

Appendix A

C. difficile BI/NAP1/027 global collection used in Chapter 3

The isolates were contributed by Munir Pirmohamed, Fabio Miyajima and Paul Roberts (University of Liverpool, UK), Brendan Wren (London School of Hygiene and Tropical Medicine, UK), Sharon Peacock and Fiona Cooke (Addenbrooke's Hospital, Cambridge, UK), Martin Curran and Niddy Walpole (Cambridge, UK), Derek Brown, John Coia and Gill Douce (Scottish Microbiology Reference Lab), Derek Fairley (Belfast Health and Social Care Trust, NI), Dale Gerding (Hines VA Hospital, USA), Glen Songer (University of Arizona, USA), Jon Brazier (Anaerobic Reference Laboratory in Cardiff, Wales), Tom Riley (University of Western Australia), Tse Hsien Koh (Singapore General Hospital), Stephen Michell and Emma Butt (University of Exeter, UK), Peter Hawkey, Katie Hardy and Sue Manzoor (West Midlands Public Health Laboratory, Birmingham, UK), Tom Louie and Kristine Cannon (University of Calgary, Canada), Hee-Jung Kim (Yonsei University, Korea), Kathy Bamford and Stephanie d' Arc (Imperial College of London, UK), Mark Wilcox and Warren Fawley (University of Leeds, UK), Ed Kuijper and Marjolein Hensgens (University of Leiden, The Netherlands).

Isolate Name	Alternative Isolate Name	Year	Location	Source	Coverage
Aus001	10Aus001	2010	Melbourne, Australia	Human	128
Aus002	10Aus002	2010	Melbourne, Australia	Human	123
Aus003	10Aus003	2010	Melbourne, Australia	Human	114
Aus004	10Aus004	2010	Melbourne, Australia	Human	144
Aus005	10Aus005	2010	Melbourne, Australia	Human	141
Aus006	10Aus006	2010	Melbourne, Australia	Human	129
Bel023	09Bel023	2009	Belfast, UK	Human	104
Bel024	09Bel024	2009	Belfast, UK	Human	93
Bel025			Belfast, UK	Human	59
Bel026	09Bel026	2009	Belfast, UK	Human	82
Bel027	09Bel027	2009	Belfast, UK	Human	95
Bel028	09Bel028	2009	Belfast, UK	Human	146
Bel029	09Bel029	2009	Belfast, UK	Human	110
Bel030	09Bel030	2009	Belfast, UK	Human	63
Bel031	09Bel031	2009	Belfast, UK	Human	99
Bel032	09Bel032	2009	Belfast, UK	Human	91
Bel033	10Bel033	2010	Belfast, UK	Human	121
Bir001	07Bir001H1	2007	Birmingham, UK	Human	114
Bir002	10Bir002H1	2010	Birmingham, UK	Human	122
Bir003	08Bir003H2	2008	Birmingham, UK	Human	139
Bir004	10Bir004H2	2010	Birmingham, UK	Human	115
Bir005	08Bir005H3	2008	Birmingham, UK	Human	123
Bir006	08Bir006H3	2008	Birmingham, UK	Human	119
Bir007	07Bir007H4	2007	Birmingham, UK	Human	132
Bir008	10Bir008H4	2010	Birmingham, UK	Human	123
Bir009	07Bir009H5	2007	Birmingham, UK	Human	112
Bir010	09Bir010H5	2009	Birmingham, UK	Human	97
Bir011	08Bir011H6	2008	Birmingham, UK	Human	99
Bir012	10Bir012H6	2010	Birmingham, UK	Human	103

