

Rank	Bull Name	Bull BC	£PLI	£PLI Rel	Milk (kg)	Fat (kg)	Prot (kg)	Fat (%)
1	OCD TROO	65	779	70	915	47.8	35.7	0.12
2	PEAK ALTA	65	757	72	612	38.5	30.4	0.16
3	SDG-PH DE	65	741	71	794	49.3	31.6	0.19
4	WINSTAR M	65	728	70	393	44.7	22	0.33
5	GENOSOUF	65	723	97	993	44.2	32.6	0.05
6	PLAIN-KNO	65	715	84	728	40.9	29.7	0.13
7	PROGENES	64	712	70	803	49.9	35	0.2
8	DENOVO 1	65	701	70	757	40.2	31.5	0.11
9	WINSTAR G	65	698	83	363	40	25.2	0.29
10	DENOVO 1	65	698	81	240	50.7	25.6	0.48
11	PEAK RAIN	65	696	86	474	44.5	25	0.29
12	RMD-DOTT	65	689	70	453	47.9	31.3	0.34
13	DENOVO 1	65	682	82	356	53.1	24.1	0.45
14	FB KENOBI	65	676	94	857	27	39.1	-0.08
15	LEVEL-PLA	65	668	70	1179	43	36.2	-0.05
16	STGEN COV	65	667	77	719	51.9	30	0.26
17	PEAK ALTA	65	666	78	688	54.6	33.4	0.3
18	DENOVO 1	65	657	90	505	46.5	24.6	0.3
19	WINSTAR M	65	655	95	409	55.2	25.2	0.45
20	SJK HELIUM	63	651	84	615	27.1	28.4	0.03
21	S-S-I HD CC	65	650	77	870	33.7	29.9	-0.01
22	WINSTAR M	65	648	71	440	54	21.1	0.42
23	PEAK MAU	65	648	93	348	27.3	20.2	0.15
24	VATLAND E	65	640	69	751	38.4	27.3	0.09
25	PEAK ALTA	65	639	77	483	30.3	24.3	0.13
26	PEAK AltaP	65	638	72	862	28.5	25.6	-0.07
27	PEAK ALTA	65	635	77	309	37.9	23.3	0.3
28	WINSTAR A	65	631	89	250	45	24.5	0.41
29	BOMAZ MC	65	630	94	311	35	20.8	0.26
30	LARS-ACRE	65	628	71	510	27.1	26.1	0.08
31	ALL.NURE \	72	624	78	776	24.4	32.9	-0.07
32	TERRA-CAL	65	618	77	722	48.5	30.1	0.22
33	PEAK PLAYI	65	616	82	685	26.3	23.4	-0.01
34	PEAK BREA	65	615	87	428	18.6	25.3	0.02
35	LEANINGHC	65	615	95	907	23.8	32.2	-0.14
36	LARS-ACRE	65	614	78	130	19.4	18.3	0.17
37	WINSTAR P	65	614	78	577	28.1	23.9	0.06
38	GENOSOUF	65	613	71	725	41.8	23.5	0.14
39	OCD GAME	65	612	69	614	37.6	20	0.15
40	DENOVO 1	65	611	71	359	25.6	20.7	0.13
41	WESTCOAS	64	611	95	342	19.9	22.2	0.07
42	PENN-ENGI	65	610	72	657	23.9	28.8	-0.03
43	BADGER S-	65	606	77	745	31	24.9	0.01
44	CHERRYPEI	65	606	72	625	35.3	26.5	0.11
45	PEAK ALTA	65	605	97	631	42	31.3	0.19
46	BOMAZ GC	65	604	72	826	41.9	26.6	0.1

47 SIEMERS TV	65	604	88	1057	36.8	37.1	-0.06
48 DENOVO IN	1	604	98	181	23.8	12.2	0.2
49 DENOVO 1	65	600	90	663	40.5	26	0.16
50 WINSTAR A	65	600	78	681	42.4	29.5	0.17
51 DENOVO 3	65	599	84	380	32.5	21.2	0.2
52 T-SPRUCE S	65	598	80	798	37.2	31.5	0.06
53 PEAK FUGL	65	597	83	593	42.2	31.6	0.21
54 WESTCOAS	64	596	83	414	28.7	22.3	0.14
55 BOMAZ EPI	65	595	96	207	47.6	25.7	0.46
56 WINSTAR S	65	592	71	480	29	20.7	0.11
57 S-S-I PR REI	65	588	98	809	34.7	29.4	0.02
58 DENOVO A	1	583	82	-254	35.3	12	0.57
59 DENOVO 3	65	582	94	324	44.4	23.7	0.37
60 DENOVO 1	65	580	92	964	36	34.6	-0.03
61 PEAK ROVE	65	578	80	414	38.1	19.1	0.25
62 DELTA FLAC	63	578	77	585	31.6	25.7	0.09
63 SHA ZIVET I	60	577	80	910	32.3	33.8	-0.05
64 COOKIECU	65	577	83	709	22.3	22.3	-0.07
65 FB 786 SKY	65	577	98	410	29.2	23.7	0.15
66 DENOVO 1	65	576	94	640	31.6	29.3	0.07
67 PEAK POKE	65	576	89	677	31.8	26	0.05
68 WINSTAR C	65	574	97	637	24.9	22.5	-0.01
69 WESTCOAS	64	573	81	270	28.3	22.9	0.2
70 STGEN CAP	65	573	72	765	27.5	26.8	-0.04
71 WESTCOAS	64	572	98	266	28	24.4	0.2
72 WESTCOAS	64	570	89	432	28.3	26.3	0.13
73 SANDY-VAL	65	570	76	1067	21.1	31.4	-0.23
74 GENOSOUF	65	568	85	736	34.3	32.8	0.05
75 TOPSTONE	63	568	89	717	23.2	24.3	-0.06
76 FB 442861	65	563	83	372	22.4	18.4	0.09
77 PEAK ALTA	65	562	83	287	25.6	21.2	0.16
78 DENOVO 1	65	561	91	-37	30.8	12.2	0.39
79 T-SPRUCE F	65	559	80	562	28.2	20.2	0.06
80 RHO GENEI	60	558	79	764	33.6	32.3	0.03
81 SANDY-VAL	65	557	90	504	42.2	27	0.25
82 PEAK ALTA	65	556	88	907	33	28.1	-0.04
83 PROGENES	64	555	77	589	29	20.6	0.06
84 BOMAZ GIL	65	553	77	765	35.2	19.8	0.05
85 SALUDEN P	71	553	86	412	23.7	20.5	0.08
86 SANDY-VAL	65	552	71	392	29.5	21.3	0.16
87 DELTA XAN	63	550	84	187	33.8	19.1	0.31
88 DENOVO 3	65	549	96	579	37	19.9	0.16
89 WESTCOAS	64	548	81	400	32.7	21.4	0.19
90 REGAN-DA	65	548	95	1209	26.7	39.5	-0.23
91 BOMAZ LEC	65	546	80	111	38.3	20.2	0.4
92 DELTA ONE	63	546	79	59	22	14.7	0.24
93 POMPADO	71	542	81	594	25.6	29	0.02

94	PEAK FACTI	65	541	78	494	29.7	23.7	0.11
95	DENOVO 3	65	541	97	-109	31.2	18.5	0.44
96	WELCOME	65	540	74	822	30.1	25.9	-0.03
97	PELEGRIN	71	539	90	860	32.9	24.5	-0.02
98	DENOVO 1	65	536	72	450	41.6	21.7	0.27
99	COOKIECU	65	535	79	720	29.9	29.3	0.01
100	KINGS-RAN	65	534	77	473	35.5	17.5	0.19
101	SILVERRIDG	64	533	95	598	32.4	25.2	0.09
102	DENOVO M	1	533	80	116	34.7	18.8	0.36
103	NORBRECK	1	531	79	395	30.1	20.9	0.16
104	DGF ADRIA	63	531	77	1064	29.7	31.9	-0.14
105	PEAK ALTA	63	531	98	811	34.3	27.5	0.02
106	PLAIN-KNO	65	527	90	432	32.4	15.5	0.17
107	BGP FB RID	65	527	76	606	28.8	23.1	0.05
108	BOSSIDE RI	65	525	78	678	26.2	24.9	-0.01
109	DENOVO SI	1	525	95	662	41.7	24.7	0.17
110	CAL-ROY-A	65	522	92	973	19.9	39.4	-0.21
111	T-SPRUCE F	65	521	87	948	33.5	26	-0.05
112	DENOVO 1	65	518	93	356	48.3	19.8	0.39
113	SIEMERS RI	65	518	69	1046	34.4	29.7	-0.08
114	PEAK MOL	65	516	87	784	38.8	26.6	0.08
115	SANDY-VAL	65	515	97	609	28.9	19.3	0.05
116	DELTA DRC	63	514	78	201	18.8	17	0.13
117	AURORA AI	65	511	96	559	24	22	0.02
118	PLAIN-KNO	65	511	75	708	32.6	28.9	0.05
119	KOEPON M	63	511	82	434	27.5	18.3	0.12
120	PEAK ALTA	65	510	95	660	26.9	30.9	0
121	DENOVO 1	65	510	84	601	47.5	23	0.26
122	WESTCOAS	64	509	98	952	42.7	32.4	0.05
123	DENOVO 1	65	508	93	754	39.8	30.3	0.11
124	DROUNER	63	508	94	606	13.7	22.4	-0.12
125	PEAK WHEI	65	507	93	766	37.9	25.1	0.08
126	S-S-I PARFE	65	507	76	350	31.5	17.9	0.2
127	OCD CHRO	65	507	77	548	37	18.4	0.17
128	PEAK ALTA	65	505	78	559	26.5	22.3	0.05
129	AR-JOY CU	65	504	70	904	25.1	28.7	-0.12
130	DENOVO 1	65	504	91	451	33.5	23.5	0.18
131	DELTA JACI	63	504	95	49	30.2	18.5	0.34
132	HADI (PEAK	60	503	83	1017	26.3	27.5	-0.16
133	SIEMERS RI	65	500	91	660	36	23.6	0.11
134	DENOVO 1	65	499	94	1208	28.7	42.9	-0.21
135	DENOVO 1	65	498	83	42	16.5	9.6	0.18
136	COOKIECU	65	496	88	268	21.7	14.9	0.13
137	S-S-I RENG	65	496	97	702	24.1	24.6	-0.05
138	BOMAZ AL	65	496	98	602	28	24.5	0.04
139	PEAK ALTA	65	495	86	651	18.2	23.2	-0.09
140	STANTONS	64	495	82	521	36.3	24.8	0.18

141 DELTA FAS	63	495	78	265	17.8	14.8	0.08
142 LOWLANDS	63	494	79	404	25.2	19.4	0.1
143 OCD LAMB	65	493	94	532	22.7	22	0.02
144 VH CONNEI	60	492	78	733	23.3	25.6	-0.07
145 DENOVO R	1	492	79	401	30	22.6	0.16
146 DROUNER I	63	486	94	747	38.6	21.6	0.1
147 BOMAZ HE	65	484	72	920	28.8	28.6	-0.09
148 FLY-HIGHEI	65	482	95	799	23.3	29	-0.1
149 DELTA EVEI	63	482	86	119	15.7	18.8	0.13
150 PLAIN-KNO	65	478	78	738	32.6	24.2	0.03
151 SANDY-VAL	65	478	79	754	34.6	25.6	0.05
152 PINE-TREE	65	476	95	323	36.7	24.7	0.28
153 FARNEAR M	65	476	85	675	21.6	21.7	-0.06
154 VH Rothult	52	475	81	-24	18.9	15.4	0.24
155 BOGHILL G	1	474	88	518	33.6	26.1	0.15
156 WINSTAR E	65	474	80	360	24.6	12.4	0.12
157 ZANDENBU	63	473	96	615	31.9	24.8	0.08
158 PROGENES	64	472	71	756	39.3	22	0.1
159 PENN-ENGI	65	471	96	604	35.2	23.9	0.12
160 BGP YOLO I	65	471	85	588	31.7	16.5	0.09
161 GO-FARM S	72	471	75	219	12.4	13.7	0.04
162 S-S-I FUTUF	65	470	84	202	22.2	11.5	0.17
163 SIEMERS RI	65	470	90	472	46.6	17	0.32
164 WINSTAR C	65	469	92	707	36.2	21.6	0.09
165 DELTA CAN	63	466	77	-85	19.9	13.5	0.29
166 SUDENA SA	63	464	83	587	7.5	19	-0.18
167 GARIDO A	60	464	84	749	36	28.1	0.07
168 STOWEY M	1	462	85	97	15.5	12.7	0.14
169 COOKIECU	65	462	81	588	32.6	24	0.1
170 BOMAZ EN	65	462	89	142	30.6	20.1	0.3
171 PEAK SMUI	65	459	91	204	15.6	13.4	0.09
172 WESTCOAS	64	456	90	794	34.6	26.9	0.03
173 FB TULARE	65	456	83	12	26.9	11.2	0.32
174 OCD FERRA	65	452	96	740	30.1	24.1	0
175 KINGS-RAN	65	450	76	438	35.3	25.1	0.2
176 DENOVO E'	1	447	76	-133	25.6	7.9	0.38
177 HOOGERHO	63	446	98	731	26.6	26.5	-0.03
178 GEN PIKAC	63	446	93	830	32	25.8	-0.01
179 S-S-I BG CA	65	445	89	598	36.9	21.2	0.15
180 PINE-TREE	65	442	98	375	21.2	15.8	0.07
181 PEAK MOTI	65	442	95	214	24.3	15.9	0.19
182 WESTCOAS	64	442	98	180	17	13.3	0.12
183 MAPLEHUF	65	438	94	605	28.3	17.9	0.05
184 INNOCENT	60	438	76	700	34	25.3	0.07
185 DELTA MAI	63	437	90	94	20.8	20.5	0.2
186 WELCOME	65	436	96	357	30.1	21.8	0.18
187 BOMAZ RIN	65	435	82	670	17.9	19.5	-0.1

188 KINGS-RAN	65	434	74	428	22.1	21.2	0.06
189 PEAK MAIN	65	433	75	915	20.3	29.8	-0.18
190 WESTCOAS	64	433	98	397	16	20.5	0
191 DG OH DOI	63	432	96	492	18.9	21.2	-0.01
192 VELDER ST	63	432	93	-244	7.3	4.5	0.21
193 DELTA WIR	63	431	91	181	11.2	17.8	0.05
194 KOEPON R	63	431	97	24	16.9	10.1	0.19
195 GALENO P	60	431	81	329	23.4	11.3	0.12
196 OCD SPRIN	65	431	97	430	23.1	16.8	0.07
197 COOKIECU	65	431	72	746	20.5	24	-0.1
198 DELTA NOM	71	431	89	318	23.9	20.7	0.13
199 ROMAN (PI	71	430	77	514	14.9	17.4	-0.07
200 AURORA M	65	430	96	513	22.8	21.3	0.03
201 DELTA STAI	63	428	79	299	11.6	16	0
202 DELTA CAR	63	428	79	89	4.5	7.7	0.01
203 SIEMERS R	65	427	76	285	32.8	14.5	0.25
204 BOMAZ RY	65	427	77	705	16	20.1	-0.14
205 DENOVO 1	65	426	89	133	38.3	12.3	0.39
206 FREEWOOD	60	426	82	607	29.1	22.4	0.05
207 DELTA PER	63	425	80	155	18.4	13.7	0.14
208 DENOVO 3	65	421	95	-66	20	12.3	0.28
209 FUSTSYN P	65	420	79	627	27.1	21.4	0.02
210 PEAK DELA	65	420	78	523	27.1	15.6	0.07
211 VH LARSSO	52	416	76	74	14.7	12.7	0.14
212 DG SPARK-	63	413	85	916	7.5	22.6	-0.32
213 SANDY-VAL	65	413	92	171	27.9	14	0.25
214 DOTTI LETS	72	413	77	405	12.7	19.9	-0.04
215 COGENT ZI	1	412	78	177	22.3	13.1	0.18
216 DELTA SHA	63	410	86	170	22.1	14.2	0.18
217 AOT PARFE	65	409	73	745	32.5	24.7	0.03
218 LADYS-MAI	65	407	75	522	33.4	21.6	0.14
219 TTM CHARI	65	407	81	393	2.2	13.2	-0.16
220 BLUMENFE	65	407	98	603	17.2	25.9	-0.08
221 DELTA LIXC	63	405	79	-165	10.3	11.3	0.21
222 HEIDENSKII	63	404	84	688	24.6	15.2	-0.03
223 APRILDAY 1	65	404	73	893	30.4	26.5	-0.06
224 PINE-TREE	65	402	92	410	22.7	15.9	0.07
225 PEAK LUKA	65	401	88	505	20.1	11.5	0
226 NIERMANN	60	401	87	200	5.5	9.6	-0.03
227 DOTTI MEC	72	401	94	354	26.3	16.6	0.14
228 NORTONHI	1	398	94	182	29.2	11.4	0.26
229 CHERRY-LIL	65	394	99	867	28	22.2	-0.07
230 HOUIN SSI	65	392	77	392	18.5	14.9	0.03
231 PEAK JEROI	65	388	95	-103	15.1	9.6	0.24
232 COLDSPRIN	65	388	80	1060	27	24.5	-0.17
233 DENOVO R	1	388	83	682	9.8	17	-0.2
234 RED ROCKS	63	388	88	779	19.8	27.5	-0.13

235	VH BAROD	52	386	77	-28	16.9	12.3	0.22
236	VOGUE LET	64	386	86	396	9.9	16.9	-0.07
237	PINE-TREE	65	384	95	289	40.5	15.5	0.34
238	SYMBOL-RI	60	384	78	379	13.2	8.1	-0.02
239	VH HOEJGA	61	383	84	-115	7.4	9.2	0.15
240	RS BOY REC	60	382	89	548	22.9	19.3	0.01
241	DGF CASIM	63	382	87	-51	4.8	12.7	0.08
242	SANDY-VAL	65	382	90	521	36.7	17.6	0.18
243	RIETHIL SU	63	381	88	284	19.2	14.1	0.09
244	EDG RUBIC	65	379	99	502	36.7	20.4	0.19
245	VH NORLAI	61	378	92	-145	9.5	9.3	0.19
246	HUDDLEST	1	377	88	-186	18.8	4.5	0.32
247	R DG ALAD	63	374	98	126	10.1	9	0.06
248	TOPMODEI	60	371	94	299	22.3	20.9	0.12
249	OCD BOUN	65	371	72	686	30.5	21.6	0.03
250	DELTA LAU	63	370	88	-53	7.5	6.3	0.12
251	DELTA TASI	63	370	80	-17	3.3	10.7	0.05
252	DENOVO 1	65	369	85	-16	18.1	8.1	0.23
253	NOSBISCH	60	368	92	454	11.1	7.3	-0.08
254	VH Tirsvad	61	367	86	240	6.7	12.6	-0.03
255	WINSTAR E	65	367	95	143	28.6	7.6	0.27
256	WILLEMS H	63	365	83	698	26.4	25.9	-0.02
257	SIEMERS D	65	365	81	617	17.5	23.5	-0.08
258	VH SLATT S	61	365	79	142	12.8	15.2	0.08
259	VYSOKA VA	43	365	81	50	10.2	6.3	0.1
260	VOGUE SPI	64	364	89	97	8.8	10.5	0.06
261	MATCREST	65	363	97	604	22.7	17.5	-0.02
262	KOEPON O	63	359	95	657	18.1	20.1	-0.09
263	SIEMERS E	65	358	92	230	26.1	20.2	0.2
264	DENOVO 1	65	358	89	-33	15.7	6.9	0.21
265	GEGANIA D	72	357	86	177	11.2	15.8	0.05
266	PEAK SKIPC	64	355	84	436	31.8	22.6	0.17
267	WELCOME-	65	354	91	602	15.7	15.3	-0.1
268	DELTA END	63	354	87	314	32.5	21.2	0.23
269	VDR SLASH	63	353	92	92	2.3	16.8	-0.02
270	PEAK HOT	65	353	78	332	29.8	18.5	0.19
271	K&L LZ COM	63	352	96	134	7.4	12.5	0.02
272	DENOVO 1	65	351	89	314	22.5	12.4	0.12
273	BOMAZ PIV	65	350	90	239	21.8	16.8	0.14
274	DENOVO R	1	350	80	-176	5.1	0.5	0.15
275	BLUMENFE	65	348	96	992	19.7	20.1	-0.22
276	PEAK CARA	65	347	73	690	14.4	20.5	-0.15
277	DENOVO JA	1	341	84	338	17.9	6.7	0.05
278	BENTEHOE	63	340	81	58	15.9	8.5	0.16
279	WEINTERPI	63	340	70	418	21.2	19.1	0.05
280	DENOVO 1	65	338	76	187	10.5	4.7	0.04
281	DELTA DEV	63	337	79	11	24.8	16.5	0.29

