

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	03/06/2017 22:33	0.0	0.0	20.6	79.4	0.0	20.6	1013	Closed
AUTO-LOG	03/06/2017 23:33	0.0	0.0	20.6	79.4	0.0	20.6	1013	Closed
AUTO-LOG	04/06/2017 00:33	0.0	0.0	20.7	79.3	0.0	20.7	1013	Closed
AUTO-LOG	04/06/2017 01:33	0.0	0.0	20.7	79.3	0.0	20.7	1013	Closed
AUTO-LOG	04/06/2017 02:33	0.0	0.0	20.7	79.3	0.0	20.7	1013	Closed
AUTO-LOG	04/06/2017 03:33	0.0	0.0	20.8	79.2	0.0	20.7	1013	Closed
AUTO-LOG	04/06/2017 04:33	0.0	0.1	20.8	79.1	0.0	20.8	1013	Closed
AUTO-LOG	04/06/2017 05:33	0.0	0.1	20.8	79.1	0.0	20.8	1013	Closed
AUTO-LOG	04/06/2017 06:33	0.0	0.1	20.8	79.1	0.0	20.8	1013	Closed
AUTO-LOG	04/06/2017 07:33	0.0	0.1	20.7	79.2	0.0	20.7	1014	Closed
AUTO-LOG	04/06/2017 08:33	0.0	0.0	20.5	79.5	0.0	20.5	1015	Closed
AUTO-LOG	04/06/2017 09:33	0.0	0.0	20.4	79.6	0.0	20.4	1015	Closed
AUTO-LOG	04/06/2017 10:33	0.0	0.0	20.4	79.6	0.0	20.3	1015	Closed
AUTO-LOG	04/06/2017 11:33	0.0	0.0	20.4	79.6	0.0	20.3	1015	Closed
AUTO-LOG	04/06/2017 12:33	0.0	0.0	20.4	79.6	0.0	20.4	1015	Closed
AUTO-LOG	04/06/2017 13:33	0.0	0.0	20.5	79.5	0.0	20.4	1015	Closed
AUTO-LOG	04/06/2017 14:33	0.0	0.0	20.5	79.5	0.0	20.5	1015	Closed
AUTO-LOG	04/06/2017 15:33	0.0	0.0	20.5	79.5	0.0	20.5	1015	Closed
AUTO-LOG	04/06/2017 16:33	0.0	0.0	20.5	79.5	0.0	20.5	1014	Closed
AUTO-LOG	04/06/2017 17:33	0.0	0.0	20.5	79.5	0.0	20.5	1014	Closed
AUTO-LOG	04/06/2017 18:33	0.0	0.0	20.5	79.5	0.0	20.5	1013	Closed
AUTO-LOG	04/06/2017 19:33	0.0	0.0	20.6	79.4	0.0	20.5	1013	Closed
AUTO-LOG	04/06/2017 20:33	0.0	0.0	20.6	79.4	0.0	20.6	1013	Closed
AUTO-LOG	04/06/2017 21:33	0.0	0.0	20.6	79.4	0.0	20.6	1013	Closed
AUTO-LOG	04/06/2017 22:33	0.0	0.0	20.6	79.4	0.0	20.6	1012	Closed
AUTO-LOG	04/06/2017 23:33	0.0	0.0	20.6	79.4	0.0	20.6	1012	Closed
AUTO-LOG	05/06/2017 00:33	0.0	0.0	20.6	79.4	0.0	20.6	1012	Closed
AUTO-LOG	05/06/2017 01:33	0.0	0.0	20.6	79.4	0.0	20.6	1011	Closed
AUTO-LOG	05/06/2017 02:33	0.0	0.0	20.7	79.3	0.0	20.7	1011	Closed
AUTO-LOG	05/06/2017 03:33	0.0	0.0	20.7	79.3	0.0	20.7	1010	Closed
AUTO-LOG	05/06/2017 04:33	0.0	0.0	20.7	79.3	0.0	20.7	1010	Closed
AUTO-LOG	05/06/2017 05:33	0.0	0.0	20.7	79.3	0.0	20.7	1010	Closed
AUTO-LOG	05/06/2017 06:33	0.0	0.0	20.7	79.3	0.0	20.7	1009	Closed
AUTO-LOG	05/06/2017 07:33	0.0	0.0	20.6	79.4	0.0	20.6	1009	Closed
AUTO-LOG	05/06/2017 08:33	0.0	0.0	20.6	79.4	0.0	20.6	1009	Closed
AUTO-LOG	05/06/2017 09:33	0.0	0.0	20.5	79.5	0.0	20.5	1009	Closed
AUTO-LOG	05/06/2017 10:33	0.0	0.0	20.5	79.5	0.0	20.4	1008	Closed