Bir013	07Bir013H7	2007	Birmingham, UK	Human	105
Bir014	08Bir014H7	2008	Birmingham, UK	Human	128
Bir015	07Bir015H8	2007	Birmingham, UK	Human	105
Bir016	10Bir016H8	2010	Birmingham, UK	Human	102
Bir017	07Bir017H9	2007	Birmingham, UK	Human	101
Bir018	07Bir018H9	2007	Birmingham, UK	Human	130
Bir019	07Bir019H10	2007	Birmingham, UK	Human	100
Bir020	10Bir020H10	2010	Birmingham, UK	Human	86
Bir021	07Bir021H11	2007	Birmingham, UK	Human	86
Bir022	10Bir022H11	2010	Birmingham, UK	Human	104
Bir023	07Bir023H12	2007	Birmingham, UK	Human	141
Bir024	09Bir024H12	2009	Birmingham, UK	Human	135
Bir025	07Bir025H13	2007	Birmingham, UK	Human	177
Bir026	10Bir026H13	2010	Birmingham, UK	Human	136
Bir027	07Bir027H13	2007	Birmingham, UK	Human	128
Bir028	09Bir028H14	2009	Birmingham, UK	Human	134
Bir029	07Bir029H15	2007	Birmingham, UK	Human	145
Bir030	08Bir030H15	2008	Birmingham, UK	Human	139
Bir031	08Bir031H16	2008	Birmingham, UK	Human	124
Bir032	08Bir032H16	2008	Birmingham, UK	Human	111
Bir033	08Bir033H16	2008	Birmingham, UK	Human	118
Bir034	08Bir034H16	2008	Birmingham, UK	Human	65
Bir035	08Bir035H16	2008	Birmingham, UK	Human	91
Bir036	08Bir036H16	2008	Birmingham, UK	Human	136
Bir037	08Bir037H16	2008	Birmingham, UK	Human	104
Bir038	08Bir038H16	2008	Birmingham, UK	Human	91
Bir039	08Bir039H16	2008	Birmingham, UK	Human	115
Wal001	02BirmW1	2002	Birmingham, UK	Human	125
Cam001	08Cam001	2008	Cambridge, UK	Human	107
Cam002	08Cam002	2008	Cambridge, UK	Human	97
Cam003	08Cam003	2008	Cambridge, UK	Human	135
Cam004	08Cam004	2008	Cambridge, UK	Human	77

Cam005	08Cam005	2008	Cambridge, UK	Human	97
Cam006	08Cam006	2008	Cambridge, UK	Human	103
Cam007	08Cam007	2008	Cambridge, UK	Human	75
Cam008	08Cam008	2008	Cambridge, UK	Human	102
Cam009	08Cam009	2008	Cambridge, UK	Human	74
Cam010	08Cam010	2008	Cambridge, UK	Human	92
Cam011	08Cam011	2008	Cambridge, UK	Human	90
Cam012	08Cam012	2008	Cambridge, UK	Human	77
Cam013	08Cam013	2008	Cambridge, UK	Human	149
Cam014	08Cam014	2008	Cambridge, UK	Human	110
Cam015	08Cam015	2008	Cambridge, UK	Human	84
Cam016	08Cam016	2008	Cambridge, UK	Human	162
Cam017	07Cam017	2007	Cambridge, UK	Human	85
Cam018a	07Cam018a	2007	Cambridge, UK	Human	109
Cam019	07Cam019	2007	Cambridge, UK	Human	84
Cam020	07Cam020	2007	Cambridge, UK	Human	140
Cam021	07Cam021	2007	Cambridge, UK	Human	100
Cam022	07Cam022	2007	Cambridge, UK	Human	162
Cam023	07Cam023	2007	Cambridge, UK	Human	102
Cam024	07Cam024	2007	Cambridge, UK	Human	107
Cam025	07Cam025	2007	Cambridge, UK	Human	118
Cam026	07Cam026	2007	Cambridge, UK	Human	90
Cam027	07Cam027	2007	Cambridge, UK	Human	44
Cam028	07Cam028	2007	Cambridge, UK	Human	172
Cam029	07Cam029	2007	Cambridge, UK	Human	84
Cam030	07Cam030	2007	Cambridge, UK	Human	92
Cam031	07Cam031	2007	Cambridge, UK	Human	340
Cam032	07Cam032	2007	Cambridge, UK	Human	99
Cam033	07Cam033	2007	Cambridge, UK	Human	77
Cam034	07Cam034	2007	Cambridge, UK	Human	42
Cam035	07Cam035	2007	Cambridge, UK	Human	54
Cam036	09Cam036	2009	Cambridge, UK	Human	161

