A:O2'	1:AA:339:C:H5'	2.15	0.47
35:BA:1358:G:C2'	35:BA:1359:A:H5''	2.44	0.47
29:B4:16:CYS:SG	29:B4:17:GLY:N	2.87	0.47
24:AY:296:PHE:O	24:AY:380:THR:HA	2.14	0.47
24:AY:315:VAL:HG11	24:AY:346:LEU:HD12	1.96	0.47
24:AY:78:PRO:HB3	24:AY:83:LEU:HA	1.97	0.47
32:B7:30:VAL:O	32:B7:34:ARG:HG2	2.13	0.47
35:BA:1144:G:O2'	35:BA:1145:C:H5'	2.14	0.47
35:BA:2459:A:N1	35:BA:2494:G:H1'	2.30	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2690:C:H5''	35:BA:2872:G:N2	2.29	0.47
35:BA:644:A:C8	35:BA:646:A:C2	3.02	0.47
35:BA:811:U:O2'	35:BA:812:C:H5''	2.14	0.47
35:BA:953:A:N6	35:BA:964:C:H42	2.08	0.47
35:BA:2578:G:N7	39:BE:140:SER:HB2	2.29	0.47
45:BN:99:LEU:O	45:BN:103:VAL:N	2.36	0.47
47:BP:102:ARG:NH1	47:BP:102:ARG:HB2	2.29	0.47
51:BT:23:ARG:O	51:BT:25:GLY:N	2.47	0.47
51:BT:51:ARG:O	51:BT:61:PHE:CA	2.62	0.47
1:AA:657:G:O2'	1:AA:658:G:H5'	2.14	0.47
6:AF:33:TYR:CD2	6:AF:75:LEU:HB2	2.50	0.47
15:AO:23:GLY:O	15:AO:24:SER:HB3	2.15	0.47
15:AO:9:GLN:O	15:AO:12:ILE:HB	2.14	0.47
18:AR:36:ASN:HB2	18:AR:39:VAL:HG23	1.95	0.47
1:AA:1102:A:H2'	1:AA:1103:C:H6	1.80	0.47
2:AB:98:LEU:H	2:AB:98:LEU:HG	1.38	0.47
35:BA:958:U:C3'	35:BA:958:U:C6	2.97	0.47
35:BA:2523:G:C1'	35:BA:2765:A:N7	2.77	0.47
1:AA:1117:G:O3'	9:AI:104:ARG:NE	2.47	0.47
3:AC:157:ILE:HB	3:AC:164:ARG:HE	1.79	0.47
3:AC:34:LEU:HD21	3:AC:38:ARG:CZ	2.44	0.47
1:AA:1358:U:OP1	14:AN:35:ARG:HG3	2.15	0.47
55:BX:29:TRP:CZ3	55:BX:59:VAL:HG21	2.43	0.47
9:AI:47:LEU:C	9:AI:49:PRO:HD2	2.35	0.47
40:BF:119:ARG:HH11	40:BF:119:ARG:CG	2.24	0.47
40:BF:126:VAL:CG2	40:BF:127:GLU:N	2.59	0.47
37:BC:40:THR:HG23	37:BC:176:GLY:C	2.35	0.47
37:BC:47:LEU:HD21	37:BC:171:ILE:CD1	2.41	0.47
57:BZ:139:VAL:HG12	57:BZ:140:ASP:H	1.79	0.47
35:BA:2705:A:C4	35:BA:2706:G:C8	3.03	0.47
16:AP:8:ARG:N	16:AP:29:ASP:OD1	2.45	0.47
1:AA:107:G:H5'	1:AA:379:C:OP1	2.14	0.47
1:AA:106:C:H42	20:AT:14:LYS:HZ3	1.61	0.47
17:AQ:3:LYS:O	17:AQ:4:LYS:C	2.52	0.47
34:B9:18:ARG:HG3	34:B9:18:ARG:HH11	1.78	0.47
1:AA:1431:C:H2'	1:AA:1432:G:O4'	2.15	0.47
41:BG:15:VAL:HG12	41:BG:19:LEU:CD1	2.44	0.47
35:BA:1298:C:O2'	35:BA:1301:A:H1'	2.13	0.47
1:AA:958:A:H2'	1:AA:985:C:O2'	2.14	0.47
49:BR:76:VAL:O	49:BR:80:PHE:HD2	1.97	0.47
43:BJ:27:UNK:O	43:BJ:83:UNK:N	2.47	0.47
14:AN:12:ARG:CB	14:AN:12:ARG:HH11	2.27	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:78:A:C6	36:BB:100:A:C8	3.02	0.47
35:BA:80:G:C2	35:BA:107:C:N3	2.82	0.47
1:AA:225:C:C2	1:AA:226:G:C8	3.03	0.47
35:BA:1438:U:O2'	35:BA:1439:A:H5'	2.14	0.47
1:AA:896:C:C6	1:AA:896:C:C3'	2.96	0.47
1:AA:1416:G:C5	1:AA:1417:G:C5	3.02	0.47
31:B6:15:GLU:CD	31:B6:18:ARG:NE	2.67	0.47
1:AA:343:U:O2'	1:AA:344:A:H3'	2.15	0.47
1:AA:346:G:N3	1:AA:346:G:H2'	2.30	0.47
1:AA:381:C:H2'	1:AA:382:A:O4'	2.13	0.47
35:BA:363(E):U:C4	35:BA:363(F):A:H2	2.32	0.47
10:AJ:20:ALA:O	10:AJ:24:VAL:HG23	2.15	0.47
17:AQ:81:ARG:HB3	17:AQ:83:ASP:OD1	2.14	0.47
20:AT:38:LYS:HA	20:AT:41:ILE:HD11	1.95	0.47
35:BA:425:G:O2'	35:BA:426:C:H5'	2.14	0.47
12:AL:18:VAL:O	12:AL:19:ARG:CB	2.63	0.47
1:AA:1262:C:N4	1:AA:1274:G:N2	2.61	0.47
7:AG:149:ARG:HH11	7:AG:149:ARG:HG2	1.79	0.47
35:BA:2555:U:H2'	35:BA:2556:C:H5'	1.95	0.47
1:AA:513:C:O2'	1:AA:514:C:H5'	2.14	0.47
1:AA:68:G:C2	1:AA:69:G:H1'	2.49	0.47
43:BJ:72:UNK:O	43:BJ:73:UNK:CB	2.62	0.47
35:BA:1680:U:H2'	35:BA:1681:G:C8	2.50	0.47
3:AC:126:ARG:O	3:AC:127:ARG:HB2	2.15	0.47
4:AD:84:LYS:HA	4:AD:84:LYS:HD3	1.64	0.47
24:AY:186:TYR:CZ	24:AY:241:PHE:CB	2.95	0.47
24:AY:193:TYR:CE1	24:AY:194:GLN:O	2.68	0.47
24:AY:324:LYS:HG2	24:AY:325:TYR:N	2.29	0.47
24:AY:78:PRO:CB	24:AY:83:LEU:CD2	2.91	0.47
35:BA:2044:C:N3	35:BA:2625:G:C2	2.82	0.47
35:BA:2679:A:P	39:BE:160:TYR:OH	2.73	0.47
35:BA:534:U:H5'	52:BU:42:ALA:HB1	1.96	0.47
35:BA:564:C:C2	35:BA:565:C:C6	3.01	0.47
35:BA:740:U:H2'	35:BA:741:G:H8	1.72	0.47
35:BA:779:U:C2'	35:BA:780:G:H5'	2.44	0.47
40:BF:65:TRP:CB	40:BF:66:PRO:HD2	2.44	0.47
6:AF:11:ASN:HA	6:AF:86:ARG:NH1	2.30	0.47
15:AO:69:TYR:HA	15:AO:72:ARG:HD2	1.96	0.47
53:BV:35:LEU:N	53:BV:57:VAL:O	2.38	0.47
53:BV:95:LEU:HD11	53:BV:97:LYS:NZ	2.29	0.47
1:AA:1074:G:H2'	1:AA:1075:C:C6	2.48	0.47
2:AB:157:ARG:HB2	2:AB:157:ARG:HH11	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:220:ASP:O	2:AB:223:ILE:HB	2.15	0.47
2:AB:25:ASN:HB3	2:AB:192:SER:O	2.14	0.47
2:AB:9:GLU:C	2:AB:12:GLU:HB2	2.34	0.47
42:BH:106:THR:HG21	42:BH:112:PRO:HB2	1.93	0.47
35:BA:861:A:N3	35:BA:862:G:O4'	2.48	0.47
35:BA:866:A:C2	35:BA:914:C:C6	3.02	0.47
35:BA:910:A:H2'	35:BA:911:A:C8	2.49	0.47
48:BQ:21:THR:C	48:BQ:23:GLY:H	2.17	0.47
57:BZ:82:ARG:HH11	57:BZ:82:ARG:HG2	1.80	0.47
22:AV:52:G:C4	22:AV:53:G:C8	3.03	0.47
1:AA:1048:G:OP1	14:AN:4:LYS:N	2.47	0.47
55:BX:88:LYS:HB2	55:BX:93:GLU:OE2	2.14	0.47
40:BF:25:PRO:HB3	40:BF:119:ARG:HG3	1.96	0.47
40:BF:154:VAL:CG1	40:BF:155:LEU:N	2.75	0.47
4:AD:174:LEU:HD21	4:AD:185:PHE:HA	1.95	0.47
35:BA:2318:G:OP2	35:BA:2318:G:N2	2.44	0.47
37:BC:22:ILE:HG22	37:BC:186:ALA:CB	2.43	0.47
1:AA:939:G:H2'	1:AA:940:C:H6	1.78	0.47
29:B4:5:ILE:O	41:BG:67:LYS:CD	2.63	0.47
36:BB:45:A:N3	36:BB:45:A:H2'	2.29	0.47
17:AQ:5:VAL:CG1	17:AQ:58:GLU:HB3	2.45	0.47
38:BD:111:LEU:HD11	38:BD:115:GLN:CB	2.44	0.47
36:BB:107:G:O2'	36:BB:108:U:H5'	2.15	0.47
46:BO:50:GLY:C	46:BO:52:VAL:N	2.67	0.47
35:BA:2756:U:O2'	35:BA:2757:A:OP2	2.27	0.47
41:BG:178:PHE:HB3	41:BG:180:PHE:HE1	1.79	0.47
41:BG:28:VAL:O	41:BG:29:TRP:CD2	2.67	0.47
35:BA:2186:G:C2	35:BA:2187:G:C6	3.02	0.47
35:BA:428:A:H5'	35:BA:429:A:OP2	2.14	0.47
35:BA:1509(B):A:O2'	35:BA:1510:G:H5'	2.15	0.47
1:AA:148:G:N2	1:AA:175:C:C2	2.82	0.47
49:BR:36:THR:OG1	49:BR:37:THR:N	2.46	0.47
35:BA:81:G:H2'	35:BA:82:G:C8	2.50	0.47
7:AG:72:ARG:CB	7:AG:142:GLU:OE2	2.62	0.47
54:BW:88:ARG:HB3	54:BW:92:ARG:HD2	1.96	0.47
1:AA:123:C:H5''	1:AA:311:C:O2'	2.14	0.47
35:BA:2547:U:O2'	46:BO:29:ASN:HB3	2.13	0.47
35:BA:441:U:H1'	40:BF:46:ARG:HH21	1.79	0.47
2:AB:23:ARG:O	2:AB:23:ARG:HD2	2.15	0.47
4:AD:107:ARG:NH1	4:AD:114:ARG:NH2	2.60	0.47
35:BA:132:G:H2'	35:BA:133:C:C6	2.49	0.47
1:AA:47:C:H5	1:AA:366:C:OP2	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1549:C:H5''	35:BA:1549:C:C6	2.49	0.47
43:BJ:28:UNK:CB	43:BJ:81:UNK:O	2.63	0.47
24:AY:401:ILE:HG12	24:AY:463:TYR:HE2	1.76	0.47
1:AA:951:G:C6	1:AA:1231:G:C6	3.03	0.47
1:AA:807:A:H2'	1:AA:808:C:C6	2.43	0.47
33:B8:38:GLY:HA2	33:B8:41:ILE:CG2	2.43	0.47
35:BA:974:G:C6	35:BA:1186:G:O6	2.67	0.47
35:BA:1308:A:C2	35:BA:1611:C:H1'	2.49	0.47
35:BA:1798:U:OP1	38:BD:260:ARG:HB3	2.15	0.47
35:BA:1791:A:N1	35:BA:1829:A:O4'	2.47	0.47
35:BA:1847:A:N6	35:BA:1893:C:N4	2.61	0.47
35:BA:2453:A:H8	35:BA:2453:A:H3'	1.78	0.47
35:BA:2715:C:O2'	35:BA:2716:U:C5'	2.62	0.47
35:BA:2820:A:O2'	39:BE:191:PRO:HG3	2.13	0.47
38:BD:16:MET:O	38:BD:17:THR:OG1	2.27	0.47
38:BD:271:ILE:HG13	38:BD:272:ALA:N	2.30	0.47
39:BE:105:THR:HG23	39:BE:166:THR:OG1	2.15	0.47
39:BE:13:ARG:CA	39:BE:22:PRO:HA	2.45	0.47
40:BF:65:TRP:CB	40:BF:66:PRO:CD	2.92	0.47
40:BF:66:PRO:O	40:BF:68:LYS:N	2.47	0.47
45:BN:34:LEU:CD1	45:BN:52:VAL:HG23	2.39	0.47
51:BT:101:PHE:CE1	51:BT:102:ILE:HG22	2.49	0.47
51:BT:24:PRO:HA	51:BT:49:VAL:HG13	1.96	0.47
51:BT:28:VAL:HG13	51:BT:46:GLU:HA	1.95	0.47
52:BU:59:ARG:O	52:BU:61:TRP:N	2.47	0.47
46:BO:6:THR:CG2	46:BO:7:TYR:H	2.27	0.47
1:AA:858:G:N2	1:AA:870:U:OP2	2.26	0.47
8:AH:13:ILE:O	8:AH:17:THR:N	2.43	0.47
15:AO:62:GLN:O	15:AO:63:ARG:C	2.53	0.47
15:AO:68:ARG:CD	15:AO:72:ARG:HH21	2.26	0.47
18:AR:74:ARG:N	18:AR:79:LEU:HB2	2.29	0.47
35:BA:2265:U:H2'	35:BA:2266:A:H8	1.74	0.47
35:BA:2435:A:C6	35:BA:2436:G:N7	2.82	0.47
48:BQ:21:THR:CG2	48:BQ:23:GLY:O	2.62	0.47
48:BQ:55:VAL:HA	48:BQ:58:PHE:CD1	2.47	0.47
48:BQ:57:HIS:C	48:BQ:57:HIS:ND1	2.67	0.47
22:AV:48:C:H5'	22:AV:49:G:H5''	1.95	0.47
1:AA:972:C:OP2	10:AJ:57:LYS:CE	2.60	0.47
3:AC:20:SER:CB	3:AC:40:ARG:HH22	2.14	0.47
35:BA:482:A:H4'	56:BY:47:LYS:CD	2.45	0.47
1:AA:620:C:C1'	4:AD:135:LEU:HG	2.44	0.47
4:AD:59:ARG:NH1	4:AD:59:ARG:CG	2.77	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:45:ALA:CB	37:BC:171:ILE:HG22	2.41	0.47
35:BA:874:G:H2'	35:BA:875:G:C8	2.50	0.47
7:AG:69:VAL:HG11	7:AG:104:LEU:HD22	1.97	0.47
41:BG:76:SER:HB3	41:BG:83:ARG:CB	2.42	0.47
40:BF:111:ALA:CB	40:BF:206:ILE:HG21	2.30	0.47
1:AA:107:G:N2	1:AA:108:G:H1'	2.30	0.47
1:AA:112:G:H5'	1:AA:389:A:C4'	2.34	0.47
1:AA:58:C:H6	1:AA:58:C:O5'	1.97	0.47
35:BA:2282:G:H4'	35:BA:2283:C:OP2	2.14	0.47
1:AA:799:G:O2'	1:AA:800:G:C5'	2.63	0.47
36:BB:71:C:C2'	36:BB:72:G:H5'	2.45	0.47
34:B9:16:VAL:O	34:B9:17:ILE:C	2.51	0.47
12:AL:44:THR:HA	12:AL:51:ALA:O	2.13	0.47
13:AM:15:VAL:HG22	13:AM:41:PRO:O	2.13	0.47
35:BA:2115:G:N2	35:BA:2119:A:P	2.82	0.47
41:BG:7:LEU:O	41:BG:8:LYS:C	2.53	0.47
35:BA:2712:U:OP1	35:BA:2714:G:H4'	2.13	0.47
35:BA:852:G:C6	35:BA:926:A:C6	3.03	0.47
51:BT:111:ARG:HH11	51:BT:111:ARG:HG2	1.80	0.47
35:BA:1509(B):A:C2'	35:BA:1510:G:H5'	2.45	0.47
4:AD:127:THR:OG1	4:AD:149:ALA:HB2	2.14	0.47
1:AA:1251:A:O2'	1:AA:1370:G:H5'	2.15	0.47
42:BH:109:PHE:H	42:BH:152:ARG:HH12	1.62	0.47
1:AA:292:G:C2	1:AA:309:G:C6	3.03	0.47
35:BA:65:C:O2'	35:BA:66:C:H5'	2.15	0.47
1:AA:306:G:H2'	1:AA:307:C:H5'	1.97	0.47
53:BV:2:PHE:CE1	53:BV:13:ARG:NH1	2.82	0.47
35:BA:1794:U:C2	35:BA:1795:C:C5	3.03	0.47
2:AB:23:ARG:O	2:AB:23:ARG:CD	2.62	0.47
1:AA:498:U:HO2'	1:AA:499:A:H8	1.59	0.47
17:AQ:62:SER:HB2	17:AQ:71:PHE:HA	1.96	0.47
17:AQ:63:ARG:HG2	17:AQ:64:PRO:N	2.28	0.47
11:AK:85:ARG:HA	11:AK:112:THR:HA	1.95	0.47
6:AF:43:LEU:HD22	6:AF:43:LEU:H	1.79	0.47
35:BA:406:G:H2'	35:BA:407:G:H8	1.78	0.47
38:BD:29:PRO:O	38:BD:29:PRO:HG2	2.15	0.47
35:BA:2140:C:H2'	35:BA:2141:G:H8	1.78	0.47
44:BK:82:UNK:O	44:BK:83:UNK:C	2.61	0.47
35:BA:1011:G:HO2'	35:BA:1013:C:H6	1.62	0.47
35:BA:1252:G:C1'	52:BU:33:ARG:HD3	2.44	0.47
35:BA:244:A:H4'	47:BP:74:GLU:HB2	1.97	0.47
35:BA:2464:C:N4	35:BA:2487:G:C6	2.83	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2612:C:H2'	35:BA:2613:U:H5'	1.97	0.47
35:BA:2619:C:H4'	39:BE:151:TYR:O	2.14	0.47
35:BA:1662:C:O2'	35:BA:2687:U:H5''	2.15	0.47
35:BA:2845:G:H2'	35:BA:2846:G:H8	1.76	0.47
35:BA:669:G:H5''	35:BA:670:A:OP2	2.14	0.47
35:BA:777:A:O2'	35:BA:778:G:H5'	2.13	0.47
35:BA:962:G:H21	35:BA:963:U:H1'	1.76	0.47
38:BD:267:SER:HB3	38:BD:270:ILE:HD11	1.97	0.47
38:BD:35:LYS:O	38:BD:62:TYR:O	2.32	0.47
39:BE:48:GLN:NE2	39:BE:64:LYS:NZ	2.62	0.47
45:BN:87:LEU:O	45:BN:90:MET:HB2	2.15	0.47
49:BR:4:LEU:HD12	49:BR:7:GLY:HA2	1.97	0.47
51:BT:16:ARG:HH12	51:BT:19:LEU:CG	2.25	0.47
52:BU:26:GLY:C	52:BU:28:ARG:H	2.16	0.47
53:BV:21:ARG:HG2	53:BV:91:TYR:CD1	2.50	0.47
52:BU:112:ARG:NH2	53:BV:46:VAL:HG21	2.30	0.47
1:AA:1418:A:N7	1:AA:1419:G:H1'	2.30	0.47
1:AA:13:U:O2'	1:AA:14:U:H5'	2.13	0.47
1:AA:597:G:C6	1:AA:644:G:C6	3.03	0.47
6:AF:15:ASP:OD1	6:AF:18:GLN:NE2	2.47	0.47
6:AF:52:ILE:O	6:AF:53:ALA:HB3	2.14	0.47
15:AO:68:ARG:HG3	15:AO:72:ARG:NE	2.28	0.47
2:AB:97:TRP:CZ3	2:AB:172:ILE:HG22	2.46	0.47
2:AB:180:LEU:O	2:AB:182:ILE:N	2.48	0.47
35:BA:920:G:N2	35:BA:921:G:C4	2.83	0.47
57:BZ:127:LYS:NZ	57:BZ:127:LYS:CB	2.78	0.47
22:AV:50:U:H3'	22:AV:51:C:C5	2.49	0.47
35:BA:2592:G:N1	35:BA:2603:G:C6	2.83	0.47
1:AA:1152:A:C2	1:AA:1153:C:C4	3.03	0.47
3:AC:142:MET:O	3:AC:145:GLY:N	2.47	0.47
10:AJ:94:VAL:CG1	10:AJ:95:GLU:N	2.78	0.47
24:AY:307:MET:SD	24:AY:307:MET:C	2.88	0.47
1:AA:541:G:O2'	1:AA:542:G:H5'	2.15	0.47
4:AD:89:THR:CA	4:AD:92:VAL:HB	2.35	0.47
37:BC:42:GLU:HG2	37:BC:44:HIS:NE2	2.30	0.47
35:BA:2308:G:H2'	35:BA:2309:A:C8	2.50	0.47
5:AE:41:VAL:CG2	5:AE:67:VAL:CG1	2.90	0.47
31:B6:7:ILE:CG2	31:B6:27:LYS:NZ	2.78	0.47
1:AA:1394:A:N6	1:AA:1500:A:O2'	2.47	0.47
1:AA:799:G:O2'	1:AA:800:G:H5'	2.14	0.47
36:BB:73:A:H2'	36:BB:74:U:C5'	2.44	0.47
16:AP:72:ARG:NE	16:AP:73:LEU:HD21	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1321:C:H6	1:AA:1321:C:H5''	1.79	0.47
1:AA:1426:C:H2'	1:AA:1427:U:H6	1.78	0.47
1:AA:64:G:H5''	1:AA:65:U:OP2	2.15	0.47
1:AA:1495:U:H2'	1:AA:1496:C:C5'	2.37	0.47
22:AV:33:U:C6	22:AV:33:U:H3'	2.49	0.47
1:AA:1250:A:N3	1:AA:1370:G:O2'	2.44	0.47
1:AA:1372:U:H5''	9:AI:71:SER:CB	2.45	0.47
1:AA:918:A:H2'	1:AA:919:A:H8	1.69	0.47
35:BA:2439:A:H5''	35:BA:2439:A:H8	1.79	0.47
35:BA:2270:G:H2'	35:BA:2271:G:O4'	2.15	0.47
35:BA:1388:G:C4	35:BA:1400:G:N2	2.82	0.47
35:BA:1068:G:OP1	44:BK:22:UNK:C	2.63	0.47
35:BA:2074:U:H2'	35:BA:2075:U:C6	2.50	0.47
1:AA:1055:A:C2	1:AA:1206:G:H1'	2.50	0.47
20:AT:104:LEU:CD2	20:AT:104:LEU:C	2.83	0.47
27:B2:71:ASN:O	27:B2:72:ALA:HB2	2.14	0.47
48:BQ:115:MET:O	48:BQ:116:GLU:C	2.52	0.47
35:BA:1941:C:C4	35:BA:1942:C:C4	3.02	0.47
24:AY:116:ALA:O	24:AY:149:ARG:HD2	2.13	0.47
24:AY:7:LEU:CD2	24:AY:292:SER:HB3	2.44	0.47
24:AY:168:PRO:HG2	24:AY:171:TRP:CH2	2.48	0.47
24:AY:175:CYS:HA	24:AY:179:PHE:HD1	1.80	0.47
42:BH:97:ARG:O	42:BH:104:GLU:HG3	2.15	0.47
30:B5:44:THR:CG2	30:B5:45:VAL:N	2.78	0.47
33:B8:6:THR:CG2	35:BA:243:U:OP1	2.62	0.47
35:BA:1252:G:O4'	52:BU:33:ARG:CD	2.55	0.47
35:BA:2010:G:H5''	54:BW:42:ARG:HB2	1.96	0.47
35:BA:2371:G:N2	35:BA:2372:G:C4	2.83	0.47
35:BA:2553:G:N3	35:BA:2583:G:H1'	2.30	0.47
35:BA:2580:U:H4'	39:BE:130:GLY:HA3	1.96	0.47
35:BA:644:A:C2	35:BA:2369:A:O2'	2.65	0.47
35:BA:948:G:C6	35:BA:949:C:N4	2.82	0.47
35:BA:998:C:H2'	35:BA:999:U:O5'	2.14	0.47
35:BA:1800:C:OP1	38:BD:266:SER:CB	2.63	0.47
39:BE:28:ALA:O	39:BE:29:GLY:O	2.33	0.47
40:BF:52:LYS:C	40:BF:88:VAL:HG12	2.35	0.47
45:BN:100:GLU:O	45:BN:117:PHE:HE1	1.98	0.47
45:BN:99:LEU:CD1	45:BN:103:VAL:HG23	2.44	0.47
52:BU:114:LYS:CA	52:BU:117:GLN:HB2	2.43	0.47
52:BU:47:TYR:O	52:BU:47:TYR:CD1	2.68	0.47
35:BA:564:C:OP1	53:BV:77:ALA:HB2	2.15	0.47
54:BW:33:ARG:HG2	54:BW:52:GLU:OE2	2.15	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:773:G:C6	1:AA:807:A:N6	2.83	0.47
30:B5:16:ARG:CG	30:B5:17:ASP:N	2.73	0.47
32:B7:1:MET:SD	35:BA:752:A:O3'	2.73	0.47
35:BA:1260:G:C4	35:BA:1261:C:C5	3.02	0.47
35:BA:1380:G:H2'	35:BA:1381:G:C8	2.49	0.47
35:BA:1567:A:C5	38:BD:84:TYR:CD2	3.02	0.47
35:BA:1270:C:O2'	35:BA:1648:C:OP2	2.25	0.47
35:BA:225:A:O2'	35:BA:226:G:H5'	2.15	0.47
35:BA:830:G:C4	35:BA:2448:A:C6	3.03	0.47
35:BA:2498:C:O2'	35:BA:2499:C:H5''	2.14	0.47
35:BA:2578:G:H2'	35:BA:2579:C:C6	2.50	0.47
35:BA:661:C:H2'	35:BA:662:G:H8	1.76	0.47
35:BA:669:G:N1	35:BA:801:G:O6	2.48	0.47
35:BA:671:C:H42	35:BA:809:G:H1	1.61	0.47
35:BA:987:G:H2'	35:BA:988:A:C8	2.49	0.47
35:BA:986:C:H2'	35:BA:987:G:H5'	1.97	0.47
38:BD:81:ALA:HA	38:BD:113:VAL:CG1	2.45	0.47
38:BD:80:ALA:HB1	38:BD:96:HIS:HE2	1.80	0.47
45:BN:63:THR:HB	45:BN:66:LYS:HZ3	1.75	0.47
45:BN:96:GLU:O	45:BN:100:GLU:HG3	2.15	0.47
52:BU:104:GLN:HA	52:BU:107:ALA:HB3	1.97	0.47
1:AA:858:G:C6	1:AA:869:G:C8	3.02	0.47
18:AR:34:TYR:O	18:AR:34:TYR:CD1	2.67	0.47
5:AE:12:LEU:CD2	5:AE:13:ILE:N	2.65	0.47
8:AH:14:ARG:HG2	8:AH:18:ARG:NH2	2.21	0.47
8:AH:32:LYS:O	8:AH:33:GLU:C	2.53	0.47
12:AL:6:THR:OG1	12:AL:9:GLN:NE2	2.37	0.47
53:BV:98:GLU:C	53:BV:99:ILE:HD13	2.35	0.47
35:BA:2479:G:OP1	35:BA:2537:U:H1'	2.15	0.47
1:AA:1097:C:O2'	1:AA:1098:C:H5'	2.15	0.47
2:AB:189:ASP:HB3	2:AB:205:ASP:OD2	2.14	0.47
2:AB:165:VAL:CG2	2:AB:166:ASP:H	2.26	0.47
35:BA:2788:C:H4'	35:BA:2810:A:O4'	2.15	0.47
35:BA:906:G:H5'	35:BA:907:U:OP2	2.14	0.47
48:BQ:62:GLY:HA3	48:BQ:109:VAL:CG2	2.45	0.47
25:B0:69:PHE:HD1	25:B0:69:PHE:N	2.13	0.47
35:BA:2263:C:O2'	35:BA:2264:C:H5'	2.14	0.47
22:AV:48:C:C6	22:AV:48:C:P	3.08	0.47
1:AA:1306:A:C5	1:AA:1307:U:C5	3.03	0.47
1:AA:1305:G:OP1	21:AU:2:GLY:CA	2.63	0.47
12:AL:32:PHE:O	12:AL:33:ARG:HB2	2.15	0.47
12:AL:89:ARG:CD	12:AL:91:LYS:N	2.78	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:404:LYS:O	24:AY:405:ASP:CB	2.57	0.47
1:AA:979:C:O2'	14:AN:19:ARG:NH2	2.47	0.47
5:AE:18:ARG:HG3	5:AE:25:ARG:O	2.14	0.47
3:AC:119:ARG:O	3:AC:122:GLU:HB2	2.15	0.47
3:AC:165:THR:O	3:AC:165:THR:CG2	2.62	0.47
3:AC:9:GLY:O	3:AC:10:PHE:C	2.51	0.47
1:AA:972:C:C4'	10:AJ:57:LYS:HG3	2.43	0.47
14:AN:57:ARG:HG2	14:AN:57:ARG:NH1	2.29	0.47
1:AA:393:A:H5'	1:AA:483:C:O2'	2.15	0.47
56:BY:50:ARG:HD3	56:BY:50:ARG:HA	1.49	0.47
56:BY:46:LYS:HB3	56:BY:62:GLU:CG	2.45	0.47
27:B2:25:VAL:HG22	27:B2:60:LEU:HB3	1.96	0.47
40:BF:157:VAL:HG12	40:BF:176:LEU:HB2	1.96	0.47
19:AS:30:LEU:HD21	19:AS:32:LYS:HZ3	1.79	0.47
4:AD:188:LEU:O	4:AD:189:PRO:O	2.31	0.47
4:AD:11:LEU:HD13	4:AD:66:ARG:CZ	2.44	0.47
11:AK:26:ASN:O	11:AK:27:ASN:HB2	2.15	0.47
37:BC:37:PHE:HE1	37:BC:217:THR:OG1	1.97	0.47
57:BZ:149:SER:HB2	57:BZ:173:ALA:HB2	1.97	0.47
7:AG:40:ALA:O	7:AG:43:PHE:N	2.47	0.47
1:AA:938:A:O3'	7:AG:95:ARG:NH1	2.47	0.47
37:BC:90:GLY:O	37:BC:153:ILE:HG22	2.14	0.47
41:BG:56:ALA:CB	41:BG:153:ARG:HH21	2.28	0.47
41:BG:87:PRO:O	41:BG:88:ILE:HG13	2.13	0.47
29:B4:25:TYR:N	29:B4:25:TYR:CD1	2.83	0.47
54:BW:20:VAL:HG23	54:BW:21:VAL:N	2.29	0.47
35:BA:2325:G:C4	35:BA:2326:C:C5	3.02	0.47
42:BH:66:GLY:HA2	42:BH:69:ARG:HB2	1.96	0.47
8:AH:111:ILE:O	8:AH:112:LEU:HB3	2.15	0.47
5:AE:76:ILE:HG13	5:AE:77:PRO:CD	2.44	0.47
31:B6:35:GLU:HB2	31:B6:51:GLU:OE1	2.14	0.47
36:BB:73:A:O2'	36:BB:74:U:H5'	2.15	0.47
36:BB:16:G:O2'	36:BB:17:C:O5'	2.32	0.47
34:B9:19:ARG:NH1	35:BA:2755:C:H3'	2.29	0.47
34:B9:19:ARG:C	34:B9:21:GLY:H	2.18	0.47
35:BA:1423:G:H5''	35:BA:1492:G:O2'	2.14	0.47
13:AM:42:ALA:O	13:AM:43:THR:C	2.52	0.47
26:B1:5:CYS:O	26:B1:9:GLY:HA2	2.15	0.47
35:BA:1470:G:N2	35:BA:1523:U:C4	2.83	0.47
41:BG:12:TYR:O	41:BG:16:ARG:HB2	2.14	0.47
41:BG:178:PHE:HA	41:BG:179:PRO:HD3	1.56	0.47
35:BA:2712:U:HO2'	35:BA:2712(A):A:H3'	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1298:C:O4'	35:BA:1302:A:N1	2.47	0.47
1:AA:986:A:C6	1:AA:1220:G:C6	3.03	0.47
16:AP:67:THR:CG2	16:AP:68:ASP:H	2.20	0.47
35:BA:120:U:C6	35:BA:149:A:C2	3.02	0.47
24:AY:431:ILE:HD11	24:AY:493:LEU:CB	2.44	0.47
35:BA:472:A:H5'	35:BA:472:A:C8	2.46	0.47
35:BA:1452:A:HO2'	35:BA:1453:U:H6	1.61	0.47
1:AA:279:A:O2'	17:AQ:95:TYR:HE1	1.97	0.47
23:AX:16:A:H2'	23:AX:17:U:C6	2.49	0.47
1:AA:954:G:H4'	13:AM:120:LYS:HD3	1.97	0.47
6:AF:67:MET:CE	6:AF:68:PRO:O	2.62	0.47
1:AA:1452:C:H5'	1:AA:1456:G:C6	2.49	0.47
35:BA:2450:A:C2	35:BA:2451:A:N9	2.83	0.47
1:AA:896:C:H2'	1:AA:897:C:C5'	2.44	0.47
1:AA:1288:A:H2'	1:AA:1289:A:C8	2.49	0.47
4:AD:64:LEU:CD2	4:AD:203:VAL:HG21	2.44	0.47
1:AA:163:C:H2'	1:AA:164:U:C5	2.48	0.47
1:AA:1137:C:H4'	1:AA:1138:G:N2	2.29	0.47
19:AS:15:LEU:CD1	19:AS:19:VAL:HG21	2.45	0.47
1:AA:613:C:C2	1:AA:628:G:N2	2.82	0.47
35:BA:1304:C:C2	35:BA:1305:C:C5	3.03	0.47
1:AA:551:U:HO2'	1:AA:552:U:H5'	1.76	0.47
1:AA:344:A:H5''	1:AA:345:C:C5	2.48	0.47
12:AL:117:ARG:NH2	12:AL:124:LYS:HB2	2.30	0.47
22:AV:21:A:C6	22:AV:46:G:C5	3.02	0.47
1:AA:39:G:C2'	1:AA:40:C:H5'	2.44	0.47
8:AH:63:LEU:H	8:AH:63:LEU:HD22	1.75	0.47
55:BX:83:VAL:O	55:BX:84:ALA:C	2.53	0.47
35:BA:354:G:C2	35:BA:355:G:C4	3.02	0.47
46:BO:18:LYS:HB2	46:BO:45:GLU:HB3	1.95	0.47
8:AH:49:GLU:O	8:AH:49:GLU:HG3	2.14	0.47
35:BA:1880:C:H2'	35:BA:1881:C:C6	2.50	0.47
35:BA:1600:C:O2'	35:BA:1601:G:H5'	2.14	0.47
1:AA:796:C:C4	1:AA:797:C:H5	2.32	0.47
10:AJ:78:ASN:O	10:AJ:80:LYS:N	2.46	0.47
25:B0:4:LYS:HD3	35:BA:2253:G:O6	2.15	0.47
24:AY:498:GLY:O	24:AY:499:ASP:OD1	2.32	0.47
7:AG:84:ASN:ND2	7:AG:84:ASN:C	2.68	0.47
1:AA:1292:U:OP2	7:AG:41:ARG:NH2	2.48	0.47
35:BA:766:C:H2'	35:BA:767:U:O4'	2.14	0.47
1:AA:139:G:H2'	1:AA:140:A:H8	1.79	0.47
24:AY:207:VAL:O	24:AY:207:VAL:CG1	2.62	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:207:VAL:HG11	24:AY:215:LEU:CA	2.45	0.47
24:AY:246:PHE:CE2	24:AY:247:LEU:CD2	2.96	0.47
24:AY:248:ALA:O	24:AY:249:GLY:O	2.33	0.47
24:AY:284:THR:CG2	24:AY:385:MET:HE1	2.44	0.47
1:AA:809:G:C6	1:AA:810:C:C5	3.03	0.47
33:B8:6:THR:HG21	35:BA:243:U:OP1	2.14	0.47
35:BA:1011:G:O2'	35:BA:1013:C:H6	1.97	0.47
35:BA:1288:U:C2	35:BA:1327:C:C2	3.03	0.47
30:B5:8:LYS:HB2	35:BA:2054:A:N1	2.30	0.47
35:BA:2051:A:H2'	35:BA:2578:G:OP1	2.14	0.47
35:BA:2598:A:C8	35:BA:2599:G:C1'	2.98	0.47
35:BA:2693:A:C2	35:BA:2717:G:C2	3.02	0.47
32:B7:5:TRP:CZ3	35:BA:464:U:C4'	2.98	0.47
35:BA:637:A:H4'	35:BA:638:G:O5'	2.14	0.47
35:BA:662:G:H5''	47:BP:18:ARG:O	2.15	0.47
38:BD:183:ARG:CG	38:BD:270:ILE:CG2	2.91	0.47
39:BE:98:PRO:CD	39:BE:175:VAL:HG12	2.43	0.47
45:BN:97:ARG:O	45:BN:100:GLU:N	2.48	0.47
45:BN:120:LEU:HD13	45:BN:121:LYS:N	2.30	0.47
35:BA:2847:U:OP1	51:BT:98:LYS:HD3	2.15	0.47
35:BA:1198:U:H5'	52:BU:9:VAL:CG1	2.45	0.47
35:BA:751:A:O4'	54:BW:90:ARG:HA	2.15	0.47
15:AO:82:ILE:O	15:AO:83:GLU:C	2.53	0.47
18:AR:68:LYS:O	18:AR:71:LYS:HB2	2.14	0.47
34:B9:11:CYS:SG	34:B9:32:HIS:CE1	3.08	0.47
35:BA:2257:U:HO2'	35:BA:2258:C:H5'	1.79	0.47
35:BA:918:A:C2	35:BA:919:G:H1'	2.49	0.47
36:BB:96:U:H2'	36:BB:97:G:H8	1.80	0.47
48:BQ:44:ALA:O	48:BQ:47:ILE:N	2.48	0.47
1:AA:1060:C:H2'	1:AA:1061:G:H8	1.80	0.47
3:AC:11:ARG:HH21	3:AC:182:ILE:HD12	1.79	0.47
1:AA:1202:G:N2	14:AN:42:ILE:HG22	2.29	0.47
19:AS:11:VAL:HA	19:AS:38:SER:HB3	1.96	0.47
35:BA:886:C:O2'	35:BA:887:A:P	2.71	0.47
35:BA:887:A:O2'	35:BA:888:C:H5''	2.13	0.47
7:AG:17:VAL:C	7:AG:19:GLY:N	2.66	0.47
35:BA:1071:G:H1	35:BA:1093:G:H22	1.63	0.47
12:AL:126:LYS:HE2	12:AL:126:LYS:HB3	1.71	0.47
4:AD:82:ALA:CB	4:AD:92:VAL:HG12	2.45	0.47
49:BR:21:TYR:O	49:BR:25:ALA:CB	2.61	0.47
35:BA:873:G:O5'	35:BA:873:G:H8	1.98	0.47
41:BG:157:ILE:HG22	41:BG:159:VAL:HG12	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:84:LYS:O	41:BG:85:GLY:O	2.32	0.47
1:AA:403:C:O2'	1:AA:404:U:H5'	2.15	0.47
5:AE:77:PRO:HG3	5:AE:142:LEU:HD22	1.92	0.47
40:BF:185:ASP:CA	40:BF:188:ARG:HG2	2.43	0.47
16:AP:72:ARG:HG2	16:AP:73:LEU:CG	2.43	0.47
1:AA:711:G:O2'	1:AA:712:A:H5'	2.15	0.47
35:BA:2189:U:H2'	35:BA:2190:G:C4'	2.44	0.47
1:AA:1028:C:O2	1:AA:1034:G:N3	2.48	0.47
1:AA:1035:A:C4	1:AA:1036:G:N7	2.83	0.47
35:BA:2815:C:H2'	35:BA:2816:C:O4'	2.14	0.47
1:AA:1219:U:H2'	1:AA:1220:G:C8	2.49	0.47
51:BT:107:ASP:O	51:BT:110:ILE:HB	2.15	0.47
35:BA:1670:C:O5'	35:BA:1670:C:C6	2.67	0.47
35:BA:654(T):C:O2'	35:BA:654(U):A:H5'	2.15	0.47
35:BA:654(M):C:H2'	35:BA:654(N):G:N7	2.29	0.47
22:AV:11:A:H61	22:AV:24:U:H3	1.62	0.47
36:BB:118:G:C2	36:BB:119:G:N7	2.83	0.47
33:B8:23:VAL:HG13	33:B8:47:LYS:H	1.80	0.47
46:BO:104:ARG:CZ	46:BO:104:ARG:HB3	2.45	0.47
35:BA:382:G:H2'	35:BA:383:U:O4'	2.15	0.47
57:BZ:63:ASP:CB	57:BZ:65:GLN:NE2	2.78	0.47
35:BA:1106:G:H2'	35:BA:1107:G:H5'	1.96	0.47
46:BO:98:VAL:O	46:BO:98:VAL:HG22	2.12	0.47
40:BF:31:HIS:CG	47:BP:13:ASN:OD1	2.67	0.47
35:BA:41:C:H2'	35:BA:42:G:H8	1.80	0.47
42:BH:54:ARG:HD2	42:BH:54:ARG:O	2.14	0.47
35:BA:717:G:N2	35:BA:718:A:H1'	2.29	0.47
35:BA:271(A):A:H5'	35:BA:271(B):C:OP2	2.15	0.47
24:AY:26:LYS:CD	24:AY:89:THR:O	2.62	0.47
24:AY:305:ALA:HA	24:AY:422:GLU:CB	2.44	0.47
30:B5:7:PRO:HA	35:BA:2615:U:C5	2.50	0.47
35:BA:1909:C:N4	35:BA:1922:G:N1	2.62	0.47
38:BD:34:VAL:HG11	38:BD:102:LYS:O	2.15	0.47
38:BD:143:HIS:O	38:BD:192:THR:CG2	2.62	0.47
39:BE:195:LEU:HD12	39:BE:196:VAL:H	1.79	0.47
39:BE:37:ARG:NH1	39:BE:42:ASP:OD1	2.47	0.47
45:BN:120:LEU:CD1	45:BN:120:LEU:C	2.83	0.47
47:BP:16:ARG:CB	47:BP:16:ARG:HH11	2.26	0.47
46:BO:59:LYS:O	46:BO:87:ILE:O	2.32	0.47
6:AF:2:ARG:HD3	6:AF:92:LYS:HE2	1.96	0.47
1:AA:740:U:C4'	15:AO:42:HIS:ND1	2.78	0.47
15:AO:39:LEU:O	15:AO:43:LEU:HB2	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:AQ:99:SER:C	17:AQ:100:LYS:HG3	2.34	0.47
25:B0:69:PHE:CD1	25:B0:69:PHE:N	2.83	0.47
48:BQ:50:ALA:O	48:BQ:51:ARG:C	2.53	0.47
48:BQ:70:PRO:O	48:BQ:71:ASP:HB3	2.15	0.47
48:BQ:72:LYS:O	48:BQ:93:TYR:HD1	1.98	0.47
3:AC:121:ALA:CB	3:AC:187:ALA:HB1	2.44	0.47
9:AI:114:TYR:CZ	10:AJ:59:SER:HA	2.50	0.47
14:AN:59:ALA:O	14:AN:60:SER:HB3	2.14	0.47
1:AA:543:C:OP2	4:AD:10:ARG:NH1	2.48	0.47
35:BA:605:C:C2'	35:BA:606:U:H5'	2.45	0.47
35:BA:2594:C:C2	35:BA:2595:G:C8	3.03	0.47
37:BC:39:GLU:CG	37:BC:217:THR:OG1	2.63	0.47
57:BZ:141:VAL:C	57:BZ:143:GLY:H	2.19	0.47
35:BA:2305:A:H2'	35:BA:2306:C:O5'	2.14	0.47
35:BA:2309:A:C2'	35:BA:2310:A:H5''	2.44	0.47
41:BG:46:ALA:C	41:BG:47:LYS:CD	2.77	0.47
29:B4:9:LEU:HD22	29:B4:26:SER:O	2.15	0.47
31:B6:25:LYS:NZ	35:BA:2285:C:N4	2.63	0.47
47:BP:66:GLY:O	47:BP:67:MET:CB	2.61	0.47
5:AE:142:LEU:HD23	5:AE:142:LEU:HA	1.77	0.47
1:AA:1001(A):G:H2'	1:AA:1002:G:C8	2.49	0.47
35:BA:2206:G:N2	35:BA:2207:G:H5'	2.30	0.47
24:AY:513:LEU:CD1	24:AY:517:ARG:HH21	2.22	0.47
13:AM:28:ALA:O	13:AM:29:ARG:C	2.53	0.47
2:AB:127:ILE:HG23	2:AB:135:GLN:OE1	2.14	0.47
1:AA:897:C:C4	1:AA:898:G:N7	2.83	0.47
35:BA:2052:G:H1'	39:BE:149:ARG:O	2.15	0.47
31:B6:17:LYS:O	31:B6:18:ARG:HB3	2.14	0.47
31:B6:40:CYS:HA	31:B6:41:PRO:HD3	1.57	0.47
1:AA:1018:C:H2'	1:AA:1019:C:C6	2.50	0.47
1:AA:1348:U:C5	1:AA:1373:G:N2	2.83	0.47
51:BT:132:LYS:C	51:BT:134:GLU:N	2.66	0.47
12:AL:75:HIS:CG	12:AL:76:ASN:H	2.32	0.47
35:BA:104:U:C2'	35:BA:105:C:H5'	2.43	0.47
1:AA:39:G:O2'	1:AA:40:C:H5'	2.15	0.47
35:BA:2752:C:H5'	35:BA:2753:A:OP2	2.15	0.47
5:AE:24:ARG:CZ	5:AE:24:ARG:HB3	2.45	0.47
1:AA:448:A:O2'	1:AA:449:C:H5'	2.15	0.47
4:AD:65:ARG:HB2	4:AD:75:PHE:CG	2.50	0.47
28:B3:41:PRO:HA	28:B3:44:ARG:HB3	1.96	0.47
53:BV:43:GLU:O	53:BV:44:LYS:CB	2.62	0.47
47:BP:75:ILE:H	47:BP:75:ILE:HD12	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:70:G:O2'	1:AA:71:C:H5'	2.15	0.47
37:BC:110:PHE:O	37:BC:111:ASP:CG	2.52	0.47
1:AA:1232:U:O5'	1:AA:1232:U:H6	1.98	0.47
33:B8:59:LYS:HE3	33:B8:59:LYS:HB2	1.71	0.47
35:BA:1255:U:C5	40:BF:73:ALA:HA	2.50	0.47
35:BA:1256:G:O2'	40:BF:82:ILE:HD11	2.15	0.47
35:BA:1257:C:H1'	40:BF:83:PHE:HA	1.97	0.47
35:BA:1330:C:O2	35:BA:1330:C:H2'	2.15	0.47
35:BA:19:C:OP1	52:BU:22:LYS:HD2	2.15	0.47
35:BA:251:A:H2'	35:BA:252:G:H5'	1.96	0.47
35:BA:2508:G:C2	35:BA:2582:G:C6	3.03	0.47
35:BA:2867:G:C8	51:BT:23:ARG:NH1	2.83	0.47
35:BA:447:A:H4'	35:BA:449:A:N7	2.29	0.47
35:BA:259:G:H1'	35:BA:621:A:O2'	2.15	0.47
47:BP:79:ARG:O	47:BP:111:ARG:HB2	2.15	0.47
35:BA:636:G:N7	47:BP:113:LYS:NZ	2.61	0.47
51:BT:50:ILE:CG2	51:BT:99:LEU:O	2.54	0.47
46:BO:62:VAL:HA	46:BO:84:ALA:CB	2.43	0.47
15:AO:80:ALA:O	15:AO:83:GLU:HB2	2.15	0.47
1:AA:1413:A:C2	1:AA:1414:U:N1	2.83	0.47
1:AA:247:G:OP2	17:AQ:99:SER:CB	2.63	0.47
2:AB:58:ILE:HG22	2:AB:222:ILE:HD12	1.96	0.47
2:AB:84:GLU:OE1	2:AB:219:VAL:HG21	2.14	0.47
42:BH:106:THR:CG2	42:BH:112:PRO:CA	2.63	0.47
48:BQ:141:GLN:NE2	57:BZ:72:ARG:O	2.49	0.47
48:BQ:27:VAL:HG21	48:BQ:134:ARG:CG	2.41	0.47
57:BZ:127:LYS:HD2	57:BZ:162:GLU:OE2	2.15	0.47
35:BA:2605:U:C2	35:BA:2606:C:C5	3.02	0.47
1:AA:1326:C:O2'	1:AA:1327:C:O5'	2.33	0.47
12:AL:36:VAL:N	12:AL:58:VAL:HG13	2.30	0.47
1:AA:972:C:O3'	10:AJ:57:LYS:CG	2.63	0.47
3:AC:106:VAL:O	3:AC:107:GLN:C	2.53	0.47
3:AC:112:SER:OG	3:AC:114:PRO:HD2	2.14	0.47
14:AN:26:ARG:NH1	14:AN:47:LEU:CD2	2.78	0.47
56:BY:45:VAL:CG1	56:BY:60:PHE:CD2	2.98	0.47
56:BY:30:VAL:CG1	56:BY:32:PRO:HB3	2.45	0.47
40:BF:7:TYR:CE2	40:BF:10:PRO:HD3	2.50	0.47
40:BF:125:LEU:HA	40:BF:194:MET:O	2.15	0.47
37:BC:142:ALA:HB1	37:BC:162:GLU:OE2	2.15	0.47
51:BT:125:ARG:C	51:BT:128:GLU:HG3	2.34	0.47
41:BG:138:GLN:HG3	41:BG:139:LEU:N	2.29	0.47
50:BS:27:SER:C	50:BS:28:VAL:CG2	2.83	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2260:C:O2'	35:BA:2388:A:O2'	2.32	0.47
8:AH:103:VAL:CG1	8:AH:108:GLY:HA3	2.36	0.47
50:BS:34:HIS:HB2	50:BS:36:TYR:CE1	2.47	0.47
35:BA:1447:G:C4'	35:BA:1545:A:H4'	2.44	0.47
38:BD:138:VAL:HG23	38:BD:168:ARG:CZ	2.45	0.47
2:AB:115:LEU:HB2	2:AB:145:LEU:HD11	1.94	0.47
36:BB:24:G:H2'	36:BB:56:G:O6	2.15	0.47
35:BA:2110:G:N2	35:BA:2178:C:H5	2.12	0.47
1:AA:961:U:OP2	1:AA:1223:C:C1'	2.63	0.47
54:BW:5:ALA:HB1	54:BW:50:VAL:HG22	1.96	0.47
35:BA:1164:G:N2	35:BA:1165:U:H1'	2.30	0.47
25:B0:36:ILE:CD1	35:BA:2355:C:O4'	2.61	0.47
43:BJ:25:UNK:O	43:BJ:84:UNK:HA	2.15	0.47
4:AD:60:GLU:CG	4:AD:202:LEU:HD12	2.39	0.47
16:AP:4:ILE:HD11	16:AP:64:ALA:HB1	1.96	0.47
35:BA:1707:G:H2'	35:BA:1708:C:O4'	2.15	0.47
35:BA:176:G:C6	35:BA:177:G:C6	3.03	0.47
1:AA:942:G:H2'	1:AA:942:G:N3	2.29	0.47
11:AK:98:LEU:O	11:AK:99:GLN:C	2.53	0.47
47:BP:77:ARG:HG2	47:BP:77:ARG:NH1	2.30	0.47
37:BC:51:PRO:HG2	37:BC:52:ARG:H	1.79	0.47
42:BH:44:VAL:CG1	42:BH:45:VAL:N	2.78	0.47
35:BA:1896:G:C6	35:BA:1897:G:N7	2.83	0.47
1:AA:1379:G:N2	1:AA:1380:U:C2	2.82	0.47
24:AY:169:ILE:C	24:AY:170:THR:CG2	2.84	0.46
24:AY:287:ARG:NH2	24:AY:289:VAL:HG13	2.29	0.46
24:AY:76:GLN:OE1	24:AY:349:MET:CA	2.63	0.46
24:AY:418:GLN:HA	24:AY:421:GLU:OE1	2.16	0.46
24:AY:425:VAL:HG13	24:AY:445:GLN:HB2	1.97	0.46
30:B5:16:ARG:HD2	30:B5:20:ARG:CZ	2.44	0.46
32:B7:11:LYS:HG2	35:BA:686:G:C4	2.50	0.46
33:B8:61:LEU:HD12	33:B8:62:LEU:H	1.78	0.46
35:BA:1006:C:H2'	35:BA:1007:C:H6	1.80	0.46
35:BA:1141:U:H5	45:BN:66:LYS:HZ1	1.62	0.46
35:BA:1256:G:H2'	35:BA:1257:C:H6	1.77	0.46
35:BA:1829:A:H3'	35:BA:1830:C:C6	2.50	0.46
35:BA:2406:U:H3	47:BP:72:PRO:HB2	1.79	0.46
35:BA:2727:G:N2	35:BA:2728:U:O2	2.48	0.46
35:BA:27:G:N2	35:BA:512:G:C2'	2.73	0.46
35:BA:2822:G:H2'	35:BA:2823:A:C5'	2.42	0.46
35:BA:35:G:O2'	35:BA:36:G:H5'	2.15	0.46
35:BA:565:C:H2'	35:BA:565:C:O2	2.14	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:942:G:O2'	35:BA:943:U:H5'	2.15	0.46
35:BA:953:A:C2	35:BA:965:C:O2	2.68	0.46
35:BA:974:G:O5'	35:BA:1186:G:N2	2.48	0.46
38:BD:154:LYS:C	38:BD:155:LEU:HD12	2.34	0.46
38:BD:24:ILE:HA	38:BD:82:ILE:CB	2.37	0.46
38:BD:183:ARG:HG3	38:BD:270:ILE:CA	2.45	0.46
38:BD:66:ASP:CG	38:BD:103:ARG:CZ	2.83	0.46
39:BE:200:GLU:N	39:BE:200:GLU:CD	2.68	0.46
40:BF:59:TYR:CD2	40:BF:78:ILE:HG13	2.50	0.46
49:BR:3:HIS:O	49:BR:5:LYS:N	2.48	0.46
51:BT:32:TYR:HB3	51:BT:81:PRO:HB2	1.95	0.46
52:BU:55:ARG:O	52:BU:59:ARG:HD2	2.16	0.46
52:BU:76:TYR:CD1	52:BU:77:SER:N	2.83	0.46
42:BH:27:LYS:HG2	42:BH:32:GLU:OE1	2.15	0.46
1:AA:599:C:H5''	8:AH:96:GLY:HA2	1.96	0.46
1:AA:589:C:C1'	1:AA:653:A:N6	2.77	0.46
1:AA:653:A:OP1	8:AH:56:LYS:NZ	2.33	0.46
8:AH:35:ILE:O	8:AH:38:ILE:N	2.46	0.46
15:AO:61:GLY:O	15:AO:62:GLN:C	2.53	0.46
2:AB:107:THR:O	2:AB:110:GLN:N	2.39	0.46
2:AB:156:LYS:O	2:AB:157:ARG:HB2	2.15	0.46
2:AB:70:PHE:N	2:AB:70:PHE:HD1	2.13	0.46
22:AV:76:A:H1'	35:BA:2395:C:N3	2.30	0.46
35:BA:1916:A:O2'	35:BA:1917:U:H5'	2.15	0.46
48:BQ:44:ALA:O	48:BQ:47:ILE:HB	2.15	0.46
57:BZ:10:ARG:HG2	57:BZ:36:LYS:HD3	1.97	0.46
57:BZ:70:LEU:HD21	57:BZ:91:LEU:HD21	1.96	0.46
1:AA:1060:C:P	14:AN:45:ARG:NH2	2.87	0.46
1:AA:395:C:O2'	1:AA:396:G:H5'	2.15	0.46
56:BY:27:VAL:HG12	56:BY:28:LYS:H	1.80	0.46
27:B2:17:SER:HB2	27:B2:18:PRO:HD2	1.97	0.46
27:B2:21:LEU:O	27:B2:24:LEU:CB	2.63	0.46
7:AG:16:LEU:HD13	9:AI:42:ARG:HA	1.95	0.46
40:BF:114:VAL:HG21	40:BF:202:PHE:CZ	2.50	0.46
35:BA:2838:G:N2	35:BA:2881:C:C2	2.83	0.46
49:BR:96:ARG:HH22	49:BR:117:VAL:HG23	1.80	0.46
35:BA:2593:U:H2'	35:BA:2594:C:H6	1.68	0.46
5:AE:63:ARG:O	5:AE:64:ARG:CB	2.63	0.46
20:AT:10:LEU:HD12	20:AT:11:SER:N	2.29	0.46
31:B6:5:VAL:N	31:B6:8:LYS:HB3	2.31	0.46
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.16	0.46
47:BP:67:MET:C	47:BP:69:GLY:N	2.68	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2086:U:C2'	35:BA:2087:G:H8	2.10	0.46
5:AE:72:GLN:OE1	5:AE:77:PRO:HA	2.15	0.46
35:BA:704:G:N2	35:BA:726:G:C4	2.83	0.46
35:BA:1423:G:OP1	35:BA:1492:G:O2'	2.22	0.46
26:B1:15:ALA:CB	26:B1:42:GLN:HG3	2.45	0.46
35:BA:1470:G:O3'	35:BA:1471:A:H8	1.98	0.46
50:BS:49:VAL:HG11	50:BS:73:LEU:CD2	2.45	0.46
35:BA:1298:C:H2'	35:BA:1299:G:O4'	2.15	0.46
1:AA:962:C:O2'	1:AA:963:G:H5'	2.15	0.46
35:BA:2070:G:H2'	35:BA:2071:A:O4'	2.16	0.46
35:BA:2206:G:H5''	35:BA:2206:G:N3	2.31	0.46
51:BT:106:SER:O	51:BT:107:ASP:CB	2.61	0.46
54:BW:6:ILE:HG12	54:BW:104:THR:CB	2.44	0.46
14:AN:13:THR:O	14:AN:14:PRO:O	2.33	0.46
13:AM:56:LEU:C	13:AM:60:VAL:HG23	2.35	0.46
1:AA:1370:G:C2	1:AA:1371:G:N7	2.82	0.46
35:BA:107:C:H2'	35:BA:108:U:H6	1.80	0.46
33:B8:52:LYS:O	33:B8:54:GLU:N	2.48	0.46
22:AV:28:C:H42	22:AV:42:G:H1	1.63	0.46
1:AA:1351:U:N3	1:AA:1352:C:C5	2.84	0.46
35:BA:2584:U:C2'	35:BA:2585:U:H5'	2.45	0.46
1:AA:346:G:N2	1:AA:347:G:C5	2.83	0.46
12:AL:109:GLY:HA2	12:AL:121:GLY:HA3	1.94	0.46
35:BA:2127:G:C2	35:BA:2128:C:C4	3.03	0.46
26:B1:94:LEU:CD1	26:B1:94:LEU:H	2.28	0.46
35:BA:296:C:N4	35:BA:342:G:H1	2.13	0.46
42:BH:18:GLU:CB	42:BH:25:LYS:O	2.64	0.46
36:BB:52:A:H2'	36:BB:53:A:OP2	2.15	0.46
1:AA:408:A:C2	1:AA:435:C:N3	2.83	0.46
57:BZ:147:GLY:C	57:BZ:148:ASP:O	2.54	0.46
44:BK:115:UNK:O	44:BK:116:UNK:CB	2.62	0.46
47:BP:75:ILE:N	47:BP:75:ILE:HD12	2.30	0.46
20:AT:8:ARG:HG3	20:AT:8:ARG:HH11	1.80	0.46
11:AK:123:LYS:CG	11:AK:123:LYS:O	2.63	0.46
6:AF:37:VAL:O	6:AF:37:VAL:HG12	2.16	0.46
24:AY:474:VAL:HG13	24:AY:521:VAL:HG13	1.97	0.46
24:AY:145:ASP:OD1	24:AY:145:ASP:N	2.47	0.46
24:AY:32:LYS:HZ2	24:AY:260:LEU:HD12	1.81	0.46
24:AY:347:THR:HA	24:AY:365:LEU:HA	1.98	0.46
24:AY:377:ASP:OD2	24:AY:378:THR:O	2.32	0.46
1:AA:774:G:C2	1:AA:775:G:N9	2.83	0.46
32:B7:1:MET:HB2	32:B7:1:MET:HE2	1.82	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B7:34:ARG:HD2	32:B7:39:ARG:HG3	1.96	0.46
35:BA:1688:U:O2	35:BA:1701:A:N7	2.49	0.46
35:BA:1778:U:C4	35:BA:1784:A:C4	3.03	0.46
35:BA:1799:G:OP1	38:BD:260:ARG:CD	2.63	0.46
35:BA:1823:G:C5	35:BA:1824:G:N7	2.84	0.46
38:BD:177:LEU:HB2	38:BD:179:SER:OG	2.15	0.46
38:BD:248:SER:HB2	38:BD:249:PRO:CD	2.46	0.46
45:BN:66:LYS:O	45:BN:87:LEU:CB	2.62	0.46
47:BP:95:VAL:HG23	47:BP:125:VAL:HA	1.96	0.46
47:BP:98:GLU:H	47:BP:101:VAL:HG13	1.80	0.46
1:AA:644:G:O2'	1:AA:645:C:H5'	2.15	0.46
6:AF:29:ALA:O	6:AF:30:LEU:C	2.53	0.46
8:AH:119:LEU:HD23	8:AH:123:GLU:OE1	2.14	0.46
8:AH:14:ARG:HG3	8:AH:83:ILE:HG22	1.96	0.46
15:AO:12:ILE:HG13	15:AO:31:LEU:HD13	1.97	0.46
15:AO:82:ILE:HG22	15:AO:83:GLU:N	2.30	0.46
2:AB:187:LEU:HD22	2:AB:201:ILE:O	2.15	0.46
2:AB:223:ILE:O	2:AB:224:GLN:C	2.53	0.46
2:AB:8:LYS:CE	2:AB:217:ARG:NH2	2.77	0.46
31:B6:54:ILE:HD11	35:BA:2397:G:H22	1.81	0.46
35:BA:199:A:N3	35:BA:2433:A:C2	2.83	0.46
47:BP:58:THR:O	47:BP:61:ARG:HG3	2.14	0.46
35:BA:1912:A:H4'	35:BA:1912:A:OP1	2.15	0.46
35:BA:2332:U:H4'	35:BA:2336:A:H62	1.79	0.46
35:BA:860:U:O4'	35:BA:860:U:O2	2.32	0.46
35:BA:861:A:C2	35:BA:862:G:N9	2.84	0.46
48:BQ:110:THR:O	48:BQ:111:GLU:C	2.53	0.46
48:BQ:141:GLN:CG	57:BZ:72:ARG:NH1	2.78	0.46
48:BQ:14:ARG:HA	48:BQ:72:LYS:CE	2.45	0.46
4:AD:133:VAL:HG12	4:AD:135:LEU:HD22	1.98	0.46
37:BC:4:GLY:O	37:BC:7:TYR:HB3	2.14	0.46
35:BA:872:A:H2'	35:BA:873:G:H8	1.79	0.46
57:BZ:111:VAL:C	57:BZ:113:ALA:O	2.54	0.46
1:AA:941:G:H1	1:AA:1342:C:H42	1.63	0.46
35:BA:2308:G:C2'	35:BA:2309:A:C8	2.98	0.46
35:BA:2303:G:N2	35:BA:2313:C:N3	2.54	0.46
41:BG:42:GLY:C	41:BG:43:LEU:HD22	2.35	0.46
41:BG:74:LYS:O	41:BG:75:LYS:O	2.34	0.46
1:AA:321:A:O3'	1:AA:1436:U:H4'	2.15	0.46
1:AA:58:C:H2'	1:AA:59:A:H8	1.80	0.46
45:BN:54:VAL:HG12	45:BN:55:VAL:N	2.30	0.46
17:AQ:77:VAL:O	17:AQ:78:GLU:HB3	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:B6:28:ARG:O	31:B6:29:ASN:O	2.32	0.46
26:B1:27:GLU:CG	26:B1:28:GLY:N	2.76	0.46
24:AY:20:SER:C	24:AY:126:LEU:HD11	2.35	0.46
24:AY:123:THR:CA	24:AY:126:LEU:HD12	2.44	0.46
50:BS:93:LYS:O	50:BS:95:HIS:N	2.48	0.46
1:AA:711:G:H4'	38:BD:138:VAL:HG12	1.97	0.46
35:BA:2171:A:O2'	35:BA:2172:U:C5	2.66	0.46
20:AT:73:HIS:C	20:AT:74:LYS:HD3	2.36	0.46
51:BT:5:ALA:O	51:BT:8:LYS:N	2.48	0.46
28:B3:54:VAL:HG12	28:B3:55:ARG:N	2.29	0.46
1:AA:1496:C:H2'	1:AA:1497:G:O4'	2.15	0.46
23:AX:16:A:H2'	23:AX:17:U:O4'	2.14	0.46
35:BA:1366:A:C6	35:BA:1367:A:C5	3.04	0.46
35:BA:2645:G:C3'	35:BA:2646:C:C5'	2.87	0.46
20:AT:50:GLU:O	20:AT:52:ALA:N	2.48	0.46
1:AA:1282:C:H2'	1:AA:1283:G:C5'	2.45	0.46
1:AA:1353:G:N3	1:AA:1354:C:C5	2.83	0.46
25:B0:17:GLN:O	25:B0:18:ALA:C	2.54	0.46
35:BA:2793:G:O2'	35:BA:2794:C:C5'	2.64	0.46
1:AA:135:C:C2'	1:AA:136:C:H5'	2.45	0.46
1:AA:24:U:H5	1:AA:559:A:H61	1.62	0.46
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.30	0.46
39:BE:57:LYS:O	39:BE:58:ARG:HG3	2.15	0.46
35:BA:2097:C:H1'	35:BA:2193:G:H22	1.80	0.46
1:AA:1055:A:H8	1:AA:1055:A:O5'	1.98	0.46
49:BR:82:GLU:O	49:BR:85:PRO:HD2	2.15	0.46
35:BA:1619:G:H8	35:BA:1619:G:O5'	1.98	0.46
35:BA:278:A:O5'	35:BA:278:A:H8	1.98	0.46
24:AY:232:GLU:O	24:AY:235:LYS:HB2	2.15	0.46
24:AY:282:ARG:CG	24:AY:319:ARG:CZ	2.94	0.46
24:AY:303:ILE:HA	24:AY:315:VAL:O	2.16	0.46
24:AY:386:LYS:HE3	24:AY:388:THR:CA	2.45	0.46
24:AY:72:THR:CB	24:AY:89:THR:HA	2.45	0.46
1:AA:774:G:H21	1:AA:775:G:H1'	1.79	0.46
30:B5:12:SER:O	30:B5:15:ARG:N	2.49	0.46
35:BA:1254:A:C8	35:BA:1256:G:C8	3.03	0.46
35:BA:2048:G:C6	35:BA:2049:G:C5	3.04	0.46
35:BA:2373:G:C6	35:BA:2374:C:N4	2.83	0.46
35:BA:257:A:O2'	35:BA:258:G:H5'	2.16	0.46
35:BA:2049:G:N2	35:BA:2620:C:C2	2.82	0.46
35:BA:629:G:H4'	35:BA:650:C:O2	2.15	0.46
35:BA:743:G:N2	35:BA:755:C:C2	2.83	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:977:G:O6	35:BA:987:G:C6	2.69	0.46
35:BA:1819:A:C5'	38:BD:158:ALA:HB2	2.39	0.46
38:BD:80:ALA:N	38:BD:94:LEU:O	2.46	0.46
39:BE:108:SER:O	39:BE:109:LYS:C	2.53	0.46
39:BE:33:VAL:HG13	39:BE:69:LYS:CD	2.45	0.46
35:BA:1141:U:P	45:BN:63:THR:HG23	2.54	0.46
35:BA:662:G:P	47:BP:18:ARG:HD2	2.55	0.46
47:BP:98:GLU:C	47:BP:101:VAL:HG22	2.35	0.46
52:BU:82:GLY:O	52:BU:85:LYS:N	2.47	0.46
35:BA:2010:G:C5'	54:BW:42:ARG:HB2	2.46	0.46
1:AA:662:G:C6	1:AA:744:C:N3	2.83	0.46
1:AA:658:G:C1'	15:AO:22:THR:HB	2.46	0.46
15:AO:80:ALA:O	15:AO:81:LEU:C	2.53	0.46
53:BV:33:VAL:O	53:BV:58:VAL:CG1	2.63	0.46
1:AA:1075:C:O2'	1:AA:1076:C:H5'	2.15	0.46
2:AB:213:LEU:HD22	2:AB:214:ILE:HD13	1.96	0.46
2:AB:87:ARG:NH1	2:AB:220:ASP:OD1	2.48	0.46
57:BZ:53:ILE:HG13	57:BZ:54:HIS:CD2	2.51	0.46
22:AV:49:G:H21	22:AV:50:U:C1'	2.26	0.46
22:AV:47:U:C6	22:AV:50:U:OP1	2.68	0.46
22:AV:69:C:C2	22:AV:70:G:C8	3.03	0.46
21:AU:18:TYR:N	21:AU:18:TYR:HD1	2.13	0.46
3:AC:14:ILE:O	3:AC:15:THR:HB	2.14	0.46
3:AC:187:ALA:HB3	3:AC:198:VAL:HB	1.97	0.46
9:AI:111:ARG:O	9:AI:113:LYS:HG3	2.15	0.46
19:AS:20:LEU:C	19:AS:23:ASN:HB3	2.35	0.46
19:AS:34:TRP:CD1	19:AS:52:TYR:CD2	3.03	0.46
19:AS:41:VAL:CG2	19:AS:44:MET:HG2	2.45	0.46
19:AS:43:GLU:CG	29:B4:47:GLN:NE2	2.77	0.46
56:BY:75:ILE:O	56:BY:76:CYS:SG	2.74	0.46
55:BX:26:TYR:HH	55:BX:93:GLU:CD	2.19	0.46
55:BX:4:ALA:O	55:BX:6:ASP:N	2.48	0.46
1:AA:619:U:N3	4:AD:135:LEU:HD11	2.29	0.46
35:BA:1210:A:N3	35:BA:1212:G:N2	2.63	0.46
37:BC:65:PRO:CG	37:BC:187:ASP:O	2.64	0.46
35:BA:1718:G:H2'	35:BA:1719:G:H8	1.80	0.46
1:AA:692:U:O2'	1:AA:694:A:N7	2.38	0.46
36:BB:42:C:HO2'	36:BB:43:C:H6	1.59	0.46
41:BG:67:LYS:HD3	41:BG:67:LYS:N	2.29	0.46
41:BG:92:VAL:CG1	41:BG:92:VAL:O	2.64	0.46
1:AA:322:C:O2'	1:AA:323:U:H5'	2.16	0.46
20:AT:14:LYS:C	20:AT:16:HIS:N	2.68	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1500:A:OP2	1:AA:1505:G:P	2.73	0.46
50:BS:54:LEU:O	50:BS:57:LYS:N	2.49	0.46
50:BS:30:ARG:HH22	50:BS:62:LYS:CG	2.28	0.46
35:BA:1120:G:O2'	35:BA:1121:C:H5'	2.15	0.46
35:BA:1576:U:O2'	35:BA:1577:C:H5'	2.15	0.46
41:BG:180:PHE:C	41:BG:182:LYS:H	2.19	0.46
1:AA:1005:A:H2'	1:AA:1006:C:H5'	1.97	0.46
1:AA:1124:G:C5'	10:AJ:35:SER:HB2	2.45	0.46
35:BA:149:A:O5'	35:BA:149:A:H8	1.97	0.46
54:BW:28:SER:HA	54:BW:70:TYR:HA	1.97	0.46
56:BY:84:ARG:HG2	56:BY:85:VAL:N	2.26	0.46
1:AA:954:G:H4'	13:AM:120:LYS:HD2	1.96	0.46
1:AA:1250:A:H2	1:AA:1370:G:H1'	1.80	0.46
1:AA:250:A:H2	1:AA:274:A:N6	2.14	0.46
35:BA:654(L):G:C2'	35:BA:654(M):C:H4'	2.45	0.46
36:BB:12:C:H4'	36:BB:13:A:OP1	2.16	0.46
35:BA:934:G:C6	35:BA:935:C:C4	3.03	0.46
4:AD:64:LEU:HB2	4:AD:198:VAL:HG21	1.98	0.46
50:BS:78:LEU:HD21	50:BS:83:LYS:HA	1.96	0.46
10:AJ:25:GLU:O	10:AJ:29:ARG:NH2	2.49	0.46
1:AA:189:G:C6	1:AA:189(A):C:C4	3.04	0.46
1:AA:1338:G:C6	1:AA:1339:A:N6	2.83	0.46
1:AA:929:G:N2	1:AA:930:C:C2	2.83	0.46
17:AQ:71:PHE:O	17:AQ:72:ARG:HG2	2.15	0.46
1:AA:1510:U:H2'	1:AA:1511:G:H8	1.78	0.46
20:AT:38:LYS:HA	20:AT:41:ILE:CG1	2.46	0.46
56:BY:6:HIS:N	56:BY:6:HIS:CD2	2.83	0.46
46:BO:105:GLU:OE1	46:BO:105:GLU:N	2.47	0.46
1:AA:446:G:C2'	1:AA:447:G:H5'	2.45	0.46
57:BZ:145:GLU:HG3	57:BZ:146:ILE:H	1.81	0.46
35:BA:2156:G:OP2	35:BA:2156:G:C8	2.68	0.46
35:BA:826:U:H1'	47:BP:53:GLY:O	2.15	0.46
7:AG:87:VAL:HG22	7:AG:154:TYR:HB2	1.97	0.46
4:AD:192:GLU:O	4:AD:193:ASP:C	2.54	0.46
35:BA:1115:G:C5	35:BA:1116:C:C5	3.04	0.46
24:AY:171:TRP:C	24:AY:182:VAL:HG13	2.35	0.46
35:BA:2529:G:H5''	35:BA:2530:A:H5''	1.98	0.46
32:B7:30:VAL:HG22	32:B7:33:ARG:HH21	1.78	0.46
35:BA:1024:G:N7	35:BA:1025:G:H2'	2.30	0.46
35:BA:1308:A:N6	35:BA:1309:G:C2	2.83	0.46
35:BA:693:C:O2'	35:BA:1353:A:H1'	2.16	0.46
35:BA:2498:C:H2'	35:BA:2499:C:C5'	2.46	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2781:A:H5'	35:BA:2782:G:H5'	1.97	0.46
35:BA:2821:A:H3'	35:BA:2821:A:OP2	2.16	0.46
35:BA:28:A:N6	35:BA:512:G:H1'	2.30	0.46
35:BA:642:G:H8	35:BA:642:G:O5'	1.99	0.46
38:BD:144:ALA:O	38:BD:145:VAL:HG23	2.15	0.46
39:BE:180:ASN:O	39:BE:181:LEU:HD12	2.16	0.46
39:BE:97:LYS:O	39:BE:100:GLU:HG3	2.15	0.46
39:BE:9:VAL:HG11	39:BE:25:VAL:CG1	2.45	0.46
47:BP:30:THR:HG22	47:BP:31:ALA:N	2.18	0.46
47:BP:47:ASP:HB3	47:BP:51:PHE:HB2	1.97	0.46
49:BR:7:GLY:O	49:BR:8:ARG:CB	2.60	0.46
35:BA:1673:U:O2'	35:BA:1674:G:H5'	2.16	0.46
1:AA:19:C:H2'	1:AA:20:U:H6	1.80	0.46
1:AA:757:U:O2'	1:AA:758:G:H5'	2.15	0.46
6:AF:50:TYR:CE1	6:AF:52:ILE:HG13	2.49	0.46
6:AF:50:TYR:CD1	6:AF:50:TYR:O	2.68	0.46
8:AH:87:SER:HG	8:AH:92:ARG:HA	1.77	0.46
53:BV:59:ALA:CA	53:BV:95:LEU:O	2.64	0.46
2:AB:16:HIS:HB3	2:AB:210:SER:CB	2.46	0.46
35:BA:199:A:O2'	35:BA:2433:A:N6	2.48	0.46
35:BA:854:G:H5'	35:BA:855:G:OP1	2.16	0.46
48:BQ:57:HIS:C	48:BQ:57:HIS:HD1	2.17	0.46
57:BZ:122:ARG:CG	57:BZ:122:ARG:NH1	2.75	0.46
22:AV:15:G:C5'	22:AV:16:C:H5'	2.46	0.46
13:AM:81:LEU:C	13:AM:93:ARG:NH1	2.69	0.46
14:AN:22:THR:CB	14:AN:33:VAL:HG21	2.46	0.46
19:AS:62:ILE:HA	19:AS:66:MET:HE1	1.95	0.46
37:BC:68:LEU:HA	37:BC:176:GLY:HA2	1.96	0.46
15:AO:5:LYS:HA	15:AO:8:LYS:HB2	1.97	0.46
1:AA:941:G:O5'	1:AA:941:G:H8	1.99	0.46
35:BA:1527:G:O5'	35:BA:1527:G:H8	1.98	0.46
41:BG:138:GLN:NE2	41:BG:149:VAL:HG12	2.30	0.46
41:BG:43:LEU:HB3	41:BG:45:GLU:CG	2.46	0.46
41:BG:77:ILE:HG22	41:BG:80:PHE:O	2.16	0.46
41:BG:40:ASN:HB2	41:BG:90:LEU:O	2.15	0.46
36:BB:45:A:OP2	41:BG:96:ARG:NH2	2.48	0.46
40:BF:32:LEU:HD13	40:BF:112:MET:SD	2.56	0.46
1:AA:28:G:O2'	1:AA:296:U:OP1	2.34	0.46
35:BA:2282:G:OP1	35:BA:2283:C:H1'	2.15	0.46
50:BS:53:SER:OG	50:BS:54:LEU:N	2.47	0.46
34:B9:19:ARG:HG3	34:B9:20:HIS:ND1	2.30	0.46
35:BA:1491:G:C5	35:BA:1500:G:N2	2.84	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1170:G:H1	35:BA:1179:C:N4	2.13	0.46
35:BA:1344:G:N2	35:BA:1403:C:O2	2.46	0.46
35:BA:1297:C:O2'	35:BA:1298:C:H5'	2.16	0.46
50:BS:85:VAL:HG23	50:BS:86:ALA:N	2.30	0.46
9:AI:22:GLY:O	9:AI:59:PHE:N	2.48	0.46
35:BA:116:C:C4	35:BA:117:G:C5	3.03	0.46
49:BR:26:LYS:HA	49:BR:70:LEU:HD22	1.97	0.46
35:BA:2355:C:C2'	35:BA:2355:C:O2	2.59	0.46
17:AQ:67:LYS:HA	17:AQ:70:ARG:NH1	2.28	0.46
2:AB:31:TYR:CD1	2:AB:31:TYR:N	2.81	0.46
9:AI:15:ALA:O	9:AI:17:VAL:HG23	2.15	0.46
35:BA:2152:G:C5	35:BA:2153:G:C8	3.03	0.46
35:BA:2852:G:H2'	35:BA:2853:C:H6	1.70	0.46
35:BA:2356:C:C5	35:BA:2357:U:C4	3.02	0.46
41:BG:115:ARG:NH2	41:BG:136:ARG:CD	2.79	0.46
51:BT:83:ILE:O	51:BT:84:GLN:O	2.34	0.46
1:AA:817:C:N4	1:AA:819:A:C4	2.83	0.46
35:BA:1479:G:H2'	35:BA:1480:G:O4'	2.15	0.46
35:BA:714:U:H2'	35:BA:715:G:H3'	1.97	0.46
38:BD:274:ARG:CG	38:BD:274:ARG:NH1	2.78	0.46
57:BZ:3:TYR:CD1	57:BZ:3:TYR:N	2.83	0.46
24:AY:334:VAL:O	24:AY:334:VAL:HG12	2.15	0.46
35:BA:519:U:H2'	35:BA:520:G:C8	2.50	0.46
1:AA:269:C:H2'	1:AA:270:A:C8	2.49	0.46
35:BA:1281:G:H2'	35:BA:1282:U:C6	2.49	0.46
35:BA:280:C:H3'	35:BA:281:G:C8	2.51	0.46
49:BR:66:VAL:C	49:BR:68:ARG:N	2.65	0.46
42:BH:139:GLN:HG3	42:BH:140:LYS:N	2.30	0.46
24:AY:171:TRP:O	24:AY:182:VAL:CA	2.62	0.46
24:AY:14:ARG:CD	24:AY:276:ALA:HB1	2.46	0.46
35:BA:1257:C:H4'	40:BF:83:PHE:CE1	2.51	0.46
35:BA:1327:C:N4	35:BA:1328:G:C6	2.84	0.46
35:BA:2000:G:N3	35:BA:2001:A:C8	2.83	0.46
35:BA:2009:G:C4'	54:BW:40:ASN:ND2	2.79	0.46
35:BA:961:C:C4	35:BA:2031:A:N3	2.83	0.46
35:BA:28:A:H1'	35:BA:513:A:C6	2.51	0.46
35:BA:772:C:O2'	35:BA:773:U:H5'	2.15	0.46
35:BA:1902:C:H5'	38:BD:246:PRO:CD	2.45	0.46
35:BA:1902:C:H4'	38:BD:246:PRO:HD3	1.97	0.46
39:BE:111:ARG:NH1	39:BE:160:TYR:CE2	2.83	0.46
40:BF:66:PRO:C	40:BF:68:LYS:N	2.69	0.46
45:BN:26:LEU:O	45:BN:30:ILE:CG1	2.56	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:831:G:O3'	47:BP:40:SER:CB	2.64	0.46
52:BU:97:ASP:HA	52:BU:100:VAL:HG23	1.98	0.46
52:BU:65:ILE:CD1	52:BU:96:ALA:CB	2.94	0.46
46:BO:14:THR:HG22	46:BO:95:GLY:H	1.79	0.46
8:AH:1:MET:HE1	8:AH:3:THR:CG2	2.45	0.46
1:AA:562:C:H1'	12:AL:15:ARG:HD2	1.98	0.46
53:BV:29:PRO:HG2	53:BV:30:GLY:H	1.81	0.46
53:BV:60:GLU:HB3	53:BV:95:LEU:HB3	1.96	0.46
53:BV:95:LEU:CD1	53:BV:97:LYS:NZ	2.78	0.46
1:AA:892:A:C2	1:AA:907:A:C2	3.03	0.46
2:AB:204:ASN:ND2	2:AB:205:ASP:N	2.61	0.46
35:BA:2249:U:H1'	35:BA:2275:C:N4	2.30	0.46
35:BA:906:G:C4'	48:BQ:67:ARG:HH22	2.28	0.46
1:AA:978:A:C6	1:AA:1318:A:N7	2.83	0.46
3:AC:16:ARG:NH2	3:AC:183:ASP:HA	2.30	0.46
10:AJ:16:LEU:HD23	10:AJ:94:VAL:CG1	2.44	0.46
14:AN:31:ARG:O	14:AN:32:SER:OG	2.33	0.46
27:B2:29:LYS:NZ	27:B2:57:ILE:HG21	2.29	0.46
9:AI:49:PRO:C	9:AI:51:ARG:N	2.69	0.46
40:BF:154:VAL:HG13	40:BF:191:ARG:CB	2.45	0.46
35:BA:1349:A:N6	35:BA:1598:C:N4	2.64	0.46
1:AA:686:U:O4	1:AA:703:G:H1'	2.16	0.46
11:AK:63:LEU:HA	11:AK:66:LEU:CG	2.45	0.46
37:BC:142:ALA:HB1	37:BC:162:GLU:CD	2.36	0.46
37:BC:55:ASP:C	37:BC:56:GLN:HG3	2.35	0.46
29:B4:9:LEU:CD2	29:B4:26:SER:HA	2.44	0.46
1:AA:495:A:O2'	1:AA:496:A:H2'	2.16	0.46
1:AA:110:C:C2	1:AA:111:G:C8	3.03	0.46
42:BH:68:THR:HG23	42:BH:72:ILE:HB	1.98	0.46
5:AE:20:GLN:CG	5:AE:21:ALA:N	2.65	0.46
38:BD:133:LEU:CD2	38:BD:191:ALA:HB2	2.43	0.46
47:BP:67:MET:C	47:BP:69:GLY:H	2.19	0.46
1:AA:712:A:H2'	1:AA:713:G:O4'	2.15	0.46
35:BA:1416:G:N3	35:BA:1417:C:C4	2.84	0.46
35:BA:2111:C:C2	35:BA:2147:G:N2	2.83	0.46
35:BA:2181:G:H2'	35:BA:2182:G:H8	1.81	0.46
1:AA:1001(A):G:H2'	1:AA:1002:G:O4'	2.15	0.46
35:BA:1993:U:H4'	39:BE:128:SER:HG	1.78	0.46
1:AA:1497:G:C2'	1:AA:1498:U:C5'	2.92	0.46
2:AB:30:ARG:C	2:AB:32:ILE:N	2.68	0.46
2:AB:127:ILE:C	2:AB:135:GLN:HE22	2.19	0.46
42:BH:107:VAL:O	42:BH:107:VAL:CG2	2.62	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:61:LYS:O	4:AD:61:LYS:HG2	2.16	0.46
55:BX:18:TYR:C	55:BX:20:GLY:N	2.60	0.46
1:AA:377:G:H5''	16:AP:24:ALA:O	2.15	0.46