AUTO-LOG	05/06/2017 11:33	0.0	0.0	20.5	79.5	0.0	20.5	1008	Closed
AUTO-LOG	05/06/2017 12:33	0.0	0.0	20.5	79.5	0.0	20.5	1007	Closed
AUTO-LOG	05/06/2017 13:33	0.0	0.0	20.5	79.5	0.0	20.5	1006	Closed
AUTO-LOG	05/06/2017 14:33	0.0	0.0	20.5	79.5	0.0	20.5	1005	Closed
AUTO-LOG	05/06/2017 15:33	0.0	0.0	20.5	79.5	0.0	20.5	1004	Closed
AUTO-LOG	05/06/2017 16:33	0.0	0.0	20.6	79.4	0.0	20.6	1003	Closed
AUTO-LOG	05/06/2017 17:33	0.0	0.0	20.6	79.4	0.0	20.6	1001	Closed
AUTO-LOG	05/06/2017 18:33	0.0	0.0	20.7	79.3	0.0	20.7	999	Closed
AUTO-LOG	05/06/2017 19:33	0.0	0.0	20.7	79.3	0.0	20.7	998	Closed
AUTO-LOG	05/06/2017 20:33	0.0	0.0	20.7	79.3	0.0	20.7	997	Closed
AUTO-LOG	05/06/2017 21:33	0.0	0.0	20.7	79.3	0.0	20.7	996	Closed
AUTO-LOG	05/06/2017 22:33	0.0	0.0	20.7	79.3	0.0	20.7	994	Closed
AUTO-LOG	05/06/2017 23:33	0.0	0.0	20.7	79.3	0.0	20.7	992	Closed
AUTO-LOG	06/06/2017 00:33	0.0	0.0	20.7	79.3	0.0	20.7	990	Closed
AUTO-LOG	06/06/2017 01:33	0.0	0.0	20.6	79.4	0.0	20.6	988	Closed
AUTO-LOG	06/06/2017 02:33	0.0	0.0	20.7	79.3	0.0	20.7	988	Closed
AUTO-LOG	06/06/2017 03:33	0.0	0.0	20.7	79.3	0.0	20.7	986	Closed
AUTO-LOG	06/06/2017 04:33	0.0	0.0	20.7	79.3	0.0	20.7	986	Closed
AUTO-LOG	06/06/2017 05:33	0.0	0.1	20.7	79.2	0.0	20.7	987	Closed
AUTO-LOG	06/06/2017 06:33	0.0	0.1	20.7	79.2	0.0	20.7	988	Closed
AUTO-LOG	06/06/2017 07:33	0.0	0.1	20.7	79.2	0.0	20.7	989	Closed
AUTO-LOG	06/06/2017 08:33	0.0	0.1	20.7	79.2	0.0	20.7	991	Closed
AUTO-LOG	06/06/2017 09:33	0.0	0.1	20.7	79.2	0.0	20.7	992	Closed
AUTO-LOG	06/06/2017 10:34	0.0	0.1	20.6	79.3	0.0	20.6	994	Closed
AUTO-LOG	06/06/2017 11:34	0.0	0.0	20.5	79.5	0.0	20.5	995	Closed
AUTO-LOG	06/06/2017 12:34	0.0	0.0	20.5	79.5	0.0	20.5	996	Closed
AUTO-LOG	06/06/2017 13:34	0.0	0.0	20.4	79.6	0.0	20.4	996	Closed
AUTO-LOG	06/06/2017 14:34	0.0	0.0	20.4	79.6	0.0	20.4	997	Closed
AUTO-LOG	06/06/2017 15:34	0.0	0.0	20.4	79.6	0.0	20.4	998	Closed
AUTO-LOG	06/06/2017 16:34	0.0	0.0	20.4	79.6	0.0	20.4	999	Closed
AUTO-LOG	06/06/2017 17:34	0.0	0.0	20.4	79.6	0.0	20.4	999	Closed
AUTO-LOG	06/06/2017 18:34	0.0	0.0	20.5	79.5	0.0	20.5	1000	Closed
AUTO-LOG	06/06/2017 19:34	0.0	0.0	20.5	79.5	0.0	20.5	1001	Closed
AUTO-LOG	06/06/2017 20:34	0.0	0.0	20.5	79.5	0.0	20.5	1001	Closed
AUTO-LOG	06/06/2017 21:34	0.0	0.0	20.6	79.4	0.0	20.6	1002	Closed
AUTO-LOG	06/06/2017 22:34	0.0	0.0	20.6	79.4	0.0	20.6	1003	Closed
AUTO-LOG	06/06/2017 23:34	0.0	0.0	20.6	79.4	0.0	20.6	1003	Closed
AUTO-LOG	07/06/2017 00:34	0.0	0.0	20.6	79.4	0.0	20.6	1004	Closed
AUTO-LOG	07/06/2017 01:34	0.0	0.0	20.6	79.4	0.0	20.6	1004	Closed