Cam037	10Cam037	2010	Cambridge, UK	Human	109
Cam038	10Cam038	2010	Cambridge, UK	Human	66
Cam039	10Cam039	2010	Cambridge, UK	Human	86
Can001	01Can001	2001	Calgary, Canada	Human	118
Can002	01Can002	2001	Calgary, Canada	Human	97
Can003	01Can003	2001	Calgary, Canada	Human	95
Can004	01Can004	2001	Calgary, Canada	Human	127
Can005	02Can005	2002	Calgary, Canada	Human	97
Can006	02Can006	2002	Calgary, Canada	Human	88
Can007	02Can007	2002	Calgary, Canada	Human	186
Can008	03Can008	2003	Calgary, Canada	Human	104
Can009	03Can009	2003	Montreal, Canada	Human	102
Can010	03Can010	2003	Montreal, Canada	Human	107
Can011	03Can011	2003	Calgary, Canada	Human	101
Can012	03Can012	2003	Montreal, Canada	Human	105
M7404		2005	Montreal, Canada	Human	100
Exe001	07Exe001	2007	Exeter, UK	Human	141
Exe002	07Exe002	2007	Exeter, UK	Human	155
Exe003	08Exe003	2008	Exeter, UK	Human	147
Exe004	07Exe004	2007	Exeter, UK	Human	121
Exe005	07Exe005	2007	Exeter, UK	Human	113
Exe006	07Exe006	2007	Exeter, UK	Human	105
Exe009	07Exe009	2007	Exeter, UK	Human	153
Exe010	07Exe010	2007	Exeter, UK	Human	135
Exe011	07Exe011	2007	Exeter, UK	Human	117
Exe012	07Exe012	2007	Exeter, UK	Human	105
Exe013	07Exe013	2007	Exeter, UK	Human	107
Exe014	08Exe014	2008	Exeter, UK	Human	139
Exe015	07Exe015	2007	Exeter, UK	Human	134
Cd196		1985	Paris, France	Human	121
Gla001	07Gla001	2007	Glasgow, UK	Human	193
Gla002	08Gla002	2008	Glasgow, UK	Human	209

Gla003	08Gla003	2008	Glasgow, UK	Human	202
Gla004	08Gla004	2008	Glasgow, UK	Human	201
Gla005	08Gla005	2008	Glasgow, UK	Human	187
Gla006	08Gla006	2008	Glasgow, UK	Human	202
Gla007	08Gla007	2008	Glasgow, UK	Human	208
Gla008	08Gla008	2008	Glasgow, UK	Human	155
Gla009	08Gla009	2008	Glasgow, UK	Human	181
Gla010	08Gla010	2008	Glasgow, UK	Human	255
Gla012	09Gla012	2009	Glasgow, UK	Human	217
Gla013	09Gla013	2009	Glasgow, UK	Human	319
Gla014	09Gla014	2009	Glasgow, UK	Human	154
Gla015	09Gla015	2009	Glasgow, UK	Human	150
Gla016	09Gla016	2009	Glasgow, UK	Human	147
Gla017	09Gla017	2009	Glasgow, UK	Human	49
Gla018	09Gla018	2009	Glasgow, UK	Human	155
Gla019	09Gla019	2009	Glasgow, UK	Human	237
Gla020	09Gla020	2009	Glasgow, UK	Human	183
Gla021	09Gla021	2009	Glasgow, UK	Human	254
Gla022	09Gla022	2009	Glasgow, UK	Human	161
LSTM031	08GlasL31	2008	Glasgow, UK	Human	110
kor001	06kor001	2006	Seoul, Korea	Human	117
kor002	07kor002	2007	Seoul, Korea	Human	103
kor003	09kor003	2009	Seoul, Korea	Human	120
kor004	09kor004	2009	Seoul, Korea	Human	148
kor005	10kor005	2010	Seoul, Korea	Human	148
kor006	10kor006	2010	Seoul, Korea	Human	156
Liv005	09Liv005	2009	Liverpool, UK	Human	74
Liv008	09Liv008	2009	Liverpool, UK	Human	115
Liv009	09Liv009	2009	Liverpool, UK	Human	107
Liv020	09Liv020	2009	Liverpool, UK	Human	103
Liv021	09Liv021	2009	Liverpool, UK	Human	95
Liv051	08Liv051	2008	Liverpool, UK	Human	57