35:BA:1388:G:C2'	35:BA:1389:G:H5'	2.46	0.46
1:AA:1242:C:O2'	1:AA:1243:C:C5'	2.62	0.46
1:AA:945:G:N2	1:AA:1337:G:H21	2.13	0.46
35:BA:1051:G:N2	35:BA:1108:U:C5	2.83	0.46
8:AH:22:GLU:O	8:AH:63:LEU:CD2	2.63	0.46
10:AJ:28:ARG:C	10:AJ:30:SER:N	2.68	0.46
24:AY:115:ALA:HB2	24:AY:148:ILE:HB	1.97	0.46
42:BH:145:ALA:CB	42:BH:164:TYR:OH	2.63	0.46
8:AH:40:ALA:CA	8:AH:45:ILE:HG13	2.46	0.46
1:AA:995:C:HO2'	1:AA:996:A:P	2.37	0.46
1:AA:166:G:C2	1:AA:167:G:C4	3.04	0.46
24:AY:393:PHE:HB3	24:AY:394:ALA:H	1.18	0.46
7:AG:12:LEU:HD13	7:AG:25:ALA:HB2	1.98	0.46
24:AY:425:VAL:HG11	24:AY:445:GLN:HG3	1.94	0.46
24:AY:438:VAL:O	24:AY:446:PHE:CE2	2.68	0.46
24:AY:457:TYR:HB3	24:AY:459:VAL:HG22	1.98	0.46
37:BC:104:LEU:O	37:BC:105:ASP:CB	2.63	0.46
1:AA:951:G:C2'	1:AA:952:U:O5'	2.64	0.46
1:AA:1405:G:C1'	1:AA:1519:A:H4'	2.44	0.46
1:AA:1516:G:N3	1:AA:1518:A:OP2	2.48	0.46
35:BA:1005:C:C2	35:BA:1006:C:C5	3.04	0.46
35:BA:1200:C:C2	35:BA:1246:A:C2	3.03	0.46
35:BA:2043:C:C4	35:BA:2777:G:C2	3.04	0.46
35:BA:2365:G:O2'	35:BA:2366:A:H8	1.95	0.46
35:BA:2031:A:N6	35:BA:2498:C:H1'	2.31	0.46
35:BA:2718:G:OP1	51:BT:100:TYR:CD2	2.64	0.46
35:BA:2771:C:H2'	35:BA:2772:C:C6	2.51	0.46
35:BA:564:C:OP1	53:BV:77:ALA:CB	2.63	0.46
38:BD:6:PHE:HE1	38:BD:13:ARG:HH21	1.52	0.46
38:BD:241:PRO:O	38:BD:242:ARG:C	2.53	0.46
39:BE:184:VAL:O	39:BE:186:GLY:N	2.48	0.46
45:BN:62:VAL:CG1	45:BN:62:VAL:O	2.61	0.46
47:BP:23:PRO:HD2	47:BP:33:ARG:CZ	2.43	0.46
52:BU:83:LEU:O	52:BU:88:ILE:HG13	2.15	0.46
35:BA:2012:G:C4'	54:BW:96:ILE:HD11	2.45	0.46
1:AA:16:A:H2'	1:AA:17:U:C5'	2.44	0.46
2:AB:157:ARG:CB	2:AB:157:ARG:HH11	2.29	0.46
2:AB:68:ILE:N	2:AB:90:MET:CE	2.66	0.46
42:BH:129:THR:HB	42:BH:130:ARG:H	1.54	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1203:C:H2'	1:AA:1204:A:C8	2.32	0.46
1:AA:1360:A:C6	1:AA:1361:G:C6	3.03	0.46
3:AC:83:ARG:C	3:AC:85:ARG:H	2.18	0.46
1:AA:1202:G:O4'	14:AN:29:ARG:HD3	2.15	0.46
35:BA:486:C:H4'	54:BW:60:ASN:ND2	2.31	0.46
7:AG:18:TYR:O	7:AG:20:ASP:N	2.45	0.46
35:BA:605:C:H1'	35:BA:657:U:O2'	2.16	0.46
35:BA:1058:G:N1	35:BA:1059:G:N7	2.63	0.46
35:BA:1061:U:N3	44:BK:55:UNK:C	2.79	0.46
4:AD:98:GLU:O	4:AD:100:ARG:N	2.49	0.46
35:BA:1502:C:H5'	35:BA:1503:U:OP2	2.16	0.46
42:BH:118:PRO:O	42:BH:119:GLU:O	2.33	0.46
57:BZ:120:ILE:HG12	57:BZ:171:ILE:C	2.36	0.46
35:BA:1721:G:H8	35:BA:1741:A:H62	1.64	0.46
35:BA:2304:G:OP1	41:BG:124:SER:OG	2.30	0.46
35:BA:2309:A:C2'	35:BA:2310:A:C5'	2.94	0.46
41:BG:135:LEU:HD23	41:BG:155:MET:CG	2.46	0.46
36:BB:41:U:C2	41:BG:70:VAL:HB	2.51	0.46
1:AA:623:C:H3'	1:AA:624:C:C6	2.51	0.46
40:BF:110:LEU:C	40:BF:112:MET:N	2.68	0.46
4:AD:57:ARG:NH2	5:AE:107:ARG:NH1	2.63	0.46
1:AA:111:G:O2'	1:AA:389:A:H1'	2.15	0.46
1:AA:507:C:C6	1:AA:507:C:OP2	2.69	0.46
35:BA:1120:G:C6	35:BA:1121:C:N3	2.84	0.46
1:AA:1001:A:N3	1:AA:1001:A:C2'	2.75	0.46
1:AA:1226:C:C5	13:AM:104:ARG:HB2	2.50	0.46
9:AI:53:VAL:HG23	9:AI:55:ALA:HB3	1.96	0.46
1:AA:67:C:O2	1:AA:171:A:C2	2.55	0.46
25:B0:45:PHE:CB	25:B0:59:LEU:HD11	2.45	0.46
25:B0:38:VAL:HB	25:B0:59:LEU:HD12	1.96	0.46
56:BY:88:LYS:NZ	56:BY:93:GLY:O	2.36	0.46
13:AM:66:LEU:O	13:AM:67:GLU:C	2.53	0.46
35:BA:2585:U:O4'	35:BA:2585:U:O2	2.31	0.46
4:AD:61:LYS:HA	4:AD:203:VAL:CG2	2.38	0.46
1:AA:629:G:H2'	1:AA:630:G:H8	1.79	0.46
31:B6:15:GLU:O	31:B6:17:LYS:N	2.48	0.46
1:AA:785:G:C2'	1:AA:786:G:H5'	2.46	0.46
11:AK:82:VAL:CG2	11:AK:83:ILE:H	2.27	0.46
3:AC:108:ASN:HB3	3:AC:111:LEU:CB	2.43	0.46
17:AQ:81:ARG:O	17:AQ:83:ASP:N	2.49	0.46
1:AA:450:G:H5''	1:AA:451:A:H3'	1.97	0.46
4:AD:112:VAL:HG12	4:AD:116:GLN:NE2	2.31	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2068:U:N3	35:BA:2430:A:H2	2.13	0.46
1:AA:453:A:O2'	1:AA:454:C:H5''	2.15	0.46
1:AA:189(C):C:H2'	1:AA:189(D):C:O4'	2.15	0.46
35:BA:1501:C:H5''	35:BA:1501:C:H6	1.81	0.46
24:AY:103:LEU:HB3	24:AY:106:VAL:HG11	1.98	0.46
24:AY:225:GLN:CA	24:AY:228:ARG:CB	2.90	0.46
37:BC:131:LEU:HD22	37:BC:136:LEU:HB2	1.97	0.46
28:B3:13:ILE:HD11	35:BA:989:G:N1	2.30	0.46
32:B7:1:MET:HG2	35:BA:753:C:OP1	2.16	0.46
33:B8:3:LYS:HD3	35:BA:242:G:C5'	2.45	0.46
35:BA:1340:U:H4'	35:BA:1394:U:H1'	1.97	0.46
35:BA:1695:G:N2	35:BA:1696:G:C5	2.84	0.46
35:BA:1803:A:C3'	35:BA:1804:C:H6	2.29	0.46
35:BA:676:A:H1'	35:BA:2443:C:O4'	2.15	0.46
35:BA:2453:A:C8	35:BA:2453:A:H3'	2.51	0.46
35:BA:2048:G:O4'	35:BA:2823:A:N1	2.48	0.46
35:BA:467:G:H2'	35:BA:468:G:C8	2.51	0.46
35:BA:582:G:H2'	35:BA:583:G:H8	1.80	0.46
35:BA:972:G:C2'	35:BA:973:A:C8	2.90	0.46
38:BD:214:TRP:C	38:BD:216:GLY:N	2.66	0.46
35:BA:2076:U:H5	38:BD:244:ARG:HH22	1.60	0.46
38:BD:26:LYS:O	38:BD:27:THR:CG2	2.62	0.46
38:BD:65:ILE:HD11	38:BD:88:ARG:NH1	2.31	0.46
39:BE:46:ALA:C	39:BE:84:PHE:O	2.54	0.46
45:BN:114:ARG:O	45:BN:117:PHE:N	2.49	0.46
49:BR:102:GLU:O	49:BR:103:ARG:C	2.53	0.46
51:BT:48:ILE:N	51:BT:63:VAL:HG13	2.30	0.46
1:AA:1418:A:C2	1:AA:1483:A:C4	3.03	0.46
1:AA:1483:A:H2	35:BA:1960:A:O4'	1.99	0.46
46:BO:87:ILE:HD13	46:BO:87:ILE:N	2.30	0.46
35:BA:2739:U:O2	35:BA:2766:G:N2	2.49	0.46
1:AA:867:G:H2'	1:AA:868:C:H6	1.80	0.46
15:AO:33:THR:O	15:AO:36:ILE:HB	2.15	0.46
53:BV:32:THR:O	53:BV:33:VAL:HG13	2.15	0.46
53:BV:95:LEU:HD13	53:BV:97:LYS:CE	2.46	0.46
1:AA:1084:G:OP1	1:AA:1086:U:C4	2.69	0.46
2:AB:221:LEU:HD13	2:AB:225:ALA:HB2	1.97	0.46
2:AB:224:GLN:O	2:AB:225:ALA:C	2.54	0.46
2:AB:64:ARG:HG2	2:AB:65:GLY:N	2.30	0.46
48:BQ:106:VAL:O	48:BQ:107:ALA:CB	2.64	0.46
35:BA:952:G:P	48:BQ:16:ARG:HH22	2.39	0.46
48:BQ:51:ARG:O	48:BQ:55:VAL:HG12	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:75:G:C2'	57:BZ:85:HIS:CE1	2.92	0.46
12:AL:89:ARG:HD2	12:AL:91:LYS:N	2.30	0.46
1:AA:1049:U:O2	1:AA:1201:A:C5	2.69	0.46
3:AC:128:PHE:O	3:AC:129:ALA:C	2.54	0.46
1:AA:1059:C:O3'	14:AN:45:ARG:NH2	2.49	0.46
14:AN:53:LEU:HB3	14:AN:56:VAL:CG2	2.34	0.46
19:AS:11:VAL:HA	19:AS:38:SER:CB	2.46	0.46
56:BY:46:LYS:CG	56:BY:47:LYS:N	2.79	0.46
56:BY:31:LEU:HB2	56:BY:32:PRO:CA	2.45	0.46
11:AK:57:THR:HG22	11:AK:60:ALA:HB2	1.98	0.46
37:BC:59:ARG:NE	37:BC:164:ARG:CD	2.78	0.46
35:BA:2309:A:H2'	35:BA:2310:A:H5'	1.96	0.46
40:BF:33:LEU:CD2	40:BF:33:LEU:H	2.29	0.46
1:AA:110:C:O2'	1:AA:111:G:H5'	2.16	0.46
45:BN:123:TYR:CD1	45:BN:123:TYR:N	2.84	0.46
54:BW:26:GLY:O	54:BW:27:LYS:HG3	2.14	0.46
31:B6:27:LYS:O	31:B6:27:LYS:HG3	2.15	0.46
1:AA:1520:G:H2'	1:AA:1521:G:H8	1.80	0.46
6:AF:98:LEU:H	6:AF:98:LEU:CD1	1.96	0.46
5:AE:77:PRO:HG2	5:AE:142:LEU:CD2	2.44	0.46
24:AY:122:ARG:O	24:AY:123:THR:C	2.52	0.46
36:BB:67:G:C2	36:BB:68:C:C5	3.03	0.46
50:BS:35:ILE:C	50:BS:36:TYR:HD1	2.19	0.46
13:AM:15:VAL:HG13	13:AM:44:ARG:O	2.15	0.46
51:BT:58:ASN:ND2	51:BT:58:ASN:N	2.30	0.46
1:AA:986:A:N1	1:AA:1220:G:C6	2.84	0.46
19:AS:77:THR:HG23	19:AS:78:ARG:H	1.81	0.46
1:AA:1250:A:O2'	9:AI:68:GLY:HA2	2.16	0.46
42:BH:154:PRO:O	42:BH:155:SER:HB3	2.16	0.46
22:AV:27:U:H2'	22:AV:28:C:H5''	1.92	0.46
35:BA:848:G:H5'	35:BA:848:G:C8	2.49	0.46
42:BH:12:PRO:CD	42:BH:15:VAL:CG1	2.93	0.46
31:B6:15:GLU:OE1	31:B6:18:ARG:NE	2.49	0.46
7:AG:126:ASP:OD1	7:AG:126:ASP:N	2.47	0.46
57:BZ:7:ALA:O	57:BZ:61:LEU:HA	2.15	0.46
28:B3:25:ALA:HA	35:BA:849:A:N1	2.30	0.46
36:BB:112:U:H2'	36:BB:113:G:H8	1.81	0.46
42:BH:18:GLU:HG3	42:BH:25:LYS:HB2	1.97	0.46
1:AA:431:A:H2'	1:AA:432:A:H8	1.80	0.46
24:AY:498:GLY:O	24:AY:499:ASP:CB	2.63	0.46
35:BA:2156:G:OP2	35:BA:2156:G:H8	1.98	0.46
1:AA:921:U:O2	5:AE:19:MET:HB2	2.16	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:184:HIS:CE1	24:AY:191:TYR:OH	2.68	0.46
24:AY:287:ARG:HH21	24:AY:289:VAL:HG13	1.81	0.46
24:AY:105:ALA:O	24:AY:319:ARG:NH1	2.49	0.46
24:AY:457:TYR:HB2	24:AY:459:VAL:CG2	2.36	0.46
24:AY:4:SER:CB	24:AY:7:LEU:HD12	2.43	0.46
24:AY:99:THR:O	24:AY:100:TYR:C	2.53	0.46
1:AA:777:A:C2'	1:AA:778:G:O5'	2.64	0.46
30:B5:10:LYS:O	30:B5:11:THR:C	2.54	0.46
35:BA:1018:C:C2'	35:BA:1019:U:H5'	2.46	0.46
35:BA:1289:C:H4'	35:BA:1330:C:C1'	2.46	0.46
35:BA:1378:A:C8	35:BA:1380:G:C6	3.04	0.46
35:BA:1267:U:H5	35:BA:2012:G:C2	2.33	0.46
35:BA:2570:G:O2'	35:BA:2571:C:H5'	2.16	0.46
35:BA:573:G:OP2	53:BV:78:LYS:NZ	2.48	0.46
35:BA:957:A:N7	35:BA:959:A:C5	2.84	0.46
35:BA:971:C:O2'	35:BA:983:A:H1'	2.16	0.46
38:BD:183:ARG:HH21	38:BD:269:PHE:HD2	1.64	0.46
35:BA:2053:G:H4'	39:BE:145:LYS:HD3	1.98	0.46
39:BE:199:ARG:CG	39:BE:200:GLU:H	2.28	0.46
40:BF:95:ARG:NH2	40:BF:97:TYR:OH	2.49	0.46
51:BT:35:LYS:NZ	51:BT:41:ARG:CD	2.78	0.46
52:BU:85:LYS:C	52:BU:87:GLY:H	2.19	0.46
35:BA:1187:G:C5'	53:BV:81:TYR:CE1	2.96	0.46
8:AH:92:ARG:HB2	8:AH:94:TYR:CE1	2.50	0.46
6:AF:46:ARG:NH2	18:AR:37:VAL:HG22	2.31	0.46
35:BA:1124:C:H2'	35:BA:1125:G:O4'	2.16	0.46
2:AB:15:VAL:C	2:AB:16:HIS:CG	2.89	0.46
2:AB:87:ARG:HH11	2:AB:223:ILE:CD1	2.14	0.46
35:BA:2396:G:N1	35:BA:2421:G:C6	2.84	0.46
35:BA:955:C:C5	35:BA:956:G:C8	3.04	0.46
1:AA:1267:C:O2	21:AU:20:LYS:HD2	2.15	0.46
12:AL:92:ASP:C	12:AL:93:LEU:HD23	2.35	0.46
1:AA:1117:G:C6	1:AA:1184:G:C6	3.03	0.46
56:BY:12:THR:CG2	56:BY:75:ILE:HG21	2.46	0.46
56:BY:79:CYS:SG	56:BY:80:GLY:N	2.89	0.46
27:B2:50:ILE:CG2	27:B2:51:ARG:N	2.62	0.46
35:BA:71:A:OP1	35:BA:112:U:O2'	2.27	0.46
40:BF:8:GLN:O	40:BF:10:PRO:HD3	2.14	0.46
40:BF:195:ASP:H	40:BF:198:ALA:HB3	1.81	0.46
1:AA:686:U:O2	11:AK:42:TRP:HZ2	1.99	0.46
7:AG:108:ALA:HB2	7:AG:123:GLU:CB	2.46	0.46
40:BF:33:LEU:N	40:BF:33:LEU:CD2	2.78	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:107:ARG:C	5:AE:109:ILE:H	2.19	0.46
5:AE:99:GLY:O	5:AE:118:ILE:N	2.43	0.46
8:AH:31:PHE:CE1	8:AH:118:VAL:HG21	2.51	0.46
35:BA:2173:A:C2'	35:BA:2173:A:N3	2.79	0.46
35:BA:2106:G:H2'	35:BA:2107:C:H1'	1.97	0.46
1:AA:1460:A:H2'	1:AA:1461:G:O4'	2.16	0.46
1:AA:67:C:O2'	1:AA:171:A:H1'	2.16	0.46
25:B0:23:VAL:HG22	25:B0:38:VAL:HG22	1.97	0.46
13:AM:30:ALA:C	13:AM:32:GLU:H	2.19	0.46
35:BA:2078:C:H2'	35:BA:2079:U:O4'	2.15	0.46
33:B8:52:LYS:N	33:B8:53:PRO:CD	2.76	0.46
34:B9:24:TYR:CE2	34:B9:35:ARG:HG3	2.49	0.46
42:BH:154:PRO:CB	42:BH:161:GLY:HA3	2.42	0.46
1:AA:894:G:O2'	1:AA:895:G:H5'	2.16	0.46
36:BB:10:C:N3	36:BB:11:C:C5	2.84	0.46
35:BA:1624:G:C5	35:BA:1625:C:C5	3.03	0.46
31:B6:18:ARG:CG	31:B6:19:ARG:H	2.20	0.46
35:BA:2801(A):A:H4'	35:BA:2802:G:C2'	2.45	0.46
5:AE:148:VAL:HG12	5:AE:149:GLU:N	2.31	0.46
28:B3:21:ALA:O	28:B3:25:ALA:HB2	2.16	0.46
12:AL:76:ASN:CG	12:AL:76:ASN:O	2.54	0.46
1:AA:816:A:OP1	1:AA:1526:G:O2'	2.33	0.46
39:BE:103:ASP:OD2	39:BE:202:LYS:CE	2.64	0.46
15:AO:14:GLU:CG	15:AO:15:PHE:CE1	2.99	0.46
4:AD:23:GLY:HA3	4:AD:112:VAL:O	2.15	0.46
35:BA:2068:U:H5'	35:BA:2069:G:H5''	1.97	0.46
45:BN:10:GLU:CD	45:BN:11:PRO:HD2	2.36	0.46
41:BG:166:ASP:C	41:BG:168:GLU:N	2.69	0.46
40:BF:62:ARG:NH1	40:BF:62:ARG:HG2	2.31	0.46
35:BA:401:A:H2'	35:BA:402:A:C8	2.50	0.46
37:BC:133:PRO:C	37:BC:135:GLY:H	2.19	0.46
1:AA:1443:G:H2'	1:AA:1443:G:N3	2.31	0.46
35:BA:298:G:H8	35:BA:298:G:H5''	1.81	0.46
41:BG:18:GLU:OE1	41:BG:18:GLU:HA	2.16	0.46
8:AH:50:ARG:O	8:AH:51:VAL:HG13	2.16	0.46
24:AY:327:LYS:CD	24:AY:357:GLU:HG3	2.45	0.46
24:AY:331:LEU:CB	24:AY:379:PHE:CD2	2.95	0.46
1:AA:949:A:C5	1:AA:950:U:C5	3.04	0.46
35:BA:1260:G:C5	35:BA:1261:C:C5	3.04	0.46
35:BA:1696:G:H2'	35:BA:1697:G:O4'	2.15	0.46
35:BA:1701:A:H5'	35:BA:1702:G:OP2	2.16	0.46
35:BA:530:G:N2	35:BA:2021:C:H1'	2.31	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2348:U:C2'	35:BA:2349:G:H5'	2.46	0.46
35:BA:2443:C:C6	35:BA:2443:C:H3'	2.49	0.46
35:BA:2822:G:H5''	39:BE:159:HIS:NE2	2.31	0.46
35:BA:528:A:H3'	35:BA:528:A:H8	1.81	0.46
35:BA:558:G:OP1	45:BN:110:GLY:HA3	2.16	0.46
35:BA:568:U:P	35:BA:945:A:H61	2.39	0.46
32:B7:3:ARG:NH2	35:BA:789:A:C2	2.84	0.46
35:BA:957:A:OP1	48:BQ:77:LYS:HB2	2.16	0.46
35:BA:963:U:C2	35:BA:964:C:C5	3.04	0.46
38:BD:218:ARG:O	38:BD:219:PRO:C	2.54	0.46
39:BE:44:TYR:O	39:BE:45:THR:CB	2.63	0.46
39:BE:4:ILE:H	39:BE:81:ILE:HD11	1.80	0.46
45:BN:59:LYS:O	45:BN:60:ILE:C	2.54	0.46
35:BA:831:G:O3'	47:BP:40:SER:HB2	2.16	0.46
51:BT:66:VAL:O	51:BT:66:VAL:HG23	2.16	0.46
52:BU:112:ARG:O	52:BU:115:ALA:CB	2.63	0.46
52:BU:45:TYR:O	52:BU:48:ALA:HB3	2.15	0.46
52:BU:74:LEU:CD1	52:BU:75:ASN:N	2.79	0.46
54:BW:29:LEU:HD23	54:BW:33:ARG:HH11	1.80	0.46
35:BA:1949:G:H2'	35:BA:1950:G:C8	2.50	0.46
1:AA:661:G:N2	1:AA:745:C:C2	2.84	0.46
48:BQ:127:ILE:HG13	48:BQ:128:LYS:O	2.15	0.46
35:BA:247:G:OP2	35:BA:249:C:H5	1.99	0.46
35:BA:2332:U:H4'	35:BA:2336:A:N6	2.31	0.46
48:BQ:1:MET:HG3	48:BQ:2:LEU:N	2.31	0.46
48:BQ:43:THR:O	48:BQ:46:GLN:HB2	2.16	0.46
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.16	0.46
12:AL:24:VAL:HG12	12:AL:26:ALA:HB2	1.97	0.46
1:AA:1178:G:N7	9:AI:97:LYS:NZ	2.53	0.46
1:AA:1190:G:H5'	1:AA:1191:A:OP2	2.16	0.46
1:AA:1359:C:P	14:AN:22:THR:HG21	2.54	0.46
3:AC:52:LEU:HD23	3:AC:52:LEU:H	1.81	0.46
40:BF:179:GLU:C	40:BF:181:LEU:N	2.69	0.46
35:BA:1059:G:OP2	44:BK:1:UNK:CB	2.64	0.46
35:BA:1348:G:C6	35:BA:1349:A:N1	2.84	0.46
11:AK:57:THR:CG2	11:AK:60:ALA:CB	2.94	0.46
11:AK:62:GLN:O	11:AK:65:ALA:N	2.49	0.46
7:AG:34:GLY:C	7:AG:36:LYS:N	2.68	0.46
35:BA:2850:A:H2'	35:BA:2851:A:C8	2.51	0.46
35:BA:2850:A:H2'	35:BA:2851:A:O4'	2.16	0.46
37:BC:66:HIS:CE1	37:BC:184:LYS:HZ3	2.34	0.46
5:AE:94:ALA:HB1	5:AE:98:THR:CG2	2.43	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1363:C:H5'	1:AA:1363(A):A:O5'	2.16	0.46
35:BA:2115:G:H4'	35:BA:2167:U:O2	2.15	0.46
36:BB:58:A:C8	36:BB:59:A:N7	2.84	0.46
41:BG:107:LEU:HD11	41:BG:178:PHE:CE1	2.48	0.46
9:AI:10:ARG:CG	9:AI:75:ASP:HB3	2.34	0.46
9:AI:22:GLY:HA3	9:AI:60:ASP:CG	2.35	0.46
35:BA:1511:C:C5	35:BA:1512:U:C5	3.04	0.46
1:AA:948:C:H42	1:AA:1233:G:H1	1.64	0.46
13:AM:30:ALA:O	13:AM:33:ALA:HB3	2.16	0.46
2:AB:131:PRO:HG2	2:AB:134:GLU:HB2	1.97	0.46
36:BB:116:G:C2	36:BB:117:G:C8	3.04	0.46
43:BJ:55:UNK:O	43:BJ:84:UNK:N	2.48	0.46
47:BP:122:PRO:HA	47:BP:141:ALA:O	2.15	0.46
4:AD:200:GLU:O	4:AD:201:GLN:C	2.53	0.46
3:AC:139:GLN:NE2	3:AC:143:GLU:CD	2.65	0.46
51:BT:132:LYS:CE	51:BT:132:LYS:H	2.29	0.46
35:BA:1334:G:H2'	35:BA:1335:U:C6	2.50	0.46
35:BA:1392:A:C6	35:BA:1393:A:C6	3.03	0.46
35:BA:132:G:C2'	35:BA:133:C:O4'	2.63	0.46
17:AQ:81:ARG:C	17:AQ:83:ASP:N	2.69	0.46
11:AK:111:ASP:O	11:AK:111:ASP:OD1	2.34	0.46
11:AK:73:MET:HG2	11:AK:103:LEU:HD11	1.97	0.46
35:BA:2341:G:H2'	35:BA:2342:C:C6	2.51	0.46
27:B2:3:LEU:CD2	27:B2:7:ARG:HH12	2.29	0.46
4:AD:46:LYS:O	4:AD:47:ARG:C	2.55	0.46
24:AY:131:ARG:HG2	24:AY:131:ARG:NH1	2.30	0.46
24:AY:69:SER:N	58:AY:1000:GCP:O3G	2.49	0.46
24:AY:76:GLN:CG	24:AY:85:ASN:ND2	2.79	0.46
9:AI:127:LYS:CG	9:AI:128:ARG:N	2.75	0.46
35:BA:1139:G:OP1	45:BN:102:ALA:HA	2.16	0.46
35:BA:1142(A):A:H5'	35:BA:1142(A):A:H8	1.79	0.46
35:BA:1155:A:C2	35:BA:1157:G:C8	3.04	0.46
35:BA:1614:A:C2	35:BA:1615:C:C5	3.04	0.46
35:BA:1824:G:O2'	35:BA:1825:A:H5'	2.16	0.46
35:BA:1832:C:C5	35:BA:1833:U:C5	3.04	0.46
35:BA:1906:G:C2	35:BA:1907:G:C4	3.04	0.46
35:BA:1925:C:O2'	35:BA:1926:U:H6	1.94	0.46
35:BA:1998:G:H2'	35:BA:1999:C:H5'	1.98	0.46
35:BA:2407:G:H2'	35:BA:2408:U:H6	1.81	0.46
33:B8:3:LYS:CD	35:BA:242:G:O5'	2.52	0.46
35:BA:2849:U:O2	35:BA:2866:U:H1'	2.16	0.46
35:BA:556:G:C6	35:BA:557:U:O4	2.69	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:660:G:O2'	35:BA:661:C:H5'	2.16	0.46
35:BA:941:A:N1	35:BA:942:G:C2	2.84	0.46
38:BD:213:ARG:O	38:BD:216:GLY:N	2.45	0.46
38:BD:227:ASN:HB3	38:BD:228:PRO:HD2	1.98	0.46
35:BA:1826:G:C4'	38:BD:242:ARG:HH21	2.28	0.46
39:BE:156:MET:HB3	39:BE:157:ALA:H	1.41	0.46
39:BE:179:GLU:O	39:BE:180:ASN:CB	2.64	0.46
40:BF:57:VAL:CG1	40:BF:58:ALA:N	2.79	0.46
45:BN:97:ARG:HA	45:BN:100:GLU:CG	2.46	0.46
45:BN:99:LEU:HA	45:BN:102:ALA:HB3	1.98	0.46
35:BA:246:C:H5'	47:BP:71:VAL:HG23	1.98	0.46
35:BA:1987:G:C2	35:BA:1988:C:C2	3.04	0.46
35:BA:1988:C:O2'	35:BA:1989:G:H5'	2.16	0.46
35:BA:2740:A:C6	35:BA:2741:A:C6	3.04	0.46
35:BA:2743:C:C2	35:BA:2762:G:N2	2.84	0.46
15:AO:12:ILE:HD11	15:AO:31:LEU:CD2	2.45	0.46
15:AO:39:LEU:HB2	15:AO:56:LEU:HD21	1.87	0.46
15:AO:66:LEU:O	15:AO:67:LEU:C	2.52	0.46
17:AQ:34:LYS:O	17:AQ:36:ILE:HG12	2.15	0.46
34:B9:11:CYS:SG	34:B9:12:ASP:N	2.89	0.46
35:BA:2475:C:H2'	35:BA:2477:C:OP1	2.15	0.46
35:BA:2787:C:O2	35:BA:2787:C:C2'	2.63	0.46
48:BQ:31:ASP:O	48:BQ:32:TYR:CG	2.69	0.46
57:BZ:23:LYS:HA	57:BZ:40:ASP:HA	1.98	0.46
13:AM:97:PRO:HA	13:AM:110:ARG:HD3	1.98	0.46
12:AL:85:ILE:CG2	12:AL:86:ARG:N	2.79	0.46
1:AA:1203:C:C5	1:AA:1204:A:N7	2.83	0.46
3:AC:21:ARG:O	3:AC:22:TRP:HD1	1.98	0.46
9:AI:112:LYS:CD	9:AI:112:LYS:C	2.75	0.46
14:AN:33:VAL:HA	14:AN:39:LEU:O	2.16	0.46
4:AD:20:TYR:O	4:AD:21:LEU:HD23	2.16	0.46
40:BF:139:PHE:O	40:BF:140:LEU:C	2.55	0.46
12:AL:129:ALA:N	24:AY:487:ARG:HH12	2.13	0.46
4:AD:141:ARG:O	4:AD:185:PHE:HD2	1.98	0.46
35:BA:2818:G:O2'	35:BA:2837:G:H5'	2.16	0.46
49:BR:18:LEU:HD11	49:BR:22:ARG:NE	2.31	0.46
7:AG:103:TRP:O	7:AG:104:LEU:C	2.54	0.46
5:AE:107:ARG:O	5:AE:109:ILE:N	2.49	0.46
1:AA:61:G:H4'	1:AA:386:C:O2'	2.16	0.46
31:B6:29:ASN:O	31:B6:30:THR:C	2.53	0.46
24:AY:122:ARG:NE	24:AY:122:ARG:HA	2.31	0.46
13:AM:16:ASP:HB3	13:AM:34:LEU:CD1	2.47	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2143:C:OP1	35:BA:2182:G:H4'	2.16	0.46
1:AA:1000:U:N3	1:AA:1042:G:N2	2.64	0.46
20:AT:74:LYS:HG2	20:AT:75:ASN:H	1.80	0.46
1:AA:1424:C:O2'	1:AA:1425:U:H5'	2.16	0.46
1:AA:1498:U:C5	23:AX:17:U:H4'	2.50	0.46
1:AA:275:G:C4	1:AA:276:G:C8	3.04	0.46
1:AA:276:G:O2'	17:AQ:68:ARG:NH1	2.49	0.46
33:B8:22:VAL:HG21	33:B8:53:PRO:CB	2.46	0.46
1:AA:896:C:C6	1:AA:896:C:H3'	2.50	0.46
4:AD:60:GLU:HG2	4:AD:202:LEU:HB2	1.98	0.46
35:BA:2791:C:H4'	35:BA:2792:G:O5'	2.15	0.46
35:BA:1385:G:C4	35:BA:1386:C:C5	3.04	0.46
51:BT:131:ALA:C	51:BT:133:GLU:N	2.67	0.46
25:B0:24:LYS:O	25:B0:25:ARG:HD3	2.16	0.46
57:BZ:177:PRO:O	57:BZ:178:GLU:HG2	2.15	0.46
35:BA:718:A:C2'	35:BA:719:C:H5'	2.46	0.46
35:BA:1764:G:C2	35:BA:1765:C:C2	3.04	0.46
1:AA:683:G:C6	1:AA:684:A:C6	3.04	0.46
1:AA:994:A:C2	1:AA:995:C:C5	3.04	0.46
1:AA:998:G:C6	1:AA:999:C:N4	2.84	0.46
35:BA:2748:A:H2	42:BH:63:SER:HG	1.60	0.46
24:AY:90:PRO:CD	24:AY:90:PRO:O	2.63	0.45
9:AI:126:SER:O	9:AI:128:ARG:HD2	2.16	0.45
1:AA:775:G:N2	1:AA:776:G:H1'	2.31	0.45
28:B3:11:SER:HB2	35:BA:988:A:C5'	2.46	0.45
33:B8:6:THR:HG21	33:B8:63:PRO:HD3	1.98	0.45
35:BA:1380:G:H2'	35:BA:1381:G:H8	1.81	0.45
35:BA:1925:C:O2	35:BA:1925:C:C2'	2.64	0.45
35:BA:2072:G:N1	35:BA:2438:U:C4	2.84	0.45
35:BA:2438:U:OP1	35:BA:2600:A:H5'	2.16	0.45
35:BA:579:G:C6	35:BA:580:C:N4	2.84	0.45
35:BA:687:C:C2'	35:BA:688:U:H5'	2.46	0.45
35:BA:986:C:C2'	35:BA:987:G:H5'	2.46	0.45
38:BD:33:LEU:HD13	38:BD:102:LYS:HD2	1.99	0.45
38:BD:89:SER:OG	38:BD:201:HIS:HD2	1.99	0.45
35:BA:2053:G:O3'	39:BE:145:LYS:HD3	2.16	0.45
39:BE:45:THR:O	39:BE:46:ALA:CB	2.63	0.45
47:BP:23:PRO:HG2	47:BP:33:ARG:HE	1.81	0.45
46:BO:37:ASP:O	46:BO:61:VAL:HG23	2.16	0.45
1:AA:19:C:O2	1:AA:572:A:H2	1.99	0.45
1:AA:861:G:N2	1:AA:872:A:C8	2.84	0.45
15:AO:42:HIS:CD2	15:AO:42:HIS:O	2.63	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:82:ILE:HD11	15:AO:87:ILE:HG13	1.98	0.45
18:AR:33:ASP:O	18:AR:36:ASN:OD1	2.34	0.45
23:AX:14:A:H2'	23:AX:15:A:H5''	1.97	0.45
28:B3:52:HIS:CE1	36:BB:83:G:C5'	2.99	0.45
35:BA:2435:A:H2'	35:BA:2436:G:O5'	2.15	0.45
35:BA:910:A:H62	48:BQ:13:GLN:H	1.64	0.45
48:BQ:16:ARG:CG	48:BQ:17:LEU:N	2.79	0.45
57:BZ:10:ARG:HB3	57:BZ:36:LYS:CG	2.38	0.45
22:AV:52:G:C6	22:AV:63:G:C6	3.04	0.45
22:AV:69:C:HO2'	22:AV:70:G:H5''	1.75	0.45
21:AU:17:THR:O	21:AU:22:ARG:HD3	2.16	0.45
56:BY:27:VAL:HG12	56:BY:28:LYS:N	2.31	0.45
27:B2:57:ILE:O	27:B2:58:ALA:O	2.33	0.45
27:B2:25:VAL:HG21	27:B2:60:LEU:HB3	1.97	0.45
35:BA:83:G:N2	35:BA:103:A:OP2	2.50	0.45
40:BF:162:LEU:HD12	40:BF:162:LEU:N	2.26	0.45
19:AS:51:VAL:CG1	19:AS:75:ALA:CB	2.94	0.45
37:BC:40:THR:HA	37:BC:177:LYS:CA	2.38	0.45
37:BC:4:GLY:C	37:BC:6:ARG:N	2.69	0.45
1:AA:939:G:OP1	7:AG:95:ARG:NH2	2.46	0.45
7:AG:102:ARG:HG2	7:AG:106:GLN:HE21	1.81	0.45
35:BA:2304:G:N2	35:BA:2313:C:C2	2.84	0.45
35:BA:2303:G:N2	35:BA:2314:C:C2	2.84	0.45
41:BG:95:ARG:O	41:BG:96:ARG:O	2.33	0.45
5:AE:107:ARG:CG	5:AE:108:ALA:N	2.78	0.45
20:AT:10:LEU:O	20:AT:12:ALA:N	2.49	0.45
26:B1:76:ARG:HB3	35:BA:271(Q):G:O3'	2.17	0.45
24:AY:19:ILE:HB	24:AY:126:LEU:HB3	1.97	0.45
24:AY:19:ILE:CG1	24:AY:19:ILE:O	2.65	0.45
50:BS:38:GLN:C	50:BS:39:ILE:HG13	2.36	0.45
35:BA:804:A:H2'	35:BA:806:C:C4	2.51	0.45
54:BW:5:ALA:O	54:BW:6:ILE:CB	2.64	0.45
28:B3:4:LEU:O	28:B3:36:VAL:CA	2.61	0.45
1:AA:220:G:H2'	1:AA:221:C:H5'	1.97	0.45
35:BA:575:A:C2'	35:BA:576:U:O5'	2.64	0.45
13:AM:65:LYS:HD3	13:AM:69:GLU:O	2.16	0.45
2:AB:29:ALA:O	2:AB:32:ILE:CG2	2.62	0.45
42:BH:94:TYR:O	42:BH:95:ARG:HG3	2.16	0.45
35:BA:2063:C:O2	35:BA:2451:A:C2	2.68	0.45
35:BA:2376:A:C2	35:BA:2377:A:H1'	2.51	0.45
35:BA:1084:A:OP1	43:BJ:54:UNK:O	2.35	0.45
35:BA:2648:C:O2'	35:BA:2649:U:H5'	2.16	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1293:G:H2'	1:AA:1294:G:C8	2.51	0.45
1:AA:788:U:H2'	1:AA:789:U:O4'	2.16	0.45
11:AK:82:VAL:CG2	11:AK:83:ILE:N	2.78	0.45
10:AJ:81:THR:C	10:AJ:83:GLU:N	2.68	0.45
1:AA:416:G:C6	1:AA:417:C:C4	3.04	0.45
1:AA:748:C:H1'	1:AA:749:C:H5	1.80	0.45
1:AA:414:A:C5	1:AA:431:A:C2	3.04	0.45
1:AA:1335:C:O2'	1:AA:1336:C:OP2	2.31	0.45
24:AY:327:LYS:N	24:AY:357:GLU:HB3	2.32	0.45
24:AY:420:SER:HB2	24:AY:427:VAL:CG2	2.37	0.45
28:B3:14:GLY:C	28:B3:15:TYR:CD1	2.90	0.45
33:B8:7:HIS:CE1	33:B8:59:LYS:HZ2	2.32	0.45
35:BA:1246:A:N6	35:BA:1247:A:C6	2.84	0.45
35:BA:18:C:N4	35:BA:19:C:N4	2.64	0.45
35:BA:2056:G:H2'	35:BA:2056:G:N3	2.30	0.45
35:BA:792:G:C4	35:BA:2440:C:C2	3.04	0.45
35:BA:2628:C:O2'	35:BA:2781:A:H3'	2.16	0.45
35:BA:572:A:H5''	35:BA:573:G:OP2	2.15	0.45
35:BA:672:C:O2'	35:BA:673:C:H5''	2.15	0.45
38:BD:164:GLN:C	38:BD:165:ILE:HD12	2.36	0.45
38:BD:224:ALA:O	38:BD:233:HIS:O	2.34	0.45
45:BN:27:ALA:O	45:BN:28:THR:C	2.55	0.45
35:BA:663:G:OP1	47:BP:20:GLY:O	2.34	0.45
49:BR:101:ALA:O	49:BR:102:GLU:CB	2.63	0.45
52:BU:108:GLU:C	52:BU:110:VAL:N	2.69	0.45
52:BU:50:ARG:O	52:BU:53:ARG:N	2.49	0.45
35:BA:1664:A:H2	46:BO:1:MET:CE	2.29	0.45
6:AF:8:ILE:HD11	6:AF:79:LEU:HD13	1.98	0.45
8:AH:32:LYS:C	8:AH:36:LEU:HG	2.36	0.45
1:AA:245:C:C2	1:AA:284:G:C2	3.04	0.45
1:AA:1072:G:C5	1:AA:1073:U:C4	3.04	0.45
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.80	0.45
2:AB:20:GLU:HG2	2:AB:189:ASP:OD2	2.17	0.45
2:AB:41:ILE:HG22	2:AB:42:ILE:N	2.31	0.45
35:BA:2331:G:C6	35:BA:2332:U:N3	2.85	0.45
48:BQ:26:TYR:HA	48:BQ:137:TYR:CD1	2.51	0.45
48:BQ:74:TYR:HD1	48:BQ:74:TYR:C	2.20	0.45
48:BQ:98:LYS:O	48:BQ:99:PRO:O	2.34	0.45
48:BQ:141:GLN:CD	57:BZ:72:ARG:HD3	2.34	0.45
1:AA:971:G:C4'	1:AA:972:C:H5''	2.45	0.45
10:AJ:65:LEU:O	10:AJ:65:LEU:CG	2.61	0.45
35:BA:886:C:C5	35:BA:887:A:N7	2.84	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B2:61:LEU:HD23	27:B2:64:LEU:HD12	1.98	0.45
35:BA:59:U:H5'	35:BA:60:G:OP2	2.15	0.45
35:BA:61:G:H8	35:BA:61:G:O5'	2.00	0.45
40:BF:113:ALA:HB1	40:BF:186:ILE:CG2	2.45	0.45
4:AD:108:LEU:O	4:AD:165:MET:CE	2.64	0.45
37:BC:34:THR:O	37:BC:35:ALA:HB2	2.16	0.45
57:BZ:151:HIS:CA	57:BZ:171:ILE:HG23	2.46	0.45
1:AA:1341:U:O2'	1:AA:1342:C:H5'	2.16	0.45
7:AG:117:ALA:O	7:AG:120:ILE:HB	2.16	0.45
35:BA:1719:G:C2	35:BA:1720:U:C2	3.04	0.45
29:B4:27:THR:O	29:B4:28:LYS:CB	2.64	0.45
41:BG:80:PHE:HD1	41:BG:81:LYS:HG2	1.81	0.45
1:AA:782:A:N7	1:AA:783:C:C4	2.84	0.45
5:AE:94:ALA:CB	5:AE:98:THR:HG21	2.45	0.45
50:BS:68:GLN:O	50:BS:72:ALA:HB2	2.16	0.45
34:B9:19:ARG:NH1	35:BA:2755:C:C2'	2.80	0.45
13:AM:11:ARG:O	13:AM:13:LYS:N	2.49	0.45
35:BA:1344:G:H5'	35:BA:1384:A:C6	2.51	0.45
35:BA:2111:C:O2	35:BA:2111:C:H2'	2.15	0.45
35:BA:2189:U:C2'	35:BA:2190:G:H4'	2.47	0.45
1:AA:985:C:H6	1:AA:985:C:O5'	2.00	0.45
19:AS:78:ARG:H	19:AS:81:ARG:NH1	2.14	0.45
1:AA:1314:C:H2'	1:AA:1315:U:H6	1.81	0.45
35:BA:1221:C:C2'	35:BA:1221(A):C:H6	2.20	0.45
9:AI:52:ALA:HB3	9:AI:95:LYS:HZ3	1.80	0.45
35:BA:474:G:C5	35:BA:510:C:N4	2.84	0.45
3:AC:150:LYS:HE3	3:AC:167:TRP:NE1	2.30	0.45
1:AA:274:A:O2'	1:AA:275:G:H8	1.97	0.45
32:B7:23:ARG:C	32:B7:24:THR:CG2	2.85	0.45
7:AG:72:ARG:N	7:AG:142:GLU:OE2	2.46	0.45
35:BA:722:A:H2'	35:BA:723:G:C8	2.51	0.45
42:BH:155:SER:C	42:BH:157:TYR:H	2.18	0.45
1:AA:786:G:C2	1:AA:787:A:C8	3.04	0.45
35:BA:1055:G:N2	35:BA:1105:U:H1'	2.30	0.45
35:BA:2095:C:H2'	35:BA:2096:U:H6	1.81	0.45
42:BH:54:ARG:HD2	42:BH:54:ARG:H	1.82	0.45
7:AG:8:GLU:HG3	7:AG:9:VAL:H	1.81	0.45
42:BH:55:PRO:HG2	42:BH:56:SER:H	1.80	0.45
16:AP:82:GLN:O	16:AP:83:GLU:HB2	2.16	0.45
43:BJ:45:UNK:O	43:BJ:49:UNK:N	2.50	0.45
46:BO:31:LYS:C	46:BO:32:TYR:CD1	2.89	0.45
24:AY:164:ILE:HD11	24:AY:251:ILE:CA	2.46	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:443:VAL:O	24:AY:445:GLN:HG2	2.15	0.45
35:BA:1773:A:H2'	35:BA:1774:C:C5'	2.43	0.45
35:BA:781:A:H2'	35:BA:1777:U:O2'	2.15	0.45
35:BA:1805:U:H6	35:BA:1805:U:O5'	2.00	0.45
35:BA:2009:G:OP1	54:BW:41:LYS:NZ	2.47	0.45
35:BA:245:G:O3'	47:BP:71:VAL:HA	2.17	0.45
35:BA:2502:G:H5''	35:BA:2503:A:H5''	1.97	0.45
35:BA:2581:G:H22	35:BA:2610:C:C2'	2.30	0.45
35:BA:2821:A:C6	35:BA:2822:G:C6	3.04	0.45
35:BA:672:C:C2	35:BA:809:G:N2	2.83	0.45
35:BA:696:G:N2	35:BA:697:C:C2	2.84	0.45
39:BE:34:VAL:O	39:BE:35:GLN:CB	2.64	0.45
35:BA:2637:U:H5''	39:BE:82:ARG:HE	1.81	0.45
45:BN:61:ARG:CG	45:BN:61:ARG:HH11	2.19	0.45
52:BU:10:ARG:O	52:BU:14:HIS:HB2	2.16	0.45
35:BA:2739:U:H5	35:BA:2763:G:N7	2.14	0.45
1:AA:19:C:OP1	5:AE:125:SER:OG	2.30	0.45
1:AA:739:C:N3	1:AA:740:U:C5	2.84	0.45
8:AH:5:PRO:CD	8:AH:6:ILE:HD12	2.45	0.45
1:AA:658:G:H4'	15:AO:22:THR:HG22	1.99	0.45
15:AO:28:GLN:O	15:AO:32:LEU:N	2.40	0.45
2:AB:21:ARG:HB3	2:AB:39:ILE:HG12	1.98	0.45
35:BA:2786:U:C2	35:BA:2787:C:C5	3.05	0.45
57:BZ:54:HIS:O	57:BZ:98:MET:HE1	2.16	0.45
22:AV:52:G:C2	22:AV:63:G:C4	3.03	0.45
1:AA:1324:A:H2'	1:AA:1325:C:C6	2.51	0.45
13:AM:79:LYS:O	13:AM:82:MET:N	2.49	0.45
3:AC:31:HIS:O	3:AC:33:LEU:N	2.49	0.45
3:AC:32:LEU:O	3:AC:35:GLU:N	2.49	0.45
3:AC:3:ASN:O	3:AC:4:LYS:HB2	2.16	0.45
9:AI:100:GLY:C	9:AI:102:LEU:N	2.68	0.45
52:BU:101:ARG:HH11	52:BU:101:ARG:HG3	1.80	0.45
35:BA:348:G:H2'	35:BA:349:G:O4'	2.16	0.45
4:AD:9:CYS:HA	4:AD:12:CYS:HB2	1.98	0.45
35:BA:1070:A:N1	44:BK:7:UNK:C	2.79	0.45
35:BA:331:A:OP1	35:BA:1210:A:N6	2.49	0.45
42:BH:117:PRO:HB3	42:BH:123:PHE:HE1	1.81	0.45
11:AK:29:ILE:HA	11:AK:44:SER:HB2	1.98	0.45
37:BC:14:VAL:HG21	37:BC:32:LEU:CD1	2.46	0.45
37:BC:20:TYR:HD1	37:BC:24:GLU:HB3	1.81	0.45
37:BC:64:LEU:HD22	37:BC:188:ASN:HB3	1.97	0.45
35:BA:874:G:C4	35:BA:875:G:C8	3.05	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BC:86:ALA:O	37:BC:91:ALA:HB3	2.16	0.45
41:BG:133:LEU:HD11	41:BG:157:ILE:HB	1.98	0.45
1:AA:296:U:O2'	1:AA:297:G:H5'	2.17	0.45
35:BA:2403:C:C2	35:BA:2415:G:C2	3.04	0.45
5:AE:84:PHE:CE2	5:AE:133:TYR:HD2	2.34	0.45
36:BB:15:A:OP1	36:BB:108:U:O2'	2.35	0.45
35:BA:615:G:OP2	40:BF:40:GLN:CG	2.63	0.45
2:AB:142:LEU:HA	2:AB:145:LEU:CB	2.46	0.45
36:BB:21:G:C6	36:BB:22:U:C4	3.04	0.45
50:BS:73:LEU:HD23	50:BS:73:LEU:C	2.37	0.45
35:BA:2188:C:H2'	35:BA:2189:U:N1	2.30	0.45
24:AY:513:LEU:HD13	24:AY:517:ARG:NH2	2.24	0.45
1:AA:126:G:H1	1:AA:235:C:N4	2.14	0.45
35:BA:1670:C:OP1	35:BA:1671:U:OP2	2.35	0.45
1:AA:815:A:C2	1:AA:1527:C:O2	2.69	0.45
1:AA:373:A:C2	1:AA:374:A:C8	3.04	0.45
13:AM:37:THR:O	13:AM:39:ILE:N	2.49	0.45
4:AD:190:ASP:OD1	4:AD:191:ARG:N	2.50	0.45
35:BA:2276:G:OP2	48:BQ:86:GLY:N	2.49	0.45
4:AD:150:GLU:O	4:AD:151:LYS:C	2.55	0.45
35:BA:843:G:N2	35:BA:844:C:C2	2.84	0.45
1:AA:951:G:C2	1:AA:952:U:C2	3.04	0.45
32:B7:43:THR:O	32:B7:45:ALA:N	2.49	0.45
35:BA:1789:A:H5''	38:BD:221:VAL:CG1	2.45	0.45
35:BA:1921:G:C2'	35:BA:1922:G:H5'	2.45	0.45
35:BA:2021:C:C4'	35:BA:2022:U:OP2	2.64	0.45
35:BA:2459:A:C6	35:BA:2494:G:N3	2.85	0.45
35:BA:413:C:O2'	35:BA:414:C:H5'	2.16	0.45
35:BA:823:G:O2'	35:BA:824:A:H5'	2.17	0.45
35:BA:831:G:C5	35:BA:832:G:C8	3.04	0.45
38:BD:26:LYS:O	38:BD:27:THR:CB	2.65	0.45
45:BN:111:PRO:O	45:BN:115:ARG:HB2	2.17	0.45
46:BO:67:LYS:HD2	46:BO:68:GLU:OE2	2.16	0.45
51:BT:100:TYR:O	51:BT:102:ILE:N	2.49	0.45
52:BU:113:ALA:O	52:BU:115:ALA:N	2.50	0.45
53:BV:4:ILE:CD1	53:BV:39:LEU:O	2.58	0.45
46:BO:39:ILE:CG1	46:BO:60:ALA:O	2.63	0.45
1:AA:14:U:N3	1:AA:17:U:OP2	2.49	0.45
8:AH:7:ALA:HA	8:AH:85:ARG:HD3	1.98	0.45
1:AA:667:G:N3	15:AO:49:ASP:OD2	2.49	0.45
18:AR:37:VAL:HG22	18:AR:38:GLU:OE1	2.16	0.45
2:AB:224:GLN:C	2:AB:226:ARG:N	2.68	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:8:LYS:C	2:AB:9:GLU:OE1	2.55	0.45
35:BA:2809:A:H62	35:BA:2891:G:H2'	1.81	0.45
36:BB:87:G:C3'	36:BB:88:C:H5''	2.47	0.45
48:BQ:32:TYR:CE2	48:BQ:111:GLU:HG3	2.51	0.45
48:BQ:118:LEU:HA	48:BQ:121:ALA:HB3	1.97	0.45
36:BB:92:C:OP1	48:BQ:19:GLY:CA	2.64	0.45
48:BQ:54:MET:HE3	48:BQ:64:ILE:HD13	1.98	0.45
22:AV:61:C:O2	22:AV:61:C:C2'	2.64	0.45
22:AV:61:C:H5'	22:AV:62:C:OP2	2.16	0.45
1:AA:1304:G:C6	1:AA:1305:G:N1	2.83	0.45
12:AL:90:VAL:O	12:AL:91:LYS:C	2.54	0.45
1:AA:1014:A:C4	19:AS:34:TRP:CE3	3.04	0.45
1:AA:1046:A:H2'	1:AA:1046:A:N3	2.32	0.45
1:AA:1048:G:C2	1:AA:1050:G:N7	2.84	0.45
3:AC:52:LEU:HD12	3:AC:68:VAL:HG12	1.98	0.45
3:AC:70:VAL:O	3:AC:106:VAL:N	2.45	0.45
9:AI:43:ALA:O	9:AI:45:ALA:N	2.49	0.45
40:BF:170:LEU:HB3	40:BF:173:VAL:CG2	2.45	0.45
40:BF:181:LEU:HD12	40:BF:182:ASN:N	2.27	0.45
40:BF:192:LEU:HD23	40:BF:192:LEU:C	2.37	0.45
40:BF:3:GLU:HA	40:BF:24:LEU:HB3	1.96	0.45
4:AD:111:ALA:HB2	4:AD:117:ALA:HA	1.98	0.45
4:AD:5:ILE:CG2	4:AD:6:GLY:N	2.78	0.45
4:AD:98:GLU:C	4:AD:100:ARG:N	2.69	0.45
35:BA:2840:C:O3'	49:BR:53:HIS:NE2	2.50	0.45
11:AK:67:ASP:O	11:AK:68:ALA:C	2.55	0.45
37:BC:14:VAL:HG23	37:BC:32:LEU:CD2	2.47	0.45
35:BA:2705:A:C5	35:BA:2706:G:N7	2.85	0.45
36:BB:42:C:N4	41:BG:91:ARG:HD3	2.31	0.45
1:AA:332:G:C5	1:AA:333:G:N7	2.84	0.45
1:AA:112:G:H4'	1:AA:389:A:H4'	1.97	0.45
20:AT:9:ASN:HB3	20:AT:13:LEU:HD11	1.99	0.45
35:BA:2758:A:H62	42:BH:67:LEU:CD1	2.25	0.45
1:AA:1502:A:C2	1:AA:1504:G:N3	2.85	0.45
35:BA:2416:C:OP1	47:BP:64:LYS:O	2.35	0.45
47:BP:64:LYS:O	47:BP:65:ARG:C	2.54	0.45
28:B3:45:GLY:C	28:B3:47:VAL:H	2.19	0.45
24:AY:20:SER:O	24:AY:122:ARG:HB3	2.17	0.45
35:BA:1032:A:N1	35:BA:1123:C:N3	2.64	0.45
35:BA:576:U:H2'	35:BA:577:G:H8	1.74	0.45
17:AQ:67:LYS:O	17:AQ:68:ARG:CB	2.63	0.45
1:AA:116:A:H2'	1:AA:117:G:O4'	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:122:G:C5	1:AA:123:C:C4	3.04	0.45
1:AA:897:C:C5	1:AA:898:G:N7	2.85	0.45
1:AA:1352:C:H2'	1:AA:1352:C:O2	2.16	0.45
1:AA:935:A:H2	1:AA:1383:C:N4	2.14	0.45
50:BS:19:LYS:HB3	50:BS:20:ARG:NH2	2.32	0.45
1:AA:1416:G:C6	1:AA:1417:G:C6	3.05	0.45
49:BR:63:ARG:NH1	49:BR:63:ARG:HB2	2.24	0.45
35:BA:535:C:H2'	35:BA:536:A:H8	1.78	0.45
51:BT:7:ILE:O	51:BT:9:LEU:N	2.49	0.45
57:BZ:63:ASP:HB3	57:BZ:65:GLN:HG3	1.98	0.45
23:AX:12:A:C3'	23:AX:12:A:N3	2.76	0.45
37:BC:77:ILE:HB	37:BC:115:ALA:HA	1.96	0.45
35:BA:1331:A:O2'	35:BA:1332:G:C8	2.62	0.45
10:AJ:28:ARG:NH1	10:AJ:28:ARG:HG2	2.30	0.45
35:BA:529:A:N7	35:BA:2041:U:O4	2.50	0.45
38:BD:109:ASP:C	38:BD:109:ASP:OD1	2.55	0.45
10:AJ:78:ASN:HD21	10:AJ:80:LYS:HB3	1.81	0.45
19:AS:72:GLY:C	19:AS:74:PHE:H	2.20	0.45
24:AY:146:ARG:HH11	24:AY:146:ARG:CG	2.07	0.45
24:AY:333:GLN:C	24:AY:335:ARG:H	2.20	0.45
24:AY:360:TYR:CD1	24:AY:360:TYR:N	2.84	0.45
24:AY:297:THR:OG1	24:AY:383:GLU:OE1	2.35	0.45
24:AY:398:PHE:HE2	24:AY:428:PHE:CE1	2.35	0.45
1:AA:1514:C:N4	1:AA:1515:C:N4	2.64	0.45
30:B5:3:LYS:HE2	35:BA:2611:U:C2'	2.47	0.45
35:BA:1155:A:OP2	52:BU:58:ARG:NH1	2.50	0.45
35:BA:1826:G:C5	35:BA:1827:C:C5	3.05	0.45
35:BA:1845:G:O2'	35:BA:1846:G:H5'	2.17	0.45
35:BA:2019:A:N6	35:BA:2020:A:N6	2.64	0.45
35:BA:2628:C:O4'	35:BA:2781:A:C4	2.69	0.45
35:BA:2686:G:C2	35:BA:2687:U:C2	3.04	0.45
35:BA:659:C:O2'	35:BA:660:G:C5'	2.62	0.45
35:BA:823:G:C6	35:BA:835:A:C2	3.04	0.45
35:BA:942:G:C6	35:BA:943:U:N3	2.85	0.45
38:BD:174:ILE:O	38:BD:175:LEU:HD23	2.16	0.45
38:BD:63:ARG:C	38:BD:64:ILE:O	2.55	0.45
39:BE:81:ILE:C	39:BE:82:ARG:O	2.52	0.45
40:BF:82:ILE:HG13	40:BF:83:PHE:H	1.82	0.45
51:BT:63:VAL:N	51:BT:74:ARG:O	2.43	0.45
52:BU:31:SER:CB	52:BU:34:LYS:CB	2.81	0.45
35:BA:1668:A:C2'	35:BA:1674:G:N7	2.80	0.45
35:BA:2762:G:H8	35:BA:2762:G:H5''	1.82	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:68:ARG:O	15:AO:71:GLN:HB3	2.17	0.45
34:B9:30:PRO:C	34:B9:32:HIS:N	2.69	0.45
35:BA:1027:A:C6	35:BA:1126:A:C4	3.04	0.45
35:BA:1125:G:C6	35:BA:1126:A:N6	2.85	0.45
48:BQ:38:GLU:CD	48:BQ:127:ILE:HB	2.36	0.45
35:BA:2631:G:N2	35:BA:2788:C:H1'	2.31	0.45
35:BA:2265:U:H2'	35:BA:2266:A:N7	2.31	0.45
48:BQ:46:GLN:HA	48:BQ:49:ALA:CB	2.47	0.45
57:BZ:35:ARG:NE	57:BZ:35:ARG:CA	2.71	0.45
57:BZ:42:VAL:CG1	57:BZ:43:GLU:N	2.78	0.45
22:AV:49:G:C2	22:AV:50:U:N1	2.84	0.45
1:AA:1309:G:C6	1:AA:1310:G:C5	3.04	0.45
3:AC:121:ALA:HB2	3:AC:187:ALA:CB	2.46	0.45
3:AC:83:ARG:CG	3:AC:87:LEU:HD11	2.43	0.45
10:AJ:12:ASP:HB3	10:AJ:15:THR:OG1	2.16	0.45
56:BY:45:VAL:CG1	56:BY:60:PHE:HD2	2.29	0.45
35:BA:1504:C:O2'	35:BA:1505:C:O5'	2.35	0.45
37:BC:222:VAL:O	37:BC:224:ILE:CG2	2.63	0.45
1:AA:660:G:OP2	15:AO:5:LYS:HD3	2.16	0.45
41:BG:143:GLU:O	41:BG:144:ILE:CG2	2.65	0.45
41:BG:55:LYS:O	41:BG:56:ALA:C	2.54	0.45
29:B4:9:LEU:CD1	29:B4:25:TYR:HB3	2.46	0.45
35:BA:597:U:H4'	47:BP:15:ARG:CZ	2.46	0.45
1:AA:109:A:O3'	1:AA:110:C:C6	2.67	0.45
1:AA:1404:C:C1'	1:AA:1499:A:N1	2.79	0.45
1:AA:924:C:H2'	1:AA:925:G:H8	1.80	0.45
38:BD:131:LEU:HD13	38:BD:135:PHE:CB	2.47	0.45
5:AE:77:PRO:CD	5:AE:142:LEU:HD22	2.45	0.45
5:AE:96:PRO:HA	5:AE:117:ASP:CG	2.37	0.45
35:BA:701:G:N2	35:BA:732:C:C2	2.84	0.45
1:AA:1431:C:C2	1:AA:1470:G:N2	2.85	0.45
50:BS:25:ARG:HG2	50:BS:25:ARG:NH1	2.30	0.45
35:BA:2190:G:H2'	35:BA:2190:G:N3	2.32	0.45
35:BA:1637:A:H4'	35:BA:2711:A:O2'	2.17	0.45
35:BA:1759:A:H2'	35:BA:1760:A:C8	2.52	0.45
51:BT:11:GLU:C	51:BT:13:ARG:N	2.68	0.45
54:BW:3:ALA:HB3	54:BW:107:LEU:CD1	2.46	0.45
28:B3:31:LEU:C	28:B3:33:GLN:H	2.20	0.45
49:BR:26:LYS:HG2	49:BR:70:LEU:HD22	1.98	0.45
49:BR:67:LEU:HD22	49:BR:76:VAL:HB	1.98	0.45
22:AV:33:U:C6	22:AV:33:U:C3'	2.99	0.45
35:BA:82:G:H8	35:BA:82:G:OP2	1.99	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B1:41:ARG:NH2	35:BA:1365:A:OP1	2.39	0.45
42:BH:91:GLY:HA2	42:BH:160:LYS:HZ1	1.82	0.45
4:AD:60:GLU:HG2	4:AD:202:LEU:CD1	2.41	0.45
49:BR:12:ARG:HB3	49:BR:16:HIS:HD2	1.82	0.45
35:BA:2422:A:C6	35:BA:2424:C:N3	2.85	0.45
3:AC:108:ASN:HB3	3:AC:111:LEU:HD12	1.97	0.45
35:BA:2096:U:H2'	35:BA:2097:C:H6	1.81	0.45
49:BR:9:LYS:HD2	49:BR:43:GLU:HB2	1.97	0.45
11:AK:123:LYS:HG2	11:AK:123:LYS:O	2.16	0.45
40:BF:4:VAL:HG12	40:BF:4:VAL:O	2.15	0.45
35:BA:272(E):G:O2'	35:BA:272(F):C:H5'	2.16	0.45
11:AK:87:THR:HG22	11:AK:88:GLY:N	2.31	0.45
40:BF:153:SER:HA	40:BF:172:TRP:HB2	1.98	0.45
24:AY:200:THR:O	24:AY:201:ILE:C	2.55	0.45
24:AY:171:TRP:CZ2	24:AY:234:VAL:HG13	2.51	0.45
24:AY:25:GLY:CA	24:AY:29:ILE:HG13	2.43	0.45
24:AY:295:LYS:O	24:AY:323:GLY:CA	2.63	0.45
24:AY:6:TYR:O	24:AY:360:TYR:CE2	2.70	0.45
24:AY:401:ILE:HD12	24:AY:461:ALA:HB3	1.98	0.45
37:BC:100:ILE:O	37:BC:100:ILE:CG2	2.62	0.45
30:B5:7:PRO:HA	35:BA:2615:U:N1	2.31	0.45
32:B7:37:LYS:NZ	32:B7:39:ARG:NH2	2.64	0.45
33:B8:8:LYS:O	33:B8:11:LYS:HB3	2.17	0.45
35:BA:1823:G:C6	35:BA:1824:G:C5	3.05	0.45
35:BA:242:G:O3'	35:BA:243:U:H6	2.00	0.45
35:BA:2509:G:C2'	35:BA:2510:C:H5'	2.47	0.45
35:BA:2580:U:H5''	39:BE:131:ALA:HB2	1.99	0.45
35:BA:2770:G:C5'	35:BA:2771:C:OP2	2.64	0.45
38:BD:176:ARG:HA	38:BD:182:LEU:HG	1.98	0.45
38:BD:91:ARG:HD3	38:BD:198:ASN:CB	2.47	0.45
38:BD:211:ARG:C	38:BD:213:ARG:N	2.70	0.45
38:BD:88:ARG:CD	38:BD:88:ARG:N	2.80	0.45
51:BT:24:PRO:HB2	51:BT:94:ALA:CB	2.46	0.45
51:BT:28:VAL:HG23	51:BT:47:GLY:O	2.16	0.45
30:B5:28:PRO:HG2	54:BW:35:ILE:HD12	1.98	0.45
1:AA:1483:A:H2	35:BA:1960:A:C1'	2.29	0.45
34:B9:27:CYS:SG	34:B9:32:HIS:ND1	2.90	0.45
34:B9:5:ALA:HB1	35:BA:1125:G:O2'	2.17	0.45
1:AA:1091:U:N3	1:AA:1095:U:C4	2.84	0.45
2:AB:237:ALA:O	2:AB:238:LEU:HB3	2.17	0.45
1:AA:1308:U:H6	1:AA:1308:U:O5'	1.99	0.45
12:AL:105:TYR:C	12:AL:107:ALA:H	2.20	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1200:C:OP1	1:AA:1201:A:C2'	2.64	0.45
3:AC:64:VAL:CG1	3:AC:65:ALA:H	2.26	0.45
3:AC:95:THR:CG2	3:AC:97:LYS:HG3	2.47	0.45
19:AS:41:VAL:CB	19:AS:44:MET:HG2	2.44	0.45
56:BY:64:GLU:O	56:BY:65:ALA:CB	2.65	0.45
27:B2:30:ARG:NH2	55:BX:5:TYR:OH	2.49	0.45
27:B2:65:ASN:O	27:B2:67:LYS:N	2.50	0.45
40:BF:160:ASN:HD21	40:BF:162:LEU:HD13	1.81	0.45
19:AS:51:VAL:CB	19:AS:58:VAL:HG22	2.42	0.45
12:AL:126:LYS:HB3	24:AY:487:ARG:CZ	2.41	0.45
4:AD:101:LEU:C	4:AD:103:ASN:H	2.20	0.45
1:AA:620:C:H4'	4:AD:138:TYR:HD1	1.82	0.45
35:BA:307:G:C2'	35:BA:309:G:OP2	2.61	0.45
49:BR:87:TYR:HE2	49:BR:117:VAL:CG1	2.29	0.45
57:BZ:151:HIS:HA	57:BZ:171:ILE:CD1	2.47	0.45
29:B4:7:PRO:HD2	41:BG:65:GLY:O	2.17	0.45
41:BG:78:SER:C	41:BG:80:PHE:N	2.69	0.45
41:BG:71:THR:CB	41:BG:89:GLY:O	2.62	0.45
1:AA:406:G:H1'	1:AA:495:A:N1	2.32	0.45
1:AA:495:A:O2'	1:AA:496:A:P	2.73	0.45
1:AA:59:A:C6	1:AA:331:G:N3	2.85	0.45
35:BA:2346:A:H5'	35:BA:2383:G:H1'	1.97	0.45
35:BA:2234:G:H2'	35:BA:2235:G:H8	1.82	0.45
8:AH:103:VAL:HG21	8:AH:109:ILE:O	2.17	0.45
35:BA:2189:U:C3'	35:BA:2190:G:H4'	2.46	0.45
1:AA:1226:C:H5	13:AM:104:ARG:HB2	1.81	0.45
10:AJ:4:ILE:HB	10:AJ:74:ILE:CD1	2.47	0.45
35:BA:2100:G:H5'	35:BA:2101:G:OP2	2.16	0.45
30:B5:57:VAL:HG12	30:B5:58:LEU:CD1	2.36	0.45
54:BW:46:PHE:O	54:BW:50:VAL:HG12	2.16	0.45
28:B3:8:LEU:HD22	28:B3:31:LEU:CA	2.46	0.45
49:BR:26:LYS:CE	49:BR:71:GLN:H	2.30	0.45
1:AA:1015:A:N6	1:AA:1016:A:C6	2.84	0.45
24:AY:513:LEU:O	24:AY:517:ARG:CB	2.65	0.45
46:BO:64:ARG:CZ	51:BT:70:VAL:HG21	2.46	0.45
23:AX:17:U:H2'	23:AX:18:G:H5'	1.98	0.45
13:AM:29:ARG:NE	13:AM:64:TRP:CD2	2.84	0.45
1:AA:1286:A:O2'	1:AA:1287:A:OP2	2.31	0.45
25:B0:20:ARG:HD2	25:B0:20:ARG:H	1.81	0.45
35:BA:2794:C:H42	35:BA:2801(A):A:N6	2.15	0.45
1:AA:32:A:N6	1:AA:33:A:N1	2.65	0.45
16:AP:65:GLN:HA	16:AP:66:PRO:HD3	1.70	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1931:U:O2'	35:BA:1932:A:H5'	2.16	0.45
57:BZ:63:ASP:CB	57:BZ:65:GLN:HG3	2.47	0.45
57:BZ:7:ALA:HB3	57:BZ:61:LEU:HD22	1.97	0.45
35:BA:1313:U:C4'	35:BA:1333:C:OP2	2.64	0.45
1:AA:929:G:C2'	1:AA:930:C:H5'	2.47	0.45
2:AB:92:TYR:CD1	2:AB:151:GLY:HA3	2.52	0.45
35:BA:1392:A:N6	35:BA:1393:A:N6	2.64	0.45
35:BA:1054:A:C2	35:BA:1055:G:N7	2.85	0.45
35:BA:682:G:HO2'	35:BA:683:C:H5'	1.77	0.45
1:AA:519:C:O2'	1:AA:520:A:H5'	2.17	0.45
3:AC:109:PRO:O	3:AC:111:LEU:N	2.48	0.45
42:BH:54:ARG:CD	42:BH:54:ARG:H	2.30	0.45
35:BA:1358:G:O2'	35:BA:1359:A:H5''	2.15	0.45
35:BA:715:G:C2	35:BA:716:A:C4	3.05	0.45
1:AA:998:G:C2	1:AA:999:C:C2	3.05	0.45
2:AB:198:ASP:N	2:AB:198:ASP:OD1	2.49	0.45
24:AY:10:VAL:HG13	24:AY:360:TYR:CB	2.46	0.45
24:AY:207:VAL:O	24:AY:208:LYS:O	2.35	0.45
24:AY:29:ILE:HG12	24:AY:259:ALA:HB2	1.97	0.45
1:AA:774:G:N3	1:AA:775:G:C8	2.85	0.45
30:B5:33:CYS:O	30:B5:35:GLU:N	2.45	0.45
35:BA:1257:C:C1'	40:BF:83:PHE:HA	2.46	0.45
35:BA:1394:U:H3'	35:BA:1394:U:H6	1.82	0.45
35:BA:1267:U:C5	35:BA:2012:G:N2	2.85	0.45
35:BA:2453:A:H2	35:BA:2504:U:H3	1.64	0.45
35:BA:2574:G:C2	35:BA:2575:C:C2	3.05	0.45
35:BA:587:C:N4	47:BP:33:ARG:CB	2.79	0.45
35:BA:976:C:H4'	35:BA:1156:A:H62	1.81	0.45
38:BD:158:ALA:O	38:BD:161:THR:OG1	2.34	0.45
39:BE:111:ARG:HD2	39:BE:111:ARG:N	2.31	0.45
39:BE:11:MET:HA	39:BE:23:VAL:O	2.16	0.45
35:BA:2685:G:C4'	46:BO:67:LYS:HZ2	2.30	0.45
46:BO:71:ARG:HB3	46:BO:72:PRO:HD2	1.99	0.45
47:BP:107:LYS:C	47:BP:109:GLY:N	2.70	0.45
47:BP:113:LYS:HB2	47:BP:129:ALA:CB	2.28	0.45
47:BP:98:GLU:O	47:BP:102:ARG:NH2	2.50	0.45
51:BT:102:ILE:O	51:BT:102:ILE:CG1	2.65	0.45
51:BT:32:TYR:CG	51:BT:33:LYS:N	2.85	0.45
52:BU:12:ARG:HD2	52:BU:13:LYS:HZ3	1.81	0.45
52:BU:61:TRP:CH2	52:BU:94:ASN:OD1	2.70	0.45
35:BA:1668:A:C8	35:BA:1674:G:C6	3.05	0.45
35:BA:1676:A:C5	35:BA:1677:A:C5	3.05	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:758:G:H4'	1:AA:880:C:C4'	2.46	0.45
2:AB:168:THR:HG23	2:AB:192:SER:CB	2.47	0.45
35:BA:247:G:C8	35:BA:249:C:C6	3.05	0.45
48:BQ:14:ARG:HG3	48:BQ:14:ARG:H	1.36	0.45
35:BA:863:A:P	48:BQ:22:LYS:HB2	2.57	0.45
48:BQ:48:GLU:O	48:BQ:49:ALA:C	2.55	0.45
35:BA:1779:U:C5	35:BA:1783:A:N7	2.85	0.45
21:AU:18:TYR:CE1	21:AU:24:ARG:NH1	2.85	0.45
9:AI:112:LYS:O	9:AI:112:LYS:HD3	2.17	0.45
1:AA:56:U:H2'	1:AA:57:G:C8	2.51	0.45
1:AA:55:A:C2'	1:AA:56:U:H5'	2.47	0.45
35:BA:1206:G:H2'	35:BA:1207:C:C6	2.51	0.45
56:BY:26:LYS:N	56:BY:40:GLU:OE2	2.47	0.45
9:AI:47:LEU:HG	9:AI:50:LEU:CD1	2.45	0.45
12:AL:126:LYS:HB2	24:AY:487:ARG:NE	2.23	0.45
11:AK:24:SER:OG	11:AK:27:ASN:O	2.30	0.45
37:BC:213:TYR:HD2	37:BC:221:SER:CB	2.30	0.45
1:AA:1342:C:H4'	9:AI:125:TYR:H	1.81	0.45
36:BB:42:C:O2	41:BG:66:GLN:NE2	2.50	0.45
20:AT:22:ARG:O	20:AT:26:ASN:ND2	2.50	0.45
17:AQ:45:HIS:O	17:AQ:73:VAL:HG23	2.15	0.45
35:BA:2325:G:C5	35:BA:2326:C:C5	3.05	0.45
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.16	0.45
36:BB:67:G:C2	36:BB:68:C:C6	3.05	0.45
35:BA:1444:G:H2'	35:BA:1445(A):C:C5	2.51	0.45
35:BA:1636:C:O4'	35:BA:1761:C:H1'	2.16	0.45
35:BA:1636:C:H2'	35:BA:1637:A:C8	2.51	0.45
20:AT:45:GLN:O	20:AT:45:GLN:NE2	2.49	0.45
1:AA:186:C:O2'	20:AT:85:MET:SD	2.72	0.45
16:AP:60:LEU:CD1	16:AP:79:VAL:HG12	2.38	0.45
1:AA:220:G:N2	1:AA:221:C:H1'	2.31	0.45
49:BR:24:GLN:NE2	49:BR:36:THR:HG21	2.32	0.45
49:BR:27:SER:O	49:BR:30:THR:CG2	2.65	0.45
25:B0:72:ARG:CB	25:B0:75:LEU:HB3	2.47	0.45
35:BA:65:C:O2'	35:BA:456:C:O2	2.33	0.45
25:B0:18:ALA:HB1	35:BA:2271:G:H5''	1.97	0.45
35:BA:2793:G:O2'	35:BA:2794:C:H5''	2.17	0.45
35:BA:614:U:C2'	35:BA:614(A):U:H5'	2.46	0.45
1:AA:1301:U:O2'	1:AA:1302:U:O5'	2.27	0.45
35:BA:2131:G:OP2	35:BA:2131:G:H3'	2.17	0.45
35:BA:131:G:H2'	35:BA:132:G:H8	1.80	0.45
18:AR:59:SER:HG	18:AR:62:GLU:CD	2.19	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:220:G:H2'	35:BA:427:U:O4	2.16	0.45
1:AA:992:U:O2'	1:AA:993:G:O5'	2.35	0.45
1:AA:166:G:H2'	1:AA:167:G:H8	1.81	0.45
2:AB:27:LYS:HG3	2:AB:27:LYS:H	1.42	0.45
35:BA:1016:G:N2	35:BA:1147:C:O2	2.49	0.45
1:AA:420:U:H1'	1:AA:424:G:N2	2.32	0.45
24:AY:158:VAL:HG12	24:AY:164:ILE:HG22	1.99	0.45
24:AY:189:GLU:HB2	24:AY:206:ILE:HG22	1.98	0.45
24:AY:231:LEU:C	24:AY:231:LEU:HD12	2.37	0.45
24:AY:347:THR:HB	24:AY:365:LEU:HG	1.99	0.45
24:AY:70:ILE:HG23	24:AY:95:PHE:CD1	2.52	0.45
33:B8:35:GLN:O	33:B8:35:GLN:CD	2.55	0.45
35:BA:1651:G:H2'	35:BA:1652:A:H8	1.81	0.45
35:BA:1815:A:H8	35:BA:1815:A:OP1	2.00	0.45
35:BA:2007:C:H4'	35:BA:2824:C:HO2'	1.82	0.45
35:BA:2028:U:O2'	35:BA:2029:G:H5'	2.16	0.45
35:BA:447:A:C4'	35:BA:449:A:N7	2.80	0.45
35:BA:2222:G:H1'	38:BD:151:LYS:NZ	2.31	0.45
38:BD:155:LEU:N	38:BD:155:LEU:HD12	2.31	0.45
38:BD:227:ASN:ND2	38:BD:228:PRO:HD2	2.31	0.45
38:BD:183:ARG:HG3	38:BD:270:ILE:CG2	2.47	0.45
38:BD:84:TYR:CG	38:BD:85:ASP:N	2.84	0.45
39:BE:105:THR:CG2	39:BE:106:GLY:H	2.27	0.45
35:BA:1658:C:OP1	39:BE:132:HIS:CE1	2.70	0.45
45:BN:93:THR:CG2	45:BN:93:THR:O	2.65	0.45
46:BO:71:ARG:HG3	46:BO:75:SER:OG	2.16	0.45
51:BT:88:ILE:HG22	51:BT:89:VAL:N	2.32	0.45
45:BN:6:PRO:CG	52:BU:64:ARG:HH22	2.29	0.45
35:BA:993:G:O4'	53:BV:87:HIS:NE2	2.49	0.45
46:BO:23:ARG:HB3	46:BO:40:VAL:CG2	2.43	0.45
35:BA:2742:C:H2'	35:BA:2743:C:H6	1.81	0.45
1:AA:587:G:N2	1:AA:754:C:OP2	2.48	0.45
1:AA:865:A:H5'	1:AA:1078:U:O4	2.16	0.45
1:AA:883:C:N3	1:AA:884:U:O4	2.50	0.45
8:AH:14:ARG:HG3	8:AH:83:ILE:CG2	2.46	0.45
2:AB:177:ALA:HB3	2:AB:184:VAL:CG2	2.47	0.45
57:BZ:166:SER:HB2	57:BZ:168:GLU:CB	2.46	0.45
22:AV:76:A:O2'	35:BA:2395:C:C4	2.65	0.45
57:BZ:42:VAL:C	57:BZ:44:PHE:N	2.67	0.45
22:AV:4:G:H2'	22:AV:5:G:C8	2.51	0.45
35:BA:1982:C:N4	35:BA:1983:C:N4	2.65	0.45
1:AA:1309:G:C6	1:AA:1329:A:C6	3.05	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:78:ILE:CG2	13:AM:79:LYS:N	2.80	0.45
13:AM:89:GLY:C	13:AM:90:LEU:O	2.53	0.45
1:AA:1048:G:C2	1:AA:1050:G:C5	3.05	0.45
10:AJ:16:LEU:CD1	10:AJ:16:LEU:C	2.83	0.45
35:BA:481:G:H1'	35:BA:506:G:N2	2.31	0.45
56:BY:23:ARG:HG2	56:BY:23:ARG:NH1	2.27	0.45
56:BY:62:GLU:HB3	56:BY:63:LYS:H	1.64	0.45
4:AD:31:CYS:O	4:AD:32:ALA:HB2	2.16	0.45
35:BA:1097:U:O2'	44:BK:6:UNK:CA	2.52	0.45
4:AD:144:ASP:O	4:AD:184:LYS:HA	2.16	0.45
35:BA:307:G:H22	35:BA:310:A:H5''	1.81	0.45
26:B1:11:ARG:NH1	26:B1:12:PRO:HD2	2.31	0.45
49:BR:20:LEU:HA	49:BR:23:ASN:HB2	1.97	0.45
35:BA:143:G:H1'	55:BX:37:THR:CG2	2.23	0.45
37:BC:64:LEU:CD1	37:BC:175:VAL:O	2.58	0.45
35:BA:903:C:H6	35:BA:903:C:O5'	2.00	0.45
7:AG:43:PHE:O	7:AG:46:ALA:N	2.49	0.45
35:BA:1742:G:H5'	35:BA:1743:C:OP2	2.17	0.45
5:AE:110:LEU:HA	5:AE:113:ALA:HB2	1.98	0.45
38:BD:136:ILE:HG23	38:BD:140:THR:HG21	1.98	0.45
35:BA:613:G:H8	35:BA:613:G:C5'	2.12	0.45
50:BS:73:LEU:O	50:BS:74:ALA:C	2.55	0.45
37:BC:167:LYS:O	37:BC:167:LYS:CE	2.65	0.45
16:AP:18:ARG:O	16:AP:20:VAL:HG12	2.17	0.45
25:B0:36:ILE:HG22	25:B0:60:PHE:HB3	1.98	0.45
1:AA:276:G:C6	1:AA:277:C:C5	3.04	0.45
35:BA:2080:G:H2'	35:BA:2081:C:C6	2.52	0.45
47:BP:93:GLY:N	47:BP:123:LEU:HD12	2.32	0.45
31:B6:15:GLU:OE2	31:B6:41:PRO:HB2	2.17	0.45
1:AA:633:G:H3'	1:AA:634:C:C5	2.52	0.45
24:AY:119:VAL:HG22	24:AY:124:ARG:HG3	1.93	0.45
12:AL:119:LYS:O	12:AL:120:TYR:CG	2.70	0.45
5:AE:150:ARG:HB2	5:AE:150:ARG:NH1	2.32	0.45
5:AE:24:ARG:CG	5:AE:24:ARG:NH1	2.77	0.45
24:AY:115:ALA:HB1	24:AY:148:ILE:CB	2.46	0.45
1:AA:955:U:O2'	1:AA:956:U:H5'	2.17	0.45
11:AK:86:GLY:H	11:AK:112:THR:HG23	1.81	0.45
18:AR:47:THR:C	18:AR:83:GLU:HG2	2.37	0.45
1:AA:189(C):C:O5'	1:AA:189(C):C:H6	2.00	0.45
27:B2:3:LEU:HD23	27:B2:3:LEU:C	2.38	0.45
22:AV:22:G:N3	22:AV:22:G:H2'	2.32	0.45
35:BA:2099:U:O2	35:BA:2191:G:N1	2.50	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:187:LYS:O	24:AY:188:ASP:C	2.54	0.45
35:BA:2082:A:H2'	35:BA:2083:G:O4'	2.17	0.45
24:AY:171:TRP:CA	24:AY:182:VAL:HG13	2.46	0.45
24:AY:282:ARG:HD3	24:AY:319:ARG:NH2	2.23	0.45
24:AY:323:GLY:O	24:AY:324:LYS:C	2.54	0.45
1:AA:679:C:N4	1:AA:680:C:N4	2.65	0.45
30:B5:6:VAL:HG22	30:B5:7:PRO:HD2	1.99	0.45
35:BA:1022:G:C6	35:BA:1140:C:C2	3.05	0.45
35:BA:1140:C:C5'	35:BA:1141:U:OP2	2.64	0.45
35:BA:1144:G:H2'	35:BA:1145:C:H6	1.79	0.45
35:BA:1381:G:O2'	35:BA:1382:G:H5'	2.16	0.45
35:BA:1612:C:H2'	35:BA:1613:G:O5'	2.17	0.45
35:BA:1614:A:H2	35:BA:1615:C:C5	2.34	0.45
35:BA:1691:C:O5'	35:BA:1691:C:H6	1.99	0.45
35:BA:1894:C:O2	35:BA:1894:C:C2'	2.65	0.45
35:BA:1902:C:C5	35:BA:1903:G:C8	3.05	0.45