282 WKM HAW	60	336	83	414	19.3	19.9	0.03
283 SHERDON I	1	335	91	352	12.3	13.6	-0.02
284 APRILDAY I	65	333	87	257	19.7	8.7	0.11
285 PIANO (WII	71	332	94	301	6.2	8.1	-0.07
286 WENDLANI	60	332	83	573	18.6	16.5	-0.05
287 JIMTOWN I	65	330	84	825	27.1	23.5	-0.07
288 FARNEAR C	65	325	99	662	18.9	20.1	-0.09
289 BOLDI V AF	64	322	98	290	14	10	0.03
290 LIS-LECK GF	71	320	90	719	16.9	26.6	-0.13
291 LOWLANDS	63	318	87	-51	6.2	8	0.1
292 SANDY-VAL	65	316	97	589	26.2	16.9	0.03
293 ISOLABELLA	72	315	77	400	21.5	14.1	0.06
294 GGA GORD	60	314	91	280	14	11.5	0.03
295 DE-SU 135	65	313	95	283	15.6	10.7	0.05
296 VANDENBE	63	312	75	107	12	11.6	0.09
297 CO-OP ROE	65	309	97	235	22.2	10.7	0.15
298 WILTOR CC	1	306	91	370	18.8	14.8	0.05
299 DELTA POV	63	304	82	242	10	10.9	0
300 DELTA ABU	63	303	93	138	8.8	8	0.04
301 WESTCOAS	64	303	96	91	13.8	14	0.12
302 RI-VAL-RE F	65	302	99	428	14.4	15.2	-0.03
303 SIEMERS H.	65	300	90	526	34.3	20.3	0.15
304 LARCREST (	65	300	95	525	22.9	17.7	0.02
305 ROSYLANE-	65	299	99	257	32.4	10.4	0.26
306 CEH MUSIC	60	298	94	761	19.8	18	-0.12
307 BOGHILL G	1	297	87	336	16.3	15.1	0.03
308 CAPS ANGE	63	297	73	-46	17.8	7.4	0.25
309 DELTA FISH	63	297	91	30	10.9	12.2	0.12
310 DE-SU 137	65	296	87	593	18.3	19.5	-0.06
311 TERRALIND	65	296	74	780	14.1	22.7	-0.19
312 KINGSLEY (	60	292	96	-27	12.5	10.5	0.16
313 DELTA LUN	63	291	95	172	16.4	13.1	0.11
314 AMERICAN	63	291	84	95	7.8	8.9	0.05
315 KOEPON RA	63	288	74	192	17.3	16	0.11
316 JOOK SAVE	65	284	75	691	15.5	14.2	-0.14
317 JBTOLLEC	71	284	70	510	15.3	18.2	-0.06
318 LEANINGH	65	284	77	784	3.9	22.4	-0.3
319 DELTA YETI	63	283	90	100	11.1	10.7	0.09
320 DELTA SKYI	63	282	90	40	11.7	14.3	0.12
321 WILDER HC	60	280	71	520	19.1	25.4	-0.02
322 NACASH (E	71	279	95	-31	16.8	9.6	0.22
323 VOGUE A2I	64	276	94	281	28.2	13.4	0.2
324 STANTONS	64	275	98	419	11.3	11.7	-0.06
325 COGENT CA	1	273	83	130	15.5	3.5	0.12
326 VOGUE REI	64	271	88	274	13.1	6.1	0.03
327 APRIL-DAY	65	267	79	307	27.4	9.2	0.18
328 LEGEND-M	64	263	97	302	8.9	18.8	-0.04

329 KOEPON O	63	257	95	451	8.8	11	-0.11
330 KINGMAST	60	255	88	654	8.7	13	-0.2
331 DG NH ARF	60	255	94	393	8.4	12.6	-0.08
332 DELTA ORA	63	254	77	43	14.2	10.6	0.15
333 VOX SAY RI	60	253	79	258	2.6	7.6	-0.09
334 DELTA KICK	63	251	79	-234	11.7	3.9	0.26
335 DOUBLE W	63	250	97	125	15.1	11.3	0.12
336 DELTA STEA	63	249	79	-135	4.3	4	0.12
337 KOEPON AI	63	249	87	380	5.3	6.6	-0.11
338 DENOVO H	1	249	93	233	18	9.2	0.1
339 BLONDIN C	64	246	78	1077	25.5	22.1	-0.19
340 KINGS-RAN	65	245	95	634	27.2	24.2	0.02
341 PEAK CHUC	65	244	88	223	5	9.7	-0.05
342 KOEPON RI	63	239	86	645	10.1	10.6	-0.18
343 VOGUE PA	64	238	78	635	17.6	13.3	-0.09
344 KOEPON SH	63	234	95	648	12.5	10.1	-0.15
345 LUIS-OOH (	72	233	94	444	14.9	8.4	-0.03
346 DELTA POC	71	227	81	139	4.8	8	-0.01
347 VDR SAUL I	63	227	75	-12	8.2	11.5	0.11
348 CLAYNOOK	64	226	98	585	19	9.3	-0.05
349 RASTOR P (	60	224	76	162	3.4	11.7	-0.04
350 MILORD (V	60	221	84	442	16.1	15.1	-0.02
351 POPPE FAM	63	219	56	242	3.6	7.2	-0.07
352 DE-SU 139	65	219	86	332	20.7	11.7	0.09
353 MONGOLE	60	217	81	145	9.7	9.5	0.05
354 DAVINCI D	71	216	95	139	8.6	13.1	0.04
355 DELTA NIPF	63	215	91	-374	-9.6	4.1	0.07
356 PLATAAN F	63	208	70	159	8.2	9.7	0.02
357 KRALL-VIEV	65	200	86	-47	12.3	0.9	0.17
358 SRS BLUEBI	60	197	75	351	7.3	10	-0.08
359 KNS COME	60	194	85	584	11.1	20.1	-0.14
360 DROUNER J	63	194	65	322	15	11.2	0.02
361 JACOBS SH	64	194	90	302	25.1	19.9	0.15
362 OCD BIG FL	65	193	89	234	5.9	6.2	-0.04
363 AMERICAN	63	187	74	-114	2.5	3.9	0.09
364 DROUNER J	63	185	66	466	16.2	17	-0.03
365 MERCURY (	60	185	86	39	2.2	-0.2	0.01
366 LIWAY SIL (	71	184	94	283	0.2	0.4	-0.13
367 WILDER RI	60	183	60	305	8.2	5.4	-0.05
368 FB ALTAATI	65	181	85	155	16.3	12	0.12
369 SIEMERS LA	65	181	96	189	13.1	13.7	0.07
370 DELTA JAC	63	180	87	-110	-10.5	-3.8	-0.07
371 DENOVO ZI	1	178	93	127	18.8	7.3	0.16
372 BATENBUR	63	178	63	-279	9.8	0.2	0.26
373 GRASHOEK	63	171	72	-37	3.4	5.1	0.06
374 STANTONS	65	161	99	657	8.3	15	-0.2
375 MOZARELL	60	152	98	-212	5	-0.7	0.17

376 PEAK HOTL	65	151	97	483	27.9	20.8	0.1
377 CROTEAU L	64	150	99	435	7.3	7.1	-0.12
378 WR CENTRI	60	150	68	-27	11.3	6.3	0.15
379 BIG MACHT	63	148	72	195	14.4	6.9	0.08
380 OSTRETIN L	43	144	84	21	7.5	7	0.08
381 DELTA MAC	63	138	94	155	-3.5	11.3	-0.12
382 MELARRY F	65	138	97	749	32	16.7	0.02
383 DINOMI RE	65	138	75	266	2.9	6	-0.09
384 GLEN KORL	62	137	79	-709	10.2	-4	0.51
385 HOLBRA M	63	122	79	-105	-2.7	6.8	0.02
386 PIROLO PLA	72	122	86	28	-1.3	3.1	-0.03
387 FLEVO GEN	63	121	96	-319	-6.9	-6.1	0.07
388 AMSWEER	63	121	74	-178	-9.1	1.2	-0.02
389 VVH SNAPS	63	121	78	599	5.7	10.9	-0.21
390 TIMMER CI	63	119	91	-123	2.8	-1.3	0.09
391 CAL-ROY-A	65	119	85	484	23.1	10.5	0.04
392 Dicksons B	62	118	87	-936	-13.3	-12.6	0.33
393 Greenmile	62	116	74	-741	-4.9	-3.2	0.33
394 VERDISO (F	72	112	83	291	12	14.6	0
395 VOGUE SOI	64	110	97	678	6	11.9	-0.24
396 UENK PON	63	106	51	-274	-2.9	0.8	0.1
397 LUCK-AT-LA	62	102	80	-835	-1.6	-10.5	0.43
398 FARMERS V	63	99	77	-288	11.7	4.2	0.29
399 ALL.NURE L	72	97	72	2	11.5	-0.3	0.14
400 MEANDER	62	92	64	-900	-11.1	-14	0.34
401 PEAK HAXL	65	91	80	664	9.1	17.1	-0.2
402 MORNING\	65	86	92	836	11	15.1	-0.25
403 KOEPON FL	63	85	76	750	16.3	15.3	-0.15
404 ARINO RED	60	83	93	429	10.6	13.6	-0.08
405 BAGWORTI	62	80	84	-789	-12.8	-13.4	0.25
406 KENMORE	65	77	92	254	9.8	4.5	0
407 HENNIKERS	1	76	83	269	-10.3	-1.5	-0.25
408 HOWSES SI	62	74	78	-1025	-14.1	-12	0.37
409 MORTENSE	62	72	94	-751	-22.4	-16.3	0.1
410 LISNAKELLY	46	71	88	-573	-2.5	-5.1	0.27
411 Busy Brook	62	67	70	-647	-16.9	-10.6	0.12
412 DROUNER I	63	65	91	-298	-9.2	-2.8	0.03
413 DV MAGICI	63	64	55	388	3.1	11.3	-0.14
414 CAMPOGA	72	64	86	19	-5	0	-0.07
415 TACKLEBER	63	63	85	-367	-7.4	-3.1	0.09
416 TRAILBLAZI	63	62	77	-126	2.2	1.6	0.09
417 WEGGELHC	63	61	83	155	2.4	2.2	-0.05
418 WEGGELHC	63	57	68	7	-7.3	7.8	-0.09
419 MONDIAL C	72	56	83	80	-8.5	-0.6	-0.14
420 MAPEL WC	64	56	89	238	10.6	6.8	0.01
421 AGRAS ULT	43	54	79	293	16.1	7.2	0.05
422 DELTA MAI	63	53	83	-268	-0.6	1.4	0.13

423 BIG MALKI	63	53	93	13	-6.9	2.5	-0.09
424 Shandanga	46	51	78	-956	-12.9	-17.7	0.35
425 CLORANE C	46	51	73	-835	-18.9	-13.2	0.2
426 SPRINGHA\	46	50	86	-760	-18.7	-13	0.16
427 Werders Dr	62	49	82	-910	-11.9	-10.3	0.34
428 AMBZED G	62	47	79	-707	-3.1	-10.2	0.33
429 ARKANS PA	62	47	77	-943	-10.6	-14.4	0.37
430 Lynbrook K	62	44	74	-1045	-13.4	-15.7	0.39
431 LEBOLD DR	64	39	94	-21	4.4	-1	0.06
432 BALLYGOW	46	37	68	-475	-4.1	-1.3	0.19
433 GLEN KORU	62	34	86	-710	-0.5	-4.9	0.37
434 BUSY BROO	62	30	73	-709	-6.6	-7.4	0.29
435 Cillwalsh W	46	29	80	-821	-16.9	-11.7	0.22
436 HOVEN HO	60	23	90	-114	-9.1	-1.7	-0.06
437 Tanglewoo	62	20	79	-988	-7.8	-17.1	0.44
438 WHG DEKE	60	20	72	128	-13.9	1	-0.23
439 PAYNES PH	62	20	74	-732	-15.1	-12.6	0.19
440 HORIZON B	62	19	81	-1015	-18.1	-17.9	0.31
441 ROADY (BC	63	18	62	-136	-0.6	1	0.06
442 FAR SIDE M	62	13	92	-749	-5.4	-5.2	0.33
443 FANANA BI	62	13	74	-936	-9.5	-15.2	0.38
444 JA-BOB RE>	65	12	87	-83	-17.2	-1.9	-0.17
445 Hanrahan P	46	10	78	-853	-5.8	-12.2	0.38
446 VVH REPAI	63	9	88	-73	3.8	2.1	0.08
447 RR MURDC	60	8	71	-270	7.8	-6.3	0.23
448 JACLES BOY	62	8	90	-745	-12.2	-12	0.24
449 PTIT COEUI	71	3	93	160	-12	1.3	-0.22
450 CHERRYHIL	64	1	77	215	2.7	0.3	-0.07
451 ASHDALE F	62	1	95	-829	-19.1	-9.3	0.19
452 Santry Lion	46	-1	78	-1019	-9.8	-15	0.43
453 LIGHTBURN	62	-2	84	-926	-16.3	-13.7	0.28
454 WALNUTLA	64	-2	98	-228	-2	-2.3	0.09
455 J & G MARC	63	-2	72	-326	-0.8	-2.3	0.15
456 SPRING TR	62	-9	84	-772	-20.1	-13	0.15
457 RED ROCKS	63	-14	66	-19	-6.4	2.2	-0.07
458 CASTLETER	46	-20	78	-698	-19.8	-8.6	0.11
459 MITCHELLS	62	-21	86	-763	-13.5	-12.5	0.23
460 ROYLANE-K	65	-22	85	6	-4.7	-4	-0.06
461 HAZAEL SH	62	-24	78	-898	-18.7	-11.4	0.24
462 KAHURANC	62	-24	88	-973	-9.5	-13.1	0.41
463 GANSEYS R	63	-25	74	-213	-20.1	-5.6	-0.14
464 WOODWAI	62	-34	87	-1038	-9.6	-14.1	0.44
465 DIRT-ROAD	65	-34	78	535	5.8	6.2	-0.18
466 ALL.NURE L	72	-39	72	544	13.2	11.3	-0.1
467 BOOMERAI	63	-43	78	-225	-1.7	-4	0.09
468 RR MANAU	60	-43	70	210	-14.7	-0.2	-0.27
469 RED VISION	63	-46	79	-462	-6.2	-12	0.16

470 BIG CLYDE	63	-47	88	-742	-13.6	-14.4	0.22
471 GRASHOEK	63	-48	76	-455	-6	-8.9	0.16
472 Matahui Ex	62	-48	79	-950	-12.2	-10.3	0.35
473 MARIAHOE	63	-50	64	-210	-10.3	-0.3	-0.02
474 MOOREHIL	46	-53	53	-841	-12.3	-12.1	0.29
475 CRACKER V	63	-54	87	-194	-8.8	-5.2	-0.01
476 SIEMERS FI	65	-56	87	429	-2.8	10.8	-0.23
477 YOU TUBE	63	-58	82	-815	-14.5	-13.1	0.24
478 HILLBRAE C	62	-59	79	-803	-8.1	-9.9	0.32
479 JIMM HOLS	63	-59	81	-279	-0.5	-7.7	0.13
480 BATENBUR	63	-62	72	-716	-11.9	-10.8	0.22
481 MASTENBR	63	-66	70	300	1.5	11	-0.12
482 BRIDEPARK	46	-66	86	-874	-21.9	-13.4	0.18
483 ESKDALE M	65	-66	85	126	-3.9	1.8	-0.11
484 Priests Sier	62	-68	95	-972	-9.7	-15.1	0.4
485 HANRAHAN	46	-69	88	-739	-8.6	-11.5	0.28
486 BIG SENTAI	63	-69	81	-356	-11.4	-6.9	0.04
487 KILDARRA I	46	-73	91	-867	-14.8	-14	0.27
488 PONSSTAR	63	-76	89	-358	-4.4	-1.4	0.13
489 ARKAN FM	62	-77	84	-1048	-15.6	-18.2	0.37
490 SMIDDIEHI	1	-78	95	-88	-0.3	-6	0.04
491 MURPHY (L	63	-78	90	-355	-20.5	-7.4	-0.08
492 FREEK (DO	63	-79	50	-713	-14.6	-10.2	0.19
493 J & G TIME	63	-86	84	-12	-14.3	-6.7	-0.17
494 Jareem Mh	62	-88	74	-839	-13	-9.8	0.28
495 DULET SUV	64	-88	84	45	-0.4	-4.2	-0.03
496 ALL.NURE S	72	-88	99	38	-9.5	-1.5	-0.13
497 GRASHOEK	63	-93	79	-122	0.9	-1.1	0.07
498 T LIEVEHOF	71	-95	66	-404	-19.4	-5.7	-0.04
499 STAMULLEI	46	-98	72	-958	-24	-15.4	0.2
500 BUELIN MC	62	-100	75	-711	-14.8	-12.2	0.18
501 GRASHOEK	63	-100	77	-202	0.1	-2.1	0.1
502 OH-RIVER-S	65	-100	97	303	-12	1.4	-0.28
503 AL. CE IOTA	72	-100	84	-319	-13.1	-6.8	0
504 PAYNES PR	62	-102	74	-689	-20.1	-10	0.1
505 BALLYCAIRI	1	-104	85	245	-1.8	0.7	-0.14
506 POSAL BUC	72	-104	78	-332	-7.1	-12.6	0.08
507 TRONNOCC	62	-106	74	-399	-4	-7.4	0.15
508 RED ROCKS	63	-109	66	-151	-12.7	-6.9	-0.08
509 HEUVEL CE	63	-111	68	240	-1	5.4	-0.13
510 MAIRE PF C	62	-111	93	-793	-16.1	-17.1	0.21
511 ROYLANE-K	65	-111	81	135	-2.5	-0.2	-0.09
512 WEGGELHC	63	-113	83	31	-6.1	-1	-0.09
513 TENNANT J	62	-114	74	-894	-16.5	-12.8	0.26
514 CASTEL BAI	71	-114	74	-38	-3	-4.3	-0.02
515 PEELDIJKEF	63	-116	91	-136	-1.1	-1.5	0.05
516 SCHRADER	62	-119	86	-1077	-22.5	-20.5	0.29