Liv052	08Liv052	2008	Liverpool, UK	Human	48
Liv053	08Liv053	2008	Liverpool, UK	Human	82
Liv054	08Liv054	2008	Liverpool, UK	Human	97
Liv055	08Liv055	2008	Liverpool, UK	Human	123
Liv056	08Liv056	2008	Liverpool, UK	Human	78
Liv057	08Liv057	2008	Liverpool, UK	Human	81
Liv058	08Liv058	2008	Liverpool, UK	Human	57
Liv059	08Liv059	2008	Liverpool, UK	Human	52
Liv060	08Liv060	2008	Liverpool, UK	Human	109
Liv061	08Liv061	2008	Liverpool, UK	Human	75
Liv062	08Liv062	2008	Liverpool, UK	Human	99
Liv063	09Liv063	2009	Liverpool, UK	Human	123
Liv064	09Liv064	2009	Liverpool, UK	Human	70
Liv065	09Liv065	2009	Liverpool, UK	Human	91
Liv066	09Liv066	2009	Liverpool, UK	Human	119
Liv067	09Liv067	2009	Liverpool, UK	Human	107
Liv068	09Liv068	2009	Liverpool, UK	Human	135
Liv069	09Liv069	2009	Liverpool, UK	Human	126
Liv070	09Liv070	2009	Liverpool, UK	Human	110
Liv071	09Liv071	2009	Liverpool, UK	Human	117
Liv072	09Liv072	2009	Liverpool, UK	Human	122
Liv073	09Liv073	2009	Liverpool, UK	Human	68
Liv074	09Liv074	2009	Liverpool, UK	Human	117
Liv075	09Liv075	2009	Liverpool, UK	Human	142
Liv076	09Liv076	2009	Liverpool, UK	Human	294
Liv077	09Liv077	2009	Liverpool, UK	Human	160
Liv078	09Liv078	2009	Liverpool, UK	Human	77
Liv079	09Liv079	2009	Liverpool, UK	Human	94
Liv081	08Liv081	2008	Liverpool, UK	Human	76
Liv082	08Liv082	2008	Liverpool, UK	Human	116
Liv083	08Liv083	2008	Liverpool, UK	Human	108
Liv084	08Liv084	2008	Liverpool, UK	Human	149

Liv085	08Liv085	2008	Liverpool, UK	Human	81
Liv086	09Liv086	2009	Liverpool, UK	Human	98
Liv087	09Liv087	2009	Liverpool, UK	Human	122
Liv088	09Liv088	2009	Liverpool, UK	Human	122
Liv089	09Liv089	2009	Liverpool, UK	Human	104
Liv090	09Liv090	2009	Liverpool, UK	Human	108
Liv091	09Liv091	2009	Liverpool, UK	Human	111
Liv092	09Liv092	2009	Liverpool, UK	Human	87
Liv093	09Liv093	2009	Liverpool, UK	Human	77
Liv094	09Liv094	2009	Liverpool, UK	Human	113
Liv095	09Liv095	2009	Liverpool, UK	Human	213
Liv096	09Liv096	2009	Liverpool, UK	Human	98
Liv097	09Liv097	2009	Liverpool, UK	Human	86
Liv098	09Liv098	2009	Liverpool, UK	Human	109
Liv1	08Liv1	2008	Liverpool, UK	Human	46
Liv100	10Liv100	2010	Liverpool, UK	Human	80
Liv101	10Liv101	2010	Liverpool, UK	Human	73
Liv102	10Liv102	2010	Liverpool, UK	Human	105
Liv103	10Liv103	2010	Liverpool, UK	Human	74
Liv104	10Liv104	2010	Liverpool, UK	Human	66
Liv10a	09Liv10a	2009	Liverpool, UK	Human	163
Liv11	08Liv11	2008	Liverpool, UK	Human	61
Liv12	09Liv12	2009	Liverpool, UK	Human	63
Liv127	10Liv127	2010	Liverpool, UK	Human	105
Liv13	09Liv13	2009	Liverpool, UK	Human	53
Liv131	10Liv131	2010	Liverpool, UK	Human	99
Liv132	10Liv132	2010	Liverpool, UK	Human	102
Liv136	10Liv136	2010	Liverpool, UK	Human	82
Liv14	09Liv14	2009	Liverpool, UK	Human	55
Liv145	09Liv145	2009	Liverpool, UK	Human	403
Liv146	09Liv146	2009	Liverpool, UK	Human	109
Liv147	09Liv147	2009	Liverpool, UK	Human	122