35:BA:1693:U:O4	35:BA:1976:U:O2'	2.35	0.45
30:B5:7:PRO:HA	35:BA:2615:U:N3	2.31	0.45
35:BA:2677:G:O2'	35:BA:2678:C:H5'	2.17	0.45
35:BA:2681:C:C5	35:BA:2727:G:C2	3.00	0.45
35:BA:36:G:C2	35:BA:445:C:N3	2.85	0.45
35:BA:627:A:H61	35:BA:636:G:C2'	2.30	0.45
35:BA:748:G:H8	35:BA:750:A:OP2	1.99	0.45
38:BD:61:LEU:CD1	38:BD:62:TYR:N	2.80	0.45
39:BE:65:GLY:HA2	39:BE:70:ALA:CB	2.46	0.45
45:BN:95:PRO:O	45:BN:98:VAL:CB	2.64	0.45
51:BT:73:GLU:OE1	51:BT:103:ARG:NH1	2.49	0.45
52:BU:14:HIS:O	52:BU:16:LYS:N	2.50	0.45
55:BX:56:THR:O	55:BX:57:LEU:HB3	2.17	0.45
1:AA:598:U:H2'	1:AA:599:C:O4'	2.17	0.45
35:BA:1027:A:C2	35:BA:1028:A:N7	2.84	0.45
1:AA:1088:G:N2	1:AA:1097:C:O2	2.49	0.45
2:AB:90:MET:HA	2:AB:91:PRO:HD3	1.84	0.45
35:BA:1910:G:N2	35:BA:1911:U:O2	2.49	0.45
22:AV:58:A:C2	22:AV:61:C:C5	3.05	0.45
54:BW:14:PRO:HA	54:BW:101:SER:CB	2.47	0.45
54:BW:14:PRO:CA	54:BW:101:SER:HB3	2.46	0.45
3:AC:189:ALA:HB3	3:AC:196:LEU:HB2	1.97	0.45
10:AJ:50:ILE:N	10:AJ:60:ARG:HG2	2.32	0.45
14:AN:41:ARG:HG3	14:AN:42:ILE:N	2.32	0.45
1:AA:55:A:O2'	1:AA:56:U:H5'	2.17	0.45
56:BY:22:GLY:O	56:BY:23:ARG:HG2	2.16	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:292:C:H42	35:BA:348:G:H1	1.65	0.45
55:BX:9:LEU:HG	55:BX:30:VAL:HA	1.99	0.45
40:BF:192:LEU:HD23	40:BF:192:LEU:O	2.17	0.45
4:AD:118:ARG:NH1	4:AD:136:PRO:CB	2.80	0.45
42:BH:132:ARG:C	42:BH:133:VAL:HG23	2.37	0.45
11:AK:91:ARG:O	11:AK:94:ALA:CB	2.64	0.45
37:BC:189:ILE:O	37:BC:193:ILE:HG13	2.17	0.45
35:BA:1721:G:H1'	35:BA:1742:G:H1	1.82	0.45
35:BA:2850:A:O5'	35:BA:2850:A:H8	2.00	0.45
41:BG:80:PHE:CE1	41:BG:81:LYS:NZ	2.84	0.45
5:AE:41:VAL:CG2	5:AE:67:VAL:HG13	2.47	0.45
35:BA:1553:A:C5	35:BA:1555:G:C5	3.05	0.45
1:AA:1236:A:C2	1:AA:1237:C:C2	3.05	0.45
35:BA:1023:U:C4'	35:BA:1123:C:OP1	2.65	0.45
35:BA:2713:A:H3'	35:BA:2714:G:C5'	2.46	0.45
16:AP:57:ARG:HA	16:AP:60:LEU:CD1	2.43	0.45
28:B3:30:ARG:CG	35:BA:1184:G:OP1	2.65	0.45
20:AT:62:LEU:HA	20:AT:65:LYS:HG3	1.99	0.45
13:AM:68:GLY:C	13:AM:70:LEU:N	2.69	0.45
35:BA:80:G:H1'	35:BA:346:A:C6	2.52	0.45
7:AG:137:LYS:HB3	7:AG:137:LYS:HE2	1.60	0.45
29:B4:37:SER:C	29:B4:39:CYS:H	2.17	0.45
25:B0:75:LEU:HD23	25:B0:75:LEU:O	2.17	0.45
1:AA:1398:A:N6	5:AE:22:GLY:H	2.06	0.45
4:AD:202:LEU:O	4:AD:205:GLU:N	2.50	0.45
8:AH:46:LYS:HG2	8:AH:64:LYS:HE2	1.98	0.45
1:AA:1010:G:C2	1:AA:1020:U:C2	3.04	0.45
5:AE:148:VAL:HG21	8:AH:107:LEU:HD13	1.99	0.45
31:B6:22:ALA:O	31:B6:23:THR:OG1	2.29	0.45
2:AB:92:TYR:OH	2:AB:150:SER:HB2	2.17	0.45
1:AA:449:C:H2'	1:AA:450:G:O4'	2.17	0.45
1:AA:337:C:C2	1:AA:338:A:C8	3.04	0.45
35:BA:317:G:H2'	35:BA:318:C:C6	2.52	0.45
38:BD:28:GLU:N	38:BD:29:PRO:HD2	2.32	0.45
37:BC:81:GLU:C	37:BC:83:ILE:H	2.19	0.45
24:AY:154:LEU:C	24:AY:156:ASP:N	2.71	0.45
24:AY:32:LYS:NZ	24:AY:260:LEU:HD12	2.32	0.45
24:AY:25:GLY:O	24:AY:27:THR:N	2.50	0.45
1:AA:677:U:O2'	1:AA:678:U:H5'	2.17	0.45
30:B5:52:TYR:CD2	30:B5:52:TYR:O	2.69	0.45
30:B5:6:VAL:CG2	30:B5:7:PRO:HD2	2.47	0.45
32:B7:30:VAL:HG22	32:B7:33:ARG:HH22	1.80	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1022:G:N7	45:BN:66:LYS:HE3	2.32	0.45
35:BA:1024:G:C3'	35:BA:1025:G:C5'	2.89	0.45
35:BA:1770:G:C5	35:BA:1771:C:C5	3.05	0.45
35:BA:1906:G:N3	35:BA:1907:G:H1'	2.32	0.45
35:BA:1999:C:H2'	35:BA:2000:G:O4'	2.17	0.45
35:BA:2000:G:C2	35:BA:2001:A:C8	3.05	0.45
25:B0:34:GLY:HA3	35:BA:2352:A:N1	2.32	0.45
35:BA:729:G:C4	38:BD:208:LYS:HD2	2.52	0.45
38:BD:260:ARG:HG2	38:BD:261:LYS:N	2.32	0.45
40:BF:37:VAL:C	40:BF:39:TRP:N	2.69	0.45
45:BN:22:THR:HA	45:BN:61:ARG:HB2	1.98	0.45
52:BU:84:LYS:HD3	52:BU:84:LYS:HA	1.76	0.45
52:BU:90:VAL:HB	52:BU:91:ASP:H	1.50	0.45
52:BU:98:LEU:O	52:BU:100:VAL:N	2.50	0.45
6:AF:62:TRP:CG	18:AR:35:ARG:NH1	2.85	0.45
35:BA:1124:C:O2'	35:BA:1125:G:H5'	2.17	0.45
1:AA:1091:U:C2	1:AA:1095:U:C4	3.04	0.45
2:AB:101:MET:CB	2:AB:102:LEU:HD12	2.42	0.45
2:AB:208:ILE:H	2:AB:208:ILE:HG13	1.40	0.45
35:BA:2631:G:N2	39:BE:61:ARG:HH12	2.14	0.45
35:BA:2788:C:O3'	35:BA:2809:A:O2'	2.34	0.45
48:BQ:72:LYS:HB3	48:BQ:94:VAL:CG2	2.45	0.45
57:BZ:24:LEU:HD23	57:BZ:25:PRO:O	2.17	0.45
57:BZ:27:VAL:O	57:BZ:87:ASP:HA	2.17	0.45
1:AA:1269:A:N6	1:AA:1312:G:O2'	2.49	0.45
1:AA:1328:C:C2	1:AA:1329:A:C8	3.05	0.45
13:AM:96:LEU:C	13:AM:110:ARG:HD3	2.37	0.45
12:AL:60:LEU:HD22	12:AL:60:LEU:N	2.32	0.45
1:AA:1151:A:C5	1:AA:1152:A:N7	2.85	0.45
1:AA:1157:A:C2	1:AA:1181:G:C4	3.05	0.45
3:AC:52:LEU:HG	3:AC:52:LEU:O	2.16	0.45
35:BA:85:G:H5''	35:BA:85:G:H8	1.81	0.45
4:AD:29:PRO:O	4:AD:30:LYS:CB	2.64	0.45
9:AI:36:TYR:CD2	9:AI:37:PHE:CE1	3.05	0.45
40:BF:117:ARG:HD2	40:BF:191:ARG:HA	1.97	0.45
40:BF:3:GLU:O	40:BF:19:GLU:HB2	2.17	0.45
49:BR:96:ARG:HD3	49:BR:98:LEU:CD1	2.36	0.45
11:AK:65:ALA:O	11:AK:68:ALA:HB3	2.17	0.45
37:BC:38:ASP:OD2	37:BC:177:LYS:HE2	2.17	0.45
37:BC:213:TYR:OH	37:BC:223:ARG:HD2	2.16	0.45
41:BG:143:GLU:O	41:BG:144:ILE:HG22	2.16	0.45
1:AA:354:G:H2'	1:AA:354:G:N3	2.32	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B3:45:GLY:O	28:B3:47:VAL:N	2.50	0.45
36:BB:50:G:OP1	50:BS:63:THR:CG2	2.65	0.45
1:AA:713:G:C2'	1:AA:714:G:C8	2.84	0.45
1:AA:1430:C:C2	1:AA:1471:G:N2	2.85	0.45
35:BA:1469:A:C2	35:BA:1470:G:H1'	2.52	0.45
1:AA:1226:C:C5	13:AM:104:ARG:HA	2.52	0.45
56:BY:84:ARG:CG	56:BY:85:VAL:H	2.25	0.45
4:AD:127:THR:HB	4:AD:147:ALA:O	2.17	0.45
36:BB:77:U:H4'	57:BZ:84:GLU:OE2	2.17	0.45
57:BZ:17:ALA:O	57:BZ:20:ARG:N	2.50	0.45
1:AA:125:U:H2'	1:AA:126:G:H8	1.81	0.45
17:AQ:67:LYS:HG2	17:AQ:68:ARG:HG3	1.99	0.45
35:BA:186:G:O5'	35:BA:186:G:H8	2.00	0.45
2:AB:137:ARG:O	2:AB:140:HIS:HB2	2.17	0.45
35:BA:2450:A:C2	35:BA:2451:A:C5	3.05	0.45
31:B6:15:GLU:O	31:B6:16:CYS:C	2.55	0.45
35:BA:1002:G:H2'	35:BA:1003:G:O5'	2.16	0.45
1:AA:134:A:C5	1:AA:135:C:C4	3.05	0.45
1:AA:560:U:H4'	1:AA:561:U:H5''	1.99	0.45
57:BZ:63:ASP:O	57:BZ:64:GLY:C	2.55	0.45
1:AA:1348:U:C5'	9:AI:110:GLU:OE1	2.64	0.45
56:BY:54:LYS:O	56:BY:55:TYR:HB2	2.17	0.45
1:AA:1465:C:C5	1:AA:1466:C:C4	3.05	0.45
5:AE:26:PHE:CD1	5:AE:26:PHE:N	2.84	0.45
22:AV:74:C:C2'	22:AV:75:C:H5'	2.47	0.45
35:BA:154:G:C4	35:BA:154(A):C:C5	3.05	0.45
1:AA:889:A:O4'	1:AA:891:U:C6	2.70	0.45
41:BG:147:ASP:O	41:BG:147:ASP:OD1	2.35	0.45
35:BA:338:G:O2'	35:BA:339:U:H5'	2.16	0.45
35:BA:2411:A:O2'	35:BA:2412:A:H5'	2.16	0.45
35:BA:1063:G:H8	35:BA:1063:G:OP2	1.99	0.45
24:AY:202:GLN:O	24:AY:203:GLU:C	2.54	0.44
24:AY:25:GLY:O	24:AY:26:LYS:C	2.55	0.44
24:AY:201:ILE:CA	24:AY:262:ASN:HD22	2.27	0.44
37:BC:73:ARG:HH21	37:BC:110:PHE:HA	1.81	0.44
35:BA:1252:G:O2'	35:BA:1253:A:C8	2.71	0.44
35:BA:1310:G:H2'	35:BA:1311:G:C5'	2.32	0.44
35:BA:1611:C:N4	35:BA:1620:G:H1	2.15	0.44
35:BA:1798:U:N1	35:BA:1822:G:N2	2.66	0.44
35:BA:1822:G:O2'	35:BA:1823:G:H5'	2.16	0.44
35:BA:2050:C:N4	35:BA:2051:A:N6	2.65	0.44
35:BA:2072:G:C8	35:BA:2072:G:O5'	2.70	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:830:G:C8	35:BA:2448:A:C2	3.05	0.44
35:BA:2679:A:OP1	39:BE:160:TYR:OH	2.34	0.44
35:BA:2716:U:O2'	35:BA:2717:G:H5'	2.17	0.44
35:BA:527:C:O2	35:BA:2779:U:C6	2.71	0.44
35:BA:572:A:H2'	35:BA:573:G:H1'	1.94	0.44
35:BA:940:G:C2'	35:BA:941:A:H5''	2.47	0.44
35:BA:962:G:H2'	35:BA:963:U:H6	1.81	0.44
38:BD:267:SER:O	38:BD:268:ARG:CB	2.65	0.44
38:BD:44:ASN:N	38:BD:44:ASN:OD1	2.48	0.44
39:BE:167:VAL:O	39:BE:170:LEU:HD11	2.16	0.44
45:BN:59:LYS:O	45:BN:60:ILE:O	2.35	0.44
47:BP:97:PRO:O	47:BP:99:LEU:N	2.50	0.44
51:BT:56:GLY:O	51:BT:57:PHE:C	2.56	0.44
1:AA:575:G:H4'	1:AA:576:G:C5'	2.45	0.44
15:AO:70:LEU:O	15:AO:74:ASP:C	2.55	0.44
53:BV:28:GLU:O	53:BV:61:VAL:CB	2.65	0.44
35:BA:2472:G:H1'	35:BA:2479:G:H22	1.83	0.44
2:AB:166:ASP:HA	2:AB:167:PRO:HD2	1.82	0.44
2:AB:164:VAL:HG11	2:AB:167:PRO:N	2.32	0.44
2:AB:97:TRP:HZ3	2:AB:172:ILE:HB	1.82	0.44
57:BZ:167:PRO:HG2	57:BZ:167:PRO:O	2.17	0.44
42:BH:125:VAL:HG13	42:BH:131:VAL:CG1	2.46	0.44
48:BQ:114:ALA:C	48:BQ:118:LEU:HD12	2.34	0.44
57:BZ:10:ARG:H	57:BZ:37:VAL:HA	1.82	0.44
57:BZ:40:ASP:OD1	57:BZ:42:VAL:CG1	2.61	0.44
1:AA:1330:U:O4	1:AA:1331:G:C2	2.70	0.44
14:AN:31:ARG:C	14:AN:32:SER:OG	2.54	0.44
1:AA:55:A:C5	24:AY:311:HIS:CE1	3.05	0.44
55:BX:12:VAL:O	55:BX:13:LEU:HB2	2.16	0.44
35:BA:1095:A:H2'	35:BA:1096:A:C8	2.42	0.44
35:BA:2840:C:H5''	49:BR:53:HIS:CD2	2.52	0.44
49:BR:20:LEU:O	49:BR:21:TYR:C	2.55	0.44
50:BS:14:VAL:CG1	50:BS:16:ASN:HD22	2.30	0.44
4:AD:59:ARG:HA	4:AD:59:ARG:NH2	2.27	0.44
35:BA:873:G:C2'	35:BA:874:G:H5'	2.47	0.44
45:BN:15:LEU:C	45:BN:15:LEU:HD13	2.37	0.44
35:BA:1542:A:H8	35:BA:1542:A:H3'	1.81	0.44
1:AA:691:G:C6	1:AA:692:U:O4	2.70	0.44
41:BG:43:LEU:C	41:BG:45:GLU:HG2	2.38	0.44
41:BG:67:LYS:H	41:BG:67:LYS:CD	2.29	0.44
35:BA:598:G:C6	35:BA:599:G:C5	3.05	0.44
40:BF:107:LYS:O	40:BF:206:ILE:CG2	2.66	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BS:26:LEU:CD2	50:BS:27:SER:O	2.65	0.44
5:AE:108:ALA:O	5:AE:112:LEU:HD12	2.17	0.44
1:AA:327:A:H3'	1:AA:328:C:H5''	1.99	0.44
35:BA:2289:G:O5'	35:BA:2289:G:H8	2.00	0.44
50:BS:53:SER:C	50:BS:55:ALA:H	2.14	0.44
35:BA:1447:G:C4'	35:BA:1545:A:C4'	2.95	0.44
41:BG:23:PHE:CD1	41:BG:23:PHE:N	2.85	0.44
1:AA:1314:C:C4	1:AA:1315:U:C5	3.06	0.44
35:BA:1747(A):G:N2	35:BA:1748:G:C8	2.85	0.44
1:AA:172:A:C8	1:AA:172:A:H5''	2.42	0.44
1:AA:221:C:H2'	1:AA:222:U:H6	1.81	0.44
25:B0:36:ILE:HG12	35:BA:2354:G:O2'	2.17	0.44
57:BZ:17:ALA:HA	57:BZ:20:ARG:CG	2.46	0.44
37:BC:155:GLU:O	37:BC:160:ARG:HB2	2.18	0.44
20:AT:48:LYS:O	20:AT:52:ALA:N	2.50	0.44
1:AA:122:G:H2'	1:AA:123:C:H6	1.76	0.44
39:BE:143:ASN:HD22	39:BE:143:ASN:N	2.13	0.44
24:AY:484:GLU:O	24:AY:488:LYS:N	2.50	0.44
35:BA:489:G:H22	35:BA:1321:A:P	2.40	0.44
4:AD:36:ARG:N	4:AD:37:PRO:CD	2.77	0.44
35:BA:1047:G:N2	35:BA:1110:G:H2'	2.31	0.44
1:AA:1526:G:O2'	1:AA:1527:C:H5'	2.17	0.44
54:BW:47:VAL:O	54:BW:51:LEU:HB2	2.16	0.44
37:BC:117:PRO:HG3	37:BC:145:VAL:HG13	1.99	0.44
26:B1:18:ILE:HG21	26:B1:20:ARG:NH2	2.31	0.44
35:BA:1355:G:O2'	35:BA:1356:G:H5'	2.17	0.44
1:AA:1530:G:H2'	1:AA:1531:A:C8	2.51	0.44
27:B2:31:GLU:OE1	27:B2:31:GLU:HA	2.16	0.44
48:BQ:117:ALA:C	48:BQ:119:ARG:H	2.21	0.44
24:AY:184:HIS:HE1	24:AY:191:TYR:CE1	2.22	0.44
24:AY:390:ILE:CG2	24:AY:390:ILE:O	2.62	0.44
24:AY:419:LEU:HD21	24:AY:424:ALA:CB	2.47	0.44
1:AA:1406:U:H2'	1:AA:1407:C:H5'	1.98	0.44
32:B7:33:ARG:CZ	35:BA:467:G:OP1	2.65	0.44
35:BA:1155:A:N3	35:BA:1157:G:C8	2.85	0.44
35:BA:2039:C:H2'	35:BA:2040:C:H6	1.82	0.44
35:BA:2577:A:C5'	35:BA:2578:G:H5'	2.44	0.44
35:BA:2685:G:C4'	46:BO:67:LYS:NZ	2.80	0.44
35:BA:2776:A:H4'	35:BA:2777:G:H5''	1.99	0.44
35:BA:685:A:H2	35:BA:688:U:O2	1.99	0.44
35:BA:752:A:O2'	35:BA:753:C:OP2	2.35	0.44
32:B7:10:ARG:CD	35:BA:770:G:H5''	2.47	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:211:ARG:O	38:BD:213:ARG:N	2.50	0.44
38:BD:244:ARG:HA	38:BD:245:PRO:HA	1.61	0.44
39:BE:63:LEU:O	39:BE:63:LEU:CD2	2.59	0.44
53:BV:79:VAL:O	53:BV:80:GLN:HB2	2.16	0.44
35:BA:1668:A:H2'	35:BA:1674:G:N7	2.31	0.44
35:BA:1947:C:N3	35:BA:1960:A:C2	2.85	0.44
46:BO:33:ALA:CA	46:BO:37:ASP:OD2	2.64	0.44
1:AA:14:U:O2	1:AA:16:A:H3'	2.16	0.44
1:AA:20:U:N3	1:AA:21:G:C4	2.86	0.44
1:AA:720:C:H2'	1:AA:721:G:N7	2.33	0.44
15:AO:81:LEU:O	15:AO:82:ILE:C	2.55	0.44
18:AR:67:ALA:O	18:AR:70:ILE:HB	2.17	0.44
2:AB:178:ARG:CG	2:AB:178:ARG:HH11	2.20	0.44
2:AB:97:TRP:NE1	2:AB:101:MET:HG3	2.32	0.44
35:BA:954:G:N3	35:BA:2274:A:H2	2.15	0.44
35:BA:954:G:H2'	35:BA:955:C:H5'	1.99	0.44
48:BQ:121:ALA:O	48:BQ:125:LEU:HD23	2.18	0.44
48:BQ:42:ILE:HD12	48:BQ:42:ILE:HA	1.75	0.44
35:BA:906:G:C2'	48:BQ:67:ARG:HH22	2.30	0.44
22:AV:68:C:N4	22:AV:69:C:N4	2.65	0.44
1:AA:1325:C:H6	1:AA:1325:C:H5''	1.81	0.44
1:AA:1325:C:C4	1:AA:1326:C:N4	2.85	0.44
1:AA:1148:U:C2'	1:AA:1149:C:H5'	2.47	0.44
1:AA:1183:A:H3'	1:AA:1184:G:C5'	2.47	0.44
35:BA:880:G:H2'	35:BA:881:G:H8	1.81	0.44
27:B2:20:GLU:OE1	27:B2:20:GLU:HA	2.18	0.44
27:B2:29:LYS:HD3	27:B2:57:ILE:HD12	1.99	0.44
2:AB:75:LYS:C	2:AB:75:LYS:HD3	2.36	0.44
19:AS:75:ALA:O	19:AS:76:PRO:C	2.55	0.44
35:BA:1095:A:C8	35:BA:1096:A:N7	2.85	0.44
35:BA:1069:A:H5'	44:BK:9:UNK:CB	2.47	0.44
4:AD:187:ARG:O	4:AD:189:PRO:HD3	2.16	0.44
49:BR:45:ARG:O	49:BR:47:PHE:N	2.50	0.44
42:BH:121:ILE:HD13	42:BH:121:ILE:HA	1.72	0.44
35:BA:142(A):C:O2'	35:BA:143:G:H5'	2.16	0.44
11:AK:58:PRO:HA	11:AK:90:GLY:CA	2.47	0.44
37:BC:14:VAL:HG22	37:BC:28:LEU:HD11	1.99	0.44
37:BC:213:TYR:HD2	37:BC:221:SER:HB3	1.81	0.44
51:BT:124:ASP:CB	51:BT:125:ARG:HH12	2.23	0.44
7:AG:95:ARG:O	7:AG:98:SER:HB2	2.17	0.44
29:B4:4:GLY:N	29:B4:6:HIS:HE1	2.14	0.44
1:AA:405:U:H3'	1:AA:406:G:C5'	2.24	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BH:71:LEU:CD2	42:BH:72:ILE:HD12	2.43	0.44
28:B3:47:VAL:CA	28:B3:50:VAL:HG22	2.29	0.44
36:BB:50:G:OP1	50:BS:63:THR:HG23	2.17	0.44
50:BS:33:LYS:C	50:BS:34:HIS:HD2	2.21	0.44
50:BS:36:TYR:HD1	50:BS:36:TYR:H	1.45	0.44
50:BS:61:ASN:O	50:BS:62:LYS:CB	2.64	0.44
34:B9:8:LYS:CE	35:BA:1032:A:OP1	2.65	0.44
41:BG:19:LEU:O	41:BG:22:ARG:CB	2.65	0.44
39:BE:6:GLY:HA2	39:BE:51:PHE:CE2	2.52	0.44
35:BA:1638:C:H4'	35:BA:2710:C:O2	2.17	0.44
50:BS:106:ARG:O	50:BS:107:GLU:HB3	2.18	0.44
1:AA:1127:G:H1	1:AA:1145:C:N4	2.15	0.44
51:BT:108:ARG:O	51:BT:110:ILE:N	2.49	0.44
42:BH:151:ILE:N	42:BH:151:ILE:CD1	2.71	0.44
35:BA:459:U:H2'	35:BA:460:A:H8	1.80	0.44
33:B8:49:VAL:CG1	33:B8:53:PRO:HD3	2.47	0.44
35:BA:9:U:O2	35:BA:10:G:C8	2.70	0.44
1:AA:80:G:C3'	1:AA:81:U:C5'	2.87	0.44
43:BJ:25:UNK:CB	43:BJ:85:LEU:HB3	2.47	0.44
35:BA:1305:C:C2	35:BA:1306:C:C6	3.05	0.44
26:B1:92:LYS:HD2	26:B1:93:GLU:N	2.33	0.44
56:BY:54:LYS:HE3	56:BY:55:TYR:HE2	1.79	0.44
1:AA:519:C:N4	1:AA:520:A:C2	2.85	0.44
35:BA:2796:U:H3'	35:BA:2799:C:H5'	1.99	0.44
1:AA:1055:A:O2'	3:AC:156:ARG:HD2	2.18	0.44
6:AF:3:ARG:NH1	6:AF:38:GLU:OE2	2.46	0.44
1:AA:996:A:C2	1:AA:997:U:N3	2.85	0.44
54:BW:110:LYS:HD2	54:BW:110:LYS:HA	1.85	0.44
35:BA:493:G:H2'	35:BA:494:G:O4'	2.18	0.44
24:AY:146:ARG:HH22	24:AY:177:LYS:HE2	1.83	0.44
24:AY:178:LEU:O	24:AY:179:PHE:C	2.55	0.44
24:AY:303:ILE:HD12	24:AY:375:ILE:HD13	1.98	0.44
24:AY:443:VAL:CG2	24:AY:444:LEU:N	2.59	0.44
24:AY:9:GLU:HB2	24:AY:360:TYR:CZ	2.52	0.44
32:B7:11:LYS:HE2	35:BA:686:G:C2	2.53	0.44
35:BA:1138:G:H8	35:BA:1138:G:O5'	2.01	0.44
35:BA:1020:A:N1	35:BA:1141:U:H1'	2.33	0.44
35:BA:1906:G:C8	35:BA:1929:G:C5	3.05	0.44
35:BA:2014:A:H2'	35:BA:2015:A:C5	2.44	0.44
35:BA:2822:G:OP1	39:BE:112:GLY:N	2.27	0.44
35:BA:662:G:C2	35:BA:663:G:C8	3.05	0.44
39:BE:27:LEU:CD1	39:BE:180:ASN:O	2.66	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BE:82:ARG:HH11	39:BE:82:ARG:CG	2.29	0.44
45:BN:67:LEU:HD23	45:BN:87:LEU:HD12	1.99	0.44
51:BT:94:ALA:C	51:BT:96:ARG:H	2.21	0.44
35:BA:1953:A:H1'	35:BA:2560:C:H1'	1.99	0.44
2:AB:44:LEU:O	2:AB:45:GLN:C	2.56	0.44
35:BA:2385:C:N3	35:BA:2386:C:C5	2.86	0.44
35:BA:864:G:N2	35:BA:913:U:O2	2.50	0.44
48:BQ:135:ASP:HB2	48:BQ:136:ALA:H	1.43	0.44
57:BZ:8:TYR:CB	57:BZ:38:TYR:CE2	3.00	0.44
57:BZ:24:LEU:CD1	57:BZ:41:LEU:HA	2.45	0.44
57:BZ:91:LEU:HD22	57:BZ:130:PRO:CB	2.46	0.44
13:AM:82:MET:HG2	13:AM:82:MET:O	2.17	0.44
13:AM:90:LEU:HA	13:AM:93:ARG:HB2	1.99	0.44
1:AA:1092:A:C4	1:AA:1183:A:N6	2.85	0.44
1:AA:1190:G:C5'	1:AA:1191:A:OP2	2.66	0.44
14:AN:40:CYS:C	14:AN:42:ILE:N	2.71	0.44
52:BU:101:ARG:HH11	52:BU:101:ARG:CG	2.30	0.44
35:BA:58:G:N2	35:BA:70:G:C4	2.85	0.44
40:BF:7:TYR:CD2	40:BF:16:GLY:HA3	2.52	0.44
4:AD:140:VAL:HG12	4:AD:141:ARG:N	2.31	0.44
35:BA:310:A:H1'	35:BA:311:A:H2'	1.98	0.44
35:BA:1348:G:C3'	35:BA:1349:A:H5''	2.46	0.44
11:AK:32:ILE:O	11:AK:39:PRO:HA	2.16	0.44
37:BC:43:VAL:CG2	37:BC:214:VAL:HG22	2.40	0.44
37:BC:217:THR:HG22	37:BC:218:MET:H	1.79	0.44
37:BC:21:THR:HG22	37:BC:225:ASN:HB2	2.00	0.44
37:BC:62:VAL:HG11	37:BC:192:PHE:HD1	1.81	0.44
7:AG:103:TRP:HB3	7:AG:134:ALA:HB1	1.99	0.44
41:BG:139:LEU:C	41:BG:141:PHE:N	2.70	0.44
41:BG:57:ALA:O	41:BG:60:LEU:HB3	2.16	0.44
40:BF:32:LEU:HD21	40:BF:109:GLY:HA3	1.99	0.44
1:AA:298:A:C6	1:AA:299:G:C2	3.05	0.44
5:AE:9:LYS:CB	5:AE:112:LEU:HD11	2.48	0.44
1:AA:108:G:O6	20:AT:15:ARG:HD2	2.17	0.44
8:AH:121:ASP:O	8:AH:125:ARG:HB2	2.17	0.44
2:AB:112:VAL:O	2:AB:113:HIS:C	2.56	0.44
38:BD:72:LYS:HZ3	38:BD:101:GLU:HB3	1.82	0.44
35:BA:1858:G:O2'	35:BA:1859:A:C8	2.70	0.44
1:AA:1030(C):G:H2'	1:AA:1030(D):A:H8	1.81	0.44
35:BA:1759:A:O2'	35:BA:1760:A:H5'	2.18	0.44
35:BA:1493:C:C2'	35:BA:1493:C:O2	2.65	0.44
35:BA:1747(A):G:C2'	35:BA:1748:G:H5''	2.47	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1139:G:N2	1:AA:1143:G:N1	2.65	0.44
3:AC:6:HIS:NE2	3:AC:8:ILE:HB	2.31	0.44
9:AI:94:ALA:O	9:AI:95:LYS:CB	2.65	0.44
1:AA:220:G:O2'	1:AA:221:C:H5'	2.16	0.44
20:AT:65:LYS:O	20:AT:68:LYS:HG3	2.17	0.44
1:AA:1495:U:C2'	1:AA:1496:C:C5'	2.88	0.44
22:AV:36:U:C2'	22:AV:37:A:C5'	2.95	0.44
49:BR:24:GLN:O	49:BR:28:LEU:N	2.50	0.44
35:BA:1363:C:O2'	35:BA:1364:G:H5'	2.17	0.44
35:BA:2673:G:H5'	35:BA:2673:G:C8	2.50	0.44
31:B6:15:GLU:HG2	31:B6:18:ARG:NH1	2.33	0.44
1:AA:504:C:H2'	1:AA:511:C:H5	1.83	0.44
35:BA:1370:C:H3'	35:BA:1371:G:C8	2.52	0.44
35:BA:1609:A:C2	35:BA:1616:A:C2	3.05	0.44
12:AL:77:LEU:HD21	12:AL:106:ASP:O	2.17	0.44
46:BO:11:ALA:O	46:BO:98:VAL:CA	2.65	0.44
35:BA:1173:G:H5'	35:BA:1174:A:O5'	2.17	0.44
35:BA:2276:G:H2'	35:BA:2276:G:N3	2.31	0.44
1:AA:1474:G:C6	1:AA:1475:G:N7	2.85	0.44
24:AY:131:ARG:HH12	24:AY:162:LEU:HD13	1.81	0.44
24:AY:177:LYS:HZ1	42:BH:110:SER:HB3	1.82	0.44
32:B7:11:LYS:O	32:B7:12:ARG:C	2.55	0.44
33:B8:8:LYS:O	33:B8:9:GLY:C	2.56	0.44
35:BA:1142(A):A:H5'	35:BA:1142(A):A:C8	2.53	0.44
35:BA:1921:G:H2'	35:BA:1922:G:H8	1.82	0.44
35:BA:2452:C:O2'	35:BA:2453:A:H5'	2.17	0.44
35:BA:2727:G:C2	35:BA:2728:U:C2	3.06	0.44
35:BA:2820:A:O2'	35:BA:2821:A:OP1	2.32	0.44
35:BA:942:G:C5'	47:BP:36:LYS:N	2.80	0.44
38:BD:92:ILE:CA	38:BD:106:ILE:HA	2.47	0.44
39:BE:105:THR:CG2	39:BE:106:GLY:N	2.80	0.44
39:BE:114:ALA:HB3	39:BE:160:TYR:CB	2.32	0.44
39:BE:190:GLY:O	39:BE:191:PRO:O	2.34	0.44
47:BP:55:ARG:O	47:BP:57:THR:N	2.50	0.44
1:AA:1418:A:H8	1:AA:1419:G:O4'	2.01	0.44
35:BA:1947:C:C2	35:BA:1960:A:C2	3.06	0.44
1:AA:580:U:H4'	15:AO:58:MET:SD	2.57	0.44
1:AA:567:G:N2	1:AA:883:C:O2	2.50	0.44
35:BA:1028:A:C2	35:BA:1029:A:C5	3.05	0.44
2:AB:108:ILE:H	2:AB:108:ILE:HG12	1.40	0.44
2:AB:168:THR:HG23	2:AB:192:SER:CA	2.47	0.44
2:AB:41:ILE:CG2	2:AB:42:ILE:N	2.81	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:54:THR:O	2:AB:58:ILE:HG13	2.17	0.44
2:AB:70:PHE:C	2:AB:71:VAL:CG2	2.86	0.44
48:BQ:135:ASP:C	48:BQ:137:TYR:H	2.21	0.44
57:BZ:126:VAL:O	57:BZ:126:VAL:HG23	2.16	0.44
57:BZ:37:VAL:O	57:BZ:38:TYR:HB3	2.18	0.44
57:BZ:82:ARG:NH1	57:BZ:82:ARG:HG2	2.33	0.44
21:AU:16:GLY:O	21:AU:17:THR:CG2	2.65	0.44
1:AA:989:C:O2	1:AA:1217:C:O2	2.36	0.44
1:AA:979:C:N4	1:AA:1360:A:H62	2.12	0.44
10:AJ:15:THR:O	10:AJ:19:SER:HB3	2.18	0.44
10:AJ:60:ARG:O	10:AJ:61:GLU:HB2	2.17	0.44
1:AA:395:C:C2'	1:AA:396:G:H5'	2.47	0.44
56:BY:36:ALA:O	56:BY:37:VAL:HG13	2.17	0.44
40:BF:154:VAL:CG1	40:BF:191:ARG:HB3	2.46	0.44
15:AO:3:ILE:HG13	15:AO:8:LYS:CG	2.47	0.44
35:BA:1463:C:H2'	35:BA:1464:C:H6	1.77	0.44
35:BA:1528:A:N6	35:BA:1544:A:C2	2.86	0.44
37:BC:86:ALA:HB1	37:BC:153:ILE:HD12	1.99	0.44
41:BG:71:THR:HG22	41:BG:72:ARG:O	2.17	0.44
20:AT:10:LEU:O	20:AT:13:LEU:HG	2.18	0.44
35:BA:2280:G:C6	35:BA:2281:C:C4	3.05	0.44
35:BA:1202:C:C5	35:BA:1203:G:N7	2.85	0.44
1:AA:714:G:C6	1:AA:715:A:N6	2.85	0.44
17:AQ:40:LYS:HG2	17:AQ:42:TYR:CE2	2.52	0.44
1:AA:1471:G:O2'	1:AA:1472:U:H5'	2.18	0.44
38:BD:14:ARG:CG	38:BD:14:ARG:HH11	2.15	0.44
35:BA:1858:G:O2'	35:BA:1859:A:H8	2.00	0.44
37:BC:168:THR:O	37:BC:169:GLY:C	2.55	0.44
1:AA:1034:G:N2	1:AA:1035:A:C5	2.85	0.44
35:BA:1414:G:N1	35:BA:1588:C:N4	2.55	0.44
35:BA:1272:A:N7	35:BA:1618:A:C1'	2.81	0.44
1:AA:1377:A:P	7:AG:94:ARG:HH22	2.41	0.44
16:AP:55:ARG:NH2	16:AP:58:TYR:CG	2.81	0.44
32:B7:24:THR:N	32:B7:28:ARG:NH2	2.66	0.44
20:AT:36:LEU:HD13	20:AT:36:LEU:C	2.37	0.44
1:AA:607:A:H2'	1:AA:608:A:C8	2.38	0.44
35:BA:1625:C:H2'	35:BA:1626:G:H5'	1.93	0.44
26:B1:14:VAL:HG21	35:BA:189:G:OP2	2.17	0.44
1:AA:1009:G:H1	1:AA:1020:U:H3	1.65	0.44
1:AA:346:G:N3	1:AA:346:G:C2'	2.80	0.44
35:BA:1385:G:H1'	35:BA:1386:C:C6	2.53	0.44
1:AA:426:G:H4'	4:AD:41:GLY:O	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2418:A:C6	35:BA:2419:U:C4	3.06	0.44
46:BO:17:ARG:NH2	46:BO:99:PHE:CD2	2.86	0.44
42:BH:18:GLU:HB2	42:BH:25:LYS:CB	2.47	0.44
35:BA:2624:G:H8	35:BA:2624:G:O5'	2.00	0.44
1:AA:855:G:H2'	1:AA:856:C:C6	2.51	0.44
41:BG:121:ASN:OD1	41:BG:122:PRO:HD2	2.17	0.44
1:AA:603:U:O2'	1:AA:604:G:H5'	2.17	0.44
1:AA:455:C:H2'	1:AA:456:C:C6	2.51	0.44
35:BA:2088:G:C6	35:BA:2089:U:C4	3.06	0.44
26:B1:37:ILE:HD12	26:B1:37:ILE:C	2.37	0.44
44:BK:131:UNK:O	44:BK:136:UNK:CB	2.66	0.44
35:BA:24:G:H2'	35:BA:25:U:O4'	2.18	0.44
37:BC:143:GLY:O	37:BC:152:ILE:HG21	2.17	0.44
24:AY:210:LEU:C	24:AY:212:ASN:N	2.71	0.44
24:AY:257:GLY:HA3	24:AY:264:GLY:HA3	2.00	0.44
24:AY:13:ARG:CD	24:AY:363:ASP:CG	2.75	0.44
24:AY:87:LEU:O	24:AY:88:ASP:C	2.55	0.44
30:B5:54:GLY:O	30:B5:56:LYS:HG2	2.18	0.44
33:B8:32:LEU:O	33:B8:33:ASN:O	2.35	0.44
35:BA:1020:A:C2	35:BA:1141:U:C2	3.05	0.44
35:BA:1139:G:C5'	45:BN:70:LYS:NZ	2.80	0.44
35:BA:1247:A:O2'	35:BA:1248:G:C5'	2.65	0.44
35:BA:1799:G:C6	35:BA:1819:A:C8	3.05	0.44
30:B5:2:ALA:HA	35:BA:2015:A:H1'	2.00	0.44
35:BA:2511:U:O2	35:BA:2578:G:C6	2.70	0.44
35:BA:2873:A:H3'	35:BA:2874:C:C6	2.53	0.44
35:BA:523:C:H2'	35:BA:524:U:O4'	2.17	0.44
35:BA:572:A:C3'	35:BA:573:G:O4'	2.65	0.44
35:BA:690:G:H21	38:BD:43:ARG:NH2	2.13	0.44
35:BA:696:G:N3	35:BA:696:G:C2'	2.79	0.44
35:BA:2689:U:O2'	49:BR:14:SER:HB2	2.17	0.44
55:BX:57:LEU:HD11	55:BX:78:LYS:HE3	1.99	0.44
1:AA:765:G:O6	1:AA:812:C:C6	2.70	0.44
1:AA:875:C:H2'	1:AA:876:G:O4'	2.16	0.44
1:AA:909:A:P	12:AL:21:LYS:HZ2	2.40	0.44
2:AB:102:LEU:O	2:AB:103:THR:C	2.55	0.44
2:AB:60:ASP:HB3	2:AB:64:ARG:NH2	2.31	0.44
35:BA:917:A:H3'	35:BA:2268:A:H61	1.81	0.44
35:BA:863:A:H2'	35:BA:864:G:H8	1.82	0.44
48:BQ:120:ILE:HA	48:BQ:123:HIS:HD2	1.83	0.44
35:BA:2469:A:HO2'	48:BQ:56:ARG:HD2	1.82	0.44
12:AL:98:TYR:N	12:AL:98:TYR:CD1	2.85	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1151:A:H4'	10:AJ:70:ARG:HH12	1.82	0.44
10:AJ:64:GLU:O	14:AN:56:VAL:HA	2.18	0.44
56:BY:45:VAL:HG11	56:BY:60:PHE:CD2	2.50	0.44
27:B2:25:VAL:CG1	27:B2:57:ILE:HD12	2.48	0.44
35:BA:70:G:H5''	35:BA:112:U:O2	2.18	0.44
35:BA:292:C:C2'	35:BA:293:U:H5'	2.47	0.44
55:BX:7:VAL:O	55:BX:30:VAL:HB	2.17	0.44
9:AI:34:ASN:O	9:AI:38:GLN:CB	2.64	0.44
9:AI:46:ALA:O	9:AI:47:LEU:HD12	2.17	0.44
19:AS:30:LEU:HD21	19:AS:32:LYS:NZ	2.31	0.44
4:AD:58:LEU:C	4:AD:58:LEU:HD13	2.38	0.44
37:BC:6:ARG:CZ	37:BC:10:LEU:HD21	2.46	0.44
37:BC:62:VAL:HG12	37:BC:161:ILE:HD11	1.98	0.44
51:BT:118:ARG:HA	51:BT:121:ILE:HG22	1.99	0.44
41:BG:111:LEU:H	41:BG:112:PRO:CD	2.31	0.44
37:BC:181:PRO:HG2	37:BC:184:LYS:HB2	1.99	0.44
5:AE:84:PHE:CE2	5:AE:133:TYR:CD2	3.06	0.44
35:BA:1243:G:H1'	47:BP:8:PRO:O	2.17	0.44
50:BS:61:ASN:O	50:BS:62:LYS:HG3	2.17	0.44
50:BS:89:ARG:CZ	50:BS:91:PRO:HG2	2.48	0.44
26:B1:7:ILE:HD13	26:B1:69:LYS:HG2	1.98	0.44
41:BG:172:LEU:CD2	41:BG:173:LEU:HD23	2.48	0.44
1:AA:1314:C:O2'	1:AA:1315:U:C5'	2.64	0.44
35:BA:1747(A):G:C3'	35:BA:1748:G:H5''	2.48	0.44
35:BA:473:G:O2'	35:BA:474:G:H5'	2.18	0.44
49:BR:76:VAL:HG22	49:BR:80:PHE:HE2	1.64	0.44
25:B0:47:PRO:HG2	25:B0:53:MET:HE2	1.99	0.44
4:AD:155:LEU:C	4:AD:157:LEU:N	2.71	0.44
13:AM:54:VAL:HG22	13:AM:57:ARG:NH1	2.33	0.44
7:AG:136:LYS:C	7:AG:138:LYS:N	2.71	0.44
35:BA:1670:C:OP2	35:BA:1671:U:C4	2.70	0.44
42:BH:92:ILE:HD12	42:BH:95:ARG:HH21	1.83	0.44
35:BA:1084:A:P	43:BJ:55:UNK:HA	2.57	0.44
35:BA:1275:A:O2'	35:BA:1645:G:N2	2.45	0.44
35:BA:496:G:H1'	54:BW:61:ASN:ND2	2.33	0.44
35:BA:221:A:H4'	35:BA:222:A:C5'	2.48	0.44
35:BA:363(E):U:C2'	35:BA:363(F):A:O4'	2.66	0.44
1:AA:1526:G:H2'	1:AA:1527:C:H6	1.83	0.44
1:AA:515:G:H2'	1:AA:516:U:O4'	2.18	0.44
35:BA:2097:C:C2	35:BA:2193:G:C2	3.05	0.44
1:AA:141:A:H1'	1:AA:182:U:C2	2.52	0.44
30:B5:59:GLU:CG	30:B5:59:GLU:O	2.65	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:184:C:H4'	35:BA:217:G:N2	2.33	0.44
35:BA:2666:C:H3'	35:BA:2667:C:C6	2.52	0.44
24:AY:492:GLN:HB3	24:AY:504:ILE:CB	2.47	0.44
35:BA:1112:G:C2	35:BA:1113:U:C2	3.05	0.44
47:BP:75:ILE:CD1	47:BP:75:ILE:H	2.31	0.44
4:AD:190:ASP:OD2	4:AD:192:GLU:HB2	2.17	0.44
3:AC:132:ARG:HH22	4:AD:47:ARG:HH22	1.65	0.44
39:BE:203:LYS:O	39:BE:203:LYS:HG3	2.16	0.44
10:AJ:84:GLN:H	10:AJ:84:GLN:HG3	1.59	0.44
25:B0:70:GLN:HG2	25:B0:71:ASP:N	2.33	0.44
16:AP:49:LEU:HA	16:AP:49:LEU:HD12	1.74	0.44
38:BD:116:GLN:HG3	38:BD:116:GLN:O	2.17	0.44
24:AY:425:VAL:CG1	24:AY:445:GLN:CG	2.88	0.44
35:BA:2533:A:H2'	35:BA:2534:A:O4'	2.17	0.44
33:B8:64:TYR:CE2	35:BA:625:G:OP1	2.71	0.44
35:BA:980:A:C4	35:BA:1136:G:O4'	2.71	0.44
35:BA:1833:U:N3	35:BA:1834:U:C5	2.86	0.44
35:BA:2076:U:O2	35:BA:2076:U:C2'	2.66	0.44
35:BA:2687:U:H2'	35:BA:2688:U:O4'	2.17	0.44
35:BA:447:A:C6	35:BA:454:A:C8	3.05	0.44
35:BA:528:A:H3'	35:BA:528:A:C8	2.52	0.44
35:BA:948:G:H1	35:BA:969:U:H3	1.65	0.44
35:BA:962:G:H2'	35:BA:963:U:C6	2.53	0.44
38:BD:147:LEU:HD12	38:BD:155:LEU:HD13	2.00	0.44
38:BD:177:LEU:CG	38:BD:181:GLU:O	2.50	0.44
35:BA:1820:U:C4	38:BD:202:LYS:HD3	2.52	0.44
35:BA:1903:G:OP1	38:BD:241:PRO:O	2.34	0.44
38:BD:31:LYS:HG3	38:BD:33:LEU:H	1.82	0.44
39:BE:120:TRP:CE3	39:BE:155:LYS:NZ	2.74	0.44
39:BE:163:GLU:HG3	39:BE:164:ARG:O	2.17	0.44
35:BA:2638:G:P	39:BE:82:ARG:NH2	2.91	0.44
39:BE:49:LEU:HD11	39:BE:91:VAL:HG23	1.97	0.44
45:BN:30:ILE:O	45:BN:34:LEU:HD22	2.18	0.44
52:BU:99:ALA:HB2	52:BU:106:PHE:CE1	2.53	0.44
52:BU:95:LEU:HA	52:BU:95:LEU:HD23	1.73	0.44
46:BO:13:ASN:OD1	46:BO:95:GLY:HA3	2.17	0.44
1:AA:662:G:N2	1:AA:663:A:C2	2.86	0.44
1:AA:673:G:H2'	1:AA:674:G:H8	1.63	0.44
1:AA:828:A:C3'	1:AA:828:A:C8	3.01	0.44
18:AR:69:THR:O	18:AR:72:ARG:HB2	2.18	0.44
53:BV:16:PRO:O	53:BV:96:ILE:CG1	2.37	0.44
53:BV:58:VAL:CG1	53:BV:59:ALA:N	2.71	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:235:SER:HB2	2:AB:236:TYR:HD1	1.82	0.44
2:AB:36:ARG:HB3	2:AB:41:ILE:CD1	2.46	0.44
2:AB:47:THR:O	2:AB:51:LEU:CD1	2.54	0.44
2:AB:76:GLN:O	2:AB:80:ILE:CD1	2.65	0.44
35:BA:1915:U:H6	35:BA:1915:U:H3'	1.82	0.44
35:BA:2332:U:C4'	35:BA:2336:A:N6	2.80	0.44
36:BB:80:U:C2'	36:BB:81:G:H21	2.24	0.44
48:BQ:35:VAL:O	48:BQ:130:LYS:N	2.49	0.44
48:BQ:44:ALA:O	48:BQ:45:GLN:C	2.56	0.44
22:AV:59:A:H2'	22:AV:60:U:O4'	2.17	0.44
3:AC:28:GLN:O	3:AC:31:HIS:HB2	2.17	0.44
3:AC:58:GLU:O	3:AC:65:ALA:N	2.50	0.44
9:AI:104:ARG:HH11	9:AI:104:ARG:CG	2.17	0.44
14:AN:3:ARG:O	14:AN:3:ARG:HG2	2.17	0.44
40:BF:158:THR:C	40:BF:160:ASN:N	2.71	0.44
19:AS:51:VAL:N	19:AS:58:VAL:HG22	2.32	0.44
19:AS:58:VAL:C	19:AS:60:VAL:H	2.20	0.44
35:BA:1057:A:H2'	35:BA:1058:G:C5'	2.48	0.44
35:BA:332:A:O2'	35:BA:333:G:P	2.76	0.44
49:BR:18:LEU:HD11	49:BR:22:ARG:CZ	2.47	0.44
42:BH:133:VAL:CG1	42:BH:134:SER:N	2.76	0.44
37:BC:67:GLY:HA2	37:BC:159:GLY:HA3	2.00	0.44
37:BC:22:ILE:HG22	37:BC:186:ALA:HB1	1.99	0.44
37:BC:47:LEU:CD2	37:BC:58:VAL:HG21	2.46	0.44
7:AG:108:ALA:HB2	7:AG:123:GLU:HB3	1.99	0.44
35:BA:2306:C:OP1	35:BA:2307:G:C8	2.70	0.44
1:AA:297:G:N2	1:AA:300:A:OP2	2.51	0.44
1:AA:321:A:O3'	1:AA:1436:U:H5'	2.18	0.44
1:AA:320:C:H2'	1:AA:321:A:H8	1.77	0.44
38:BD:137:PRO:HD2	38:BD:140:THR:HG21	1.98	0.44
38:BD:129:ASN:N	38:BD:193:VAL:HG11	2.32	0.44
35:BA:271(J):C:O2	35:BA:271(M):G:O6	2.36	0.44
35:BA:271(P):C:C2'	35:BA:271(Q):G:H5'	2.47	0.44
40:BF:188:ARG:CA	47:BP:7:ARG:HD2	2.32	0.44
2:AB:95:GLN:C	2:AB:96:ARG:HD2	2.37	0.44
13:AM:12:ASN:O	13:AM:44:ARG:HD2	2.17	0.44
26:B1:44:PRO:CB	26:B1:46:LEU:HD23	2.47	0.44
35:BA:1416:G:C2	35:BA:1417:C:C4	3.06	0.44
35:BA:182:A:C2	35:BA:183:C:C2	3.06	0.44
35:BA:2711:A:H3'	35:BA:2712:U:H5'	1.99	0.44
13:AM:70:LEU:CA	13:AM:73:GLU:CB	2.95	0.44
35:BA:1517:G:H8	35:BA:1517:G:C5'	2.31	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:27:ILE:CG2	7:AG:27:ILE:O	2.65	0.44
35:BA:2652:C:C2	35:BA:2669:G:C2	3.05	0.44
35:BA:2668:G:C2'	35:BA:2669:G:H5'	2.47	0.44
27:B2:41:ILE:CG1	27:B2:42:GLY:H	2.27	0.44
12:AL:102:ARG:NH2	12:AL:110:VAL:CG2	2.80	0.44
8:AH:97:VAL:HG13	8:AH:98:LYS:N	2.32	0.44
1:AA:1238:A:N3	1:AA:1238:A:H2'	2.31	0.44
35:BA:736:C:C2	35:BA:737:C:C5	3.06	0.44
37:BC:79:LYS:HD3	37:BC:119:VAL:HG11	2.00	0.44
42:BH:18:GLU:HB2	42:BH:25:LYS:CG	2.47	0.44
24:AY:341:VAL:O	24:AY:341:VAL:HG12	2.15	0.44
25:B0:82:ARG:HA	25:B0:83:PRO:HD3	1.71	0.44
1:AA:695:A:H2'	1:AA:696:A:C8	2.53	0.44
24:AY:276:ALA:HA	24:AY:277:PRO:HD3	1.78	0.44
24:AY:333:GLN:C	24:AY:335:ARG:N	2.71	0.44
24:AY:452:ARG:C	24:AY:454:LYS:N	2.69	0.44
24:AY:507:SER:OG	24:AY:510:ASN:HB2	2.18	0.44
1:AA:968:A:O2'	1:AA:969:A:OP1	2.31	0.44
1:AA:1410:G:C5	1:AA:1491:G:N2	2.86	0.44
1:AA:777:A:C2	1:AA:778:G:C4	3.05	0.44
30:B5:17:ASP:O	30:B5:20:ARG:N	2.51	0.44
30:B5:5:PRO:HB3	35:BA:2614:A:N9	2.32	0.44
35:BA:1197:G:H2'	35:BA:1198:U:C6	2.53	0.44
35:BA:1381:G:H2'	35:BA:1382:G:H8	1.82	0.44
35:BA:1754:C:N4	35:BA:1755:A:C6	2.86	0.44
35:BA:2056:G:C8	35:BA:2577:A:C6	3.05	0.44
35:BA:462:C:H2'	35:BA:463:G:O4'	2.17	0.44
35:BA:830:G:C8	35:BA:2448:A:N3	2.86	0.44
35:BA:948:G:C4	35:BA:949:C:C5	3.05	0.44
38:BD:211:ARG:HB3	38:BD:212:SER:H	1.63	0.44
35:BA:782:A:N1	38:BD:226:MET:CE	2.81	0.44
38:BD:69:ARG:CZ	38:BD:105:ILE:CG1	2.96	0.44
39:BE:104:VAL:O	39:BE:166:THR:HG23	2.18	0.44
45:BN:52:VAL:HB	45:BN:120:LEU:HD22	2.00	0.44
35:BA:1950:G:N2	35:BA:1957:C:N3	2.65	0.44
1:AA:828:A:C5	1:AA:859:A:C8	3.05	0.44
1:AA:834:C:C2	1:AA:853:G:N2	2.85	0.44
1:AA:1489:G:O2'	1:AA:1490:C:H5'	2.18	0.44
35:BA:1125:G:H3'	35:BA:1126:A:H8	1.82	0.44
13:AM:86:CYS:O	13:AM:87:TYR:C	2.54	0.44
1:AA:1119:C:H2'	1:AA:1120:G:H8	1.82	0.44
3:AC:116:VAL:O	3:AC:120:VAL:HG23	2.17	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:138:VAL:HB	3:AC:151:VAL:HG23	2.00	0.44
19:AS:61:TYR:CD1	35:BA:887:A:H5'	2.52	0.44
27:B2:17:SER:OG	27:B2:20:GLU:CB	2.66	0.44
35:BA:86:C:OP1	56:BY:32:PRO:HD2	2.18	0.44
4:AD:18:LYS:HE2	4:AD:31:CYS:CB	2.47	0.44
4:AD:100:ARG:HG2	4:AD:102:ASP:OD1	2.17	0.44
4:AD:95:GLY:O	4:AD:99:SER:N	2.41	0.44
35:BA:2818:G:OP1	35:BA:2837:G:O2'	2.31	0.44
35:BA:142:A:H1'	35:BA:1408:C:C1'	2.47	0.44
37:BC:3:HIS:ND1	37:BC:7:TYR:CD2	2.86	0.44
57:BZ:151:HIS:HB3	57:BZ:170:THR:CA	2.46	0.44
36:BB:43:C:H5'	36:BB:44:G:OP2	2.18	0.44
41:BG:159:VAL:O	41:BG:159:VAL:HG22	2.17	0.44
41:BG:104:GLU:O	41:BG:108:ASN:OD1	2.36	0.44
16:AP:14:ASN:N	16:AP:15:PRO:HD3	2.33	0.44
50:BS:31:SER:OG	50:BS:32:LEU:N	2.51	0.44
38:BD:131:LEU:CD2	38:BD:132:PRO:HD2	2.47	0.44
5:AE:78:HIS:CD2	5:AE:78:HIS:N	2.86	0.44
8:AH:112:LEU:O	8:AH:118:VAL:HG13	2.16	0.44
36:BB:16:G:O2'	36:BB:17:C:P	2.76	0.44
36:BB:71:C:H2'	36:BB:72:G:C5'	2.47	0.44
35:BA:1240:U:C2'	35:BA:1241:A:OP2	2.66	0.44
35:BA:2199:A:H61	35:BA:2226:C:N4	2.16	0.44
35:BA:2189:U:H3'	35:BA:2189:U:C6	2.53	0.44
39:BE:52:LEU:O	39:BE:52:LEU:HG	2.18	0.44
50:BS:22:GLY:O	50:BS:23:ARG:O	2.36	0.44
10:AJ:4:ILE:HB	10:AJ:74:ILE:HG13	2.00	0.44
51:BT:111:ARG:NH1	51:BT:111:ARG:HG2	2.32	0.44
1:AA:1375:A:C2'	1:AA:1376:U:O4'	2.63	0.44
28:B3:30:ARG:HD2	35:BA:1184:G:OP2	2.18	0.44
16:AP:36:ILE:O	16:AP:51:VAL:HG13	2.17	0.44
1:AA:1423:G:H2'	1:AA:1424:C:C6	2.53	0.44
4:AD:152:SER:O	4:AD:155:LEU:N	2.45	0.44
36:BB:76:G:C6	36:BB:77:U:C5	3.05	0.44
49:BR:40:LYS:O	49:BR:44:LEU:HB2	2.18	0.44
5:AE:128:PRO:HB2	5:AE:129:ILE:CD1	2.46	0.44
2:AB:30:ARG:HH21	2:AB:194:PRO:CG	2.30	0.44
5:AE:131:ILE:O	5:AE:135:THR:HB	2.17	0.44
9:AI:15:ALA:HB2	9:AI:65:VAL:HG23	1.99	0.44
42:BH:91:GLY:HA2	42:BH:160:LYS:NZ	2.33	0.44
47:BP:93:GLY:O	47:BP:123:LEU:HD12	2.18	0.44
35:BA:931:G:N1	35:BA:933:A:C6	2.86	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1958:C:C2'	35:BA:1959:G:H5'	2.48	0.44
24:AY:119:VAL:HG12	24:AY:119:VAL:O	2.17	0.44
35:BA:1645:G:H5''	35:BA:1646:C:O4'	2.18	0.44
35:BA:288:C:C5	35:BA:351:G:N2	2.85	0.44
57:BZ:9:TYR:CE1	57:BZ:63:ASP:OD2	2.71	0.44
35:BA:442:G:N2	40:BF:48:THR:HB	2.33	0.44
37:BC:77:ILE:O	37:BC:95:GLY:HA2	2.18	0.44
35:BA:1331:A:H2'	35:BA:1333:C:C5	2.53	0.44
6:AF:61:LEU:HD22	6:AF:63:TYR:CZ	2.52	0.44
35:BA:361:G:H2'	35:BA:362:U:C5'	2.48	0.44
11:AK:19:ALA:O	11:AK:82:VAL:HG23	2.18	0.44
35:BA:491:G:C4	35:BA:492:A:C8	3.05	0.44
11:AK:98:LEU:HA	11:AK:98:LEU:HD23	1.74	0.44
4:AD:166:LYS:C	4:AD:168:ARG:H	2.21	0.44
32:B7:35:ARG:NH1	32:B7:35:ARG:HG2	2.33	0.44
35:BA:2666:C:H5'	35:BA:2667:C:OP2	2.18	0.44
1:AA:88:A:C2	1:AA:89:C:C5	3.06	0.44
35:BA:2341:G:H2'	35:BA:2342:C:H6	1.83	0.44
47:BP:91:PHE:N	47:BP:91:PHE:CD1	2.86	0.44
54:BW:62:HIS:C	54:BW:63:ASP:CG	2.75	0.44
38:BD:162:SER:O	38:BD:178:PRO:HG3	2.17	0.44
36:BB:5:C:H2'	36:BB:6:C:H6	1.82	0.44
24:AY:103:LEU:O	24:AY:104:THR:C	2.56	0.44
24:AY:138:LEU:HB2	24:AY:268:MET:CE	2.36	0.44
24:AY:15:THR:HG22	24:AY:106:VAL:HA	2.00	0.44
24:AY:215:LEU:HD23	24:AY:216:ASP:CG	2.38	0.44
24:AY:296:PHE:CD2	24:AY:331:LEU:CD1	2.93	0.44
24:AY:415:GLY:HA2	24:AY:457:TYR:CZ	2.53	0.44
37:BC:103:ILE:HG23	37:BC:107:TRP:CD1	2.53	0.44
1:AA:1491:G:C5	1:AA:1492:A:C6	3.05	0.44
28:B3:10:LYS:O	28:B3:11:SER:C	2.56	0.44
35:BA:1139:G:O2'	35:BA:1143:A:N6	2.43	0.44
35:BA:1264:G:C6	35:BA:1265:A:N6	2.86	0.44
35:BA:1653:G:H1'	35:BA:1654:A:OP2	2.18	0.44
35:BA:244:A:H3'	35:BA:245:G:O4'	2.18	0.44
35:BA:2456:C:O2'	35:BA:2457:U:H5'	2.17	0.44
35:BA:252:G:O2'	35:BA:253:C:O4'	2.30	0.44
35:BA:695:G:C2	35:BA:696:G:C8	3.05	0.44
38:BD:206:LEU:HD12	38:BD:207:GLY:H	1.83	0.44
38:BD:221:VAL:O	38:BD:221:VAL:HG23	2.18	0.44
38:BD:37:LEU:CD1	38:BD:62:TYR:CD1	3.00	0.44
39:BE:172:VAL:HG12	39:BE:172:VAL:O	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BE:67:PHE:CD1	39:BE:68:ALA:N	2.77	0.44
45:BN:107:LEU:O	45:BN:108:PRO:O	2.35	0.44
45:BN:34:LEU:HD22	45:BN:52:VAL:HG21	1.99	0.44
45:BN:66:LYS:O	45:BN:87:LEU:HB2	2.17	0.44
35:BA:833:U:C5'	47:BP:48:PRO:CB	2.88	0.44
51:BT:60:THR:CB	51:BT:76:PHE:O	2.66	0.44
52:BU:12:ARG:O	52:BU:13:LYS:C	2.55	0.44
54:BW:41:LYS:HA	54:BW:41:LYS:HD3	1.77	0.44
1:AA:857:C:H2'	1:AA:858:G:O5'	2.17	0.44
6:AF:52:ILE:HG21	6:AF:87:ARG:NH1	2.32	0.44
18:AR:66:LEU:O	18:AR:70:ILE:CG1	2.64	0.44
53:BV:95:LEU:HD22	53:BV:97:LYS:HD3	1.99	0.44
2:AB:42:ILE:CD1	2:AB:203:GLY:CA	2.88	0.44
2:AB:54:THR:CG2	2:AB:58:ILE:HD11	2.37	0.44
35:BA:2328:A:H61	35:BA:2387:U:H3	1.66	0.44
35:BA:2469:A:N1	35:BA:2481:G:H1'	2.33	0.44
57:BZ:102:LEU:HD11	57:BZ:124:ILE:HD13	2.00	0.44
57:BZ:42:VAL:CG1	57:BZ:43:GLU:H	2.27	0.44
22:AV:48:C:C6	22:AV:48:C:OP2	2.62	0.44
1:AA:1327:C:O2'	1:AA:1328:C:H5'	2.18	0.44
1:AA:1326:C:OP1	21:AU:12:LYS:HE3	2.18	0.44
1:AA:1176:A:C6	1:AA:1177:G:C6	3.06	0.44
1:AA:1177:G:H2'	1:AA:1178:G:O4'	2.18	0.44
1:AA:1216:G:C6	1:AA:1217:C:N4	2.86	0.44
1:AA:980:C:H5'	1:AA:981:U:C5	2.53	0.44
3:AC:182:ILE:HG12	3:AC:203:PHE:HD1	1.81	0.44
3:AC:55:VAL:HG22	3:AC:68:VAL:HG12	1.95	0.44
35:BA:884:C:C2	35:BA:892:G:N2	2.86	0.44
56:BY:38:ILE:HD12	56:BY:38:ILE:HA	1.65	0.44
35:BA:85:G:N2	35:BA:103:A:C2	2.86	0.44
7:AG:18:TYR:CB	7:AG:59:LEU:HD13	2.48	0.44
35:BA:1060:U:C5'	35:BA:1061:U:H5	2.31	0.44
35:BA:1058:G:OP1	44:BK:2:UNK:N	2.51	0.44
1:AA:699:C:H2'	1:AA:700:G:O4'	2.17	0.44
1:AA:688:G:O2'	1:AA:704:A:N1	2.45	0.44
37:BC:59:ARG:NH2	37:BC:142:ALA:CB	2.81	0.44
57:BZ:149:SER:O	57:BZ:151:HIS:CD2	2.71	0.44
35:BA:2304:G:C2	35:BA:2313:C:C2	3.06	0.44
20:AT:72:LEU:CD2	20:AT:80:ARG:HH21	2.29	0.44
31:B6:8:LYS:O	31:B6:9:LEU:HB3	2.16	0.44
1:AA:1500:A:OP2	1:AA:1505:G:OP2	2.36	0.44
1:AA:781:A:C6	1:AA:802:A:C2	3.05	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:16:G:O2'	36:BB:17:C:C6	2.67	0.44
35:BA:1203:G:N1	35:BA:1241:A:OP2	2.50	0.44
1:AA:1031:G:C2'	1:AA:1032:G:H5'	2.48	0.44
35:BA:1642:G:C2'	35:BA:1643:G:H5'	2.47	0.44
9:AI:89:ASN:HB3	9:AI:92:TYR:CG	2.53	0.44
28:B3:35:ARG:HG2	28:B3:36:VAL:N	2.30	0.44
43:BJ:27:UNK:O	43:BJ:82:UNK:HA	2.18	0.44
1:AA:1015:A:C8	1:AA:1016:A:N7	2.85	0.44
25:B0:53:MET:HB3	25:B0:53:MET:HE2	1.87	0.44
35:BA:1277:G:HO2'	49:BR:24:GLN:HG2	1.81	0.44
17:AQ:67:LYS:O	17:AQ:68:ARG:HB2	2.17	0.44
1:AA:232:G:H2'	1:AA:233:C:C6	2.53	0.44
20:AT:53:LEU:C	20:AT:55:ILE:N	2.71	0.44
42:BH:12:PRO:HG2	42:BH:15:VAL:HG13	2.00	0.44
42:BH:12:PRO:CD	42:BH:15:VAL:HG11	2.48	0.44
10:AJ:33:GLN:HB2	10:AJ:75:ILE:CD1	2.47	0.44
31:B6:18:ARG:HG3	31:B6:19:ARG:N	2.30	0.44
1:AA:851:G:H2'	1:AA:852:G:C8	2.53	0.44
35:BA:2801(A):A:H4'	35:BA:2802:G:C5'	2.44	0.44
1:AA:600:C:C2	1:AA:639:G:C2	3.06	0.44
35:BA:1332:G:C5'	35:BA:1333:C:H5	2.30	0.44
35:BA:271(G):C:H6	35:BA:271(G):C:O5'	2.01	0.44
1:AA:652:U:C5	1:AA:752:G:N3	2.86	0.44
49:BR:78:LYS:HG2	49:BR:78:LYS:O	2.16	0.44
35:BA:2832:U:H5	35:BA:2884:U:H5''	1.82	0.44
1:AA:184:G:O4'	1:AA:224:C:C5'	2.66	0.44
1:AA:906:G:C8	1:AA:906:G:H3'	2.53	0.44
1:AA:683:G:H3'	1:AA:684:A:C8	2.53	0.44
10:AJ:45:ARG:NH1	10:AJ:45:ARG:HG3	2.32	0.44
35:BA:1090:U:O5'	35:BA:1090:U:H6	2.00	0.44
24:AY:136:PRO:HB3	24:AY:246:PHE:CZ	2.53	0.44
24:AY:34:LEU:N	24:AY:34:LEU:HD23	2.33	0.44
24:AY:68:ILE:CD1	24:AY:92:HIS:CE1	3.01	0.44
30:B5:44:THR:HG22	30:B5:45:VAL:H	1.82	0.44
35:BA:1199:U:C2	35:BA:1200:C:C6	3.06	0.44
35:BA:1252:G:O2'	35:BA:1253:A:O4'	2.35	0.44
35:BA:1924:C:P	35:BA:1924:C:C2'	3.00	0.44
35:BA:2073:C:C6	35:BA:2073:C:C3'	3.01	0.44
35:BA:2076:U:C5	38:BD:244:ARG:NH2	2.84	0.44
35:BA:463:G:C2	35:BA:467:G:N1	2.85	0.44
35:BA:579:G:H1	35:BA:1261:C:N4	2.15	0.44
35:BA:778:G:C2	35:BA:779:U:C2	3.06	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:148:GLU:H	38:BD:154:LYS:NZ	2.15	0.44
38:BD:233:HIS:CE1	38:BD:247:ALA:H	2.36	0.44
39:BE:169:ASN:ND2	39:BE:169:ASN:O	2.51	0.44
39:BE:199:ARG:NH1	39:BE:199:ARG:CB	2.59	0.44
45:BN:34:LEU:HD13	45:BN:34:LEU:HA	1.81	0.44
45:BN:36:GLY:N	45:BN:49:GLY:HA2	2.30	0.44
45:BN:90:MET:HE2	45:BN:93:THR:O	2.18	0.44
46:BO:67:LYS:HD2	46:BO:68:GLU:CD	2.39	0.44
51:BT:73:GLU:OE2	51:BT:103:ARG:HD2	2.17	0.44
51:BT:78:LEU:HB3	51:BT:79:HIS:ND1	2.32	0.44
53:BV:52:VAL:CG2	53:BV:52:VAL:O	2.62	0.44
35:BA:1936:A:P	35:BA:1961:C:N4	2.84	0.44
35:BA:1947:C:N3	35:BA:1948:G:N7	2.66	0.44
35:BA:1986:A:H3'	35:BA:1987:G:H5''	1.99	0.44
1:AA:658:G:H5''	15:AO:31:LEU:HD23	2.00	0.44
1:AA:739:C:C4	1:AA:740:U:C5	3.06	0.44
1:AA:762:C:H2'	1:AA:763:G:C8	2.53	0.44
1:AA:878:G:H5'	8:AH:89:PRO:CG	2.47	0.44
6:AF:24:GLU:O	6:AF:25:ILE:C	2.56	0.44
8:AH:30:ARG:CB	8:AH:30:ARG:NH1	2.81	0.44
15:AO:12:ILE:HG13	15:AO:31:LEU:HD11	1.99	0.44
53:BV:62:LEU:CD2	53:BV:95:LEU:HB2	2.47	0.44
1:AA:892:A:C4	1:AA:907:A:C6	3.06	0.44
1:AA:1102:A:O2'	1:AA:1103:C:C5'	2.65	0.44
2:AB:105:PHE:HE1	2:AB:152:PHE:CE1	2.36	0.44
2:AB:7:VAL:HA	2:AB:11:LEU:CD1	2.48	0.44
2:AB:213:LEU:C	2:AB:213:LEU:CD2	2.87	0.44
2:AB:47:THR:O	2:AB:48:MET:C	2.56	0.44
31:B6:54:ILE:CD1	35:BA:2397:G:H22	2.31	0.44
35:BA:2396:G:C2	35:BA:2421:G:C6	3.06	0.44
35:BA:857:C:C4	35:BA:858:U:O4	2.71	0.44
48:BQ:56:ARG:C	48:BQ:58:PHE:N	2.71	0.44
48:BQ:141:GLN:OE1	57:BZ:72:ARG:HA	2.18	0.44
22:AV:63:G:H2'	22:AV:64:G:O4'	2.18	0.44
13:AM:89:GLY:O	13:AM:90:LEU:C	2.56	0.44
13:AM:97:PRO:CA	13:AM:110:ARG:HD3	2.47	0.44
21:AU:12:LYS:O	21:AU:17:THR:N	2.45	0.44
21:AU:9:ARG:HD3	21:AU:13:ILE:HD11	1.99	0.44
12:AL:86:ARG:HH21	12:AL:99:HIS:CG	2.35	0.44
12:AL:105:TYR:O	24:AY:434:ASN:ND2	2.51	0.44
1:AA:1068:G:O6	1:AA:1108:G:C2	2.70	0.44
1:AA:972:C:O2'	1:AA:973:G:C5'	2.65	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AN:42:ILE:O	14:AN:46:GLU:HB2	2.18	0.44
35:BA:486:C:O5'	35:BA:486:C:H6	2.01	0.44
56:BY:63:LYS:HG2	56:BY:64:GLU:H	1.83	0.44
27:B2:40:SER:O	55:BX:13:LEU:HD11	2.18	0.44
55:BX:10:ALA:HB1	55:BX:11:PRO:CD	2.48	0.44
4:AD:19:LEU:CD2	4:AD:21:LEU:HD21	2.48	0.44
40:BF:139:PHE:O	40:BF:141:ALA:N	2.50	0.44
35:BA:658:C:O2'	40:BF:102:PRO:HG3	2.18	0.44
4:AD:105:VAL:HG13	4:AD:110:PHE:HB2	1.99	0.44
35:BA:2818:G:OP2	49:BR:42:LYS:NZ	2.39	0.44
49:BR:117:VAL:HG22	49:BR:118:GLU:N	2.33	0.44
11:AK:71:LYS:O	11:AK:75:TYR:CD1	2.70	0.44
37:BC:22:ILE:O	37:BC:186:ALA:HB2	2.18	0.44
37:BC:6:ARG:NH2	37:BC:7:TYR:CA	2.67	0.44
37:BC:149:ILE:O	37:BC:153:ILE:HG13	2.18	0.44
41:BG:106:LEU:CD2	41:BG:157:ILE:HD13	2.48	0.44
29:B4:6:HIS:HB3	41:BG:67:LYS:HE2	1.99	0.44
36:BB:45:A:H1'	41:BG:95:ARG:CZ	2.48	0.44
16:AP:8:ARG:HH21	16:AP:15:PRO:HG3	1.82	0.44
1:AA:294:U:O2'	1:AA:295:C:H5'	2.18	0.44
5:AE:39:GLY:CA	5:AE:69:VAL:HB	2.28	0.44
35:BA:2343:C:H2'	35:BA:2344:U:C5	2.51	0.44
1:AA:782:A:C6	1:AA:801:U:C5	3.06	0.44
26:B1:76:ARG:CA	35:BA:271(Q):G:H4'	2.42	0.44
47:BP:5:ASP:OD1	47:BP:6:LEU:N	2.51	0.44
34:B9:18:ARG:O	34:B9:19:ARG:HB3	2.18	0.44
1:AA:1034:G:C2	1:AA:1035:A:N7	2.86	0.44
35:BA:1299:G:H4'	35:BA:1301:A:N9	2.33	0.44
35:BA:2711:A:C3'	35:BA:2712:U:H5'	2.48	0.44
35:BA:1038:C:H3'	35:BA:1039:G:C5'	2.48	0.44
19:AS:6:LYS:O	19:AS:7:LYS:HD3	2.18	0.44
51:BT:110:ILE:C	51:BT:112:ARG:H	2.21	0.44
35:BA:263:C:O4'	35:BA:430:G:H1'	2.17	0.44
28:B3:8:LEU:CD2	28:B3:31:LEU:HG	2.48	0.44
35:BA:1166:C:H1'	35:BA:1184:G:N2	2.33	0.44
35:BA:372:G:O2'	35:BA:373:U:OP1	2.36	0.44
32:B7:19:ARG:NH2	32:B7:23:ARG:HH22	2.16	0.44
7:AG:139:GLU:O	7:AG:140:ASP:C	2.56	0.44
33:B8:22:VAL:CG2	33:B8:53:PRO:HB2	2.47	0.44
20:AT:44:ALA:HA	20:AT:52:ALA:HB1	2.00	0.44
20:AT:53:LEU:N	20:AT:53:LEU:HD12	2.32	0.44
35:BA:2063:C:N4	35:BA:2064:C:N4	2.66	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:608:A:C2	1:AA:609:A:C4	3.06	0.44
1:AA:609:A:C2'	1:AA:610:G:H5'	2.48	0.44
35:BA:205:G:HO2'	35:BA:206:U:P	2.37	0.44
1:AA:346:G:O2'	1:AA:347:G:H8	2.01	0.44
1:AA:200:G:C6	1:AA:201:C:C4	3.06	0.44
1:AA:1465:C:C4	1:AA:1466:C:C4	3.05	0.44
35:BA:1055:G:H22	35:BA:1105:U:H1'	1.83	0.44
42:BH:58:GLU:O	42:BH:62:LYS:HG3	2.18	0.44
1:AA:956:U:H2'	1:AA:957:U:H5'	1.99	0.44
35:BA:2886:G:N2	35:BA:2887:U:C2	2.86	0.44
35:BA:424:G:O2'	35:BA:425:G:H5'	2.17	0.44
1:AA:474:G:H2'	1:AA:475:G:H8	1.82	0.44
7:AG:37:ASN:HD21	9:AI:40:LEU:CD2	2.30	0.44
13:AM:116:THR:O	13:AM:117:VAL:C	2.55	0.44
25:B0:31:VAL:N	25:B0:65:GLY:O	2.51	0.44
26:B1:37:ILE:HD12	26:B1:37:ILE:O	2.17	0.44
4:AD:194:LEU:N	4:AD:194:LEU:HD22	2.33	0.44
1:AA:780:A:O3'	1:AA:1523:G:H4'	2.18	0.44
24:AY:99:THR:O	24:AY:101:ARG:N	2.51	0.43
24:AY:113:ILE:HG23	24:AY:118:GLY:C	2.39	0.43
24:AY:169:ILE:CD1	24:AY:275:TRP:CZ2	3.01	0.43
24:AY:179:PHE:HD2	24:AY:193:TYR:CE2	2.36	0.43
24:AY:210:LEU:O	24:AY:212:ASN:N	2.50	0.43
24:AY:215:LEU:HD23	24:AY:216:ASP:OD2	2.18	0.43
24:AY:282:ARG:O	24:AY:283:GLN:CG	2.66	0.43
24:AY:384:MET:O	24:AY:385:MET:CB	2.65	0.43
24:AY:9:GLU:HB2	24:AY:360:TYR:OH	2.18	0.43
1:AA:678:U:C5	1:AA:679:C:C5	3.06	0.43
30:B5:28:PRO:O	30:B5:30:LEU:HG	2.18	0.43
35:BA:1289:C:H4'	35:BA:1330:C:O4'	2.17	0.43
32:B7:10:ARG:NH2	35:BA:1378:A:H5''	2.32	0.43
35:BA:1310:G:O4'	35:BA:1611:C:H5''	2.18	0.43
35:BA:1891:G:C2	35:BA:1892:C:C2	3.06	0.43
35:BA:2291:U:H2'	35:BA:2292:C:H6	1.76	0.43
35:BA:2487:G:H2'	35:BA:2488:A:H8	1.82	0.43
35:BA:747:U:OP1	35:BA:2612:C:H6	2.01	0.43
35:BA:2690:C:H5''	35:BA:2872:G:H22	1.82	0.43
35:BA:2628:C:C2'	35:BA:2781:A:H2'	2.47	0.43
35:BA:695:G:C2	35:BA:696:G:C4	3.06	0.43
35:BA:774:A:H2	35:BA:787:U:C2'	2.31	0.43
38:BD:53:PHE:HA	38:BD:218:ARG:HB2	2.00	0.43
40:BF:70:THR:O	40:BF:72:ARG:N	2.51	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BP:113:LYS:HG2	47:BP:114:ILE:N	2.32	0.43
47:BP:38:GLN:O	47:BP:39:LYS:CB	2.66	0.43
47:BP:83:VAL:HG23	47:BP:105:LEU:CD2	2.38	0.43
48:BQ:78:PRO:CD	48:BQ:81:VAL:HG11	2.30	0.43
51:BT:25:GLY:O	51:BT:48:ILE:CG2	2.66	0.43
51:BT:54:ARG:HA	51:BT:59:THR:HG22	1.98	0.43
1:AA:673:G:O6	1:AA:734:G:C6	2.71	0.43
15:AO:10:LYS:HE2	15:AO:10:LYS:HA	2.00	0.43
15:AO:39:LEU:HB3	15:AO:56:LEU:HD11	2.00	0.43
15:AO:53:HIS:O	15:AO:54:ARG:C	2.56	0.43
15:AO:70:LEU:HD12	15:AO:78:TYR:HD1	1.83	0.43
17:AQ:29:HIS:CE1	17:AQ:32:TYR:CD2	3.05	0.43
2:AB:10:LEU:O	2:AB:10:LEU:HD13	2.18	0.43
2:AB:177:ALA:O	2:AB:180:LEU:N	2.51	0.43
57:BZ:6:LYS:N	57:BZ:6:LYS:HD3	2.33	0.43
1:AA:1053:G:O2'	1:AA:1054:C:OP2	2.30	0.43
3:AC:157:ILE:HB	3:AC:164:ARG:NH2	2.32	0.43
3:AC:113:ALA:HB2	3:AC:183:ASP:O	2.18	0.43
10:AJ:14:LYS:C	10:AJ:16:LEU:N	2.69	0.43
10:AJ:64:GLU:HG2	14:AN:59:ALA:CA	2.46	0.43
35:BA:335:C:OP1	35:BA:335:C:C6	2.68	0.43
4:AD:29:PRO:O	4:AD:30:LYS:HB3	2.18	0.43
40:BF:195:ASP:O	40:BF:199:TRP:HB2	2.18	0.43
4:AD:135:LEU:O	4:AD:136:PRO:C	2.56	0.43
49:BR:90:ARG:HH21	49:BR:118:GLU:HA	1.83	0.43
41:BG:71:THR:CG2	41:BG:72:ARG:H	2.31	0.43
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.51	0.43
35:BA:599:G:H2'	35:BA:600:G:H8	1.83	0.43
1:AA:105:G:O2'	1:AA:106:C:H5'	2.18	0.43
1:AA:59:A:N1	1:AA:331:G:N3	2.65	0.43
31:B6:48:VAL:O	31:B6:49:HIS:ND1	2.51	0.43
38:BD:75:ILE:N	38:BD:75:ILE:HD12	2.32	0.43
35:BA:1555:G:N2	35:BA:1556:C:C2	2.86	0.43
31:B6:35:GLU:CB	31:B6:51:GLU:OE1	2.66	0.43
35:BA:1494:A:O2'	35:BA:1496:A:C2	2.71	0.43
35:BA:2115:G:H5'	35:BA:2167:U:H1'	2.00	0.43
37:BC:167:LYS:O	37:BC:167:LYS:CG	2.66	0.43
1:AA:1030(C):G:O2'	1:AA:1030(D):A:H5'	2.17	0.43
35:BA:1312:U:OP2	55:BX:63:LYS:NZ	2.34	0.43
35:BA:1452:A:O2'	35:BA:1453:U:H6	2.01	0.43
35:BA:1163:G:C2	35:BA:1164:G:C8	3.06	0.43
20:AT:61:SER:O	20:AT:62:LEU:C	2.57	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:56:LEU:CD1	13:AM:57:ARG:N	2.77	0.43
35:BA:2860:A:C8	35:BA:2861:G:H1'	2.53	0.43
35:BA:815:C:C2	35:BA:1193:G:C2	3.06	0.43
1:AA:253:U:H5''	17:AQ:68:ARG:HD2	2.00	0.43
35:BA:370:G:O2'	35:BA:423:A:H3'	2.18	0.43
56:BY:2:ARG:HG2	56:BY:2:ARG:NH1	2.33	0.43
35:BA:2296:U:N3	35:BA:2337:G:N2	2.66	0.43
1:AA:1282:C:H2'	1:AA:1283:G:O5'	2.18	0.43
35:BA:2650:U:H2'	35:BA:2651:C:H6	1.84	0.43
1:AA:836:G:C5	1:AA:851:G:N1	2.86	0.43
35:BA:269:U:C4	35:BA:271(Y):U:C2	3.05	0.43
12:AL:113:ARG:HB3	12:AL:122:THR:HG21	1.98	0.43
35:BA:1360:A:N6	35:BA:1372:U:C5	2.85	0.43
45:BN:46:VAL:O	45:BN:46:VAL:HG22	2.18	0.43
1:AA:340:U:C2	1:AA:350:G:N2	2.86	0.43
1:AA:339:C:H2'	1:AA:340:U:H6	1.79	0.43
1:AA:1478:C:O2'	1:AA:1479:C:H5'	2.18	0.43
7:AG:14:PRO:HA	7:AG:21:VAL:HG12	1.99	0.43
35:BA:1619:G:C8	35:BA:1619:G:O5'	2.71	0.43
43:BJ:103:UNK:O	43:BJ:108:UNK:CB	2.66	0.43
24:AY:14:ARG:CD	24:AY:276:ALA:CB	2.88	0.43
24:AY:326:GLU:O	24:AY:327:LYS:C	2.56	0.43
24:AY:349:MET:HG2	24:AY:350:ALA:N	2.33	0.43
24:AY:425:VAL:HG21	24:AY:449:VAL:HG11	1.99	0.43
24:AY:13:ARG:NH1	24:AY:83:LEU:HD12	2.32	0.43
1:AA:1406:U:C6	1:AA:1407:C:C6	3.06	0.43