517 Langevelds	62	-120	84	-872	-18.4	-19.2	0.22
518 Drysdales S	62	-125	79	-1045	-18.3	-20.8	0.33
519 BATENBUR	63	-125	82	195	-3.8	4.1	-0.14
520 BAGWORTI	62	-127	89	-883	-25	-16.6	0.14
521 ZINKS GFB	62	-135	73	-741	-19.4	-13.6	0.14
522 MAGYS LUS	63	-136	87	-647	-15	-11.2	0.14
523 KILRONAN	46	-137	90	-884	-16.7	-19.9	0.25
524 CHERRYHIL	46	-139	77	-658	-16.9	-15.9	0.12
525 STONE-FRC	65	-139	96	95	-8.4	-4.7	-0.15
526 MAIRE FI G	62	-141	83	-670	-10.4	-10.6	0.22
527 KEYENBERG	63	-143	66	-334	-9.1	-9.3	0.05
528 CHARLTON	62	-144	82	-1222	-17.5	-21.7	0.45
529 Gordons Ar	62	-147	90	-867	-14.5	-15	0.27
530 HUNDAY M	1	-148	73	-941	-20.7	-25.1	0.23
531 GREENWEL	62	-158	84	-537	-15.7	-7.2	0.08
532 GRASHOEK	63	-163	70	-266	-14.4	-4.9	-0.05
533 PLATAAN F	63	-165	73	312	3.2	3.9	-0.11
534 SAVANNAH	62	-166	95	-867	-21.4	-15.2	0.18
535 GLENMEAD	62	-170	78	-904	-16.4	-12	0.27
536 GRASHOEK	63	-171	72	-356	-9.5	-9.4	0.06
537 BREANSHA	46	-172	84	-771	-18.1	-17.3	0.17
538 MENTOR (F	63	-175	81	-310	-13.7	-2.9	-0.02
539 WYEVALLE'	1	-181	80	-502	-17.5	-13.4	0.03
540 MAIRE IG C	62	-183	82	-517	-23.1	-12.6	-0.03
541 ERAGON P	63	-184	83	-191	-3.3	0.7	0.05
542 LEO (LONA	63	-185	75	22	-8.1	-3.8	-0.11
543 MATTENHO	71	-185	79	-194	-9.2	-5.7	-0.02
544 BOSSINK RI	63	-186	79	-530	-14.1	-9.4	0.09
545 TARAMON'	62	-186	77	-663	-10	-11	0.22
546 MATAPO S	62	-187	80	-796	-7.4	-11.3	0.33
547 WAI AU HO	62	-187	76	-803	-28.9	-16.7	0.04
548 K-H ODYSSEY	60	-191	64	-320	-5.4	-10.4	0.09
549 WICKLOW	62	-194	74	-1004	-22.6	-19.8	0.24
550 MEANDER	62	-198	63	-870	-12.2	-17.6	0.31
551 GRASHOEK	63	-203	69	-791	-5.1	-16.5	0.36
552 LIGHTNING	63	-204	93	-214	-15.2	-2.9	-0.08
553 DENMIRE M	1	-204	91	-148	1.8	-9.3	0.1
554 BOSSIDE RY	65	-205	56	-441	-15.3	-16.5	0.03
555 BAXGOLD E	72	-208	80	-20	1	-6.8	0.02
556 Ambzed Po	62	-212	74	-750	-23.4	-16.5	0.09
557 CRISTOFOL	72	-215	86	-115	-15.5	-8.4	-0.13
558 SCHRADER'	62	-217	74	-702	-14.9	-12	0.18
559 SHERDON F	1	-218	60	-186	-6.8	-4.3	0.01
560 KEYENBERG	63	-219	71	-179	-1.6	-6.7	0.07
561 FARMERS V	63	-223	76	-172	-10.6	-5	-0.05
562 HOLLYSPRI	1	-224	84	-89	-4	-0.8	0
563 AZALEA GA	72	-230	79	-314	-10.8	-12.3	0.02

564 BRENLAND	64	-231	97	336	4.9	1.7	-0.1
565 BRABANTD	64	-235	93	224	2.6	-1.2	-0.08
566 NEREWATE	1	-238	68	-610	-19.2	-19.1	0.07
567 KEUR TRIST	71	-255	64	-513	-23.2	-10.6	-0.03
568 LORN LACE	62	-257	69	-819	-10.5	-12.8	0.3
569 MORWICK	1	-258	96	-610	-4.6	-14.1	0.26
570 THUNDER V	63	-268	90	-265	-13.5	-10	-0.04
571 SCHREUR II	63	-279	75	-256	-12.4	-6.2	-0.03
572 TOYSTORY	72	-281	82	78	-7.6	-6.1	-0.13
573 SMIDDIEHI	1	-289	96	-366	1.5	-9.9	0.2
574 RH NORWIL	60	-291	90	-222	-16	-10.8	-0.09
575 APPLE-PTS	65	-306	58	-778	-16.1	-21.1	0.2
576 ZANDENBU	63	-310	85	86	-12.2	-9	-0.19
577 P.M NEBRA	63	-324	72	-261	-11.2	-11.7	-0.01
578 CALORI-D C	65	-332	61	-57	-12.6	-7.9	-0.13
579 ROCKALLI C	65	-345	87	-221	-31.7	-19.2	-0.28
580 PA-RED-RO	65	-381	74	108	-4.6	-12.1	-0.11
581 RIDGEDALE	65	-398	67	-533	-7.3	-16.6	0.18
582 LOH DICE R	60	-406	92	49	-22.4	-7.8	-0.29
583 INCH SHOV	1	-430	76	-1054	-18.1	-27	0.34
584 RALMA SHC	65	-434	80	-205	-23.1	-15.9	-0.18
585 WINDY-KNI	65	-467	83	-719	-35.3	-23.8	-0.08
586 GLORYLANI	65	-519	62	-897	-37.3	-32.2	-0.02
587 FIRTH BULL	1	-534	94	-231	-3.8	-11.2	0.07

Prot (%)	HealthyCov	EnviroCow	FI	Calf Surv.	LS	SCC	Mastitis	Lame.	Adv.
0.06	131	4	3.6	-0.1	113	-6	0	2.6	
0.11	189	3.8	12.8	-0.5	116	-25	-1	1.8	
0.06	131	3.6	5.3	2.8	64	-4	0	0.9	
0.1	215	3.5	9.6	2	113	-18	-1	2.3	
0	115	3.9	4.2	1.6	67	5	1	1.6	
0.06	189	3.6	5.4	1.4	174	2	1	2.3	
0.09	12	4	-2.4	0.4	40	-8	1	2.7	
0.07	87	4.1	1.7	-4	107	-14	-1	3.5	
0.15	160	3.2	7.3	2.1	58	-24	-1	0.6	
0.21	121	3.1	3.9	0	55	-14	0	0.8	
0.11	195	2.9	10.1	2.3	55	-12	1	3.8	
0.19	79	3.2	-1	1.5	34	-11	-1	1.7	
0.14	116	3.2	11.2	-4.5	73	-19	0	-0.8	
0.12	100	3.3	-1.7	1	79	-23	-1	1.8	
-0.03	65	3.7	3.6	-1.6	85	2	1	2.2	
0.07	56	3.5	2.2	4.6	27	10	1	2.4	
0.12	-21	3.9	1.6	-5.8	46	-11	0	1.4	
0.09	130	3	3.9	0.8	49	-8	2	5.6	
0.14	56	3.3	5.1	1	12	-1	2	1.4	
0.09	231	2.6	7.3	1.6	119	-19	-3	2.1	
0.01	171	3	6	1.2	107	-6	0	2.4	
0.08	112	3.3	5.2	1.6	67	-6	1	0.6	
0.1	255	2.6	15	1.7	107	-16	-1	2.9	
0.03	124	3.3	0.6	1.5	85	-8	0	2.1	
0.1	221	2.9	12.3	2.9	110	-8	0	1.2	
-0.03	234	2.9	9.6	1.3	143	-14	-2	0.9	
0.15	178	2.7	7.3	3.2	67	-11	-2	1.3	
0.19	102	2.7	3.2	2.4	15	-25	-1	-0.1	
0.12	156	3	4.4	3	79	-17	-1	2	
0.11	205	2.5	4.8	3.8	76	-11	-1	2.2	
0.08	150	2.8	3.8	0.4	82	-16	0	2.6	
0.07	51	3	-2.2	2.1	9	-6	1	1.6	
0.01	232	2.6	6.5	2.4	92	-20	-3	1	
0.13	202	2.8	6.6	1.1	85	-37	-4	1.9	
0.03	212	2.2	8.4	1.6	101	-5	1	2.3	
0.17	286	2.5	11.5	1.8	156	-20	-3	2.2	
0.06	179	2.7	6.3	2.8	79	-1	0	2.4	
0	107	3.3	2.6	0.5	76	0	1	2.8	
0	212	2.8	2	2.4	122	-25	-2	2.7	
0.1	177	3.2	7.2	3.1	107	-5	1	2.8	
0.13	220	2.7	8.1	3.4	98	-27	-4	1.2	
0.08	190	2.5	11.1	0.3	73	-2	1	1.6	
0	189	2.3	6.2	2.5	52	-17	0	2.3	
0.07	108	3.3	-0.4	0.1	92	-19	2	3.4	
0.12	0	3.4	3.7	-2.7	15	-9	1	2	
-0.01	55	3.5	-5.2	1.5	76	-14	-2	2	

0.02	77	2.6	-1.7	1.6	37	-10	0	2.4
0.07	265	2.5	15.5	1.8	85	-21	-1	4.5
0.05	94	3.1	-0.2	1.5	76	-5	0	1.5
0.08	43	3.5	-2.4	1.3	110	-3	1	-0.2
0.1	156	2.6	1.3	2	76	-12	-1	3.2
0.06	87	3.1	-5.2	1.3	101	-17	0	2.5
0.14	10	3.2	-7.1	0.5	34	-8	0	0.9
0.1	216	2.1	13	1	110	-11	-1	0.9
0.22	38	2.9	0.2	-0.3	40	-2	1	3.1
0.06	142	3.2	4.1	1.5	101	-5	0	1.7
0.03	146	2.1	10	0	27	3	1	1.2
0.25	173	2.6	6.4	1.3	92	-6	1	3.8
0.15	54	2.9	5.1	2.2	18	-3	1	0.1
0.03	50	3	0.9	1	92	-3	2	1.7
0.06	166	2.4	10.4	-0.3	58	-4	2	1.8
0.07	118	3	-4	2	101	1	-2	2.8
0.04	87	2.9	-1.8	2.2	79	-2	0	3.1
-0.01	211	2.6	5.1	1.4	122	-31	-2	1.9
0.12	147	2.5	9.5	0.6	46	6	1	4.6
0.09	90	2.7	2.2	2	49	-4	0	2.1
0.04	112	2.8	1.5	1.2	64	-15	-1	-0.5
0.02	196	2.4	9.3	2.4	64	-10	0	4.2
0.16	182	2.3	4.8	4.6	104	-5	0	1.9
0.02	133	3.2	5.9	1.4	107	2	1	2.2
0.18	135	2.5	4.7	1.7	58	-6	-1	3
0.14	92	2.8	2.5	0.3	85	3	1	1.7
-0.04	213	2.2	4.7	2.6	95	-14	-1	2.3
0.1	58	2.8	-3.5	2.6	49	-6	2	0.9
0.01	192	2.6	2.9	1.8	125	-15	-2	3.4
0.07	161	2.7	9.4	1	70	-24	-3	1.2
0.14	170	2.6	1.9	2.2	107	-18	-3	1.5
0.16	214	2.3	8.8	-2	98	-26	-1	3.6
0.02	202	2.1	8.1	-0.2	76	-20	-2	1.9
0.08	66	2.5	-2.8	-0.6	3	-18	-1	2.8
0.12	63	2.6	0.5	0.2	43	6	0	0.6
-0.02	123	2.6	-1.7	2.1	82	-22	-2	-0.2
0.01	206	2.2	4.8	2.6	92	-14	-1	3
-0.06	153	3	3.2	0.1	140	-15	-1	2.4
0.08	175	2.3	10	0.9	58	-8	-1	2.1
0.1	163	2.3	4.3	1	85	-13	-1	1.6
0.15	154	2.4	4.6	4.1	98	0	1	2
0.01	148	2.2	8.9	2.4	43	-9	1	2.5
0.1	124	2.8	3.5	1.7	107	9	1	1.6
0	49	2.7	-1.2	-0.4	34	5	2	1.5
0.2	49	2.4	0.5	0.5	-37	-10	-1	3.3
0.15	205	2.5	3.1	0.6	146	-18	-3	2.1
0.11	117	2.1	3.1	1.5	40	-24	-1	0.6

0.09	111	2.6	5	1.2	67	-5	1	0.9
0.27	125	2.2	10.6	0.3	46	-6	0	0.3
-0.01	148	2.2	5.3	1.1	70	-10	1	2.8
-0.04	206	2.1	2.1	3.7	113	-28	-1	-0.9
0.08	50	2.7	3.8	1.8	21	4	0	0
0.06	61	2.7	-1.5	-1.3	40	-18	0	1.4
0.02	181	2.1	3.5	3.1	58	-7	-1	2.3
0.06	108	2.3	2.3	-0.4	73	-18	0	1.4
0.18	55	2.8	4.5	-1.2	34	-1	1	0.4
0.09	120	2.4	-1.9	1.3	55	-20	-2	2.6
-0.03	73	2.6	-1.3	0	52	-11	0	2.1
0.01	71	2.8	-4.9	1.8	76	-5	0	4.7
0.02	172	2.5	1.7	1.7	122	-11	-1	4.7
0.04	118	2.7	1.1	1.8	101	-2	0	1.6
0.03	152	2.3	5.8	-0.3	85	-21	-1	0.9
0.03	51	2.7	1.4	-0.5	61	-5	2	-0.2
0.08	19	2.4	-2.6	0.8	24	-14	-1	-0.1
-0.06	97	2.4	4.9	-1.3	37	-8	-1	1.9
0.09	26	2.4	1	0.8	6	-6	1	1.2
-0.05	59	2.7	0.4	-0.9	61	0	2	3.2
0.01	64	2.8	-0.9	0.1	88	-5	0	0.8
-0.01	183	2.3	7.7	-2.4	110	-25	-1	2.2
0.12	169	3	-1.3	0.9	183	-6	-1	1.8
0.04	137	2.2	3.9	2.5	55	-5	0	4
0.06	70	2.3	-4.9	2.9	37	-11	0	2.6
0.05	175	2.4	4.5	-0.1	113	-7	-1	1.8
0.1	64	2.3	5	0.5	43	2	0	2.3
0.04	15	2.4	-6.4	1.9	-6	-11	0	2.5
0.01	-25	2.4	1.4	0.3	-3	14	3	1.1
0.06	-57	2.9	0.2	0.9	-3	32	5	2.5
0.03	195	2.4	-1.5	1.1	140	-24	-3	2.4
0	76	2.4	2.5	-1.1	70	-5	-1	0.4
0.07	147	1.8	3.8	1	27	-13	-2	2.2
0	114	2.4	-3.8	1.8	88	-23	-1	1.5
0.04	81	2.9	-0.4	2.4	82	-1	1	0.8
-0.01	112	2.5	0.2	-0.2	82	-22	-1	1.3
0.1	77	2.2	0.4	2.3	21	-1	1	2.2
0.2	98	1.9	-3.3	4.6	-3	-22	-2	-1.7
-0.06	120	2.8	-5.1	1.8	128	-14	-1	1.4
0.02	102	2	-0.4	1.1	46	1	-1	0.9
0.03	-40	2.4	-9.2	2.4	-3	-18	1	-0.5
0.1	282	1.9	9.3	5.1	137	-14	0	5.6
0.07	198	2.2	10	1.2	104	-16	-1	2.8
0.02	158	1.6	8.4	0	21	-12	0	2
0.05	74	2.4	-0.3	1.6	55	-10	-1	3.6
0.02	138	2.6	0.6	0.8	140	-20	-1	1
0.09	24	2.4	-2.4	1.2	6	-14	1	2.1

0.07	194	2.4	4.7	0.7	128	-1	0	3.6
0.07	115	2.4	-1.1	2.6	85	-8	1	3.4
0.05	90	2.5	3.7	-1.8	43	-15	0	2.6
0.02	86	2.4	4.1	-0.3	43	-9	0	2.7
0.11	101	2.2	-1.7	0.1	76	-23	-2	2.4
-0.03	113	1.9	1.1	1.4	49	-13	-1	0.3
-0.02	55	2.5	-1.9	1.2	31	-6	2	2.6
0.03	103	2.1	11.2	-0.3	43	5	1	-2.1
0.18	126	2.5	-5.8	2.6	119	-3	-1	3.3
0	84	2.3	-3.2	0.3	73	-6	0	2
0.01	72	2	2.5	-0.8	37	-3	0	1.3
0.16	-5	2.7	-6.7	0.5	24	1	1	4.7
-0.01	182	2	3.4	2.3	98	-16	-1	2.5
0.2	143	2.2	8	0.2	82	-9	-1	2.2
0.1	34	2.1	2.1	-1.8	9	4	2	3.8
0.01	193	2.3	13.8	1.8	113	8	1	1.5
0.05	43	2	-1.2	-1.6	0	-11	-1	1.5
-0.03	52	2.2	1.3	0.4	-6	-15	1	0.2
0.05	28	2.6	-4.8	2	40	-4	1	1.7
-0.03	126	2	4	1	31	-7	-1	1.5
0.08	231	2.1	6.6		165	-32	-3	
0.06	230	1.6	11.4	2.9	82	-17	-1	1.9
0.02	49	2	-4.2	-1.8	12	-14	0	2
-0.02	38	2.6	-6.9	0.8	52	-26	-3	0.3
0.2	146	2.6	-2.1	0.9	186	-4	0	2.4
0	224	2	4.7	2.3	119	-29	-2	2.3
0.04	31	2	-5.5	1	9	-14	0	
0.11	211	1.9	14.3	2.8	85	-3	-1	1.5
0.05	71	2.2	-3.1	-0.5	61	-22	0	1.3
0.18	56	2.2	-1.6	1.2	46	4	1	4.3
0.08	191	2	6.4	2.5	104	-20	-1	2.1
0.01	34	2.1	-1.8	0.3	43	-5	0	0
0.13	179	1.9	5.6	0.8	95	-20	-3	2.2
0	109	1.9	5.1	-0.8	49	-13	0	-0.1
0.12	-4	2.3	-7	4.1	-24	-1	2	-0.1
0.15	174	2	10.9	-0.2	116	0	0	2.6
0.03	63	2.2	-1.9	-0.6	49	-18	0	0.5
-0.02	20	2.4	2.1	0.3	40	17	3	1
0.02	67	1.5	0.5	2.5	-21	-4	0	2.2
0.04	129	2.1	9.5	0.9	64	-7	0	3.1
0.1	144	1.5	11.7	-2.1	31	-11	-2	4.4
0.09	204	1.2	15.2	1	46	-10	0	0.9
-0.02	101	2.1	3.7	1.1	58	-4	1	2.6
0.02	18	2.2	-2.8	0.4	24	-13	0	-1
0.21	44	2	-5.4	-1.6	58	-6	-1	2
0.12	27	2.4	0.6	2.4	49	7	1	-1.4
-0.03	179	1.7	4.5	-2	85	-24	-2	1.9