Liv148	09Liv148	2009	Liverpool, UK	Human	98
Liv149	09Liv149	2009	Liverpool, UK	Human	85
Liv15	09Liv15	2009	Liverpool, UK	Human	44
Liv16	09Liv16	2009	Liverpool, UK	Human	49
Liv17	09Liv17	2009	Liverpool, UK	Human	42
Liv170	09Liv170	2009	Liverpool, UK	Human	110
Liv171	09Liv171	2009	Liverpool, UK	Human	105
Liv172	09Liv172	2009	Liverpool, UK	Human	225
Liv173	09Liv173	2009	Liverpool, UK	Human	114
Liv174	09Liv174	2009	Liverpool, UK	Human	110
Liv175	09Liv175	2009	Liverpool, UK	Human	111
Liv176	09Liv176	2009	Liverpool, UK	Human	113
Liv177	09Liv177	2009	Liverpool, UK	Human	115
Liv178	09Liv178	2009	Liverpool, UK	Human	112
Liv179	09Liv179	2009	Liverpool, UK	Human	119
Liv18	08Liv18	2008	Liverpool, UK	Human	55
Liv180	09Liv180	2009	Liverpool, UK	Human	110
Liv181	09Liv181	2009	Liverpool, UK	Human	109
Liv182	09Liv182	2009	Liverpool, UK	Human	124
Liv183	09Liv183	2009	Liverpool, UK	Human	128
Liv184	09Liv184	2009	Liverpool, UK	Human	98
Liv185	09Liv185	2009	Liverpool, UK	Human	125
Liv186	09Liv186	2009	Liverpool, UK	Human	134
Liv187	09Liv187	2009	Liverpool, UK	Human	116
Liv188	07Liv188	2007	Liverpool, UK	Human	112
Liv189	07Liv189	2007	Liverpool, UK	Human	142
Liv19	09Liv19	2009	Liverpool, UK	Human	46
Liv190	07Liv190	2007	Liverpool, UK	Human	120
Liv2	09Liv2	2009	Liverpool, UK	Human	44
Liv20	09Liv20	2009	Liverpool, UK	Human	56
Liv21	09Liv21	2009	Liverpool, UK	Human	44
Liv3	09Liv3	2009	Liverpool, UK	Human	47