1:AA:1406:U:H2'	1:AA:1407:C:C5'	2.48	0.43
28:B3:15:TYR:O	28:B3:20:LYS:NZ	2.46	0.43
32:B7:34:ARG:HH22	35:BA:466:A:P	2.40	0.43
33:B8:8:LYS:NZ	33:B8:11:LYS:HZ3	2.09	0.43
35:BA:1006:C:H2'	35:BA:1007:C:C6	2.53	0.43
35:BA:1650:G:H5'	49:BR:107:ASP:OD2	2.19	0.43
35:BA:1892:C:HO2'	35:BA:1893:C:H5''	1.81	0.43
35:BA:2073:C:C6	35:BA:2073:C:H3'	2.52	0.43
35:BA:2459:A:C2	35:BA:2494:G:H1'	2.53	0.43
35:BA:258:G:H8	35:BA:258:G:O5'	2.00	0.43
35:BA:239:U:O2	35:BA:259:G:C2	2.71	0.43
35:BA:412:A:C2	35:BA:413:C:C1'	3.01	0.43
35:BA:592:G:C4	35:BA:666:G:N2	2.86	0.43
35:BA:685:A:OP1	35:BA:686:G:N2	2.51	0.43
35:BA:833:U:H5''	47:BP:48:PRO:HB3	1.96	0.43
35:BA:972:G:C2	35:BA:973:A:N6	2.86	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:181:GLU:OE2	38:BD:270:ILE:HG21	2.18	0.43
38:BD:211:ARG:O	38:BD:215:LEU:HG	2.18	0.43
38:BD:221:VAL:CG2	38:BD:221:VAL:O	2.66	0.43
35:BA:2820:A:H8	39:BE:109:LYS:HE2	1.83	0.43
35:BA:1258:C:O4'	40:BF:84:VAL:CG2	2.66	0.43
45:BN:22:THR:C	45:BN:23:LEU:O	2.56	0.43
45:BN:35:ARG:O	45:BN:36:GLY:C	2.57	0.43
35:BA:944:G:H22	47:BP:38:GLN:NE2	2.16	0.43
51:BT:16:ARG:NH1	51:BT:16:ARG:CB	2.80	0.43
52:BU:24:TYR:O	52:BU:29:SER:HB3	2.18	0.43
52:BU:92:ARG:NH1	53:BV:11:GLN:N	2.66	0.43
35:BA:1949:G:H1	35:BA:1957:C:N4	2.15	0.43
1:AA:585:G:C6	1:AA:586:C:C4	3.06	0.43
1:AA:860:A:N6	1:AA:861:G:C2	2.85	0.43
15:AO:29:VAL:O	15:AO:33:THR:HB	2.18	0.43
15:AO:65:ARG:HG3	15:AO:66:LEU:H	1.82	0.43
17:AQ:29:HIS:CA	17:AQ:36:ILE:HD11	2.47	0.43
2:AB:157:ARG:CZ	2:AB:157:ARG:CB	2.96	0.43
2:AB:212:GLN:O	2:AB:213:LEU:O	2.36	0.43
35:BA:2263:C:H2'	35:BA:2264:C:C6	2.53	0.43
35:BA:865:C:H4'	35:BA:866:A:OP1	2.17	0.43
35:BA:907:U:OP1	48:BQ:24:GLY:N	2.48	0.43
35:BA:920:G:H2'	35:BA:921:G:H8	1.82	0.43
48:BQ:72:LYS:O	48:BQ:93:TYR:CD1	2.71	0.43
57:BZ:128:VAL:HG11	57:BZ:133:ILE:HD13	2.00	0.43
57:BZ:28:MET:HA	57:BZ:88:PHE:HB2	2.00	0.43
57:BZ:8:TYR:CD2	57:BZ:38:TYR:CZ	3.06	0.43
22:AV:4:G:H2'	22:AV:5:G:H8	1.83	0.43
1:AA:1068:G:C6	1:AA:1108:G:C2	3.06	0.43
1:AA:1189:C:H5''	3:AC:5:ILE:HG21	2.00	0.43
3:AC:21:ARG:CG	3:AC:58:GLU:HG2	2.43	0.43
3:AC:83:ARG:O	3:AC:85:ARG:N	2.51	0.43
1:AA:356:A:C2	1:AA:368:U:O2	2.71	0.43
24:AY:307:MET:CG	24:AY:313:ASP:H	2.30	0.43
56:BY:40:GLU:HA	56:BY:40:GLU:OE1	2.17	0.43
27:B2:14:ARG:HH22	35:BA:78:A:H5'	1.81	0.43
7:AG:59:LEU:O	7:AG:62:PHE:HB3	2.18	0.43
40:BF:3:GLU:HA	40:BF:24:LEU:HB2	2.00	0.43
4:AD:100:ARG:HB3	4:AD:103:ASN:HB2	2.00	0.43
4:AD:184:LYS:O	4:AD:186:LEU:N	2.50	0.43
11:AK:63:LEU:O	11:AK:66:LEU:HG	2.18	0.43
37:BC:114:VAL:HG12	37:BC:144:THR:CG2	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BG:76:SER:HB3	41:BG:83:ARG:CG	2.48	0.43
1:AA:390:C:H4'	16:AP:28:ARG:NH2	2.12	0.43
1:AA:334:C:H6	1:AA:334:C:O5'	2.01	0.43
1:AA:106:C:N4	20:AT:14:LYS:CE	2.81	0.43
35:BA:1853:A:H2'	35:BA:1854:A:O4'	2.18	0.43
2:AB:115:LEU:CG	2:AB:145:LEU:HD12	2.49	0.43
26:B1:46:LEU:HD22	26:B1:63:ALA:HA	2.00	0.43
38:BD:14:ARG:NH1	38:BD:14:ARG:HG2	2.22	0.43
20:AT:94:ALA:O	20:AT:95:ALA:C	2.56	0.43
35:BA:2100:G:C2	35:BA:2101:G:C2	3.06	0.43
4:AD:52:SER:O	4:AD:56:VAL:CG2	2.67	0.43
9:AI:22:GLY:O	9:AI:58:ARG:C	2.57	0.43
3:AC:150:LYS:HE3	3:AC:167:TRP:CD1	2.53	0.43
28:B3:8:LEU:CD1	28:B3:31:LEU:HA	2.48	0.43
28:B3:9:VAL:HG11	28:B3:55:ARG:HD3	2.01	0.43
28:B3:56:VAL:HG12	28:B3:57:GLU:N	2.33	0.43
23:AX:17:U:O2'	23:AX:18:G:H5'	2.17	0.43
49:BR:29:LEU:HD21	49:BR:52:ILE:CD1	2.43	0.43
9:AI:11:LYS:C	9:AI:13:ALA:H	2.21	0.43
1:AA:254:G:C2'	1:AA:255:G:H5'	2.48	0.43
54:BW:65:LEU:HD23	54:BW:68:ARG:CD	2.48	0.43
35:BA:1425:G:H2'	35:BA:1426:G:O4'	2.18	0.43
35:BA:2152:G:C6	35:BA:2153:G:N7	2.86	0.43
1:AA:309:G:H2'	1:AA:310:G:H8	1.83	0.43
31:B6:15:GLU:HG2	31:B6:18:ARG:NH2	2.33	0.43
35:BA:535:C:H2'	35:BA:536:A:O4'	2.18	0.43
35:BA:1396:U:H2'	35:BA:1396:U:O2	2.18	0.43
40:BF:131:GLY:CA	40:BF:138:GLU:O	2.65	0.43
24:AY:332:ARG:CA	24:AY:339:ASP:OD1	2.66	0.43
12:AL:20:LYS:CD	12:AL:20:LYS:N	2.81	0.43
35:BA:2563:U:H1'	35:BA:2566:A:C5	2.53	0.43
57:BZ:63:ASP:O	57:BZ:65:GLN:N	2.51	0.43
1:AA:929:G:H21	1:AA:930:C:H1'	1.83	0.43
7:AG:54:THR:OG1	7:AG:56:GLN:CG	2.65	0.43
15:AO:11:VAL:O	15:AO:14:GLU:HB3	2.18	0.43
35:BA:203:C:P	35:BA:204:A:H3'	2.57	0.43
35:BA:237:C:H2'	35:BA:238:C:H6	1.83	0.43
1:AA:1030(B):C:O5'	1:AA:1030(B):C:H6	2.01	0.43
44:BK:99:UNK:O	44:BK:100:UNK:O	2.36	0.43
45:BN:38:HIS:O	52:BU:67:ALA:HB1	2.17	0.43
1:AA:830:G:O2'	1:AA:831:U:H5'	2.18	0.43
24:AY:169:ILE:CD1	24:AY:275:TRP:HZ2	2.31	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:78:PRO:HB3	24:AY:83:LEU:CA	2.47	0.43
24:AY:79:TYR:O	24:AY:82:CYS:O	2.36	0.43
1:AA:1410:G:O2'	1:AA:1411:C:H5'	2.18	0.43
32:B7:4:THR:HG22	35:BA:789:A:H5'	1.99	0.43
35:BA:1009:A:O4'	52:BU:59:ARG:HG2	2.17	0.43
35:BA:976:C:C5'	35:BA:1156:A:N6	2.81	0.43
35:BA:16:G:H1	35:BA:524:U:H3	1.66	0.43
35:BA:2010:G:C5	35:BA:2011:U:C5	3.06	0.43
35:BA:2048:G:O6	35:BA:2049:G:C6	2.72	0.43
35:BA:2633:G:H2'	35:BA:2634:G:O4'	2.19	0.43
35:BA:531:C:H5''	35:BA:532:A:C6	2.53	0.43
35:BA:779:U:H6	35:BA:779:U:O5'	2.00	0.43
35:BA:943:U:OP2	47:BP:38:GLN:CD	2.57	0.43
35:BA:996:A:O2'	35:BA:997:G:H5'	2.18	0.43
35:BA:999:U:H6	35:BA:1154:G:C6	2.36	0.43
38:BD:24:ILE:O	38:BD:25:THR:C	2.56	0.43
39:BE:13:ARG:HA	39:BE:23:VAL:HG22	1.99	0.43
47:BP:106:LEU:HD11	47:BP:112:LEU:CD2	2.48	0.43
47:BP:130:PHE:HB3	47:BP:135:LEU:HD23	2.00	0.43
52:BU:74:LEU:HD13	52:BU:75:ASN:C	2.38	0.43
1:AA:911:U:H2'	1:AA:912:C:C6	2.53	0.43
6:AF:31:GLU:O	6:AF:33:TYR:N	2.51	0.43
12:AL:8:ASN:O	12:AL:12:ARG:HG3	2.19	0.43
53:BV:32:THR:CG2	53:BV:33:VAL:N	2.78	0.43
34:B9:2:LYS:O	34:B9:34:GLN:HA	2.18	0.43
2:AB:201:ILE:C	2:AB:202:PRO:O	2.53	0.43
35:BA:2395:C:O2'	35:BA:2396:G:O5'	2.31	0.43
35:BA:911:A:H5''	35:BA:912:C:H5''	1.99	0.43
48:BQ:101:ARG:HG3	48:BQ:101:ARG:HH11	1.82	0.43
57:BZ:100:VAL:O	57:BZ:123:ASP:HA	2.18	0.43
22:AV:53:G:H5''	22:AV:54:U:OP1	2.18	0.43
22:AV:66:C:C5	22:AV:67:C:C5	3.06	0.43
12:AL:60:LEU:HD11	12:AL:85:ILE:HG12	2.00	0.43
12:AL:90:VAL:HG21	12:AL:96:VAL:CG1	2.48	0.43
1:AA:1060:C:C5	3:AC:2:GLY:HA3	2.54	0.43
35:BA:327:G:H21	35:BA:328:U:H1'	1.77	0.43
35:BA:76:C:H2'	35:BA:77:C:H6	1.79	0.43
55:BX:28:PHE:HZ	55:BX:81:VAL:HG21	1.72	0.43
40:BF:125:LEU:CD2	40:BF:125:LEU:N	2.77	0.43
4:AD:3:ARG:O	4:AD:4:TYR:C	2.56	0.43
41:BG:72:ARG:CZ	41:BG:86:MET:HA	2.47	0.43
1:AA:106:C:N4	20:AT:14:LYS:HZ1	2.15	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:319:G:O2'	1:AA:320:C:H5'	2.18	0.43
1:AA:59:A:H4'	1:AA:388:G:OP1	2.17	0.43
54:BW:13:SER:HA	54:BW:99:ARG:HB2	2.00	0.43
38:BD:117:VAL:HG21	38:BD:129:ASN:N	2.33	0.43
5:AE:76:ILE:HD12	5:AE:142:LEU:HD21	2.00	0.43
24:AY:19:ILE:HD12	24:AY:127:MET:HG2	2.00	0.43
24:AY:21:HIS:CD2	24:AY:122:ARG:HG2	2.53	0.43
26:B1:50:ARG:CG	26:B1:59:THR:HG22	2.47	0.43
41:BG:7:LEU:O	41:BG:9:ARG:N	2.51	0.43
1:AA:1225:A:H2'	1:AA:1226:C:C5	2.53	0.43
1:AA:962:C:H2'	1:AA:963:G:C8	2.52	0.43
9:AI:88:TYR:O	9:AI:89:ASN:ND2	2.51	0.43
4:AD:155:LEU:CB	4:AD:158:ILE:HG12	2.43	0.43
13:AM:49:THR:C	13:AM:51:ALA:N	2.72	0.43
13:AM:70:LEU:CA	13:AM:73:GLU:HB3	2.48	0.43
33:B8:22:VAL:HG21	33:B8:53:PRO:HB2	2.00	0.43
35:BA:7:G:H8	35:BA:7:G:O5'	2.01	0.43
35:BA:2064:C:H2'	35:BA:2065:C:C6	2.53	0.43
22:AV:10:G:H2'	22:AV:11:A:H8	1.82	0.43
1:AA:80:G:N1	1:AA:90:U:H5'	2.32	0.43
1:AA:161:A:H2'	1:AA:162:A:C8	2.53	0.43
35:BA:2674:G:C6	35:BA:2675:A:C5	3.06	0.43
35:BA:1645:G:H5''	35:BA:1646:C:C5'	2.49	0.43
46:BO:28:SER:O	46:BO:29:ASN:ND2	2.51	0.43
35:BA:296:C:HO2'	35:BA:297:C:H5'	1.82	0.43
42:BH:61:HIS:O	42:BH:62:LYS:C	2.57	0.43
35:BA:363(E):U:H2'	35:BA:363(F):A:H1'	2.00	0.43
35:BA:363(E):U:H3'	35:BA:363(F):A:O4'	2.17	0.43
1:AA:570:G:O4'	1:AA:820:U:O2	2.35	0.43
25:B0:25:ARG:NH1	25:B0:25:ARG:HG2	2.31	0.43
1:AA:339:C:OP1	46:BO:96:THR:OG1	2.35	0.43
35:BA:2300:G:H2'	35:BA:2301:C:H6	1.80	0.43
1:AA:47:C:H4'	1:AA:365:U:C5	2.53	0.43
24:AY:492:GLN:CA	24:AY:504:ILE:HG12	2.49	0.43
24:AY:105:ALA:CA	24:AY:319:ARG:NH1	2.56	0.43
24:AY:32:LYS:O	24:AY:35:LEU:CB	2.65	0.43
24:AY:399:ARG:O	24:AY:437:ILE:HA	2.19	0.43
28:B3:10:LYS:NZ	28:B3:15:TYR:OH	2.43	0.43
32:B7:33:ARG:HD2	35:BA:467:G:OP1	2.18	0.43
35:BA:1025:G:H1'	35:BA:1135:C:O4'	2.17	0.43
35:BA:1260:G:C4	35:BA:1261:C:C6	3.06	0.43
35:BA:1697:G:H3'	35:BA:1698:A:C5'	2.48	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1798:U:C2	35:BA:1822:G:C2	3.07	0.43
35:BA:589:C:C2	35:BA:590:A:C8	3.06	0.43
35:BA:672:C:C3'	35:BA:673:C:H5''	2.49	0.43
35:BA:824:A:C6	35:BA:825:C:C4	3.07	0.43
38:BD:80:ALA:O	38:BD:113:VAL:HG12	2.19	0.43
38:BD:158:ALA:C	38:BD:196:VAL:HG11	2.34	0.43
35:BA:782:A:N1	38:BD:226:MET:HG2	2.24	0.43
39:BE:9:VAL:HG12	39:BE:25:VAL:HB	1.97	0.43
39:BE:31:CYS:HA	39:BE:50:GLY:O	2.19	0.43
39:BE:64:LYS:O	39:BE:64:LYS:CG	2.66	0.43
51:BT:50:ILE:HD11	51:BT:64:ARG:HB3	2.00	0.43
52:BU:83:LEU:CG	52:BU:88:ILE:HD11	2.46	0.43
52:BU:95:LEU:HD12	53:BV:11:GLN:HE21	1.84	0.43
1:AA:670:G:O5'	1:AA:670:G:H8	2.01	0.43
1:AA:716:A:H2'	1:AA:717:C:O4'	2.18	0.43
18:AR:44:LEU:CD1	18:AR:44:LEU:N	2.81	0.43
18:AR:63:GLN:O	18:AR:66:LEU:N	2.51	0.43
1:AA:285:G:H2'	1:AA:286:G:C8	2.44	0.43
2:AB:102:LEU:CD2	2:AB:176:GLU:HB3	2.34	0.43
2:AB:218:ALA:O	2:AB:219:VAL:C	2.56	0.43
57:BZ:166:SER:H	57:BZ:167:PRO:HA	1.83	0.43
35:BA:2395:C:C6	35:BA:2396:G:C8	3.06	0.43
35:BA:2245:U:H5'	35:BA:2246:G:H5'	1.99	0.43
36:BB:95:C:O2'	36:BB:96:U:C5'	2.62	0.43
48:BQ:21:THR:O	48:BQ:22:LYS:HB3	2.18	0.43
1:AA:1306:A:C4	1:AA:1307:U:C6	3.06	0.43
13:AM:92:HIS:CE1	13:AM:98:VAL:HG21	2.53	0.43
54:BW:76:VAL:HG22	54:BW:101:SER:HB2	2.00	0.43
3:AC:155:GLY:O	3:AC:157:ILE:HG13	2.18	0.43
14:AN:26:ARG:HH11	14:AN:47:LEU:CD2	2.31	0.43
35:BA:299:A:C6	35:BA:300:A:C6	3.06	0.43
35:BA:109:G:C5'	35:BA:348:G:H4'	2.49	0.43
40:BF:119:ARG:NH1	40:BF:119:ARG:CG	2.81	0.43
40:BF:155:LEU:HD12	40:BF:156:LEU:N	2.33	0.43
19:AS:29:ARG:N	19:AS:29:ARG:CD	2.81	0.43
35:BA:1091:G:C2	35:BA:1092:C:C4	3.07	0.43
35:BA:143:G:O4'	55:BX:37:THR:HG21	2.17	0.43
37:BC:192:PHE:CD1	37:BC:192:PHE:O	2.72	0.43
35:BA:878:A:C6	35:BA:900:A:N7	2.86	0.43
57:BZ:111:VAL:O	57:BZ:113:ALA:O	2.36	0.43
41:BG:36:LYS:HG2	41:BG:37:VAL:N	2.34	0.43
1:AA:405:U:H5''	1:AA:495:A:H2	1.83	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:42:G:O2'	1:AA:622:A:N1	2.47	0.43
54:BW:25:ARG:CA	54:BW:71:VAL:HG11	2.28	0.43
26:B1:82:LEU:HD13	26:B1:82:LEU:HA	1.68	0.43
35:BA:1242:A:C6	47:BP:8:PRO:HB2	2.53	0.43
35:BA:1576:U:H2'	35:BA:1577:C:C6	2.53	0.43
35:BA:45:C:H5''	35:BA:215:G:OP2	2.18	0.43
35:BA:2106:G:H2'	35:BA:2107:C:C1'	2.49	0.43
35:BA:1647:G:OP2	35:BA:1647:G:H3'	2.19	0.43
24:AY:493:LEU:HA	24:AY:493:LEU:HD23	1.83	0.43
16:AP:20:VAL:HG21	16:AP:32:TYR:CB	2.48	0.43
7:AG:60:LYS:O	7:AG:63:LYS:HB3	2.18	0.43
2:AB:124:SER:O	2:AB:126:GLU:N	2.49	0.43
35:BA:1750:G:C2'	35:BA:1751:C:H5'	2.47	0.43
29:B4:37:SER:C	29:B4:39:CYS:N	2.71	0.43
35:BA:187:G:H1	35:BA:209:C:H42	1.67	0.43
35:BA:185:U:C4'	35:BA:218:A:H4'	2.49	0.43
7:AG:127:ALA:O	7:AG:130:GLY:N	2.50	0.43
36:BB:11:C:OP2	36:BB:12:C:H5	2.01	0.43
38:BD:2:ALA:O	38:BD:3:VAL:CG2	2.59	0.43
49:BR:60:LEU:HA	49:BR:63:ARG:HD2	1.99	0.43
5:AE:145:LYS:HA	5:AE:148:VAL:HB	2.00	0.43
35:BA:271(F):C:C2'	35:BA:271(G):C:H5'	2.48	0.43
35:BA:1338:G:N3	35:BA:1393:A:H2	2.15	0.43
35:BA:1042:G:C2	35:BA:1043:C:H1'	2.54	0.43
1:AA:184:G:C4'	1:AA:224:C:H5''	2.48	0.43
1:AA:131:C:C2'	1:AA:131:C:O2	2.67	0.43
14:AN:21:TYR:N	14:AN:21:TYR:HD1	2.15	0.43
35:BA:1679:U:C4	35:BA:1680:U:C4	3.06	0.43
35:BA:124:G:H8	35:BA:124:G:O5'	2.00	0.43
24:AY:103:LEU:HB3	24:AY:106:VAL:CG1	2.49	0.43
24:AY:446:PHE:CA	24:AY:449:VAL:HG22	2.46	0.43
13:AM:102:ARG:CD	13:AM:105:THR:OG1	2.65	0.43
35:BA:1137:G:O2'	35:BA:2039:C:C5'	2.64	0.43
32:B7:5:TRP:HD1	35:BA:1612:C:O3'	2.00	0.43
35:BA:1797:C:N4	35:BA:1822:G:H1	2.16	0.43
30:B5:9:LYS:HE3	35:BA:2019:A:N7	2.34	0.43
35:BA:2345:G:N2	35:BA:2382:G:H8	2.16	0.43
35:BA:2348:U:H5	35:BA:2382:G:C2	2.35	0.43
35:BA:534:U:H6	35:BA:534:U:O5'	2.01	0.43
35:BA:558:G:OP2	45:BN:111:PRO:HD2	2.17	0.43
35:BA:586:A:N1	35:BA:1254:A:C2	2.86	0.43
35:BA:587:C:O2'	35:BA:588:U:P	2.77	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:783:A:H3'	35:BA:783:A:C8	2.54	0.43
35:BA:783:A:H2'	35:BA:784:A:O5'	2.18	0.43
38:BD:242:ARG:HH11	38:BD:246:PRO:HG3	1.83	0.43
38:BD:247:ALA:HB2	38:BD:253:GLN:CG	2.48	0.43
38:BD:26:LYS:O	38:BD:27:THR:OG1	2.37	0.43
38:BD:92:ILE:HG22	38:BD:106:ILE:CG1	2.45	0.43
38:BD:80:ALA:HB3	38:BD:94:LEU:HD12	1.99	0.43
39:BE:119:ARG:HG3	39:BE:160:TYR:CD1	2.53	0.43
39:BE:101:ARG:HB2	39:BE:201:THR:HG21	2.00	0.43
51:BT:91:ARG:CG	51:BT:116:ALA:HA	2.45	0.43
51:BT:91:ARG:HG2	51:BT:116:ALA:CA	2.46	0.43
52:BU:12:ARG:HA	52:BU:15:LYS:HE2	1.99	0.43
52:BU:80:ILE:CG2	52:BU:80:ILE:O	2.66	0.43
35:BA:1665:A:H1'	46:BO:1:MET:SD	2.59	0.43
35:BA:2742:C:H2'	35:BA:2743:C:C6	2.54	0.43
35:BA:2761:G:C2'	35:BA:2762:G:H5''	2.48	0.43
1:AA:719:C:O2'	18:AR:49:LYS:HB3	2.19	0.43
6:AF:7:ASN:ND2	18:AR:34:TYR:OH	2.51	0.43
8:AH:4:ASP:O	8:AH:5:PRO:O	2.36	0.43
15:AO:24:SER:OG	15:AO:27:VAL:CG2	2.66	0.43
18:AR:54:ARG:O	18:AR:55:ARG:CG	2.65	0.43
2:AB:182:ILE:O	2:AB:183:PRO:C	2.57	0.43
25:B0:27:GLU:N	25:B0:27:GLU:CD	2.72	0.43
35:BA:910:A:H3'	35:BA:911:A:C8	2.54	0.43
57:BZ:31:ARG:HG3	57:BZ:32:HIS:ND1	2.34	0.43
1:AA:1269:A:C2	1:AA:1313:U:H1'	2.52	0.43
1:AA:1328:C:O2'	1:AA:1329:A:H5'	2.18	0.43
3:AC:35:GLU:O	3:AC:36:ASP:C	2.57	0.43
14:AN:29:ARG:HG3	14:AN:29:ARG:HH11	1.84	0.43
56:BY:67:LEU:HD23	56:BY:67:LEU:C	2.38	0.43
35:BA:1072:C:O2	35:BA:1094:U:O4	2.36	0.43
4:AD:170:VAL:O	4:AD:171:GLY:O	2.36	0.43
4:AD:82:ALA:O	4:AD:89:THR:HG22	2.19	0.43
35:BA:1484:G:N2	35:BA:1506:C:N3	2.66	0.43
35:BA:2877:G:OP2	35:BA:2877:G:H8	2.02	0.43
49:BR:87:TYR:C	49:BR:89:ASP:H	2.22	0.43
35:BA:877:U:HO2'	35:BA:878:A:H5''	1.82	0.43
57:BZ:169:GLU:O	57:BZ:170:THR:C	2.56	0.43
7:AG:118:VAL:O	7:AG:119:ARG:O	2.37	0.43
1:AA:108:G:N3	1:AA:108:G:H5''	2.33	0.43
35:BA:2280:G:C2	35:BA:2281:C:C5	3.07	0.43
35:BA:2284:C:H2'	35:BA:2285:C:C6	2.47	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:101:G:N9	36:BB:102:A:C8	2.86	0.43
5:AE:80:ILE:HD11	5:AE:138:ALA:CB	2.48	0.43
35:BA:1023:U:H4'	35:BA:1123:C:OP1	2.18	0.43
2:AB:95:GLN:HG3	2:AB:148:TYR:HA	2.01	0.43
35:BA:1423:G:O2'	35:BA:1424:G:O4'	2.34	0.43
26:B1:7:ILE:CG2	26:B1:66:HIS:HD2	2.31	0.43
42:BH:29:PRO:C	42:BH:31:GLY:H	2.21	0.43
35:BA:182:A:H2	35:BA:433:C:O2	2.00	0.43
1:AA:959:A:C4'	1:AA:985:C:H4'	2.49	0.43
41:BG:51:ARG:NH1	41:BG:53:LEU:HD11	2.34	0.43
9:AI:52:ALA:CB	9:AI:95:LYS:HZ1	2.32	0.43
9:AI:85:LEU:C	9:AI:85:LEU:CD1	2.86	0.43
1:AA:1015:A:O2'	14:AN:15:LYS:NZ	2.48	0.43
13:AM:108:ARG:HG3	13:AM:108:ARG:NH1	2.34	0.43
13:AM:60:VAL:CG1	13:AM:61:GLU:N	2.73	0.43
35:BA:1278:A:H5'	49:BR:24:GLN:HE21	1.83	0.43
35:BA:2540:C:C2'	35:BA:2541:A:O4'	2.60	0.43
43:BJ:25:UNK:O	43:BJ:26:UNK:CB	2.66	0.43
2:AB:82:ARG:HG2	2:AB:82:ARG:HH11	1.84	0.43
35:BA:392:C:H2'	35:BA:393:C:C6	2.54	0.43
1:AA:933:G:OP2	7:AG:3:ARG:HB2	2.19	0.43
35:BA:553:G:C2'	35:BA:554:U:H5'	2.48	0.43
1:AA:407:G:O2'	4:AD:116:GLN:HG3	2.18	0.43
1:AA:1186:G:C6	1:AA:1187:G:N7	2.86	0.43
1:AA:139:G:H2'	1:AA:140:A:C8	2.54	0.43
54:BW:82:LEU:HD12	54:BW:82:LEU:HA	1.82	0.43
37:BC:227:HIS:O	37:BC:228:SER:HB3	2.19	0.43
35:BA:272(G):C:O2	35:BA:363(D):G:N2	2.51	0.43
24:AY:113:ILE:CG2	24:AY:114:ASP:N	2.58	0.43
24:AY:26:LYS:HG2	58:AY:1000:GCP:PB	2.58	0.43
24:AY:255:PHE:HE1	24:AY:275:TRP:HZ3	1.52	0.43
24:AY:281:PRO:C	24:AY:282:ARG:CD	2.87	0.43
24:AY:419:LEU:CD1	24:AY:449:VAL:HG12	2.36	0.43
24:AY:96:SER:HA	24:AY:99:THR:OG1	2.19	0.43
37:BC:100:ILE:HG21	37:BC:126:LYS:HE3	2.01	0.43
35:BA:1611:C:H42	35:BA:1620:G:H1	1.65	0.43
35:BA:1754:C:H5'	51:BT:101:PHE:CE2	2.53	0.43
35:BA:1835:G:N3	35:BA:1835:G:H2'	2.34	0.43
35:BA:1906:G:N7	35:BA:1929:G:H2'	2.33	0.43
35:BA:2345:G:N7	35:BA:2372:G:C2	2.86	0.43
35:BA:2438:U:C5'	35:BA:2600:A:H5'	2.49	0.43
35:BA:2772:C:H2'	35:BA:2773:C:C6	2.53	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:770:G:C6	35:BA:771:G:C5	3.07	0.43
38:BD:27:THR:HB	38:BD:83:GLU:OE2	2.18	0.43
39:BE:38:THR:C	39:BE:40:GLU:N	2.71	0.43
45:BN:22:THR:OG1	45:BN:25:ARG:CB	2.63	0.43
47:BP:96:THR:O	47:BP:100:LEU:CD2	2.67	0.43
52:BU:59:ARG:HH11	52:BU:59:ARG:HG2	1.82	0.43
52:BU:92:ARG:CZ	53:BV:11:GLN:H	2.31	0.43
35:BA:1956:U:O2	35:BA:1985:G:H4'	2.19	0.43
35:BA:1953:A:H2	35:BA:2549:G:N3	2.17	0.43
1:AA:915:A:C5	1:AA:916:G:C8	3.06	0.43
6:AF:5:GLU:HG2	6:AF:62:TRP:HZ2	1.83	0.43
15:AO:56:LEU:HD23	15:AO:56:LEU:HA	1.83	0.43
53:BV:95:LEU:C	53:BV:95:LEU:HD23	2.38	0.43
53:BV:96:ILE:N	53:BV:96:ILE:CD1	2.65	0.43
48:BQ:127:ILE:CD1	48:BQ:128:LYS:O	2.67	0.43
2:AB:211:ILE:H	2:AB:211:ILE:HG13	1.56	0.43
2:AB:74:LYS:HD2	2:AB:166:ASP:HB2	2.00	0.43
48:BQ:109:VAL:HG12	48:BQ:109:VAL:O	2.18	0.43
48:BQ:74:TYR:C	48:BQ:74:TYR:CD1	2.92	0.43
57:BZ:40:ASP:OD1	57:BZ:42:VAL:N	2.51	0.43
57:BZ:8:TYR:HD2	57:BZ:38:TYR:CZ	2.36	0.43
35:BA:2591:C:OP1	38:BD:239:ARG:HB2	2.19	0.43
1:AA:1310:G:O2'	1:AA:1311:G:H5'	2.17	0.43
1:AA:1312:G:H2'	1:AA:1313:U:C6	2.52	0.43
21:AU:13:ILE:HA	21:AU:22:ARG:NH1	2.33	0.43
1:AA:1153:C:O2'	1:AA:1154:G:P	2.76	0.43
1:AA:971:G:H5''	1:AA:972:C:H5''	2.01	0.43
3:AC:30:ARG:HG3	14:AN:37:PHE:O	2.19	0.43
19:AS:38:SER:OG	19:AS:71:LEU:HD12	2.19	0.43
1:AA:393:A:C6	1:AA:394:G:N7	2.86	0.43
55:BX:11:PRO:HG2	55:BX:13:LEU:HG	2.01	0.43
55:BX:26:TYR:OH	55:BX:93:GLU:OE2	2.33	0.43
40:BF:13:SER:O	40:BF:14:PRO:O	2.36	0.43
4:AD:170:VAL:HG11	4:AD:174:LEU:HB3	2.01	0.43
11:AK:64:ALA:O	11:AK:67:ASP:HB3	2.19	0.43
11:AK:71:LYS:HB2	11:AK:71:LYS:HE3	1.84	0.43
5:AE:56:GLN:O	5:AE:59:GLY:N	2.50	0.43
35:BA:1722:A:O2'	35:BA:1739:U:H5''	2.18	0.43
41:BG:59:GLU:HG3	41:BG:60:LEU:N	2.34	0.43
16:AP:8:ARG:HB3	16:AP:28:ARG:NH1	2.33	0.43
17:AQ:60:ILE:CG1	17:AQ:61:GLU:N	2.81	0.43
35:BA:2283:C:N4	35:BA:2389:G:C6	2.87	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BB:66:A:C6	36:BB:108:U:N3	2.86	0.43
36:BB:37:C:N3	36:BB:48:A:O2'	2.49	0.43
35:BA:2746:U:C3'	35:BA:2747:G:H5'	2.46	0.43
35:BA:1491:G:C2	35:BA:1500:G:N3	2.87	0.43
26:B1:46:LEU:HD11	26:B1:61:ARG:O	2.19	0.43
50:BS:106:ARG:HD3	50:BS:107:GLU:O	2.18	0.43
50:BS:23:ARG:O	50:BS:24:LEU:O	2.37	0.43
50:BS:24:LEU:HB2	50:BS:85:VAL:HG12	1.99	0.43
50:BS:84:GLN:O	50:BS:85:VAL:HG13	2.17	0.43
35:BA:2102:U:C2'	35:BA:2103:C:O4'	2.60	0.43
1:AA:1423:G:C5'	46:BO:49:ARG:NH1	2.79	0.43
56:BY:86:ARG:O	56:BY:88:LYS:NZ	2.51	0.43
17:AQ:18:THR:CG2	17:AQ:69:LYS:HD2	2.48	0.43
35:BA:654(T):C:O5'	35:BA:654(T):C:H6	2.01	0.43
1:AA:1165:C:C4	1:AA:1166:G:N7	2.87	0.43
22:AV:26:G:C5	22:AV:27:U:C5	3.07	0.43
1:AA:80:G:H5'	1:AA:82:U:OP2	2.18	0.43
1:AA:502:G:C2	1:AA:544:G:C2	3.06	0.43
1:AA:594:G:C2'	1:AA:595:G:H5'	2.49	0.43
35:BA:2127:G:C6	35:BA:2128:C:N4	2.87	0.43
26:B1:94:LEU:CD1	26:B1:94:LEU:N	2.82	0.43
35:BA:1106:G:C2	35:BA:1107:G:H1'	2.53	0.43
35:BA:495:G:H1'	54:BW:57:ASN:CG	2.39	0.43
35:BA:363(A):A:N3	35:BA:363(A):A:H2'	2.34	0.43
35:BA:2551:C:H2'	35:BA:2552:U:C6	2.53	0.43
1:AA:682:G:C2	1:AA:683:G:C8	3.07	0.43
35:BA:1290:C:O5'	35:BA:1290:C:H6	2.01	0.43
3:AC:101:LEU:HA	3:AC:101:LEU:HD23	1.64	0.43
47:BP:144:GLU:O	47:BP:144:GLU:HG2	2.19	0.43
40:BF:17:ARG:HG3	40:BF:17:ARG:HH11	1.84	0.43
35:BA:1075:C:C4	35:BA:1076:C:N4	2.86	0.43
1:AA:591:U:C2	1:AA:649:G:N2	2.87	0.43
37:BC:131:LEU:HD22	37:BC:136:LEU:HD12	2.00	0.43
1:AA:1492:A:P	1:AA:1492:A:H8	2.41	0.43
35:BA:1013:C:H2'	35:BA:1014:U:C5'	2.46	0.43
35:BA:818:G:N2	35:BA:1190:G:C6	2.86	0.43
35:BA:240:G:O2'	35:BA:257:A:N6	2.52	0.43
35:BA:2049:G:C2	35:BA:2620:C:N3	2.87	0.43
35:BA:2640:G:C2'	35:BA:2641:G:H5''	2.47	0.43
35:BA:2729:G:H1'	39:BE:187:ALA:HB3	1.97	0.43
35:BA:573:G:O2'	35:BA:574:C:H3'	2.18	0.43
35:BA:578:A:H4'	35:BA:1254:A:OP1	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BD:271:ILE:CG1	38:BD:272:ALA:N	2.82	0.43
38:BD:51:VAL:HG11	38:BD:54:ARG:HE	1.84	0.43
35:BA:1816:G:C8	38:BD:62:TYR:CZ	3.06	0.43
53:BV:10:LYS:HB2	53:BV:10:LYS:HE3	1.81	0.43
55:BX:57:LEU:HD22	55:BX:58:HIS:N	2.34	0.43
1:AA:874:G:C5	1:AA:875:C:C4	3.07	0.43
1:AA:825:G:C6	1:AA:876:G:C6	3.07	0.43
1:AA:886:G:N2	1:AA:912:C:H1'	2.34	0.43
6:AF:49:ALA:HB2	18:AR:78:LEU:O	2.17	0.43
1:AA:585:G:C4'	12:AL:8:ASN:HD22	2.21	0.43
35:BA:2472:G:H8	35:BA:2472:G:OP2	2.00	0.43
42:BH:98:LEU:HB2	42:BH:125:VAL:CG2	2.41	0.43
1:AA:1327:C:C2'	1:AA:1328:C:H6	2.30	0.43
3:AC:12:LEU:HD23	3:AC:12:LEU:HA	1.74	0.43
3:AC:23:TYR:CE1	10:AJ:95:GLU:OE1	2.71	0.43
10:AJ:53:PRO:CB	14:AN:42:ILE:HG13	2.48	0.43
27:B2:56:GLN:O	27:B2:57:ILE:C	2.57	0.43
55:BX:26:TYR:HD1	55:BX:26:TYR:N	2.17	0.43
7:AG:18:TYR:HB3	7:AG:59:LEU:HD13	2.00	0.43
1:AA:619:U:O2	4:AD:134:ASP:OD1	2.36	0.43
11:AK:27:ASN:CG	11:AK:28:THR:N	2.72	0.43
37:BC:171:ILE:CG2	37:BC:171:ILE:O	2.66	0.43
37:BC:44:HIS:CA	37:BC:171:ILE:O	2.67	0.43
1:AA:1442(A):G:H22	51:BT:121:ILE:CG1	2.07	0.43
35:BA:870:A:C5	35:BA:871:U:C6	3.07	0.43
41:BG:102:PHE:CD1	41:BG:103:LEU:N	2.86	0.43
1:AA:557:G:H3'	1:AA:558:G:C8	2.54	0.43
5:AE:103:GLY:O	5:AE:106:PRO:HG2	2.18	0.43
1:AA:59:A:H5'	1:AA:60:A:C5'	2.49	0.43
1:AA:323:U:H4'	20:AT:22:ARG:HB2	2.01	0.43
26:B1:78:LYS:HE2	26:B1:78:LYS:HB3	1.80	0.43
35:BA:2235:G:N3	35:BA:2236:C:C6	2.86	0.43
1:AA:8:A:H5'	5:AE:120:THR:O	2.19	0.43
31:B6:11:LEU:HD11	31:B6:51:GLU:HG3	2.01	0.43
35:BA:2115:G:N3	35:BA:2117:A:N7	2.67	0.43
1:AA:1004:A:C2'	1:AA:1005:A:H5'	2.49	0.43
35:BA:2297:C:C2'	35:BA:2298:A:H5'	2.48	0.43
35:BA:1759:A:H2'	35:BA:1760:A:H8	1.83	0.43
1:AA:1356:G:C2	1:AA:1357:A:C5	3.07	0.43
9:AI:53:VAL:HG13	9:AI:95:LYS:HZ1	1.81	0.43
1:AA:1015:A:C6	1:AA:1016:A:C6	3.06	0.43
35:BA:2354:G:C2	35:BA:2355:C:C5	3.07	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BP:140:ALA:O	47:BP:141:ALA:HB3	2.19	0.43
35:BA:270:A:O2'	35:BA:271:A:H5'	2.18	0.43
35:BA:364:C:O2'	35:BA:365:C:H5'	2.19	0.43
46:BO:104:ARG:O	46:BO:107:ARG:HB3	2.18	0.43
12:AL:102:ARG:HB2	12:AL:120:TYR:HA	1.99	0.43
1:AA:787:A:C2	1:AA:788:U:C1'	3.01	0.43
35:BA:1108:U:P	43:BJ:80:UNK:HA	2.58	0.43
35:BA:131:G:C2	35:BA:132:G:C5	3.07	0.43
1:AA:448:A:C2	1:AA:487:A:C2	3.07	0.43
1:AA:1055:A:C8	1:AA:1055:A:O5'	2.72	0.43
18:AR:84:LYS:N	18:AR:84:LYS:NZ	2.67	0.43
35:BA:1015:G:N7	35:BA:1148:A:N1	2.65	0.43
44:BK:81:UNK:O	44:BK:82:UNK:CB	2.66	0.43
24:AY:492:GLN:HB3	24:AY:504:ILE:CG1	2.49	0.43
35:BA:280:C:C5	35:BA:281:G:C5	3.07	0.43
35:BA:272(E):G:H2'	35:BA:272(F):C:H6	1.84	0.43
1:AA:488:C:H6	1:AA:488:C:O5'	2.02	0.43
7:AG:111:ARG:NH1	7:AG:113:GLU:OE2	2.52	0.43
24:AY:164:ILE:HD11	24:AY:252:THR:CG2	2.34	0.43
24:AY:420:SER:CB	24:AY:426:GLN:HA	2.48	0.43
24:AY:84:VAL:CG1	24:AY:85:ASN:N	2.82	0.43
30:B5:14:ALA:O	30:B5:18:ALA:HB2	2.18	0.43
35:BA:2466:C:H2'	35:BA:2467:C:C6	2.53	0.43
35:BA:252:G:H2'	35:BA:253:C:H6	1.83	0.43
35:BA:2578:G:H1'	39:BE:139:GLY:HA2	2.00	0.43
35:BA:953:A:H2	35:BA:965:C:O2	2.01	0.43
38:BD:203:ASN:O	38:BD:204:ILE:C	2.54	0.43
38:BD:65:ILE:CD1	38:BD:88:ARG:NH1	2.82	0.43
39:BE:36:ARG:HG2	39:BE:36:ARG:HH11	1.83	0.43
40:BF:88:VAL:HG22	40:BF:89:VAL:N	2.34	0.43
47:BP:80:TYR:HB3	47:BP:81:GLN:H	1.57	0.43
51:BT:31:SER:N	51:BT:43:GLN:O	2.51	0.43
52:BU:42:ALA:C	52:BU:44:ASN:N	2.70	0.43
35:BA:1936:A:H5''	35:BA:1940:U:C5	2.53	0.43
1:AA:587:G:C2	1:AA:755:G:C6	3.07	0.43
1:AA:757:U:H2'	1:AA:758:G:O4'	2.18	0.43
1:AA:826:C:H4'	8:AH:12:ARG:HG2	2.01	0.43
8:AH:38:ILE:HG21	8:AH:120:THR:HG22	2.01	0.43
15:AO:77:ARG:O	15:AO:81:LEU:CB	2.66	0.43
1:AA:1412:C:C2	1:AA:1413:A:C8	3.06	0.43
1:AA:1100:C:C2	1:AA:1102:A:H5'	2.54	0.43
2:AB:108:ILE:O	2:AB:111:ARG:HB2	2.19	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:70:PHE:H	2:AB:70:PHE:HD1	1.65	0.43
25:B0:41:ARG:HD2	25:B0:41:ARG:HA	1.54	0.43
35:BA:2328:A:H2'	35:BA:2329:G:C8	2.54	0.43
35:BA:2329:G:N2	35:BA:2386:C:N3	2.51	0.43
35:BA:1966:A:H2	35:BA:2592:G:N3	2.16	0.43
13:AM:79:LYS:C	13:AM:81:LEU:N	2.71	0.43
54:BW:76:VAL:CG2	54:BW:103:ILE:HG23	2.48	0.43
1:AA:1113:C:H2'	1:AA:1114:C:O5'	2.19	0.43
1:AA:1117:G:C8	1:AA:1117:G:H5'	2.46	0.43
1:AA:1156:G:O2'	1:AA:1180:A:N1	2.51	0.43
1:AA:1204:A:C4	1:AA:1205:U:C6	3.07	0.43
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.49	0.43
9:AI:112:LYS:HD3	9:AI:113:LYS:N	2.34	0.43
14:AN:47:LEU:HD12	14:AN:53:LEU:HD21	1.99	0.43
35:BA:481:G:OP2	56:BY:47:LYS:HD2	2.18	0.43
56:BY:80:GLY:O	56:BY:81:LYS:C	2.57	0.43
37:BC:10:LEU:HG	37:BC:32:LEU:O	2.19	0.43
37:BC:23:ASP:O	37:BC:27:HIS:HB2	2.17	0.43
37:BC:59:ARG:HG2	37:BC:59:ARG:O	2.18	0.43
35:BA:1464:C:HO2'	35:BA:1528:A:H8	1.61	0.43
29:B4:6:HIS:HA	41:BG:67:LYS:HD2	1.99	0.43
41:BG:143:GLU:O	41:BG:144:ILE:C	2.57	0.43
41:BG:57:ALA:O	41:BG:60:LEU:N	2.44	0.43
35:BA:616:G:H5'	40:BF:107:LYS:NZ	2.33	0.43
1:AA:299:G:C2	1:AA:300:A:C2	3.07	0.43
42:BH:41:MET:HE2	42:BH:42:ARG:O	2.18	0.43
35:BA:271(Q):G:O2'	35:BA:271(R):G:OP2	2.36	0.43
8:AH:104:ARG:HD2	8:AH:104:ARG:HA	1.86	0.43
17:AQ:40:LYS:CD	17:AQ:42:TYR:CZ	2.85	0.43
45:BN:7:LYS:O	45:BN:8:GLN:C	2.57	0.43
1:AA:1430:C:N4	1:AA:1431:C:N4	2.66	0.43
35:BA:1416:G:H1'	35:BA:1417:C:C5	2.54	0.43
35:BA:1466:G:H2'	35:BA:1547:C:N4	2.34	0.43
41:BG:107:LEU:CD2	41:BG:178:PHE:CE1	3.02	0.43
35:BA:434:U:O2'	35:BA:436:C:N4	2.52	0.43
1:AA:986:A:H2'	1:AA:987:G:H8	1.84	0.43
35:BA:2206:G:N3	35:BA:2206:G:C3'	2.80	0.43
35:BA:852:G:H2'	35:BA:853:G:O4'	2.19	0.43
25:B0:37:LEU:O	25:B0:38:VAL:HG23	2.19	0.43
1:AA:253:U:OP1	17:AQ:67:LYS:NZ	2.37	0.43
40:BF:44:ARG:O	40:BF:45:ARG:C	2.57	0.43
33:B8:52:LYS:H	33:B8:53:PRO:HD2	1.81	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1438:U:H2'	35:BA:1439:A:H8	1.83	0.43
1:AA:1284:C:C4	1:AA:1285:A:C5	3.06	0.43
1:AA:80:G:H5''	1:AA:81:U:H5	1.83	0.43
19:AS:15:LEU:O	19:AS:19:VAL:N	2.48	0.43
35:BA:1149:G:H2'	35:BA:1150:C:H6	1.80	0.43
12:AL:102:ARG:HH21	12:AL:110:VAL:CG2	2.30	0.43
35:BA:1107:G:OP2	35:BA:1107:G:C8	2.72	0.43
1:AA:155:C:H2'	1:AA:156:G:C8	2.45	0.43
46:BO:11:ALA:O	46:BO:99:PHE:N	2.51	0.43
17:AQ:83:ASP:OD1	17:AQ:84:LEU:N	2.47	0.43
11:AK:14:VAL:HG21	11:AK:35:PRO:HD3	2.01	0.43
1:AA:830:G:C6	1:AA:831:U:C4	3.07	0.43
2:AB:195:ASP:N	2:AB:195:ASP:OD1	2.52	0.43
35:BA:1475:G:H5'	35:BA:1476:C:OP2	2.17	0.43
24:AY:173:ILE:HG23	24:AY:227:LEU:HD11	2.01	0.43
24:AY:395:PRO:HG3	24:AY:439:GLY:HA3	2.00	0.43
30:B5:45:VAL:HG13	30:B5:51:TYR:HD1	1.83	0.43
35:BA:1009:A:O5'	35:BA:1009:A:H8	2.01	0.43
35:BA:1266:G:O2'	35:BA:2012:G:N1	2.52	0.43
35:BA:1998:G:C6	35:BA:1999:C:C4	3.06	0.43
35:BA:2038:G:C6	35:BA:2039:C:C4	3.06	0.43
35:BA:2513:G:C6	35:BA:2514:U:C4	3.06	0.43
35:BA:2051:A:C5'	35:BA:2578:G:O5'	2.66	0.43
35:BA:786:C:O2'	35:BA:787:U:H5'	2.18	0.43
38:BD:270:ILE:HD12	38:BD:270:ILE:O	2.19	0.43
38:BD:69:ARG:NE	38:BD:105:ILE:CD1	2.75	0.43
35:BA:660:G:O3'	40:BF:38:ARG:NH2	2.52	0.43
40:BF:73:ALA:O	40:BF:75:HIS:CD2	2.72	0.43
47:BP:80:TYR:HA	47:BP:111:ARG:HB2	2.00	0.43
53:BV:81:TYR:CE1	53:BV:83:ARG:NE	2.74	0.43
1:AA:1484:C:O2'	35:BA:1961:C:C5'	2.57	0.43
35:BA:1678:G:H1'	35:BA:1991:U:C1'	2.49	0.43
46:BO:8:LEU:N	46:BO:8:LEU:CD1	2.82	0.43
1:AA:730:G:C4	1:AA:731:G:H1'	2.54	0.43
1:AA:738:C:C2	1:AA:739:C:C5	3.07	0.43
18:AR:22:VAL:HB	18:AR:56:THR:HA	2.00	0.43
1:AA:286:G:H2'	1:AA:287:U:O4'	2.18	0.43
1:AA:1098:C:N3	1:AA:1099:G:C8	2.87	0.43
2:AB:102:LEU:H	2:AB:102:LEU:HD13	1.83	0.43
2:AB:212:GLN:NE2	2:AB:216:SER:HB2	2.33	0.43
2:AB:219:VAL:HG12	2:AB:223:ILE:HD11	2.00	0.43
57:BZ:128:VAL:HG13	57:BZ:133:ILE:CD1	2.49	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BZ:57:ILE:CD1	57:BZ:70:LEU:HA	2.42	0.43
12:AL:104:VAL:HG12	12:AL:105:TYR:N	2.33	0.43
12:AL:83:VAL:HG11	12:AL:107:ALA:HB2	1.98	0.43
3:AC:11:ARG:O	3:AC:12:LEU:C	2.56	0.43
9:AI:97:LYS:O	9:AI:98:PRO:C	2.57	0.43
1:AA:1060:C:C5'	14:AN:45:ARG:HH21	2.31	0.43
56:BY:17:SER:CB	56:BY:71:LYS:HE2	2.49	0.43
27:B2:65:ASN:C	27:B2:67:LYS:N	2.72	0.43
35:BA:59:U:O2'	35:BA:73:A:H2'	2.19	0.43
35:BA:607:U:N3	35:BA:620:G:C4	2.87	0.43
35:BA:143:G:C6	35:BA:143(A):C:C4	3.07	0.43
11:AK:43:SER:OG	11:AK:44:SER:N	2.51	0.43
37:BC:3:HIS:CB	37:BC:7:TYR:CD2	3.00	0.43
15:AO:4:THR:O	15:AO:7:GLU:CA	2.67	0.43
7:AG:36:LYS:O	7:AG:39:ALA:HB3	2.18	0.43
35:BA:2870:C:OP1	49:BR:61:HIS:CE1	2.66	0.43
35:BA:2308:G:N2	35:BA:2309:A:N6	2.67	0.43
35:BA:2314:C:N4	35:BA:2315:G:O6	2.52	0.43
41:BG:139:LEU:HB2	41:BG:146:TYR:CD1	2.49	0.43
47:BP:62:LEU:HD23	47:BP:62:LEU:H	1.80	0.43
35:BA:2282:G:C2	35:BA:2425:A:C6	3.07	0.43
42:BH:38:SER:CB	42:BH:64:LEU:HD21	2.49	0.43
1:AA:1401:G:C2	1:AA:1402:C:H1'	2.54	0.43
26:B1:82:LEU:C	26:B1:83:GLU:HG3	2.38	0.43
36:BB:73:A:C2'	36:BB:74:U:H5'	2.48	0.43
25:B0:48:GLY:O	25:B0:49:LYS:C	2.56	0.43
51:BT:8:LYS:HA	51:BT:11:GLU:CD	2.39	0.43
51:BT:5:ALA:HA	51:BT:8:LYS:HG3	2.01	0.43
35:BA:116:C:C2'	35:BA:117:G:H5'	2.49	0.43
35:BA:49:A:N1	35:BA:118:A:C2	2.87	0.43
1:AA:1440:C:H2'	1:AA:1441:G:C5'	2.49	0.43
46:BO:119:PRO:HG2	46:BO:120:GLU:H	1.83	0.43
49:BR:37:THR:OG1	49:BR:40:LYS:HB2	2.19	0.43
35:BA:816:C:N4	35:BA:1192:G:N1	2.65	0.43
35:BA:1671:U:O5'	35:BA:1671:U:H6	2.02	0.43
24:AY:488:LYS:CD	24:AY:518:TYR:OH	2.66	0.43
46:BO:107:ARG:NH1	51:BT:36:GLU:HG3	2.32	0.43
1:AA:944:G:C2	1:AA:1340:A:N6	2.87	0.43
35:BA:1332:G:H5'	35:BA:1333:C:H5	1.82	0.43
35:BA:1335:U:O5'	35:BA:1335:U:H6	2.01	0.43
35:BA:285:C:O2'	35:BA:286:C:H5'	2.18	0.43
1:AA:532:A:C2	3:AC:156:ARG:NH2	2.87	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BJ:119:UNK:O	43:BJ:120:UNK:CB	2.67	0.43
35:BA:519:U:H2'	35:BA:520:G:H8	1.82	0.43
43:BJ:48:UNK:O	43:BJ:49:UNK:CB	2.67	0.43
35:BA:25:U:H4'	54:BW:79:GLY:HA2	2.00	0.43
8:AH:134:ILE:HD13	8:AH:134:ILE:HA	1.75	0.43
24:AY:131:ARG:HH22	24:AY:162:LEU:CD1	2.32	0.43
24:AY:168:PRO:CG	24:AY:171:TRP:CH2	3.02	0.43
24:AY:190:THR:HG22	24:AY:192:LEU:CD1	2.49	0.43
24:AY:198:GLY:CA	24:AY:262:ASN:ND2	2.82	0.43
24:AY:346:LEU:CB	24:AY:366:GLY:HA3	2.31	0.43
24:AY:384:MET:O	24:AY:385:MET:HB3	2.19	0.43
35:BA:1259:G:O2'	35:BA:1260:G:H5'	2.19	0.43
35:BA:1382:G:H4'	35:BA:1573:G:N2	2.33	0.43
35:BA:1572:A:O2'	35:BA:1573:G:C5'	2.55	0.43
35:BA:1701:A:H3'	35:BA:1702:G:H8	1.84	0.43
35:BA:1791:A:H3'	35:BA:1792:G:C8	2.54	0.43
35:BA:1800:C:N3	35:BA:1818:U:O2	2.51	0.43
35:BA:1928:A:H2'	35:BA:1929:G:O4'	2.19	0.43
35:BA:1970:A:C4	35:BA:1972:A:N7	2.87	0.43
35:BA:2046:G:N2	35:BA:2047:U:C2	2.87	0.43
35:BA:2050:C:H2'	35:BA:2051:A:O4'	2.19	0.43
35:BA:644:A:H2	35:BA:2369:A:O2'	2.01	0.43
35:BA:2447:G:C4	35:BA:2501:C:N3	2.87	0.43
35:BA:2821:A:H2'	35:BA:2822:G:H8	1.79	0.43
35:BA:528:A:H2	35:BA:2043:C:C5'	2.30	0.43
35:BA:587:C:H5''	35:BA:588:U:H5'	2.00	0.43
35:BA:638:G:C6	35:BA:651:G:N1	2.87	0.43
35:BA:781:A:H4'	38:BD:221:VAL:HG11	2.01	0.43
38:BD:92:ILE:CA	38:BD:105:ILE:O	2.67	0.43
39:BE:59:VAL:CG1	39:BE:63:LEU:HG	2.48	0.43
45:BN:27:ALA:HA	45:BN:30:ILE:CG1	2.48	0.43
45:BN:70:LYS:C	45:BN:71:ILE:HG13	2.40	0.43
45:BN:93:THR:O	45:BN:94:HIS:HB2	2.18	0.43
45:BN:99:LEU:HD22	45:BN:99:LEU:HA	1.70	0.43
47:BP:71:VAL:C	47:BP:73:GLY:N	2.72	0.43
35:BA:1754:C:OP2	51:BT:113:LYS:HD2	2.19	0.43
52:BU:53:ARG:O	52:BU:56:ASP:HB2	2.19	0.43
35:BA:1952:A:C6	46:BO:22:ILE:CD1	2.98	0.43
1:AA:865:A:H5'	1:AA:1078:U:C4	2.54	0.43
1:AA:580:U:OP1	15:AO:54:ARG:NH2	2.52	0.43
1:AA:667:G:C4'	15:AO:51:HIS:HD1	2.32	0.43
15:AO:38:ARG:HD2	15:AO:38:ARG:HA	1.75	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1095:U:O2'	1:AA:1096:C:H5'	2.19	0.43
2:AB:218:ALA:O	2:AB:221:LEU:N	2.52	0.43
2:AB:44:LEU:CA	2:AB:47:THR:OG1	2.65	0.43
2:AB:51:LEU:HA	2:AB:54:THR:HB	2.01	0.43
35:BA:247:G:N2	35:BA:250:G:H5''	2.34	0.43
35:BA:1916:A:H8	35:BA:1916:A:O5'	2.02	0.43
35:BA:862:G:H2'	35:BA:863:A:H8	1.78	0.43
48:BQ:42:ILE:HD11	48:BQ:126:PRO:CG	2.49	0.43
48:BQ:54:MET:HB3	48:BQ:55:VAL:H	1.67	0.43
57:BZ:125:LEU:CD2	57:BZ:164:ALA:HB3	2.49	0.43
1:AA:1203:C:O5'	1:AA:1203:C:H6	2.00	0.43
1:AA:980:C:C6	1:AA:981:U:C2	3.07	0.43
10:AJ:9:ARG:HG2	10:AJ:69:ASN:HA	2.01	0.43
27:B2:36:ARG:HH21	55:BX:9:LEU:HA	1.84	0.43
35:BA:2839:G:H1'	49:BR:93:GLY:H	1.82	0.43
55:BX:35:THR:HG22	55:BX:37:THR:N	2.33	0.43
11:AK:40:ILE:CG2	11:AK:75:TYR:CD2	3.02	0.43
7:AG:116:ALA:O	7:AG:117:ALA:C	2.57	0.43
35:BA:1718:G:C8	35:BA:1718:G:H5'	2.53	0.43
35:BA:601:C:H42	35:BA:656:G:H1	1.67	0.43
20:AT:19:SER:HA	20:AT:22:ARG:HD2	1.99	0.43
35:BA:2415:G:H2'	35:BA:2416:C:O4'	2.19	0.43
35:BA:2234:G:N3	35:BA:2235:G:C8	2.87	0.43
1:AA:642:A:N7	8:AH:115:SER:HA	2.34	0.43
5:AE:80:ILE:HD11	5:AE:138:ALA:CA	2.47	0.43
5:AE:95:ALA:O	5:AE:96:PRO:C	2.58	0.43
1:AA:527:G:O2'	1:AA:535:A:N1	2.39	0.43
36:BB:21:G:N3	36:BB:21:G:O4'	2.52	0.43
36:BB:56:G:O2'	36:BB:57:A:OP2	2.32	0.43
50:BS:102:ALA:O	50:BS:103:GLU:C	2.57	0.43
1:AA:1001:A:H1'	1:AA:1001(A):G:N2	2.33	0.43
25:B0:51:VAL:HG21	25:B0:80:HIS:CA	2.49	0.43
13:AM:53:VAL:HG12	13:AM:54:VAL:N	2.34	0.43
57:BZ:14:LYS:O	57:BZ:18:LEU:CD2	2.67	0.43
16:AP:5:ARG:HB2	16:AP:6:LEU:H	1.55	0.43
35:BA:2052:G:H4'	39:BE:143:ASN:N	2.33	0.43
55:BX:24:GLY:CA	55:BX:82:GLN:NE2	2.82	0.43
49:BR:100:LEU:N	49:BR:100:LEU:HD13	2.34	0.43
35:BA:2400:G:N1	35:BA:2401:U:O2	2.52	0.43
35:BA:1153:C:O2	35:BA:1153:C:H2'	2.18	0.43
35:BA:2691:C:C5'	35:BA:2691:C:H6	2.28	0.43
29:B4:42:PHE:CG	29:B4:42:PHE:O	2.72	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:362:U:O5'	35:BA:363:G:OP2	2.36	0.43
3:AC:111:LEU:HA	3:AC:111:LEU:HD23	1.73	0.43
10:AJ:82:ILE:O	10:AJ:86:MET:CB	2.67	0.43
35:BA:150:C:H2'	35:BA:151:C:C6	2.53	0.43
35:BA:2496:C:O2'	35:BA:2497:A:C5'	2.67	0.43
1:AA:747:C:C5	1:AA:748:C:O2	2.71	0.43
1:AA:604:G:C6	1:AA:605:U:C4	3.07	0.43
40:BF:172:TRP:N	40:BF:172:TRP:CD1	2.87	0.43
35:BA:1415:U:H6	35:BA:1415:U:H3'	1.84	0.43
24:AY:183:TYR:HD2	24:AY:184:HIS:N	2.16	0.42
24:AY:209:GLY:O	24:AY:210:LEU:O	2.37	0.42
24:AY:282:ARG:HG2	24:AY:319:ARG:NH2	2.34	0.42
24:AY:395:PRO:CG	24:AY:398:PHE:CZ	2.99	0.42
1:AA:1407:C:C4	1:AA:1408:A:N7	2.87	0.42
1:AA:678:U:C4	1:AA:679:C:C4	3.06	0.42
30:B5:16:ARG:HG2	30:B5:17:ASP:OD1	2.19	0.42
33:B8:37:SER:HG	33:B8:40:GLU:HG3	1.82	0.42
35:BA:1141:U:OP2	45:BN:63:THR:CG2	2.55	0.42
35:BA:1649:G:H2'	35:BA:1650:G:O5'	2.19	0.42
35:BA:1844:C:N3	35:BA:1845:G:N7	2.66	0.42
35:BA:1895:C:C5'	35:BA:1895:C:H6	2.25	0.42
35:BA:2007:C:C4'	35:BA:2824:C:H4'	2.49	0.42
35:BA:2821:A:N6	35:BA:2822:G:C6	2.87	0.42
35:BA:2048:G:H4'	35:BA:2823:A:C2	2.54	0.42
30:B5:13:LYS:NZ	35:BA:516:C:OP1	2.45	0.42
35:BA:670:A:H4'	35:BA:671:C:C5'	2.49	0.42
38:BD:208:LYS:HG2	38:BD:210:GLY:O	2.19	0.42
38:BD:62:TYR:CD1	38:BD:63:ARG:N	2.87	0.42
39:BE:172:VAL:C	39:BE:174:ASP:N	2.72	0.42
45:BN:22:THR:O	45:BN:26:LEU:CB	2.66	0.42
45:BN:28:THR:HG23	45:BN:29:LYS:N	2.34	0.42
49:BR:104:ARG:O	49:BR:106:GLY:N	2.50	0.42
51:BT:28:VAL:O	51:BT:29:ARG:HB2	2.19	0.42
52:BU:110:VAL:O	52:BU:114:LYS:HG2	2.19	0.42
35:BA:1669:A:OP2	35:BA:2550:G:OP1	2.36	0.42
1:AA:562:C:H41	1:AA:884:U:C2'	2.31	0.42
1:AA:877:C:H5''	8:AH:88:LYS:CD	2.44	0.42
11:AK:114:VAL:HG23	11:AK:115:PRO:HD2	2.00	0.42
15:AO:71:GLN:HA	15:AO:75:PRO:HB3	2.01	0.42
1:AA:286:G:C5	1:AA:287:U:C5	3.07	0.42
1:AA:1088:G:H2'	1:AA:1089:G:O4'	2.18	0.42
35:BA:199:A:C2	35:BA:2433:A:C4	3.06	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BQ:110:THR:O	48:BQ:113:GLN:N	2.42	0.42
57:BZ:53:ILE:HG22	57:BZ:71:VAL:CG2	2.49	0.42
1:AA:1308:U:C5	13:AM:99:ARG:CZ	3.01	0.42
1:AA:1305:G:H5''	21:AU:5:ASP:H	1.84	0.42
12:AL:85:ILE:HA	12:AL:85:ILE:HD13	1.70	0.42
1:AA:983:A:O2'	1:AA:1050:G:OP2	2.36	0.42
1:AA:1105:A:H2'	1:AA:1106:G:H8	1.84	0.42
1:AA:1179:A:N6	1:AA:1180:A:N1	2.66	0.42
14:AN:26:ARG:HB3	14:AN:27:CYS:H	1.76	0.42
14:AN:57:ARG:CG	14:AN:57:ARG:NH1	2.80	0.42
35:BA:481:G:H4'	35:BA:481:G:OP1	2.19	0.42
56:BY:65:ALA:HA	56:BY:66:PRO:HD3	1.79	0.42
4:AD:18:LYS:CE	4:AD:31:CYS:HB3	2.49	0.42
41:BG:133:LEU:HD13	41:BG:135:LEU:HD13	2.01	0.42
29:B4:10:VAL:CG2	29:B4:11:PRO:CD	2.92	0.42
50:BS:26:LEU:HD22	50:BS:26:LEU:O	2.18	0.42
1:AA:300:A:N3	1:AA:565:U:C2	2.87	0.42
45:BN:19:GLU:HG2	45:BN:56:ASN:OD1	2.19	0.42
42:BH:67:LEU:C	42:BH:71:LEU:HB2	2.39	0.42
36:BB:101:G:H2'	36:BB:102:A:C1'	2.49	0.42
24:AY:21:HIS:CD2	24:AY:122:ARG:CB	2.96	0.42
35:BA:1343:G:H1	35:BA:1404:C:H42	1.67	0.42
1:AA:1225:A:OP2	13:AM:104:ARG:HB2	2.18	0.42
50:BS:106:ARG:HD2	50:BS:107:GLU:O	2.18	0.42
50:BS:106:ARG:NH1	50:BS:107:GLU:C	2.69	0.42
1:AA:1016:A:H2'	1:AA:1017:G:O4'	2.18	0.42
25:B0:45:PHE:O	25:B0:59:LEU:HD11	2.19	0.42
25:B0:38:VAL:CB	25:B0:59:LEU:HD12	2.49	0.42
2:AB:121:LEU:HG	2:AB:126:GLU:CB	2.46	0.42
13:AM:69:GLU:O	13:AM:69:GLU:HG3	2.19	0.42
1:AA:918:A:C5	1:AA:919:A:C6	3.07	0.42
35:BA:372:G:O3'	35:BA:373:U:H6	2.02	0.42
1:AA:123:C:O2'	1:AA:290:C:H1'	2.19	0.42
38:BD:3:VAL:HG22	38:BD:200:ASP:OD2	2.19	0.42
40:BF:131:GLY:HA3	40:BF:138:GLU:O	2.19	0.42
35:BA:2161:C:H2'	35:BA:2162:G:C8	2.45	0.42
35:BA:1275:A:C6	49:BR:16:HIS:HA	2.54	0.42
35:BA:1316:U:C2	35:BA:1337:G:N2	2.87	0.42
35:BA:1238:G:N2	35:BA:1239:G:C1'	2.82	0.42
8:AH:20:TYR:HE1	8:AH:76:PRO:HG2	1.82	0.42
35:BA:2441:C:O2'	35:BA:2442:C:H5'	2.18	0.42
1:AA:100:C:H2'	1:AA:101:A:C8	2.54	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:43:GLU:O	53:BV:44:LYS:HG3	2.18	0.42
35:BA:2059:A:O3'	40:BF:69:HIS:HA	2.18	0.42
1:AA:313:A:C2	1:AA:314:C:C2	3.06	0.42
24:AY:202:GLN:O	24:AY:203:GLU:O	2.38	0.42
24:AY:299:PHE:CE1	24:AY:387:PHE:HE1	2.37	0.42
24:AY:454:LYS:C	24:AY:454:LYS:HD3	2.40	0.42
24:AY:467:ASN:O	24:AY:506:THR:HG23	2.19	0.42
30:B5:39:MET:O	54:BW:38:TYR:CE2	2.71	0.42
32:B7:3:ARG:O	35:BA:687:C:H4'	2.19	0.42
35:BA:1009:A:N3	35:BA:1154:G:H5'	2.34	0.42
35:BA:1653:G:C2'	35:BA:1654:A:OP2	2.67	0.42
35:BA:1970:A:H5''	35:BA:1971:A:OP1	2.19	0.42
35:BA:2050:C:H6	35:BA:2050:C:O5'	2.02	0.42
35:BA:792:G:O2'	35:BA:2440:C:N3	2.46	0.42
35:BA:2443:C:C6	35:BA:2443:C:C3'	3.02	0.42
35:BA:2641:G:C2	35:BA:2774:C:N3	2.87	0.42
35:BA:837:C:C4	35:BA:941:A:N6	2.87	0.42
38:BD:143:HIS:CG	38:BD:143:HIS:O	2.72	0.42
38:BD:182:LEU:H	38:BD:272:ALA:CA	2.31	0.42
38:BD:250:TRP:HE3	38:BD:252:TRP:HE1	1.67	0.42
39:BE:27:LEU:HD23	51:BT:1:MET:N	2.34	0.42
45:BN:65:LYS:CD	45:BN:69:GLN:NE2	2.82	0.42
35:BA:587:C:N4	47:BP:33:ARG:HB3	2.34	0.42
47:BP:47:ASP:OD2	47:BP:49:ARG:CB	2.62	0.42
51:BT:28:VAL:O	51:BT:29:ARG:CB	2.68	0.42
35:BA:1664:A:OP1	35:BA:1665:A:OP2	2.37	0.42
1:AA:874:G:H2'	1:AA:875:C:O5'	2.19	0.42
8:AH:28:ALA:CB	8:AH:57:PRO:HB2	2.40	0.42
53:BV:95:LEU:HD22	53:BV:97:LYS:CD	2.50	0.42
48:BQ:38:GLU:O	48:BQ:127:ILE:HD13	2.19	0.42
1:AA:1096:C:O2'	1:AA:1097:C:H5'	2.19	0.42
35:BA:1919:A:C2	35:BA:1920:C:O4'	2.72	0.42
57:BZ:127:LYS:O	57:BZ:128:VAL:HB	2.18	0.42
21:AU:18:TYR:CE2	21:AU:24:ARG:HA	2.54	0.42
1:AA:1092:A:OP2	7:AG:5:ARG:NH2	2.47	0.42
1:AA:978:A:OP1	1:AA:980:C:N4	2.52	0.42
3:AC:141:VAL:O	3:AC:144:SER:HB3	2.19	0.42
10:AJ:16:LEU:HD22	10:AJ:16:LEU:O	2.19	0.42
35:BA:84:A:N3	35:BA:85:G:H1'	2.34	0.42
55:BX:28:PHE:CZ	55:BX:81:VAL:CG2	2.97	0.42
4:AD:9:CYS:C	4:AD:12:CYS:HB2	2.40	0.42
19:AS:49:ILE:CD1	19:AS:49:ILE:N	2.77	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1057:A:H2	35:BA:1082:U:N3	2.09	0.42
35:BA:2333:A:C1'	35:BA:2335:A:C5	3.02	0.42
4:AD:59:ARG:NH1	4:AD:59:ARG:HG2	2.28	0.42
1:AA:686:U:C2	1:AA:687:A:N7	2.87	0.42
11:AK:33:THR:HA	11:AK:39:PRO:CA	2.40	0.42
37:BC:213:TYR:CE1	37:BC:223:ARG:HG3	2.54	0.42
37:BC:41:VAL:CG1	37:BC:43:VAL:HG23	2.47	0.42
35:BA:1528:A:N1	35:BA:1542:A:H2	2.16	0.42
35:BA:2704:C:H2'	35:BA:2705:A:O4'	2.19	0.42
41:BG:71:THR:HG22	41:BG:72:ARG:H	1.80	0.42
1:AA:60:A:H8	1:AA:60:A:OP1	2.01	0.42
35:BA:2389:G:H5''	35:BA:2390:U:O4'	2.18	0.42
18:AR:31:LEU:H	18:AR:31:LEU:CD2	2.31	0.42
35:BA:1886:C:O2'	35:BA:1887:C:H5'	2.19	0.42
36:BB:73:A:C2	36:BB:74:U:H1'	2.54	0.42
50:BS:89:ARG:O	50:BS:90:GLY:O	2.37	0.42
34:B9:17:ILE:CG2	34:B9:18:ARG:N	2.82	0.42
35:BA:2746:U:O2'	35:BA:2747:G:H5'	2.18	0.42
1:AA:505:G:C6	1:AA:535:A:C2	3.07	0.42
35:BA:1859:A:N6	35:BA:1883:G:O2'	2.52	0.42
41:BG:170:ARG:O	41:BG:174:GLU:CB	2.67	0.42
1:AA:1220:G:N2	19:AS:54:GLY:CA	2.79	0.42
1:AA:1139:G:N2	1:AA:1143:G:C2	2.86	0.42
35:BA:428:A:C6	35:BA:429:A:C2	3.07	0.42
9:AI:95:LYS:HB2	9:AI:95:LYS:HE2	1.58	0.42
35:BA:119:A:H4'	35:BA:120:U:H5'	2.01	0.42
54:BW:6:ILE:HG12	54:BW:104:THR:CG2	2.47	0.42
13:AM:29:ARG:NH2	13:AM:64:TRP:CB	2.80	0.42
1:AA:253:U:O2'	1:AA:254:G:H5'	2.19	0.42
1:AA:1286:A:O2'	1:AA:1287:A:P	2.77	0.42
1:AA:848:C:H2'	1:AA:849:C:O4'	2.19	0.42
35:BA:2801(A):A:C4'	35:BA:2802:G:H2'	2.48	0.42
1:AA:1212:U:H2'	1:AA:1212:U:H6	1.64	0.42
1:AA:929:G:C2	1:AA:930:C:C2	3.07	0.42
1:AA:1442(B):A:O2'	1:AA:1443:G:C8	2.71	0.42
24:AY:65:GLN:O	24:AY:66:ARG:C	2.58	0.42
14:AN:8:GLU:O	14:AN:11:LYS:N	2.51	0.42
30:B5:37:LYS:HG3	30:B5:37:LYS:O	2.19	0.42
24:AY:207:VAL:HG11	24:AY:215:LEU:HA	2.00	0.42
24:AY:425:VAL:HG12	24:AY:445:GLN:HG3	1.92	0.42
24:AY:506:THR:O	24:AY:507:SER:HB3	2.19	0.42
30:B5:9:LYS:HD3	30:B5:9:LYS:HA	1.60	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B7:10:ARG:HD3	35:BA:770:G:H5''	2.01	0.42
32:B7:13:ALA:HB1	35:BA:125:G:C1'	2.48	0.42
32:B7:7:PRO:HG3	35:BA:1612:C:C5'	2.46	0.42
35:BA:1791:A:N6	35:BA:1828:G:O2'	2.53	0.42
35:BA:1830:C:O2'	35:BA:1831:G:C5'	2.66	0.42
35:BA:2372:G:C2	35:BA:2373:G:C5	3.08	0.42
35:BA:2447:G:C6	35:BA:2501:C:O2	2.71	0.42
35:BA:412:A:N3	35:BA:412:A:H2'	2.34	0.42
35:BA:629:G:C5'	35:BA:629:G:H8	2.25	0.42
35:BA:637:A:C2	35:BA:652:C:O4'	2.73	0.42
35:BA:648:G:C2	35:BA:649:G:N7	2.87	0.42
35:BA:772:C:O2'	35:BA:773:U:C5'	2.67	0.42
35:BA:792:G:C3'	35:BA:793:A:H5'	2.49	0.42
35:BA:990:A:OP2	35:BA:991:C:OP2	2.37	0.42
38:BD:11:PRO:C	38:BD:13:ARG:H	2.22	0.42
38:BD:18:VAL:HG23	38:BD:211:ARG:HH22	1.78	0.42
35:BA:1827:C:H3'	38:BD:222:ARG:HH12	1.84	0.42
38:BD:82:ILE:HA	38:BD:93:ALA:CA	2.47	0.42
39:BE:184:VAL:C	39:BE:186:GLY:N	2.72	0.42
40:BF:98:SER:OG	40:BF:99:TYR:N	2.52	0.42
45:BN:97:ARG:N	45:BN:100:GLU:OE2	2.52	0.42
46:BO:77:ILE:HG23	46:BO:77:ILE:O	2.19	0.42
51:BT:50:ILE:CD1	51:BT:64:ARG:HB2	2.50	0.42
52:BU:20:LEU:O	52:BU:21:ALA:HB2	2.18	0.42
52:BU:36:ARG:HA	52:BU:39:LEU:HB2	2.01	0.42
52:BU:63:VAL:O	52:BU:64:ARG:C	2.57	0.42
1:AA:583:A:C2	1:AA:584:G:H1'	2.55	0.42
1:AA:720:C:H3'	1:AA:721:G:H8	1.80	0.42
6:AF:12:PRO:HD2	6:AF:55:ASP:OD2	2.19	0.42
8:AH:9:MET:CG	8:AH:26:VAL:HG21	2.49	0.42
18:AR:38:GLU:O	18:AR:41:LYS:HB3	2.19	0.42
1:AA:1489:G:C4	1:AA:1490:C:C5	3.07	0.42
2:AB:14:GLY:C	2:AB:15:VAL:CG2	2.83	0.42
2:AB:42:ILE:HD12	2:AB:202:PRO:C	2.39	0.42
25:B0:43:THR:HB	35:BA:2331:G:O2'	2.19	0.42
48:BQ:111:GLU:O	48:BQ:114:ALA:N	2.52	0.42
36:BB:75:G:C2'	57:BZ:85:HIS:HE1	2.29	0.42
12:AL:43:VAL:HG23	12:AL:53:ARG:CB	2.49	0.42
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.54	0.42
1:AA:1202:G:O5'	1:AA:1202:G:H8	2.02	0.42
1:AA:972:C:O3'	10:AJ:57:LYS:HG2	2.19	0.42
3:AC:113:ALA:HB2	3:AC:202:ILE:HG13	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:47:LEU:HD12	3:AC:47:LEU:HA	1.88	0.42
19:AS:44:MET:CE	29:B4:47:GLN:NE2	2.83	0.42
35:BA:498:G:C4	35:BA:499:U:C5	3.07	0.42
1:AA:543:C:P	4:AD:10:ARG:NH1	2.91	0.42
9:AI:76:ALA:O	9:AI:79:LEU:HB3	2.20	0.42
40:BF:125:LEU:HD12	40:BF:196:LEU:HD23	2.00	0.42
40:BF:122:LYS:CG	40:BF:191:ARG:HG3	2.49	0.42
49:BR:18:LEU:HD13	49:BR:18:LEU:C	2.40	0.42
37:BC:68:LEU:HD21	37:BC:174:PRO:HB2	2.00	0.42
7:AG:120:ILE:O	7:AG:123:GLU:N	2.52	0.42
35:BA:1527:G:O2'	35:BA:1544:A:N6	2.35	0.42
35:BA:1456:G:N2	35:BA:2704:C:C2	2.88	0.42
29:B4:9:LEU:HD11	29:B4:26:SER:N	2.33	0.42
5:AE:105:VAL:N	5:AE:106:PRO:CD	2.82	0.42
20:AT:72:LEU:HD21	20:AT:80:ARG:NH2	2.32	0.42
42:BH:52:VAL:HG13	42:BH:53:GLU:N	2.34	0.42
42:BH:38:SER:HG	42:BH:64:LEU:HD21	1.85	0.42
38:BD:119:ALA:CB	38:BD:130:ALA:HB3	2.48	0.42
26:B1:80:LEU:CD2	26:B1:81:LYS:N	2.79	0.42
37:BC:69:GLY:HA3	37:BC:180:PHE:CE1	2.54	0.42
5:AE:76:ILE:HG13	5:AE:77:PRO:N	2.34	0.42
5:AE:82:VAL:HB	5:AE:89:ILE:HG23	2.01	0.42
50:BS:62:LYS:O	50:BS:65:VAL:HB	2.19	0.42
50:BS:30:ARG:HB3	50:BS:89:ARG:NH1	2.33	0.42
50:BS:93:LYS:HD2	50:BS:93:LYS:HA	1.90	0.42
2:AB:145:LEU:HA	2:AB:145:LEU:HD22	1.75	0.42
45:BN:5:VAL:HG12	45:BN:7:LYS:CG	2.31	0.42
35:BA:1491:G:C6	35:BA:1500:G:N2	2.87	0.42
41:BG:19:LEU:O	41:BG:20:ILE:C	2.57	0.42
50:BS:46:VAL:CG1	50:BS:47:THR:H	2.09	0.42
35:BA:2111:C:N4	35:BA:2145:C:C6	2.88	0.42
35:BA:1299:G:H4'	35:BA:1301:A:C4	2.54	0.42
35:BA:2695:C:H2'	35:BA:2696:U:C5	2.54	0.42
51:BT:106:SER:C	51:BT:107:ASP:OD1	2.57	0.42
28:B3:8:LEU:HD21	28:B3:31:LEU:HG	2.01	0.42
28:B3:30:ARG:NH2	35:BA:1158:C:OP1	2.36	0.42
25:B0:53:MET:N	25:B0:60:PHE:CE2	2.87	0.42
23:AX:17:U:H2'	23:AX:18:G:C5'	2.49	0.42
4:AD:158:ILE:O	4:AD:162:LEU:HD23	2.18	0.42
36:BB:76:G:C4	36:BB:77:U:C6	3.07	0.42
35:BA:814:C:HO2'	35:BA:815:C:H5'	1.80	0.42
7:AG:26:PHE:CE2	7:AG:124:LEU:HD11	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:82:ARG:CG	2:AB:82:ARG:HH11	2.32	0.42
57:BZ:63:ASP:C	57:BZ:65:GLN:N	2.70	0.42
35:BA:1360:A:N3	35:BA:1360:A:H2'	2.34	0.42
10:AJ:82:ILE:O	10:AJ:86:MET:HB3	2.20	0.42
15:AO:15:PHE:N	15:AO:15:PHE:HD1	2.15	0.42
35:BA:2097:C:O2	35:BA:2193:G:C2	2.72	0.42
57:BZ:177:PRO:C	57:BZ:178:GLU:HG2	2.40	0.42
35:BA:1171:G:OP2	35:BA:1171:G:H8	2.02	0.42
37:BC:89:ALA:HB1	37:BC:150:GLY:O	2.18	0.42
1:AA:1131:G:C2	1:AA:1132:C:N4	2.87	0.42
20:AT:82:SER:O	20:AT:86:ARG:CB	2.67	0.42
35:BA:2250:G:C5	48:BQ:83:MET:HB3	2.53	0.42
24:AY:324:LYS:HG2	24:AY:325:TYR:H	1.83	0.42
24:AY:349:MET:SD	24:AY:356:VAL:HG22	2.59	0.42
24:AY:419:LEU:CD2	24:AY:424:ALA:CB	2.88	0.42
24:AY:443:VAL:O	24:AY:444:LEU:C	2.58	0.42
35:BA:1139:G:H8	35:BA:1139:G:H5''	1.84	0.42
35:BA:1803:A:H61	35:BA:1822:G:HO2'	1.67	0.42
35:BA:1901:A:O2'	35:BA:1902:C:H5'	2.19	0.42
35:BA:2406:U:H5''	35:BA:2408:U:OP2	2.20	0.42
35:BA:781:A:H2	35:BA:1776:G:N3	2.17	0.42
35:BA:971:C:OP2	35:BA:974:G:C8	2.73	0.42
38:BD:146:GLU:HB3	38:BD:152:GLY:O	2.20	0.42
38:BD:186:HIS:NE2	38:BD:188:GLU:CB	2.82	0.42
38:BD:144:ALA:O	38:BD:192:THR:CG2	2.67	0.42
45:BN:39:ARG:O	45:BN:42:TRP:HB3	2.19	0.42
35:BA:245:G:H4'	47:BP:71:VAL:HA	2.00	0.42
51:BT:52:ILE:HG12	51:BT:61:PHE:HB2	2.00	0.42
51:BT:80:SER:OG	51:BT:81:PRO:N	2.49	0.42
52:BU:55:ARG:HG3	52:BU:55:ARG:NH1	2.34	0.42
52:BU:63:VAL:O	52:BU:66:ASN:N	2.52	0.42
53:BV:75:PHE:CE1	53:BV:77:ALA:N	2.88	0.42
30:B5:30:LEU:HD22	54:BW:38:TYR:CD2	2.55	0.42
35:BA:2762:G:C5'	35:BA:2762:G:C8	3.02	0.42
6:AF:60:PHE:CZ	18:AR:78:LEU:HD21	2.55	0.42
18:AR:43:PHE:CD2	18:AR:66:LEU:HD11	2.53	0.42
35:BA:2785:C:O2'	35:BA:2786:U:H5'	2.20	0.42