0.08	127	1.5	2.1	1.6	0	-20	-1	1.7
0	51	2.3	-2.3	0.5	61	-9	0	1.2
0.09	131	1.8	9.7	-1.6	61	-15	0	3.3
0.06	137	1.8	5.1	0.1	58	-17	-1	2.5
0.16	321	1	15.1	2.4	116	-21	-3	4.8
0.14	80	2.3	-5.6	2.4	58	-10	-1	1.5
0.11	224	1.3	13.9	2.1	64	-18	0	3.3
0.01	190	1.9	1.2	0.4	125	-19	-3	3.1
0.03	160	1.3	17	0.3	18	1	0	1.3
-0.01	104	2.1	0.5	1.4	85	-4	0	1.3
0.12	92	1.8	-7.5	4.1	67	-14	-2	0.6
0.01	197	1.6	2.7	1	70	-24	-2	1.5
0.05	121	1.7	1.4	0.5	34	-21	-1	1.9
0.07	143	2.1	-1.2	1.3	119	-14	-1	1.5
0.06	298	1.7	12.4	2.6	198	-15	-2	2.2
0.06	115	1.7	1.2	-1.1	52	-12	0	1.1
-0.03	138	2	3.2	0.5	70	-20	-1	1
0.09	70	2.1	-6.3	0.6	70	-23	-2	1.8
0.03	37	2.5	-0.2	-0.7	92	10	0	2.4
0.1	154	2.1	-3.6	1	137	-20	-2	1.9
0.18	114	2	18.5	-2.2	55	14	4	2.1
0.01	84	1.8	0.3	1.8	34	3	1	2
-0.02	129	2	3.3	0.7	95	-2	1	2
0.12	93	2	4.9	1.2	37	0	0	2.1
-0.08	175	1.9	3.3	0.4	95	-24	-2	1.6
0.1	75	2.1	6.4	-1.4	49	-5	0	2.3
0.08	145	1.7	2.1	1.5	64	-18	-2	0.9
0.09	152	1.7	9.2	-0.8	88	-7	1	2.3
0.1	101	1.6	3.7	-0.4	-3	-10	-2	2.9
0	21	1.9	0.4	-1.5	18	0	1	0.9
0.05	22	1.9	-1.6	1.9	3	-2	0	1.6
0	232	1.5	13.7	1.1	88	-25	-3	
0.07	86	1.6	10	0.1	31	5	0	0.9
0.21	158	1.9	3.5	-0.2	119	-17	-2	3.2
-0.08	151	1.8	-1.5	1.1	85	-17	-1	2.1
-0.03	7	2	-1	-1.6	6	-13	1	-0.3
0.03	90	1.8	-1.4	0.6	58	-10	-1	1.8
-0.06	190	2.4	-1.4	1.3	220	-18	-2	1.6
0.04	242	1.2	11.6	2.8	49	-26	-4	2.4
0.06	127	1.6	-0.4	1.6	82	-4	1	2.1
0.06	81	2	-1.9	-2.2	61	-13	1	4.4
-0.07	69	1.8	-2.9	1.9	24	-14	2	2.2
0.02	199	1.4	7.1	-0.1	128	-12	-2	2.4
0.16	177	1.4	9.7	0.8	67	-10	-2	1
-0.11	77	1.6	-1.8	0.9	24	-11	-2	0.1
-0.06	152	1.8	6.4	-1.4	61	-20	-3	5.3
0.02	52	1.4	-0.8	0.3	15	-6	-1	1.3

0.16	104	1.9	2.2	1.1	64	-8	-2	2
0.04	220	1.2	8.5	-0.4	119	-23	-3	1.4
0.07	-7	2.1	-4.1	-0.1	15	-2	1	2.1
-0.05	244	1.5	8.1	3.4	116	-24	-1	2.8
0.16	190	1.5	11	-2	82	-23	-3	1.5
0.01	71	2	0.2	1	107	-3	0	0.4
0.18	210	1	16.6	-2.1	52	-35	-2	1.4
0.01	39	1.4	3.2	-0.1	-12	-8	1	2.1
0.06	97	1.5	-3	0.1	31	-22	-2	2.5
0.04	-16	2	-11	-1.2	37	-10	0	1.5
0.17	183	1.5	6.4	1.7	79	-13	-2	-1
0.13	131	1.5	12.7	2.1	15	-5	1	2.9
0.06	184	1.6	3.2	2.3	92	-15	-1	2.1
0.13	63	1.5	-1.6	-2.9	34	-15	-1	3.2
-0.01	12	1.8	-3.7	1	15	-6	1	0.4
0.1	222	1.5	4.8	3.3	143	-9	-1	1.3
0.14	199	1.7	4.3	2.5	177	0	-1	0.3
0.1	124	2	9.5	0	116	5	1	1.2
-0.09	263	1.5	5.6	1.1	162	-20	-2	3
0.06	211	0.9	14.3	3	46	-10	-1	2.2
0.03	118	1.8	10.6	0.3	73	3	0	0.6
0.03	12	2	-17.9	1.1	88	-24	-2	
0.04	113	1.3	7.1	2	46	1	1	0
0.12	131	1.3	3.9	1.2	43	-5	-1	1.5
0.06	198	1.1	10.4	0.6	37	-18	-2	2.3
0.09	192	1.3	7.7	4.4	55	-9	1	4.2
-0.03	54	2.3	-2.9	3	92	12	1	3.6
-0.02	100	1.3	2.1	0.1	40	-20	0	-1.3
0.15	42	2	-10	1.7	98	-15	-2	-2
0.1	169	1.5	9.9	-0.5	85	-6	-1	2.6
0.12	104	1.7	4.9	1.5	40	0	-1	1.6
0.09	-64	2	-6.9	0.1	0	6	3	-0.2
-0.05	202	0.6	7.6	3.1	61	-22	-1	1
0.13	-25	1.4	-11.3	3.3	-40	-11	0	1.1
0.16	128	1.5	3.6	3.2	70	-8	-3	
0.09	38	1.4	0.1	0.6	21	12	1	1.4
0.1	144	1.7	5.8	1.6	92	-12	-1	1.5
0.02	90	1.6	3.3	2.5	24	4	1	1.6
0.11	46	1.6	2.7	-2	21	-6	-1	1.7
0.08	272	1.3	17.9	-1.9	149	-18	-2	3.1
-0.14	82	1.5	-7.5	2.2	34	-24	-2	3.7
-0.02	131	1.6	-1.1		107	-17	-1	
-0.05	189	1.5	7.4	1.2	119	-16	-1	0.5
0.08	116	1.6	2.7		79	-4	-2	
0.06	85	1.3	-6.1		73	-27	-3	
-0.02	224	0.9	15.5	2.1	55	-11	-1	2.9
0.19	40	1.4	-8	1.5	49	3	-1	1.8

0.07	39	1.5	-1.5	1.5	18	1	1	2.5
0.02	153	1.3	3.5	0.5	92	-12	0	1.4
0	169	1.1	2.2	0.8	64	-25	-3	1.7
-0.02	264	0.5	15.3	2.1	58	-20	-2	3.7
-0.03	40	1.9	-4	1.1	49	-13	1	3
-0.04	-1	1.5	-9.6	3.3	-18	-3	0	-0.5
-0.02	72	1.5	-4.9	1.5	67	-11	0	2.1
0.01	192	0.8	7.5	1.1	73	-11	-2	4.2
0.03	19	1.2	-7.3	3.1	-31	-25	-3	-0.4
0.12	179	0.8	5.5	-0.4	46	-23	-3	2.1
-0.03	66	1	1.4	1.9	6	-17	0	-0.1
0.01	103	1.2	2.6	0	27	-17	-2	0.9
0.03	153	0.9	4.5	1.9	76	-28	-3	0.5
0.02	111	1.1	5.2	0.6	24	-7	1	4.2
0.1	58	1.7	3.7		58	0	0	
0.03	17	1.8	-5.2	2.9	12	1	1	2.4
0.03	90	1.5	-4.6	0.8	67	-7	-2	1.5
0.03	101	1.5	-5.8	0.6	67	-13	-2	2.3
0.04	154	0.9	4.1	-0.7	52	-13	-2	4
0.13	107	0.7	11.8	1.6	9	7	1	0.2
0.01	98	1.3	0	3	76	9	0	1.3
0.03	-21	1.7	-7.8	1.3	18	-1	1	0.3
0	54	1.3	-1.6	-1.1	49	-4	-1	2.9
0.02	42	1.2	-2.6	1.4	21	-9	-1	-2
-0.08	81	1.1	-0.2	-0.8	24	-18	-2	2.3
0.05	95	1	5.8	-5	49	-21	-1	3.9
0.11	70	1.3	-1.5		31	-15	-3	
0.14	78	1.2	-0.1	-1.7	37	-11	-1	3.2
0	26	1.5	0.4	-0.5	49	-3	2	1.3
-0.03	40	1.1	-3.2	2	-31	-11	0	0.5
0.14	104	1.4	-3.3	-0.1	70	-21	-3	0.9
0.09	51	1	-4.5	1.5	27	-11	1	3.9
0.07	137	1.4	0.8	-4	101	-27	-3	2.3
0.11	54	1	-3.7		27	1	-1	
-0.1	77	1.5	1.1	-1.2	64	-18	-1	1.7
0.02	71	0.9	-2.6	2.6	9	-12	-1	-0.5
-0.04	95	1	5.9	2.3	34	-15	1	-0.5
0.09	156	0.9	1.4	3.5	113	-14	-1	1.1
0.16	13	1.1	-4.7	1.5	-37	-2	-1	2.6
0.09	-20	0.7	-2.9		-21	-9	1	
0.13	87	1	-2.8	1.5	61	-9	0	2.9
0.05	25	0.9	-3.9	-1.1	3	-10	2	2
-0.02	165	0.4	9.1	1.2	49	-3	-1	1.7
-0.01	153	1.2	5.3	-0.1	113	-6	0	1.1
-0.03	184	0.9	5.4	3.4	88	-6	-1	1.5
-0.01	15	1.3	-6.9	0.5	12	-22	-1	1.3
0.1	62	0.7	0.4	-1.7	-3	-9	0	2.4

-0.04	111	1.1	-3.4	-0.5	73	-33	-1	0.7
-0.1	107	1	-0.3	2.4	40	-6	-1	0.7
0	164	0.7	5.6	2.2	107	-2	-1	-1.2
0.11	61	0.9	-2.3	0.7	40	2	-2	1.3
-0.01	163	1	-0.6	0.4	92	-20	-2	2.8
0.14	95	0.7	-3.7	0.3	18	-13	-1	2.1
0.09	33	1.3	-5.5	1.3	58	8	2	3.2
0.1	169	0.7	5.5	0.3	76	-13	-2	4
-0.07	177	0.8	6.5	2.1	104	-16	0	2.7
0.02	39	1.2	2.2	-2.7	24	-7	0	0.8
-0.14	-4	0.7	-6.5	1.7	-55	-1	0	-0.2
0.04	-110	1.6	-8.9	-3.6	-9	9	1	-1.8
0.03	87	0.8	2.5	1.3	27	-8	1	3.4
-0.12	81	1.4	-0.2	1.7	67	-14	0	0.2
-0.08	43	1.2	-1.2	0.3	40	-11	0	0.8
-0.13	133	0.9	-0.5	1.7	79	-14	-1	0.7
-0.07	67	1	-2	-0.4	18	-29	-2	2.1
0.04	117	1	1.9	1.9	92	-16	-1	0.5
0.14	24	1.3	-1		49	7	-1	
-0.11	80	0.9	1.1	-1.6	27	-18	-2	0.9
0.08	94	1.1	2.4	-2.5	82	-7	-1	0
0.01	-41	1.4	-10.6		9	-7	0	
-0.01	150	0.8	9.3		82	-16		
0.01	-33	1.7	-0.5	-1.1	46	6	3	1.2
0.06	63	0.8	10.7	-0.7	12	4	2	0.6
0.1	93	0.5	2.8	1.9	34	-11	-2	-3.9
0.21	157	0.7	7.1	-0.1	67	-11	-2	3
0.06	87	0.9	4		61	-14	-2	
0.03	75	1	1	0.4	73	-3	-1	0.9
-0.02	38	1.2	0.3	0.3	43	-4	0	
0.01	-28	1.1	-9.3	-0.6	40	-2	-1	0.3
0.01	41	0.9	-4.4		70	-13		
0.12	-122	1.9	-19.6	3.6	64	18	1	-0.3
-0.02	60	1.2	5.9	0.2	43	27	3	2.5
0.09	70	0.9	3.9		61	-1	-2	
0.02	-42	1.3	-8.2		52	5		
-0.02	137	1.1	1.1	0.9	82	-11	-3	-0.1
-0.1	230	0.1	4.2	1.8	76	-29	-4	0.8
-0.05	124	0.5	2.3		58	-22	-4	
0.08	-47	1.2	1.2	-2	-12	-2	0	-0.9
0.09	16	0.8	-7.7	0.5	46	3	2	3
0	226	0.3	12	1.9	88	-17	-3	1.9
0.04	-33	1.3	-2.8	-2.6	46	5	1	1.2
0.12	68	0.6	7.2		9	-3		
0.08	68	0.8	2.3		64	-13		
-0.07	64	0.1	-1.5	1.6	6	-13	0	1
0.08	106	0.7	-0.8	0.1	95	-5	-1	4.5

0.06	-118	-0.1	-9.7	0.7	-153	6	1	-0.7
-0.08	81	0.5	4.8	1.8	9	4	1	2.2
0.09	12	1.1	-6.1		64	0		
0.01	-19	1.1	-8.4	1.6	64	-12	0	
0.08	37	0.1	2.9	1.1	-61	-9	-1	0.5
0.07	6	1.1	-3.2	-4.2	67	-7	-1	1.3
-0.09	-107	0.7	-7.9	-1.7	-34	6	3	0.1
-0.03	108	0.4	4.2	1	46	-1	1	0.7
0.26	-57	1.7	-2.4	2.9	67	20	0	0.1
0.13	21	0.6	-3	0.1	24	-14	-1	
0.03	92	0.2	1.8	2	18	-7	-2	1.6
0.06	179	0.4	7.6	-1.1	110	-11	-1	4
0.09	36	1	5		27	1		
-0.1	2	0.8	-1.3		61	-7	0	
0.03	47	0.7	6.5	1.5	27	-2	-2	-1.9
-0.06	-68	0.6	-13.7	2	-24	2	1	0.2
0.25	129	0.9	11.2	2.3	95	5	-3	0
0.28	-20	1.2	2.5	1.7	24	7	-1	-0.3
0.06	-27	0.1	-4	0.7	-49	0	1	-0.6
-0.12	56	0.3	0.5	-0.8	46	-5	1	2.5
0.12	82	0.3	8.9		37	11		
0.23	-13	1.3	3.1	1.4	40	22	-1	-0.8
0.17	-138	1.4	-7.5		0	12	2	
0	8	0.5	3.6		3	4	1	
0.21	85	0.8	8.2		55	-5	-3	
-0.05	3	0.6	-7.4	0.2	85	2	0	0.4
-0.14	8	0	2.9	0.8	-6	11	3	0.4
-0.1	-78	0.1	-5.3	-0.7	-79	0	0	
-0.01	-94	0.7	-7.8	-1.6	-43	2	1	1.4
0.17	146	0.8	11.7	2	119	10	-2	-0.5
-0.05	35	0.2	-6.1	0.5	31	-15	-1	1.3
-0.12	151	0.1	14.6	-2.3	67	-13	0	-0.1
0.3	55	0.5	5.2	2.7	-9	-7	-4	-2.3
0.11	119	1.3	14.5	1.8	122	10	-1	0.4
0.18	-8	1	7.1	0.3	52	5	1	2.3
0.14	79	0.8	11.5	1.7	95	15	0	
0.09	87	0.4	5.2	-2.8	73	-6	-1	1.4
-0.02	-34	0.6	-3.4		49	14	2	
-0.01	29	0.3	3.4	2.7	-9	2	0	0.1
0.11	9	0.8	1.5	3.5	31	9	1	
0.07	-76	0.8	6.4		-18	34	4	
-0.03	-10	0.6	3.1	1.5	-6	12	2	
0.09	-5	0.4	-2.3		12	-12		
-0.04	115	-0.4	8.9	0.7	-18	-9	-3	0.5
-0.01	-43	0.5	3.8	-0.8	0	3	3	-1.3
-0.03	-48	0.1	-11.5	0.4	-9	-2	1	1.7
0.13	-7	0.3	-3.4	-1.4	18	6	-1	1.7

0.03	31	0.4	-8.8	3.5	64	0	-1	1.1
0.19	170	0.2	18.1	0.5	98	-9	-1	1.1
0.19	178	0	15.2	0.3	79	-6	-2	-1.4
0.16	157	0.3	15.9	1.8	107	-5	-3	0.9
0.27	-16	1.2	7.3	1.9	31	28	3	1.5
0.17	-6	0.4	5.3	3.5	-15	15	-1	
0.23	33	0.9	8.3	0.1	67	12	-1	-0.2
0.26	50	0.7	8	1.2	37	7	-1	0.6
0	84	-0.6	2.7	2.4	-21	-13	-1	-0.3
0.18	-17	0	6.8	0.6	-43	22	2	
0.24	-76	0.5	-1.4	3.8	-46	13	0	-1.3
0.21	-49	0.9	4.3	1.3	3	7	0	-0.1
0.21	55	0.6	15.4	0.3	55	0	1	-2.7
0.03	104	0	1.9	1.9	88	4	0	0.6
0.21	37	0.5	11.2	1.4	37	8	0	-1.2
-0.04	46	0.7	-0.5		104	-4	-2	
0.15	38	0.8	7.9	0.8	76	13	0	
0.21	64	0.4	11.3	2.2	24	10	-1	-0.2
0.07	-55	0.8	-7.9		58	-5		
0.26	-74	1	0.6	-1.1	37	17	-1	-3.3
0.21	38	0.7	8.5	1.2	79	18	1	1
0.01	76	-0.1	1.9	3.6	34	2	-1	
0.21	24	0.6	9.7	2.4	88	14	3	0.1
0.05	-57	-0.1	-7.5	0.5	-15	1	0	
0.03	-20	0.5	-4.3		34	13		1.3
0.17	17	0.4	10.8	1.4	15	23	1	2.9
-0.05	100	-0.3	-3	-0.3	46	-22	-3	0.3
-0.08	74	-0.7	-2.9	2.4	-18	-18	-1	0.7
0.24	10	0.7	8.5	0.7	61	13	0	-0.8
0.26	71	-0.2	18.4	1.2	24	-1	0	-1.1
0.23	54	0.2	7.6	1.7	52	13	-1	0
0.06	76	-0.4	2.7	0.1	37	-8	-1	-0.6
0.11	-58	0.2	-3.4		-15	2	1	
0.17	32	0.6	10.4	2.2	49	21	0	0.2
0.03	-25	0	-4.1		-12	10		
0.19	28	0.3	10.1	0.6	61	11	0	-0.8
0.17	6	0.5	9.7	4.1	55	25	1	-0.8
-0.05	68	-0.8	5.2	1.8	-31	-5	0	2.4
0.25	34	0.1	8.4	2	9	14	0	-2.2
0.26	-79	1.1	0.5	-0.6	18	12	1	-1
0.02	92	-0.5	7.3	0.7	15	-2	-2	
0.28	-43	0.5	0.6	0.4	9	7	-2	-0.1
-0.13	-18	-0.7	-1.5	0.3	-52	-8	0	0.9
-0.08	-161	0	-16.2		-64	-12	0	
0.04	-58	0.1	-2.9		-12	10	0	
-0.08	49	0	1.1		37	-11		
0.04	1	0.1	0.6		31	8	-1	