Liv38	09Liv38	2009	Liverpool, UK	Human	64
Liv4	09Liv4	2009	Liverpool, UK	Human	45
Liv40	09Liv40	2009	Liverpool, UK	Human	72
Liv41	09Liv41	2009	Liverpool, UK	Human	63
Liv48	09Liv48	2009	Liverpool, UK	Human	63
Liv49	09Liv49	2009	Liverpool, UK	Human	73
Liv5	09Liv5	2009	Liverpool, UK	Human	33
Liv6a	09Liv6a	2009	Liverpool, UK	Human	110
Liv7	09Liv7	2009	Liverpool, UK	Human	45
CD679		2009	London, UK	Human	110
ham001	02ham001	2002	London, UK	Human	121
ham002	07ham002	2007	London, UK	Human	133
ham003a	09ham003a	2009	London, UK	Human	127
Ham004	07Ham004	2007	London, UK	Human	129
Ham005	03Ham005	2003	London, UK	Human	128
ham006	07ham006	2007	London, UK	Human	83
ham007	03ham007	2003	London, UK	Human	182
ham009	09ham009	2009	London, UK	Human	123
ham010a	08ham010a	2008	London, UK	Human	97
ham011	04ham011	2004	London, UK	Human	106
lon001			London, UK	Human	92
lon004			London, UK	Human	86
lon005			London, UK	Human	95
lon006			London, UK	Human	126
LSTM35	NottR20291L35		Nottingham, UK	Human	97
LSTM36	MaidL36	2006	Maidstone, UK	Human	80
Wal002	98PresW2	1998	Preston, UK	Human	108
LSTM025	07DundL25	2007	Dundee, UK	Human	121
LSTM026	08Dumfl26	2008	Dumfries, UK	Human	163
LSTM027	08Ayrsl27	2008	Ayrshire, UK	Human	131
LSTM028	08EdinL28	2008	Edinburgh, UK	Human	158
LSTM029	08DumbL29	2008	Dumbarton, UK	Human	166

LSTM030	08InveL30	2008	Inverness, UK	Human	106
Sin001	08Sin001	2008	Singapore	Human	86
Sin002	09Sin002	2009	Singapore	Human	84
Sin003	09Sin003	2009	Singapore	Human	109
R20291a		2005	Stoke Mandeville, UK	Human	128
2004013	04MEa013	2004	Maine, USA	Human	37
2004102	04NJc102	2004	New Jersey, USA	Human	50
2004118	04MEb118	2004	Maine, USA	Human	30
2004163	04PA163	2004	Pennsylvania, USA	Human	32
2006439	06AZ439	2006	Arizona, USA	Food	38
2007140	07MD140	2007	Maryland, USA	Human	29
2007218		2007	Arizona, USA	Food	29
2007221a	07AZb221aF	2007	Arizona, USA	Food	128
2007223a	07AZc223aF	2007	Arizona, USA	Food	129
2007825		2007	USA	Human	27
2007833	07AZa833	2007	Arizona, USA	Human	9
2007837		2007	USA	Human	53
2007850		2007	USA	Human	57
2007855		2007	USA	Bovine	40
BI-1_L21	88MinnBI-1a	1988	Minneapolis, MN, USA	Human	143
BI-10a	01PitBBI-10a	2001	Pittsburgh, PA, USA	Human	119
BI-11	01PitABI-11	2001	Pittsburgh, PA, USA	Human	51
BI-12_L23	04CampBI-12a	2004	Camp Hill, PA, USA	Human	138
BI-13	04NJbBI-13	2004	New Jersey, USA	Human	62
BI-15	04NJaBI-15	2004	New Jersey, USA	Human	90
BI-17_L24	04MontBI-17a	2004	Montreal, Canada	Human	124
BI-2a	91TuscBI-2a	1991	Tuscon, AZ, USA	Human	100
BI-3a	90MinnBI-3a	1990	Minneapolis, MN, USA	Human	132
BI-4	93MinnBI-4	1993	Minneapolis, MN, USA	Human	105
BI-5	95AlbaBI-5	1995	Albany, NY, USA	Human	74
BI-6	03PorABI-6	2003	Portland, OR, USA	Human	38
BI-6p	04AtlaBI-6p	2004	Atlanta, GA, USA	Human	60