33:B8:10:ALA:HA	33:B8:13:ARG:CG	2.45	0.42
35:BA:906:G:N1	35:BA:907:U:C4	2.88	0.42
35:BA:921:G:O2'	35:BA:922:U:H5'	2.19	0.42
57:BZ:69:THR:O	57:BZ:70:LEU:HB3	2.19	0.42
48:BQ:141:GLN:CD	57:BZ:72:ARG:HA	2.38	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1269:A:N1	1:AA:1312:G:N3	2.67	0.42
1:AA:1269:A:C2	1:AA:1325:C:O2	2.72	0.42
13:AM:86:CYS:O	13:AM:89:GLY:N	2.51	0.42
3:AC:153:VAL:HG12	3:AC:154:SER:H	1.83	0.42
10:AJ:93:GLY:O	10:AJ:94:VAL:HG23	2.19	0.42
4:AD:79:PHE:HB2	4:AD:93:PHE:CZ	2.54	0.42
35:BA:2838:G:C4'	49:BR:45:ARG:HH11	2.31	0.42
42:BH:83:TYR:HB3	42:BH:135:GLY:O	2.19	0.42
35:BA:142:A:H5'	35:BA:142(A):C:OP2	2.19	0.42
37:BC:59:ARG:CD	37:BC:164:ARG:NE	2.80	0.42
29:B4:5:ILE:CD1	29:B4:5:ILE:N	2.82	0.42
41:BG:96:ARG:N	41:BG:99:MET:HE2	2.34	0.42
1:AA:617:G:C2	1:AA:624:C:O2	2.72	0.42
24:AY:342:ILE:CG1	24:AY:345:ALA:HB2	2.49	0.42
25:B0:14:ARG:CD	35:BA:2279:G:O6	2.63	0.42
42:BH:65:HIS:C	42:BH:67:LEU:N	2.67	0.42
8:AH:112:LEU:O	8:AH:118:VAL:CG1	2.67	0.42
24:AY:122:ARG:HB3	24:AY:126:LEU:HD21	2.01	0.42
24:AY:20:SER:N	24:AY:126:LEU:HD13	2.34	0.42
35:BA:1168:G:C2	35:BA:1182:A:C2	3.07	0.42
42:BH:30:LYS:CB	42:BH:79:VAL:O	2.67	0.42
1:AA:1004:A:N6	1:AA:1035:A:N7	2.68	0.42
35:BA:2298:A:H2'	35:BA:2299:G:C1'	2.45	0.42
35:BA:2712:U:OP1	35:BA:2714:G:O2'	2.20	0.42
50:BS:85:VAL:H	50:BS:106:ARG:CB	2.32	0.42
3:AC:7:PRO:HG3	3:AC:184:TYR:CG	2.55	0.42
35:BA:117:G:O4'	35:BA:126:A:H2	2.03	0.42
1:AA:1441:G:OP1	1:AA:1442:G:H5'	2.19	0.42
56:BY:86:ARG:HH12	56:BY:95:LYS:HZ2	1.57	0.42
4:AD:124:GLY:O	4:AD:126:ILE:N	2.50	0.42
7:AG:137:LYS:HA	7:AG:140:ASP:HB3	2.02	0.42
1:AA:1168:A:C6	1:AA:1169:A:C6	3.07	0.42
42:BH:94:TYR:HD1	42:BH:107:VAL:CA	2.32	0.42
1:AA:896:C:O2'	1:AA:897:C:H5'	2.18	0.42
1:AA:81:U:H6	1:AA:81:U:H3'	1.85	0.42
35:BA:30:G:C2'	35:BA:31:C:O4'	2.68	0.42
35:BA:1332:G:N2	35:BA:1610:A:N7	2.67	0.42
35:BA:2418:A:C5	35:BA:2419:U:C5	3.08	0.42
41:BG:116:ASP:O	41:BG:117:PHE:CB	2.66	0.42
35:BA:1042:G:C5	35:BA:1114:G:N1	2.88	0.42
1:AA:1206:G:C6	1:AA:1207:G:C6	3.07	0.42
1:AA:68:G:H2'	1:AA:69:G:O4'	2.20	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:41:ARG:O	7:AG:45:ASP:CG	2.57	0.42
35:BA:2255:G:O5'	35:BA:2255:G:H8	2.02	0.42
24:AY:154:LEU:O	24:AY:156:ASP:N	2.53	0.42
24:AY:246:PHE:HB2	24:AY:251:ILE:HD11	2.01	0.42
24:AY:30:THR:O	24:AY:34:LEU:HG	2.19	0.42
24:AY:453:LEU:O	24:AY:457:TYR:O	2.38	0.42
24:AY:509:VAL:HA	24:AY:512:ARG:HG3	2.01	0.42
24:AY:527:ARG:HD2	24:AY:528:GLU:O	2.19	0.42
13:AM:102:ARG:HG3	13:AM:102:ARG:NH1	2.34	0.42
30:B5:18:ALA:O	30:B5:21:SER:HB2	2.19	0.42
32:B7:11:LYS:HE2	35:BA:686:G:C5'	2.49	0.42
32:B7:34:ARG:HA	32:B7:34:ARG:HD3	1.89	0.42
35:BA:1159:U:H5''	35:BA:1159:U:H6	1.84	0.42
35:BA:1188:U:H2'	35:BA:1189:A:O4'	2.19	0.42
35:BA:1326:U:H3	35:BA:1648:C:HO2'	1.61	0.42
35:BA:1826:G:C6	35:BA:1827:C:C5	3.08	0.42
35:BA:1926:U:C3'	35:BA:1927:A:H5''	2.50	0.42
35:BA:2048:G:C2	35:BA:2621:A:C2	3.08	0.42
35:BA:2572:A:C5	39:BE:144:ARG:NH1	2.87	0.42
35:BA:659:C:C2	35:BA:660:G:C8	3.07	0.42
35:BA:810:U:OP1	35:BA:1253:A:N6	2.51	0.42
38:BD:145:VAL:N	38:BD:155:LEU:O	2.49	0.42
38:BD:165:ILE:HG13	38:BD:175:LEU:CD2	2.38	0.42
38:BD:203:ASN:O	38:BD:205:VAL:HG23	2.20	0.42
39:BE:101:ARG:O	39:BE:201:THR:HB	2.19	0.42
39:BE:81:ILE:O	39:BE:81:ILE:CG2	2.66	0.42
39:BE:4:ILE:CD1	39:BE:92:THR:O	2.67	0.42
40:BF:65:TRP:CZ3	40:BF:73:ALA:O	2.72	0.42
51:BT:19:LEU:HD11	51:BT:78:LEU:O	2.19	0.42
51:BT:78:LEU:HD22	51:BT:79:HIS:CE1	2.54	0.42
35:BA:1677:A:H2'	35:BA:1678:G:H8	1.77	0.42
35:BA:2744:G:H21	42:BH:143:GLN:CD	2.22	0.42
1:AA:914:A:H2'	1:AA:915:A:C8	2.51	0.42
8:AH:27:PRO:HG3	8:AH:58:TYR:CZ	2.55	0.42
15:AO:18:PHE:O	15:AO:19:PRO:C	2.57	0.42
2:AB:187:LEU:HA	2:AB:201:ILE:HB	2.02	0.42
2:AB:60:ASP:O	2:AB:64:ARG:HB3	2.20	0.42
57:BZ:168:GLU:CA	57:BZ:168:GLU:OE1	2.66	0.42
35:BA:915:C:C4	35:BA:916:G:C5	3.07	0.42
48:BQ:35:VAL:HG13	48:BQ:35:VAL:O	2.20	0.42
57:BZ:28:MET:HG3	57:BZ:37:VAL:CG1	2.47	0.42
35:BA:1785:A:OP1	35:BA:1982:C:H5'	2.20	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1785:A:C5	35:BA:1787:A:C4	3.08	0.42
1:AA:1326:C:O2'	1:AA:1327:C:C5'	2.67	0.42
1:AA:1118:C:H2'	1:AA:1119:C:O5'	2.19	0.42
3:AC:120:VAL:C	3:AC:122:GLU:N	2.73	0.42
56:BY:14:LEU:HD23	56:BY:73:ARG:HG3	2.02	0.42
35:BA:2818:G:H4'	35:BA:2837:G:C4'	2.49	0.42
11:AK:58:PRO:O	11:AK:59:TYR:C	2.56	0.42
37:BC:45:ALA:CA	37:BC:171:ILE:HG22	2.49	0.42
37:BC:43:VAL:O	37:BC:43:VAL:HG12	2.18	0.42
51:BT:129:ARG:O	51:BT:129:ARG:HG3	2.20	0.42
35:BA:2703:C:C2'	35:BA:2703:C:O2	2.66	0.42
41:BG:141:PHE:O	41:BG:143:GLU:N	2.50	0.42
41:BG:47:LYS:HG2	41:BG:81:LYS:CG	2.46	0.42
29:B4:9:LEU:CD1	29:B4:10:VAL:N	2.82	0.42
50:BS:26:LEU:CD2	50:BS:26:LEU:O	2.67	0.42
20:AT:10:LEU:C	20:AT:12:ALA:N	2.72	0.42
38:BD:121:PRO:C	38:BD:123:ALA:N	2.71	0.42
35:BA:1889:A:C6	35:BA:1890:A:C6	3.07	0.42
31:B6:50:ARG:HB3	31:B6:51:GLU:H	1.75	0.42
36:BB:67:G:O2'	36:BB:68:C:H6	2.02	0.42
35:BA:1202:C:C5	35:BA:1203:G:C5	3.08	0.42
2:AB:106:LYS:C	2:AB:109:SER:HB2	2.40	0.42
35:BA:1446:C:C2	35:BA:1466:G:N2	2.87	0.42
1:AA:960:U:O2'	1:AA:1223:C:H4'	2.19	0.42
1:AA:986:A:C2'	1:AA:987:G:O4'	2.67	0.42
50:BS:85:VAL:H	50:BS:106:ARG:HB2	1.83	0.42
1:AA:1133:G:C4	1:AA:1142:G:N1	2.88	0.42
1:AA:1133:G:C1'	1:AA:1142:G:H22	2.33	0.42
1:AA:1349:A:C6	1:AA:1374:A:C8	3.07	0.42
35:BA:1451:C:C5'	35:BA:1452:A:H5'	2.49	0.42
28:B3:35:ARG:CB	28:B3:35:ARG:HH11	2.33	0.42
14:AN:14:PRO:O	14:AN:15:LYS:C	2.57	0.42
4:AD:126:ILE:HG23	4:AD:127:THR:H	1.84	0.42
1:AA:1251:A:H2'	1:AA:1252:A:O4'	2.19	0.42
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.54	0.42
9:AI:70:LYS:HB2	9:AI:70:LYS:HE2	1.74	0.42
1:AA:277:C:C5'	17:AQ:68:ARG:HH12	2.32	0.42
35:BA:1569:A:C2	35:BA:1570:A:C8	3.08	0.42
5:AE:131:ILE:O	5:AE:135:THR:CB	2.67	0.42
20:AT:40:ALA:HB2	20:AT:55:ILE:HG21	2.01	0.42
20:AT:88:VAL:HG12	20:AT:92:LEU:HD12	2.02	0.42
35:BA:933:A:H2'	35:BA:934:G:O4'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1481:U:C2	1:AA:1482:G:C8	3.07	0.42
31:B6:15:GLU:HB2	31:B6:20:ASN:CB	2.49	0.42
1:AA:606:G:C2	1:AA:633:G:O6	2.72	0.42
1:AA:502:G:H4'	1:AA:550:G:O2'	2.19	0.42
35:BA:614:U:H2'	35:BA:614(A):U:H5'	2.01	0.42
1:AA:559:A:O4'	1:AA:561:U:H2'	2.19	0.42
57:BZ:60:GLU:CA	57:BZ:65:GLN:O	2.66	0.42
1:AA:498:U:O2'	1:AA:499:A:H8	2.02	0.42
35:BA:1244:G:C2'	35:BA:1245:G:H5'	2.50	0.42
35:BA:341:G:C6	35:BA:342:G:C5	3.08	0.42
29:B4:40:HIS:CD2	29:B4:41:PRO:HA	2.54	0.42
35:BA:2131:G:H5''	35:BA:2132:U:C5'	2.49	0.42
47:BP:86:LYS:HG2	47:BP:86:LYS:O	2.20	0.42
35:BA:2885:C:H2'	35:BA:2886:G:O4'	2.20	0.42
37:BC:11:LEU:C	37:BC:13:LYS:N	2.72	0.42
35:BA:426:C:O2'	35:BA:427:U:H5'	2.20	0.42
35:BA:1432:C:H2'	35:BA:1433:U:O4'	2.20	0.42
1:AA:130:A:O3'	1:AA:189(G):G:N2	2.52	0.42
24:AY:68:ILE:HB	58:AY:1000:GCP:O3G	2.20	0.42
24:AY:12:LYS:O	24:AY:82:CYS:HB2	2.18	0.42
35:BA:2532:G:O2'	35:BA:2657:A:N6	2.53	0.42
30:B5:19:ARG:HD3	35:BA:2047:U:OP1	2.20	0.42
32:B7:29:LYS:HE3	32:B7:29:LYS:HB3	1.75	0.42
35:BA:1754:C:C4	35:BA:1755:A:C5	3.08	0.42
35:BA:1770:G:H2'	35:BA:1771:C:H6	1.84	0.42
35:BA:2369:A:O2'	35:BA:2370:G:H5'	2.19	0.42
35:BA:2345:G:N2	35:BA:2382:G:C8	2.88	0.42
35:BA:2443:C:C2'	35:BA:2444:G:C5'	2.94	0.42
35:BA:2715:C:C2	35:BA:2716:U:C5	3.07	0.42
35:BA:638:G:C2	35:BA:639:U:C2	3.08	0.42
38:BD:148:GLU:H	38:BD:154:LYS:HZ2	1.67	0.42
38:BD:18:VAL:CG2	38:BD:211:ARG:NH2	2.70	0.42
38:BD:211:ARG:O	38:BD:212:SER:C	2.58	0.42
39:BE:117:MET:O	39:BE:121:ASN:CA	2.66	0.42
39:BE:117:MET:HG3	39:BE:122:PHE:O	2.20	0.42
40:BF:59:TYR:N	40:BF:59:TYR:CD1	2.88	0.42
45:BN:107:LEU:HD11	45:BN:117:PHE:HD1	1.85	0.42
47:BP:85:LEU:C	47:BP:88:LEU:H	2.23	0.42
52:BU:6:THR:CG2	52:BU:10:ARG:NH2	2.82	0.42
52:BU:83:LEU:HA	52:BU:88:ILE:HG12	2.01	0.42
53:BV:23:GLU:O	53:BV:24:LYS:C	2.57	0.42
54:BW:12:ILE:O	54:BW:12:ILE:HG23	2.18	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:16:A:C2'	1:AA:17:U:C5'	2.95	0.42
1:AA:597:G:H2'	1:AA:598:U:C5'	2.44	0.42
1:AA:878:G:C5	1:AA:879:C:C4	3.08	0.42
1:AA:910:C:C2'	1:AA:911:U:H5'	2.49	0.42
5:AE:13:ILE:HG22	5:AE:14:ARG:N	2.35	0.42
6:AF:79:LEU:O	6:AF:85:VAL:HG21	2.19	0.42
11:AK:114:VAL:CG2	11:AK:115:PRO:HD2	2.49	0.42
18:AR:40:LEU:HD23	18:AR:40:LEU:HA	1.60	0.42
53:BV:95:LEU:C	53:BV:95:LEU:CD2	2.88	0.42
48:BQ:38:GLU:OE1	48:BQ:127:ILE:HB	2.20	0.42
2:AB:211:ILE:O	2:AB:212:GLN:C	2.58	0.42
11:AK:120:ARG:CZ	11:AK:126:ARG:HD2	2.50	0.42
25:B0:43:THR:HG21	35:BA:2336:A:H61	1.84	0.42
12:AL:32:PHE:HD1	12:AL:85:ILE:O	2.01	0.42
1:AA:1195:C:C4	1:AA:1197:G:C8	3.07	0.42
1:AA:1204:A:H2'	1:AA:1205:U:C1'	2.49	0.42
3:AC:122:GLU:O	3:AC:123:GLN:C	2.57	0.42
3:AC:92:ALA:O	3:AC:93:LYS:C	2.58	0.42
10:AJ:62:HIS:HB2	14:AN:59:ALA:CB	2.49	0.42
35:BA:324:A:C2'	35:BA:325:G:H5'	2.49	0.42
35:BA:327:G:N2	35:BA:336:C:C2	2.87	0.42
35:BA:482:A:H5'	56:BY:47:LYS:HD3	2.02	0.42
4:AD:143:GLY:O	4:AD:144:ASP:O	2.37	0.42
49:BR:97:VAL:C	49:BR:98:LEU:HG	2.40	0.42
37:BC:22:ILE:CD1	37:BC:189:ILE:HG22	2.50	0.42
35:BA:877:U:N3	35:BA:899:A:N6	2.65	0.42
1:AA:1342:C:O3'	9:AI:125:TYR:HB2	2.20	0.42
35:BA:2309:A:O2'	35:BA:2310:A:H5''	2.20	0.42
1:AA:42:G:H1	1:AA:400:C:H42	1.66	0.42
40:BF:104:LYS:O	40:BF:108:LYS:HG3	2.19	0.42
1:AA:328:C:H4'	1:AA:329:A:H5'	2.02	0.42
1:AA:801:U:H2'	1:AA:802:A:H8	1.85	0.42
26:B1:76:ARG:HH21	26:B1:95:LEU:HD13	1.81	0.42
35:BA:2234:G:C4	35:BA:2235:G:C8	3.07	0.42
1:AA:712:A:H2'	1:AA:713:G:C8	2.55	0.42
35:BA:2745:C:O2'	35:BA:2746:U:H5'	2.20	0.42
2:AB:114:ARG:HD2	2:AB:141:GLU:OE2	2.20	0.42
35:BA:2173:A:OP2	35:BA:2173:A:C4	2.72	0.42
36:BB:26:A:H5'	36:BB:27:C:P	2.59	0.42
1:AA:187:C:H4'	20:AT:85:MET:HB2	2.02	0.42
42:BH:148:ILE:O	42:BH:151:ILE:HD13	2.20	0.42
32:B7:40:TRP:CD2	35:BA:459:U:C5'	3.00	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1272:A:N7	35:BA:1618:A:H1'	2.35	0.42
49:BR:67:LEU:O	49:BR:70:LEU:O	2.37	0.42
1:AA:193:C:H2'	1:AA:194:C:C6	2.55	0.42
35:BA:2856:C:O2	35:BA:2862:G:N2	2.52	0.42
35:BA:1551:C:C5	35:BA:1552:G:N7	2.88	0.42
42:BH:94:TYR:CD1	42:BH:107:VAL:C	2.90	0.42
16:AP:5:ARG:NH2	16:AP:23:ASP:O	2.52	0.42
19:AS:13:ASP:C	19:AS:15:LEU:H	2.22	0.42
35:BA:1306:C:C2	35:BA:1307:A:C8	3.07	0.42
35:BA:1307:A:H1'	35:BA:1622:G:N2	2.35	0.42
25:B0:20:ARG:NH1	35:BA:2357:U:OP1	2.53	0.42
35:BA:2801(A):A:H5'	35:BA:2802:G:C8	2.38	0.42
35:BA:1389:G:C2	35:BA:1390:U:C2	3.08	0.42
45:BN:75:TYR:HB2	45:BN:82:LEU:CD1	2.43	0.42
57:BZ:60:GLU:C	57:BZ:61:LEU:HG	2.39	0.42
39:BE:177:PRO:O	39:BE:178:GLU:O	2.38	0.42
17:AQ:31:LEU:HA	17:AQ:31:LEU:HD12	1.69	0.42
24:AY:114:ASP:OD1	24:AY:143:LYS:HD2	2.20	0.42
24:AY:135:THR:O	24:AY:136:PRO:C	2.58	0.42
24:AY:231:LEU:O	24:AY:234:VAL:HG23	2.20	0.42
24:AY:442:GLY:O	24:AY:443:VAL:CG2	2.62	0.42
24:AY:445:GLN:HA	24:AY:448:VAL:CB	2.50	0.42
35:BA:1650:G:C6	35:BA:1651:G:N7	2.87	0.42
35:BA:1812:A:H2'	35:BA:1813:G:O4'	2.19	0.42
35:BA:1834:U:O3'	35:BA:1835:G:H8	2.03	0.42
35:BA:2039:C:O2'	35:BA:2040:C:H5'	2.20	0.42
35:BA:2044:C:C2	35:BA:2625:G:N2	2.88	0.42
35:BA:644:A:C2	35:BA:2369:A:H1'	2.55	0.42
35:BA:2569:G:C2	35:BA:2570:G:N7	2.87	0.42
38:BD:173:VAL:HG23	38:BD:174:ILE:N	2.34	0.42
39:BE:44:TYR:CD2	39:BE:45:THR:O	2.70	0.42
30:B5:44:THR:HG21	49:BR:101:ALA:HB2	2.02	0.42
51:BT:29:ARG:HA	51:BT:29:ARG:HD3	1.35	0.42
51:BT:62:THR:HA	51:BT:74:ARG:O	2.20	0.42
51:BT:32:TYR:CD1	51:BT:81:PRO:HB2	2.54	0.42
52:BU:12:ARG:O	52:BU:16:LYS:HG3	2.19	0.42
52:BU:36:ARG:O	52:BU:39:LEU:HB2	2.19	0.42
52:BU:53:ARG:HA	52:BU:56:ASP:OD1	2.18	0.42
52:BU:92:ARG:C	52:BU:94:ASN:H	2.22	0.42
53:BV:47:VAL:HB	53:BV:51:VAL:O	2.19	0.42
30:B5:39:MET:HG2	54:BW:34:ASN:OD1	2.18	0.42
46:BO:85:VAL:HB	46:BO:87:ILE:HD11	2.02	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2742:C:C4	35:BA:2763:G:N2	2.88	0.42
1:AA:720:C:C1'	18:AR:50:ILE:CG2	2.93	0.42
1:AA:753:A:H4'	1:AA:754:C:C2	2.55	0.42
6:AF:80:ARG:HA	6:AF:85:VAL:CG1	2.47	0.42
12:AL:7:ILE:O	12:AL:10:LEU:N	2.52	0.42
15:AO:53:HIS:HE1	15:AO:57:LEU:HD21	1.85	0.42
35:BA:920:G:O2'	35:BA:921:G:H5'	2.19	0.42
57:BZ:41:LEU:HD11	57:BZ:82:ARG:HH21	1.85	0.42
12:AL:53:ARG:NH1	12:AL:93:LEU:HD21	2.34	0.42
12:AL:32:PHE:HB3	12:AL:84:LEU:HD22	2.02	0.42
1:AA:1053:G:O2'	1:AA:1054:C:P	2.78	0.42
1:AA:1117:G:O2'	9:AI:104:ARG:CD	2.67	0.42
1:AA:1120:G:C6	1:AA:1154:G:C2	3.08	0.42
3:AC:157:ILE:CD1	3:AC:166:GLU:HB2	2.49	0.42
1:AA:1151:A:C2	10:AJ:39:PRO:HG3	2.53	0.42
1:AA:982:U:H5''	14:AN:6:LEU:HD11	2.00	0.42
35:BA:479:A:C4	35:BA:481:G:O4'	2.72	0.42
35:BA:481:G:C4	35:BA:507:A:C2	3.07	0.42
27:B2:65:ASN:ND2	35:BA:112:U:H5'	2.35	0.42
55:BX:81:VAL:O	55:BX:81:VAL:HG23	2.19	0.42
4:AD:9:CYS:CA	4:AD:12:CYS:HB2	2.49	0.42
35:BA:129:C:H2'	35:BA:130:C:H6	1.85	0.42
35:BA:142:A:H1'	35:BA:1408:C:H1'	2.02	0.42
4:AD:58:LEU:HD11	4:AD:62:GLN:HG3	2.01	0.42
4:AD:11:LEU:HD13	4:AD:66:ARG:NE	2.34	0.42
35:BA:2594:C:C2	35:BA:2595:G:N7	2.88	0.42
37:BC:14:VAL:CG2	37:BC:32:LEU:HD11	2.50	0.42
7:AG:107:ALA:HB2	7:AG:134:ALA:HB2	2.01	0.42
35:BA:2306:C:H5''	35:BA:2307:G:O4'	2.20	0.42
41:BG:39:ILE:HG21	41:BG:94:LEU:HD11	2.01	0.42
41:BG:41:GLN:CG	41:BG:155:MET:HE2	2.49	0.42
41:BG:42:GLY:HA2	41:BG:89:GLY:HA2	2.02	0.42
1:AA:43:C:C2	1:AA:44:G:C8	3.08	0.42
17:AQ:4:LYS:O	17:AQ:60:ILE:HA	2.20	0.42
17:AQ:58:GLU:C	17:AQ:59:ILE:HG12	2.39	0.42
35:BA:2279:G:C6	35:BA:2280:G:N7	2.87	0.42
42:BH:38:SER:OG	42:BH:64:LEU:HD11	2.18	0.42
38:BD:126:GLN:O	38:BD:193:VAL:CG2	2.68	0.42
33:B8:12:LYS:HB3	47:BP:68:GLN:NE2	2.35	0.42
35:BA:612:C:O2'	35:BA:613:G:H5''	2.19	0.42
26:B1:50:ARG:HA	26:B1:59:THR:HA	2.01	0.42
1:AA:961:U:O2'	1:AA:962:C:P	2.77	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:958:A:C2	19:AS:54:GLY:O	2.67	0.42
35:BA:1746:G:N3	35:BA:1746:G:H2'	2.35	0.42
51:BT:5:ALA:HA	51:BT:8:LYS:HE2	2.01	0.42
42:BH:150:ALA:O	42:BH:151:ILE:C	2.57	0.42
35:BA:116:C:H2'	35:BA:117:G:C5'	2.49	0.42
1:AA:1015:A:C5	1:AA:1016:A:N7	2.88	0.42
56:BY:88:LYS:C	56:BY:90:LEU:H	2.23	0.42
35:BA:108:U:O5'	35:BA:108:U:H6	2.03	0.42
35:BA:1368:G:C2	35:BA:1369:G:C5	3.07	0.42
35:BA:2077:A:N3	35:BA:2078:C:C6	2.88	0.42
35:BA:1439:A:H3'	35:BA:1440:G:C8	2.52	0.42
20:AT:100:ILE:CD1	20:AT:100:ILE:N	2.83	0.42
35:BA:2649:U:H2'	35:BA:2650:U:C6	2.55	0.42
1:AA:135:C:H2'	1:AA:136:C:H5'	2.01	0.42
35:BA:233:A:O2'	35:BA:234:C:H5'	2.20	0.42
1:AA:412:A:H4'	1:AA:413:G:H8	1.84	0.42
35:BA:2521:C:N3	35:BA:2545:G:C2	2.88	0.42
17:AQ:11:VAL:HG23	17:AQ:20:THR:HB	2.02	0.42
1:AA:818:G:HO2'	1:AA:820:U:H6	1.64	0.42
17:AQ:83:ASP:CG	17:AQ:84:LEU:H	2.20	0.42
35:BA:1086:A:N3	35:BA:1086:A:H5''	2.34	0.42
43:BJ:121:UNK:O	43:BJ:122:UNK:C	2.68	0.42
35:BA:1861:G:O2'	35:BA:1862:G:H5'	2.19	0.42
2:AB:181:PHE:CD1	8:AH:70:GLN:HB3	2.55	0.42
35:BA:24:G:H2'	35:BA:25:U:C6	2.54	0.42
1:AA:1263:C:C2	1:AA:1273:G:N2	2.88	0.42
24:AY:28:THR:HB	58:AY:1000:GCP:H8	2.01	0.42
24:AY:131:ARG:CG	24:AY:131:ARG:HH11	2.33	0.42
24:AY:131:ARG:HH12	24:AY:162:LEU:CD1	2.33	0.42
24:AY:17:ALA:HB3	24:AY:103:LEU:HG	2.01	0.42
24:AY:527:ARG:HD2	24:AY:528:GLU:C	2.40	0.42
24:AY:72:THR:HG22	24:AY:89:THR:HA	2.00	0.42
30:B5:40:LYS:CD	30:B5:44:THR:O	2.68	0.42
30:B5:46:CYS:HB2	30:B5:47:PRO:HD2	2.01	0.42
35:BA:1693:U:O4	35:BA:1977:A:C5	2.73	0.42
35:BA:1805:U:N3	35:BA:1806:C:C5	2.87	0.42
35:BA:1843:C:H2'	35:BA:1844:C:C5	2.53	0.42
35:BA:1893:C:H2'	35:BA:1894:C:O4'	2.19	0.42
35:BA:1130:U:N3	35:BA:2025:C:H5''	2.35	0.42
35:BA:2375:G:N3	35:BA:2379:G:N1	2.68	0.42
35:BA:2637:U:O2'	35:BA:2638:G:H5'	2.20	0.42
35:BA:528:A:C8	35:BA:528:A:C3'	3.03	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:588:U:C2	35:BA:589:C:C5	3.08	0.42
35:BA:646:A:O4'	35:BA:646:A:N3	2.53	0.42
35:BA:671:C:C2	35:BA:672:C:C5	3.08	0.42
38:BD:53:PHE:HB3	38:BD:218:ARG:HB2	2.02	0.42
35:BA:2820:A:C8	39:BE:109:LYS:HE2	2.55	0.42
39:BE:11:MET:HB3	39:BE:24:THR:HA	2.02	0.42
39:BE:134:ILE:HG13	39:BE:134:ILE:O	2.19	0.42
39:BE:26:ILE:O	39:BE:182:LEU:N	2.51	0.42
47:BP:55:ARG:HG2	47:BP:57:THR:N	2.32	0.42
52:BU:76:TYR:C	52:BU:76:TYR:CD1	2.93	0.42
52:BU:98:LEU:O	52:BU:99:ALA:C	2.57	0.42
53:BV:73:SER:HA	53:BV:83:ARG:O	2.20	0.42
35:BA:2740:A:C6	35:BA:2764:A:C8	3.07	0.42
1:AA:645:C:O2'	1:AA:646:U:H5'	2.20	0.42
6:AF:12:PRO:HG3	6:AF:55:ASP:OD1	2.20	0.42
8:AH:14:ARG:NH1	8:AH:14:ARG:HB2	2.35	0.42
15:AO:43:LEU:HA	15:AO:43:LEU:HD22	1.70	0.42
2:AB:10:LEU:C	2:AB:10:LEU:CD1	2.88	0.42
2:AB:153:ARG:HG3	2:AB:154:LEU:HD23	2.02	0.42
35:BA:2631:G:N2	39:BE:61:ARG:NH2	2.67	0.42
35:BA:247:G:OP2	35:BA:249:C:C5	2.72	0.42
35:BA:1910:G:C2	35:BA:1911:U:C2	3.08	0.42
42:BH:125:VAL:HG13	42:BH:131:VAL:HG11	2.02	0.42
13:AM:91:ARG:HD3	13:AM:96:LEU:HB2	2.00	0.42
1:AA:1157:A:H4'	1:AA:1158:C:O5'	2.20	0.42
1:AA:1180:A:OP1	9:AI:103:THR:CG2	2.67	0.42
1:AA:973:G:C2'	1:AA:974:A:OP1	2.67	0.42
3:AC:113:ALA:O	3:AC:117:ALA:HB2	2.19	0.42
3:AC:187:ALA:N	3:AC:198:VAL:O	2.46	0.42
14:AN:4:LYS:HB2	14:AN:4:LYS:HZ2	1.84	0.42
35:BA:327:G:C2	35:BA:336:C:C2	3.07	0.42
35:BA:483:A:H1'	56:BY:60:PHE:HE1	1.84	0.42
55:BX:47:PHE:O	55:BX:49:VAL:N	2.47	0.42
35:BA:1069:A:N6	35:BA:1073:A:C6	2.88	0.42
4:AD:173:TRP:CD2	4:AD:189:PRO:HB3	2.55	0.42
35:BA:142:A:H1'	35:BA:1408:C:O4'	2.20	0.42
11:AK:62:GLN:O	11:AK:65:ALA:HB3	2.20	0.42
35:BA:2703:C:C2'	35:BA:2704:C:H5'	2.48	0.42
35:BA:2312:U:H5'	41:BG:73:ALA:HB2	2.01	0.42
41:BG:85:GLY:O	41:BG:86:MET:CB	2.65	0.42
36:BB:7:G:H3'	36:BB:8:U:C5'	2.46	0.42
35:BA:1467:C:O2'	35:BA:1468:C:H5'	2.19	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:AT:89:ARG:C	20:AT:91:LEU:H	2.23	0.42
25:B0:48:GLY:HA3	25:B0:80:HIS:CA	2.48	0.42
9:AI:90:PRO:C	9:AI:92:TYR:H	2.22	0.42
35:BA:115:C:O2'	35:BA:116:C:H5'	2.20	0.42
35:BA:472:A:C2'	35:BA:473:G:H5'	2.46	0.42
28:B3:8:LEU:HD11	28:B3:29:ARG:O	2.19	0.42
49:BR:79:LEU:C	49:BR:79:LEU:HD13	2.39	0.42
36:BB:77:U:H2'	36:BB:77:U:O2	2.20	0.42
26:B1:35:THR:OG1	35:BA:2079:U:O3'	2.33	0.42
33:B8:52:LYS:C	33:B8:56:GLU:OE1	2.58	0.42
42:BH:94:TYR:CB	42:BH:107:VAL:HB	2.45	0.42
42:BH:94:TYR:CE1	42:BH:108:GLY:HA3	2.52	0.42
20:AT:50:GLU:C	20:AT:52:ALA:N	2.72	0.42
35:BA:9:U:O2	35:BA:10:G:C1'	2.67	0.42
35:BA:1306:C:N4	35:BA:1606:G:H2'	2.35	0.42
40:BF:34:TRP:CG	47:BP:11:GLY:O	2.73	0.42
1:AA:787:A:C4	1:AA:788:U:C6	3.08	0.42
35:BA:1051:G:OP1	35:BA:2752:C:H1'	2.19	0.42
35:BA:491:G:O2'	35:BA:492:A:H5'	2.19	0.42
35:BA:1480:G:C6	35:BA:1481:U:C4	3.08	0.42
35:BA:282:A:O2'	35:BA:283:A:H8	2.00	0.42
3:AC:60:ALA:HB3	3:AC:63:ASN:OD1	2.19	0.42
35:BA:180:G:O2'	35:BA:181:A:N7	2.53	0.42
35:BA:407:G:H8	35:BA:407:G:O5'	2.03	0.42
1:AA:797:C:O2	1:AA:797:C:C2'	2.68	0.42
1:AA:906:G:C8	1:AA:906:G:C3'	3.03	0.42
1:AA:360:A:P	24:AY:411:GLN:NE2	2.92	0.42
24:AY:169:ILE:O	24:AY:170:THR:HG22	2.19	0.42
24:AY:173:ILE:CG2	24:AY:180:LYS:HB2	2.46	0.42
24:AY:284:THR:O	24:AY:285:ASP:C	2.57	0.42
24:AY:323:GLY:O	24:AY:324:LYS:O	2.37	0.42
24:AY:347:THR:OG1	24:AY:348:PHE:N	2.53	0.42
24:AY:445:GLN:HA	24:AY:448:VAL:HG21	1.98	0.42
24:AY:527:ARG:O	24:AY:528:GLU:HG2	2.20	0.42
24:AY:89:THR:CB	24:AY:90:PRO:CD	2.94	0.42
35:BA:2661:G:H2'	35:BA:2662:A:C8	2.54	0.42
35:BA:2654:A:N1	35:BA:2665:A:H5''	2.35	0.42
32:B7:10:ARG:HD3	35:BA:770:G:OP1	2.19	0.42
35:BA:1651:G:C2	35:BA:1652:A:C4	3.08	0.42
35:BA:1661:G:C4	35:BA:1662:C:C5	3.08	0.42
35:BA:16:G:H2'	35:BA:17:G:C8	2.55	0.42
35:BA:1133:U:H5	35:BA:2026:C:O2'	2.02	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2034:U:H2'	35:BA:2035:G:O4'	2.20	0.42
35:BA:2056:G:N2	35:BA:2057:A:C4	2.87	0.42
35:BA:2358:G:C4	35:BA:2359:C:C5	3.08	0.42
35:BA:2460:U:O2	35:BA:2493:U:O2	2.38	0.42
35:BA:2575:C:C5'	35:BA:2576:G:OP2	2.61	0.42
35:BA:526:A:C2	35:BA:2625:G:N3	2.88	0.42
35:BA:586:A:C2	35:BA:1254:A:C2	3.07	0.42
35:BA:752:A:N7	35:BA:1781:C:C2	2.88	0.42
38:BD:169:GLU:CD	38:BD:184:LYS:HZ2	2.21	0.42
38:BD:242:ARG:CG	38:BD:242:ARG:NH1	2.79	0.42
39:BE:102:VAL:HG23	39:BE:104:VAL:CG2	2.49	0.42
39:BE:48:GLN:NE2	39:BE:64:LYS:HZ1	2.13	0.42
39:BE:86:PRO:HB2	39:BE:87:GLU:H	1.63	0.42
35:BA:673:C:P	40:BF:54:ARG:HH11	2.42	0.42
45:BN:96:GLU:HG2	45:BN:100:GLU:OE2	2.20	0.42
45:BN:99:LEU:O	45:BN:100:GLU:C	2.57	0.42
52:BU:87:GLY:O	53:BV:49:THR:HA	2.20	0.42
53:BV:75:PHE:C	53:BV:75:PHE:CD1	2.93	0.42
35:BA:571:A:C2'	53:BV:78:LYS:HZ3	2.32	0.42
1:AA:735:C:OP1	18:AR:71:LYS:NZ	2.50	0.42
1:AA:826:C:O5'	1:AA:826:C:H6	2.02	0.42
6:AF:9:VAL:HG12	6:AF:10:LEU:N	2.34	0.42
6:AF:10:LEU:N	6:AF:59:TYR:O	2.53	0.42
15:AO:67:LEU:HA	15:AO:67:LEU:HD23	1.67	0.42
2:AB:185:ILE:HD12	2:AB:185:ILE:H	1.78	0.42
2:AB:42:ILE:HD11	2:AB:202:PRO:HB2	2.01	0.42
35:BA:2808:U:H2'	35:BA:2809:A:H5'	2.02	0.42
35:BA:952:G:O2'	35:BA:2267:A:H1'	2.19	0.42
36:BB:87:G:N1	36:BB:91:C:N4	2.68	0.42
57:BZ:5:LEU:HB3	57:BZ:59:LEU:CD2	2.49	0.42
22:AV:52:G:C2'	22:AV:53:G:C8	2.94	0.42
24:AY:405:ASP:HA	24:AY:406:PRO:HD3	1.73	0.42
1:AA:1119:C:H2'	1:AA:1120:G:C8	2.54	0.42
3:AC:9:GLY:C	3:AC:12:LEU:HG	2.40	0.42
3:AC:67:THR:HG23	3:AC:102:ASN:CB	2.37	0.42
3:AC:90:GLU:C	3:AC:93:LYS:HB3	2.37	0.42
14:AN:45:ARG:O	14:AN:49:HIS:HD2	2.02	0.42
19:AS:36:ARG:O	19:AS:38:SER:N	2.52	0.42
35:BA:326:G:C4	35:BA:327:G:C8	3.08	0.42
27:B2:51:ARG:O	27:B2:52:ASP:C	2.57	0.42
35:BA:57:C:HO2'	35:BA:58:G:H5'	1.82	0.42
4:AD:170:VAL:HB	4:AD:174:LEU:O	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:188:LEU:HD23	4:AD:189:PRO:O	2.19	0.42
1:AA:939:G:C2	1:AA:940:C:C2	3.07	0.42
35:BA:1462:C:C4	35:BA:1463:C:C4	3.08	0.42
35:BA:2312:U:O2'	41:BG:40:ASN:ND2	2.53	0.42
41:BG:129:GLY:C	41:BG:130:ASN:CG	2.76	0.42
41:BG:80:PHE:CD1	41:BG:81:LYS:HG2	2.54	0.42
36:BB:45:A:H1'	41:BG:95:ARG:NH2	2.34	0.42
5:AE:33:VAL:HG22	5:AE:43:LEU:CD1	2.31	0.42
20:AT:13:LEU:H	20:AT:13:LEU:CD2	2.29	0.42
38:BD:121:PRO:O	38:BD:131:LEU:HD21	2.20	0.42
6:AF:98:LEU:HA	18:AR:29:PHE:O	2.20	0.42
6:AF:97:PHE:O	18:AR:30:ASP:OD1	2.37	0.42
8:AH:31:PHE:HE1	8:AH:118:VAL:HG21	1.85	0.42
36:BB:107:G:C6	36:BB:108:U:C5	3.07	0.42
50:BS:63:THR:C	50:BS:65:VAL:N	2.74	0.42
1:AA:335:C:HO2'	1:AA:1433:A:HO2'	1.66	0.42
35:BA:1858:G:HO2'	35:BA:1859:A:H8	1.59	0.42
38:BD:263:ARG:CB	38:BD:263:ARG:NH1	2.83	0.42
16:AP:20:VAL:CG2	16:AP:21:VAL:N	2.83	0.42
4:AD:124:GLY:C	4:AD:126:ILE:H	2.23	0.42
13:AM:3:ARG:HA	13:AM:8:GLU:O	2.20	0.42
1:AA:277:C:P	17:AQ:68:ARG:HH12	2.42	0.42
1:AA:235:C:C5'	17:AQ:70:ARG:HG2	2.49	0.42
35:BA:1428:C:C2'	35:BA:1569:A:OP1	2.67	0.42
2:AB:137:ARG:O	2:AB:140:HIS:CB	2.68	0.42
22:AV:29:G:C2	22:AV:42:G:C2	3.07	0.42
1:AA:629:G:H2'	1:AA:630:G:C8	2.55	0.42
1:AA:1126:U:OP1	1:AA:1281:U:O2	2.38	0.42
1:AA:1018:C:H2'	1:AA:1019:C:H6	1.85	0.42
35:BA:2126:A:H4'	35:BA:2127:G:O5'	2.20	0.42
35:BA:2563:U:C2	35:BA:2566:A:N7	2.88	0.42
35:BA:1105:U:C6	35:BA:1105:U:O5'	2.72	0.42
35:BA:2749:A:C5	35:BA:2750:A:N7	2.87	0.42
45:BN:12:ARG:HG2	45:BN:50:ASP:OD2	2.20	0.42
1:AA:817:C:C5	1:AA:819:A:C1'	3.01	0.42
1:AA:458:C:H2'	1:AA:460:G:H5'	2.00	0.42
37:BC:50:ASP:OD1	37:BC:51:PRO:HD2	2.19	0.42
36:BB:63:G:C6	36:BB:64:C:N4	2.87	0.42
8:AH:50:ARG:O	8:AH:51:VAL:CG1	2.68	0.42
35:BA:2409:G:C6	35:BA:2410:G:C5	3.08	0.42
24:AY:109:CYS:O	24:AY:137:ILE:CG2	2.68	0.42
24:AY:173:ILE:CD1	24:AY:190:THR:CG2	2.98	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:295:LYS:HD3	24:AY:381:GLN:HB2	2.01	0.42
24:AY:418:GLN:O	24:AY:421:GLU:HB3	2.20	0.42
24:AY:68:ILE:HB	24:AY:92:HIS:HE1	1.85	0.42
35:BA:1141:U:H6	45:BN:63:THR:HG22	1.83	0.42
35:BA:1266:G:H22	35:BA:2012:G:H2'	1.83	0.42
35:BA:2031:A:C6	35:BA:2498:C:H1'	2.54	0.42
35:BA:240:G:C6	35:BA:241:A:C6	3.07	0.42
35:BA:245:G:O2'	47:BP:71:VAL:HG23	2.20	0.42
35:BA:685:A:N1	35:BA:787:U:H1'	2.34	0.42
35:BA:695:G:N1	35:BA:696:G:C5	2.87	0.42
35:BA:833:U:O2	47:BP:55:ARG:NH2	2.50	0.42
38:BD:218:ARG:O	38:BD:219:PRO:O	2.38	0.42
38:BD:250:TRP:HB2	38:BD:252:TRP:HE1	1.84	0.42
39:BE:48:GLN:HG3	39:BE:78:LEU:HD13	2.02	0.42
45:BN:100:GLU:O	45:BN:117:PHE:CE1	2.73	0.42
47:BP:25:SER:O	47:BP:30:THR:HA	2.19	0.42
51:BT:78:LEU:C	51:BT:79:HIS:CG	2.93	0.42
52:BU:59:ARG:O	52:BU:60:LEU:C	2.58	0.42
46:BO:23:ARG:CG	46:BO:24:VAL:N	2.67	0.42
35:BA:1667:G:C5'	46:BO:5:GLN:O	2.66	0.42
1:AA:586:C:P	17:AQ:34:LYS:NZ	2.93	0.42
1:AA:762:C:C2	1:AA:763:G:C8	3.08	0.42
6:AF:18:GLN:O	6:AF:21:LEU:N	2.53	0.42
17:AQ:34:LYS:HG2	17:AQ:35:VAL:N	2.33	0.42
1:AA:1413:A:C2	1:AA:1414:U:C6	3.08	0.42
1:AA:1100:C:C2	1:AA:1102:A:C5'	3.02	0.42
2:AB:155:LEU:HD21	2:AB:159:PRO:CG	2.31	0.42
39:BE:60:ASN:OD1	39:BE:61:ARG:HB3	2.20	0.42
35:BA:2324:C:O2	35:BA:2385:C:C5	2.63	0.42
35:BA:908:C:H2'	35:BA:909:A:C8	2.55	0.42
35:BA:958:U:OP1	48:BQ:41:TRP:HZ3	2.02	0.42
36:BB:85:G:N1	36:BB:93:G:C6	2.88	0.42
35:BA:910:A:C6	48:BQ:13:GLN:HG3	2.55	0.42
57:BZ:31:ARG:HG3	57:BZ:32:HIS:CE1	2.54	0.42
48:BQ:141:GLN:O	57:BZ:71:VAL:O	2.36	0.42
57:BZ:79:ARG:O	57:BZ:80:ARG:C	2.59	0.42
12:AL:33:ARG:HD2	12:AL:34:ARG:H	1.85	0.42
1:AA:1050:G:C2	1:AA:1209:C:C2	3.08	0.42
1:AA:1108:G:OP2	3:AC:174:PRO:HA	2.20	0.42
3:AC:90:GLU:HA	3:AC:93:LYS:CB	2.50	0.42
19:AS:9:VAL:HG12	19:AS:9:VAL:O	2.19	0.42
56:BY:13:VAL:HG13	56:BY:14:LEU:H	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:BY:27:VAL:O	56:BY:28:LYS:HG3	2.20	0.42
56:BY:30:VAL:HG12	56:BY:32:PRO:HB3	2.02	0.42
4:AD:108:LEU:HD12	4:AD:108:LEU:HA	1.76	0.42
1:AA:620:C:C2	4:AD:135:LEU:HG	2.54	0.42
35:BA:2320:A:H2'	35:BA:2320:A:N3	2.35	0.42
35:BA:130:C:H4'	35:BA:1349:A:C1'	2.50	0.42
35:BA:143:G:H5''	35:BA:1598:C:H1'	2.02	0.42
11:AK:63:LEU:CA	11:AK:66:LEU:HG	2.50	0.42
57:BZ:151:HIS:CA	57:BZ:171:ILE:HG12	2.45	0.42
35:BA:1463:C:O2'	35:BA:1464:C:H5'	2.20	0.42
1:AA:321:A:C2	1:AA:322:C:C4	3.07	0.42
1:AA:60:A:H2	1:AA:107:G:N3	2.18	0.42
20:AT:71:THR:CG2	20:AT:72:LEU:N	2.83	0.42
45:BN:55:VAL:HA	45:BN:123:TYR:O	2.19	0.42
31:B6:5:VAL:HG11	35:BA:2283:C:H5'	2.01	0.42
35:BA:2429:G:N7	47:BP:56:SER:HB2	2.35	0.42
35:BA:1888:G:N3	35:BA:1888:G:H5'	2.35	0.42
35:BA:1557:C:C5	35:BA:1558:A:C5	3.08	0.42
34:B9:19:ARG:HB2	35:BA:2756:U:H3'	2.00	0.42
26:B1:50:ARG:HG3	35:BA:2200:C:OP1	2.20	0.42
41:BG:178:PHE:CB	41:BG:180:PHE:HE1	2.33	0.42
35:BA:44:G:N2	35:BA:435:C:H41	2.18	0.42
35:BA:2189:U:C6	35:BA:2189:U:C3'	3.03	0.42
1:AA:1219:U:H6	1:AA:1219:U:O5'	2.03	0.42
1:AA:173:U:H4'	1:AA:174:C:OP2	2.20	0.42
1:AA:142:G:H1	1:AA:221:C:H42	1.67	0.42
26:B1:65:SER:O	35:BA:372:G:C8	2.73	0.42
7:AG:145:ALA:C	7:AG:147:ALA:N	2.73	0.42
35:BA:2153:G:C2	35:BA:2154:G:C1'	3.03	0.42
2:AB:129:GLU:O	2:AB:130:ARG:HB2	2.20	0.42
22:AV:23:C:C4	22:AV:24:U:C5	3.08	0.42
35:BA:848:G:O6	35:BA:928:G:H2'	2.19	0.42
1:AA:293:G:C6	1:AA:305:G:C2	3.08	0.42
1:AA:260:G:H8	1:AA:260:G:O5'	2.03	0.42
1:AA:552:U:H2'	1:AA:553:A:C8	2.55	0.42
1:AA:346:G:O2'	1:AA:347:G:P	2.77	0.42
35:BA:2563:U:C1'	35:BA:2566:A:N6	2.83	0.42
1:AA:944:G:N1	1:AA:1340:A:N6	2.68	0.42
35:BA:496:G:C1'	54:BW:61:ASN:HD21	2.33	0.42
1:AA:928:G:C6	1:AA:929:G:O6	2.72	0.42
35:BA:342:G:H2'	35:BA:343:C:C6	2.55	0.42
55:BX:50:LYS:HB3	55:BX:84:ALA:HB2	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1360:A:N7	35:BA:1372:U:C4	2.88	0.42
35:BA:150:C:H2'	35:BA:151:C:H6	1.84	0.42
35:BA:1044:G:N2	35:BA:1111:A:C2	2.88	0.42
1:AA:46:G:N1	1:AA:366:C:O2	2.53	0.42
35:BA:231:C:O2'	35:BA:232:G:H5'	2.18	0.42
20:AT:97:ALA:HA	20:AT:98:PRO:HD2	1.80	0.42
37:BC:148:ASN:O	37:BC:150:GLY:N	2.53	0.42
6:AF:99:ALA:O	6:AF:100:ASN:HB2	2.19	0.42
47:BP:26:GLY:O	47:BP:27:HIS:CG	2.72	0.42
24:AY:208:LYS:HB2	24:AY:209:GLY:H	1.62	0.41
24:AY:210:LEU:HB2	24:AY:228:ARG:NH2	2.35	0.41
24:AY:284:THR:CB	24:AY:287:ARG:O	2.69	0.41
32:B7:11:LYS:HE3	35:BA:686:G:C2	2.54	0.41
35:BA:1791:A:O3'	38:BD:206:LEU:CD1	2.64	0.41
35:BA:1934:C:H2'	35:BA:1935:G:C5'	2.50	0.41
35:BA:2007:C:C5'	35:BA:2824:C:O2'	2.68	0.41
35:BA:2037:G:H2'	35:BA:2038:G:H8	1.80	0.41
35:BA:748:G:C5'	35:BA:2612:C:N4	2.82	0.41
35:BA:1265:A:OP2	35:BA:2615:U:OP1	2.38	0.41
35:BA:388:G:C6	35:BA:390:A:C2	3.08	0.41
35:BA:671:C:N4	35:BA:809:G:H1	2.17	0.41
35:BA:669:G:C2	35:BA:801:G:C6	3.08	0.41
38:BD:145:VAL:CG1	38:BD:146:GLU:N	2.81	0.41
38:BD:21:PHE:HE1	38:BD:91:ARG:HH22	1.68	0.41
39:BE:173:VAL:HB	39:BE:183:LEU:HB3	2.02	0.41
39:BE:4:ILE:O	39:BE:4:ILE:HG23	2.19	0.41
45:BN:35:ARG:O	45:BN:35:ARG:HG3	2.20	0.41
45:BN:52:VAL:C	45:BN:53:VAL:HG23	2.41	0.41
45:BN:57:ALA:C	45:BN:58:ASP:O	2.59	0.41
35:BA:664:C:OP1	47:BP:21:ARG:NH2	2.52	0.41
52:BU:47:TYR:HE2	53:BV:74:LYS:HZ2	1.66	0.41
53:BV:75:PHE:CE1	53:BV:77:ALA:HA	2.52	0.41
1:AA:1484:C:C1'	35:BA:1960:A:O2'	2.68	0.41
46:BO:21:CYS:SG	46:BO:23:ARG:O	2.78	0.41
1:AA:587:G:N2	1:AA:755:G:C5	2.88	0.41
15:AO:26:GLU:O	15:AO:27:VAL:C	2.57	0.41
17:AQ:25:ARG:NH1	17:AQ:27:PHE:CE2	2.88	0.41
17:AQ:27:PHE:CE1	17:AQ:36:ILE:HD12	2.54	0.41
18:AR:44:LEU:HD21	18:AR:79:LEU:HD22	2.02	0.41
34:B9:10:ILE:N	34:B9:10:ILE:HD12	2.26	0.41
34:B9:10:ILE:HG21	35:BA:2477:C:C5	2.54	0.41
48:BQ:38:GLU:H	48:BQ:127:ILE:HD12	1.84	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:8:LYS:NZ	2:AB:217:ARG:NH2	2.68	0.41
35:BA:1911:U:H2'	35:BA:1918:A:H2	1.65	0.41
35:BA:919:G:H4'	36:BB:81:G:C4'	2.50	0.41
13:AM:87:TYR:O	13:AM:90:LEU:HG	2.20	0.41
1:AA:1106:G:N3	1:AA:1107:C:C6	2.88	0.41
1:AA:1152:A:H2'	1:AA:1153:C:C6	2.54	0.41
1:AA:1179:A:O2'	1:AA:1180:A:H5'	2.20	0.41
3:AC:95:THR:HG22	3:AC:97:LYS:HG3	2.02	0.41
14:AN:26:ARG:NH1	14:AN:47:LEU:HD23	2.35	0.41
24:AY:307:MET:HG2	24:AY:312:ARG:C	2.39	0.41
35:BA:482:A:N7	35:BA:506:G:C2	2.88	0.41
54:BW:60:ASN:OD1	54:BW:60:ASN:O	2.38	0.41
27:B2:37:PHE:C	27:B2:39:ALA:H	2.22	0.41
40:BF:115:ALA:O	40:BF:118:ALA:HB3	2.20	0.41
40:BF:13:SER:HA	40:BF:14:PRO:HD3	1.94	0.41
40:BF:24:LEU:O	40:BF:115:ALA:CB	2.58	0.41
12:AL:125:PRO:O	12:AL:126:LYS:C	2.58	0.41
4:AD:118:ARG:HG3	4:AD:118:ARG:NH1	2.34	0.41
35:BA:2319:G:N3	35:BA:2320:A:C6	2.88	0.41
35:BA:139:G:H1'	55:BX:41:ASN:OD1	2.20	0.41
37:BC:214:VAL:HG23	37:BC:224:ILE:HG21	2.01	0.41
37:BC:59:ARG:HD2	37:BC:164:ARG:HE	1.83	0.41
54:BW:8:ARG:HD3	54:BW:102:HIS:CD2	2.55	0.41
41:BG:39:ILE:CG1	41:BG:156:ASP:O	2.67	0.41
29:B4:25:TYR:C	29:B4:26:SER:OG	2.59	0.41
20:AT:12:ALA:C	20:AT:14:LYS:H	2.23	0.41
38:BD:79:VAL:HG21	38:BD:112:GLN:O	2.18	0.41
35:BA:727:A:C5	35:BA:728:G:C6	3.08	0.41
1:AA:518:C:C4	1:AA:530:G:N7	2.88	0.41
12:AL:45:PRO:HB2	12:AL:49:ASN:O	2.20	0.41
38:BD:14:ARG:NH1	38:BD:14:ARG:CG	2.80	0.41
36:BB:58:A:H2'	36:BB:59:A:C8	2.54	0.41
1:AA:1001(A):G:H8	1:AA:1002:G:N9	2.16	0.41
25:B0:51:VAL:CG2	25:B0:81:VAL:CG2	2.94	0.41
35:BA:852:G:C6	35:BA:926:A:C2	3.08	0.41
57:BZ:15:PRO:O	57:BZ:18:LEU:HD23	2.20	0.41
57:BZ:15:PRO:CA	57:BZ:18:LEU:HD23	2.50	0.41
49:BR:37:THR:CG2	49:BR:40:LYS:HE2	2.50	0.41
38:BD:273:ARG:CG	38:BD:273:ARG:NH1	2.79	0.41
7:AG:137:LYS:O	7:AG:141:VAL:CG2	2.68	0.41
35:BA:2154:G:H2'	35:BA:2155:G:O5'	2.20	0.41
20:AT:48:LYS:O	20:AT:49:ALA:C	2.57	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:AT:49:ALA:O	20:AT:50:GLU:C	2.58	0.41
36:BB:9:G:C6	36:BB:10:C:C4	3.08	0.41
19:AS:15:LEU:HB3	19:AS:16:LEU:HD12	2.01	0.41
19:AS:18:LYS:HA	19:AS:18:LYS:HD2	1.71	0.41
35:BA:1053:C:N4	35:BA:1108:U:H3	2.18	0.41
4:AD:148:VAL:HB	4:AD:181:MET:HB3	2.01	0.41
35:BA:354:G:H2'	35:BA:355:G:H8	1.85	0.41
45:BN:47:ALA:H	45:BN:48:MET:CE	2.30	0.41
3:AC:132:ARG:HH22	4:AD:47:ARG:NH2	2.17	0.41
35:BA:1482:G:N3	35:BA:1482:G:H2'	2.35	0.41
45:BN:128:HIS:HA	45:BN:129:PRO:HD2	1.85	0.41
24:AY:146:ARG:HD3	35:BA:2656:U:H4'	2.01	0.41
24:AY:155:LEU:CD2	24:AY:166:CYS:HB3	2.25	0.41
24:AY:333:GLN:O	24:AY:335:ARG:N	2.53	0.41
24:AY:79:TYR:CE2	24:AY:269:LEU:HD13	2.55	0.41
24:AY:89:THR:HB	24:AY:90:PRO:HD3	1.98	0.41
30:B5:52:TYR:O	30:B5:53:ALA:HB3	2.20	0.41
35:BA:1340:U:H4'	35:BA:1394:U:C1'	2.50	0.41
35:BA:1308:A:N1	35:BA:1611:C:H1'	2.35	0.41
35:BA:1753:G:N2	35:BA:1758:G:C8	2.82	0.41
35:BA:2448:A:OP2	35:BA:2498:C:OP2	2.38	0.41
35:BA:2553:G:C6	35:BA:2554:U:O2	2.74	0.41
35:BA:2574:G:C5	35:BA:2575:C:C4	3.08	0.41
35:BA:2627:G:N3	35:BA:2781:A:H2	2.17	0.41
35:BA:2681:C:N3	35:BA:2724:C:C5	2.89	0.41
35:BA:2847:U:C5	35:BA:2848:G:C6	3.08	0.41
35:BA:691:C:O2'	38:BD:43:ARG:HG2	2.21	0.41
38:BD:78:LYS:O	38:BD:95:LEU:CA	2.65	0.41
39:BE:117:MET:CA	39:BE:122:PHE:HB2	2.50	0.41
40:BF:65:TRP:CH2	40:BF:75:HIS:CD2	3.05	0.41
45:BN:91:LEU:HD23	45:BN:95:PRO:CB	2.50	0.41
45:BN:96:GLU:CG	45:BN:100:GLU:OE2	2.68	0.41
47:BP:105:LEU:H	47:BP:105:LEU:HD12	1.85	0.41
52:BU:27:LEU:C	52:BU:30:LYS:H	2.21	0.41
55:BX:57:LEU:CD2	55:BX:58:HIS:N	2.83	0.41
1:AA:1077:G:N2	1:AA:1079:G:H3'	2.36	0.41
6:AF:9:VAL:C	6:AF:10:LEU:HD12	2.40	0.41
8:AH:37:ARG:HE	8:AH:41:ARG:NH2	2.18	0.41
8:AH:96:GLY:O	8:AH:99:GLU:HB2	2.20	0.41
1:AA:1093:A:C2	1:AA:1109:C:O2	2.72	0.41
2:AB:42:ILE:CD1	2:AB:202:PRO:C	2.88	0.41
33:B8:13:ARG:HB3	47:BP:63:PRO:HB3	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1912:A:H5''	35:BA:1918:A:C6	2.54	0.41
35:BA:862:G:C2'	35:BA:863:A:O4'	2.65	0.41
48:BQ:141:GLN:O	57:BZ:53:ILE:HB	2.19	0.41
57:BZ:10:ARG:CB	57:BZ:36:LYS:HG3	2.39	0.41
22:AV:3:C:H42	22:AV:70:G:H1	1.67	0.41
22:AV:53:G:H2'	22:AV:53:G:N3	2.35	0.41
12:AL:89:ARG:HH11	12:AL:91:LYS:N	2.18	0.41
1:AA:1158:C:C2'	1:AA:1158:C:O2	2.68	0.41
1:AA:977:A:N6	1:AA:1224:G:OP1	2.53	0.41
3:AC:141:VAL:HG11	3:AC:202:ILE:HG23	2.01	0.41
35:BA:479:A:O2'	35:BA:481:G:C5'	2.60	0.41
55:BX:39:ILE:O	55:BX:43:VAL:HG23	2.21	0.41
9:AI:79:LEU:HD13	9:AI:79:LEU:C	2.41	0.41
40:BF:7:TYR:OH	40:BF:10:PRO:CB	2.64	0.41
35:BA:1087:G:H2'	35:BA:1088:A:H4'	2.01	0.41
4:AD:78:LEU:HD21	4:AD:96:LEU:HB3	2.02	0.41
49:BR:20:LEU:C	49:BR:22:ARG:N	2.72	0.41
11:AK:24:SER:C	11:AK:26:ASN:H	2.22	0.41
1:AA:689:C:P	11:AK:46:GLY:HA3	2.61	0.41
49:BR:61:HIS:O	49:BR:65:LEU:HB2	2.20	0.41
37:BC:90:GLY:O	37:BC:153:ILE:CG2	2.68	0.41
29:B4:6:HIS:HA	41:BG:67:LYS:CD	2.50	0.41
41:BG:66:GLN:HB3	41:BG:92:VAL:CG2	2.50	0.41
16:AP:27:LYS:O	16:AP:28:ARG:C	2.58	0.41
40:BF:110:LEU:CD2	40:BF:183:VAL:CG1	2.88	0.41
40:BF:32:LEU:O	40:BF:35:GLU:HB3	2.20	0.41
1:AA:295:C:C2'	1:AA:296:U:C6	2.90	0.41
1:AA:353:A:H2'	1:AA:354:G:OP2	2.20	0.41
20:AT:17:ARG:O	20:AT:18:GLN:C	2.58	0.41
1:AA:782:A:N7	1:AA:783:C:C2	2.88	0.41
38:BD:75:ILE:HG22	38:BD:76:PRO:O	2.20	0.41
1:AA:1266:G:H21	1:AA:1268:A:C5'	2.31	0.41
35:BA:1343:G:H1	35:BA:1404:C:N4	2.18	0.41
1:AA:960:U:H5	19:AS:78:ARG:HD3	1.84	0.41
50:BS:104:GLY:C	50:BS:106:ARG:H	2.23	0.41
16:AP:74:LEU:C	16:AP:79:VAL:CG2	2.89	0.41
51:BT:3:ARG:CB	51:BT:6:LEU:HB2	2.35	0.41
49:BR:72:ASP:OD2	49:BR:75:LEU:CD2	2.67	0.41
16:AP:45:THR:HG22	16:AP:47:ASP:H	1.85	0.41
1:AA:1015:A:N7	1:AA:1016:A:N7	2.68	0.41
1:AA:193:C:C2	1:AA:194:C:C5	3.08	0.41
26:B1:40:ARG:NH2	35:BA:2232:U:OP2	2.38	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B8:55:ALA:O	33:B8:56:GLU:C	2.59	0.41
9:AI:65:VAL:O	9:AI:66:ARG:HB2	2.19	0.41
1:AA:896:C:O5'	1:AA:896:C:H6	2.03	0.41
55:BX:24:GLY:N	55:BX:82:GLN:HE22	2.16	0.41
40:BF:163:VAL:C	40:BF:166:ALA:HB3	2.41	0.41
1:AA:382:A:O2'	1:AA:383:A:H5'	2.20	0.41
1:AA:189(A):C:O2'	1:AA:189(B):C:H5'	2.20	0.41
2:AB:179:LYS:CA	8:AH:72:PRO:HG3	2.50	0.41
6:AF:6:VAL:HB	6:AF:63:TYR:CD2	2.55	0.41
35:BA:1050:A:H2'	35:BA:1050:A:N3	2.35	0.41
1:AA:520:A:OP1	12:AL:52:LEU:HB2	2.20	0.41
40:BF:43:LYS:O	40:BF:43:LYS:CG	2.66	0.41
35:BA:1410:G:C2	35:BA:1593:G:C2	3.08	0.41
35:BA:2557:G:C4	35:BA:2558:C:C5	3.07	0.41
1:AA:141:A:O4'	1:AA:182:U:H1'	2.20	0.41
49:BR:84:ALA:N	49:BR:85:PRO:HD3	2.36	0.41
1:AA:1129:C:OP1	9:AI:62:TYR:HE2	2.03	0.41
46:BO:32:TYR:N	46:BO:32:TYR:CD1	2.88	0.41
35:BA:765:G:H8	35:BA:765:G:O5'	2.03	0.41
40:BF:161:GLU:HG3	40:BF:161:GLU:H	1.67	0.41
24:AY:456:GLU:HG3	24:AY:456:GLU:O	2.19	0.41
24:AY:139:THR:O	24:AY:255:PHE:HB2	2.20	0.41
35:BA:2532:G:C8	35:BA:2532:G:O5'	2.60	0.41
35:BA:1130:U:C2	35:BA:2025:C:H5''	2.55	0.41
35:BA:1797:C:C2	35:BA:1823:G:C2	3.08	0.41
35:BA:1839:G:C5	35:BA:1927:A:N3	2.88	0.41
35:BA:2822:G:C2'	35:BA:2823:A:O5'	2.68	0.41
35:BA:28:A:H2'	35:BA:29:U:O4'	2.20	0.41
35:BA:641:C:H2'	35:BA:642:G:O4'	2.20	0.41
33:B8:48:PHE:CZ	35:BA:650:C:OP1	2.73	0.41
35:BA:953:A:C2	35:BA:965:C:C2	3.08	0.41
38:BD:66:ASP:CB	38:BD:103:ARG:HD2	2.48	0.41
38:BD:147:LEU:CD1	38:BD:155:LEU:HD11	2.51	0.41
35:BA:1792:G:P	38:BD:206:LEU:HD11	2.59	0.41
39:BE:113:PHE:CD1	39:BE:158:GLY:HA2	2.55	0.41
39:BE:175:VAL:O	39:BE:175:VAL:HG13	2.20	0.41
51:BT:25:GLY:H	51:BT:49:VAL:CG1	2.33	0.41
51:BT:33:LYS:HZ1	51:BT:43:GLN:HG2	1.85	0.41
51:BT:61:PHE:C	51:BT:62:THR:HG23	2.41	0.41
52:BU:12:ARG:O	52:BU:15:LYS:HG2	2.20	0.41
35:BA:2744:G:C4	35:BA:2761:G:C2	3.08	0.41
1:AA:15:G:O6	1:AA:16:A:N6	2.53	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:720:C:C3'	1:AA:721:G:C8	3.00	0.41
1:AA:883:C:C2	1:AA:884:U:C5	3.08	0.41
6:AF:46:ARG:NH2	18:AR:37:VAL:CG2	2.83	0.41
53:BV:34:GLU:O	53:BV:36:PRO:CD	2.69	0.41
53:BV:61:VAL:O	53:BV:62:LEU:C	2.58	0.41
53:BV:59:ALA:HB2	53:BV:96:ILE:HA	2.02	0.41
2:AB:155:LEU:HD11	2:AB:157:ARG:O	2.19	0.41
2:AB:165:VAL:O	2:AB:187:LEU:O	2.38	0.41
2:AB:212:GLN:HE22	2:AB:216:SER:HB2	1.84	0.41
33:B8:13:ARG:O	33:B8:24:ALA:CB	2.69	0.41
48:BQ:111:GLU:C	48:BQ:113:GLN:N	2.71	0.41
35:BA:863:A:OP2	48:BQ:22:LYS:HB2	2.20	0.41
12:AL:89:ARG:CD	12:AL:91:LYS:H	2.33	0.41
54:BW:18:ARG:NH1	54:BW:76:VAL:CG1	2.82	0.41
1:AA:1046:A:H3'	1:AA:1047:G:H8	1.85	0.41
1:AA:1116:C:O2	1:AA:1185:G:C2	2.73	0.41
1:AA:1048:G:C5'	14:AN:2:ALA:HB1	2.49	0.41
19:AS:39:THR:CG2	19:AS:40:ILE:N	2.80	0.41
27:B2:13:ALA:C	27:B2:15:LYS:H	2.24	0.41
27:B2:30:ARG:HH21	55:BX:46:ALA:HA	1.85	0.41
27:B2:58:ALA:O	27:B2:59:ARG:C	2.59	0.41
35:BA:607:U:OP1	40:BF:102:PRO:HA	2.20	0.41
4:AD:5:ILE:HG22	4:AD:6:GLY:N	2.35	0.41
37:BC:161:ILE:HG21	37:BC:174:PRO:HG3	2.02	0.41
37:BC:53:ARG:HB3	37:BC:53:ARG:NH1	2.35	0.41
1:AA:1298:C:C5	7:AG:114:ARG:CZ	3.03	0.41
1:AA:939:G:C5'	7:AG:102:ARG:HH22	2.31	0.41
35:BA:1524:G:C6	35:BA:1525:G:C5	3.09	0.41
40:BF:109:GLY:C	40:BF:112:MET:HB3	2.41	0.41
1:AA:62:U:OP2	1:AA:386:C:H5'	2.20	0.41
17:AQ:56:VAL:C	17:AQ:57:VAL:CG1	2.88	0.41
42:BH:40:GLU:O	42:BH:41:MET:CB	2.67	0.41
5:AE:84:PHE:HB2	5:AE:134:ALA:HB2	2.02	0.41
26:B1:51:VAL:O	26:B1:52:ARG:O	2.38	0.41
35:BA:214:G:N2	35:BA:215:G:N2	2.68	0.41
50:BS:25:ARG:O	50:BS:39:ILE:HA	2.21	0.41
1:AA:959:A:H5'	1:AA:985:C:H4'	2.01	0.41
1:AA:958:A:N6	19:AS:77:THR:O	2.53	0.41
1:AA:1128:C:H5''	9:AI:16:ARG:NH2	2.35	0.41
35:BA:2100:G:N1	35:BA:2101:G:C2	2.88	0.41
9:AI:19:LEU:HA	9:AI:60:ASP:O	2.19	0.41
35:BA:116:C:H4'	35:BA:127:A:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BW:4:LYS:HG2	54:BW:5:ALA:N	2.35	0.41
35:BA:2699:C:C4	35:BA:2700:C:C5	3.08	0.41
49:BR:71:GLN:O	49:BR:72:ASP:C	2.58	0.41
13:AM:70:LEU:O	13:AM:74:VAL:HG23	2.19	0.41
47:BP:138:LEU:HG	47:BP:138:LEU:O	2.20	0.41
11:AK:125:PHE:N	11:AK:125:PHE:CD1	2.88	0.41
20:AT:40:ALA:CA	20:AT:55:ILE:HG21	2.49	0.41
20:AT:84:LEU:O	20:AT:88:VAL:HG23	2.19	0.41
35:BA:9:U:O2	35:BA:10:G:N9	2.54	0.41
35:BA:89:G:H3'	35:BA:90:U:C5'	2.50	0.41
47:BP:146:VAL:CG2	47:BP:147:LEU:N	2.75	0.41
1:AA:260:G:H2'	1:AA:261:U:C6	2.55	0.41
25:B0:7:LEU:HD22	48:BQ:85:LYS:CG	2.42	0.41
9:AI:96:LEU:HD12	9:AI:96:LEU:HA	1.90	0.41
5:AE:144:THR:O	5:AE:148:VAL:HG23	2.20	0.41
37:BC:77:ILE:C	37:BC:78:ALA:O	2.58	0.41
1:AA:1527:C:H2'	1:AA:1528:U:C6	2.55	0.41
24:AY:492:GLN:C	24:AY:504:ILE:HG12	2.40	0.41
24:AY:492:GLN:HB3	24:AY:504:ILE:HG12	2.02	0.41
24:AY:7:LEU:C	24:AY:10:VAL:HG23	2.40	0.41
24:AY:140:PHE:HA	24:AY:255:PHE:O	2.20	0.41
24:AY:174:GLY:C	24:AY:179:PHE:HA	2.41	0.41
24:AY:297:THR:HB	24:AY:322:SER:HG	1.76	0.41
24:AY:303:ILE:HG12	24:AY:316:ALA:CB	2.46	0.41
24:AY:417:VAL:HG13	24:AY:497:GLY:O	2.21	0.41
42:BH:104:GLU:CG	42:BH:104:GLU:O	2.68	0.41
1:AA:1405:G:HO2'	1:AA:1519:A:H5'	1.80	0.41
35:BA:1265:A:OP1	35:BA:1265:A:H8	2.03	0.41
35:BA:1341:U:OP2	35:BA:1394:U:H1'	2.21	0.41
35:BA:1429:G:O4'	35:BA:1568:G:H1'	2.19	0.41
35:BA:2019:A:C5	35:BA:2020:A:N7	2.89	0.41
35:BA:2492:U:O2'	35:BA:2493:U:H5'	2.20	0.41
35:BA:2511:U:O4	35:BA:2575:C:N3	2.53	0.41
35:BA:527:C:P	35:BA:2779:U:O4	2.78	0.41
35:BA:635:C:O2'	35:BA:639:U:OP1	2.38	0.41
35:BA:743:G:OP1	39:BE:130:GLY:O	2.38	0.41
35:BA:996:A:C5	35:BA:1160:G:C2	3.09	0.41
38:BD:44:ASN:CB	38:BD:48:ARG:O	2.62	0.41
39:BE:65:GLY:O	39:BE:66:HIS:C	2.59	0.41
51:BT:61:PHE:O	51:BT:62:THR:CG2	2.68	0.41
52:BU:95:LEU:HD13	53:BV:4:ILE:CG2	2.46	0.41
1:AA:284:G:H2'	1:AA:285:G:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:204:ASN:HD21	2:AB:206:ASP:N	2.04	0.41
33:B8:13:ARG:O	33:B8:24:ALA:HB1	2.20	0.41
42:BH:105:LEU:C	42:BH:106:THR:CG2	2.88	0.41
25:B0:16:SER:OG	35:BA:2261:C:H3'	2.20	0.41
48:BQ:12:GLN:CD	48:BQ:73:PRO:CD	2.89	0.41
57:BZ:54:HIS:HB3	57:BZ:101:PRO:CG	2.51	0.41
1:AA:1309:G:P	13:AM:88:ARG:HH11	2.43	0.41
1:AA:1092:A:C2	1:AA:1183:A:N1	2.89	0.41
1:AA:1113:C:N4	1:AA:1188:A:C2	2.88	0.41
1:AA:1188:A:H2'	1:AA:1189:C:O4'	2.21	0.41
3:AC:64:VAL:CG1	3:AC:65:ALA:N	2.77	0.41
3:AC:35:GLU:OE2	3:AC:95:THR:HG23	2.19	0.41
10:AJ:56:HIS:C	10:AJ:58:ASP:N	2.73	0.41
24:AY:308:ASP:H	24:AY:309:PRO:CD	2.19	0.41
56:BY:24:VAL:HG12	56:BY:25:GLY:N	2.36	0.41
4:AD:26:CYS:HA	4:AD:31:CYS:HB2	2.03	0.41
40:BF:160:ASN:O	40:BF:164:ARG:HB2	2.21	0.41
35:BA:1058:G:C6	35:BA:1059:G:N7	2.88	0.41
49:BR:96:ARG:CD	49:BR:98:LEU:HD11	2.38	0.41
7:AG:150:ALA:HA	11:AK:59:TYR:HB3	2.01	0.41
11:AK:62:GLN:O	11:AK:63:LEU:C	2.59	0.41
7:AG:50:ILE:CD1	7:AG:121:ALA:HB1	2.51	0.41
20:AT:26:ASN:HB2	20:AT:71:THR:HG23	2.01	0.41
54:BW:83:LYS:HZ3	54:BW:97:LYS:HD3	1.84	0.41
47:BP:62:LEU:HD23	47:BP:62:LEU:N	2.34	0.41
35:BA:1032:A:H61	35:BA:1123:C:H42	1.68	0.41
19:AS:78:ARG:CB	19:AS:81:ARG:HH12	2.30	0.41
35:BA:1747:G:O5'	35:BA:1747:G:H8	2.03	0.41
35:BA:1272:A:H3'	35:BA:1273:U:C5'	2.39	0.41
24:AY:431:ILE:CD1	24:AY:431:ILE:H	2.17	0.41
56:BY:88:LYS:HD2	56:BY:88:LYS:N	2.35	0.41
35:BA:814:C:O2'	35:BA:815:C:C5'	2.56	0.41
17:AQ:18:THR:HG21	17:AQ:69:LYS:HD2	2.02	0.41
56:BY:2:ARG:HD3	56:BY:3:VAL:HG23	2.02	0.41
1:AA:1239:A:N3	1:AA:1241:G:C6	2.89	0.41
35:BA:1313:U:C3'	35:BA:1313:U:O2	2.68	0.41
11:AK:82:VAL:HG12	11:AK:108:ILE:HA	2.02	0.41
11:AK:19:ALA:O	11:AK:82:VAL:HA	2.21	0.41
17:AQ:63:ARG:HA	17:AQ:64:PRO:HD3	1.84	0.41
10:AJ:27:ALA:C	10:AJ:30:SER:HB3	2.40	0.41
20:AT:41:ILE:HG12	20:AT:41:ILE:H	1.50	0.41
42:BH:54:ARG:CG	42:BH:54:ARG:HH11	2.31	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:AQ:52:LYS:HB3	17:AQ:52:LYS:HE3	1.69	0.41
1:AA:998:G:C2	1:AA:999:C:N3	2.89	0.41
1:AA:718:G:O6	18:AR:81:PHE:HD2	2.03	0.41
1:AA:927:G:N1	1:AA:1391:U:O2	2.53	0.41
40:BF:11:VAL:HB	40:BF:12:LEU:H	1.68	0.41
24:AY:346:LEU:O	24:AY:348:PHE:CE2	2.73	0.41
24:AY:368:HIS:HB3	24:AY:369:ASN:H	1.65	0.41
24:AY:380:THR:OG1	24:AY:383:GLU:HB2	2.21	0.41
24:AY:469:ALA:HB3	24:AY:507:SER:O	2.21	0.41
35:BA:1258:C:H1'	40:BF:84:VAL:CG2	2.40	0.41
35:BA:1792:G:C5	35:BA:1793:C:C5	3.08	0.41
35:BA:1799:G:C4'	35:BA:1800:C:H6	2.34	0.41
35:BA:1842:G:H2'	35:BA:1843:C:O4'	2.20	0.41
35:BA:1909:C:N4	35:BA:1922:G:C6	2.89	0.41
35:BA:2573:C:OP1	35:BA:2574:G:H5''	2.20	0.41
35:BA:2721:A:H2'	35:BA:2722:G:C8	2.54	0.41
35:BA:2820:A:O2'	39:BE:191:PRO:CG	2.67	0.41
35:BA:389:G:C6	47:BP:70:GLN:HG3	2.55	0.41
38:BD:171:ASP:O	38:BD:171:ASP:OD1	2.38	0.41
38:BD:248:SER:OG	38:BD:252:TRP:NE1	2.39	0.41
35:BA:2784:C:C4'	39:BE:42:ASP:OD1	2.64	0.41
52:BU:52:ARG:HA	52:BU:55:ARG:NH1	2.35	0.41
35:BA:1667:G:OP1	46:BO:7:TYR:N	2.54	0.41
1:AA:15:G:C4	1:AA:16:A:C8	3.08	0.41
1:AA:584:G:O2'	1:AA:585:G:H5'	2.20	0.41
1:AA:662:G:N2	1:AA:663:A:N3	2.67	0.41
1:AA:672:U:O2	1:AA:673:G:N7	2.53	0.41
1:AA:728:A:H62	15:AO:51:HIS:CD2	2.38	0.41
1:AA:1080:A:C5'	5:AE:16:THR:HG21	2.44	0.41
6:AF:4:TYR:HD1	6:AF:92:LYS:HG3	1.79	0.41
18:AR:60:ALA:O	18:AR:63:GLN:HB3	2.20	0.41
2:AB:19:HIS:CD2	2:AB:20:GLU:OE1	2.72	0.41
2:AB:61:LEU:HA	2:AB:61:LEU:HD12	1.86	0.41
35:BA:919:G:C4	35:BA:920:G:N7	2.88	0.41
48:BQ:55:VAL:CA	48:BQ:58:PHE:CE1	2.97	0.41
22:AV:55:U:H2'	22:AV:57:A:OP2	2.20	0.41
1:AA:1325:C:N4	1:AA:1326:C:N4	2.64	0.41
12:AL:36:VAL:HG11	24:AY:406:PRO:CG	2.50	0.41
12:AL:36:VAL:HG12	12:AL:82:VAL:CG1	2.43	0.41
10:AJ:53:PRO:CA	14:AN:42:ILE:HD11	2.50	0.41
56:BY:75:ILE:O	56:BY:76:CYS:CB	2.68	0.41
9:AI:79:LEU:HD22	9:AI:79:LEU:HA	1.88	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BF:18:ARG:NH1	40:BF:199:TRP:CZ3	2.88	0.41
50:BS:14:VAL:HG12	50:BS:15:ARG:N	2.34	0.41
37:BC:59:ARG:CB	37:BC:164:ARG:HG3	2.50	0.41
37:BC:22:ILE:CG2	37:BC:22:ILE:O	2.68	0.41
37:BC:28:LEU:HD21	37:BC:32:LEU:HD11	2.03	0.41
35:BA:1542:A:C2	35:BA:1544:A:C5	3.08	0.41
35:BA:2308:G:HO2'	35:BA:2309:A:H8	1.65	0.41
41:BG:46:ALA:N	41:BG:47:LYS:HD2	2.35	0.41
29:B4:8:LYS:HE3	29:B4:8:LYS:HB2	1.88	0.41
40:BF:33:LEU:CD2	40:BF:112:MET:SD	3.08	0.41
4:AD:57:ARG:HH22	5:AE:107:ARG:NH1	2.19	0.41
1:AA:108:G:O4'	1:AA:108:G:N3	2.53	0.41
17:AQ:3:LYS:HD3	17:AQ:61:GLU:O	2.20	0.41
35:BA:2758:A:O2'	35:BA:2759:G:H8	2.04	0.41
1:AA:1501:C:N4	1:AA:1504:G:C2	2.88	0.41
38:BD:120:GLY:O	38:BD:131:LEU:HD23	2.20	0.41
1:AA:1268:A:N3	1:AA:1268:A:H2'	2.35	0.41
5:AE:70:PRO:CG	5:AE:142:LEU:HD13	2.48	0.41
36:BB:67:G:HO2'	36:BB:68:C:P	2.43	0.41
36:BB:17:C:H42	36:BB:68:C:H42	1.68	0.41
50:BS:71:ARG:O	50:BS:72:ALA:O	2.39	0.41
1:AA:714:G:C6	1:AA:715:A:C6	3.09	0.41
1:AA:529:G:O6	12:AL:49:ASN:ND2	2.53	0.41
35:BA:2185:C:C2'	35:BA:2186:G:H5'	2.51	0.41
1:AA:1000:U:H6	1:AA:1000:U:H3'	1.84	0.41
1:AA:1000:U:C4	1:AA:1001:A:N7	2.89	0.41
35:BA:1642:G:H2'	35:BA:1643:G:C5'	2.51	0.41
16:AP:79:VAL:HB	16:AP:80:PHE:CD1	2.56	0.41
42:BH:148:ILE:HA	42:BH:151:ILE:HD11	2.03	0.41
35:BA:1221:C:C2'	35:BA:1221(A):C:C6	2.90	0.41
22:AV:31:G:C2	22:AV:40:C:C2	3.09	0.41
35:BA:48:G:O2'	35:BA:118:A:N1	2.50	0.41
35:BA:1163:G:H2'	35:BA:1164:G:H8	1.86	0.41
1:AA:66:G:N2	1:AA:172:A:C2	2.84	0.41
35:BA:2077:A:C2'	35:BA:2078:C:H5'	2.48	0.41
1:AA:1353:G:H8	1:AA:1353:G:O5'	2.03	0.41
22:AV:21:A:C6	22:AV:46:G:C4	3.08	0.41
1:AA:1464:G:C6	1:AA:1465:C:N4	2.89	0.41
1:AA:786:G:C6	1:AA:787:A:N7	2.89	0.41
36:BB:112:U:H2'	36:BB:113:G:C8	2.56	0.41
35:BA:2545:G:N3	35:BA:2565:A:H2	2.18	0.41
41:BG:116:ASP:HB3	41:BG:117:PHE:H	1.66	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:29:GLN:O	25:B0:66:VAL:HA	2.21	0.41
1:AA:79:G:N2	1:AA:91:C:N4	2.68	0.41
1:AA:407:G:H1	1:AA:435:C:N4	2.19	0.41
35:BA:220:G:H22	35:BA:427:U:H2'	1.85	0.41
1:AA:648:A:H2'	1:AA:649:G:C8	2.55	0.41
35:BA:1383:C:H3'	35:BA:1383:C:H6	1.86	0.41
1:AA:887:G:H2'	1:AA:888:G:H5'	2.03	0.41
1:AA:899:C:OP2	1:AA:899:C:H6	2.04	0.41
24:AY:15:THR:C	24:AY:106:VAL:HG23	2.41	0.41