0.13	54	-0.1	4.9	2.4	37	16	0	
0.08	-9	0	10.3		-3	25	1	
0.29	-46	0.3	6.5	0.1	0	20	0	-2.4
0.08	-14	0.4	-5.7		95	19		
0.21	24	-0.2	4.5	1.2		11	1	
0.01	-52	0.5	3	0.7	37	24	2	
-0.04	-55	-0.5	-10.2	0.9	-40	-1	1	0.8
0.18	52	0	-2.1	0.8	76	5	-1	
0.22	-55	-0.1	3.8	0	3	20	1	
0.02	11	-0.8	1.6	0.7	-46	-9	2	
0.17	-16	0	-1.7		6	6	-1	
0.01	-176	-0.6	-15.8		-137	2		
0.21	39	-0.3	13.8	1.3	31	4	-2	1.5
-0.03	-37	-0.2	-5.1	-0.5	-9	-1	1	0.8
0.23	-32	0.6	6.2	-0.5	70	14	2	-2.2
0.17	15	-0.1	9.6	1	58	10	0	-3.4
0.06	30	-0.7	6.9		-31	2	-1	
0.2	14	0.2	11.4	-3.3	76	21	1	2.2
0.13	-66	-0.4	5.2	-1.8	-31	10	0	-0.2
0.23	30	0.1	11.3	0.6	46	31	2	0.1
-0.04	-5	-0.6	-3.7	-0.9	-21	4	0	3.9
0.05	7	0.1	-0.8	2	34	4	0	1.6
0.18	40	-0.5	4.5		12	9		
-0.08	16	0.2	2.8	2.2	52	13	2	
0.24	-102	0.4	1.1	1.1	-3	26	2	-1.3
-0.07	-8	-0.7	-0.4	1.5	-46	3	2	0.3
-0.03	0	-0.5	-3.4	1.5	-6	-9	1	0.1
0.04	-153	0	-1.3		-64	31	4	
0.1	-6	0			58	-5	-1	
0.22	-13	0.4	8.5	1.9	49	3	1	0.1
0.15	-33	-0.2	9.6	0.8	-3	19	1	-1
0.06	-131	0.3	-11.2	1.4	21	16	2	
-0.1	36	-0.6	-1.4	0.5	27	7	2	1.6
0.05	39	-1.3	1.1	2.4	-52	2	-1	0.9
0.17	-21	-0.1	8.9	0.7	27	22	1	0.6
-0.09	-89	-0.3	-8.6	3	-43	19	4	4.2
-0.02	26	-0.8	4	1	-49	-1	-1	-0.5
0.07	-108	-0.5	1	0.5	-73	7	0	-1
-0.02	-15	-0.6	0.1		-27	9		
-0.03	-159	-0.7	-12.3		-119	10		
0.12	-27	0	4.2	0.8	24	10	0	0.3
-0.05	-73	-0.7	-1.1	1.1	-85	11	3	2
-0.03	-101	-0.2	-2.8		-3	25	4	
0.23	-103	0.1	4.1	0.4	-21	23	1	-0.1
-0.04	-13	-0.6	-8.5	0.8	-3	4	0	1.1
0.04	-126	-0.2	0.5	-1.5	-61	2	1	-5.7
0.21	-38	0.5	6.8	1.1	24	19	0	-4.2

0.13	32	-0.3	12.3	1.1	46	23	0	-0.3
0.19	31	-0.3	4.9	1.2	21	6	0	-0.6
-0.03	-152	-0.2	-4.5		-37	31	4	
0.17	5	-0.1	7	1.1	49	13	1	0.8
0.14	-21	-0.1	3.6	-0.2	24	8	-1	-3.6
0.13	-71	-0.1	-5.7	1.5	-18	6	-2	
0.12	-1	0.1	10.9	-1.4	46	6	1	-1.2
0.08	4	-0.2	9.3	2.3	64	19	4	0.4
-0.09	59	-1.4	-1.5	0	-12	-21	-2	1.6
0.15	-103	-0.3	0	-2.2	-31	10	-1	-0.9
0.02	-63	-0.4	-5.1		-18	10	-2	
0.26	-3	-0.4	9.7	0.4	21	12	-1	-1.4
0.18	-86	0.2	2.7	1.8	34	27	3	-2.3
0.08	124	-0.2	4.1	2.2	146	-9	-2	0.1
0.13	-112	-0.1	-7.3	0.2	-18	8	-1	0.5
0.05	-109	-0.2	0.9		6	22	3	
-0.08	-147	-1.3	-7.3		-153	10	1	
0.18	-122	0.1	0.7	-0.2	-43	7	-1	-1.3
0.24	-149	-0.2	-4	-1.8	-64	11	-1	-2
0.03	-38	-1.2	4.3		-79	13	2	
0.11	3	-0.7	8.9	-1.2	37	5	0	2.4
0.09	-96	-0.9	-2		-40	18	2	
0.04	-2	-0.4	1.3	-0.3	70	22	3	1.5
0.06	-33	-0.9	6.8	2	-73	19	2	-0.9
0.09	-199	-0.8	-13.1	-0.4	-82	16	1	-2
-0.05	-130	0	-12.2	1.3	0	5	-1	
0.01	-85	-0.6	-13.6	-1.3	-24	-6	0	0.8
0.1	-98	-0.6	-7.4	1	-27	13	1	
0.14	-133	-0.2	2.1	-0.6	-15	28	3	-0.3
0.2	-153	-0.4	2	0.8	-61	29	2	-0.3
0.13	-44	-0.3	1.9	2	-9	10	0	
0	-79	-0.8	-4.4		-21	11		
0.18	-89	-0.3	7.1	0.6	-40	24	1	-0.5
0.15	-90	-0.2	0.3	-1.6	-3	22	1	
0.13	-95	-0.9	2.1		-49	12	1	
0.05	-131	-0.7	-5.2	-1.6	-61	23	0	0.6
-0.05	-123	-0.4	-2.6	1.2	-21	23	5	1.7
-0.02	43	-1	5.2		27	7	2	
-0.07	-142	-0.4	-9.4	-0.3	-31	8	2	-1
0.11	-41	-0.7	7.7	1	-27	26	2	
-0.06	-34	-1.1	-5.5	0	-37	-10	-2	-1.7
0.15	-142	-0.6	6.2	1	-61	33	3	-0.3
0.02	-143	-1	-4.7	-0.7	-98	24	0	-1.9
-0.01	-164	-0.2	-13.9		15	15	1	
0.01	-151	-0.9	-1.2		-85	19	1	
0.03	-149	-1.1	-9.1	3.3	-85	13	3	0.2
-0.03	-65	-1.1	-5.5	1.8	-67	4	1	0.5

-0.11	-146	-1.3	-11.1	0.2	-95	-11	0	0.4
-0.1	-144	-0.9	-9.8	-4.7	-15	9	3	-0.4
0.01	26	-1.7	3.3	1.8	-76	8	-2	1.4
0.08	-116	-1.3			-143	21	3	
0.19	-213	-0.7	-7.6	-2.4	-122	22	2	0.4
0.08	-153	-1.1	-6.6	-3.8	-73	5	-1	0.3
-0.02	-114	-0.8	-4.2	-1.3	-18	15	-1	-0.2
0.03	-199	-0.7	-14.9	0.6	-73	6	1	
-0.1	-150	-1.2	-9.7	0.5	-107	6	0	-3.4
0.03	-143	-1.2	-11.8	-2.4	-46	-14	-1	-4.4
-0.04	-146	-0.8	-9.7	-0.5	-67	0	0	-1.4
0.06	-65	-0.8	-12.1			2		
-0.14	-145	-1.2	-12.9	-2.1	-67	9	-1	-0.6
-0.04	-129	-1.6	-5.1		-88	25	2	
-0.07	-153	-1.6	-12.6	2.2	-107	4	2	-1.9
-0.15	47	-2.1	5	2	-24	1	-1	-0.3
-0.2	-173	-1	-19.4		0	9		
0.01	-195	-1.3	-19.1	-1.6	-34	0		
-0.11	-153	-1.1	-12.1	0.5	15	17	3	-2.8
0.11	-174	-1.6	-6.3	-0.1	-104	19	2	-1.4
-0.11	-112	-2.1	-9.2	0.6	-64	-1	-1	-1.4
0	-24	-2.8	1	0	-101	3	0	
-0.04	-83	-2.4	-4.5	1.1	-79	-4		-0.2
-0.04	-351	-2.7	-19.4	-2	-268	6	0	-6.2

DD	GL	DCI	Maint	Feed Adv.	dCE	mCE	TB Adv.	Legs	
	0.5	-1	1.3	-8	138	-1.1	0.8	2.3	1.22
	0.3	-3	2.2	-10	139	-0.2	1	1.4	-0.82
	0.2	-4	0.3	-6	130	0	1.4	2.8	0.75
	0.4	-2	2.7	-13	128	0.4	1.2	0.1	-0.37
	0.6	-3	0.4	-28	255	0.1	1.3	0.9	1.26
	0.7	0	0.6	12	28	-0.1	0.2	1	2.17
	0.5	-3	1.1	-25	227	-0.2	0.7	1.7	-0.37
	0.7	1	-1.5	-25	243	-0.5	0.9	0.8	0.94
	-0.1	-1	0	-15	116	-0.1	1.2	3.8	-0.17
	0.6	1	2.1	-3	24	-0.3	1.3	2.1	1.92
	0.8	-3	-1.3	-2	53	0	1.4	6.2	1.07
	0.3	-1	1.9	4	57	-0.2	0.7	0.4	0.73
	0	-1	2.2	0	45	-0.1	1	1	0.17
	0.2	-3	1.8	-1	74	-0.7	1.6	1.3	-0.21
	0.3	-2	1.2	-21	177	-0.4	1.2	1.9	1.04
	0.1	0	1.5	-15	153	-0.2	0.6	0.5	-1.22
	0.3	-4	1.6	-15	162	0.2	1	2.1	-1.47
	1	-1	1.5	-11	85	0.4	1.8	2.3	2.01
	-0.1	-2	0.9	-17	129	-0.1	2.1	0.2	-0.98
	0.4	-2	2.2	14	-36	-0.1	0.8	2.3	1.06
	0.4	0	0.5	-4	61	0.1	0.6	1.9	1.18
	-0.4	0	1.9	-9	121	-0.1	1.7	0.7	-0.15
	0.8	0	-0.3	-1	54	0.4	0.9	2.9	1.01
	0.5	-2	0.4	-6	146	0	1.2	0.9	1.2
	0.1	-3	0.4	-1	54	-0.2	1.3	3.5	0.66
	0.1	-2	1.9	-1	63	0	1.5	2.5	0.49
	0.1	0	-0.5	11	14	-0.8	1.1	3.3	0.03
	-0.3	-1	1.7	2	27	-1.2	1.4	2.7	-0.78
	0.2	1	0.7	-15	132	0.1	0.3	2.6	-0.35
	0.6	-1	2.2	9	21	0.1	0.8	0.3	1.57
	0.7	-2	0.4	-9	51	0.4	1.2	2.1	1.1
	0.3	-1	0.2	-4	104	0	0.8	2.6	1.07
	0.2	0	0.1	-2	89	-0.3	1.6	1.2	1.79
	-0.2	-2	1.5	-18	131	0.1	1.3	5.3	-1.64
	0.9	-1	1.5	20	-75	-0.6	1.9	1.8	2.75
	0.6	0	1.5	14	-23	-0.6	1.3	0.6	0.89
	0.4	0	1	-4	87	-0.6	1.5	2.7	1.65
	0.5	-2	0.4	-21	201	0.9	1.3	1	0.89
	0.7	0	0.8	0	73	-0.4	0.4	-0.1	1.16
	0.5	0	-0.4	-30	185	0.3	0.6	3	0.87
	0.3	-1	-0.9	-16	103	-0.7	1.3	-1.2	-0.69
	0.8	-2	1	8	22	-0.5	1.2	2.1	1.44
	0.7	0	0.8	2	53	-0.3	0.9	1.8	1.57
	0.6	-2	0.7	-16	156	0.1	1.5	3.2	0.62
	0.6	-5	1.6	-27	180	0.2	1.2	1.9	-0.88
	0.2	-3	2.7	-21	219	-0.3	0.8	0.9	-0.67

0.6	-1	0.2	6	-2	-0.5	0.9	1.9	0.94
0.7	-1	-0.7	-33	171	-0.2	-0.4	2.3	0.05
0.2	-1	2.6	-10	112	0.2	1.5	2.9	0.37
-0.2	-1	1.7	-3	95	0.3	0.2	0.3	0.32
0.4	-1	0.5	2	59	0.1	1.6	2	1.07
0.6	-1	1.3	8	47	-1.2	1.2	1.3	0.78
0	-2	1.5	-4	99	-0.5	1	5.4	0.66
0.4	-2	1.1	25	-101	-1.1	0.6	0.6	1.02
0.2	1	3.6	11	-1	-0.4	1.7	4.4	-0.46
0.4	1	0.7	-25	201	1.3	0.4	0.4	0.31
0.4	1	0.6	18	-49	-0.7	1.7	2.5	2.62
1.1	-1	1.7	-8	49	0.4	0.8	1.9	2.26
0.1	0	3.2	-7	99	-0.3	1.4	2.2	0.57
0.2	-2	0.8	-4	41	0	0.6	1.7	-0.94
0.3	-3	-1.2	1	47	0	1.8	1.6	2.29
0.7	-1	2	0	90	0.2	0.7	2.2	2.27
0.3	-5	0.9	5	34	-0.1	0.9	1.6	0.6
0	-1	0.2	-5	90	0.7	1	-0.4	-0.23
0.5	-2	2	-7	76	0.4	1.1	4.1	0.92
0	-2	2.1	5	54	-0.6	1.1	1.7	-0.06
0	-1	1.5	-4	102	0.4	0.9	0.3	0.65
0.5	1	1.2	-9	95	0.1	1.6	-0.1	0.05
0.2	-1	0.4	17	-72	-0.2	1.4	1.5	0.23
0.3	-2	0	-20	166	0.6	1	2.8	0.1
0.5	-1	-0.1	3	16	-1	0.7	1.5	0.74
0.5	-1	3.7	0	46	-0.7	1.5	1.7	1.63
0.7	0	0.5	9	-5	-0.5	1.1	2.3	2.16
0.1	-2	1.3	6	30	-0.7	0.9	-1.2	1.34
0.9	-3	3.5	0	56	-0.5	1	0	1.15
-0.4	-1	1	-23	171	0.5	1.6	0.9	-2.09
0.4	-1	0.3	2	39	-0.2	0.9	1.8	0.84
0.6	-1	2.1	-3	31	-0.2	1.3	2.9	2.09
0.3	-3	1	4	18	0.3	1.3	1.4	0.86
0.5	-1	0.1	-2	48	-0.2	0.8	-0.5	1.68
0.4	0	-0.2	10	2	-0.2	0.7	1.7	2.08
0.2	-1	1.5	2	50	0.2	1.4	2.5	0.88
0.8	-3	-0.7	5	10	0.7	1.5	1.8	1.26
0.4	-2	1.6	-6	134	0	1.6	1.6	-0.41
0.8	-2	1	-8	76	0.3	0.6	0.4	0.67
0.5	3	0.5	7	-2	-1.6	1.2	0.8	1.83
0.4	-2	1.8	16	-38	0.7	0	1.2	2.07
0.3	0	1	6	40	-0.2	1.8	1.9	0.07
0.3	-1	0.7	-7	54	-0.4	1.6	3.9	1.46
0.4	-1	0	0	67	-0.5	2.3	3	2.42
0.3	-1	1.4	-11	120	0.9	0.5	0.1	-0.83
0.7	-2	-0.4	3	33	0.6	0	1.4	1.79
0.3	-2	1.4	5	-21	0.4	1	-0.5	-0.86

0	-1	1.7	-7	72	0.1	1.2	2.6	-0.02
0	-2	1.8	10	-30	-0.3	1.2	1.8	-0.05
0.9	1	1	14	-11	-0.6	1.1	-0.8	2.32
0	-2	0.5	17	-68	-0.4	2	-2.3	0.93
-0.1	-1	3.2	-5	102	-0.4	1.1	0.9	-0.39
0.2	-2	0.8	-3	99	-0.3	1	1.3	0.15
0.6	-1	0.6	10	18	-0.2	0.5	1.2	1.96
0.4	-2	0.1	5	-8	-0.6	1.8	0.2	0.54
0.1	-2	0.6	-22	144	0.4	0.7	1.4	0.57
1	-2	-0.5	-11	65	-0.1	0.5	-0.8	1.02
0.4	0	1.6	2	86	0.1	0.9	0.5	0.52
0.7	-3	1.4	-10	87	-0.2	1.6	2.4	0.09
0.9	-1	-0.7	0	62	0	-0.5	2.7	1.16
0	1	0.1	2	70	-0.4	1	1.3	0.52
0	-1	2.4	3	20	-0.5	-0.1	-0.4	0.16
-0.7	0	1.9	-5	54	-0.1	1.3	2.4	0.56
-0.5	-1	0.9	1	22	-0.2	1.3	1.3	-2.25
0.3	1	1.3	-7	99	-1	0.9	1.8	1.24
0.3	-1	2.5	0	39	0.3	1.3	1.5	0.2
0.3	-2	0.9	7	84	-0.4	0.6	2.7	1.31
0	-1	1.4	1	50	-0.6	0.8	1.6	0.28
0.2	1	1.1	-5	32	-0.9	1.2	2.7	0.54
0.7	-2	-0.3	-4	93	0.9	0.1	3.2	2.75
0.8	1	1	-2	73	-0.2	-0.3	-8.5	1.02
0.2	-3	0.1	9	2	0.7	0.5	2	0.58
0.6	-2	0.4	-2	39	-0.2	0.8	1	2.47
-0.1	-3	2.7	3	-1	0.4	0.5	2.8	-0.75
0.2	-1	2.9	4	64	-0.2	2	0.8	-0.52
0.3	-2	1.8	8	24	-0.9	1.1	1.2	0.4
0.7	-1	3.5	-17	150	0.4	1.3	0.1	0.86
0.7	-2	-0.6	1	63	-0.1	1	4.4	2.35
-0.2	-1	2.4	7	16	0.2	1.8	0.5	-0.19
0.6	-2	1	6	-11	0	1	1.3	1.39
0.4	0	-0.7	-2	50	-0.5	1.1	0.2	0.51
-0.1	-3	-0.2	-36	186	0.5	1.2	3	-0.26
0	0	-0.7	11	43	-0.8	0.6	0.2	0.8
0.6	-1	1.8	-3	26	0.2	1	2.3	2.15
0.3	0	0.7	2	5	-0.3	0.7	1	2.5
0.5	-2	1.1	1	82	-0.2	0.6	-0.5	1.73
0.4	0	1.1	13	-42	-0.8	1.4	2.3	2.86
-0.8	-1	2.7	9	6	-0.5	1.2	1.1	-1.21
1.2	2	1.3	-13	19	-0.2	0.3	3.7	1.48
0.3	-3	1.8	-11	67	0.1	0.2	-1.7	-0.39
0.4	0	0.8	13	-30	-0.7	2.2	2.3	1.39
0.5	-5	2.6	-9	77	-0.3	0.8	-0.9	-0.62
0	-3	1.2	-5	78	-0.4	0.1	1	1.01
0.4	1	0.2	-2	72	0.8	0.8	0	-0.85