BI-7_L22	03PorBBI-7a	2003	Portland, OR, USA	Human	88
BI-8	04PortBI-8	2004	Portland, ME, USA	Human	78
BI-8_L32	08Ayr195	2008	Ayrshire, UK	Human	101
LSTM001	04MEL01	2004	Maine, USA	Human	153
LSTM002	05PAL02	2005	Pennsylvania, USA	Human	135
LSTM003	06AZL03E	2006	Arizona, USA	Equine	133
LSTM004	07CTNL04	2007	FOODNET-CT, USA	Human	132
LSTM005	07AZL05F	2007	Arizona, USA	Food	163
LSTM006	07AZL06F	2007	Arizona, USA	Food	120
LSTM007	07TNNL07	2007	FOODNET-TN, USA	Human	119
LSTM009	07AZL09F	2007	Arizona, USA	Food	137
LSTM011	07AZL11F	2007	Arizona, USA	Food	164
LSTM012	07AZL12F	2007	Arizona, USA	Food	131
LSTM013	7828L13	2007	USA	Human	168
LSTM014	7832L14	2007	USA	Human	133
LSTM016	7839L16	2007	USA	Human	140
LSTM019	7850L19H	2007	USA	Household	123
LSTM020	7851L20H	2007	USA	Household	153
LSTM33				Human	105
LSTM34				Human	107
LSTM37				Human	90
LSTM38				Human	95

Appendix B

C. difficile BI/NAP1/027 local hospital collection used in Chapter 4

CDU – Clinical Decision Unit (A&E)

HEC – Heart Emergency Centre (A&E)

AMAU – Acute Medical Admission Unit (A&E)

POCU – Post-Operative Critical Unit

Aintree – Aintree University Hospital

BGH – Broad Green Hospital

Wirral – Wirral University Teaching Hospital

Name	Date (dd/mm/yyyy)	Ward	StudyNo	Alternative Name
Liv1	05/12/2008	CDU	CDP080028	
Liv2	02/03/2009	3X	CDP080028	
Liv3	12/01/2009	5X	CDP080034	
Liv4	09/07/2009	GP	CDP080034	
Liv5	12/03/2009	6A	CDP080046	
Liv6	31/05/2009	9B	CDP080046	
Liv7	31/03/2009	11BGH	CDP080047	
Liv8	10/07/2009	HEC	CDP080047	
Liv9	03/01/2009	AMAU	CDP080033	
Liv10	19/02/2009	3X	CDP080033	
Liv11	14/08/2008	7Y	CDN080506	
Liv12	13/02/2009	3X	CDN080506	
Liv13	29/03/2009	7Y	CDN080506	
Liv14	23/02/2009	POCU	CDP080049	
Liv15	09/07/2009	2B	CDP080049	
Liv16	27/02/2009	GP	CDP080048	
Liv17	08/04/2009	6A	CDP080048	
Liv18	09/12/2008	5A	CDP080029	
Liv19	05/05/2009	AMAU	CDP080029	
Liv20	25/04/2009	3X	CDP080051	
Liv21	01/06/2009	7Y	CDP080051	
Liv38	07/10/2009	AMAU	CDN080567	
Liv40	19/11/2009	5A	CDA081055	
Liv41	29/12/2009	3A	CDA081055	
Liv48	16/10/2009	8Y	CDN080568	
Liv49	16/11/2009	3X	CDN080568	