24:AY:171:TRP:NE1	24:AY:234:VAL:CG1	2.75	0.41
24:AY:369:ASN:HB2	24:AY:373:ILE:CD1	2.50	0.41
35:BA:2531:A:H61	35:BA:2662:A:H61	1.68	0.41
35:BA:2532:G:N2	35:BA:2662:A:N1	2.69	0.41
1:AA:1407:C:H42	1:AA:1408:A:N6	2.18	0.41
1:AA:770:C:C4'	1:AA:900:A:H2	2.33	0.41
33:B8:7:HIS:CE1	33:B8:9:GLY:CA	2.90	0.41
35:BA:1248:G:OP1	40:BF:92:PRO:CG	2.68	0.41
35:BA:1613:G:H2'	35:BA:1613:G:N3	2.36	0.41
35:BA:1659:U:OP2	39:BE:132:HIS:CE1	2.74	0.41
35:BA:2073:C:O2'	35:BA:2598:A:O2'	2.37	0.41
35:BA:2634:G:H2'	35:BA:2635:C:H6	1.84	0.41
35:BA:2776:A:H4'	35:BA:2778:A:H5''	2.03	0.41
35:BA:514:A:O2'	35:BA:515:A:H5'	2.20	0.41
35:BA:516:C:H2'	35:BA:517:C:C6	2.56	0.41
35:BA:754:C:H2'	35:BA:755:C:C5	2.51	0.41
35:BA:990:A:O5'	35:BA:991:C:P	2.78	0.41
38:BD:198:ASN:ND2	38:BD:198:ASN:O	2.54	0.41
38:BD:225:ALA:O	38:BD:226:MET:O	2.38	0.41
52:BU:28:ARG:HD3	52:BU:38:THR:HG23	2.01	0.41
53:BV:39:LEU:HD13	53:BV:47:VAL:HG11	2.02	0.41
1:AA:1483:A:C2	35:BA:1960:A:O4'	2.73	0.41
1:AA:716:A:H1'	11:AK:117:ASN:O	2.20	0.41
1:AA:834:C:N3	1:AA:853:G:C2	2.88	0.41
5:AE:12:LEU:CD2	5:AE:13:ILE:H	2.19	0.41
8:AH:5:PRO:O	8:AH:8:ASP:CA	2.68	0.41
15:AO:25:THR:HG1	15:AO:70:LEU:HD21	1.81	0.41
18:AR:74:ARG:HG2	18:AR:79:LEU:O	2.20	0.41
35:BA:2248:C:H3'	35:BA:2249:U:C6	2.56	0.41
35:BA:860:U:H1'	35:BA:2268:A:H5'	2.01	0.41
36:BB:85:G:N2	36:BB:93:G:C5	2.88	0.41
48:BQ:26:TYR:CB	48:BQ:137:TYR:HD1	2.33	0.41
57:BZ:30:ASN:O	57:BZ:33:LEU:N	2.53	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BZ:71:VAL:CG1	57:BZ:73:GLN:O	2.68	0.41
57:BZ:87:ASP:C	57:BZ:88:PHE:CD1	2.94	0.41
12:AL:83:VAL:HG12	12:AL:107:ALA:HB2	1.97	0.41
1:AA:1120:G:H2'	1:AA:1121:U:C6	2.56	0.41
1:AA:1157:A:H61	1:AA:1178:G:H21	1.68	0.41
1:AA:1197:G:C2	1:AA:1198:G:C8	3.08	0.41
1:AA:976:G:C5'	1:AA:1358:U:O2	2.69	0.41
1:AA:978:A:H2'	1:AA:979:C:H6	1.85	0.41
9:AI:114:TYR:OH	10:AJ:59:SER:HA	2.21	0.41
10:AJ:56:HIS:C	10:AJ:58:ASP:H	2.24	0.41
14:AN:19:ARG:HB3	14:AN:20:ALA:H	1.65	0.41
14:AN:25:VAL:HB	14:AN:38:GLY:O	2.21	0.41
19:AS:20:LEU:HD23	19:AS:23:ASN:CB	2.51	0.41
1:AA:357:G:O2'	1:AA:358:U:H5'	2.21	0.41
1:AA:55:A:N3	24:AY:311:HIS:CD2	2.88	0.41
56:BY:20:TYR:CD1	56:BY:20:TYR:N	2.89	0.41
56:BY:38:ILE:CD1	56:BY:66:PRO:HG3	2.50	0.41
7:AG:15:ASP:HB3	7:AG:19:GLY:HA2	1.99	0.41
9:AI:33:PHE:O	9:AI:34:ASN:C	2.59	0.41
40:BF:36:VAL:HG12	40:BF:36:VAL:O	2.19	0.41
49:BR:47:PHE:HB3	49:BR:48:VAL:H	1.55	0.41
35:BA:2333:A:H1'	35:BA:2335:A:N7	2.36	0.41
35:BA:142:A:N6	35:BA:1596:A:H5'	2.36	0.41
5:AE:56:GLN:HB3	5:AE:57:LYS:H	1.68	0.41
37:BC:3:HIS:CG	37:BC:7:TYR:CE2	3.08	0.41
16:AP:8:ARG:HG2	16:AP:9:PHE:N	2.36	0.41
35:BA:601:C:H5'	40:BF:108:LYS:HZ2	1.85	0.41
50:BS:29:PHE:CD1	50:BS:29:PHE:O	2.74	0.41
1:AA:27:G:C6	1:AA:557:G:N1	2.88	0.41
40:BF:185:ASP:OD1	40:BF:188:ARG:HD3	2.20	0.41
35:BA:1422:G:C5	35:BA:1423:G:N7	2.89	0.41
1:AA:960:U:C6	1:AA:1225:A:C8	3.08	0.41
19:AS:6:LYS:C	19:AS:7:LYS:HE3	2.40	0.41
51:BT:3:ARG:HB3	51:BT:6:LEU:CB	2.36	0.41
35:BA:263:C:H2'	35:BA:264:C:C6	2.55	0.41
1:AA:1377:A:OP2	7:AG:94:ARG:NH1	2.53	0.41
16:AP:20:VAL:HG22	16:AP:21:VAL:N	2.35	0.41
1:AA:148:G:N2	1:AA:175:C:N3	2.68	0.41
56:BY:91:GLU:HB3	56:BY:92:ASN:H	1.69	0.41
23:AX:17:U:N3	23:AX:18:G:N7	2.68	0.41
1:AA:948:C:OP1	13:AM:107:ALA:HA	2.21	0.41
13:AM:61:GLU:HA	13:AM:66:LEU:HD13	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:813:U:N3	35:BA:814:C:C4	2.89	0.41
53:BV:7:THR:HG1	53:BV:25:LEU:HD11	1.82	0.41
1:AA:1168:A:C8	1:AA:1168:A:OP1	2.68	0.41
35:BA:210:C:H6	35:BA:210:C:O5'	2.03	0.41
50:BS:20:ARG:NH1	50:BS:20:ARG:HG2	2.35	0.41
31:B6:20:ASN:O	31:B6:21:TYR:CG	2.74	0.41
35:BA:2356:C:C2'	35:BA:2357:U:H5'	2.50	0.41
35:BA:1151:G:C2	35:BA:1152:C:C2	3.08	0.41
12:AL:77:LEU:HD22	12:AL:81:SER:HB3	2.03	0.41
35:BA:1392:A:O5'	35:BA:1392:A:H8	2.04	0.41
35:BA:2564:A:C6	35:BA:2565:A:C6	3.09	0.41
35:BA:133:C:H6	35:BA:133:C:O5'	2.03	0.41
35:BA:282:A:H5'	35:BA:352:G:O6	2.20	0.41
1:AA:446:G:H2'	1:AA:447:G:O4'	2.19	0.41
27:B2:3:LEU:HD23	27:B2:3:LEU:O	2.20	0.41
3:AC:94:LEU:HD12	3:AC:94:LEU:C	2.41	0.41
24:AY:258:THR:O	24:AY:258:THR:CG2	2.69	0.41
24:AY:324:LYS:NZ	24:AY:326:GLU:OE2	2.45	0.41
24:AY:89:THR:HB	24:AY:99:THR:HG21	1.99	0.41
24:AY:97:GLU:C	24:AY:99:THR:H	2.24	0.41
1:AA:773:G:N3	1:AA:774:G:C8	2.88	0.41
26:B1:24:ALA:O	26:B1:25:LYS:C	2.59	0.41
33:B8:7:HIS:HB3	33:B8:59:LYS:HB3	2.02	0.41
33:B8:63:PRO:O	33:B8:64:TYR:O	2.39	0.41
35:BA:1011:G:O2'	35:BA:1013:C:O4'	2.30	0.41
35:BA:1268:A:H2'	35:BA:1269:A:C8	2.55	0.41
35:BA:1774:C:H2'	35:BA:1774:C:O2	2.21	0.41
35:BA:1848:A:H2'	35:BA:1849:G:O4'	2.21	0.41
35:BA:1922:G:C2	35:BA:1923:U:C2	3.09	0.41
35:BA:2348:U:HO2'	35:BA:2349:G:H5'	1.83	0.41
35:BA:830:G:C5	35:BA:2448:A:C5	3.08	0.41
35:BA:2510:C:C2'	35:BA:2511:U:H5'	2.50	0.41
35:BA:2720:U:O4	35:BA:2872:G:C6	2.74	0.41
35:BA:465:G:H2'	35:BA:466:A:C8	2.56	0.41
32:B7:7:PRO:CA	35:BA:686:G:H8	2.26	0.41
35:BA:695:G:H2'	35:BA:696:G:H8	1.85	0.41
38:BD:204:ILE:HD13	38:BD:204:ILE:O	2.21	0.41
38:BD:227:ASN:CB	38:BD:228:PRO:HD2	2.50	0.41
38:BD:43:ARG:HG3	38:BD:43:ARG:H	1.58	0.41
39:BE:92:THR:OG1	39:BE:93:VAL:N	2.52	0.41
39:BE:98:PRO:HG3	39:BE:174:ASP:HA	2.03	0.41
40:BF:65:TRP:HB2	40:BF:66:PRO:CD	2.51	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BN:39:ARG:O	45:BN:42:TRP:CB	2.68	0.41
53:BV:91:TYR:C	53:BV:91:TYR:HD1	2.21	0.41
35:BA:1669:A:H4'	35:BA:2549:G:H4'	2.02	0.41
46:BO:25:LEU:HD11	46:BO:59:LYS:HE2	2.03	0.41
1:AA:580:U:H4'	15:AO:58:MET:CG	2.51	0.41
15:AO:65:ARG:O	15:AO:66:LEU:C	2.59	0.41
18:AR:53:ARG:NH1	18:AR:60:ALA:CA	2.79	0.41
1:AA:1488:G:C4	1:AA:1489:G:N7	2.89	0.41
34:B9:1:MET:CG	34:B9:31:LYS:O	2.69	0.41
2:AB:158:LEU:HD22	2:AB:182:ILE:HD11	2.03	0.41
2:AB:212:GLN:C	2:AB:212:GLN:CD	2.79	0.41
2:AB:222:ILE:O	2:AB:226:ARG:N	2.47	0.41
35:BA:857:C:N4	35:BA:858:U:O4	2.53	0.41
35:BA:954:G:C2'	35:BA:955:C:H5'	2.50	0.41
57:BZ:133:ILE:C	57:BZ:134:PRO:O	2.59	0.41
22:AV:52:G:C2	22:AV:63:G:C5	3.09	0.41
22:AV:64:G:H2'	22:AV:65:C:C1'	2.51	0.41
35:BA:2591:C:OP1	38:BD:239:ARG:CG	2.69	0.41
35:BA:2601:C:C2	35:BA:2603:G:N7	2.89	0.41
12:AL:43:VAL:HG23	12:AL:53:ARG:HB3	2.02	0.41
1:AA:980:C:H3'	1:AA:981:U:C6	2.55	0.41
3:AC:22:TRP:CG	3:AC:59:ARG:HG3	2.55	0.41
19:AS:20:LEU:HD23	19:AS:20:LEU:HA	1.85	0.41
40:BF:114:VAL:HG21	40:BF:202:PHE:CE1	2.55	0.41
35:BA:1058:G:C2	35:BA:1059:G:N7	2.88	0.41
4:AD:108:LEU:HD23	4:AD:110:PHE:CD2	2.50	0.41
4:AD:3:ARG:HE	4:AD:5:ILE:HG13	1.86	0.41
11:AK:58:PRO:HB2	11:AK:93:GLN:HG3	2.02	0.41
37:BC:114:VAL:CG1	37:BC:144:THR:HG22	2.51	0.41
36:BB:42:C:H42	41:BG:91:ARG:HD3	1.85	0.41
2:AB:22:LYS:NZ	2:AB:40:HIS:CE1	2.89	0.41
36:BB:7:G:C2'	36:BB:8:U:H5''	2.50	0.41
5:AE:63:ARG:HA	5:AE:66:MET:CE	2.51	0.41
5:AE:6:PHE:CD1	5:AE:6:PHE:N	2.88	0.41
31:B6:6:ARG:HB2	31:B6:7:ILE:H	1.52	0.41
38:BD:79:VAL:HG23	38:BD:115:GLN:N	2.36	0.41
38:BD:130:ALA:HB1	38:BD:191:ALA:O	2.21	0.41
35:BA:1023:U:O4'	35:BA:1123:C:OP1	2.38	0.41
35:BA:1403:C:H2'	35:BA:1404:C:O5'	2.20	0.41
37:BC:168:THR:O	37:BC:170:ALA:N	2.53	0.41
1:AA:1028:C:O2	1:AA:1033:G:N1	2.52	0.41
35:BA:1635:G:H2'	35:BA:1636:C:C6	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BW:107:LEU:N	54:BW:107:LEU:HD12	2.35	0.41
35:BA:2701:C:H2'	35:BA:2702:U:C6	2.56	0.41
16:AP:45:THR:HG22	16:AP:47:ASP:N	2.36	0.41
16:AP:55:ARG:O	16:AP:58:TYR:N	2.53	0.41
1:AA:760:G:H21	17:AQ:94:ASN:HB3	1.81	0.41
20:AT:62:LEU:CA	20:AT:65:LYS:HG3	2.51	0.41
13:AM:69:GLU:O	13:AM:73:GLU:HG3	2.20	0.41
26:B1:40:ARG:HH12	35:BA:2232:U:P	2.43	0.41
2:AB:30:ARG:HG3	2:AB:31:TYR:N	2.29	0.41
38:BD:45:ASN:H	38:BD:45:ASN:HD22	1.69	0.41
36:BB:116:G:N2	36:BB:117:G:C5	2.89	0.41
35:BA:201:C:H4'	35:BA:386:G:C2	2.56	0.41
48:BQ:59:ARG:O	48:BQ:60:ARG:C	2.59	0.41
1:AA:345:C:H3'	51:BT:36:GLU:OE2	2.20	0.41
1:AA:637:G:H2'	1:AA:638:G:O4'	2.21	0.41
1:AA:559:A:C5'	1:AA:560:U:O3'	2.69	0.41
1:AA:411:A:C5	1:AA:429:U:C5	3.08	0.41
4:AD:94:LEU:HA	4:AD:94:LEU:HD23	1.93	0.41
2:AB:92:TYR:CD1	2:AB:92:TYR:C	2.94	0.41
35:BA:1334:G:C2'	35:BA:1335:U:O5'	2.69	0.41
17:AQ:11:VAL:HG23	17:AQ:12:SER:N	2.35	0.41
1:AA:751:U:H2'	1:AA:752:G:O4'	2.19	0.41
1:AA:1316:G:O3'	14:AN:18:VAL:CG2	2.67	0.41
36:BB:52:A:O2'	36:BB:53:A:C8	2.66	0.41
1:AA:1134:G:N2	1:AA:1141:C:N3	2.69	0.41
35:BA:733:G:O6	35:BA:761:A:C8	2.74	0.41
11:AK:34:ASP:CB	11:AK:35:PRO:CD	2.97	0.41
1:AA:339:C:P	46:BO:96:THR:OG1	2.79	0.41
3:AC:63:ASN:O	3:AC:63:ASN:CG	2.58	0.41
1:AA:471:G:O5'	1:AA:471:G:C8	2.71	0.41
35:BA:268:C:H42	35:BA:424:G:H1	1.68	0.41
10:AJ:98:ILE:HG22	10:AJ:98:ILE:O	2.21	0.41
35:BA:552:G:H1'	35:BA:1220:A:N1	2.35	0.41
9:AI:25:LYS:HB2	9:AI:25:LYS:HE3	1.81	0.41
24:AY:10:VAL:HB	24:AY:11:ALA:H	1.75	0.41
24:AY:158:VAL:HG12	24:AY:162:LEU:CB	2.50	0.41
24:AY:190:THR:HG22	24:AY:192:LEU:HD13	2.02	0.41
24:AY:193:TYR:HB2	24:AY:263:PHE:CB	2.51	0.41
24:AY:216:ASP:O	24:AY:220:GLY:C	2.59	0.41
24:AY:282:ARG:CG	24:AY:319:ARG:NH1	2.83	0.41
33:B8:3:LYS:NZ	35:BA:241:A:O2'	2.54	0.41
35:BA:1696:G:O2'	35:BA:1697:G:H5'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:1837:C:H2'	35:BA:1838:C:H5''	2.02	0.41
35:BA:1923:U:H2'	35:BA:1924:C:OP2	2.21	0.41
35:BA:2000:G:O2'	35:BA:2001:A:H5'	2.21	0.41
35:BA:2504:U:H3'	35:BA:2504:U:C6	2.56	0.41
35:BA:27:G:HO2'	35:BA:28:A:P	2.44	0.41
35:BA:743:G:O3'	39:BE:132:HIS:CB	2.68	0.41
35:BA:833:U:C5	35:BA:834:C:C5	3.08	0.41
38:BD:92:ILE:HA	38:BD:106:ILE:HA	2.02	0.41
38:BD:144:ALA:H	38:BD:156:ALA:CB	2.34	0.41
45:BN:116:LEU:O	45:BN:119:ARG:HB2	2.20	0.41
45:BN:97:ARG:C	45:BN:99:LEU:N	2.74	0.41
47:BP:96:THR:HG22	47:BP:126:VAL:CG2	2.50	0.41
47:BP:21:ARG:O	47:BP:22:GLY:C	2.59	0.41
47:BP:31:ALA:C	47:BP:33:ARG:H	2.21	0.41
52:BU:9:VAL:O	52:BU:13:LYS:CE	2.64	0.41
53:BV:78:LYS:O	53:BV:79:VAL:CG2	2.69	0.41
1:AA:1418:A:H2	1:AA:1483:A:N3	2.18	0.41
35:BA:1669:A:C6	35:BA:1994:C:O2	2.74	0.41
1:AA:741:G:O2'	1:AA:742:G:C5'	2.69	0.41
1:AA:833:U:H2'	1:AA:834:C:C6	2.56	0.41
8:AH:9:MET:HG3	8:AH:26:VAL:CB	2.51	0.41
8:AH:94:TYR:N	8:AH:94:TYR:CD1	2.89	0.41
15:AO:26:GLU:OE1	15:AO:81:LEU:HD22	2.21	0.41
53:BV:35:LEU:O	53:BV:37:VAL:O	2.38	0.41
35:BA:2478:A:H8	35:BA:2478:A:O5'	2.04	0.41
1:AA:1083:U:H3'	1:AA:1084:G:C8	2.56	0.41
35:BA:966:G:C1'	35:BA:2267:A:N6	2.83	0.41
35:BA:911:A:O4'	35:BA:2264:C:H4'	2.20	0.41
48:BQ:45:GLN:H	48:BQ:45:GLN:NE2	2.17	0.41
57:BZ:34:ASN:O	57:BZ:35:ARG:NE	2.54	0.41
57:BZ:47:VAL:O	57:BZ:50:GLN:HB2	2.21	0.41
1:AA:1325:C:C6	1:AA:1325:C:OP2	2.74	0.41
12:AL:31:PRO:O	12:AL:32:PHE:CD2	2.74	0.41
1:AA:990:C:H2'	1:AA:991:U:O4'	2.20	0.41
3:AC:67:THR:CG2	3:AC:102:ASN:HB2	2.37	0.41
10:AJ:65:LEU:O	10:AJ:67:THR:N	2.54	0.41
14:AN:24:CYS:HG	14:AN:40:CYS:HG	1.51	0.41
19:AS:62:ILE:HA	19:AS:66:MET:HE2	2.01	0.41
49:BR:93:GLY:C	49:BR:94:TYR:CD1	2.82	0.41
37:BC:30:LYS:HZ3	37:BC:178:ALA:HB1	1.84	0.41
48:BQ:8:LYS:O	48:BQ:9:TYR:CG	2.74	0.41
57:BZ:151:HIS:HA	57:BZ:171:ILE:HD13	2.02	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2307:G:H5'	35:BA:2308:G:OP1	2.20	0.41
29:B4:25:TYR:O	29:B4:26:SER:CB	2.69	0.41
54:BW:21:VAL:C	54:BW:23:LEU:N	2.71	0.41
25:B0:14:ARG:HH11	25:B0:14:ARG:HG3	1.86	0.41
31:B6:36:LEU:C	31:B6:36:LEU:CD2	2.89	0.41
36:BB:68:C:N1	36:BB:69:G:C8	2.89	0.41
13:AM:15:VAL:CG1	13:AM:44:ARG:O	2.69	0.41
35:BA:1034:G:C2	35:BA:1122:G:C2	3.08	0.41
35:BA:1445:A:O2'	35:BA:1445(A):C:H5'	2.21	0.41
35:BA:2830:G:O2'	35:BA:2831:G:H5'	2.20	0.41
20:AT:74:LYS:C	20:AT:76:ALA:N	2.74	0.41
35:BA:1224:C:C4	35:BA:1225:G:C6	3.09	0.41
54:BW:73:ALA:O	54:BW:74:ALA:HB2	2.21	0.41
1:AA:1374:A:H2'	1:AA:1375:A:H5'	2.02	0.41
28:B3:31:LEU:O	28:B3:32:GLN:HB2	2.20	0.41
1:AA:1251:A:O4'	1:AA:1370:G:H4'	2.21	0.41
29:B4:37:SER:O	29:B4:38:LYS:CB	2.67	0.41
35:BA:1438:U:C4	35:BA:1552:G:N2	2.88	0.41
4:AD:200:GLU:HG2	4:AD:201:GLN:N	2.36	0.41
25:B0:20:ARG:HH11	25:B0:20:ARG:CG	2.33	0.41
35:BA:1002:G:C2'	35:BA:1003:G:O5'	2.69	0.41
35:BA:1152:C:C5	35:BA:1153:C:H5	2.38	0.41
26:B1:73:LEU:O	26:B1:77:ALA:HB2	2.20	0.41
1:AA:697:U:C4'	1:AA:786:G:H4'	2.51	0.41
8:AH:63:LEU:N	8:AH:63:LEU:CD2	2.79	0.41
35:BA:1479:G:C2	35:BA:1480:G:C4	3.09	0.41
35:BA:1214:A:O5'	35:BA:1214:A:H8	2.04	0.41
35:BA:1631(A):A:H2'	35:BA:1632:A:C8	2.55	0.41
35:BA:1173:G:H3'	35:BA:1174:A:H5'	2.03	0.41
57:BZ:145:GLU:HG3	57:BZ:146:ILE:N	2.36	0.41
57:BZ:147:GLY:O	57:BZ:148:ASP:O	2.39	0.41
35:BA:552:G:N3	35:BA:552:G:H2'	2.35	0.41
8:AH:124:ALA:HB1	8:AH:129:VAL:O	2.20	0.41
24:AY:106:VAL:HG22	24:AY:108:CYS:N	2.30	0.41
24:AY:10:VAL:C	24:AY:279:PRO:HG3	2.41	0.41
24:AY:138:LEU:HD11	24:AY:272:LEU:CB	2.38	0.41
24:AY:416:LEU:HD23	24:AY:416:LEU:HA	1.78	0.41
24:AY:93:GLU:C	24:AY:94:ASP:CG	2.76	0.41
24:AY:96:SER:O	24:AY:100:TYR:N	2.45	0.41
1:AA:949:A:H2'	1:AA:950:U:C5'	2.40	0.41
1:AA:949:A:C5	1:AA:950:U:C4	3.08	0.41
30:B5:51:TYR:CD2	30:B5:52:TYR:CE1	3.08	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B7:16:HIS:O	32:B7:43:THR:HG23	2.20	0.41
33:B8:44:LYS:N	33:B8:44:LYS:HD2	2.36	0.41
35:BA:1288:U:P	35:BA:1289:C:H41	2.44	0.41
35:BA:1754:C:H6	35:BA:1754:C:O5'	2.04	0.41
35:BA:1807:G:O2'	35:BA:1809:A:N7	2.47	0.41
35:BA:1893:C:H6	35:BA:1893:C:H5'	1.86	0.41
35:BA:18:C:O2'	52:BU:23:GLY:HA2	2.21	0.41
35:BA:1969:A:O2'	35:BA:1972:A:C1'	2.65	0.41
35:BA:1972:A:N3	35:BA:1973:G:C8	2.89	0.41
35:BA:2353:G:H1	35:BA:2364:C:H42	1.69	0.41
35:BA:2447:G:C4	35:BA:2500:U:C5	3.09	0.41
35:BA:671:C:H2'	35:BA:672:C:H6	1.86	0.41
35:BA:996:A:C4'	52:BU:92:ARG:HH21	2.34	0.41
38:BD:173:VAL:O	38:BD:173:VAL:HG22	2.20	0.41
38:BD:218:ARG:HG3	38:BD:218:ARG:NH1	2.36	0.41
38:BD:21:PHE:HD1	38:BD:91:ARG:NH2	2.16	0.41
35:BA:779:U:OP1	38:BD:49:ILE:HG13	2.20	0.41
38:BD:60:ARG:HH21	38:BD:87:ASN:HA	1.76	0.41
39:BE:59:VAL:CG2	39:BE:63:LEU:HA	2.50	0.41
52:BU:60:LEU:HA	52:BU:60:LEU:HD23	1.73	0.41
1:AA:1406:U:C5	1:AA:1407:C:C6	3.09	0.41
28:B3:15:TYR:HA	28:B3:16:PRO:HD3	1.87	0.41
30:B5:20:ARG:O	30:B5:23:HIS:HB2	2.21	0.41
35:BA:2598:A:N7	35:BA:2599:G:C1'	2.81	0.41
35:BA:2641:G:C8	35:BA:2641:G:H5'	2.45	0.41
35:BA:28:A:H62	35:BA:512:G:H1'	1.85	0.41
35:BA:783:A:N6	35:BA:785:G:C5	2.89	0.41
35:BA:941:A:C2	35:BA:942:G:C4	3.09	0.41
38:BD:169:GLU:OE1	38:BD:184:LYS:CE	2.69	0.41
38:BD:18:VAL:O	38:BD:19:ALA:O	2.39	0.41
38:BD:208:LYS:HE3	38:BD:210:GLY:HA3	2.02	0.41
38:BD:181:GLU:CG	38:BD:272:ALA:CB	2.90	0.41
39:BE:38:THR:CG2	39:BE:39:PRO:HD2	2.51	0.41
46:BO:71:ARG:HH21	46:BO:77:ILE:HG21	1.86	0.41
47:BP:96:THR:O	47:BP:100:LEU:HD23	2.20	0.41
51:BT:31:SER:O	51:BT:32:TYR:O	2.39	0.41
51:BT:79:HIS:O	51:BT:80:SER:HB3	2.21	0.41
51:BT:93:ARG:HG2	51:BT:117:ASP:CB	2.45	0.41
52:BU:97:ASP:O	52:BU:100:VAL:HG23	2.21	0.41
52:BU:15:LYS:HG3	52:BU:16:LYS:N	2.35	0.41
52:BU:27:LEU:HA	52:BU:30:LYS:HG2	2.01	0.41
52:BU:92:ARG:CB	53:BV:11:GLN:CD	2.82	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BV:47:VAL:O	53:BV:49:THR:O	2.39	0.41
35:BA:1667:G:N2	35:BA:1991:U:C5	2.89	0.41
46:BO:12:ASP:OD2	46:BO:85:VAL:CG1	2.69	0.41
1:AA:671:G:N1	1:AA:672:U:C2	2.89	0.41
1:AA:826:C:N3	1:AA:827:U:C5	2.88	0.41
6:AF:11:ASN:HB2	6:AF:86:ARG:NH2	2.36	0.41
6:AF:83:ASP:C	6:AF:85:VAL:N	2.70	0.41
8:AH:26:VAL:CG2	8:AH:32:LYS:HD3	2.50	0.41
8:AH:6:ILE:H	8:AH:6:ILE:CD1	2.05	0.41
1:AA:668:G:O2'	1:AA:669:U:H5'	2.21	0.41
8:AH:87:SER:OG	8:AH:92:ARG:CA	2.62	0.41
1:AA:835:U:C5'	18:AR:64:ARG:HH22	2.34	0.41
35:BA:2157:G:O2'	35:BA:2158:A:C5'	2.66	0.41
1:AA:1414:U:HO2'	1:AA:1415:G:H8	1.67	0.41
34:B9:1:MET:HG2	34:B9:31:LYS:O	2.21	0.41
2:AB:9:GLU:HA	2:AB:12:GLU:HG3	2.02	0.41
2:AB:72:GLY:HA2	2:AB:165:VAL:HG22	2.03	0.41
2:AB:104:ASN:O	2:AB:108:ILE:HG12	2.21	0.41
2:AB:16:HIS:HB3	2:AB:210:SER:HA	2.03	0.41
2:AB:178:ARG:C	2:AB:180:LEU:N	2.74	0.41
2:AB:212:GLN:OE1	2:AB:212:GLN:C	2.59	0.41
2:AB:69:LEU:HA	2:AB:69:LEU:HD22	1.84	0.41
2:AB:8:LYS:C	2:AB:10:LEU:N	2.67	0.41
47:BP:59:LEU:HA	47:BP:61:ARG:HE	1.74	0.41
26:B1:34:THR:O	35:BA:2432:A:N6	2.51	0.41
25:B0:42:GLY:O	25:B0:57:PHE:CG	2.74	0.41
57:BZ:70:LEU:HD23	57:BZ:70:LEU:N	2.36	0.41
57:BZ:8:TYR:N	57:BZ:8:TYR:CD1	2.89	0.41
57:BZ:98:MET:HG3	57:BZ:99:TYR:N	2.33	0.41
36:BB:81:G:N1	36:BB:97:G:C2	2.89	0.41
57:BZ:100:VAL:HA	57:BZ:101:PRO:HD2	1.72	0.41
57:BZ:69:THR:C	57:BZ:70:LEU:CD2	2.89	0.41
57:BZ:53:ILE:HG22	57:BZ:71:VAL:HG23	2.03	0.41
22:AV:49:G:N2	22:AV:50:U:N1	2.68	0.41
22:AV:71:C:H2'	22:AV:72:A:C8	2.56	0.41
12:AL:104:VAL:O	12:AL:107:ALA:HB3	2.21	0.41
1:AA:1114:C:H2'	1:AA:1115:C:H6	1.86	0.41
1:AA:1179:A:N6	1:AA:1180:A:C2	2.88	0.41
1:AA:1054:C:OP1	1:AA:1198:G:OP2	2.39	0.41
9:AI:98:PRO:HB2	9:AI:99:LEU:CD2	2.47	0.41
19:AS:62:ILE:HD12	19:AS:66:MET:HE2	2.02	0.41
1:AA:1014:A:C2	19:AS:34:TRP:CZ2	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:979:C:C3'	1:AA:980:C:C5'	2.74	0.41
3:AC:28:GLN:HA	3:AC:28:GLN:NE2	2.35	0.41
10:AJ:8:LEU:HB3	10:AJ:16:LEU:HD21	2.02	0.41
19:AS:45:VAL:O	19:AS:45:VAL:CG2	2.69	0.41
1:AA:355:C:H2'	1:AA:356:A:C8	2.55	0.41
35:BA:498:G:H2'	35:BA:499:U:C6	2.50	0.41
56:BY:13:VAL:HG22	56:BY:14:LEU:H	1.86	0.41
56:BY:7:VAL:HG12	56:BY:83:THR:HG21	2.03	0.41
27:B2:17:SER:O	27:B2:21:LEU:HG	2.20	0.41
27:B2:59:ARG:O	27:B2:62:THR:HB	2.20	0.41
35:BA:109:G:H5'	35:BA:348:G:H4'	2.02	0.41
35:BA:95:G:C2'	35:BA:96:G:O5'	2.69	0.41
1:AA:543:C:H5'	4:AD:14:ARG:CZ	2.51	0.41
4:AD:173:TRP:CD1	4:AD:189:PRO:HD3	2.56	0.41
35:BA:309:G:N7	35:BA:330:A:N6	2.69	0.41
49:BR:48:VAL:CB	49:BR:51:LEU:HD22	2.50	0.41
1:AA:689:C:H4'	1:AA:705:U:H1'	2.03	0.41
11:AK:60:ALA:O	11:AK:61:ALA:C	2.58	0.41
57:BZ:144:LEU:HD13	57:BZ:144:LEU:HA	1.76	0.41
57:BZ:150:LEU:O	57:BZ:171:ILE:CG1	2.65	0.41
35:BA:878:A:H5'	35:BA:878:A:N3	2.35	0.41
7:AG:99:LEU:O	7:AG:102:ARG:HB3	2.21	0.41
7:AG:106:GLN:O	7:AG:107:ALA:C	2.59	0.41
1:AA:939:G:OP1	7:AG:102:ARG:NH1	2.50	0.41
7:AG:29:LYS:NZ	7:AG:102:ARG:HG3	2.36	0.41
7:AG:108:ALA:H	7:AG:123:GLU:HG2	1.86	0.41
41:BG:135:LEU:CD2	41:BG:155:MET:HG3	2.51	0.41
41:BG:67:LYS:N	41:BG:67:LYS:CD	2.84	0.41
36:BB:8:U:H5'	36:BB:8:U:C6	2.56	0.41
17:AQ:58:GLU:O	17:AQ:59:ILE:CG1	2.68	0.41
35:BA:2289:G:H1'	35:BA:2346:A:H2	1.86	0.41
38:BD:121:PRO:O	38:BD:123:ALA:N	2.45	0.41
35:BA:1855:G:C6	35:BA:1888:G:C8	3.09	0.41
35:BA:2234:G:C6	35:BA:2235:G:N7	2.89	0.41
35:BA:1553:A:C2	35:BA:1555:G:C8	3.09	0.41
1:AA:642:A:HO2'	8:AH:31:PHE:HE1	1.68	0.41
24:AY:21:HIS:HD2	24:AY:122:ARG:CA	2.34	0.41
35:BA:704:G:C2	35:BA:726:G:C4	3.09	0.41
41:BG:16:ARG:HD3	41:BG:16:ARG:HA	1.83	0.41
41:BG:10:LYS:HE2	41:BG:14:GLU:OE2	2.21	0.41
41:BG:16:ARG:CZ	41:BG:28:VAL:HG13	2.50	0.41
41:BG:170:ARG:O	41:BG:174:GLU:HB2	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:961:U:OP2	1:AA:1223:C:H1'	2.21	0.41
1:AA:1219:U:C2	1:AA:1220:G:C8	3.09	0.41
35:BA:2070:G:C2	35:BA:2071:A:N3	2.89	0.41
1:AA:1314:C:C2'	1:AA:1315:U:O4'	2.69	0.41
35:BA:1746:G:N2	35:BA:1747:G:C4	2.88	0.41
1:AA:1441:G:O2'	1:AA:1460:A:N6	2.50	0.41
54:BW:3:ALA:HB3	54:BW:107:LEU:HD12	2.02	0.41
1:AA:1349:A:N1	1:AA:1374:A:C8	2.88	0.41
35:BA:2699:C:H2'	35:BA:2700:C:O4'	2.21	0.41
1:AA:1425:U:H2'	1:AA:1426:C:C5	2.55	0.41
14:AN:12:ARG:HH11	14:AN:14:PRO:CG	2.26	0.41
1:AA:142:G:N3	1:AA:196:A:H2	2.18	0.41
1:AA:195:A:P	20:AT:68:LYS:NZ	2.94	0.41
1:AA:195:A:P	20:AT:68:LYS:HZ3	2.43	0.41
13:AM:23:TYR:CD1	13:AM:23:TYR:C	2.94	0.41
35:BA:813:U:N3	35:BA:814:C:N4	2.69	0.41
35:BA:541:C:H2'	35:BA:542:C:C6	2.56	0.41
26:B1:40:ARG:HG3	26:B1:41:ARG:N	2.35	0.41
1:AA:1456:G:H3'	1:AA:1456:G:N3	2.36	0.41
35:BA:1428:C:O2'	35:BA:1569:A:OP1	2.38	0.41
9:AI:81:ILE:O	9:AI:84:ALA:HB3	2.21	0.41
42:BH:154:PRO:HG3	42:BH:163:TYR:HD1	1.86	0.41
20:AT:36:LEU:HA	20:AT:39:LYS:HB2	2.03	0.41
1:AA:1284:C:P	1:AA:1285:A:H3'	2.61	0.41
4:AD:61:LYS:HB3	4:AD:61:LYS:HE2	1.82	0.41
47:BP:146:VAL:CG1	47:BP:147:LEU:H	2.33	0.41
1:AA:525:C:C2	1:AA:526:C:C5	3.09	0.41
7:AG:126:ASP:HB3	7:AG:131:LYS:HG3	2.01	0.41
12:AL:124:LYS:O	12:AL:124:LYS:HG3	2.20	0.41
1:AA:1238:A:C2	1:AA:1241:G:H1'	2.56	0.41
4:AD:91:SER:O	4:AD:94:LEU:N	2.52	0.41
37:BC:120:MET:HA	37:BC:123:VAL:HG12	2.02	0.41
39:BE:57:LYS:HA	39:BE:57:LYS:HE3	2.02	0.41
1:AA:520:A:N6	1:AA:521:G:N3	2.67	0.41
46:BO:11:ALA:HB1	46:BO:98:VAL:HG23	2.03	0.41
1:AA:571:U:H5''	1:AA:819:A:C5	2.55	0.41
42:BH:18:GLU:HB3	42:BH:25:LYS:HG3	2.01	0.41
35:BA:1477:A:N6	35:BA:1478:G:C6	2.89	0.41
1:AA:1446:U:O2'	1:AA:1447:A:H3'	2.21	0.41
1:AA:1134:G:C5	1:AA:1135:U:O2	2.74	0.41
35:BA:2193:G:H2'	35:BA:2194:G:O4'	2.21	0.41
32:B7:31:LEU:HD22	32:B7:42:LEU:HB3	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:480:LYS:CA	24:AY:480:LYS:HE2	2.51	0.41
35:BA:37:C:H2'	35:BA:38:A:C8	2.55	0.41
1:AA:1485:U:O5'	1:AA:1485:U:H6	2.03	0.41
27:B2:7:ARG:O	27:B2:11:GLU:HG3	2.21	0.41
36:BB:5:C:O2'	36:BB:6:C:H5'	2.20	0.41
1:AA:899:C:C6	1:AA:899:C:OP2	2.74	0.41
40:BF:169:ASN:HA	40:BF:169:ASN:HD22	1.65	0.41
8:AH:25:ASP:OD2	8:AH:60:ARG:NE	2.54	0.41
1:AA:792:A:C2	1:AA:794:A:C4	3.09	0.41
1:AA:151:A:O2'	1:AA:152:A:H5'	2.20	0.41
37:BC:191:ALA:O	37:BC:194:ARG:HB2	2.21	0.41
24:AY:15:THR:CG2	24:AY:106:VAL:HA	2.51	0.41
24:AY:223:LEU:HA	24:AY:226:GLN:CB	2.51	0.41
24:AY:421:GLU:CA	24:AY:529:HIS:HE1	2.31	0.41
32:B7:5:TRP:CZ3	35:BA:464:U:O4'	2.74	0.41
35:BA:1816:G:H8	38:BD:62:TYR:CE2	2.39	0.41
30:B5:6:VAL:CG2	35:BA:2015:A:C2	3.00	0.41
35:BA:2028:U:O4	35:BA:2033:A:OP2	2.37	0.41
35:BA:245:G:C2'	35:BA:246:C:H5'	2.51	0.41
35:BA:2819:G:C6	35:BA:2821:A:C2	3.09	0.41
35:BA:2845:G:N1	35:BA:2846:G:C6	2.89	0.41
35:BA:572:A:O5'	35:BA:572:A:H8	2.04	0.41
35:BA:840:C:H2'	35:BA:841:A:H8	1.85	0.41
38:BD:149:PRO:O	38:BD:151:LYS:HD2	2.21	0.41
35:BA:1827:C:O5'	38:BD:222:ARG:NH1	2.54	0.41
38:BD:224:ALA:CA	38:BD:233:HIS:HB2	2.48	0.41
38:BD:62:TYR:CE1	38:BD:64:ILE:CA	3.00	0.41
39:BE:195:LEU:O	39:BE:196:VAL:CG1	2.68	0.41
45:BN:57:ALA:O	45:BN:58:ASP:C	2.57	0.41
47:BP:55:ARG:C	47:BP:57:THR:N	2.73	0.41
35:BA:2413:G:N2	47:BP:70:GLN:HE22	2.06	0.41
47:BP:96:THR:O	47:BP:99:LEU:CB	2.69	0.41
51:BT:50:ILE:HD11	51:BT:64:ARG:HB2	2.03	0.41
51:BT:75:ILE:N	51:BT:75:ILE:HD12	2.36	0.41
52:BU:68:ALA:CB	52:BU:106:PHE:HE2	2.33	0.41
53:BV:12:TYR:N	53:BV:12:TYR:CD1	2.88	0.41
35:BA:1667:G:N3	35:BA:1991:U:C5	2.88	0.41
1:AA:586:C:O2'	1:AA:587:G:H5'	2.20	0.41
1:AA:753:A:C4'	1:AA:754:C:C2	3.03	0.41
1:AA:885:G:H1	1:AA:912:C:H42	1.69	0.41
15:AO:26:GLU:HB2	15:AO:27:VAL:H	1.59	0.41
18:AR:37:VAL:O	18:AR:38:GLU:C	2.59	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:908:A:C2	1:AA:909:A:C5	3.09	0.41
34:B9:32:HIS:O	34:B9:34:GLN:N	2.54	0.41
2:AB:69:LEU:HB2	2:AB:159:PRO:HG2	2.03	0.41
2:AB:236:TYR:HB3	2:AB:239:VAL:HG23	2.02	0.41
2:AB:44:LEU:O	2:AB:47:THR:N	2.54	0.41
2:AB:7:VAL:O	2:AB:7:VAL:HG12	2.21	0.41
57:BZ:155:LEU:N	57:BZ:155:LEU:CD2	2.83	0.41
48:BQ:125:LEU:HA	48:BQ:126:PRO:HD3	1.95	0.41
48:BQ:43:THR:OG1	48:BQ:46:GLN:NE2	2.54	0.41
48:BQ:51:ARG:HG2	48:BQ:52:VAL:N	2.35	0.41
57:BZ:5:LEU:HD23	57:BZ:5:LEU:HA	1.80	0.41
13:AM:79:LYS:O	13:AM:82:MET:HB3	2.21	0.41
13:AM:98:VAL:HG12	13:AM:98:VAL:O	2.21	0.41
1:AA:979:C:OP1	1:AA:1222:G:O6	2.38	0.41
3:AC:21:ARG:C	3:AC:22:TRP:CG	2.95	0.41
3:AC:42:LEU:O	3:AC:45:LYS:HB3	2.21	0.41
3:AC:82:GLU:O	3:AC:83:ARG:C	2.58	0.41
9:AI:104:ARG:NH1	9:AI:104:ARG:CG	2.76	0.41
56:BY:25:GLY:HA3	56:BY:39:VAL:HG13	2.02	0.41
35:BA:60:G:C8	35:BA:63:U:C5	3.10	0.41
55:BX:26:TYR:O	55:BX:81:VAL:HG22	2.20	0.41
40:BF:192:LEU:HD21	40:BF:194:MET:CE	2.51	0.41
4:AD:15:GLU:OE1	4:AD:59:ARG:NH2	2.54	0.41
37:BC:212:VAL:HG12	37:BC:224:ILE:HD11	2.03	0.41
57:BZ:141:VAL:O	57:BZ:143:GLY:N	2.44	0.41
41:BG:113:ARG:O	41:BG:140:ILE:HG22	2.21	0.41
31:B6:26:ASN:HB3	31:B6:27:LYS:H	1.40	0.41
35:BA:2283:C:C4	35:BA:2389:G:C5	3.09	0.41
35:BA:2286:A:C2	35:BA:2346:A:N6	2.89	0.41
36:BB:18:G:N2	36:BB:68:C:N4	2.69	0.41
50:BS:66:ALA:O	50:BS:70:GLY:N	2.53	0.41
1:AA:529:G:H2'	1:AA:530:G:H5'	2.01	0.41
50:BS:25:ARG:HH12	50:BS:40:ILE:HD11	1.86	0.41
1:AA:1004:A:C5	1:AA:1037:C:N4	2.88	0.41
20:AT:74:LYS:HG2	20:AT:75:ASN:N	2.36	0.41
1:AA:962:C:H2'	1:AA:963:G:H8	1.85	0.41
1:AA:1145:C:O2'	1:AA:1146:A:C5'	2.69	0.41
35:BA:2101:G:N1	35:BA:2102:U:C4	2.89	0.41
24:AY:486:LYS:HA	24:AY:493:LEU:HD12	2.01	0.41
5:AE:126:ARG:O	5:AE:128:PRO:HD3	2.21	0.41
56:BY:3:VAL:CG1	56:BY:3:VAL:O	2.69	0.41
40:BF:133:ASN:N	40:BF:133:ASN:HD22	2.19	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:137:ALA:O	3:AC:139:GLN:N	2.54	0.41
35:BA:2163:C:H2'	35:BA:2164:C:H5'	2.03	0.41
1:AA:30:U:C1'	1:AA:31:G:OP1	2.69	0.41
35:BA:1370:C:C5	35:BA:1371:G:C5	3.09	0.41
1:AA:803:G:H2'	1:AA:804:U:C6	2.56	0.41
35:BA:496:G:H1'	54:BW:61:ASN:HD21	1.86	0.41
55:BX:61:GLY:O	55:BX:62:LYS:O	2.39	0.41
35:BA:2422:A:C6	35:BA:2424:C:C4	3.09	0.41
35:BA:2526:G:H2'	35:BA:2527:C:O4'	2.21	0.41
35:BA:1410:G:C6	35:BA:1411:C:C4	3.09	0.41
11:AK:16:SER:O	11:AK:35:PRO:HG3	2.21	0.41
1:AA:460:G:N2	1:AA:473:G:O6	2.54	0.41
35:BA:284:U:H6	35:BA:284:U:O5'	2.04	0.41
3:AC:25:GLY:O	3:AC:26:LYS:C	2.59	0.41
24:AY:30:THR:HG21	24:AY:88:ASP:CB	2.49	0.40
24:AY:326:GLU:HA	24:AY:326:GLU:OE1	2.21	0.40
35:BA:2532:G:C2'	35:BA:2533:A:H5'	2.51	0.40
35:BA:1246:A:N6	35:BA:1247:A:N6	2.68	0.40
35:BA:1247:A:O2'	35:BA:1248:G:O5'	2.36	0.40
35:BA:1654:A:OP1	49:BR:2:ARG:C	2.59	0.40
35:BA:1654:A:OP1	49:BR:3:HIS:HB2	2.21	0.40
35:BA:1805:U:O2	38:BD:50:THR:CB	2.64	0.40
35:BA:1803:A:N6	35:BA:1814:G:O2'	2.54	0.40
35:BA:2553:G:H3'	35:BA:2554:U:C5'	2.45	0.40
35:BA:2873:A:O4'	49:BR:8:ARG:NH2	2.54	0.40
35:BA:555:U:O2	35:BA:556:G:N7	2.53	0.40
35:BA:693:C:H2'	35:BA:693:C:O2	2.21	0.40
35:BA:839:U:C2	35:BA:840:C:C5	3.09	0.40
35:BA:942:G:H5''	47:BP:36:LYS:H	1.86	0.40
35:BA:993:G:C1'	53:BV:87:HIS:NE2	2.84	0.40
38:BD:144:ALA:HA	38:BD:155:LEU:O	2.21	0.40
39:BE:68:ALA:C	39:BE:70:ALA:N	2.71	0.40
39:BE:79:ARG:HB3	39:BE:80:GLU:H	1.56	0.40
39:BE:4:ILE:HD12	39:BE:92:THR:O	2.21	0.40
40:BF:64:ILE:CG2	40:BF:65:TRP:H	2.34	0.40
47:BP:114:ILE:N	47:BP:129:ALA:O	2.49	0.40
51:BT:19:LEU:HD22	51:BT:85:LYS:HG3	2.01	0.40
51:BT:22:PHE:CE2	51:BT:85:LYS:CE	3.02	0.40
52:BU:114:LYS:HG2	52:BU:114:LYS:H	1.70	0.40
52:BU:59:ARG:HA	52:BU:62:ILE:HB	2.03	0.40
35:BA:1667:G:OP1	46:BO:6:THR:CA	2.66	0.40
35:BA:1986:A:C2	35:BA:1987:G:C8	3.09	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:761:G:H2'	1:AA:762:C:H6	1.87	0.40
8:AH:38:ILE:O	8:AH:42:GLU:N	2.46	0.40
1:AA:741:G:H5'	15:AO:39:LEU:HD21	2.01	0.40
35:BA:2134:A:C1'	35:BA:2159:G:H21	2.34	0.40
1:AA:286:G:C6	1:AA:287:U:C4	3.09	0.40
2:AB:100:GLY:HA3	2:AB:104:ASN:HB3	2.02	0.40
2:AB:25:ASN:ND2	2:AB:193:ASP:HB2	2.37	0.40
35:BA:2786:U:C2'	35:BA:2787:C:H6	2.19	0.40
35:BA:907:U:C2	35:BA:908:C:C5	3.09	0.40
48:BQ:45:GLN:O	48:BQ:49:ALA:HB2	2.21	0.40
57:BZ:5:LEU:CD1	57:BZ:39:VAL:HG11	2.32	0.40
35:BA:2524:G:C8	35:BA:2524:G:H5'	2.52	0.40
12:AL:36:VAL:CG1	24:AY:406:PRO:CB	2.85	0.40
1:AA:1150:U:O4	1:AA:1151:A:N6	2.54	0.40
1:AA:1153:C:O2'	1:AA:1154:G:OP2	2.37	0.40
3:AC:73:PRO:O	3:AC:77:ILE:HG13	2.21	0.40
19:AS:38:SER:C	19:AS:70:LYS:HB3	2.42	0.40
1:AA:367:U:C2	1:AA:394:G:C2	3.09	0.40
56:BY:78:ALA:HB1	56:BY:81:LYS:HE3	2.01	0.40
56:BY:96:ILE:HG13	56:BY:99:CYS:CB	2.50	0.40
40:BF:124:LEU:HD12	40:BF:125:LEU:H	1.86	0.40
40:BF:139:PHE:O	40:BF:142:TRP:N	2.54	0.40
44:BK:5:UNK:C	44:BK:7:UNK:N	2.84	0.40
4:AD:184:LYS:O	4:AD:186:LEU:HG	2.22	0.40
49:BR:45:ARG:C	49:BR:47:PHE:H	2.24	0.40
35:BA:2320:A:N1	35:BA:2333:A:C4	2.89	0.40
4:AD:15:GLU:HA	4:AD:15:GLU:OE1	2.21	0.40
37:BC:7:TYR:HA	37:BC:10:LEU:CD2	2.51	0.40
51:BT:118:ARG:O	51:BT:122:ASP:HB2	2.21	0.40
35:BA:1718:G:O2'	35:BA:1719:G:H5'	2.20	0.40
41:BG:111:LEU:O	41:BG:114:ILE:HG22	2.20	0.40
41:BG:44:GLY:O	41:BG:47:LYS:CE	2.65	0.40
1:AA:405:U:C5'	1:AA:495:A:H2	2.34	0.40
5:AE:11:ILE:H	5:AE:11:ILE:HG13	1.27	0.40
5:AE:6:PHE:HB2	5:AE:34:VAL:HG22	2.03	0.40
35:BA:1435:G:H1	35:BA:1557:C:H42	1.69	0.40
35:BA:727:A:C6	35:BA:728:G:N1	2.89	0.40
35:BA:1498:C:C3'	35:BA:1499:C:H5'	2.52	0.40
35:BA:1578:U:C2'	35:BA:1579:A:C5'	2.87	0.40
1:AA:961:U:H5'	1:AA:984:C:O2	2.21	0.40
9:AI:16:ARG:NH1	9:AI:16:ARG:HG3	2.34	0.40
35:BA:1273:U:HO2'	35:BA:1274:A:H5''	1.79	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:50:U:H5''	35:BA:51:G:C8	2.56	0.40
24:AY:486:LYS:HE2	24:AY:486:LYS:HB3	1.88	0.40
35:BA:1451:C:H4'	35:BA:1452:A:H5'	2.03	0.40
35:BA:1166:C:H6	35:BA:1166:C:O5'	2.04	0.40
1:AA:1423:G:C6	1:AA:1424:C:C4	3.09	0.40
2:AB:137:ARG:HB3	2:AB:138:LEU:CD2	2.50	0.40
22:AV:26:G:N2	22:AV:44:A:N6	2.55	0.40
35:BA:931:G:N2	35:BA:933:A:C8	2.89	0.40
4:AD:64:LEU:HD13	4:AD:198:VAL:HG11	2.03	0.40
50:BS:78:LEU:O	50:BS:79:ALA:HB2	2.21	0.40
45:BN:137:LYS:HB3	45:BN:138:LEU:H	1.64	0.40
1:AA:537:G:H2'	1:AA:538:G:H8	1.85	0.40
1:AA:635:G:C2'	1:AA:636:U:H5'	2.51	0.40
2:AB:23:ARG:HA	2:AB:23:ARG:HD2	1.93	0.40
35:BA:221:A:N7	35:BA:266:G:O6	2.55	0.40
1:AA:651:C:O2'	1:AA:652:U:H5'	2.21	0.40
1:AA:817:C:C4	1:AA:819:A:N9	2.90	0.40
10:AJ:81:THR:O	10:AJ:83:GLU:N	2.54	0.40
24:AY:503:TYR:CE1	24:AY:514:ALA:HB2	2.56	0.40
1:AA:1486:G:C6	1:AA:1487:G:C6	3.09	0.40
35:BA:2587:A:H8	35:BA:2587:A:O5'	2.03	0.40
1:AA:371:G:H2'	1:AA:372:C:O4'	2.21	0.40
35:BA:1518:U:O5'	35:BA:1518:U:H6	2.03	0.40
24:AY:402:ARG:O	24:AY:462:VAL:N	2.52	0.40
24:AY:505:ALA:C	24:AY:507:SER:N	2.75	0.40
13:AM:102:ARG:CG	13:AM:102:ARG:HH11	2.33	0.40
35:BA:1155:A:O5'	52:BU:55:ARG:NE	2.55	0.40
35:BA:1289:C:H4'	35:BA:1330:C:C4'	2.52	0.40
35:BA:1613:G:N1	35:BA:1617:C:O2'	2.33	0.40
35:BA:1649:G:C4	35:BA:1650:G:C8	3.10	0.40
35:BA:1654:A:H2'	35:BA:1655:A:H8	1.86	0.40
35:BA:1756:G:O5'	35:BA:1756:G:C8	2.74	0.40
35:BA:1799:G:OP1	38:BD:260:ARG:CB	2.69	0.40
35:BA:1835:G:H5''	35:BA:1836:C:OP2	2.21	0.40
35:BA:2222:G:H1'	38:BD:151:LYS:HZ2	1.86	0.40
35:BA:2687:U:C5	35:BA:2688:U:C4	3.09	0.40
35:BA:940:G:C3'	35:BA:941:A:H5''	2.51	0.40
38:BD:209:ALA:O	38:BD:212:SER:N	2.55	0.40
38:BD:259:THR:O	38:BD:260:ARG:C	2.57	0.40
38:BD:87:ASN:CB	38:BD:88:ARG:CZ	2.86	0.40
39:BE:21:VAL:C	39:BE:22:PRO:O	2.58	0.40
45:BN:2:LYS:HZ1	52:BU:95:LEU:CD2	2.31	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:942:G:C5'	47:BP:36:LYS:H	2.34	0.40
35:BA:29:U:C4'	52:BU:11:ARG:HH22	2.34	0.40
52:BU:40:PHE:C	52:BU:42:ALA:N	2.74	0.40
52:BU:92:ARG:O	52:BU:93:LYS:C	2.58	0.40
5:AE:123:LEU:O	5:AE:125:SER:O	2.40	0.40
6:AF:2:ARG:HH11	6:AF:92:LYS:CE	2.34	0.40
8:AH:35:ILE:O	8:AH:37:ARG:N	2.54	0.40
53:BV:61:VAL:HG23	53:BV:61:VAL:O	2.21	0.40
1:AA:243:A:C2	1:AA:246:A:N7	2.89	0.40
34:B9:23:VAL:HG23	34:B9:36:GLN:OE1	2.22	0.40
35:BA:2435:A:C2'	35:BA:2436:G:O5'	2.69	0.40
36:BB:87:G:C2'	36:BB:88:C:H5''	2.50	0.40
48:BQ:34:LEU:HD13	48:BQ:118:LEU:HB3	2.03	0.40
57:BZ:48:PHE:HD1	57:BZ:48:PHE:HA	1.64	0.40
57:BZ:48:PHE:CZ	57:BZ:74:VAL:HG21	2.55	0.40
22:AV:49:G:O2'	22:AV:50:U:H5'	2.21	0.40
35:BA:1981:A:H5''	35:BA:1982:C:OP2	2.21	0.40
35:BA:2603:G:C2	35:BA:2604:U:H1'	2.55	0.40
1:AA:1117:G:O3'	9:AI:104:ARG:HD2	2.21	0.40
3:AC:53:ALA:C	3:AC:54:ARG:O	2.60	0.40
1:AA:972:C:O3'	10:AJ:57:LYS:HG3	2.21	0.40
56:BY:10:GLY:C	56:BY:27:VAL:HG13	2.41	0.40
35:BA:329:G:N7	56:BY:71:LYS:HE3	2.36	0.40
35:BA:110:G:C2'	35:BA:111:A:H5'	2.50	0.40
40:BF:155:LEU:HD12	40:BF:156:LEU:H	1.86	0.40
40:BF:205:ARG:O	40:BF:205:ARG:HG2	2.21	0.40
12:AL:126:LYS:CB	24:AY:487:ARG:NH2	2.56	0.40
1:AA:620:C:N1	4:AD:135:LEU:HG	2.35	0.40
4:AD:95:GLY:O	4:AD:98:GLU:N	2.50	0.40
26:B1:11:ARG:CB	26:B1:12:PRO:HD2	2.18	0.40
35:BA:2320:A:C2	35:BA:2333:A:C8	3.09	0.40
5:AE:30:ALA:O	5:AE:45:PHE:HA	2.21	0.40
1:AA:1297:C:H1'	7:AG:114:ARG:HH21	1.85	0.40
7:AG:120:ILE:O	7:AG:121:ALA:C	2.59	0.40
40:BF:103:LYS:O	40:BF:107:LYS:HG2	2.21	0.40
40:BF:33:LEU:CD1	40:BF:109:GLY:O	2.68	0.40
5:AE:32:VAL:HG12	5:AE:33:VAL:N	2.36	0.40
5:AE:7:GLU:HB3	5:AE:112:LEU:HD22	2.03	0.40
17:AQ:77:VAL:O	17:AQ:78:GLU:CB	2.68	0.40
31:B6:26:ASN:ND2	31:B6:32:ASN:OD1	2.54	0.40
31:B6:27:LYS:HG3	31:B6:30:THR:OG1	2.21	0.40
42:BH:65:HIS:CG	42:BH:66:GLY:N	2.89	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:799:G:O2'	1:AA:800:G:O4'	2.35	0.40
38:BD:193:VAL:H	38:BD:193:VAL:HG12	1.58	0.40
28:B3:26:LEU:HD11	28:B3:47:VAL:HG22	2.01	0.40
8:AH:104:ARG:NH2	8:AH:138:TRP:CH2	2.89	0.40
8:AH:104:ARG:CZ	8:AH:138:TRP:CZ2	3.04	0.40
50:BS:58:LEU:HD23	50:BS:65:VAL:CG1	2.50	0.40
38:BD:97:TYR:O	38:BD:98:VAL:C	2.60	0.40
41:BG:7:LEU:HD11	41:BG:107:LEU:HD12	2.02	0.40
35:BA:1858:G:H22	35:BA:1883:G:H2'	1.85	0.40
35:BA:2111:C:O2	35:BA:2111:C:C2'	2.70	0.40
36:BB:34:U:H5''	36:BB:35:U:OP1	2.21	0.40
41:BG:51:ARG:HH12	41:BG:53:LEU:HD11	1.86	0.40
16:AP:21:VAL:CG1	16:AP:34:GLU:O	2.67	0.40
25:B0:60:PHE:CD1	25:B0:60:PHE:C	2.93	0.40
23:AX:17:U:H2'	23:AX:18:G:O5'	2.21	0.40
13:AM:106:ASN:HB3	13:AM:107:ALA:H	1.51	0.40
57:BZ:17:ALA:O	57:BZ:18:LEU:C	2.59	0.40
9:AI:27:THR:N	9:AI:61:ALA:O	2.49	0.40
35:BA:79:G:C6	35:BA:80:G:N7	2.90	0.40
35:BA:2450:A:C2'	35:BA:2451:A:H5'	2.51	0.40
1:AA:1396:A:H4'	1:AA:1398:A:O4'	2.21	0.40
35:BA:2790:A:H2	35:BA:2791:C:H3'	1.86	0.40
10:AJ:23:ILE:O	10:AJ:23:ILE:HG22	2.21	0.40
1:AA:199:G:O2'	1:AA:200:G:H5'	2.21	0.40
35:BA:382:G:H2'	35:BA:383:U:C5'	2.50	0.40
35:BA:2162:G:C2	35:BA:2163:C:C5	3.09	0.40
35:BA:2562:U:H2'	35:BA:2563:U:C5'	2.47	0.40
1:AA:411:A:N6	1:AA:413:G:N2	2.69	0.40
35:BA:1244:G:H2'	35:BA:1245:G:C8	2.55	0.40
37:BC:115:ALA:CB	37:BC:120:MET:CE	2.95	0.40
1:AA:1389:C:H2'	1:AA:1390:U:O4'	2.21	0.40
19:AS:27:GLU:HB3	19:AS:28:LYS:H	1.37	0.40
35:BA:2749:A:OP2	35:BA:2751:G:H5''	2.20	0.40
35:BA:1479:G:H2'	35:BA:1480:G:H8	1.87	0.40
35:BA:40:C:C4	35:BA:41:C:N4	2.88	0.40
1:AA:118:U:O4	1:AA:289:G:H4'	2.21	0.40
23:AX:13:A:N3	23:AX:13:A:H2'	2.36	0.40
35:BA:790:C:O2'	35:BA:791:C:OP1	2.29	0.40
24:AY:16:PHE:CZ	24:AY:86:LEU:HB2	2.56	0.40
24:AY:403:LEU:HA	24:AY:461:ALA:HA	2.03	0.40
1:AA:1407:C:N4	1:AA:1408:A:N6	2.69	0.40
35:BA:1845:G:C4	35:BA:1846:G:C8	3.10	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2060:A:C2	35:BA:2502:G:C5	3.09	0.40
35:BA:2359:C:C6	35:BA:2360:A:N7	2.89	0.40
35:BA:2360:A:O2'	35:BA:2361:A:C8	2.75	0.40
35:BA:239:U:C4	35:BA:240:G:C6	3.09	0.40
35:BA:2457:U:C2'	35:BA:2458:G:H5'	2.52	0.40
32:B7:10:ARG:NE	35:BA:770:G:H5''	2.37	0.40
35:BA:835:A:N6	35:BA:836:G:C6	2.89	0.40
35:BA:950:G:C4	35:BA:951:C:C6	3.09	0.40
38:BD:171:ASP:O	38:BD:172:TYR:HD1	2.03	0.40
38:BD:175:LEU:HA	38:BD:175:LEU:HD22	1.82	0.40
39:BE:116:VAL:CG2	39:BE:122:PHE:CG	3.04	0.40
39:BE:48:GLN:CD	39:BE:78:LEU:HD13	2.42	0.40
40:BF:80:ALA:O	40:BF:81:PRO:C	2.57	0.40
45:BN:58:ASP:O	45:BN:60:ILE:HG13	2.22	0.40
52:BU:46:ALA:O	52:BU:47:TYR:C	2.59	0.40
52:BU:59:ARG:C	52:BU:61:TRP:N	2.72	0.40
35:BA:1676:A:C2'	35:BA:1677:A:C8	2.89	0.40
1:AA:739:C:C2	1:AA:740:U:C6	3.10	0.40
1:AA:587:G:N2	1:AA:755:G:C4	2.90	0.40
17:AQ:27:PHE:HA	17:AQ:28:PRO:HD3	1.81	0.40
23:AX:14:A:H2'	23:AX:15:A:C4'	2.51	0.40
34:B9:10:ILE:HD12	34:B9:14:CYS:SG	2.61	0.40
34:B9:23:VAL:HG21	34:B9:36:GLN:HE22	1.87	0.40
35:BA:2474:C:H5'	35:BA:2475:C:OP2	2.21	0.40
1:AA:1082:G:C2'	1:AA:1083:U:H5'	2.51	0.40
33:B8:10:ALA:O	33:B8:13:ARG:CG	2.65	0.40
35:BA:2245:U:C5'	35:BA:2246:G:H5'	2.52	0.40
35:BA:2323:G:C6	35:BA:2324:C:C4	3.09	0.40
35:BA:916:G:HO2'	35:BA:917:A:H5''	1.83	0.40
48:BQ:120:ILE:O	48:BQ:121:ALA:C	2.60	0.40
57:BZ:136:PHE:O	57:BZ:137:ILE:HD13	2.21	0.40
57:BZ:5:LEU:HB3	57:BZ:59:LEU:HD23	2.03	0.40
35:BA:2588:G:N7	35:BA:2589:A:N7	2.69	0.40
13:AM:96:LEU:C	13:AM:110:ARG:HE	2.24	0.40
1:AA:1148:U:O2'	1:AA:1149:C:H5'	2.21	0.40
1:AA:1149:C:C4	1:AA:1150:U:C4	3.10	0.40
1:AA:1197:G:OP1	1:AA:1198:G:OP2	2.39	0.40
1:AA:1204:A:C2	1:AA:1205:U:C2	3.09	0.40
1:AA:1205:U:H2'	1:AA:1205:U:O2	2.21	0.40
3:AC:50:ALA:HB2	3:AC:75:VAL:HB	2.04	0.40
1:AA:1216:G:OP1	14:AN:2:ALA:HB3	2.21	0.40
19:AS:47:HIS:NE2	29:B4:47:GLN:CB	2.83	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:480:A:OP2	56:BY:46:LYS:NZ	2.46	0.40
19:AS:49:ILE:O	19:AS:58:VAL:O	2.39	0.40
35:BA:1091:G:H2'	35:BA:1092:C:C6	2.56	0.40
35:BA:1485:G:N2	35:BA:1505:C:C6	2.82	0.40
49:BR:97:VAL:O	49:BR:98:LEU:HD23	2.22	0.40
1:AA:688:G:H8	1:AA:688:G:H5''	1.86	0.40
57:BZ:140:ASP:C	57:BZ:141:VAL:HG23	2.40	0.40
41:BG:106:LEU:HD21	41:BG:157:ILE:CD1	2.51	0.40
41:BG:38:VAL:HA	41:BG:93:THR:HA	2.03	0.40
40:BF:110:LEU:CD1	40:BF:110:LEU:C	2.89	0.40
50:BS:29:PHE:O	50:BS:29:PHE:HD1	2.04	0.40
5:AE:35:GLY:HA3	5:AE:40:ARG:O	2.22	0.40
1:AA:1437:C:O2'	1:AA:1438:G:H5'	2.22	0.40
31:B6:32:ASN:O	31:B6:33:LYS:HB2	2.21	0.40
35:BA:2325:G:C6	35:BA:2326:C:C4	3.09	0.40
26:B1:62:VAL:HG22	26:B1:63:ALA:N	2.36	0.40
36:BB:23:G:H2'	36:BB:24:G:C8	2.56	0.40
35:BA:1858:G:C6	35:BA:1883:G:C5	3.09	0.40
1:AA:188:C:H4'	20:AT:89:ARG:NH1	2.36	0.40
20:AT:73:HIS:CG	20:AT:74:LYS:HD3	2.56	0.40
1:AA:1357:A:O2'	14:AN:34:TYR:HE1	2.03	0.40
35:BA:2208:A:H1'	35:BA:2219:G:N7	2.33	0.40
1:AA:1128:C:H41	1:AA:1139:G:H2'	1.86	0.40
10:AJ:4:ILE:CD1	10:AJ:4:ILE:N	2.84	0.40
32:B7:47:ARG:HE	32:B7:47:ARG:HB2	1.71	0.40
54:BW:73:ALA:HB3	54:BW:106:ILE:CG1	2.52	0.40
28:B3:35:ARG:HB2	28:B3:35:ARG:HH11	1.86	0.40
1:AA:172:A:N7	1:AA:174:C:C5	2.89	0.40
13:AM:3:ARG:O	13:AM:4:ILE:CG1	2.69	0.40
1:AA:1250:A:C2	1:AA:1370:G:H1'	2.57	0.40
1:AA:274:A:H4'	1:AA:275:G:OP1	2.20	0.40
2:AB:139:LYS:O	2:AB:143:GLU:HG3	2.21	0.40
35:BA:722:A:H2'	35:BA:723:G:H8	1.86	0.40
35:BA:122:G:C4	35:BA:123:G:C8	3.09	0.40
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.57	0.40
22:AV:11:A:C2	22:AV:12:G:H1'	2.56	0.40
35:BA:2376:A:O2'	35:BA:2377:A:H5'	2.21	0.40
35:BA:2801(A):A:C3'	35:BA:2802:G:H5'	2.50	0.40
1:AA:1020:U:O2'	1:AA:1021:G:H5'	2.20	0.40
1:AA:32:A:OP1	1:AA:398:C:C1'	2.64	0.40
5:AE:48:ALA:O	5:AE:49:PRO:C	2.58	0.40
35:BA:1275:A:N6	49:BR:16:HIS:CA	2.78	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:75:HIS:CD2	12:AL:77:LEU:N	2.88	0.40
4:AD:107:ARG:HH12	4:AD:114:ARG:HH22	1.67	0.40
35:BA:2132:U:O4	37:BC:5:LYS:HG2	2.20	0.40
35:BA:302:C:N4	35:BA:303:U:O4	2.55	0.40
1:AA:448:A:OP2	1:AA:485:G:N1	2.54	0.40
11:AK:34:ASP:C	11:AK:34:ASP:OD1	2.59	0.40
35:BA:2301:C:C2	35:BA:2302:G:C8	3.10	0.40
38:BD:28:GLU:H	38:BD:29:PRO:HD2	1.86	0.40
35:BA:712:G:C2'	35:BA:713:G:H5'	2.51	0.40
37:BC:96:GLY:C	37:BC:97:GLU:HG2	2.42	0.40
35:BA:1075:C:N4	35:BA:1076:C:N4	2.68	0.40
24:AY:231:LEU:HA	24:AY:234:VAL:HG23	2.03	0.40
24:AY:280:MET:HB3	24:AY:281:PRO:HD2	2.04	0.40
24:AY:286:THR:OG1	24:AY:287:ARG:N	2.54	0.40
24:AY:395:PRO:CA	24:AY:440:ALA:O	2.69	0.40
37:BC:103:ILE:HG23	37:BC:107:TRP:CE2	2.56	0.40
1:AA:808:C:C2	1:AA:809:G:C8	3.09	0.40
35:BA:1022:G:N7	35:BA:1140:C:C4	2.89	0.40
35:BA:999:U:C5	35:BA:1154:G:C4	2.99	0.40
35:BA:1265:A:H2	35:BA:1266:G:N2	2.18	0.40
35:BA:750:A:OP1	35:BA:1615:C:N4	2.54	0.40
35:BA:1654:A:H2'	35:BA:1655:A:C8	2.55	0.40
35:BA:1656:C:H2'	35:BA:1657:C:C5	2.57	0.40
35:BA:1926:U:N3	35:BA:1929:G:N1	2.68	0.40
35:BA:2461:C:H1'	35:BA:2492:U:N3	2.37	0.40
35:BA:531:C:N3	35:BA:563:G:C8	2.90	0.40
35:BA:557:U:H5'	45:BN:111:PRO:HB2	2.04	0.40
35:BA:1566:A:OP1	38:BD:211:ARG:NH1	2.54	0.40
38:BD:80:ALA:HB3	38:BD:94:LEU:HD13	2.04	0.40
35:BA:1817:G:OP1	38:BD:88:ARG:NH2	2.54	0.40
40:BF:37:VAL:O	40:BF:39:TRP:N	2.54	0.40
45:BN:68:GLU:HG3	45:BN:88:GLU:HG3	2.04	0.40
51:BT:113:LYS:HA	51:BT:113:LYS:HD3	1.74	0.40
52:BU:75:ASN:O	52:BU:76:TYR:O	2.39	0.40
54:BW:52:GLU:OE1	54:BW:52:GLU:N	2.55	0.40
35:BA:1952:A:H2'	35:BA:1953:A:C8	2.56	0.40
46:BO:24:VAL:CG2	46:BO:30:ALA:O	2.67	0.40
15:AO:62:GLN:HA	15:AO:65:ARG:HD2	2.04	0.40
15:AO:62:GLN:O	15:AO:66:LEU:HG	2.21	0.40
18:AR:69:THR:O	18:AR:72:ARG:N	2.55	0.40
53:BV:6:LYS:O	53:BV:6:LYS:HG2	2.20	0.40
53:BV:19:LYS:HB2	53:BV:96:ILE:CD1	2.51	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1413:A:N6	1:AA:1488:G:C6	2.89	0.40
2:AB:19:HIS:O	2:AB:20:GLU:C	2.59	0.40
2:AB:55:PHE:CE1	2:AB:218:ALA:CB	3.04	0.40
35:BA:2631:G:H1	39:BE:61:ARG:NH1	2.18	0.40
35:BA:2432:A:C2	35:BA:2433:A:C4	3.10	0.40
33:B8:13:ARG:CD	47:BP:61:ARG:HD3	2.46	0.40
48:BQ:121:ALA:O	48:BQ:125:LEU:CD2	2.69	0.40
57:BZ:28:MET:O	57:BZ:28:MET:SD	2.80	0.40
57:BZ:23:LYS:HD3	57:BZ:38:TYR:CZ	2.56	0.40
57:BZ:40:ASP:C	57:BZ:40:ASP:OD1	2.60	0.40
12:AL:93:LEU:HB2	12:AL:96:VAL:CG2	2.51	0.40
1:AA:1059:C:H2'	1:AA:1060:C:H6	1.85	0.40
3:AC:67:THR:HG1	3:AC:102:ASN:HD22	1.64	0.40
35:BA:334:C:P	35:BA:335:C:N4	2.94	0.40
56:BY:26:LYS:HB3	56:BY:27:VAL:H	1.57	0.40
27:B2:13:ALA:HA	27:B2:16:LEU:HB2	2.03	0.40
27:B2:29:LYS:HD3	27:B2:57:ILE:CD1	2.51	0.40
35:BA:111:A:H2'	35:BA:112:U:H6	1.81	0.40
55:BX:54:VAL:HG12	55:BX:54:VAL:O	2.20	0.40
9:AI:42:ARG:NH1	9:AI:42:ARG:HG2	2.37	0.40
35:BA:1069:A:C2	35:BA:1096:A:H4'	2.57	0.40
4:AD:3:ARG:NH1	4:AD:118:ARG:HD3	2.36	0.40
4:AD:92:VAL:O	4:AD:96:LEU:CD1	2.66	0.40
4:AD:96:LEU:HA	4:AD:99:SER:OG	2.21	0.40
49:BR:92:GLY:O	49:BR:93:GLY:C	2.60	0.40
35:BA:2318:G:H2'	35:BA:2319:G:OP2	2.20	0.40
4:AD:67:ILE:O	4:AD:67:ILE:CG2	2.66	0.40
1:AA:688:G:N2	1:AA:699:C:O2	2.54	0.40
1:AA:1342:C:H4'	9:AI:125:TYR:HB3	2.02	0.40
45:BN:131:GLN:HE22	45:BN:134:ARG:HG2	1.85	0.40
45:BN:133:GLN:HG2	45:BN:134:ARG:N	2.36	0.40
35:BA:548:A:H2'	35:BA:549:G:H5'	2.03	0.40
41:BG:45:GLU:HA	41:BG:47:LYS:HE2	2.02	0.40
5:AE:107:ARG:O	5:AE:110:LEU:N	2.54	0.40
1:AA:1436:U:O5'	1:AA:1436:U:H6	2.04	0.40
1:AA:353:A:C2'	1:AA:354:G:OP2	2.70	0.40
42:BH:41:MET:O	42:BH:42:ARG:HB2	2.21	0.40
18:AR:31:LEU:N	18:AR:31:LEU:HD23	2.35	0.40
50:BS:53:SER:H	50:BS:55:ALA:CB	2.33	0.40
50:BS:89:ARG:CG	50:BS:92:TYR:CA	3.00	0.40
35:BA:1494:A:N3	35:BA:1494:A:C5'	2.82	0.40
48:BQ:10:ARG:HH11	48:BQ:10:ARG:CB	2.14	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:B0:80:HIS:CD2	25:B0:80:HIS:H	2.38	0.40
1:AA:1133:G:C2	1:AA:1142:G:N1	2.89	0.40
10:AJ:34:VAL:CG1	10:AJ:35:SER:N	2.85	0.40
38:BD:68:LYS:CB	38:BD:70:TRP:CZ3	3.04	0.40
1:AA:437:U:HO2'	4:AD:123:HIS:CE1	2.39	0.40
13:AM:66:LEU:HD12	13:AM:66:LEU:N	2.36	0.40
6:AF:74:ASP:CB	6:AF:77:ARG:HH21	2.20	0.40
1:AA:918:A:H62	1:AA:919:A:N6	2.18	0.40
2:AB:136:VAL:O	2:AB:136:VAL:HG12	2.21	0.40
1:AA:1351:U:H2'	1:AA:1352:C:H6	1.86	0.40
36:BB:116:G:H2'	36:BB:117:G:C8	2.57	0.40
35:BA:65:C:H42	35:BA:89:G:H1	1.70	0.40
12:AL:108:ALA:O	12:AL:109:GLY:O	2.39	0.40
24:AY:332:ARG:HA	24:AY:339:ASP:OD1	2.21	0.40
1:AA:944:G:N2	1:AA:1338:G:C8	2.89	0.40
2:AB:92:TYR:C	2:AB:93:VAL:HG12	2.40	0.40
15:AO:14:GLU:HG2	15:AO:15:PHE:CE1	2.57	0.40
1:AA:349:A:H2'	1:AA:350:G:C8	2.57	0.40
1:AA:796:C:C2	1:AA:797:C:C6	3.09	0.40
4:AD:163:GLU:O	4:AD:166:LYS:HG3	2.22	0.40
1:AA:683:G:C5	1:AA:684:A:C5	3.10	0.40
1:AA:423:G:H2'	1:AA:424:G:H5'	2.04	0.40
10:AJ:45:ARG:HH11	10:AJ:45:ARG:HG3	1.86	0.40
35:BA:1476:C:H3'	35:BA:1476:C:H6	1.87	0.40
1:AA:932:C:H5'	7:AG:4:ARG:HG3	2.02	0.40
49:BR:32:GLY:O	49:BR:115:GLU:HA	2.21	0.40
35:BA:1234:U:H2'	35:BA:1235:G:O4'	2.22	0.40
24:AY:263:PHE:CD2	24:AY:264:GLY:N	2.86	0.40
24:AY:305:ALA:CB	24:AY:422:GLU:HB3	2.52	0.40
30:B5:13:LYS:C	30:B5:16:ARG:H	2.25	0.40
30:B5:9:LYS:O	30:B5:11:THR:N	2.54	0.40
32:B7:5:TRP:CZ3	35:BA:464:U:H4'	2.55	0.40
33:B8:4:MET:O	33:B8:62:LEU:CD1	2.66	0.40
35:BA:1286:A:N6	35:BA:1289:C:C2	2.89	0.40
35:BA:1823:G:C6	35:BA:1824:G:N7	2.89	0.40
35:BA:1973:G:C6	35:BA:1974:C:C4	3.09	0.40
32:B7:39:ARG:HD3	35:BA:458:G:O2'	2.22	0.40
35:BA:533:G:H5'	52:BU:24:TYR:CD1	2.57	0.40
35:BA:570:G:C6	35:BA:2030:A:C2	3.09	0.40
35:BA:647:G:C6	35:BA:648:G:C5	3.10	0.40
35:BA:660:G:C6	35:BA:661:C:C4	3.10	0.40
35:BA:739:G:H1'	35:BA:740:U:H5	1.87	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:691:C:H5'	38:BD:218:ARG:NH1	2.37	0.40
39:BE:137:HIS:HB3	39:BE:138:PRO:HD2	2.01	0.40
35:BA:2572:A:C8	39:BE:144:ARG:HG2	2.57	0.40
47:BP:125:VAL:O	47:BP:145:PRO:HD2	2.22	0.40
47:BP:16:ARG:CD	47:BP:17:LYS:N	2.85	0.40
47:BP:96:THR:O	47:BP:99:LEU:HB2	2.21	0.40
51:BT:44:ASP:O	51:BT:45:PHE:HB2	2.22	0.40
51:BT:50:ILE:N	51:BT:50:ILE:CD1	2.84	0.40
51:BT:57:PHE:C	51:BT:57:PHE:CD1	2.91	0.40
52:BU:112:ARG:HH12	53:BV:46:VAL:CB	2.34	0.40
52:BU:112:ARG:HH22	53:BV:46:VAL:CG1	2.35	0.40
52:BU:59:ARG:NH1	52:BU:59:ARG:HG2	2.37	0.40
35:BA:2760:C:H3'	35:BA:2761:G:H5''	2.04	0.40
8:AH:56:LYS:HA	8:AH:57:PRO:HD2	1.43	0.40
15:AO:26:GLU:HG2	15:AO:26:GLU:H	1.58	0.40
18:AR:55:ARG:HD2	18:AR:55:ARG:HA	1.89	0.40
2:AB:102:LEU:O	2:AB:105:PHE:CA	2.70	0.40
35:BA:2787:C:O2	39:BE:61:ARG:CD	2.68	0.40
35:BA:2431:U:C4	35:BA:2434:A:OP2	2.75	0.40
47:BP:59:LEU:CA	47:BP:61:ARG:NE	2.74	0.40
35:BA:909:A:C2	35:BA:912:C:C2	3.09	0.40
57:BZ:24:LEU:C	57:BZ:24:LEU:HD23	2.42	0.40
57:BZ:28:MET:O	57:BZ:29:TYR:CB	2.68	0.40
57:BZ:99:TYR:CE1	57:BZ:125:LEU:CD1	3.03	0.40
22:AV:47:U:H2'	22:AV:50:U:OP1	2.21	0.40
22:AV:57:A:O5'	22:AV:57:A:H8	2.04	0.40
1:AA:363:A:N1	1:AA:364:A:C2	2.90	0.40
1:AA:1151:A:O2'	1:AA:1152:A:H8	2.04	0.40
3:AC:157:ILE:HD12	3:AC:164:ARG:HB2	2.03	0.40
3:AC:5:ILE:HD13	3:AC:5:ILE:H	1.87	0.40
14:AN:35:ARG:O	14:AN:36:PHE:C	2.58	0.40
35:BA:77:C:O5'	35:BA:77:C:H6	2.04	0.40
35:BA:85:G:C6	35:BA:98:G:C2	3.10	0.40
4:AD:32:ALA:O	4:AD:33:MET:C	2.60	0.40
35:BA:310:A:O2'	35:BA:311:A:C3'	2.69	0.40
5:AE:51:VAL:O	5:AE:52:PRO:C	2.60	0.40
37:BC:68:LEU:HD13	37:BC:70:LYS:HB3	2.03	0.40
29:B4:27:THR:HG23	41:BG:143:GLU:OE1	2.22	0.40
41:BG:151:ALA:HB3	41:BG:153:ARG:HH11	1.85	0.40
41:BG:83:ARG:CB	41:BG:84:LYS:HD2	2.49	0.40
5:AE:7:GLU:O	5:AE:8:GLU:CB	2.68	0.40
31:B6:26:ASN:O	31:B6:27:LYS:CB	2.69	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BA:2284:C:C4	35:BA:2285:C:C5	3.10	0.40
1:AA:795:C:H5'	1:AA:1522:U:OP1	2.21	0.40
38:BD:123:ALA:HA	38:BD:124:PRO:HD3	1.34	0.40
35:BA:1556:C:C2'	35:BA:1557:C:H5'	2.52	0.40
5:AE:70:PRO:CD	5:AE:142:LEU:HB3	2.50	0.40
5:AE:91:LEU:CD1	5:AE:120:THR:CB	2.99	0.40
34:B9:16:VAL:HG11	35:BA:1032:A:C4'	2.48	0.40
35:BA:2124:G:H3'	35:BA:2125:G:C8	2.53	0.40
35:BA:183:C:O2	35:BA:215:G:N2	2.54	0.40
1:AA:1001(A):G:C8	1:AA:1002:G:N7	2.90	0.40
1:AA:1029:C:O2'	1:AA:1030:C:C5	2.67	0.40
35:BA:510:C:O2'	35:BA:511:U:H5'	2.21	0.40
13:AM:30:ALA:C	13:AM:32:GLU:N	2.74	0.40
57:BZ:19:ARG:C	57:BZ:21:ALA:N	2.73	0.40
1:AA:234:C:O2'	1:AA:235:C:H5'	2.22	0.40
35:BA:372:G:O3'	35:BA:373:U:C6	2.75	0.40
47:BP:147:LEU:HG	47:BP:148:LEU:H	1.86	0.40
35:BA:269:U:C5	35:BA:271(Y):U:C6	3.09	0.40
1:AA:1241:G:C6	1:AA:1242:C:N4	2.89	0.40
6:AF:61:LEU:HD22	6:AF:63:TYR:OH	2.21	0.40
1:AA:517:G:H4'	1:AA:519:C:C4	2.57	0.40
35:BA:1112:G:H2'	35:BA:1113:U:C6	2.56	0.40
1:AA:1270:C:O2'	1:AA:1271:G:H5'	2.20	0.40
20:AT:31:SER:O	20:AT:32:ALA:C	2.58	0.40
35:BA:543:C:N3	35:BA:551:G:C2	2.90	0.40
11:AK:106:LYS:O	11:AK:107:SER:HB3	2.19	0.40