1	-3	0.2	-3	78	0.4	0	1.8	3.28
0.8	-2	-0.2	-3	81	0.8	0.1	2	1.01
0	-2	0.2	-24	160	-0.2	1.2	4.3	-0.23
0.4	1	0.3	-9	116	0.1	1.3	3.7	-0.23
0.5	-1	2.9	13	-26	-0.4	0.9	2.7	-0.09
0.1	1	1.8	21	-40	-0.5	1.8	5.1	0.83
0.3	-4	1.2	-16	126	0.6	0.9	0.3	1.14
-0.5	-1	0.2	4	-1	-0.6	1.5	1.5	0.69
1.2	2	1.3	-6	62	0.4	0.3	3.8	2.26
0.2	-1	3.1	8	27	-0.2	1.5	3.7	1.76
0.2	0	-0.7	20	-37	-0.6	1.2	1.7	0.7
0.6	-2	1.3	-11	81	0.1	1.9	4.3	-0.35
0.7	-1	1.1	2	-2	0.7	1.3	2.6	0.79
0.5	-1	-0.4	-7	51	0.9	0.3	1.8	-0.2
0.6	-1	0	5	1	-0.1	0.5	3.2	1.17
0	-2	-0.1	-16	94	0.3	1.8	2.3	-0.28
0.4	-1	-0.7	2	43	0.2	0.9	-0.1	0.85
0	-2	0.7	-13	108	0	0.9	1.8	-0.23
0.3	-2	0.4	-15	106	-0.1	0.9	1.6	0.63
0.3	0	0.8	-8	103	-0.3	0.7	-2.2	0.9
			-3		0.1	0.9		0.94
0.1	-1	0.5	7	-27	-0.5	0.2	1.1	0.76
0.7	-1	1.2	10	18	0.1	0.6	1.4	2.38
0	-1	2.5	-6	123	-0.3	1.6	0.9	-1.69
1	-1	0.1	7	5	0.8	-0.1	-0.8	2.44
0.3	-1	-0.1	-8	79	0	0.9	2.1	0.24
			4		0.1	1.7		1.12
0.1	-1	-1.3	0	53	0.3	-0.4	0.7	-0.64
0.1	2	0	10	-2	0.2	0.9	1.8	0.65
0.9	-3	3.6	2	1	0	1.3	2	0.92
0.4	-4	0.9	-13	58	0.1	1	-0.5	0.74
0.2	-2	2.4	9	-11	-0.6	0.9	1.4	0.99
0.3	0	1.4	0	-5	-0.3	1.2	3.2	0.55
-0.2	-1	0	17	-32	-0.5	1.2	2.3	0.43
0.1	-1	0.2	-4	76	-0.1	0.5	3.2	0.66
0.4	-1	1.1	-6	13	0.4	0.9	2.8	0.64
0.2	1	0.5	7	25	-1	0.7	-0.3	0.86
0.5	-1	0.8	-4	76	0	0.9	1.5	1.98
0.5	-2	1.3	20	-34	-0.7	1.4	1.1	0.55
0.2	0	1.2	-12	98	-1.4	0.9	1.9	-0.91
0.5	-3	1.5	4	-26	-0.2	0.7	1	-0.38
0.5	-1	0.8	11	-60	-0.6	1.1	1.6	0.6
0.5	0	1.7	-5	81	0	1.1	2.7	-0.18
-0.3	-1	-0.4	10	37	-1.1	0.7	3.4	0.79
0.9	-1	0.5	12	-27	0.2	0.2	3.6	2.76
-0.2	-1	0.4	-1	47	-0.6	-0.3	1.6	1.27
0.7	0	1.5	5	1	-1	1.1	1.4	1.85

0.3	1	0.8	14	-22	-0.9	0.8	2.2	0.62
0.1	-3	-0.4	0	63	0.6	0.8	3.3	-0.55
0.2	0	0.5	-6	13	0.6	0.1	0.9	-1.2
0	-2	-1.8	2	7	-0.3	1.8	3	-0.38
1.3	0	0.9	11	-101	-0.5	0.9	0.4	1.9
0.8	-3	0.6	-10	149	0.5	-0.2	2	2.83
0.4	-3	1.5	4	-48	0.8	0.8	2.3	-0.1
0.5	-1	0.1	-3	14	0.2	0.5	-0.7	1.51
0.4	-2	0.7	7	-28	-0.5	0.7	2.6	0.38
0.2	1	0.4	0	39	-0.1	1.1	2.1	0.82
0.3	0	0.7	14	-62	-0.3	0.6	-0.9	2.34
0.2	-2	0.5	3	23	-0.4	1.7	1.4	1.87
0.3	-1	0.6	6	1	-0.5	0.2	0.4	1.33
0.4	-2	0.2	-7	63	0.9	0.3	1.5	2.59
0.3	-3	-0.4	-8	-12	0.1	1.4	1.4	0.37
0.2	-1	0.5	14	-28	-0.3	0.6	3.9	2.27
0.2	-1	-0.1	-8	93	-0.1	0.8	2.6	0.6
0.2	0	3.4	-6	28	0	0.5	-1	0.77
0.4	-2	-0.4	0	65	-0.5	0.4	0.7	-0.21
0.7	-1	0.1	9	16	0	0.4	-0.1	2.98
0.3	-3	1.1	-13	73	-0.2	1.1	1.4	0.25
0.3	1	0.8	8	3	-0.8	0.8	0.4	2.11
0.3	0	0.8	2	42	0.1	0.8	0.2	1.53
0.6	0	0.4	-27	150	1	0.1	1.6	0.06
0.2	-1	-0.3	-7	88	0.1	0.9	1.6	1.06
0	-2	-0.9	-14	82	-0.6	1.7	2.2	-1.44
0.1	-1	-1.2	4	5	-1.1	0.2	2.3	1.6
0.3	0	2.4	1	-26	-0.4	1.4	0.4	0.49
0.4	3	-2.6	-12	80	0.2	1	1.3	1.71
0.2	0	1.3	10	1	-1.6	1	2.4	1.1
0	-1	0.8	2	25	-0.6	0.5	1.5	-0.83
	-1		-14		0.4	0.2		-0.31
-0.2	-2	0.9	14	-49	-0.3	1.4	3	-0.91
0.7	-3	1.6	-4	20	0.3	0.1	0.2	1.24
0.5	-2	0	-3	57	0.1	0.9	2	1.92
0.1	-2	0.3	6	54	-0.4	0.6	-0.5	0.43
0.2	0	0.8	-11	58	0.6	0.1	2.7	0.12
0.3	-2	0.5	0	35	0.7	0.7	-0.3	1.42
0.3	1	-0.7	-16	62	0.4	0.9	1.1	-1.03
0.9	0	1.5	17	-72	-0.4	1.4	6.8	3.26
1.1	-2	2.4	-3	74	-0.1	1.7	7.1	2.29
0.3	1	-0.9	4	63	-0.6	0.7	0.8	1.67
0.6	-1	0.8	20	-113	-0.6	0.8	3	1.3
0.1	0	1.1	2	-19	0.5	-0.1	2.4	1.06
0	0	-0.6	6	27	-0.2	0.8	3	1.36
0.5	0	2.7	-31	141	-0.1	1.3	0.1	-1.75
0.6	-1	2.7	20	-61	0.9	0.1	2.7	0.08

0.3	-2	0.4	-15	66	0.7	0	0.3	-0.12
0.1	-1	-2.2	19	-133	-1.8	1.1	0.5	1
-0.1	-1	1.3	-17	82	0	2.1	3	-0.33
0.6	-1	-1.7	0	41	0.1	1	3.3	0.83
-0.1	-2	0.8	-4	32	0.5	0.9	-0.2	-0.62
-0.1	0	-0.3	12	-3	-0.7	-0.8	2.3	0.95
-0.1	-2	3.5	15	-75	-0.9	1.1	2.8	-1.04
-0.2	-1	-2.6	12	-20	-1	0.9	2.2	-0.87
0.5	-1	0.4	-5	43	0.4	0.1	1.6	2.16
0.4	0	2	6	8	-0.7	1.4	1.6	1.89
0.2	-1	0.1	8	-1	1.2	0.1	4.8	1.31
0	0	-0.3	-24	116	-0.8	0	1.5	-1.17
1	0	-0.4	-5	59	-0.3	0.1	2	1.79
0.5	-4	0.5	13	-72	-0.2	0.7	1.8	0.9
0	-1	1.1	11	23	0.3	0.7	0.8	0.79
0.6	3	-0.1	-5	0	0.1	-0.1	-0.2	4.46
0.4	0	0.7	4	-34	0.9	-0.3	3.5	2.89
0.2	-2	-0.4	-22	76	-0.1	0.8	1.2	0.15
1	-1	-0.8	-1	27	-0.1	-0.1	2.6	2.82
0.4	-4	0.7	-8	-41	1.3	0.7	0.1	-0.84
-0.4	0	0.4	-5	49	0.1	1	-0.2	-0.48
	-3		7		0	1.1		2.01
0.1	-1	1.2	28	-97	-0.8	0.7	3.4	0.5
0.4	-1	1.1	2	-35	0.2	0.7	1.8	1.19
0.6	1	0.4	-9	46	-0.2	0.2	1.9	0.43
0.5	1	-0.2	-4	23	0.5	0.6	3.8	-0.36
0.5	-1	1.6	-11	112	-0.1	0.7	0.1	1.13
0	-2	0.1	12	-33	-1.4	1.7	4.5	1.37
-0.2	-1	-2.1	20	-66	-1.2	1.2	3.1	0.64
0.6	-1	-0.5	-7	29	0	0.8	2.7	0.89
0.3	1	0.1	-10	79	-0.2	0.2	2.9	-0.62
0	-2	1.9	-1	45	-0.4	1.4	-0.1	0.63
-0.2	0	1.5	31	-160	-0.6	1.7	2	0.31
0.8	0	0.3	6	-40	-0.2	0.6	-0.8	2.38
	-3	1	1		0.7	-0.3		0.85
0.3	-1	-0.7	18	-87	-0.8	0.9	2.1	1.15
0.5	-1	-0.4	-8	49	0.2	0.6	0.7	-0.33
0.5	0	1.4	-8	80	-0.1	-0.1	3.6	1.15
0.1	0	-0.7	1	21	0.2	0.7	6.6	-0.47
0.7	0	2.6	-12	2	0.2	0.5	2.3	-0.2
0.5	-2	0	0	72	-0.1	0.3	2	-0.24
			8		0.6	0.5		0.8
0.2	-2	0.8	-8	24	0.5	0.7	1.8	0.89
			-10		0.6	0.4		2.55
	0		20		-0.4	0.1		2.19
0.4	-1	1.3	-4	22	-0.2	0.6	2.1	-0.26
0.8	-1	0.1	23	-112	0.4	0.1	0.6	2.41

0.4	0	0.3	4	7	0.5	1.1	2.9	0.65
0.2	-1	-1.3	3	-39	-0.1	0.5	5.3	1.46
0.3	-3	-0.6	9	-34	0	0.5	1	0.19
0.4	-1	1.9	13	-83	-0.2	1.5	0.7	0.08
0.5	1	-0.5	-12	114	-0.4	0.8	0.4	-0.15
-0.1	1	0.2	6	37	-0.7	1.3	0.9	1.76
0	0	-0.2	6	-21	-0.8	0.6	3.7	0.42
0.8	1	0.3	7	-82	0.1	0.2	1.3	0.51
-0.5	-1	0	3	-18	-0.8	0.5	-2.3	-0.58
0.7	-1	-0.8	6	-49	1.3	-0.1	3.4	1.79
-0.1	0	1.3	12	-71	-0.3	1	2	-0.79
0.2	-1	-0.2	2	-12	-0.3	0.4	0.1	0.22
-0.3	-2	-0.6	11	-96	0.5	0.3	0.7	-0.12
0.6	-4	1.7	-3	15	1	0.5	1.3	0.79
			-14		0.5	-0.4		0.35
0.3	0	-1	-27	161	0.6	-0.1	0.2	1.2
0.5	0	-0.3	8	-10	-0.6	1.7	0.9	1.75
0.6	-3	0.1	-1	66	-0.1	0.1	0.8	3
1.5	-2	-0.1	18	-21	-0.8	-0.1	1.7	3.16
0.2	0	2.6	7	-104	0.1	0.1	-0.5	0.91
0.4	-2	0.8	8	-26	-1	0.4	1.4	2.16
0.1	-3	-0.7	12	-22	-1	1.3	0.9	0.45
0.4	-1	0.2	16	-56	-0.8	2.3	2.5	0.54
-0.4	-1	0	5	-45	0.1	0.6	0.9	1.26
0.5	0	1.3	8	-16	-0.4	1.7	0.5	0.36
0.8	-1	-0.6	10	-77	0.3	0.2	4.2	-0.04
			-6		-0.2	-0.3		0.98
1.1	-1	1.2	0	-15	0.6	-0.1	4.5	1.54
0.3	-1	0.8	8	5	-0.2	-0.1	-0.1	0.82
0.2	0	-0.5	2	24	-0.1	1	5.2	1.04
0.6	-2	-0.5	6	-5	0.5	-1.3	-0.1	1.17
1.1	-4	-0.6	13	-58	0.6	-0.7	3.3	0.89
0.8	-2	-1.2	-4	15	-0.3	-0.1	0.8	2.8
	-3		17		0.4	0.1		3.84
0.6	-1	0	-10	82	-1.2	0.3	0.6	0.79
-0.3	0	-0.1	23	-56	-0.4	1	-0.4	0.31
-0.6	-2	0.8	5	-21	-0.5	0.6	0.2	-1.2
0.6	-2	2.8	20	-158	0.5	-0.1	3.1	1.17
0.7	-1	0.1	-8	50	0.8	0	0.4	1.2
	-1		30		0	0.9		-1.2
0.2	1	2.4	8	-78	-1.2	1.9	3.7	1.27
0.6	1	-0.3	19	-89	-0.6	1.2	0.9	1.74
0.1	-2	0.4	18	-131	-1.2	1.4	0.7	1.04
0.1	-2	1.2	-4	3	0.6	0.6	2.4	0.92
0.2	0	-1.1	15	-46	-0.3	0.5	2.9	0.8
0.1	0	-0.2	4	40	-0.5	0.7	4.6	0.38
0.6	0	-2.2	28	-96	-0.6	0.5	-3.7	1.77

0.3	-2	-2.4	2	24	-0.6	1.5	6.7	1.61
0.3	-1	-0.3	-6	53	-0.5	1.1	1.2	1.22
0.1	1	0.7	24	-147	-1.1	1.7	5.5	1.72
0.6	-2	1	16	-76	0	0.1	0.8	1.92
0.6	-2	-0.9	-4	31	-0.2	0.9	2.7	1.77
0.8	-3	-0.3	1	-17	1.1	0.1	-0.2	3.18
1.1	-2	-0.2	14	-6	0	0.1	-1.6	2.86
1.2	-1	-0.1	14	-58	-0.2	0.7	-0.5	0.51
0.6	-1	2	1	-20	-1	1.4	1.7	1.12
-0.3	-1	2.6	-19	61	0	2	5	-0.2
-0.1	0	1.5	6	-16	-0.6	0.7	2.8	2.95
-0.1	-1	-0.1	13	10	-1.2	2	3.1	1.69
0.5	-1	0.3	-4	21	-0.1	0.1	2.2	0.31
0.1	1	-1.9	-13	122	-0.3	0.9	2.9	0.86
0.2	-1	-0.6	2	32	-0.3	0.8	1.7	0.2
0.2	-1	-0.5	2	-12	-1.1	1.2	6.2	1.25
0.2	0	-1.2	-11	80	0.7	0.1	3.7	-1.49
0.3	0	1.7	5	-14	0.1	0.4	3.2	-0.79
	-2		-3		0.2	-0.4		1.35
0.2	1	-1.4	-1	22	-0.5	0	2.3	0.44
-0.1	-1	-1.3	8	-33	-0.7	0.8	4	0.77
	2		-14		0.3	-0.2		0.89
					-0.1	-0.3		
-0.2	-1	-1.9	-22	105	0.3	0	-1.9	-0.39
0.2	-2	-0.1	-4	-11	1	0.2	0.9	0.17
-0.4	0	0.7	23	-136	-0.8	1.5	-0.3	0.67
0.7	0	2.7	-6	-4	0.4	1.2	2.7	-0.07
			7		-0.3	-0.3		0
-0.1	-2	0.4	-12	42	0.3	0.5	-0.9	0.33
	0		-16		-0.1	0.1		-0.67
0	-1	1.2	6		-0.3	-0.8		1.1
			14		-1.7	-0.8		2.65
-0.2	0	0.3	18	-28	-2.3	-0.1	-0.6	0.35
0.7	-2	0.2	-16	119	0.6	0.1	1.3	1.48
	0		-6		-0.7	0.1		0.42
			4		-1.3	0.2		1.01
0.4	-2	0.5	-20		0.4	-0.4		1.6
0.3	0	-0.4	8	-45	-0.4	0.7	3.7	2.11
	-2				-0.1	-0.5		
-0.6	-3	0.6	-23	61	-0.4	1.3	0.6	-2.23
0.7	0	-0.7	17	-104	-0.7	1.1	6.1	1.56
0.9	-1	0.5	-1	25	1.1	-0.4	2.5	0.38
-0.1	0	0.6	-14	40	0.5	1.2	1	-0.12
			-1		0.1	-0.9		0.54
			2		-0.9	-0.2		1.48
0.1	0	0.1	22	-124	-1.7	0.5	2.1	0.81
0.5	-1	0.2	9	-27	0.8	-0.9	4.2	0.53

-0.1	-2	1.8	22	-147	-0.7	0.6	3.1	1.67
0.4	0	-1.1	-1	25	-0.1	0	2.2	0.16
			1		-0.1	-0.4		1.02
		-0.3	-4		1	-1		0.39
0.3	-1	0.6	3	-23	0.9	-1.1	0	-0.86
0.5	-1	2.2	-8	43	0.5	-0.1	4.9	0.69
0.3	-2	0.6	27	-77	-1.2	0.8	-2.9	1.27
0.2	1	-0.8	7	-24	-1.1	0.2	3.1	1.37
0.1	2	1.9	-28		0.8			
	-3		1		0.8	-0.3		-0.75
0.2	-4	-0.9	-6	-4	0.4	-0.7	2.8	1.08
0.7	-1	0.5	-11	4	1.3	-0.9	0.4	0.81
			-30		1.2	-0.6		-0.26
			-1		0.1	-0.2		0.2
-0.2		-0.5	-15		1.1	-0.5	2.8	-0.97
-0.1	-1	0.1	14	-21	0.1	0.9	1	1.12
0.3	0	-1.2	-26		1.8			
-0.2	-1	-1.1	-42	184	1.3	-0.1	1.8	-2.12
-0.5	-1	0.5	20	-130	-0.3	0.7	2.6	0.94
0.6	0	2	25	-94	-1.5	1.1	3.2	0.97
					0.2			
	-2	-3.4	-40		1.7			
			-25		0.4	0.1		-1.27
			-7		-1	-0.5		-1.17
	-1		-34		1.9			
0.3	-1	-0.7	36	-155	-1.3	0.9	3.1	-0.03
-0.1	0	0	23	-112	0.3	1	3.7	-0.15
			7		0.4	-0.2		-0.3
-0.1	1	-0.8	2	45	0.6	-0.6	0.6	-0.09
0.4	-1	-1.4			1.7	-1.3	-0.1	
0.7	1	-1.7	12	-65	-1.2	0.7	4.9	1.47
-0.3	-2	-0.2	-13	49	0	0.3	3.8	-0.05
-0.3	0	1.8	-30		2			
0.1	0	0.7	-54		2	0.9	1.5	-1.34
0.6	-2	0.7	-19	118	0.8	0.5	3.6	-2.98
	2	0.6	-28					
0.7	1	1	-3		0.8	-0.8		0.18
					0.7	-0.2		
0.1	2	0.2	-17	108	0.4	0	1.8	-0.39
	1	-2.9	-27		1.4	-0.7		-0.97
	3		-25		0.8	0.1		0.31
	1	-1	-23		0.6	0.1		0.83
			1		0.6	-0.4		0.2
-0.1	0	-1.8	9	-5	0.4	-0.4	0.8	0.36
-0.5	1	-1.1	0	3	0.3	-0.5	0.5	-1.61
0.6	0	0.1	29	-104	-0.2	-0.3	0.4	2.11
	0	-1.6	2		0.5	-0.8	2.3	1.9