Liv051	22/07/2008	2A	CDP080004
Liv052	18/11/2008	5X	CDP080005
Liv053	23/08/2008	6A	CDP080010
Liv054	06/11/2008	7Y	CDP080018
Liv055	19/11/2008	3X	CDP080020
Liv056	19/11/2008	5A	CDP080021
Liv057	23/11/2008	3X	CDP080022
Liv058	22/11/2008	6B	CDP080024
Liv059	21/11/2008	AMAU	CDP080025
Liv060	28/11/2008	7B	CDP080026
Liv061	04/12/2008	9X	CDP080027
Liv062	31/12/2008	5Y	CDP080032
Liv063	21/01/2009	5A	CDP080036
Liv064	01/02/2009	5B	CDP080039
Liv065	03/02/2009	5B	CDP080040
Liv066	03/02/2009	5B	CDP080041
Liv067	26/02/2009	8B	CDP080043
Liv068	03/03/2009	AMAU	CDP080044
Liv069	20/04/2009	2B	CDP080052
Liv070	30/04/2009	8X	CDP080053
Liv071	08/05/2009	3X	CDP080054
Liv072	12/05/2009	8X	CDP080056
Liv073	21/07/2009	5BGH	CDP080062
Liv074	25/08/2009	AMAU	CDP080065
Liv075	25/08/2009	AMAU	CDP080068
Liv076	21/09/2009	8X	CDP080070
Liv077	28/10/2009	2B	CDP080073
Liv078	17/11/2009	3Y	CDP080075
Liv079	03/12/2009	3A	CDP080077
Liv081	28/07/2008	2B	CDN080505
Liv082	13/08/2008	3C	CDN080508
Liv083	03/10/2008	6A	CDN080515
Liv084	04/11/2008	3B	CDN080518
Liv085	10/12/2008	8Y/9X	CDN080521
Liv086	08/01/2009	5B	CDN080523
Liv087	28/01/2009	5Y	CDN080527
Liv088	01/03/2009	5B	CDN080531
Liv089	06/04/2009	5A	CDN080533
Liv090	27/04/2009	7Y	CDN080538
Liv091	30/04/2009	8X	CDN080539
Liv092	22/05/2009	5A	CDN080542
Liv093	08/06/2009	8X	CDN080546
Liv094	21/07/2009	2X	CDN080550
Liv095	07/08/2009	9X	CDN080552
Liv096	10/08/2009	9B	CDN080553
Liv097	10/10/2009	5X	CDN080566
Liv098	28/10/2009	6A	CDN080569
Liv100	10/02/2010	11BGH	CDP080079
Liv101	25/02/2010	11BGH	CDP080081
Liv102	28/03/2010	AMAU	CDP080082
Liv103	26/02/2010	11BGH	CDN080578
Liv104	15/03/2010	11BGH	CDN080580
Liv127	20/05/2010	3X	CDN080580
Liv131	16/05/2010	Aintree	CDP08UHA0009
Liv132	21/02/2010	Aintree	CDN08UHA0501

Liv136	16/05/2010	Wirral	CDN08WTH0507
Liv145	08/03/2009	3X	CDP080034
Liv146	29/05/2009	GP	CDP080034
Liv147	15/04/2009	5A	CDP080049
Liv148	11/09/2009	GP	CDP080048
Liv149	23/04/2009	7B	CDP080051
Liv170	26/07/2009	2A	2A1
Liv171	01/04/2009	2B	2B1a
Liv172	26/05/2009	2A	2B1b
Liv173	25/04/2009	2B	2B2a
Liv174	29/06/2009	2A	2B2b
Liv175	04/05/2009	2Y	2Y1
Liv176	13/07/2009	2Y	2Y2
Liv177	25/07/2009	2Y	2Y3
Liv178	21/02/2009	5A	5A1
Liv179	08/02/2009	5B	5B1
Liv180	03/08/2009	5Y	5Y1
Liv181	11/09/2009	5Y	5Y2
Liv182	14/02/2009	7Y	7Y1
Liv183	15/02/2009	7Y	7Y2
Liv184	22/04/2009	7Y	7Y3
Liv185	04/05/2009	7Y	7Y4
Liv186	13/05/2009	7Y	7Y5
Liv187	11/05/2009	ACRU (8X)	8X1
Liv188	15/05/2007	5A	2746
Liv189	02/07/2007	2B	3584
Liv190	03/07/2007	7 BGH	3615
Liv150	12/03/2009		Liv5a
Liv151	12/03/2009		Liv5b
Liv152	12/03/2009		Liv5c
Liv153	12/03/2009		Liv5d
Liv154	12/03/2009		Liv5e
Liv155	14/08/2008		Liv11a
Liv156	14/08/2008		Liv11b
Liv157	14/08/2008		Liv11c
Liv158	14/08/2008		Liv11d
Liv159	14/08/2008		Liv11e
Liv160	08/04/2009		Liv17a
Liv161	08/04/2009		Liv17b
Liv162	08/04/2009		Liv17c
Liv163	08/04/2009		Liv17d
Liv164	08/04/2009		Liv17e
Liv165	09/12/2008		Liv18a
Liv166	09/12/2008		Liv18b
Liv167	09/12/2008		Liv18c
Liv168	09/12/2008		Liv18d
Liv169	09/12/2008		Liv18e