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

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:62:ALA:O	37:BC:30:LYS:O[2.656]	2.18	0.02

## 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%)	110 (47%)	62 (27%)	61 (26%)	0	2
3	AC	205/239 (86%)	134 (65%)	39 (19%)	32 (16%)	0	8
4	AD	206/209 (99%)	131 (64%)	51 (25%)	24 (12%)	1	15
5	AE	149/162 (92%)	108 (72%)	31 (21%)	10 (7%)	2	36
6	AF	99/101 (98%)	67 (68%)	24 (24%)	8 (8%)	1	28
7	AG	153/156 (98%)	85 (56%)	44 (29%)	24 (16%)	0	8
8	AH	136/138 (99%)	94 (69%)	26 (19%)	16 (12%)	1	15
9	AI	125/128 (98%)	78 (62%)	28 (22%)	19 (15%)	0	8
10	AJ	97/105 (92%)	60 (62%)	23 (24%)	14 (14%)	0	10
11	AK	117/129 (91%)	72 (62%)	32 (27%)	13 (11%)	1	17
12	AL	123/135 (91%)	66 (54%)	33 (27%)	24 (20%)	0	4
13	AM	123/126 (98%)	63 (51%)	31 (25%)	29 (24%)	0	2
14	AN	58/61 (95%)	33 (57%)	12 (21%)	13 (22%)	0	2
15	AO	86/89 (97%)	59 (69%)	21 (24%)	6 (7%)	2	34
16	AP	82/88 (93%)	55 (67%)	17 (21%)	10 (12%)	1	14
17	AQ	98/105 (93%)	82 (84%)	10 (10%)	6 (6%)	2	38
18	AR	68/88 (77%)	37 (54%)	18 (26%)	13 (19%)	0	4
19	AS	77/93 (83%)	42 (54%)	18 (23%)	17 (22%)	0	3
20	AT	97/106 (92%)	46 (47%)	32 (33%)	19 (20%)	0	4
21	AU	23/27 (85%)	11 (48%)	8 (35%)	4 (17%)	0	6
24	AY	488/529 (92%)	314 (64%)	88 (18%)	86 (18%)	0	6
25	B0	82/85 (96%)	64 (78%)	9 (11%)	9 (11%)	1	17
26	B1	92/98 (94%)	63 (68%)	16 (17%)	13 (14%)	0	10
27	B2	69/72 (96%)	38 (55%)	22 (32%)	9 (13%)	0	13
28	B3	58/60 (97%)	38 (66%)	15 (26%)	5 (9%)	1	26
29	B4	43/71 (61%)	26 (60%)	9 (21%)	8 (19%)	0	5
30	B5	57/60 (95%)	34 (60%)	11 (19%)	12 (21%)	0	3
31	B6	48/54 (89%)	18 (38%)	16 (33%)	14 (29%)	0	1
32	B7	47/49 (96%)	29 (62%)	10 (21%)	8 (17%)	0	6
33	B8	62/65 (95%)	30 (48%)	16 (26%)	16 (26%)	0	2
34	B9	35/37 (95%)	19 (54%)	10 (29%)	6 (17%)	0	6

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
37	BC	226/229 (99%)	158 (70%)	39 (17%)	29 (13%)	0	13
38	BD	273/276 (99%)	195 (71%)	46 (17%)	32 (12%)	1	15
39	BE	203/206 (98%)	99 (49%)	48 (24%)	56 (28%)	0	1
40	BF	206/210 (98%)	134 (65%)	35 (17%)	37 (18%)	0	5
41	BG	179/182 (98%)	95 (53%)	47 (26%)	37 (21%)	0	4
42	BH	154/180 (86%)	111 (72%)	23 (15%)	20 (13%)	0	13
43	BJ	1/173 (1%)	1 (100%)	0	0	100	100
45	BN	137/140 (98%)	78 (57%)	28 (20%)	31 (23%)	0	2
46	BO	120/122 (98%)	84 (70%)	23 (19%)	13 (11%)	1	18
47	BP	144/150 (96%)	70 (49%)	37 (26%)	37 (26%)	0	2
48	BQ	139/141 (99%)	79 (57%)	40 (29%)	20 (14%)	0	10
49	BR	115/118 (98%)	69 (60%)	27 (24%)	19 (16%)	0	7
50	BS	97/112 (87%)	41 (42%)	23 (24%)	33 (34%)	0	0
51	BT	136/146 (93%)	75 (55%)	31 (23%)	30 (22%)	0	3
52	BU	115/118 (98%)	59 (51%)	27 (24%)	29 (25%)	0	2
53	BV	99/101 (98%)	56 (57%)	21 (21%)	22 (22%)	0	3
54	BW	111/113 (98%)	72 (65%)	25 (22%)	14 (13%)	0	14
55	BX	91/96 (95%)	55 (60%)	27 (30%)	9 (10%)	1	21
56	BY	99/110 (90%)	33 (33%)	36 (36%)	30 (30%)	0	1
57	BZ	174/206 (84%)	88 (51%)	48 (28%)	38 (22%)	0	3
All	All	6255/6850 (91%)	3758 (60%)	1413 (23%)	1084 (17%)	0	6

All (1084) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	9	GLU
2	AB	15	VAL
2	AB	18	GLY
2	AB	19	HIS
2	AB	24	TRP
2	AB	31	TYR
2	AB	75	LYS
2	AB	93	VAL
2	AB	103	THR
2	AB	105	PHE

Continued on next page...



*Continued from previous page...*

Mol	Chain	Res	Type
2	AB	106	LYS
2	AB	147	LYS
2	AB	153	ARG
2	AB	181	PHE
2	AB	190	THR
2	AB	194	PRO
2	AB	195	ASP
2	AB	209	ARG
2	AB	213	LEU
2	AB	223	ILE
2	AB	229	VAL
2	AB	236	TYR
2	AB	238	LEU
3	AC	12	LEU
3	AC	49	SER
3	AC	54	ARG
3	AC	55	VAL
3	AC	120	VAL
3	AC	121	ALA
3	AC	129	ALA
3	AC	154	SER
3	AC	207	VAL
4	AD	4	TYR
4	AD	5	ILE
4	AD	13	ARG
4	AD	14	ARG
4	AD	30	LYS
4	AD	32	ALA
4	AD	43	HIS
4	AD	125	HIS
4	AD	144	ASP
4	AD	186	LEU
4	AD	189	PRO
5	AE	48	ALA
5	AE	64	ARG
5	AE	65	ASN
6	AF	31	GLU
6	AF	32	ASN
6	AF	64	GLN
7	AG	120	ILE
8	AH	6	ILE
8	AH	10	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	AH	35	ILE
8	AH	91	ARG
9	AI	34	ASN
9	AI	58	ARG
9	AI	89	ASN
9	AI	95	LYS
9	AI	119	ALA
10	AJ	32	ALA
10	AJ	55	LYS
10	AJ	79	ARG
10	AJ	90	LEU
12	AL	7	ILE
12	AL	18	VAL
12	AL	27	LEU
12	AL	41	ARG
12	AL	42	THR
12	AL	47	LYS
12	AL	71	PRO
12	AL	92	ASP
12	AL	94	PRO
12	AL	115	LYS
12	AL	120	TYR
12	AL	122	THR
13	AM	4	ILE
13	AM	7	VAL
13	AM	12	ASN
13	AM	28	ALA
13	AM	44	ARG
13	AM	53	VAL
13	AM	60	VAL
13	AM	71	ARG
13	AM	83	ASP
13	AM	91	ARG
13	AM	104	ARG
13	AM	124	PRO
13	AM	125	ARG
14	AN	14	PRO
14	AN	15	LYS
14	AN	16	PHE
14	AN	26	ARG
14	AN	41	ARG
14	AN	56	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	AN	58	LYS
15	AO	26	GLU
16	AP	28	ARG
16	AP	45	THR
17	AQ	4	LYS
17	AQ	14	LYS
17	AQ	27	PHE
18	AR	45	SER
18	AR	60	ALA
19	AS	5	LEU
19	AS	9	VAL
19	AS	61	TYR
19	AS	62	ILE
19	AS	76	PRO
20	AT	50	GLU
20	AT	61	SER
20	AT	97	ALA
20	AT	98	PRO
20	AT	99	LEU
21	AU	6	ARG
24	AY	13	ARG
24	AY	23	ASP
24	AY	73	SER
24	AY	88	ASP
24	AY	90	PRO
24	AY	104	THR
24	AY	106	VAL
24	AY	137	ILE
24	AY	154	LEU
24	AY	163	LYS
24	AY	201	ILE
24	AY	208	LYS
24	AY	210	LEU
24	AY	237	ALA
24	AY	248	ALA
24	AY	283	GLN
24	AY	304	GLN
24	AY	305	ALA
24	AY	306	ASN
24	AY	309	PRO
24	AY	315	VAL
24	AY	317	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	327	LYS
24	AY	337	ALA
24	AY	343	SER
24	AY	357	GLU
24	AY	390	ILE
24	AY	392	ASN
24	AY	393	PHE
24	AY	431	ILE
24	AY	444	LEU
24	AY	499	ASP
25	B0	20	ARG
25	B0	42	GLY
26	B1	30	VAL
26	B1	52	ARG
26	B1	54	ALA
26	B1	64	ALA
26	B1	83	GLU
26	B1	85	LEU
26	B1	91	LYS
27	B2	17	SER
27	B2	50	ILE
27	B2	58	ALA
28	B3	16	PRO
29	B4	26	SER
30	B5	4	HIS
30	B5	20	ARG
30	B5	24	ALA
30	B5	25	LEU
30	B5	35	GLU
30	B5	49	CYS
31	B6	16	CYS
31	B6	17	LYS
31	B6	18	ARG
31	B6	20	ASN
31	B6	27	LYS
31	B6	28	ARG
31	B6	29	ASN
31	B6	46	HIS
31	B6	52	VAL
32	B7	2	LYS
32	B7	11	LYS
33	B8	7	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
33	B8	31	HIS
33	B8	33	ASN
33	B8	34	TRP
33	B8	35	GLN
33	B8	37	SER
33	B8	50	LEU
33	B8	55	ALA
33	B8	61	LEU
34	B9	11	CYS
34	B9	17	ILE
34	B9	31	LYS
34	B9	33	LYS
37	BC	58	VAL
37	BC	59	ARG
37	BC	71	GLN
37	BC	78	ALA
37	BC	95	GLY
37	BC	97	GLU
37	BC	105	ASP
37	BC	109	ASP
37	BC	135	GLY
37	BC	142	ALA
37	BC	149	ILE
37	BC	164	ARG
37	BC	167	LYS
37	BC	168	THR
37	BC	177	LYS
37	BC	181	PRO
37	BC	223	ARG
38	BD	19	ALA
38	BD	27	THR
38	BD	37	LEU
38	BD	41	GLY
38	BD	53	PHE
38	BD	64	ILE
38	BD	125	ILE
38	BD	211	ARG
38	BD	226	MET
39	BE	2	LYS
39	BE	4	ILE
39	BE	35	GLN
39	BE	45	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	BE	46	ALA
39	BE	56	PRO
39	BE	60	ASN
39	BE	64	LYS
39	BE	66	HIS
39	BE	69	LYS
39	BE	77	ILE
39	BE	82	ARG
39	BE	83	ASP
39	BE	88	GLY
39	BE	90	THR
39	BE	112	GLY
39	BE	113	PHE
39	BE	119	ARG
39	BE	127	ASP
39	BE	178	GLU
39	BE	189	PRO
39	BE	190	GLY
39	BE	191	PRO
40	BF	3	GLU
40	BF	7	TYR
40	BF	11	VAL
40	BF	14	PRO
40	BF	21	ALA
40	BF	24	LEU
40	BF	30	PRO
40	BF	82	ILE
40	BF	84	VAL
40	BF	91	GLY
40	BF	98	SER
41	BG	68	PRO
41	BG	74	LYS
41	BG	75	LYS
41	BG	80	PHE
41	BG	82	LEU
41	BG	86	MET
41	BG	96	ARG
41	BG	138	GLN
41	BG	143	GLU
42	BH	41	MET
42	BH	52	VAL
42	BH	84	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	BH	102	ALA
42	BH	126	PRO
42	BH	129	THR
42	BH	155	SER
42	BH	160	LYS
45	BN	7	LYS
45	BN	36	GLY
45	BN	45	ASN
45	BN	58	ASP
45	BN	60	ILE
45	BN	63	THR
45	BN	68	GLU
45	BN	119	ARG
45	BN	133	GLN
45	BN	136	GLU
45	BN	137	LYS
46	BO	5	GLN
46	BO	25	LEU
46	BO	29	ASN
46	BO	48	PRO
46	BO	88	ASN
47	BP	10	PRO
47	BP	21	ARG
47	BP	30	THR
47	BP	33	ARG
47	BP	34	GLY
47	BP	36	LYS
47	BP	39	LYS
47	BP	47	ASP
47	BP	55	ARG
47	BP	65	ARG
47	BP	67	MET
47	BP	70	GLN
47	BP	71	VAL
47	BP	108	LYS
48	BQ	4	PRO
48	BQ	25	ASP
48	BQ	51	ARG
48	BQ	54	MET
48	BQ	71	ASP
48	BQ	99	PRO
49	BR	6	SER

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
49	BR	105	ARG
49	BR	117	VAL
50	BS	23	ARG
50	BS	24	LEU
50	BS	35	ILE
50	BS	50	SER
50	BS	59	LYS
50	BS	62	LYS
50	BS	63	THR
50	BS	72	ALA
50	BS	79	ALA
50	BS	85	VAL
50	BS	88	ASP
50	BS	94	TYR
50	BS	97	ARG
51	BT	24	PRO
51	BT	32	TYR
51	BT	69	GLY
51	BT	80	SER
51	BT	84	GLN
51	BT	88	ILE
51	BT	107	ASP
51	BT	133	GLU
52	BU	12	ARG
52	BU	20	LEU
52	BU	91	ASP
52	BU	102	GLU
53	BV	16	PRO
53	BV	19	LYS
53	BV	27	ALA
53	BV	47	VAL
53	BV	50	PRO
53	BV	51	VAL
53	BV	53	GLU
53	BV	75	PHE
54	BW	22	ASP
54	BW	65	LEU
54	BW	67	ASP
54	BW	92	ARG
54	BW	99	ARG
54	BW	111	HIS
55	BX	4	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	BX	19	ALA
55	BX	62	LYS
56	BY	17	SER
56	BY	26	LYS
56	BY	37	VAL
56	BY	50	ARG
56	BY	53	PRO
56	BY	56	PRO
56	BY	64	GLU
56	BY	65	ALA
56	BY	66	PRO
56	BY	74	PRO
56	BY	76	CYS
56	BY	77	PRO
56	BY	78	ALA
56	BY	82	PRO
56	BY	91	GLU
56	BY	101	LYS
57	BZ	31	ARG
57	BZ	34	ASN
57	BZ	52	SER
57	BZ	80	ARG
57	BZ	125	LEU
57	BZ	163	LEU
57	BZ	177	PRO
2	AB	13	ALA
2	AB	54	THR
2	AB	79	ASP
2	AB	178	ARG
2	AB	211	ILE
2	AB	225	ALA
2	AB	234	PRO
3	AC	32	LEU
3	AC	82	GLU
3	AC	84	ILE
3	AC	96	GLY
3	AC	110	ASN
3	AC	141	VAL
3	AC	143	GLU
3	AC	153	VAL
3	AC	156	ARG
4	AD	9	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	AD	35	ARG
4	AD	37	PRO
4	AD	47	ARG
4	AD	99	SER
4	AD	153	ARG
4	AD	171	GLY
4	AD	172	PRO
5	AE	56	GLN
5	AE	63	ARG
6	AF	42	GLU
7	AG	19	GLY
7	AG	22	LEU
7	AG	50	ILE
7	AG	107	ALA
7	AG	113	GLU
7	AG	119	ARG
7	AG	137	LYS
7	AG	146	GLU
8	AH	20	TYR
8	AH	49	GLU
8	AH	107	LEU
9	AI	42	ARG
9	AI	54	ASP
9	AI	100	GLY
10	AJ	36	GLY
10	AJ	51	ARG
10	AJ	57	LYS
10	AJ	66	ARG
11	AK	44	SER
11	AK	62	GLN
11	AK	73	MET
11	AK	95	ILE
12	AL	29	GLY
12	AL	76	ASN
12	AL	89	ARG
12	AL	91	LYS
13	AM	5	ALA
13	AM	10	PRO
13	AM	29	ARG
13	AM	38	GLY
13	AM	42	ALA
13	AM	58	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
13	AM	69	GLU
13	AM	114	ARG
13	AM	117	VAL
14	AN	12	ARG
14	AN	20	ALA
14	AN	51	GLY
14	AN	59	ALA
15	AO	24	SER
15	AO	27	VAL
16	AP	13	HIS
16	AP	30	GLY
16	AP	43	LYS
16	AP	62	VAL
16	AP	76	GLN
17	AQ	34	LYS
17	AQ	78	GLU
18	AR	27	GLY
18	AR	42	ARG
18	AR	68	LYS
19	AS	10	PHE
19	AS	24	ALA
19	AS	27	GLU
19	AS	43	GLU
19	AS	73	GLU
20	AT	15	ARG
20	AT	32	ALA
20	AT	49	ALA
20	AT	94	ALA
20	AT	95	ALA
21	AU	5	ASP
21	AU	9	ARG
24	AY	12	LYS
24	AY	89	THR
24	AY	105	ALA
24	AY	108	CYS
24	AY	136	PRO
24	AY	143	LYS
24	AY	155	LEU
24	AY	196	GLY
24	AY	203	GLU
24	AY	209	GLY
24	AY	211	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	221	GLU
24	AY	249	GLY
24	AY	250	GLU
24	AY	285	ASP
24	AY	295	LYS
24	AY	310	LYS
24	AY	314	ARG
24	AY	324	LYS
24	AY	385	MET
24	AY	405	ASP
24	AY	413	LEU
24	AY	416	LEU
24	AY	417	VAL
24	AY	422	GLU
24	AY	424	ALA
24	AY	425	VAL
24	AY	507	SER
24	AY	523	PHE
25	B0	8	GLY
25	B0	41	ARG
25	B0	55	ARG
25	B0	73	GLY
26	B1	79	GLY
26	B1	92	LYS
26	B1	94	LEU
28	B3	3	ARG
28	B3	33	GLN
29	B4	36	CYS
30	B5	10	LYS
30	B5	51	TYR
31	B6	31	PRO
31	B6	43	CYS
32	B7	12	ARG
32	B7	22	MET
32	B7	23	ARG
33	B8	3	LYS
33	B8	9	GLY
33	B8	46	ARG
33	B8	51	ALA
33	B8	56	GLU
34	B9	36	GLN
37	BC	45	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	BC	51	PRO
37	BC	111	ASP
37	BC	126	LYS
38	BD	3	VAL
38	BD	11	PRO
38	BD	24	ILE
38	BD	25	THR
38	BD	35	LYS
38	BD	45	ASN
38	BD	52	ARG
38	BD	122	ASP
38	BD	170	GLY
38	BD	219	PRO
38	BD	236	GLY
38	BD	266	SER
38	BD	268	ARG
39	BE	19	ARG
39	BE	29	GLY
39	BE	33	VAL
39	BE	47	VAL
39	BE	68	ALA
39	BE	72	VAL
39	BE	86	PRO
39	BE	115	GLY
39	BE	130	GLY
39	BE	162	ALA
39	BE	172	VAL
39	BE	173	VAL
39	BE	179	GLU
39	BE	196	VAL
40	BF	10	PRO
40	BF	43	LYS
40	BF	54	ARG
40	BF	67	GLN
40	BF	85	GLY
40	BF	127	GLU
40	BF	132	VAL
40	BF	158	THR
40	BF	180	GLY
40	BF	204	ASN
41	BG	7	LEU
41	BG	29	TRP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	BG	52	ILE
41	BG	79	ASN
41	BG	84	LYS
41	BG	85	GLY
41	BG	87	PRO
41	BG	117	PHE
41	BG	118	ARG
41	BG	126	ASP
41	BG	129	GLY
41	BG	137	GLU
41	BG	172	LEU
41	BG	176	LEU
41	BG	181	ARG
42	BH	103	LEU
42	BH	104	GLU
42	BH	108	GLY
42	BH	118	PRO
42	BH	119	GLU
42	BH	151	ILE
42	BH	164	TYR
45	BN	8	GLN
45	BN	23	LEU
45	BN	24	GLY
45	BN	42	TRP
45	BN	46	VAL
45	BN	57	ALA
45	BN	76	SER
45	BN	98	VAL
45	BN	108	PRO
46	BO	27	GLY
46	BO	49	ARG
46	BO	68	GLU
46	BO	74	GLY
46	BO	90	GLN
47	BP	13	ASN
47	BP	32	THR
47	BP	51	PHE
47	BP	68	GLN
47	BP	81	GLN
47	BP	103	ALA
47	BP	104	GLY
47	BP	147	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
47	BP	148	LEU
48	BQ	55	VAL
48	BQ	56	ARG
48	BQ	57	HIS
48	BQ	67	ARG
48	BQ	106	VAL
48	BQ	107	ALA
48	BQ	112	GLU
49	BR	8	ARG
49	BR	21	TYR
49	BR	46	GLY
49	BR	68	ARG
49	BR	72	ASP
49	BR	82	GLU
49	BR	93	GLY
49	BR	102	GLU
50	BS	13	ARG
50	BS	32	LEU
50	BS	64	GLU
50	BS	90	GLY
50	BS	102	ALA
50	BS	103	GLU
51	BT	8	LYS
51	BT	12	SER
51	BT	28	VAL
51	BT	68	TYR
51	BT	78	LEU
51	BT	93	ARG
51	BT	97	ALA
51	BT	101	PHE
51	BT	111	ARG
51	BT	129	ARG
52	BU	9	VAL
52	BU	21	ALA
52	BU	27	LEU
52	BU	76	TYR
52	BU	92	ARG
52	BU	93	LYS
52	BU	97	ASP
52	BU	116	ALA
53	BV	20	LEU
53	BV	24	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
53	BV	44	LYS
53	BV	80	GLN
54	BW	11	ARG
54	BW	44	ALA
55	BX	12	VAL
55	BX	48	LYS
55	BX	87	GLN
55	BX	93	GLU
56	BY	29	GLU
56	BY	39	VAL
56	BY	80	GLY
56	BY	92	ASN
57	BZ	30	ASN
57	BZ	49	ARG
57	BZ	53	ILE
57	BZ	70	LEU
57	BZ	77	ASP
57	BZ	81	ARG
57	BZ	82	ARG
57	BZ	83	PRO
57	BZ	110	GLY
57	BZ	120	ILE
57	BZ	147	GLY
57	BZ	148	ASP
2	AB	27	LYS
2	AB	47	THR
2	AB	49	GLU
2	AB	57	PHE
2	AB	77	ALA
2	AB	130	ARG
2	AB	157	ARG
2	AB	171	ALA
2	AB	196	LEU
2	AB	216	SER
2	AB	224	GLN
2	AB	239	VAL
3	AC	93	LYS
6	AF	38	GLU
7	AG	43	PHE
7	AG	44	TYR
7	AG	53	LYS
7	AG	80	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	AG	88	PRO
7	AG	117	ALA
7	AG	136	LYS
7	AG	138	LYS
8	AH	51	VAL
8	AH	104	ARG
8	AH	105	ARG
9	AI	101	PHE
9	AI	127	LYS
10	AJ	59	SER
10	AJ	83	GLU
11	AK	72	ALA
11	AK	127	LYS
12	AL	10	LEU
12	AL	19	ARG
12	AL	25	PRO
12	AL	83	VAL
13	AM	14	ARG
13	AM	43	THR
13	AM	57	ARG
15	AO	25	THR
16	AP	67	THR
17	AQ	82	MET
18	AR	54	ARG
18	AR	55	ARG
19	AS	35	SER
19	AS	44	MET
19	AS	75	ALA
21	AU	24	ARG
24	AY	10	VAL
24	AY	80	HIS
24	AY	100	TYR
24	AY	197	LYS
24	AY	260	LEU
24	AY	344	ASP
24	AY	443	VAL
24	AY	527	ARG
25	B0	18	ALA
25	B0	75	LEU
26	B1	65	SER
27	B2	66	GLU
29	B4	9	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	B4	20	ASN
29	B4	28	LYS
30	B5	21	SER
30	B5	57	VAL
31	B6	6	ARG
33	B8	64	TYR
34	B9	2	LYS
37	BC	12	GLU
37	BC	72	VAL
37	BC	169	GLY
38	BD	23	GLU
38	BD	109	ASP
38	BD	144	ALA
38	BD	188	GLU
38	BD	243	GLY
39	BE	44	TYR
39	BE	52	LEU
39	BE	121	ASN
39	BE	124	GLY
39	BE	180	ASN
39	BE	185	LYS
39	BE	197	ILE
39	BE	204	ALA
40	BF	69	HIS
40	BF	94	PRO
40	BF	171	PRO
41	BG	112	PRO
41	BG	167	GLU
42	BH	111	HIS
45	BN	28	THR
45	BN	110	GLY
45	BN	129	PRO
46	BO	16	ALA
46	BO	51	ALA
47	BP	42	SER
47	BP	56	SER
47	BP	106	LEU
48	BQ	24	GLY
48	BQ	111	GLU
49	BR	4	LEU
49	BR	11	ASN
49	BR	51	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	BT	41	ARG
51	BT	45	PHE
51	BT	116	ALA
51	BT	132	LYS
52	BU	3	ARG
52	BU	14	HIS
52	BU	15	LYS
52	BU	36	ARG
52	BU	60	LEU
53	BV	23	GLU
53	BV	56	SER
53	BV	79	VAL
54	BW	6	ILE
54	BW	63	ASP
54	BW	74	ALA
55	BX	5	TYR
56	BY	13	VAL
56	BY	81	LYS
56	BY	95	LYS
57	BZ	29	TYR
57	BZ	79	ARG
57	BZ	141	VAL
57	BZ	150	LEU
57	BZ	166	SER
2	AB	48	MET
2	AB	125	PRO
2	AB	143	GLU
2	AB	146	GLN
2	AB	155	LEU
2	AB	161	ALA
2	AB	202	PRO
2	AB	204	ASN
2	AB	215	LEU
3	AC	31	HIS
3	AC	35	GLU
3	AC	83	ARG
3	AC	136	GLN
3	AC	181	ASN
4	AD	182	LYS
6	AF	73	ASN
7	AG	55	GLY
7	AG	60	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	AG	104	LEU
8	AH	5	PRO
8	AH	19	VAL
8	AH	33	GLU
8	AH	36	LEU
9	AI	24	GLY
9	AI	44	VAL
10	AJ	13	HIS
10	AJ	19	SER
10	AJ	92	THR
11	AK	65	ALA
11	AK	66	LEU
11	AK	91	ARG
11	AK	122	LYS
13	AM	41	PRO
13	AM	75	ALA
13	AM	116	THR
15	AO	88	ARG
16	AP	36	ILE
16	AP	46	PRO
18	AR	38	GLU
18	AR	57	GLY
19	AS	28	LYS
20	AT	11	SER
20	AT	19	SER
20	AT	92	LEU
24	AY	22	PRO
24	AY	369	ASN
24	AY	421	GLU
25	B0	47	PRO
26	B1	88	LYS
27	B2	18	PRO
27	B2	47	ASN
27	B2	68	ARG
27	B2	70	GLN
29	B4	8	LYS
30	B5	18	ALA
37	BC	76	ALA
37	BC	103	ILE
37	BC	217	THR
38	BD	29	PRO
38	BD	244	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	BE	53	PRO
39	BE	63	LEU
39	BE	203	LYS
40	BF	25	PRO
40	BF	31	HIS
40	BF	81	PRO
40	BF	122	LYS
40	BF	140	LEU
41	BG	8	LYS
41	BG	20	ILE
41	BG	43	LEU
41	BG	53	LEU
41	BG	70	VAL
41	BG	110	ALA
41	BG	163	ALA
42	BH	29	PRO
45	BN	59	LYS
45	BN	127	ASP
46	BO	95	GLY
47	BP	43	GLY
47	BP	146	VAL
48	BQ	40	ALA
48	BQ	53	ALA
49	BR	48	VAL
49	BR	106	GLY
50	BS	18	ILE
50	BS	27	SER
50	BS	71	ARG
50	BS	92	TYR
50	BS	98	VAL
50	BS	104	GLY
51	BT	4	GLY
51	BT	33	LYS
51	BT	91	ARG
51	BT	118	ARG
52	BU	5	LYS
52	BU	13	LYS
52	BU	50	ARG
52	BU	51	LYS
52	BU	109	LEU
52	BU	114	LYS
53	BV	18	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
53	BV	40	LEU
54	BW	25	ARG
55	BX	11	PRO
57	BZ	14	LYS
57	BZ	17	ALA
57	BZ	20	ARG
57	BZ	22	GLY
57	BZ	78	LYS
57	BZ	109	ALA
57	BZ	139	VAL
2	AB	107	THR
2	AB	124	SER
2	AB	191	ASP
2	AB	208	ILE
3	AC	39	ILE
3	AC	51	GLY
5	AE	57	LYS
5	AE	116	THR
6	AF	21	LEU
7	AG	9	VAL
7	AG	17	VAL
7	AG	155	ARG
8	AH	57	PRO
9	AI	12	GLU
9	AI	21	PRO
9	AI	33	PHE
9	AI	112	LYS
10	AJ	29	ARG
11	AK	25	TYR
14	AN	13	THR
14	AN	60	SER
18	AR	34	TYR
18	AR	36	ASN
19	AS	33	THR
20	AT	33	ILE
20	AT	34	LYS
20	AT	54	LYS
20	AT	63	ILE
24	AY	26	LYS
24	AY	65	GLN
24	AY	66	ARG
24	AY	78	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	150	ASP
27	B2	59	ARG
28	B3	2	PRO
31	B6	33	LYS
33	B8	11	LYS
37	BC	211	SER
38	BD	198	ASN
39	BE	62	PRO
39	BE	155	LYS
39	BE	187	ALA
40	BF	66	PRO
40	BF	164	ARG
40	BF	178	PRO
42	BH	158	HIS
47	BP	9	ASN
47	BP	19	VAL
47	BP	107	LYS
47	BP	141	ALA
47	BP	149	GLU
48	BQ	110	THR
49	BR	29	LEU
49	BR	103	ARG
50	BS	57	LYS
50	BS	60	GLY
50	BS	107	GLU
51	BT	39	ARG
52	BU	34	LYS
52	BU	77	SER
53	BV	29	PRO
53	BV	35	LEU
53	BV	48	GLY
56	BY	8	LYS
56	BY	38	ILE
56	BY	79	CYS
57	BZ	73	GLN
57	BZ	143	GLY
57	BZ	169	GLU
2	AB	158	LEU
3	AC	3	ASN
4	AD	28	SER
4	AD	188	LEU
5	AE	7	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	AF	72	VAL
9	AI	46	ALA
11	AK	106	LYS
12	AL	126	LYS
13	AM	31	LYS
18	AR	77	GLY
19	AS	12	ASP
19	AS	59	PRO
20	AT	20	LEU
24	AY	11	ALA
24	AY	121	ASP
24	AY	411	GLN
24	AY	488	LYS
26	B1	53	VAL
30	B5	16	ARG
32	B7	13	ALA
32	B7	24	THR
32	B7	38	GLY
39	BE	17	ASP
40	BF	79	GLY
40	BF	102	PRO
40	BF	133	ASN
42	BH	127	GLU
45	BN	53	VAL
45	BN	88	GLU
45	BN	94	HIS
47	BP	97	PRO
48	BQ	86	GLY
48	BQ	116	GLU
50	BS	29	PHE
50	BS	48	LEU
51	BT	20	PRO
52	BU	35	ALA
52	BU	90	VAL
54	BW	14	PRO
57	BZ	18	LEU
57	BZ	124	ILE
57	BZ	128	VAL
3	AC	7	PRO
3	AC	66	VAL
3	AC	109	PRO
9	AI	98	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	101	VAL
24	AY	21	HIS
28	B3	59	VAL
31	B6	30	THR
37	BC	130	ILE
39	BE	193	GLY
41	BG	101	ILE
41	BG	111	LEU
41	BG	144	ILE
51	BT	110	ILE
53	BV	52	VAL
56	BY	3	VAL
56	BY	7	VAL
56	BY	42	VAL
57	BZ	61	LEU
2	AB	174	VAL
4	AD	7	PRO
8	AH	103	VAL
9	AI	68	GLY
11	AK	80	VAL
12	AL	124	LYS
18	AR	39	VAL
24	AY	442	GLY
39	BE	43	GLY
39	BE	71	GLY
39	BE	75	VAL
42	BH	15	VAL
45	BN	64	GLY
47	BP	23	PRO
47	BP	37	GLY
49	BR	58	GLY
50	BS	14	VAL
50	BS	28	VAL
50	BS	49	VAL
52	BU	63	VAL
53	BV	46	VAL
56	BY	96	ILE
2	AB	58	ILE
2	AB	65	GLY
2	AB	222	ILE
3	AC	8	ILE
15	AO	61	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	198	GLY
38	BD	98	VAL
40	BF	89	VAL
40	BF	134	GLY
41	BG	177	GLY
45	BN	30	ILE
51	BT	15	VAL
54	BW	71	VAL
3	AC	5	ILE
4	AD	67	ILE
5	AE	55	VAL
7	AG	14	PRO
20	AT	55	ILE
45	BN	135	PRO
47	BP	11	GLY
52	BU	100	VAL
2	AB	230	VAL
5	AE	77	PRO
12	AL	109	GLY
24	AY	334	VAL
24	AY	373	ILE
29	B4	19	GLY
38	BD	271	ILE
29	B4	41	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%)	152 (75%)	50 (25%)	1	8
3	AC	160/188 (85%)	133 (83%)	27 (17%)	3	24
4	AD	180/181 (99%)	154 (86%)	26 (14%)	5	32
5	AE	115/123 (94%)	94 (82%)	21 (18%)	2	18
6	AF	90/90 (100%)	76 (84%)	14 (16%)	4	28
7	AG	126/127 (99%)	114 (90%)	12 (10%)	12	55
8	AH	119/119 (100%)	101 (85%)	18 (15%)	4	30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	AI	98/99 (99%)	82 (84%)	16 (16%)	3	26
10	AJ	88/92 (96%)	71 (81%)	17 (19%)	2	16
11	AK	90/99 (91%)	73 (81%)	17 (19%)	2	17
12	AL	104/111 (94%)	86 (83%)	18 (17%)	3	22
13	AM	99/101 (98%)	79 (80%)	20 (20%)	2	14
14	AN	49/50 (98%)	36 (74%)	13 (26%)	1	7
15	AO	79/80 (99%)	52 (66%)	27 (34%)	0	3
16	AP	72/74 (97%)	64 (89%)	8 (11%)	9	47
17	AQ	94/97 (97%)	85 (90%)	9 (10%)	12	55
18	AR	61/77 (79%)	54 (88%)	7 (12%)	8	44
19	AS	69/80 (86%)	58 (84%)	11 (16%)	4	28
20	AT	76/82 (93%)	69 (91%)	7 (9%)	13	57
21	AU	19/22 (86%)	17 (90%)	2 (10%)	10	50
24	AY	427/453 (94%)	308 (72%)	119 (28%)	0	6
25	B0	66/67 (98%)	49 (74%)	17 (26%)	1	7
26	B1	78/83 (94%)	65 (83%)	13 (17%)	3	24
27	B2	66/67 (98%)	61 (92%)	5 (8%)	19	67
28	B3	51/52 (98%)	42 (82%)	9 (18%)	3	21
29	B4	39/63 (62%)	29 (74%)	10 (26%)	1	8
30	B5	51/52 (98%)	47 (92%)	4 (8%)	18	65
31	B6	49/52 (94%)	37 (76%)	12 (24%)	1	8
32	B7	41/42 (98%)	36 (88%)	5 (12%)	7	42
33	B8	53/55 (96%)	42 (79%)	11 (21%)	2	13
34	B9	34/34 (100%)	26 (76%)	8 (24%)	1	9
37	BC	180/181 (99%)	150 (83%)	30 (17%)	3	24
38	BD	217/218 (100%)	150 (69%)	67 (31%)	0	5
39	BE	165/166 (99%)	134 (81%)	31 (19%)	2	17
40	BF	165/166 (99%)	142 (86%)	23 (14%)	5	35
41	BG	155/156 (99%)	127 (82%)	28 (18%)	2	19
42	BH	128/148 (86%)	90 (70%)	38 (30%)	0	5
43	BJ	1/1 (100%)	1 (100%)	0	100	100

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	BN	117/119 (98%)	99 (85%)	18 (15%)	4	29
46	BO	100/100 (100%)	89 (89%)	11 (11%)	9	48
47	BP	112/116 (97%)	91 (81%)	21 (19%)	2	17
48	BQ	111/111 (100%)	87 (78%)	24 (22%)	1	12
49	BR	100/101 (99%)	78 (78%)	22 (22%)	1	11
50	BS	77/88 (88%)	60 (78%)	17 (22%)	1	11
51	BT	120/127 (94%)	96 (80%)	24 (20%)	2	15
52	BU	92/94 (98%)	74 (80%)	18 (20%)	2	15
53	BV	82/82 (100%)	65 (79%)	17 (21%)	2	13
54	BW	91/92 (99%)	81 (89%)	10 (11%)	9	48
55	BX	74/78 (95%)	63 (85%)	11 (15%)	4	31
56	BY	84/91 (92%)	69 (82%)	15 (18%)	2	20
57	BZ	155/179 (87%)	117 (76%)	38 (24%)	1	8
All	All	5271/5546 (95%)	4255 (81%)	1016 (19%)	2	16

All (1016) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	9	GLU
2	AB	15	VAL
2	AB	16	HIS
2	AB	17	PHE
2	AB	20	GLU
2	AB	24	TRP
2	AB	27	LYS
2	AB	32	ILE
2	AB	33	TYR
2	AB	45	GLN
2	AB	46	LYS
2	AB	51	LEU
2	AB	58	ILE
2	AB	64	ARG
2	AB	67	THR
2	AB	69	LEU
2	AB	70	PHE
2	AB	76	GLN
2	AB	79	ASP

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
2	AB	98	LEU
2	AB	101	MET
2	AB	102	LEU
2	AB	106	LYS
2	AB	108	ILE
2	AB	111	ARG
2	AB	130	ARG
2	AB	137	ARG
2	AB	138	LEU
2	AB	140	HIS
2	AB	145	LEU
2	AB	150	SER
2	AB	152	PHE
2	AB	155	LEU
2	AB	162	ILE
2	AB	168	THR
2	AB	172	ILE
2	AB	178	ARG
2	AB	183	PRO
2	AB	185	ILE
2	AB	189	ASP
2	AB	193	ASP
2	AB	195	ASP
2	AB	198	ASP
2	AB	204	ASN
2	AB	212	GLN
2	AB	217	ARG
2	AB	231	GLU
2	AB	232	PRO
2	AB	234	PRO
2	AB	236	TYR
3	AC	5	ILE
3	AC	10	PHE
3	AC	14	ILE
3	AC	15	THR
3	AC	16	ARG
3	AC	23	TYR
3	AC	29	TYR
3	AC	38	ARG
3	AC	49	SER
3	AC	54	ARG
3	AC	59	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	68	VAL
3	AC	77	ILE
3	AC	85	ARG
3	AC	88	ARG
3	AC	98	ASN
3	AC	107	GLN
3	AC	109	PRO
3	AC	135	LYS
3	AC	167	TRP
3	AC	173	VAL
3	AC	176	HIS
3	AC	179	ARG
3	AC	188	LEU
3	AC	192	THR
3	AC	196	LEU
3	AC	207	VAL
4	AD	3	ARG
4	AD	8	VAL
4	AD	11	LEU
4	AD	15	GLU
4	AD	31	CYS
4	AD	49	ARG
4	AD	50	ARG
4	AD	56	VAL
4	AD	59	ARG
4	AD	78	LEU
4	AD	98	GLU
4	AD	108	LEU
4	AD	122	ARG
4	AD	132	ARG
4	AD	134	ASP
4	AD	135	LEU
4	AD	154	ASN
4	AD	156	GLU
4	AD	178	VAL
4	AD	181	MET
4	AD	190	ASP
4	AD	192	GLU
4	AD	196	LEU
4	AD	200	GLU
4	AD	208	SER
4	AD	209	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	AE	10	MET
5	AE	11	ILE
5	AE	12	LEU
5	AE	18	ARG
5	AE	20	GLN
5	AE	24	ARG
5	AE	31	LEU
5	AE	36	ASP
5	AE	47	LYS
5	AE	52	PRO
5	AE	53	LEU
5	AE	73	ASN
5	AE	76	ILE
5	AE	87	SER
5	AE	107	ARG
5	AE	116	THR
5	AE	119	LEU
5	AE	127	ASN
5	AE	128	PRO
5	AE	140	ARG
5	AE	147	ASP
6	AF	10	LEU
6	AF	14	LEU
6	AF	15	ASP
6	AF	21	LEU
6	AF	25	ILE
6	AF	26	ILE
6	AF	47	ARG
6	AF	55	ASP
6	AF	61	LEU
6	AF	83	ASP
6	AF	87	ARG
6	AF	92	LYS
6	AF	97	PHE
6	AF	98	LEU
7	AG	30	ILE
7	AG	37	ASN
7	AG	41	ARG
7	AG	72	ARG
7	AG	78	ARG
7	AG	88	PRO
7	AG	89	MET