1	-3	-1	-1		0.8	-1	2.7	1.54
0.1	-1	-0.1	-17	47	0.6	0.6	3.5	-1.41
	-3	0.8					1.8	
0.5	-1	1.8	-14	45	1.2	0.2	-0.5	-2.57
0.4	-2	-0.5	-44		1			
	0	-1.1	-24		0.8			
0.3	-1	-1.5	-42	204	2	0.1	1.5	-2.24
0.4	-1	-1.7	-49	219	1.6	-0.1	0.4	-1.83
-0.3	-2	0.2	15	-117	-0.2	-0.1	1.5	0.32
	-3	1.5						
-0.2	0	0.4	-22		1.5		2.7	
-0.3	1	0.1	-40	211	1	-0.2	1.3	-2.7
-0.2	-2	2.1	-27	144	1	0.3	2.3	-1.89
-0.6	0	-1.3	2	-59	-0.4	0.6	1.8	0.69
	1	-0.9	-27		0.4			
			-15		0.6	-0.1		-0.67
	-1	-2.4	-32		1.2			
	-1	0.4	-36		1.8			
	1		-12		-0.5	-0.2		0.11
-0.7	-3	1.3	-25		1.2	0.2	1.7	
0.3	1	-0.9	-31	130	1.4	-0.1	1.1	-2.02
	0	1.7	-4		0.8	-0.8		0.1
0	-3	1.3	-16	61	0.3	0.6	0.2	-2.02
	-1	0.5	11		0.1	-0.5		1.56
0.2			-13		-0.5	-0.7		0.91
0.7	0	-0.4	-27		1.7		-1.7	
0.8	0	-0.7	12	-60	-1.6	0.5	6.4	2.33
0.1	-2	-0.3	16	-111	-0.7	-0.4	-2.5	1.28
0	0	0.2	-24		0.9	0.3	0.9	
-0.1	-1	1.2	-6	-5	0.3	1.7	4	-2.39
0.1	1	-2.3	-15		0.4			
0.1	-1	-0.9	20	-142	-1	0.4	3.5	-0.1
			-7		0.8	0		-0.34
0.2	-1	-1.1	-34		0.9		0.9	
			-2		0.5	0.4		1.95
-0.1	-2	0.8	-20	77	1.1	-0.1	5.4	-2.03
-0.1	0	-1.8	-30	143	1.1	0.1	-9.3	-2.28
0.6	-1	0.8	12	-67	0.6	0.7	3.1	-1.04
-0.4	0	1.6			1.5	0.1	0.6	
-0.1	-2	-0.3	-50		2.4		-0.2	
	1	-5	-1		0.6	-0.5		1.01
0.1	2	-0.9	-26		1.6		-3.6	
0.4	0	0.6	22	-111	-1.1	-0.3	0.4	-0.34
	1		3		-0.5	0		-1.11
			-12		0.6	-1		-0.31
			-14		0.7	-0.1		-0.8
	-1	-1.2	-15		0.9	0.1		0.19

	-2	0.1	-12		0.8	-0.8		1.4
	-1	0.6	-13		1.3	-1.4		-0.77
	-2	1.5	-17		1.2			
			5		-1.4	-0.2		2.42
	0	0.5						
	-1	1.5	-25		1.9	-1.5		0.45
0.3	1	-1.3	18	-99	-1.9	0.5	4.3	1.37
	-3	-0.1	-1		2.2	-0.2		0.65
	0	-2	-3					
			9		-0.1	-0.6		0.48
	2	-0.1	-13		0.5	-1.9		0.44
			7		0.1	-0.9		0.69
0.3	-3	1.2	-16	37	0.8	0.1	-2	-3.51
0.1	0	0.4	7	-12	0.6	0	0.7	0.08
-0.4	-2	-0.1	-20		1.4	-0.1	0.4	
-0.2	-1	1.1	-1	-39	0.2	0.9	-0.6	-2.94
			6		0.9	-0.3		-1
0.5	-2	1.6	-13	50	1.3	0	2.1	-1.71
-0.2	-3	1	13		0.7	-1.1		-2.47
0	0	-1.4			1.1	-0.7	1.1	
0.5	2	-0.6	6		-0.6	-1.1	1.7	1.69
0.6	-2	-1.1	-22		1.4	0.1	0	-0.58
	-3				0.2			
	0	0.9	-23		1.5	-0.7		-0.09
	-2	0.2	-26					
-0.1	-1	-0.4	1	-21	0	0	0.8	0.4
0	-1	-1	3	-21	-1.1	0.6	0.8	0.14
			-12		-0.3	-0.6		-0.23
			-6		-1.4	-0.9		-1.42
0.2	-3	3.1	-36	186	-1	0.2	1.9	-3.11
-0.1	1	0.7	-27	87	0.2	0	-1.2	-2.56
	-1		-8		0.1	-1.4		-0.08
0.7	-1	-0.5	3	-68	-1.5	1.4	4.4	1.83
0.8	-3	-2	15	-113	0.2	-0.8	0	1.01
0.2	-3	-0.6	-22	68	1.5	-0.1	1.3	-2.37
0.4	-1	-0.1	-8				0.3	0.04
0.6	-2	-1.4	2	40	0.6	-0.3	0.2	0.31
-0.3	-2	-0.8	-13	54	0.9	0	-1.1	-2.82
			-7		0.6	0.6		0.9
			1		0.6	-0.2		0.73
0.2	-1	-1.1	-26		0.8	-0.8	2.5	
0.4	-2	-1.5	3	-1	-0.1	-0.3	2.1	-0.89
	0		-4		0	-0.5		0.35
0.1	-1	-0.4	-41	170	1.5	-0.1	0.5	-2.49
0.2	2	0.5	9	-51	-0.2	-0.2	0.1	1.44
-1.1	0	-0.6	-6		1.1	-1.1	2.4	-0.89
-0.7	-3	-1.5	-51		2.2		-3.5	

0	0	-0.9	-13		0.8			
0	-2	-2.8			1.4		-0.7	
	1		-1		-0.8	-1		0.2
0.3	-1	-0.9	-19		1.4	0.6	-1.9	
-0.7	-1	-0.6						
	1	-2.8	-20		1.2	-0.5	-0.6	0.03
0	-3	0.6	-34	176	1.3	0	0.5	-3.24
0	-1	-0.5	-15	56	1.4	0	4.4	-2.15
0.6	-1	0.1	24	-159	-0.7	0.1	1.1	-0.51
-0.2	0	-0.8	-11		-0.4			
			-12		0.3	-0.5		0.6
-0.1	-2	1	-18	54	1.2	-0.3	0.7	-2.82
-0.4	0	-1.5	-22		1		-2	
-0.2	4	-1.1					2	
0.3	0	-0.8	-19	97	0.8	-0.4	-0.2	-2
	3		-7		-0.4			-1.2
			16		-0.3	-0.2		0.28
-0.1	0	-0.3	-42		1	0.1	0.6	-3.72
	-2	-1	-23					
					-1.3	-0.4		
0.8	-4	0.7	-9	-17	1.5	-0.1	0.8	-2.84
			14		0.6	0.1		0.31
0.1	-2	1.3	-7	1	0.1	-0.2	3	0.51
0	1	0.9			0.3		-1.6	
-0.3	0	0.7	13		-0.1	-0.3		0.68
			-19		-0.1	0.2		-1.99
0.4	0	-1.3	2	0	-0.3	-0.4	2.8	0.87
	0	-0.6	-4		-0.3	-0.2		1.3
	-1	0.6	-10					
0.1	-1	-0.2	-20	68	0.5	0	-1.4	-2.13
	2	0.3	-32					
			5		-0.8	0.1		-0.01
0	-2	-0.5	-56	211	1.7	0.2	1.4	-2.68
	0	0.4						
			3		-1.2			-1.42
0	1	-0.6	-4		-0.7	-1.1		1.58
-0.6	2	-1.2	-6		-1.2	0.2	0.3	-1.49
	-2				0.9			
-1	-1	-0.9	2	33	0.2	-0.3	-0.8	-0.45
	-3	1.2	-19					
0.5	1	-0.4	8	-14	-1.3	-0.1	0.2	0.76
0.1	-2	-1.3	-20	79	1.6	-0.1	0.4	-2.58
-0.8		1			-0.1	-0.5		
			-4		-0.8	-0.8		-0.14
			-4		0.4	-1		-2.92
0.1	0	0.6	19		-0.7	0.1	1.1	-0.09
-0.7	1	-0.4	-7	35	-0.5	-0.5	1.1	1.06

-0.5	1	-1.1	22	-134	-2.2	1.3	4.8	-2.34
0.1	-1	1.3	15	-116	-1.5	0.6	4.9	1.08
1.3	2	0.3					-5.4	
			-18		0.1	-0.4		0.13
	0	-0.7			0.9			
0.3	1	-1.2	5		-0.8	-1.1	0.1	0.03
-0.4	0	-1	-2		-0.7	-0.4	2.1	-0.18
	2	0.2	-11		-0.7	-0.2		-0.94
-1	2	-2.3	11	23	-0.5	-0.6	-0.9	-0.01
-1	2	-1.9	23		-0.7	-1.8	-0.2	0.38
-1.1	0	-1.7	-10	123	1.1	-0.1	-1.4	-1.23
	2		-2		-1.2			0.87
0.3	1	-1.4	4	42	-0.2	-0.6	-0.7	1.28
			9		-0.9	-0.9		0.78
-0.5		-0.6			-0.1			
0.2	1	-0.1	17	-45	-1.6	-1.3	1.9	0.53
			0		0	-1.3		0.66
	3		9		-2.2			0.06
-1.4	0	0	6	-13	-1.2	0.5	4.2	-0.12
-0.9			-15					0.33
-0.2	0	-0.9	11		-1.8	0.1		-0.1
	-2	-1	17		0.2	-1.4		0.01
0.3	-2	-0.4	-11		-0.8			-1.07
-1.3	3	-1.9	10		-2.3	0.6	-2.5	0.41

Udder	TM	Supplier GE Gen.	Sexed GB	UK Proven
0.92	1.43	WWS (WW G	Y	N
-1.22	-2.13	ALT G	Y	N
0.17	0.49	CBL (CBL) G	Y	N
0.74	0.32	GEN (GEN) G	Y	N
1.43	1.58	CBL (CBL) G	Y	Y
1.4	1.85	WWS (WW G	Y	N
-0.87	-1.41	UKD (UKD) G	Y	N
-0.16	0.13	GEN (GEN) G	Y	N
-0.13	-0.69	SMX (SMX) G	Y	Y
0.42	1.48	GEN (GEN) G	Y	Y
0.45	0.33	SYN (WFE) G	Y	Y
0.44	0.39	WWS (WW G	Y	N
0.77	1.03	GEN (GEN) G	Y	Y
0.78	0.47	GEN (GEN) G	N	Y
-0.33	0.46	GEN (GEN) G	Y	N
0.25	0.16	CBL (CBL) G	Y	N
-0.4	-1.52	(AIS) G		N
-0.41	1.01	GEN (GEN) G	N	Y
1.12	0.12	GEN (GEN) G	Y	Y
0.86	1.55	CBL (CBL) G	Y	Y
1.32	1.35	WWS (WW G	Y	N
1.26	0.64	GEN (GEN) G	Y	N
-0.74	-0.53	(AIS) G		Y
1.28	1.55	GEN (GEN) G	Y	N
0.61	0.03	ALT G	Y	N
1.63	1.48	ALT (AIS) G	Y	N
0.82	0.05	(AIS) G		N
0.58	-0.38	ALT (AIS/AI G	Y	Y
0.39	-0.13	GEN (GEN) G	Y	Y
1.78	1.5	WWS (WW G	Y	N
0.88	1.16	SYN (WFE) G	Y	N
0.95	1.27	CRV G	Y	N
1.39	1.54	UKD (UKD) G	Y	N
0.41	-1.75	UKD G	Y	Y
2.11	2.42	WWS (WW G	Y	Y
1.31	0.45	WWS (WW G	Y	N
1.6	1.91	WWS (WW G	Y	N
1.07	1	CBL (CBL) G	Y	N
1.61	1.67	WWS (WW G	Y	N
0.2	0.27	GEN (GEN) G	Y	N
-0.47	-1.7	SMX (SMX) G	Y	Y
3.08	2.48	WWS (WW G	Y	N
1.59	1.87	WWS (WW G	Y	N
1.24	0.29	UKD G	Y	N
-1.6	-2.46	(AIS) G		Y
-0.02	-0.78	GEN (GEN) G	Y	N

0.82	1.29 WWS (WW G	Y	Y
0.57	-0.77 GEN (GEN) G	N	Y
1.22	1.06 GEN (GEN) G	Y	Y
-0.18	0.19 GEN (GEN) G	N	N
1.39	0.78 GEN (GEN) G	Y	Y
1.22	1.29 WWS (WW G	Y	N
1.4	1.21 CRV G	Y	N
0.66	0.63 SMX (SMX) G	Y	N
0.76	-0.69 GEN (GEN) G	Y	Y
1.02	0.01 GEN (GEN) G	Y	N
1.79	2.56 WWS (WW G	Y	Y
0.06	0.99 GEN (GEN) G	Y	Y
-2.05	-1.38 GEN (GEN) G	Y	Y
0.25	-0.83 GEN (GEN) G	Y	Y
1.6	1.54 SYN (SYN) G	Y	N
0.94	2.09 CRV G	Y	N
0.56	0.49 SYN (SYN) G	Y	N
0.94	-0.33 WWS (WW G	Y	N
1	1.44 GEN (GEN) G	Y	Y
0.76	-0.07 GEN (GEN) G	Y	Y
1.15	1.27 SYN (AIS) G	N	Y
1.08	0.8 GEN (GEN) G	N	Y
1.62	0.7 SMX (SMX) G	N	Y
1	0.58 CBL (CBL) G	Y	N
0.53	0.82 SMX (SMX) G	Y	Y
0.84	0.93 SMX (SMX) G	Y	Y
2.03	2.92 WWS (WW G	Y	N
1.74	2.46 CBL (CBL) G	Y	N
0.78	1.43 SYN (WFE) G	Y	Y
-1.01	-3.41 GEN (GEN) G	Y	Y
0.21	0.51 (AIS) G		N
0.75	1.46 GEN (GEN) G	Y	Y
1.66	1.17 WWS (WW G	Y	N
0.7	0.39 SYN (SYN) G	Y	N
1.13	1.92 WWS (WW G	Y	Y
0.44	0.77 (AIS) G		Y
1.36	1.26 SMX (SMX) G	Y	N
1.09	0.2 GEN (GEN) G	Y	Y
0.64	0.8 SYN (WFE) G	Y	Y
1.41	1.74 WWS (WW G	Y	N
-0.9	-0.43 CRV G	Y	Y
0.26	0.03 GEN (GEN) G	Y	Y
1.66	1.69 SMX (SMX) G	Y	N
2.13	2.82 WWS (WW G	Y	Y
0.93	0.06 WWS (WW G	Y	N
0.54	0.64 CRV G	N	N
0.8	-0.47 SYN (WFE) G	Y	N

1.54	0.55 CRV	G	Y	N
0.3	-0.14 GEN (GEN)	G	Y	Y
0.11	1.03 SYN (WFE)	G	Y	N
2.64	2.02 SYN (AIS)	G	Y	Y
0.21	-0.14 GEN (GEN)	G	Y	N
2.11	1.61 SMX (SMX)	G	Y	N
2.32	2.62 BLS (BLS)	G	Y	N
0.94	1.31 SMX (SMX)	G	N	Y
0.72	0.58 GEN (GEN)	G	Y	Y
0.89	1.22 GEN (GEN)	G	Y	Y
1.3	0.51 CBL (CBL)	G	Y	N
0.95	0.09 ALT (AIS)	G	Y	Y
0.71	1.38 SYN (WFE)	G	Y	Y
1.87	1.42 SYN (SYN)	G	Y	N
1.73	1.67 WWS (WW)	G	Y	N
1.41	0.98 GEN (GEN)	G	Y	Y
1.47	-0.31 GEN (GEN)	G	N	Y
0.41	0.64 WWS (WW)	G	Y	N
-0.93	-0.95 GEN (GEN)	G	Y	Y
1.33	1.6 GEN (GEN)	G	Y	N
1.24	1.09 JSG	G	Y	N
2.06	0.78 SMX (SMX)	G	N	Y
0.89	1.91 CRV	G	Y	N
0.37	1.06 ALT (AIS/AI)	G	Y	Y
0.83	0.86 GEN (GEN)	G	N	N
1.59	2.94 UKD	G	Y	N
-0.49	-1.35 (AIS)	G		Y
1.31	0.14 GEN (GEN)	G	Y	Y
0.09	0.73 SMX (SMX)	G	Y	Y
-0.39	-0.17 GEN (GEN)	G	Y	Y
1.06	1.67 CBL (CBL)	G	Y	Y
1.12	0.15 ALT (AIS/AI)	G	Y	Y
1.31	1.38 WWS (WW)	G	Y	N
1.62	1.43 SMX (SMX)	G	Y	Y
1.65	0.42 (AIS)	G		N
1.03	1.03 WWS (WW)	G	Y	N
-0.3	1.11 GEN (GEN)	G	Y	Y
-0.23	0.98 CRV	G	Y	Y
1.33	0.96 SYN (WFE)	G	Y	N
1.69	2.81 WWS (WW)	G	Y	Y
0.6	-0.11 GEN (GEN)	G	Y	Y
0.45	0.89 GEN (GEN)	G	Y	Y
0.52	-1.33 SYN	G	Y	Y
2.03	1.24 WWS (WW)	G	Y	Y
-0.59	-0.98 (AIS)	G		Y
0	0.24 ALT	G	Y	Y
0.15	-0.71 GEN (GEN)	G	Y	N

1.18	2.68 CRV	G	Y	N
0.67	1.04 CRV	G	Y	N
1.48	0.62 GEN (GEN)	G	Y	Y
0.11	0.14 VIK (VIK)	G	Y	N
0.52	0.47 GEN (GEN)	G	Y	Y
1.76	1.04 CBL (CBL)	G	Y	Y
0.86	1.15 GEN (GEN)	G	N	N
1.64	1.36 WWS (WW	G	Y	Y
1.5	2.29 CRV	G	Y	Y
1.76	1.42 WWS (WW	G	Y	N
1.7	0.91 CBL (CBL)	G	Y	N
0.67	-0.93 GEN (GEN)	G	Y	Y
1.02	0.97 CBL (CBL)	G	Y	N
-0.32	-1.22 VIK (VIK)	G	Y	N
1.03	1.57 GEN (GEN)	G	Y	Y
1.75	0.83 GEN (GEN)	G	Y	Y
1.29	1.4 GEN (GEN)	G	N	Y
1.86	1.29 JSG	G	Y	N
0.52	0.69 WWS (WW	G	Y	Y
2.06	1.58 JSG	G	Y	N
0.64	0.6 DOR		Y	N
0.89	-0.25 WWS (WW	G	N	Y
1.76	2.75 WWS (WW	G	Y	Y
0.85	-1.11 GEN (GEN)	G	N	Y
0.52	1.43 CRV	G	N	N
1.46	0.89 SYN (WFE)	G	Y	N
0.9	0.98 (AIS)			N
0.9	-0.02 UKD (UKD)	G	N	Y
1.15	0.64 WWS (WW	G	Y	N
0.36	0.28 GEN (GEN)	G	Y	Y
-0.48	-1.66 UKD	G	Y	Y
0.49	1.25 SMX (SMX)	G	Y	Y
-0.2	0.08 UKD	G	Y	Y
2.27	0.91 SMX (SMX)	G	N	Y
2.02	1.83 BLS (BLS)	G	Y	N
0.27	0.37 GEN (GEN)	G	Y	Y
1.62	1.86 GEN (GEN)	G	Y	Y
0.03	0.75 CBL (CBL)	G	Y	Y
1.31	0.03 WWS (WW	G	Y	Y
0.01	-1.07 GEN (GEN)	G	Y	Y
-0.37	-1.91 WWS (WW	G	Y	Y
1.58	0.79 SMX (SMX)	G	N	Y
1.39	0.32 GEN (GEN)	G	Y	Y
0.36	0.31 SYN (SYN)	G	Y	N
0.34	1.31 CRV (CRV)	G	Y	Y
-0.59	0.46 WWS (WW	G	Y	Y
2.52	2.83 GEN (GEN)	G	Y	N