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	AG	104	LEU
7	AG	114	ARG
7	AG	124	LEU
7	AG	136	LYS
7	AG	137	LYS
8	AH	1	MET
8	AH	2	LEU
8	AH	6	ILE
8	AH	14	ARG
8	AH	18	ARG
8	AH	25	ASP
8	AH	30	ARG
8	AH	52	ASP
8	AH	82	HIS
8	AH	91	ARG
8	AH	92	ARG
8	AH	102	ARG
8	AH	104	ARG
8	AH	109	ILE
8	AH	112	LEU
8	AH	127	LEU
8	AH	135	CYS
8	AH	137	VAL
9	AI	3	GLN
9	AI	10	ARG
9	AI	41	VAL
9	AI	56	LEU
9	AI	95	LYS
9	AI	98	PRO
9	AI	99	LEU
9	AI	102	LEU
9	AI	104	ARG
9	AI	105	ASP
9	AI	111	ARG
9	AI	112	LYS
9	AI	114	TYR
9	AI	121	ARG
9	AI	126	SER
9	AI	128	ARG
10	AJ	6	ILE
10	AJ	12	ASP
10	AJ	17	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	AJ	40	LEU
10	AJ	43	ARG
10	AJ	48	THR
10	AJ	49	VAL
10	AJ	50	ILE
10	AJ	51	ARG
10	AJ	54	PHE
10	AJ	55	LYS
10	AJ	57	LYS
10	AJ	58	ASP
10	AJ	67	THR
10	AJ	73	ASP
10	AJ	92	THR
10	AJ	96	ILE
11	AK	14	VAL
11	AK	29	ILE
11	AK	31	THR
11	AK	36	ASP
11	AK	38	ASN
11	AK	51	LYS
11	AK	66	LEU
11	AK	80	VAL
11	AK	84	VAL
11	AK	91	ARG
11	AK	104	GLN
11	AK	116	HIS
11	AK	117	ASN
11	AK	119	CYS
11	AK	124	LYS
11	AK	125	PHE
11	AK	126	ARG
12	AL	18	VAL
12	AL	20	LYS
12	AL	27	LEU
12	AL	33	ARG
12	AL	36	VAL
12	AL	37	CYS
12	AL	43	VAL
12	AL	44	THR
12	AL	47	LYS
12	AL	48	PRO
12	AL	53	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	54	LYS
12	AL	83	VAL
12	AL	84	LEU
12	AL	89	ARG
12	AL	94	PRO
12	AL	122	THR
12	AL	126	LYS
13	AM	9	ILE
13	AM	12	ASN
13	AM	19	LEU
13	AM	56	LEU
13	AM	58	GLU
13	AM	64	TRP
13	AM	65	LYS
13	AM	67	GLU
13	AM	73	GLU
13	AM	77	ASN
13	AM	78	ILE
13	AM	82	MET
13	AM	86	CYS
13	AM	90	LEU
13	AM	93	ARG
13	AM	101	GLN
13	AM	102	ARG
13	AM	108	ARG
13	AM	115	LYS
13	AM	120	LYS
14	AN	4	LYS
14	AN	14	PRO
14	AN	17	LYS
14	AN	19	ARG
14	AN	21	TYR
14	AN	26	ARG
14	AN	32	SER
14	AN	33	VAL
14	AN	41	ARG
14	AN	47	LEU
14	AN	56	VAL
14	AN	57	ARG
14	AN	58	LYS
15	AO	3	ILE
15	AO	7	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
15	AO	10	LYS
15	AO	11	VAL
15	AO	15	PHE
15	AO	17	ARG
15	AO	22	THR
15	AO	26	GLU
15	AO	27	VAL
15	AO	33	THR
15	AO	38	ARG
15	AO	40	SER
15	AO	42	HIS
15	AO	43	LEU
15	AO	45	VAL
15	AO	51	HIS
15	AO	53	HIS
15	AO	58	MET
15	AO	63	ARG
15	AO	65	ARG
15	AO	68	ARG
15	AO	77	ARG
15	AO	82	ILE
15	AO	83	GLU
15	AO	85	LEU
15	AO	87	ILE
15	AO	88	ARG
16	AP	1	MET
16	AP	17	TYR
16	AP	22	THR
16	AP	40	ASP
16	AP	53	VAL
16	AP	55	ARG
16	AP	75	ARG
16	AP	80	PHE
17	AQ	25	ARG
17	AQ	36	ILE
17	AQ	38	ARG
17	AQ	49	GLU
17	AQ	52	LYS
17	AQ	55	ASP
17	AQ	57	VAL
17	AQ	73	VAL
17	AQ	91	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
18	AR	34	TYR
18	AR	38	GLU
18	AR	44	LEU
18	AR	47	THR
18	AR	82	THR
18	AR	84	LYS
18	AR	88	LYS
19	AS	4	SER
19	AS	6	LYS
19	AS	7	LYS
19	AS	10	PHE
19	AS	22	LEU
19	AS	27	GLU
19	AS	29	ARG
19	AS	37	ARG
19	AS	41	VAL
19	AS	44	MET
19	AS	45	VAL
20	AT	13	LEU
20	AT	26	ASN
20	AT	35	THR
20	AT	41	ILE
20	AT	61	SER
20	AT	74	LYS
20	AT	93	GLU
21	AU	15	ARG
21	AU	18	TYR
24	AY	7	LEU
24	AY	14	ARG
24	AY	21	HIS
24	AY	22	PRO
24	AY	23	ASP
24	AY	26	LYS
24	AY	30	THR
24	AY	36	PHE
24	AY	69	SER
24	AY	73	SER
24	AY	77	PHE
24	AY	85	ASN
24	AY	94	ASP
24	AY	99	THR
24	AY	101	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	103	LEU
24	AY	111	MET
24	AY	114	ASP
24	AY	119	VAL
24	AY	123	THR
24	AY	127	MET
24	AY	131	ARG
24	AY	137	ILE
24	AY	141	MET
24	AY	145	ASP
24	AY	146	ARG
24	AY	147	ASP
24	AY	150	ASP
24	AY	158	VAL
24	AY	162	LEU
24	AY	164	ILE
24	AY	178	LEU
24	AY	183	TYR
24	AY	185	LEU
24	AY	192	LEU
24	AY	193	TYR
24	AY	194	GLN
24	AY	208	LYS
24	AY	210	LEU
24	AY	212	ASN
24	AY	215	LEU
24	AY	229	ASP
24	AY	230	GLU
24	AY	231	LEU
24	AY	235	LYS
24	AY	239	ASN
24	AY	244	GLU
24	AY	247	LEU
24	AY	251	ILE
24	AY	258	THR
24	AY	263	PHE
24	AY	266	ASP
24	AY	267	HIS
24	AY	268	MET
24	AY	269	LEU
24	AY	270	ASP
24	AY	272	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	274	GLU
24	AY	284	THR
24	AY	287	ARG
24	AY	289	VAL
24	AY	299	PHE
24	AY	307	MET
24	AY	308	ASP
24	AY	309	PRO
24	AY	310	LYS
24	AY	312	ARG
24	AY	313	ASP
24	AY	324	LYS
24	AY	331	LEU
24	AY	332	ARG
24	AY	335	ARG
24	AY	342	ILE
24	AY	344	ASP
24	AY	347	THR
24	AY	360	TYR
24	AY	365	LEU
24	AY	372	THR
24	AY	377	ASP
24	AY	379	PHE
24	AY	385	MET
24	AY	386	LYS
24	AY	387	PHE
24	AY	388	THR
24	AY	392	ASN
24	AY	396	GLU
24	AY	397	LEU
24	AY	399	ARG
24	AY	401	ILE
24	AY	403	LEU
24	AY	404	LYS
24	AY	405	ASP
24	AY	419	LEU
24	AY	425	VAL
24	AY	427	VAL
24	AY	431	ILE
24	AY	433	ASN
24	AY	450	VAL
24	AY	455	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	460	GLU
24	AY	465	SER
24	AY	467	ASN
24	AY	470	THR
24	AY	472	ARG
24	AY	476	CYS
24	AY	480	LYS
24	AY	485	PHE
24	AY	488	LYS
24	AY	490	GLU
24	AY	492	GLN
24	AY	496	ASP
24	AY	499	ASP
24	AY	504	ILE
24	AY	508	MET
24	AY	511	LEU
24	AY	516	GLU
24	AY	518	TYR
24	AY	521	VAL
24	AY	526	THR
25	B0	5	LYS
25	B0	11	ARG
25	B0	16	SER
25	B0	20	ARG
25	B0	27	GLU
25	B0	37	LEU
25	B0	41	ARG
25	B0	43	THR
25	B0	44	ARG
25	B0	62	LEU
25	B0	63	VAL
25	B0	67	VAL
25	B0	69	PHE
25	B0	75	LEU
25	B0	80	HIS
25	B0	81	VAL
25	B0	84	LEU
26	B1	3	LYS
26	B1	13	ILE
26	B1	21	ARG
26	B1	26	ARG
26	B1	35	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	B1	38	SER
26	B1	39	LYS
26	B1	45	ASN
26	B1	56	GLN
26	B1	83	GLU
26	B1	92	LYS
26	B1	94	LEU
26	B1	95	LEU
27	B2	7	ARG
27	B2	22	GLU
27	B2	45	SER
27	B2	59	ARG
27	B2	64	LEU
28	B3	6	VAL
28	B3	8	LEU
28	B3	11	SER
28	B3	16	PRO
28	B3	28	LEU
28	B3	33	GLN
28	B3	35	ARG
28	B3	37	LEU
28	B3	46	ASN
29	B4	5	ILE
29	B4	6	HIS
29	B4	9	LEU
29	B4	20	ASN
29	B4	25	TYR
29	B4	26	SER
29	B4	28	LYS
29	B4	32	TYR
29	B4	34	GLU
29	B4	40	HIS
30	B5	3	LYS
30	B5	11	THR
30	B5	25	LEU
30	B5	48	GLU
31	B6	5	VAL
31	B6	10	LEU
31	B6	11	LEU
31	B6	14	THR
31	B6	18	ARG
31	B6	30	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
31	B6	31	PRO
31	B6	36	LEU
31	B6	42	TRP
31	B6	44	ARG
31	B6	45	LYS
31	B6	53	LYS
32	B7	1	MET
32	B7	8	ASN
32	B7	24	THR
32	B7	47	ARG
32	B7	48	LYS
33	B8	19	SER
33	B8	26	LYS
33	B8	30	ARG
33	B8	31	HIS
33	B8	34	TRP
33	B8	42	ARG
33	B8	44	LYS
33	B8	47	LYS
33	B8	49	VAL
33	B8	61	LEU
33	B8	64	TYR
34	B9	1	MET
34	B9	2	LYS
34	B9	8	LYS
34	B9	10	ILE
34	B9	18	ARG
34	B9	28	GLU
34	B9	29	ASN
34	B9	36	GLN
37	BC	3	HIS
37	BC	5	LYS
37	BC	6	ARG
37	BC	10	LEU
37	BC	27	HIS
37	BC	28	LEU
37	BC	30	LYS
37	BC	46	LYS
37	BC	47	LEU
37	BC	52	ARG
37	BC	57	ASN
37	BC	71	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	BC	92	ASP
37	BC	104	LEU
37	BC	107	TRP
37	BC	108	MET
37	BC	109	ASP
37	BC	134	ARG
37	BC	139	ASN
37	BC	147	PHE
37	BC	162	GLU
37	BC	163	PHE
37	BC	167	LYS
37	BC	168	THR
37	BC	171	ILE
37	BC	183	GLU
37	BC	184	LYS
37	BC	187	ASP
37	BC	215	THR
37	BC	221	SER
38	BD	3	VAL
38	BD	7	LYS
38	BD	9	TYR
38	BD	14	ARG
38	BD	18	VAL
38	BD	27	THR
38	BD	28	GLU
38	BD	29	PRO
38	BD	31	LYS
38	BD	33	LEU
38	BD	35	LYS
38	BD	37	LEU
38	BD	40	THR
38	BD	43	ARG
38	BD	45	ASN
38	BD	49	ILE
38	BD	52	ARG
38	BD	59	LYS
38	BD	61	LEU
38	BD	64	ILE
38	BD	68	LYS
38	BD	73	VAL
38	BD	79	VAL
38	BD	87	ASN

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
38	BD	88	ARG
38	BD	91	ARG
38	BD	95	LEU
38	BD	102	LYS
38	BD	105	ILE
38	BD	111	LEU
38	BD	113	VAL
38	BD	115	GLN
38	BD	116	GLN
38	BD	117	VAL
38	BD	118	VAL
38	BD	127	VAL
38	BD	134	ARG
38	BD	137	PRO
38	BD	141	VAL
38	BD	142	VAL
38	BD	157	ARG
38	BD	162	SER
38	BD	165	ILE
38	BD	169	GLU
38	BD	172	TYR
38	BD	174	ILE
38	BD	175	LEU
38	BD	176	ARG
38	BD	181	GLU
38	BD	192	THR
38	BD	193	VAL
38	BD	198	ASN
38	BD	200	ASP
38	BD	202	LYS
38	BD	204	ILE
38	BD	206	LEU
38	BD	211	ARG
38	BD	212	SER
38	BD	242	ARG
38	BD	252	TRP
38	BD	257	LEU
38	BD	260	ARG
38	BD	262	ARG
38	BD	263	ARG
38	BD	264	LYS
38	BD	268	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	BD	274	ARG
39	BE	26	ILE
39	BE	27	LEU
39	BE	36	ARG
39	BE	40	GLU
39	BE	53	PRO
39	BE	54	GLN
39	BE	55	ASN
39	BE	57	LYS
39	BE	61	ARG
39	BE	64	LYS
39	BE	67	PHE
39	BE	69	LYS
39	BE	76	ARG
39	BE	79	ARG
39	BE	82	ARG
39	BE	85	ASN
39	BE	94	GLU
39	BE	102	VAL
39	BE	111	ARG
39	BE	121	ASN
39	BE	122	PHE
39	BE	129	HIS
39	BE	133	LYS
39	BE	134	ILE
39	BE	143	ASN
39	BE	169	ASN
39	BE	178	GLU
39	BE	182	LEU
39	BE	197	ILE
39	BE	202	LYS
39	BE	203	LYS
40	BF	11	VAL
40	BF	19	GLU
40	BF	23	ASP
40	BF	28	ILE
40	BF	53	THR
40	BF	64	ILE
40	BF	65	TRP
40	BF	66	PRO
40	BF	82	ILE
40	BF	83	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BF	98	SER
40	BF	102	PRO
40	BF	122	LYS
40	BF	123	LEU
40	BF	125	LEU
40	BF	127	GLU
40	BF	136	THR
40	BF	160	ASN
40	BF	164	ARG
40	BF	168	ARG
40	BF	169	ASN
40	BF	172	TRP
40	BF	206	ILE
41	BG	10	LYS
41	BG	16	ARG
41	BG	21	ARG
41	BG	22	ARG
41	BG	26	GLN
41	BG	33	ARG
41	BG	36	LYS
41	BG	40	ASN
41	BG	45	GLU
41	BG	49	ASP
41	BG	52	ILE
41	BG	58	GLN
41	BG	60	LEU
41	BG	63	ILE
41	BG	67	LYS
41	BG	80	PHE
41	BG	82	LEU
41	BG	84	LYS
41	BG	86	MET
41	BG	102	PHE
41	BG	104	GLU
41	BG	125	PHE
41	BG	130	ASN
41	BG	146	TYR
41	BG	149	VAL
41	BG	152	LEU
41	BG	153	ARG
41	BG	179	PRO
42	BH	23	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	BH	25	LYS
42	BH	27	LYS
42	BH	34	GLU
42	BH	38	SER
42	BH	41	MET
42	BH	43	VAL
42	BH	46	GLU
42	BH	49	VAL
42	BH	50	VAL
42	BH	52	VAL
42	BH	54	ARG
42	BH	59	ARG
42	BH	60	ARG
42	BH	64	LEU
42	BH	65	HIS
42	BH	80	SER
42	BH	83	TYR
42	BH	85	LYS
42	BH	87	LEU
42	BH	88	LEU
42	BH	98	LEU
42	BH	103	LEU
42	BH	104	GLU
42	BH	105	LEU
42	BH	113	VAL
42	BH	116	GLU
42	BH	119	GLU
42	BH	126	PRO
42	BH	127	GLU
42	BH	129	THR
42	BH	131	VAL
42	BH	137	ASP
42	BH	149	ARG
42	BH	151	ILE
42	BH	162	ILE
42	BH	163	TYR
42	BH	164	TYR
45	BN	1	MET
45	BN	2	LYS
45	BN	4	TYR
45	BN	10	GLU
45	BN	19	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	BN	25	ARG
45	BN	34	LEU
45	BN	48	MET
45	BN	55	VAL
45	BN	56	ASN
45	BN	63	THR
45	BN	65	LYS
45	BN	75	TYR
45	BN	90	MET
45	BN	99	LEU
45	BN	120	LEU
45	BN	123	TYR
45	BN	127	ASP
46	BO	12	ASP
46	BO	17	ARG
46	BO	23	ARG
46	BO	29	ASN
46	BO	40	VAL
46	BO	47	ILE
46	BO	48	PRO
46	BO	73	ASP
46	BO	87	ILE
46	BO	98	VAL
46	BO	113	LYS
47	BP	6	LEU
47	BP	7	ARG
47	BP	16	ARG
47	BP	18	ARG
47	BP	21	ARG
47	BP	30	THR
47	BP	41	ARG
47	BP	55	ARG
47	BP	61	ARG
47	BP	62	LEU
47	BP	68	GLN
47	BP	70	GLN
47	BP	75	ILE
47	BP	77	ARG
47	BP	91	PHE
47	BP	110	TYR
47	BP	111	ARG
47	BP	112	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	BP	123	LEU
47	BP	132	LYS
47	BP	139	LYS
48	BQ	6	ARG
48	BQ	10	ARG
48	BQ	14	ARG
48	BQ	17	LEU
48	BQ	22	LYS
48	BQ	31	ASP
48	BQ	42	ILE
48	BQ	45	GLN
48	BQ	51	ARG
48	BQ	54	MET
48	BQ	55	VAL
48	BQ	58	PHE
48	BQ	59	ARG
48	BQ	60	ARG
48	BQ	63	LYS
48	BQ	67	ARG
48	BQ	68	ILE
48	BQ	74	TYR
48	BQ	103	MET
48	BQ	104	PHE
48	BQ	110	THR
48	BQ	125	LEU
48	BQ	133	ARG
48	BQ	141	GLN
49	BR	2	ARG
49	BR	5	LYS
49	BR	8	ARG
49	BR	23	ASN
49	BR	28	LEU
49	BR	29	LEU
49	BR	45	ARG
49	BR	49	ASP
49	BR	57	ARG
49	BR	63	ARG
49	BR	66	VAL
49	BR	67	LEU
49	BR	71	GLN
49	BR	75	LEU
49	BR	79	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	BR	90	ARG
49	BR	94	TYR
49	BR	97	VAL
49	BR	99	LYS
49	BR	100	LEU
49	BR	113	LEU
49	BR	117	VAL
50	BS	11	LYS
50	BS	12	PHE
50	BS	15	ARG
50	BS	17	ARG
50	BS	20	ARG
50	BS	26	LEU
50	BS	29	PHE
50	BS	35	ILE
50	BS	36	TYR
50	BS	52	SER
50	BS	54	LEU
50	BS	56	LEU
50	BS	84	GLN
50	BS	92	TYR
50	BS	97	ARG
50	BS	101	LEU
50	BS	106	ARG
51	BT	11	GLU
51	BT	16	ARG
51	BT	23	ARG
51	BT	24	PRO
51	BT	29	ARG
51	BT	32	TYR
51	BT	38	ASN
51	BT	41	ARG
51	BT	43	GLN
51	BT	58	ASN
51	BT	65	LYS
51	BT	67	SER
51	BT	77	PRO
51	BT	82	LEU
51	BT	83	ILE
51	BT	89	VAL
51	BT	96	ARG
51	BT	99	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
51	BT	102	ILE
51	BT	122	ASP
51	BT	123	GLN
51	BT	124	ASP
51	BT	128	GLU
51	BT	132	LYS
52	BU	13	LYS
52	BU	14	HIS
52	BU	20	LEU
52	BU	28	ARG
52	BU	44	ASN
52	BU	47	TYR
52	BU	55	ARG
52	BU	56	ASP
52	BU	59	ARG
52	BU	66	ASN
52	BU	74	LEU
52	BU	88	ILE
52	BU	90	VAL
52	BU	101	ARG
52	BU	102	GLU
52	BU	105	VAL
52	BU	108	GLU
52	BU	114	LYS
53	BV	12	TYR
53	BV	13	ARG
53	BV	16	PRO
53	BV	18	LEU
53	BV	19	LYS
53	BV	21	ARG
53	BV	39	LEU
53	BV	47	VAL
53	BV	50	PRO
53	BV	51	VAL
53	BV	70	ILE
53	BV	73	SER
53	BV	89	GLN
53	BV	91	TYR
53	BV	92	THR
53	BV	96	ILE
53	BV	99	ILE
54	BW	9	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	BW	11	ARG
54	BW	51	LEU
54	BW	63	ASP
54	BW	82	LEU
54	BW	88	ARG
54	BW	96	ILE
54	BW	102	HIS
54	BW	103	ILE
54	BW	107	LEU
55	BX	11	PRO
55	BX	14	SER
55	BX	26	TYR
55	BX	28	PHE
55	BX	36	LYS
55	BX	45	THR
55	BX	57	LEU
55	BX	68	ARG
55	BX	69	TYR
55	BX	76	ARG
55	BX	87	GLN
56	BY	2	ARG
56	BY	6	HIS
56	BY	7	VAL
56	BY	9	LYS
56	BY	11	ASP
56	BY	13	VAL
56	BY	38	ILE
56	BY	50	ARG
56	BY	53	PRO
56	BY	56	PRO
56	BY	62	GLU
56	BY	73	ARG
56	BY	77	PRO
56	BY	83	THR
56	BY	99	CYS
57	BZ	3	TYR
57	BZ	5	LEU
57	BZ	6	LYS
57	BZ	18	LEU
57	BZ	19	ARG
57	BZ	20	ARG
57	BZ	28	MET

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
57	BZ	29	TYR
57	BZ	30	ASN
57	BZ	35	ARG
57	BZ	38	TYR
57	BZ	40	ASP
57	BZ	41	LEU
57	BZ	44	PHE
57	BZ	45	ASP
57	BZ	48	PHE
57	BZ	57	ILE
57	BZ	66	SER
57	BZ	70	LEU
57	BZ	71	VAL
57	BZ	72	ARG
57	BZ	73	GLN
57	BZ	76	LEU
57	BZ	87	ASP
57	BZ	89	PHE
57	BZ	93	ASP
57	BZ	97	GLU
57	BZ	98	MET
57	BZ	103	ARG
57	BZ	104	PHE
57	BZ	122	ARG
57	BZ	123	ASP
57	BZ	124	ILE
57	BZ	127	LYS
57	BZ	136	PHE
57	BZ	142	SER
57	BZ	154	ASP
57	BZ	155	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (184) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	19	HIS
2	AB	37	ASN
2	AB	40	HIS
2	AB	45	GLN
2	AB	135	GLN
2	AB	146	GLN
2	AB	204	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	28	GLN
3	AC	102	ASN
3	AC	118	GLN
3	AC	139	GLN
3	AC	170	GLN
3	AC	176	HIS
4	AD	62	GLN
4	AD	119	GLN
4	AD	129	ASN
4	AD	160	GLN
5	AE	20	GLN
5	AE	73	ASN
5	AE	78	HIS
6	AF	7	ASN
6	AF	13	ASN
6	AF	18	GLN
6	AF	27	GLN
6	AF	100	ASN
7	AG	11	GLN
7	AG	13	GLN
7	AG	28	ASN
7	AG	37	ASN
7	AG	56	GLN
7	AG	68	ASN
7	AG	84	ASN
7	AG	106	GLN
8	AH	15	ASN
8	AH	78	GLN
8	AH	82	HIS
9	AI	3	GLN
9	AI	31	GLN
9	AI	73	GLN
9	AI	124	GLN
10	AJ	13	HIS
10	AJ	56	HIS
10	AJ	68	HIS
10	AJ	84	GLN
11	AK	38	ASN
11	AK	117	ASN
12	AL	8	ASN
12	AL	9	GLN
12	AL	49	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	75	HIS
13	AM	12	ASN
13	AM	40	ASN
13	AM	101	GLN
14	AN	49	HIS
15	AO	37	ASN
15	AO	46	HIS
16	AP	65	GLN
16	AP	76	GLN
17	AQ	16	GLN
17	AQ	26	GLN
19	AS	14	HIS
19	AS	56	GLN
20	AT	18	GLN
20	AT	26	ASN
20	AT	42	GLN
24	AY	21	HIS
24	AY	76	GLN
24	AY	85	ASN
24	AY	142	ASN
24	AY	202	GLN
24	AY	225	GLN
24	AY	262	ASN
24	AY	267	HIS
24	AY	311	HIS
24	AY	369	ASN
24	AY	392	ASN
24	AY	426	GLN
24	AY	434	ASN
24	AY	445	GLN
24	AY	458	ASN
24	AY	510	ASN
24	AY	529	HIS
25	B0	29	GLN
25	B0	70	GLN
26	B1	19	GLN
26	B1	45	ASN
26	B1	56	GLN
26	B1	66	HIS
27	B2	43	GLN
27	B2	56	GLN
27	B2	65	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	B3	19	GLN
28	B3	32	GLN
28	B3	52	HIS
29	B4	6	HIS
29	B4	20	ASN
29	B4	40	HIS
29	B4	46	GLN
30	B5	43	HIS
31	B6	26	ASN
31	B6	32	ASN
33	B8	33	ASN
33	B8	35	GLN
34	B9	29	ASN
34	B9	36	GLN
37	BC	57	ASN
37	BC	66	HIS
37	BC	188	ASN
37	BC	225	ASN
38	BD	44	ASN
38	BD	45	ASN
38	BD	58	HIS
38	BD	87	ASN
38	BD	115	GLN
38	BD	129	ASN
38	BD	166	GLN
38	BD	198	ASN
38	BD	203	ASN
38	BD	227	ASN
39	BE	48	GLN
39	BE	54	GLN
39	BE	55	ASN
39	BE	121	ASN
39	BE	132	HIS
39	BE	135	HIS
39	BE	169	ASN
40	BF	67	GLN
40	BF	75	HIS
40	BF	133	ASN
40	BF	160	ASN
40	BF	169	ASN
41	BG	40	ASN
41	BG	41	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	BG	58	GLN
41	BG	66	GLN
41	BG	108	ASN
41	BG	121	ASN
41	BG	138	GLN
42	BH	65	HIS
42	BH	143	GLN
45	BN	56	ASN
45	BN	69	GLN
45	BN	131	GLN
46	BO	5	GLN
46	BO	29	ASN
47	BP	35	HIS
47	BP	70	GLN
47	BP	84	ASN
47	BP	128	HIS
48	BQ	45	GLN
48	BQ	46	GLN
48	BQ	123	HIS
48	BQ	141	GLN
49	BR	3	HIS
49	BR	13	HIS
49	BR	23	ASN
49	BR	24	GLN
49	BR	31	HIS
49	BR	61	HIS
49	BR	71	GLN
50	BS	16	ASN
50	BS	34	HIS
51	BT	58	ASN
51	BT	79	HIS
51	BT	123	GLN
52	BU	49	HIS
52	BU	66	ASN
52	BU	72	HIS
52	BU	94	ASN
53	BV	11	GLN
53	BV	89	GLN
54	BW	40	ASN
54	BW	57	ASN
54	BW	60	ASN
54	BW	62	HIS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
54	BW	102	HIS
55	BX	41	ASN
55	BX	82	GLN
55	BX	87	GLN
57	BZ	55	HIS
57	BZ	73	GLN
57	BZ	75	ASN
57	BZ	118	GLN
57	BZ	151	HIS

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	273 (18%)	58 (3%)
22	AV	76/77 (98%)	36 (47%)	3 (3%)
23	AX	8/9 (88%)	5 (62%)	0
35	BA	2900/2915 (99%)	654 (22%)	73 (2%)
36	BB	118/122 (96%)	24 (20%)	1 (0%)
All	All	4605/4645 (99%)	992 (21%)	135 (2%)

All (992) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	G
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	51	A
1	AA	54	C
1	AA	60	A
1	AA	61	G
1	AA	65	U
1	AA	79	G
1	AA	80	G
1	AA	81	U
1	AA	89	C
1	AA	90	U
1	AA	97	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	101	A
1	AA	102	G
1	AA	110	C
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	122	G
1	AA	131	C
1	AA	144	G
1	AA	146	G
1	AA	147	G
1	AA	150	C
1	AA	165	C
1	AA	172	A
1	AA	189(H)	G
1	AA	195	A
1	AA	197	A
1	AA	198	G
1	AA	199	G
1	AA	203	U
1	AA	204	U
1	AA	244	U
1	AA	245	C
1	AA	247	G
1	AA	251	G
1	AA	253	U
1	AA	267	C
1	AA	274	A
1	AA	275	G
1	AA	281	G
1	AA	289	G
1	AA	328	C
1	AA	330	C
1	AA	332	G
1	AA	344	A
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	367	U
1	AA	372	C
1	AA	389	A
1	AA	397	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	435	C
1	AA	439	A
1	AA	442	C
1	AA	452	A
1	AA	453	A
1	AA	454	C
1	AA	461	A
1	AA	470	C
1	AA	484	G
1	AA	485	G
1	AA	496	A
1	AA	499	A
1	AA	507	C
1	AA	508	C
1	AA	509	A
1	AA	511	C
1	AA	518	C
1	AA	527	G
1	AA	528	C
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	548	G
1	AA	559	A
1	AA	561	U
1	AA	562	C
1	AA	564	C
1	AA	570	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	572	A
1	AA	573	A
1	AA	576	G
1	AA	577	G
1	AA	596	C
1	AA	623	C
1	AA	632	A
1	AA	633	G
1	AA	653	A
1	AA	665	A
1	AA	673	G
1	AA	688	G
1	AA	689	C
1	AA	701	C
1	AA	702	A
1	AA	703	G
1	AA	717	C
1	AA	721	G
1	AA	722	A
1	AA	723	U
1	AA	731	G
1	AA	734	G
1	AA	749	C
1	AA	755	G
1	AA	765	G
1	AA	772	U
1	AA	777	A
1	AA	786	G
1	AA	793	U
1	AA	794	A
1	AA	816	A
1	AA	817	C
1	AA	828	A
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	848	C
1	AA	858	G
1	AA	859	A
1	AA	872	A
1	AA	914	A
1	AA	927	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	934	C
1	AA	935	A
1	AA	946	A
1	AA	950	U
1	AA	960	U
1	AA	961	U
1	AA	962	C
1	AA	966	G
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	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	1026	G
1	AA	1030	C
1	AA	1050	G
1	AA	1051	C
1	AA	1054	C
1	AA	1064	G
1	AA	1085	U
1	AA	1094	G
1	AA	1095	U
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	1127	G
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1145	C
1	AA	1152	A
1	AA	1154	G
1	AA	1158	C
1	AA	1159	U
1	AA	1180	A
1	AA	1184	G
1	AA	1190	G
1	AA	1191	A
1	AA	1196	U
1	AA	1197	G
1	AA	1200	C
1	AA	1201	A
1	AA	1212	U
1	AA	1213	A
1	AA	1225	A
1	AA	1227	A
1	AA	1229	A
1	AA	1230	C
1	AA	1238	A
1	AA	1240	U
1	AA	1256	A
1	AA	1257	U
1	AA	1267	C
1	AA	1268	A
1	AA	1270	C
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	1305	G
1	AA	1317	C
1	AA	1320	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1322	C
1	AA	1324	A
1	AA	1327	C
1	AA	1331	G
1	AA	1335	C
1	AA	1336	C
1	AA	1346	A
1	AA	1347	G
1	AA	1348	U
1	AA	1353	G
1	AA	1359	C
1	AA	1363	C
1	AA	1363(A)	A
1	AA	1364	U
1	AA	1387	G
1	AA	1397	C
1	AA	1398	A
1	AA	1400	C
1	AA	1402	C
1	AA	1408	A
1	AA	1419	G
1	AA	1430	C
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1443	G
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1487	G
1	AA	1489	G
1	AA	1491	G
1	AA	1493	A
1	AA	1494	G
1	AA	1495	U
1	AA	1496	C
1	AA	1499	A
1	AA	1502	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G
22	AV	2	G
22	AV	3	C
22	AV	4	G
22	AV	5	G
22	AV	8	U
22	AV	9	G
22	AV	13	C
22	AV	15	G
22	AV	16	C
22	AV	17	C
22	AV	17(A)	U
22	AV	18	G
22	AV	19	G
22	AV	20	U
22	AV	21	A
22	AV	24	U
22	AV	25	C
22	AV	27	U
22	AV	28	C
22	AV	33	U
22	AV	44	A
22	AV	45	G
22	AV	48	C
22	AV	53	G
22	AV	54	U
22	AV	58	A
22	AV	59	A
22	AV	60	U
22	AV	61	C
22	AV	62	C
22	AV	63	G
22	AV	65	C
22	AV	67	C
22	AV	71	C
22	AV	72	A
22	AV	73	A
23	AX	12	A
23	AX	14	A
23	AX	15	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	AX	17	U
23	AX	19	U
35	BA	9	U
35	BA	10	G
35	BA	45	C
35	BA	50	U
35	BA	61	G
35	BA	71	A
35	BA	72	U
35	BA	74	A
35	BA	75	G
35	BA	82	G
35	BA	83	G
35	BA	84	A
35	BA	85	G
35	BA	88	G
35	BA	90	U
35	BA	92	A
35	BA	94	C
35	BA	95	G
35	BA	100	G
35	BA	102	G
35	BA	105	C
35	BA	118	A
35	BA	119	A
35	BA	120	U
35	BA	122	G
35	BA	139(A)	G
35	BA	141	A
35	BA	146	G
35	BA	149	A
35	BA	155	U
35	BA	181	A
35	BA	196	A
35	BA	197	A
35	BA	199	A
35	BA	204	A
35	BA	205	G
35	BA	215	G
35	BA	216	A
35	BA	221	A
35	BA	222	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	227	A
35	BA	228	A
35	BA	229	A
35	BA	233	A
35	BA	244	A
35	BA	245	G
35	BA	248	G
35	BA	261	G
35	BA	267	C
35	BA	271(I)	G
35	BA	271(K)	U
35	BA	271(L)	U
35	BA	271(M)	G
35	BA	271(O)	C
35	BA	271(P)	C
35	BA	271(R)	G
35	BA	272(A)	U
35	BA	272(B)	G
35	BA	272(I)	U
35	BA	276	A
35	BA	284	U
35	BA	307	G
35	BA	310	A
35	BA	311	A
35	BA	312	G
35	BA	329	G
35	BA	330	A
35	BA	332	A
35	BA	333	G
35	BA	343	C
35	BA	349	G
35	BA	352	G
35	BA	353	G
35	BA	356	G
35	BA	358	U
35	BA	362	U
35	BA	363(D)	G
35	BA	363(E)	U
35	BA	363(F)	A
35	BA	371	A
35	BA	386	G
35	BA	387	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	388	G
35	BA	390	A
35	BA	396	G
35	BA	405	U
35	BA	406	G
35	BA	411	G
35	BA	412	A
35	BA	428	A
35	BA	435	C
35	BA	444	C
35	BA	448	U
35	BA	451	C
35	BA	456	C
35	BA	457	A
35	BA	470	A
35	BA	472	A
35	BA	473	G
35	BA	480	A
35	BA	481	G
35	BA	494	G
35	BA	505	A
35	BA	508	G
35	BA	509	C
35	BA	525	U
35	BA	527	C
35	BA	530	G
35	BA	531	C
35	BA	532	A
35	BA	533	G
35	BA	537	C
35	BA	556	G
35	BA	563	G
35	BA	573	G
35	BA	574	C
35	BA	575	A
35	BA	586	A
35	BA	588	U
35	BA	603	A
35	BA	604	G
35	BA	607	U
35	BA	613	G
35	BA	614(B)	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	614(C)	A
35	BA	615	G
35	BA	616	G
35	BA	622	G
35	BA	627	A
35	BA	629	G
35	BA	637	A
35	BA	645	C
35	BA	646	A
35	BA	651	G
35	BA	654(I)	C
35	BA	654(J)	A
35	BA	654(K)	C
35	BA	654(L)	G
35	BA	654(M)	C
35	BA	655	A
35	BA	656	G
35	BA	669	G
35	BA	670	A
35	BA	673	C
35	BA	686	G
35	BA	708	C
35	BA	709	U
35	BA	721	C
35	BA	722	A
35	BA	730	C
35	BA	753	C
35	BA	765	G
35	BA	776	G
35	BA	781	A
35	BA	782	A
35	BA	784	A
35	BA	785	G
35	BA	786	C
35	BA	788	A
35	BA	789	A
35	BA	790	C
35	BA	791	C
35	BA	792	G
35	BA	805	G
35	BA	806	C
35	BA	812	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
35	BA	819	A
35	BA	827	U
35	BA	828	U
35	BA	829	A
35	BA	830	G
35	BA	831	G
35	BA	846	C
35	BA	848	G
35	BA	854	G
35	BA	857	C
35	BA	859	G
35	BA	866	A
35	BA	872	A
35	BA	878	A
35	BA	879	G
35	BA	885	C
35	BA	886	C
35	BA	887	A
35	BA	888	C
35	BA	889	C
35	BA	890	A
35	BA	895	U
35	BA	896	A
35	BA	897	C
35	BA	898	C
35	BA	899	A
35	BA	901	A
35	BA	907	U
35	BA	910	A
35	BA	915	C
35	BA	917	A
35	BA	926	A
35	BA	932	G
35	BA	933	A
35	BA	941	A
35	BA	945	A
35	BA	958	U
35	BA	959	A
35	BA	961	C
35	BA	962	G
35	BA	973	A
35	BA	974	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	975	C
35	BA	975(A)	G
35	BA	983	A
35	BA	989	G
35	BA	990	A
35	BA	991	C
35	BA	996	A
35	BA	1005	C
35	BA	1011	G
35	BA	1012	U
35	BA	1013	C
35	BA	1022	G
35	BA	1025	G
35	BA	1026	U
35	BA	1027	A
35	BA	1035	U
35	BA	1039	G
35	BA	1044	G
35	BA	1045	A
35	BA	1046	A
35	BA	1047	G
35	BA	1048	A
35	BA	1053	C
35	BA	1059	G
35	BA	1060	U
35	BA	1061	U
35	BA	1062	G
35	BA	1065	U
35	BA	1067	A
35	BA	1068	G
35	BA	1069	A
35	BA	1070	A
35	BA	1071	G
35	BA	1072	C
35	BA	1073	A
35	BA	1088	A
35	BA	1103	A
35	BA	1107	G
35	BA	1108	U
35	BA	1111	A
35	BA	1112	G
35	BA	1117	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	1129	A
35	BA	1130	U
35	BA	1135	C
35	BA	1136	G
35	BA	1142(A)	A
35	BA	1143	A
35	BA	1155	A
35	BA	1161	C
35	BA	1167	U
35	BA	1171	G
35	BA	1174	A
35	BA	1175	U
35	BA	1176	G
35	BA	1178	C
35	BA	1204	A
35	BA	1205	U
35	BA	1210	A
35	BA	1211	U
35	BA	1212	G
35	BA	1221	C
35	BA	1223	G
35	BA	1227	G
35	BA	1236	G
35	BA	1237	A
35	BA	1240	U
35	BA	1241	A
35	BA	1244	G
35	BA	1247	A
35	BA	1248	G
35	BA	1253	A
35	BA	1256	G
35	BA	1265	A
35	BA	1271	G
35	BA	1272	A
35	BA	1273	U
35	BA	1274	A
35	BA	1292	U
35	BA	1300	U
35	BA	1301	A
35	BA	1302	A
35	BA	1314	C
35	BA	1319	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	1321	A
35	BA	1332	G
35	BA	1349	A
35	BA	1352	U
35	BA	1359	A
35	BA	1365	A
35	BA	1367	A
35	BA	1368	G
35	BA	1378	A
35	BA	1379	A
35	BA	1380	G
35	BA	1384	A
35	BA	1385	G
35	BA	1386	C
35	BA	1396	U
35	BA	1398	C
35	BA	1406	U
35	BA	1407	C
35	BA	1416	G
35	BA	1417	C
35	BA	1419	A
35	BA	1420	U
35	BA	1421	G
35	BA	1427	A
35	BA	1428	C
35	BA	1436	G
35	BA	1445	A
35	BA	1449	A
35	BA	1450	G
35	BA	1451	C
35	BA	1455	G
35	BA	1460	A
35	BA	1467	C
35	BA	1471	A
35	BA	1475	G
35	BA	1478	G
35	BA	1482	G
35	BA	1485	G
35	BA	1490	A
35	BA	1493	C
35	BA	1495	A
35	BA	1496	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	1497	U
35	BA	1499	C
35	BA	1502	C
35	BA	1505	C
35	BA	1509	C
35	BA	1509(A)	A
35	BA	1514	U
35	BA	1517	G
35	BA	1518	U
35	BA	1520	G
35	BA	1528(A)	A
35	BA	1529	G
35	BA	1536	C
35	BA	1541	G
35	BA	1542	A
35	BA	1543	C
35	BA	1544	A
35	BA	1554	A
35	BA	1558	A
35	BA	1559	G
35	BA	1569	A
35	BA	1578	U
35	BA	1579	A
35	BA	1584	C
35	BA	1586	A
35	BA	1588	C
35	BA	1591	G
35	BA	1603	A
35	BA	1608	A
35	BA	1609	A
35	BA	1610	A
35	BA	1614	A
35	BA	1615	C
35	BA	1616	A
35	BA	1617	C
35	BA	1640	C
35	BA	1648	C
35	BA	1654	A
35	BA	1666	G
35	BA	1667	G
35	BA	1674	G
35	BA	1690	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	1694	C
35	BA	1698	A
35	BA	1699	G
35	BA	1717	G
35	BA	1718	G
35	BA	1721	G
35	BA	1722	A
35	BA	1739	U
35	BA	1740	G
35	BA	1742	G
35	BA	1744	C
35	BA	1748	G
35	BA	1756	G
35	BA	1763	G
35	BA	1764	G
35	BA	1773	A
35	BA	1780	A
35	BA	1781	C
35	BA	1787	A
35	BA	1791	A
35	BA	1799	G
35	BA	1800	C
35	BA	1801	G
35	BA	1816	G
35	BA	1820	U
35	BA	1821	A
35	BA	1829	A
35	BA	1835	G
35	BA	1838	C
35	BA	1839	G
35	BA	1845	G
35	BA	1847	A
35	BA	1848	A
35	BA	1858	G
35	BA	1865	G
35	BA	1866	C
35	BA	1878	G
35	BA	1881	C
35	BA	1882	C
35	BA	1885	A
35	BA	1888	G
35	BA	1889	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
35	BA	1893	C
35	BA	1894	C
35	BA	1895	C
35	BA	1900	A
35	BA	1901	A
35	BA	1907	G
35	BA	1909	C
35	BA	1911	U
35	BA	1912	A
35	BA	1913	A
35	BA	1914	C
35	BA	1915	U
35	BA	1916	A
35	BA	1920	C
35	BA	1921	G
35	BA	1924	C
35	BA	1925	C
35	BA	1926	U
35	BA	1927	A
35	BA	1928	A
35	BA	1929	G
35	BA	1930	G
35	BA	1936	A
35	BA	1937	A
35	BA	1938	A
35	BA	1940	U
35	BA	1948	G
35	BA	1955	U
35	BA	1963	U
35	BA	1964	G
35	BA	1965	C
35	BA	1967	C
35	BA	1970	A
35	BA	1971	A
35	BA	1972	A
35	BA	1981	A
35	BA	1982	C
35	BA	1987	G
35	BA	1992	G
35	BA	1993	U
35	BA	1997	G
35	BA	2023	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	2031	A
35	BA	2032	G
35	BA	2033	A
35	BA	2034	U
35	BA	2035	G
35	BA	2036	C
35	BA	2043	C
35	BA	2055	C
35	BA	2056	G
35	BA	2060	A
35	BA	2061	G
35	BA	2062	A
35	BA	2069	G
35	BA	2077	A
35	BA	2093	G
35	BA	2100	G
35	BA	2102	U
35	BA	2103	C
35	BA	2104	G
35	BA	2105	C
35	BA	2107	C
35	BA	2109	U
35	BA	2111	C
35	BA	2112	G
35	BA	2113	U
35	BA	2116	G
35	BA	2117	A
35	BA	2118	U
35	BA	2127	G
35	BA	2129	C
35	BA	2131	G
35	BA	2132	U
35	BA	2133	G
35	BA	2145	C
35	BA	2146	C
35	BA	2147	G
35	BA	2156	G
35	BA	2159	G
35	BA	2160	G
35	BA	2172	U
35	BA	2173	A
35	BA	2174	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	2178	C
35	BA	2179	C
35	BA	2180	U
35	BA	2185	C
35	BA	2186	G
35	BA	2187	G
35	BA	2189	U
35	BA	2190	G
35	BA	2193	G
35	BA	2198	A
35	BA	2199	A
35	BA	2200	C
35	BA	2207	G
35	BA	2208	A
35	BA	2218	U
35	BA	2219	G
35	BA	2225	A
35	BA	2238	G
35	BA	2239	G
35	BA	2243	U
35	BA	2245	U
35	BA	2268	A
35	BA	2275	C
35	BA	2283	C
35	BA	2287	A
35	BA	2288	A
35	BA	2305	A
35	BA	2307	G
35	BA	2308	G
35	BA	2309	A
35	BA	2311	A
35	BA	2312	U
35	BA	2313	C
35	BA	2319	G
35	BA	2320	A
35	BA	2331	G
35	BA	2334	G
35	BA	2336	A
35	BA	2347	C
35	BA	2350	C
35	BA	2354	G
35	BA	2361	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	2379	G
35	BA	2383	G
35	BA	2385	C
35	BA	2391	G
35	BA	2392	A
35	BA	2394	C
35	BA	2395	C
35	BA	2399	G
35	BA	2401	U
35	BA	2402	C
35	BA	2423	U
35	BA	2424	C
35	BA	2425	A
35	BA	2429	G
35	BA	2430	A
35	BA	2431	U
35	BA	2439	A
35	BA	2441	C
35	BA	2448	A
35	BA	2465	C
35	BA	2469	A
35	BA	2470	G
35	BA	2472	G
35	BA	2475	C
35	BA	2476	A
35	BA	2477	C
35	BA	2478	A
35	BA	2482	G
35	BA	2483	C
35	BA	2499	C
35	BA	2502	G
35	BA	2505	G
35	BA	2518	A
35	BA	2520	C
35	BA	2524	G
35	BA	2529	G
35	BA	2543	G
35	BA	2554	U
35	BA	2561	A
35	BA	2566	A
35	BA	2567	G
35	BA	2572	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	2576	G
35	BA	2577	A
35	BA	2578	G
35	BA	2602	A
35	BA	2610	C
35	BA	2611	U
35	BA	2612	C
35	BA	2615	U
35	BA	2630	G
35	BA	2641	G
35	BA	2646	C
35	BA	2654	A
35	BA	2657	A
35	BA	2673	G
35	BA	2675	A
35	BA	2682	U
35	BA	2690	C
35	BA	2691	C
35	BA	2702	U
35	BA	2703	C
35	BA	2712	U
35	BA	2712(A)	A
35	BA	2713	A
35	BA	2714	G
35	BA	2720	U
35	BA	2726	U
35	BA	2748	A
35	BA	2750	A
35	BA	2751	G
35	BA	2752	C
35	BA	2757	A
35	BA	2758	A
35	BA	2761	G
35	BA	2762	G
35	BA	2763	G
35	BA	2765	A
35	BA	2778	A
35	BA	2779	U
35	BA	2780	G
35	BA	2781	A
35	BA	2787	C
35	BA	2789	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	2790	A
35	BA	2791	C
35	BA	2794	C
35	BA	2799	C
35	BA	2801	A
35	BA	2801(A)	A
35	BA	2802	G
35	BA	2803	C
35	BA	2808	U
35	BA	2818	G
35	BA	2820	A
35	BA	2821	A
35	BA	2823	A
35	BA	2825	C
35	BA	2830	G
35	BA	2833	G
35	BA	2834	G
35	BA	2835	A
35	BA	2849	U
35	BA	2850	A
35	BA	2858	C
35	BA	2861	G
35	BA	2872	G
35	BA	2873	A
35	BA	2879	C
35	BA	2894	G
36	BB	8	U
36	BB	13	A
36	BB	15	A
36	BB	16	G
36	BB	17	C
36	BB	21	G
36	BB	25	A
36	BB	27	C
36	BB	35	U
36	BB	40	U
36	BB	41	U
36	BB	42	C
36	BB	43	C
36	BB	45	A
36	BB	53	A
36	BB	56	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BB	57	A
36	BB	68	C
36	BB	73	A
36	BB	74	U
36	BB	81	G
36	BB	88	C
36	BB	91	C
36	BB	110	G

All (135) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	30	U
1	AA	49	U
1	AA	60	A
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	530	G
1	AA	547	A
1	AA	560	U
1	AA	575	G
1	AA	576	G
1	AA	687	A
1	AA	703	G
1	AA	748	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	792	A
1	AA	870	U
1	AA	961	U
1	AA	968	A
1	AA	980	C
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	1124	G
1	AA	1139	G
1	AA	1157	A
1	AA	1190	G
1	AA	1200	C
1	AA	1239	A
1	AA	1283	G
1	AA	1285	A
1	AA	1286	A
1	AA	1319	A
1	AA	1320	C
1	AA	1326	C
1	AA	1347	G
1	AA	1399	C
1	AA	1452	C
1	AA	1498	U
1	AA	1504	G
22	AV	17(A)	U
22	AV	26	G
22	AV	53	G
35	BA	50	U
35	BA	71	A
35	BA	74	A
35	BA	177	G
35	BA	199	A
35	BA	214	G
35	BA	221	A
35	BA	331	A
35	BA	332	A
35	BA	370	G
35	BA	387	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	434	U
35	BA	472	A
35	BA	587	C
35	BA	603	A
35	BA	613	G
35	BA	614(C)	A
35	BA	654(K)	C
35	BA	752	A
35	BA	790	C
35	BA	829	A
35	BA	856	C
35	BA	886	C
35	BA	896	A
35	BA	945	A
35	BA	1052	C
35	BA	1060	U
35	BA	1068	G
35	BA	1069	A
35	BA	1177	A
35	BA	1210	A
35	BA	1300	U
35	BA	1301	A
35	BA	1378	A
35	BA	1396	U
35	BA	1427	A
35	BA	1517	G
35	BA	1541	G
35	BA	1558	A
35	BA	1608	A
35	BA	1616	A
35	BA	1653	G
35	BA	1666	G
35	BA	1748	G
35	BA	1756	G
35	BA	1799	G
35	BA	1819	A
35	BA	1908	C
35	BA	1924	C
35	BA	1937	A
35	BA	1938	A
35	BA	1948	G
35	BA	1970	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BA	1992	G
35	BA	1996	C
35	BA	2033	A
35	BA	2035	G
35	BA	2110	G
35	BA	2126	A
35	BA	2128	C
35	BA	2131	G
35	BA	2179	C
35	BA	2238	G
35	BA	2282	G
35	BA	2422	A
35	BA	2481	G
35	BA	2497	A
35	BA	2543	G
35	BA	2610	C
35	BA	2689	U
35	BA	2756	U
35	BA	2762	G
35	BA	2801	A
36	BB	56	G

## 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

## 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

## 5.6 Ligand geometry ⓘ

1 ligand is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
58	GCP	AY	1000	-	34,34,34	3.69	11 (32%)	52,54,54	4.66	10 (19%)

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
58	GCP	AY	1000	-	-	0/20/38/38	0/3/3/3

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	AY	1000	GCP	PG-C3B	13.87	1.93	1.79
58	AY	1000	GCP	C6-N1	7.62	1.47	1.36
58	AY	1000	GCP	C2-N3	6.74	1.41	1.33
58	AY	1000	GCP	PB-C3B	6.31	1.85	1.79
58	AY	1000	GCP	PB-O3A	5.67	1.64	1.58
58	AY	1000	GCP	C2-N1	4.75	1.44	1.36
58	AY	1000	GCP	C4-N3	4.28	1.42	1.35
58	AY	1000	GCP	C8-N9	4.06	1.42	1.36
58	AY	1000	GCP	PG-O2G	-3.19	1.48	1.54
58	AY	1000	GCP	PG-O3G	-2.35	1.50	1.54
58	AY	1000	GCP	PG-O1G	2.03	1.54	1.50

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	AY	1000	GCP	C6-C5-N7	-32.00	129.83	134.14
58	AY	1000	GCP	C6-N1-C2	5.43	123.27	120.20
58	AY	1000	GCP	O3G-PG-O1G	-2.71	105.32	112.49
58	AY	1000	GCP	C8-N9-C1'	2.63	131.11	126.15
58	AY	1000	GCP	PA-O3A-PB	-2.42	124.74	132.02
58	AY	1000	GCP	O2G-PG-O1G	-2.41	106.11	112.49
58	AY	1000	GCP	O3G-PG-O2G	2.40	115.84	108.34
58	AY	1000	GCP	C4-C5-N7	2.19	111.53	109.41
58	AY	1000	GCP	C4'-O4'-C1'	2.06	111.98	109.72
58	AY	1000	GCP	C1'-N9-C4	-2.04	123.10	126.64

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%)	-0.08	39 (2%) 53 35	52, 140, 199, 200	0
2	AB	235/256 (91%)	-0.13	2 (0%) 81 62	40, 110, 177, 200	0
3	AC	207/239 (86%)	-0.18	2 (0%) 79 59	37, 117, 174, 200	0
4	AD	208/209 (99%)	0.37	7 (3%) 43 29	48, 158, 200, 200	0
5	AE	151/162 (93%)	0.09	1 (0%) 84 67	38, 112, 171, 200	0
6	AF	101/101 (100%)	-0.21	1 (0%) 79 59	59, 135, 188, 200	0
7	AG	155/156 (99%)	-0.03	3 (1%) 64 42	46, 128, 189, 200	0
8	AH	138/138 (100%)	0.13	4 (2%) 49 32	36, 114, 180, 200	0
9	AI	127/128 (99%)	0.25	1 (0%) 83 64	32, 121, 172, 200	0
10	AJ	99/105 (94%)	0.62	11 (11%) 6 7	32, 125, 191, 200	0
11	AK	119/129 (92%)	0.20	6 (5%) 28 19	40, 116, 179, 200	0
12	AL	125/135 (92%)	0.39	5 (4%) 36 25	45, 119, 192, 200	0
13	AM	125/126 (99%)	0.54	12 (9%) 8 8	64, 127, 200, 200	0
14	AN	60/61 (98%)	0.07	0 100 100	28, 104, 172, 200	0
15	AO	88/89 (98%)	0.32	5 (5%) 23 16	59, 130, 188, 200	0
16	AP	84/88 (95%)	1.36	21 (25%) 1 2	79, 156, 200, 200	0
17	AQ	100/105 (95%)	0.80	8 (8%) 12 11	66, 141, 200, 200	0
18	AR	70/88 (79%)	0.31	2 (2%) 49 32	59, 124, 176, 200	0
19	AS	79/93 (84%)	0.34	4 (5%) 27 19	57, 118, 197, 200	0
20	AT	99/106 (93%)	0.75	15 (15%) 3 4	87, 153, 200, 200	0
21	AU	25/27 (92%)	0.98	4 (16%) 3 4	46, 117, 175, 185	0
22	AV	77/77 (100%)	-0.62	1 (1%) 74 52	77, 151, 189, 199	0
23	AX	9/9 (100%)	0.51	1 (11%) 6 7	79, 156, 192, 199	0
24	AY	496/529 (93%)	0.52	46 (9%) 9 9	71, 170, 202, 202	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å <sup>2</sup> )	Q<0.9
25	B0	84/85 (98%)	1.10	13 (15%)	3 4	37, 118, 194, 200	0
26	B1	94/98 (95%)	0.84	11 (11%)	5 6	65, 143, 197, 200	0
27	B2	71/72 (98%)	0.24	4 (5%)	24 17	101, 153, 200, 200	0
28	B3	60/60 (100%)	0.75	5 (8%)	11 10	54, 126, 198, 200	0
29	B4	45/71 (63%)	0.15	2 (4%)	33 23	108, 174, 200, 200	0
30	B5	59/60 (98%)	0.54	8 (13%)	4 4	62, 150, 200, 200	0
31	B6	50/54 (92%)	0.86	8 (16%)	3 4	62, 139, 186, 200	0
32	B7	49/49 (100%)	0.99	9 (18%)	2 3	78, 153, 197, 200	0
33	B8	64/65 (98%)	0.57	5 (7%)	13 11	66, 129, 179, 200	0
34	B9	37/37 (100%)	1.61	10 (27%)	1 2	71, 142, 178, 194	0
35	BA	2901/2915 (99%)	0.14	116 (3%)	36 25	51, 159, 201, 202	0
36	BB	119/122 (97%)	-0.30	1 (0%)	83 64	66, 123, 172, 190	0
37	BC	228/229 (99%)	1.73	72 (31%)	1 2	87, 182, 200, 200	0
38	BD	275/276 (99%)	0.44	22 (8%)	12 11	40, 117, 175, 200	0
39	BE	205/206 (99%)	0.40	15 (7%)	15 12	51, 143, 199, 200	0
40	BF	208/210 (99%)	0.59	20 (9%)	8 8	51, 156, 200, 200	0
41	BG	181/182 (99%)	0.12	4 (2%)	59 39	47, 134, 194, 200	0
42	BH	156/180 (86%)	0.59	17 (10%)	6 7	78, 165, 200, 200	0
43	BJ	1/173 (0%)	3.21	1 (100%)	0 0	174, 174, 174, 174	0
44	BK	0/147	-	-	-	-	-
45	BN	139/140 (99%)	0.42	5 (3%)	41 28	69, 131, 190, 200	0
46	BO	122/122 (100%)	0.66	11 (9%)	10 9	59, 133, 198, 200	0
47	BP	146/150 (97%)	0.71	19 (13%)	4 5	65, 147, 200, 200	0
48	BQ	141/141 (100%)	0.26	8 (5%)	23 16	20, 107, 171, 200	0
49	BR	117/118 (99%)	1.01	15 (12%)	4 5	81, 169, 200, 200	0
50	BS	99/112 (88%)	0.30	8 (8%)	12 11	49, 123, 194, 200	0
51	BT	138/146 (94%)	0.63	17 (12%)	5 5	89, 162, 200, 200	0
52	BU	117/118 (99%)	0.30	3 (2%)	53 35	47, 121, 179, 200	0
53	BV	101/101 (100%)	0.91	18 (17%)	2 3	42, 146, 200, 200	0
54	BW	113/113 (100%)	1.47	35 (30%)	1 2	78, 165, 200, 200	0
55	BX	93/96 (96%)	1.23	24 (25%)	1 2	38, 167, 200, 200	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
56	BY	101/110 (91%)	1.64	32 (31%) 1 2	86, 169, 200, 200	0
57	BZ	176/206 (85%)	0.05	4 (2%) 57 38	43, 122, 195, 200	0
All	All	10971/11642 (94%)	0.32	743 (6%) 17 13	20, 146, 200, 202	0

All (743) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	AM	126	LYS	13.2
35	BA	654(K)	C	11.7
37	BC	173	ALA	9.5
37	BC	216	THR	9.3
37	BC	36	LYS	8.9
24	AY	349	MET	8.5
37	BC	95	GLY	8.2
56	BY	8	LYS	8.2
37	BC	207	THR	8.2
25	B0	3	HIS	8.1
13	AM	125	ARG	7.9
35	BA	1065	U	7.8
37	BC	35	ALA	7.7
56	BY	35	TYR	7.6
37	BC	165	ASN	7.6
35	BA	1066	U	7.4
34	B9	1	MET	7.2
31	B6	46	HIS	7.1
35	BA	275	G	7.1
1	AA	89	C	6.9
1	AA	82	U	6.7
35	BA	34	C	6.6
35	BA	2894	G	6.5
35	BA	1076	C	6.5
56	BY	32	PRO	6.4
46	BO	76	ALA	6.4
35	BA	1075	C	6.4
54	BW	74	ALA	6.4
56	BY	7	VAL	6.4
35	BA	1078	U	6.4
35	BA	2802	G	6.4
24	AY	109	CYS	6.3
37	BC	210	ARG	6.3
28	B3	1	MET	6.3

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
42	BH	158	HIS	6.2
35	BA	1575	C	6.2
40	BF	208	GLY	6.1
35	BA	1420	U	6.0
39	BE	158	GLY	6.0
37	BC	200	LYS	6.0
24	AY	111	MET	6.0
37	BC	1	PRO	5.9
51	BT	115	ARG	5.8
37	BC	79	LYS	5.8
37	BC	219	GLY	5.8
1	AA	619	U	5.8
10	AJ	3	LYS	5.7
56	BY	6	HIS	5.7
35	BA	2895	U	5.7
25	B0	5	LYS	5.6
24	AY	108	CYS	5.6
37	BC	16	PRO	5.6
51	BT	118	ARG	5.5
11	AK	11	LYS	5.5
16	AP	17	TYR	5.5
56	BY	5	MET	5.5
55	BX	53	LYS	5.5
37	BC	206	GLY	5.4
55	BX	79	ALA	5.4
35	BA	1546	C	5.4
13	AM	117	VAL	5.4
24	AY	62	MET	5.4
35	BA	1067	A	5.4
51	BT	1	MET	5.4
54	BW	94	ASP	5.4
10	AJ	100	THR	5.4
35	BA	1090	U	5.3
37	BC	17	ASN	5.3
37	BC	205	LYS	5.3
35	BA	1574	C	5.3
24	AY	342	ILE	5.2
1	AA	218	C	5.2
37	BC	215	THR	5.2
35	BA	1534	U	5.1
56	BY	4	LYS	5.1
21	AU	26	LYS	5.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
54	BW	24	ILE	5.0
49	BR	112	ALA	5.0
37	BC	199	HIS	5.0
53	BV	68	LYS	4.9
16	AP	32	TYR	4.9
13	AM	123	ALA	4.9
56	BY	29	GLU	4.9
35	BA	33	U	4.9
52	BU	90	VAL	4.8
55	BX	81	VAL	4.8
42	BH	167	GLU	4.8
17	AQ	74	LEU	4.8
54	BW	11	ARG	4.8
13	AM	122	LYS	4.8
20	AT	9	ASN	4.8
35	BA	654(V)	A	4.7
37	BC	201	PRO	4.7
55	BX	61	GLY	4.7
7	AG	79	ARG	4.7
37	BC	208	PHE	4.7
37	BC	24	GLU	4.7
35	BA	1274	A	4.7
38	BD	36	PRO	4.6
35	BA	1543	C	4.6
30	B5	30	LEU	4.6
56	BY	31	LEU	4.6
42	BH	58	GLU	4.6
35	BA	1276	A	4.6
16	AP	34	GLU	4.5
35	BA	654(I)	C	4.5
37	BC	217	THR	4.5
15	AO	48	LYS	4.5
8	AH	131	GLY	4.5
24	AY	36	PHE	4.5
35	BA	654(H)	G	4.5
56	BY	3	VAL	4.5
56	BY	28	LYS	4.5
25	B0	2	ALA	4.5
56	BY	33	LYS	4.5
56	BY	9	LYS	4.5
56	BY	79	CYS	4.4
40	BF	152	GLU	4.4

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
55	BX	34	ALA	4.4
20	AT	8	ARG	4.4
1	AA	96	U	4.4
24	AY	350	ALA	4.4
55	BX	78	LYS	4.4
24	AY	17	ALA	4.4
37	BC	209	LEU	4.4
37	BC	85	GLU	4.3
35	BA	2801	A	4.3
37	BC	12	GLU	4.3
47	BP	88	LEU	4.3
35	BA	654(L)	G	4.3
37	BC	220	PRO	4.3
37	BC	184	LYS	4.3
35	BA	1064	C	4.3
38	BD	276	LYS	4.2
56	BY	36	ALA	4.2
24	AY	66	ARG	4.2
1	AA	81	U	4.2
34	B9	15	LYS	4.2
10	AJ	5	ARG	4.1
1	AA	217	C	4.1
56	BY	2	ARG	4.1
1	AA	88	A	4.1
37	BC	164	ARG	4.1
42	BH	110	SER	4.1
54	BW	81	ALA	4.1
13	AM	116	THR	4.1
35	BA	654(S)	G	4.1
21	AU	20	LYS	4.1
42	BH	111	HIS	4.1
40	BF	207	GLY	4.1
37	BC	48	GLY	4.1
24	AY	138	LEU	4.0
41	BG	49	ASP	4.0
24	AY	65	GLN	4.0
42	BH	59	ARG	4.0
35	BA	654(D)	G	4.0
1	AA	216	G	4.0
37	BC	198	ALA	4.0
37	BC	96	GLY	4.0
19	AS	82	GLY	4.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
54	BW	93	ALA	4.0
34	B9	28	GLU	4.0
24	AY	37	GLY	3.9
35	BA	2789	C	3.9
47	BP	102	ARG	3.9
56	BY	51	VAL	3.9
1	AA	143	A	3.9
37	BC	118	ASP	3.9
37	BC	88	GLU	3.9
37	BC	203	GLY	3.9
54	BW	72	LYS	3.9
37	BC	134	ARG	3.9
42	BH	61	HIS	3.9
54	BW	10	VAL	3.9
50	BS	37	ALA	3.8
35	BA	1074	G	3.8
37	BC	218	MET	3.8
35	BA	2712(A)	A	3.8
35	BA	1094	U	3.8
38	BD	102	LYS	3.8
53	BV	77	ALA	3.7
16	AP	22	THR	3.7
18	AR	23	LYS	3.7
42	BH	159	GLU	3.7
35	BA	654(E)	G	3.7
40	BF	172	TRP	3.7
24	AY	77	PHE	3.7
54	BW	23	LEU	3.7
37	BC	15	ASP	3.7
18	AR	19	LYS	3.7
6	AF	101	ALA	3.7
35	BA	1360	A	3.7
51	BT	2	ASN	3.6
37	BC	174	PRO	3.6
1	AA	142	G	3.6
16	AP	18	ARG	3.6
51	BT	116	ALA	3.6
51	BT	117	ASP	3.6
13	AM	124	PRO	3.6
56	BY	30	VAL	3.6
24	AY	76	GLN	3.6
7	AG	78	ARG	3.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
48	BQ	95	ALA	3.6
42	BH	60	ARG	3.6
20	AT	72	LEU	3.6
10	AJ	77	PRO	3.6
47	BP	15	ARG	3.5
24	AY	19	ILE	3.5
38	BD	275	LYS	3.5
1	AA	620	C	3.5
10	AJ	45	ARG	3.5
37	BC	94	VAL	3.5
1	AA	1257	U	3.5
23	AX	19	U	3.5
55	BX	54	VAL	3.5
24	AY	116	ALA	3.5
7	AG	80	VAL	3.5
24	AY	139	THR	3.5
55	BX	59	VAL	3.5
11	AK	128	ALA	3.5
24	AY	367	LEU	3.5
13	AM	16	ASP	3.5
52	BU	89	GLU	3.4
35	BA	654(J)	A	3.4
35	BA	1536	C	3.4
35	BA	1752	C	3.4
35	BA	654(U)	A	3.4
37	BC	130	ILE	3.4
24	AY	234	VAL	3.4
35	BA	1277	G	3.4
40	BF	12	LEU	3.4
54	BW	84	ARG	3.4
37	BC	2	LYS	3.4
4	AD	135	LEU	3.4
32	B7	41	ARG	3.4
37	BC	34	THR	3.4
28	B3	12	PRO	3.4
56	BY	74	PRO	3.4
35	BA	654(C)	G	3.4
17	AQ	75	ARG	3.4
26	B1	21	ARG	3.4
24	AY	358	GLU	3.4
32	B7	42	LEU	3.4
4	AD	125	HIS	3.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
56	BY	80	GLY	3.4
51	BT	113	LYS	3.4
12	AL	20	LYS	3.3
35	BA	1535	A	3.3
40	BF	149	ASP	3.3
35	BA	1647	G	3.3
35	BA	2833	G	3.3
35	BA	1091	G	3.3
1	AA	632	A	3.3
51	BT	64	ARG	3.3
35	BA	654(T)	C	3.3
11	AK	12	ARG	3.3
46	BO	103	ALA	3.3
26	B1	15	ALA	3.3
20	AT	25	ARG	3.3
35	BA	1077	A	3.3
16	AP	6	LEU	3.3
55	BX	77	LYS	3.2
2	AB	132	LYS	3.2
40	BF	78	ILE	3.2
56	BY	34	LYS	3.2
48	BQ	141	GLN	3.2
37	BC	150	GLY	3.2
43	BJ	85	LEU	3.2
24	AY	115	ALA	3.2
37	BC	86	ALA	3.2
35	BA	1079	C	3.2
20	AT	104	LEU	3.2
30	B5	58	LEU	3.2
47	BP	77	ARG	3.2
34	B9	34	GLN	3.2
55	BX	35	THR	3.2
57	BZ	164	ALA	3.2
37	BC	83	ILE	3.2
37	BC	179	SER	3.2
56	BY	82	PRO	3.2
16	AP	59	TRP	3.2
11	AK	126	ARG	3.1
55	BX	28	PHE	3.1
55	BX	40	LYS	3.1
39	BE	114	ALA	3.1
4	AD	133	VAL	3.1

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
35	BA	614(A)	U	3.1
56	BY	72	VAL	3.1
16	AP	46	PRO	3.1
20	AT	23	ARG	3.1
35	BA	1213	A	3.1
40	BF	46	ARG	3.1
30	B5	53	ALA	3.1
37	BC	97	GLU	3.1
31	B6	54	ILE	3.1
32	B7	32	LYS	3.1
48	BQ	12	GLN	3.1
15	AO	47	LYS	3.1
50	BS	74	ALA	3.1
16	AP	7	ALA	3.1
54	BW	103	ILE	3.1
34	B9	37	GLY	3.1
38	BD	37	LEU	3.1
16	AP	37	GLY	3.1
30	B5	59	GLU	3.1
47	BP	106	LEU	3.0
37	BC	37	PHE	3.0
53	BV	81	TYR	3.0
39	BE	157	ALA	3.0
55	BX	76	ARG	3.0
47	BP	82	GLY	3.0
35	BA	12	U	3.0
40	BF	11	VAL	3.0
38	BD	47	GLY	3.0
39	BE	73	GLU	3.0
35	BA	1237	A	3.0
35	BA	1272	A	3.0
35	BA	1618	A	3.0
35	BA	1761	C	3.0
56	BY	38	ILE	3.0
13	AM	118	ALA	3.0
54	BW	85	VAL	3.0
35	BA	1659	U	3.0
37	BC	115	ALA	3.0
32	B7	31	LEU	3.0
34	B9	4	ARG	3.0
16	AP	13	HIS	3.0
54	BW	73	ALA	3.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
55	BX	68	ARG	3.0
35	BA	676	A	3.0
24	AY	356	VAL	3.0
31	B6	13	CYS	3.0
51	BT	114	LEU	3.0
47	BP	83	VAL	3.0
47	BP	84	ASN	3.0
47	BP	110	TYR	3.0
46	BO	26	LYS	3.0
55	BX	56	THR	3.0
53	BV	27	ALA	2.9
1	AA	618	C	2.9
38	BD	233	HIS	2.9
20	AT	24	LEU	2.9
47	BP	108	LYS	2.9
47	BP	85	LEU	2.9
37	BC	116	THR	2.9
39	BE	69	LYS	2.9
25	B0	74	ARG	2.9
37	BC	166	ASP	2.9
56	BY	25	GLY	2.9
26	B1	20	ARG	2.9
37	BC	53	ARG	2.9
49	BR	90	ARG	2.9
35	BA	508	G	2.9
15	AO	50	HIS	2.9
53	BV	6	LYS	2.9
54	BW	2	GLU	2.9
24	AY	325	TYR	2.9
54	BW	69	LEU	2.9
56	BY	52	SER	2.9
16	AP	1	MET	2.8
20	AT	22	ARG	2.8
54	BW	21	VAL	2.8
1	AA	97	G	2.8
35	BA	2629	A	2.8
32	B7	45	ALA	2.8
24	AY	75	MET	2.8
33	B8	57	ARG	2.8
11	AK	129	SER	2.8
24	AY	152	MET	2.8
24	AY	202	GLN	2.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
38	BD	269	PHE	2.8
24	AY	497	GLY	2.8
24	AY	256	PHE	2.8
35	BA	2003	G	2.8
16	AP	8	ARG	2.8
1	AA	1447	A	2.8
9	AI	8	GLY	2.8
20	AT	21	LYS	2.8
1	AA	1493	A	2.8
49	BR	3	HIS	2.8
35	BA	1212	G	2.8
53	BV	25	LEU	2.8
1	AA	1398	A	2.8
47	BP	81	GLN	2.8
35	BA	1447	G	2.8
34	B9	35	ARG	2.7
38	BD	8	PRO	2.7
10	AJ	33	GLN	2.7
24	AY	439	GLY	2.7
49	BR	44	LEU	2.7
46	BO	75	SER	2.7
29	B4	44	THR	2.7
1	AA	93	G	2.7
42	BH	26	VAL	2.7
15	AO	89	GLY	2.7
40	BF	147	GLY	2.7
35	BA	1641	A	2.7
39	BE	159	HIS	2.7
50	BS	73	LEU	2.7
54	BW	1	MET	2.7
37	BC	148	ASN	2.7
40	BF	79	GLY	2.7
1	AA	228	A	2.7
32	B7	35	ARG	2.7
20	AT	71	THR	2.7
37	BC	38	ASP	2.7
55	BX	57	LEU	2.7
56	BY	46	LYS	2.7
32	B7	46	VAL	2.7
35	BA	278	A	2.7
37	BC	121	GLY	2.7
16	AP	39	TYR	2.7

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
47	BP	119	GLU	2.7
35	BA	277	C	2.6
37	BC	181	PRO	2.6
48	BQ	40	ALA	2.6
37	BC	20	TYR	2.6
26	B1	60	PHE	2.6
27	B2	11	GLU	2.6
55	BX	39	ILE	2.6
30	B5	9	LYS	2.6
35	BA	1273	U	2.6
35	BA	1545	A	2.6
45	BN	82	LEU	2.6
37	BC	172	HIS	2.6
3	AC	149	ALA	2.6
49	BR	29	LEU	2.6
51	BT	100	TYR	2.6
51	BT	65	LYS	2.6
30	B5	60	VAL	2.6
40	BF	28	ILE	2.6
20	AT	64	ASP	2.6
35	BA	1211	U	2.6
35	BA	1384	A	2.6
55	BX	80	ILE	2.6
54	BW	25	ARG	2.6
24	AY	348	PHE	2.6
25	B0	6	GLY	2.6
24	AY	343	SER	2.6
13	AM	115	LYS	2.6
24	AY	389	GLY	2.6
38	BD	170	GLY	2.6
24	AY	110	LEU	2.6
35	BA	1383	C	2.6
50	BS	30	ARG	2.6
50	BS	59	LYS	2.6
25	B0	53	MET	2.6
49	BR	13	HIS	2.6
35	BA	1658	C	2.5
31	B6	50	ARG	2.5
37	BC	122	ALA	2.5
35	BA	2141	G	2.5
16	AP	36	ILE	2.5
30	B5	54	GLY	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
37	BC	211	SER	2.5
50	BS	51	ALA	2.5
39	BE	131	ALA	2.5
57	BZ	165	VAL	2.5
31	B6	49	HIS	2.5
47	BP	149	GLU	2.5
38	BD	262	ARG	2.5
35	BA	2062	A	2.5
49	BR	2	ARG	2.5
49	BR	26	LYS	2.5
54	BW	99	ARG	2.5
33	B8	64	TYR	2.5
37	BC	49	ILE	2.5
12	AL	120	TYR	2.5
35	BA	271(A)	A	2.5
39	BE	107	THR	2.5
35	BA	1372	U	2.5
35	BA	643	A	2.5
35	BA	31	C	2.5
35	BA	115	C	2.5
53	BV	12	TYR	2.5
53	BV	70	ILE	2.5
25	B0	46	LYS	2.5
55	BX	58	HIS	2.5
35	BA	2125	G	2.5
51	BT	99	LEU	2.5
54	BW	22	ASP	2.5
37	BC	82	LYS	2.5
5	AE	29	GLY	2.5
35	BA	1210	A	2.5
24	AY	338	LYS	2.5
1	AA	202	U	2.5
4	AD	17	VAL	2.5
35	BA	2402	C	2.5
47	BP	79	ARG	2.5
46	BO	30	ALA	2.5
46	BO	122	LEU	2.5
34	B9	2	LYS	2.5
1	AA	314	C	2.5
1	AA	50	A	2.4
40	BF	194	MET	2.4
1	AA	328	C	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
48	BQ	97	VAL	2.4
56	BY	10	GLY	2.4
54	BW	12	ILE	2.4
55	BX	60	ARG	2.4
35	BA	1275	A	2.4
53	BV	75	PHE	2.4
35	BA	2690	C	2.4
45	BN	43	THR	2.4
17	AQ	31	LEU	2.4
1	AA	116	A	2.4
35	BA	654	A	2.4
26	B1	57	GLU	2.4
54	BW	75	TYR	2.4
10	AJ	101	VAL	2.4
34	B9	36	GLN	2.4
35	BA	1026	U	2.4
22	AV	17	C	2.4
52	BU	91	ASP	2.4
1	AA	229	U	2.4
27	B2	8	LYS	2.4
36	BB	90	A	2.4
40	BF	110	LEU	2.4
53	BV	26	ASP	2.4
24	AY	79	TYR	2.4
4	AD	139	ARG	2.4
17	AQ	58	GLU	2.4
25	B0	39	ARG	2.4
47	BP	89	ALA	2.4
51	BT	73	GLU	2.4
51	BT	112	ARG	2.4
37	BC	55	ASP	2.4
39	BE	27	LEU	2.4
13	AM	84	ILE	2.4
47	BP	118	GLY	2.4
1	AA	181	G	2.3
12	AL	128	ALA	2.3
16	AP	64	ALA	2.3
35	BA	336	C	2.3
20	AT	106	ALA	2.3
38	BD	35	LYS	2.3
45	BN	77	GLY	2.3
37	BC	149	ILE	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>
54	BW	87	PRO	2.3
42	BH	76	VAL	2.3
48	BQ	17	LEU	2.3
20	AT	98	PRO	2.3
56	BY	69	ALA	2.3
8	AH	99	GLU	2.3
20	AT	26	ASN	2.3
46	BO	121	VAL	2.3
33	B8	24	ALA	2.3
49	BR	72	ASP	2.3
57	BZ	150	LEU	2.3
38	BD	223	GLY	2.3
35	BA	1092	C	2.3
12	AL	19	ARG	2.3
8	AH	100	ILE	2.3
24	AY	178	LEU	2.3
24	AY	456	GLU	2.3
40	BF	18	ARG	2.3
53	BV	82	ARG	2.3
38	BD	184	LYS	2.3
54	BW	83	LYS	2.3
16	AP	73	LEU	2.3
17	AQ	32	TYR	2.3
55	BX	36	LYS	2.3
38	BD	147	LEU	2.3
10	AJ	74	ILE	2.3
34	B9	16	VAL	2.3
31	B6	42	TRP	2.3
12	AL	102	ARG	2.3
26	B1	33	LYS	2.3
24	AY	231	LEU	2.3
49	BR	111	LEU	2.3
30	B5	11	THR	2.3
31	B6	39	TYR	2.3
3	AC	150	LYS	2.3
54	BW	46	PHE	2.3
42	BH	57	ASP	2.3
49	BR	52	ILE	2.2
54	BW	18	ARG	2.2
46	BO	25	LEU	2.2
1	AA	83	U	2.2
17	AQ	43	LEU	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
21	AU	25	LYS	2.2
51	BT	93	ARG	2.2
1	AA	306	G	2.2
49	BR	96	ARG	2.2
21	AU	21	TYR	2.2
26	B1	22	GLY	2.2
35	BA	414	C	2.2
37	BC	13	LYS	2.2
10	AJ	85	LEU	2.2
35	BA	2630	G	2.2
39	BE	122	PHE	2.2
16	AP	74	LEU	2.2
55	BX	26	TYR	2.2
1	AA	80	G	2.2
25	B0	45	PHE	2.2
25	B0	84	LEU	2.2
38	BD	38	LYS	2.2
16	AP	41	PRO	2.2
37	BC	61	THR	2.2
24	AY	199	HIS	2.2
54	BW	20	VAL	2.2
39	BE	149	ARG	2.2
54	BW	47	VAL	2.2
16	AP	35	LYS	2.2
1	AA	527	G	2.2
20	AT	51	GLU	2.2
35	BA	276	A	2.2
42	BH	112	PRO	2.2
47	BP	78	PRO	2.2
49	BR	14	SER	2.2
53	BV	11	GLN	2.2
54	BW	43	GLY	2.2
25	B0	79	VAL	2.2
35	BA	1547	C	2.2
35	BA	1990	C	2.2
25	B0	8	GLY	2.2
1	AA	130	A	2.2
28	B3	2	PRO	2.2
38	BD	27	THR	2.2
38	BD	183	ARG	2.2
54	BW	44	ALA	2.2
38	BD	101	GLU	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
53	BV	50	PRO	2.2
26	B1	91	LYS	2.2
51	BT	105	LEU	2.2
54	BW	65	LEU	2.2
35	BA	1744	C	2.2
46	BO	120	GLU	2.2
24	AY	38	GLN	2.2
28	B3	52	HIS	2.2
35	BA	2719	G	2.2
33	B8	46	ARG	2.2
10	AJ	73	ASP	2.2
17	AQ	33	GLY	2.2
42	BH	113	VAL	2.2
8	AH	98	LYS	2.2
19	AS	10	PHE	2.2
26	B1	52	ARG	2.2
40	BF	58	ALA	2.1
35	BA	2172	U	2.1
35	BA	2310	A	2.1
35	BA	2897	U	2.1
41	BG	35	GLU	2.1
53	BV	55	ALA	2.1
16	AP	23	ASP	2.1
25	B0	85	ALA	2.1
56	BY	59	GLY	2.1
1	AA	389	A	2.1
35	BA	406	G	2.1
35	BA	1073	A	2.1
57	BZ	163	LEU	2.1
31	B6	44	ARG	2.1
1	AA	177	C	2.1
56	BY	66	PRO	2.1
24	AY	362	GLY	2.1
37	BC	204	ALA	2.1
41	BG	90	LEU	2.1
48	BQ	39	PRO	2.1
10	AJ	4	ILE	2.1
35	BA	157	U	2.1
53	BV	5	VAL	2.1
53	BV	88	ARG	2.1
29	B4	8	LYS	2.1
38	BD	254	THR	2.1

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
47	BP	76	LYS	2.1
37	BC	14	VAL	2.1
35	BA	156	U	2.1
35	BA	588	U	2.1
40	BF	108	LYS	2.1
4	AD	138	TYR	2.1
35	BA	790	C	2.1
49	BR	4	LEU	2.1
56	BY	55	TYR	2.1
1	AA	203	U	2.1
50	BS	49	VAL	2.1
1	AA	51	A	2.1
35	BA	11	G	2.1
35	BA	274	G	2.1
35	BA	32	C	2.1
2	AB	7	VAL	2.1
4	AD	124	GLY	2.1
46	BO	80	ASP	2.1
28	B3	53	LEU	2.1
13	AM	114	ARG	2.1
35	BA	1235	G	2.1
38	BD	224	ALA	2.1
54	BW	32	ALA	2.1
42	BH	74	ASN	2.1
51	BT	21	GLU	2.1
39	BE	68	ALA	2.1
11	AK	119	CYS	2.1
35	BA	896	A	2.1
45	BN	7	LYS	2.1
24	AY	253	PRO	2.1
35	BA	1068	G	2.1
40	BF	151	SER	2.1
54	BW	107	LEU	2.1
54	BW	4	LYS	2.1
55	BX	82	GLN	2.1
15	AO	87	ILE	2.1
24	AY	501	LEU	2.1
37	BC	202	GLU	2.1
27	B2	68	ARG	2.0
37	BC	124	GLY	2.0
35	BA	2819	G	2.0
45	BN	83	LYS	2.0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
40	BF	150	GLY	2.0
1	AA	33	A	2.0
24	AY	237	ALA	2.0
33	B8	23	VAL	2.0
46	BO	79	PHE	2.0
26	B1	58	ILE	2.0
49	BR	36	THR	2.0
1	AA	585	G	2.0
35	BA	2848	G	2.0
35	BA	2063	C	2.0
37	BC	58	VAL	2.0
39	BE	59	VAL	2.0
39	BE	137	HIS	2.0
53	BV	101	GLY	2.0
54	BW	98	LYS	2.0
40	BF	53	THR	2.0
35	BA	1238	G	2.0
42	BH	163	TYR	2.0
24	AY	18	ILE	2.0
38	BD	237	GLU	2.0
17	AQ	45	HIS	2.0
27	B2	10	LEU	2.0
32	B7	7	PRO	2.0
50	BS	88	ASP	2.0
55	BX	52	VAL	2.0
48	BQ	14	ARG	2.0
35	BA	271(N)	U	2.0
35	BA	733	G	2.0
53	BV	52	VAL	2.0
39	BE	54	GLN	2.0
32	B7	8	ASN	2.0
26	B1	53	VAL	2.0
41	BG	84	LYS	2.0
42	BH	86	GLU	2.0
19	AS	8	GLY	2.0
19	AS	81	ARG	2.0
37	BC	11	LEU	2.0

## 6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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

### 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
58	GCP	AY	1000	32/32	0.24	-	95,109,121,122	0

### 6.5 Other polymers

There are no such residues in this entry.