2.61	1.59	SMX (SMX) G	Y	N
1.15	0.93	JSG G	Y	N
0.48	-0.86	SMX (SMX) G	N	Y
1.28	0.48	CBL (CBL) G	Y	Y
-0.19	0.17	CRV G	N	Y
-0.66	1.4	CRV G	N	Y
-0.03	-1.13	GEN (GEN) G	Y	Y
1.22	1.84	SYN (WFE) G	Y	N
0.1	0.13	WWS (WW G	Y	Y
1.43	1.4	WWS (WW G	Y	N
-0.06	0.96	CRV G	Y	Y
2.8	2.54	SYN G	N	N
1.27	1.46	CBL (CBL) G	Y	Y
-0.16	1.2	CRV G	N	N
0.99	-0.32	CRV G	Y	N
2.67	3.23	WWS (WW G	Y	N
1.27	1.17	UKD (UKD) G	N	Y
0.07	0.18	GEN (GEN) G	Y	Y
0.97	0.4	SYN (WFE) G	Y	N
0.14	1.8	CRV G	Y	N
0.26	0.04	GEN (GEN) G	Y	Y
1.65	2.31	CRV (CRV) G	N	N
1.61	2.08	JSG G	Y	N
0.2	-1.11	VIK G	Y	N
1.04	0.52	SYN G	Y	N
1.01	-0.62	GEN (GEN) G	Y	Y
0.94	1.29	SYN (WFE) G	Y	N
1.57	1.26	CBL (CBL) G	Y	Y
-0.53	-0.14	CRV G	Y	Y
1.68	1.67	WWS (WW G	Y	N
0.98	0.17	WWS (WW G	Y	N
0.15	-0.91	DOR	Y	N
0.37	-0.17	GEN (GEN) G	Y	Y
-0.91	-0.17	CRV G	Y	N
2.33	2.7	SYN (AIS/S\ G	Y	N
1.07	1.33	GEN (GEN) G	Y	N
2	1.88	GEN (GEN) G	Y	Y
0.16	1.07	CRV G	N	N
0.7	-0.4	SYN G	N	N
1.28	2.58	GEN (GEN) G	Y	Y
0.77	1.42	CBL (CBL) G	Y	Y
1.44	1.99	WWS (WW G	Y	Y
1.13	0.67	WWS (WW G	Y	N
0.07	-0.05	CRV G	N	Y
1.12	1.08	JSG G	Y	N
0.93	-1.78	GEN (GEN) G	Y	Y
1	-0.11	CRV G	N	Y

-0.22	-0.49 VIK (VIK)	G	Y	N
1.82	1.24 SYN (WFE)	G	Y	N
0.75	-0.12 GEN (GEN)	G	Y	Y
0.41	0.69 SYN (WFE)	G	Y	N
1.01	-0.68 VIK	G	Y	N
-0.29	0.5 SYN (WFE)	G	Y	Y
0.5	-0.91 CBL (CBL)	G	Y	Y
1.27	-0.34 CRV	G	N	Y
-0.06	1.53 SYN (WFE)	G	Y	Y
1.07	1.87 CBL (CBL)	G	Y	Y
1.49	0.86 VIK	G	Y	Y
0.09	-1.49 GEN (GEN)	G	Y	Y
1.59	1.57 CBL (CBL)	G	Y	Y
1.63	0.95 SYN (WFE)	G	Y	Y
0.45	0.9 SYN (WFE)	G	Y	N
-1.2	1.14 CRV	G	Y	Y
0.12	0.93 CRV	G	N	N
0.19	-0.29 GEN (GEN)	G	Y	Y
1.69	2.39 SYN (WFE)	G	Y	Y
0.25	-0.37 (AIS)	G		Y
0.13	-0.36 GEN (GEN)	G	Y	Y
0.97	2.42 CRV		N	N
1.67	0.7 BLS (BLS)	G	Y	N
1.56	1.01 VIK (AIS/VII)	G	Y	N
1.73	1.07 GSU	G	N	N
1.8	0.68 CBL (CBL)	G	Y	Y
-0.67	0.16 GEN (GEN)	G	Y	Y
1.99	2.09 CBL (CBL)	G	Y	Y
2.16	-0.14 WWS (WW)	G	Y	N
0.36	-0.29 GEN (GEN)	G	Y	Y
1.65	-0.05 SYN (WFE)	G	Y	N
1.38	1.44 UKD	G	N	N
1.7	0.43 WWS (WW)	G	Y	Y
-1.21	0.01 CRV	G	Y	N
-1.65	-0.61 CGL		Y	Y
2.16	1.76 UKD (UKD)	G	N	N
0.1	-0.23 GEN (GEN)	G	Y	Y
1.13	1.73 GEN (GEN)	G	Y	Y
0.71	0.3 GEN (GEN)	G	Y	Y
0.98	-0.99 GEN (GEN)	G	Y	Y
1.71	0.71 WWS (WW)	G	Y	Y
2.69	1.87 UKD (UKD)		Y	N
0.47	0 GEN (GEN)	G	Y	Y
-0.74	0.91 CGL		Y	N
0.07	1.09 DOR/UKD		Y	N
0.62	-0.64 GEN (GEN)	G	Y	N
1.03	1.57 CRV	G	Y	N

0.35	0.24 SYN	G	N	N
2.15	2.39 GEN (GEN)	G	Y	Y
2.32	0.45 WWS (WW	G	Y	Y
0.7	-0.39 SYN	G	Y	Y
0.56	-0.04 SYN	G	N	Y
1.79	1.54 SMX (SMX)	G	N	Y
2.44	1.81 CBL (CBL)	G	Y	Y
0.94	0.41 SMX (SMX)	G	N	Y
0.27	-2.09 SYN (WFE)	G	Y	Y
0.29	0.67 CRV	G	Y	N
0.97	-0.06 WWS (WW	G	Y	Y
1.21	0.36 CBL (CBL)	G	Y	N
-1.5	-1.29 DOR	G	N	Y
-0.06	0.08 GEN (GEN)	G	Y	Y
-0.01	-0.88 DOR		Y	N
-0.49	-0.07 (AIS)	G		Y
1.93	1.43 CBL (CBL)	G	Y	Y
1.02	2.32 CRV	G	Y	N
-0.19	1.57 CRV	G	Y	Y
-0.37	0.05 (AIS)	G		Y
1	2.08 WWS (WW	G	Y	Y
1.66	0.04 CBL (CBL)	G	Y	N
0.99	-0.09 WWS (WW	G	Y	Y
0.63	1.23 GEN (GEN)	G	Y	Y
0.64	-0.09 CBL (CBL)	G	Y	Y
0.48	0.5 GEN (GEN)	G	N	Y
-0.09	0.06 DOR		Y	N
0.37	0.48 CRV	G	Y	Y
0	0.82 GEN (GEN)	G	Y	Y
1.58	0.68 CBL (CBL)	G	Y	N
1.33	1.05 SYN	G	N	Y
0.47	0.64 CRV	G	Y	Y
0.07	1.39 CRV	G	Y	Y
0.89	2.36 DOR		Y	N
-0.24	0.12 SYN (WFE)	G	Y	N
2.38	0.57 GEN (GEN)	G	Y	N
1.1	-0.43 GSU	G	N	N
-0.32	-0.33 CRV	G	N	Y
-0.21	-0.43 CRV	G	N	Y
1.43	-1.02 DOR (DOR)		Y	N
1.16	1.11 (AIS)	G		Y
2.31	1.85 CBL (CBL)	G	Y	Y
1.72	0.78 SMX (SMX)	G	Y	Y
2.01	1.63 CBL (CBL)	G	Y	Y
1.93	0.67 SMX (SMX)	G	N	Y
-0.05	0.21 SYN (WFE)	G	Y	N
1.91	0.99 SMX (SMX)	G	N	Y

1.41	1.56 GEN (GEN) G	Y	Y
2.01	1.4 SYN (WFE) G	Y	Y
1.82	1.18 CBL (CBL) G	Y	Y
0.35	0.83 CRV G	Y	N
1.94	2.27 SYN (WFE) G	Y	N
1.15	1.95 CRV G	Y	N
0.35	1.7 CRV G	N	Y
0.9	1.04 CRV G	Y	N
-0.36	-0.69 (AIS) G		Y
1.61	0.37 GEN (GEN) G	Y	Y
1.11	2.53 BLS (BLS) G	Y	N
1.68	1.9 GEN (GEN) G	Y	Y
0.59	-0.37 CRV G	Y	N
-0.34	-0.35 GEN (GEN) G	Y	Y
0.3	0.64 GSU G	N	N
2.52	2.72 JSG G	N	Y
1.07	-0.63 GEN (GEN) G	N	Y
0.74	-1.15 CRV G	N	N
-0.7	0.87 DOR	Y	N
1.51	1.45 SMX (SMX) G	Y	Y
2.96	2.29 SYN (WFE) G	Y	N
1.24	1.09 DOR	N	N
	CGL	N	N
-0.51	-0.65 GEN (GEN) G	Y	Y
-0.83	-0.74 DOR G	N	N
1.51	0.64 CBL (CBL) G	Y	Y
0.61	-0.76 CRV G	Y	Y
-1.46	-0.99 CGL	N	N
0.13	-0.95 DOR G	N	N
1.05	-0.26 DOR	N	N
1.08	0.78 DOR	N	N
-0.38	1.62 CGL	N	N
1.75	0.66 GEN (GEN) G	Y	Y
1.76	0.8 GEN (GEN) G	Y	Y
-0.44	-1.35 CGL	N	N
-0.05	0.84 CGL	N	N
1.23	1.12 DOR	N	N
1.81	0.38 SYN (WFE) G	N	Y
	CGL	N	N
0.32	-1.34 (AIS) G		Y
2.73	1.89 CBL (CBL) G	Y	Y
-0.95	-0.44 CRV G	N	N
0.06	-1.53 GEN (GEN) G	Y	Y
-0.66	-0.23 CGL	N	N
-1.58	-0.16 CGL	N	N
2.09	0.97 CBL (CBL) G	Y	Y
0.77	0 SYN (WFE) G	N	Y

1.97	1.44 CRV	G	Y	Y
1.41	0.28 SMX (SMX)	G	Y	Y
1.45	1.04 CGL		N	N
-2.23	-1.44 CGL		N	N
0.96	-0.71 GSU	G	N	N
0.4	-0.26 CRV	G	N	Y
1.12	1.31 SMX (SMX)	G	Y	Y
2.71	1.59 BLS (BLS)	G	Y	N
-4.5	CBL (LIC)		N	Y
0.59	-0.07 CGL (WFE)		N	N
-0.81	0.08 DOR	G	N	N
0.56	-0.05 CRV	G	N	Y
-1.61	-2.59 CGL		N	N
-1.85	-1.78 CGL		N	N
-2.95	-3.67 CGL		N	Y
1.84	1.67 GSU	G	N	N
-3.53	CBL (LIC)		N	Y
-3.44	-4.79 CBL (LIC)	G	Y	N
1.55	1.3 SYN (WFE)	G	Y	N
1.26	0.59 SMX (SMX)	G	N	Y
	CGL		N	N
-3.07	CBL (LIC)		Y	Y
-1.72	-2.12 CGL		N	N
0.96	-0.57 DOR		N	N
-3.57	CRV		Y	N
2.38	0.49 JSG	G	Y	N
1.6	-0.13 GEN (GEN)	G	Y	Y
0.79	-0.03 DOR		N	N
0.49	-0.06 SYN (WFE)	G	Y	Y
	CBL (LIC)		N	Y
0.5	1.3 SYN (WFE)	G	Y	Y
0.49	0.09 HEN/SCA	G	N	Y
-3.48	CBL (LIC)		N	Y
-5.38	-6.16 CBL (LIC)		N	Y
-4.43	-5.51 (AIS)	G		Y
-3.14	CBL (LIC)		N	N
0.36	-1.29 DOR (WFE)		N	Y
	CGL		Y	N
-1.45	-1.89 DOR	G	N	N
-2.27	-2.38 CGL		N	N
-3.12	-2.81 CGL		N	N
-2.36	-1.25 CGL		N	N
-1.74	-1.22 CGL		N	N
-0.62	-1.08 DOR	G	N	N
-0.13	-1.2 WFE (WFE)	G	N	Y
0.73	1.1 GSU	G	N	N
-0.82	-0.5 CRV		N	Y

-0.31	0.25 CGL (WFE)	N	Y
-3.45	-4.34 CBL (CBL) G	N	Y
	GEN (IRE)	N	Y
-4.15	-5.22 GEN (IRE) G	N	Y
-3.62	CBL (LIC)	N	Y
-4.89	CRV	Y	Y
-2.63	-4 CBL G	Y	N
-2.33	-3.85 CBL (LIC) G	Y	N
1.2	0.36 SMX (SMX) G	N	Y
	IRE (IRE)	N	Y
-4.17	CBL (LIC)	N	Y
-4.42	-5.31 CBL (LIC) G	Y	N
-3.94	-5.49 CBL (AIS/Cf G	Y	Y
1.88	0.7 SYN (WFE) G	Y	Y
-4.35	CBL (LIC)	Y	N
-1.03	-2.07 DOR	N	N
-3.53	CRV	N	N
-4.27	CBL	N	Y
-2.2	-2.12 CGL	N	N
-2.88	CBL (LIC)	N	Y
-2.06	-3.59 CBL G	N	N
0.15	-0.86 CGL	N	Y
-3.58	-4.75 CBL (AIS/Cf G	Y	Y
-1.67	-0.57 (WFE)		Y
-0.21	-0.18 (WFE)		N
-4.92	CBL (LIC)	N	Y
1.38	1.35 SYN (WFE) G	Y	Y
1.82	0.86 SMX (SMX) G	Y	N
-4.59	CBL (LIC)	N	Y
-5.45	-6.27 CBL (CBL) G	Y	Y
-1.93	CBL (LIC)	N	Y
2.04	0.89 SMX (SMX) G	N	Y
-1.21	-1.87 CGL	N	N
-4.94	CBL (LIC)	Y	Y
-0.41	0.75 CGL	N	N
-3.33	-3.87 CBL (AIS/Cf G	Y	Y
-4.66	-6.17 CBL (LIC) G	N	Y
0.38	-1.43 GSU G	N	N
	CBL (LIC)	N	Y
-4	CBL (LIC)	N	Y
-2.05	-1.95 CGL	N	N
-5.07	CBL (LIC)	N	Y
0.58	-0.25 GSU G	N	N
-0.54	-2.08 DOR	N	N
-1.62	-1.94 CGL	N	N
0.16	CRV (CRV)	Y	N
-2.39	-2.86 CGL	N	N

-1.91	-1.16 CGL	N	N
-3.22	-3.66 CGL	N	N
-3.52	CBL (LIC)	N	N
-0.42	1.14 CGL	N	N
	CBL (CBL/LIC)	N	Y
-4.96	-4.14 CGL	N	N
2.18	0.93 GEN (GEN) G	Y	Y
0.25	-0.44 CGL	N	N
-2.56	CRV	Y	N
0.48	0.87 CGL	N	N
-0.97	-0.85 CGL	N	N
-0.32	-0.15 CGL	N	N
-6.09	-7.57 CBL (CBL) G	N	Y
0.77	-0.46 GEN (GEN) G	Y	Y
-3.87	CBL (LIC)	N	Y
-1.45	-3.16 (AIS) G		Y
-1.26	-2.17 CGL	N	N
-2.41	-3.4 (AIS) G		Y
-1.81	-2.96 CGL (WFE)	N	Y
	CBL (LIC)	N	Y
0.45	1.04 WFE	N	Y
-2.13	-2.22 (WFE)		Y
	DOR	Y	N
-1.72	-2.4 CGL	N	N
-3.25	CBL (LIC)	Y	Y
1.12	-0.44 SMX (SMX) G	N	N
0.8	0.52 (WFE) G		Y
-2.01	-1.95 CGL	N	N
-2.98	-3.21 CGL	N	N
-4.97	-6.5 GEN (IRE) G	Y	Y
-2.72	-4.08 CBL G	Y	N
-1.15	-0.49 CGL	N	N
2.26	2.1 SMX (SMX) G	N	Y
0.23	-0.08 DOR G	N	N
-3.78	-4.95 CBL (LIC) G	Y	N
0.47	0.13 (WFE)		Y
-0.78	-0.55 DOR G	N	N
-2.95	-4.37 CBL G	N	N
-0.76	-1.35 CGL	N	N
-0.56	-0.08 CGL	N	N
-4.3	CBL (LIC)	N	Y
0.65	-0.77 GSU G	N	N
-0.56	-0.97 CGL	N	N
-4.51	-5.11 CBL G	Y	N
2.3	1.64 SMX (SMX) G	Y	N
-2.25	-2.8 CGL (WFE)	N	Y
-4.69	CBL (LIC)	Y	Y

-3.85	CBL (LIC)		N	Y
	CBL		N	Y
-1.43	-1.3 CGL		N	N
-4.89	CBL		N	Y
	CBL (LIC)		N	Y
-3.39	-3.37 CSA		N	Y
-2.27	-5.16 CBL (CBL)	G	N	Y
-3.04	-4.52 GEN (GEN)	G	Y	Y
1.88	0.14 GEN (GEN)	G	Y	Y
-2.66	CBL (LIC)		N	Y
-1.98	-1.64 CGL		N	N
-3.22	-5.27 CBL	G	N	N
-3.9	CBL (LIC)		N	Y
	CSA		N	Y
-1.82	-2.38 CBL	G	N	N
-3.63	-3.82 CGL		N	N
0.76	0.96 CGL		Y	N
-3.62	-5.89 CBL (LIC)		N	Y
-2.78	CRV		N	N
	CGL		N	N
-3.96	-5.55 (AIS)	G		Y
-2.74	-1.33 CGL		N	N
0.48	0.34 UKD	G	N	Y
	CBL (LIC)		N	Y
-0.52	-0.13 CGL		N	N
-1.69	-2.73 CGL		N	N
1.85	1.21 SYN (WFE)	G	Y	Y
-1.46	-0.84 CGL		N	N
-4.3	CBL (LIC)		N	N
-4.46	-4.6 CBL (LIC)	G	N	N
-4.34	CRV		N	N
-1.06	-0.74 CGL		N	N
-4.47	-5.63 CBL	G	Y	N
	CRV		N	N
-2.7	-3.73 CGL		N	N
-1.78	-0.78 CGL		N	Y
-0.16	-1.21 (WFE)			Y
	CGL		N	N
-0.42	-0.29 DOR	G	N	N
-2.36	CRV		N	N
0.09	0.48 DOR (DOR)	G	N	Y
-5.15	-5.51 CBL	G	Y	N
	CGL		N	N
-1.34	-0.87 CGL		N	N
-1.96	-3.33 CGL		N	N
-1.68	-2.37 UKD		N	Y
-0.72	-0.15 DOR	G	N	N

0.47	-2.1 GEN (GEN) G	Y	Y
2.42	1.78 SMX (SMX) G	Y	Y
	DOR	N	Y
-1	-1.7 CGL	N	N
	CRV	N	N
-1.54	-1.49 CSA	N	Y
-2.24	-1.91 CSA	N	Y
-1.51	-2.36 CSA	N	N
0.81	-0.12 DOR G	N	N
0.01	-0.81 (WFE)		Y
-1	-1.22 CGL (WFE) G	N	Y
0.44	0.15 CGL	Y	N
0.59	1.34 DOR (DOR) G	N	N
0.26	0.76 CGL	N	N
	GSU	N	N
-0.17	-0.87 DOR G	N	N
-0.57	0.38 CGL	Y	N
-0.02	-0.5 CGL	N	N
1.36	-0.1 SYN (WFE) G	Y	Y
-1.57	-1.71 INC (INC)	N	Y
-0.55	-0.84 DOR	N	N
1.21	0.4 CGL	N	N
-1.03	-2.46 CGL	Y	N
0.38	-0.52 FIR	N	Y