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	07/06/2017 02:34	0.0	0.0	20.6	79.4	0.0	20.6	1004	Closed
AUTO-LOG	07/06/2017 03:34	0.0	0.0	20.6	79.4	0.0	20.6	1005	Closed
AUTO-LOG	07/06/2017 04:34	0.0	0.0	20.6	79.4	0.0	20.6	1005	Closed
AUTO-LOG	07/06/2017 05:34	0.0	0.0	20.6	79.4	0.0	20.6	1006	Closed
AUTO-LOG	07/06/2017 06:34	0.0	0.1	20.6	79.3	0.0	20.6	1007	Closed
AUTO-LOG	07/06/2017 07:34	0.0	0.0	20.6	79.4	0.0	20.6	1008	Closed
AUTO-LOG	07/06/2017 07:45	0.0	0.0	20.5	79.5	0.0	20.5	1008	Closed
AUTO-LOG	07/06/2017 08:06	0.0	0.1	20.4	79.5	0.0	20.4	1008	Closed
AUTO-LOG	07/06/2017 08:09	0.0	0.1	20.3	79.6	0.0	20.3	1008	Closed
AUTO-LOG	07/06/2017 08:21	0.0	0.0	20.2	79.8	0.0	20.2	1008	Closed

Text in red represents low and falling pressure

Text in orange represents low and rising pressure

Text in purple represent erroneous data

Target number of readings	336
Achieved number of readings	677
Total number of readings with air bricks open	284
Total number of readings with air bricks closed	393
Maximum CH ₄ concentration	0.1% v/v
Maximum CO ₂ concentration	0.1% v/v
Minimum O ₂ concentration	19.8% v/v

27621 - Angmering - Void Monitoring Results - Plot 44

Gas Analyser Model GA2000
 MCERTS certified instrument Yes
 Serial No GA10941/G501108
 Date downloaded 10/11/2017
 Computer & User Info HH-GEO-LT-2828 - C Lewis
 Date of last user calibration N/A
 Date of last factory calibration 16/02/2018
 Next service due 16/08/2017
 Date of last Gas Check 16/08/2017
 Security code [2540E1EF]

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	PEAK CH ₄ % v/v	PEAK CO ₂ % v/v	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	24/10/2017 13:01	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.6	1015	Closed
AUTO-LOG	24/10/2017 14:01	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1015	Closed
AUTO-LOG	24/10/2017 15:01	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1015	Closed
AUTO-LOG	24/10/2017 16:01	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1015	Closed
AUTO-LOG	24/10/2017 17:01	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1015	Closed
AUTO-LOG	24/10/2017 18:01	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1015	Closed
AUTO-LOG	24/10/2017 19:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1015	Closed
AUTO-LOG	24/10/2017 20:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1015	Closed
AUTO-LOG	24/10/2017 21:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1015	Closed
AUTO-LOG	24/10/2017 22:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1015	Closed
AUTO-LOG	24/10/2017 23:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 00:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 01:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 02:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 03:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 04:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 05:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	25/10/2017 06:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	25/10/2017 07:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	25/10/2017 08:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	25/10/2017 09:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	25/10/2017 10:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	25/10/2017 11:01	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	25/10/2017 12:01	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1017	Closed
AUTO-LOG	25/10/2017 13:01	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1017	Closed
AUTO-LOG	25/10/2017 14:01	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1017	Closed
AUTO-LOG	25/10/2017 15:01	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1017	Closed
AUTO-LOG	25/10/2017 16:01	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1017	Closed
AUTO-LOG	25/10/2017 17:01	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1017	Closed
AUTO-LOG	25/10/2017 18:02	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.6	1018	Closed
AUTO-LOG	25/10/2017 19:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1018	Closed
AUTO-LOG	25/10/2017 20:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1018	Closed
AUTO-LOG	25/10/2017 21:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1018	Closed
AUTO-LOG	25/10/2017 22:02	0.0	0.1	21.6	78.3	0.0	0.0	0.1	21.6	1018	Closed
AUTO-LOG	25/10/2017 23:02	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.6	1018	Closed
AUTO-LOG	26/10/2017 00:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 01:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 02:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 03:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 04:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 05:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 06:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 07:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 08:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 09:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1019	Closed
AUTO-LOG	26/10/2017 10:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 11:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 12:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 13:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 14:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 15:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 16:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 17:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 18:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 19:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1020	Closed
AUTO-LOG	26/10/2017 20:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1021	Closed
AUTO-LOG	26/10/2017 21:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1021	Closed
AUTO-LOG	26/10/2017 22:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1021	Closed
AUTO-LOG	26/10/2017 23:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1021	Closed
AUTO-LOG	27/10/2017 00:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1022	Closed
AUTO-LOG	27/10/2017 01:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1022	Closed
AUTO-LOG	27/10/2017 02:02	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1022	Closed
AUTO-LOG	27/10/2017 03:02	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1022	Closed
AUTO-LOG	27/10/2017 04:02	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1022	Closed
AUTO-LOG	27/10/2017 05:02	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1023	Closed
AUTO-LOG	27/10/2017 06:02	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1023	Closed
AUTO-LOG	27/10/2017 07:02	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1025	Closed
AUTO-LOG	27/10/2017 08:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1025	Closed
AUTO-LOG	27/10/2017 09:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1027	Closed
AUTO-LOG	27/10/2017 10:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 11:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 12:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 13:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 14:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 15:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 16:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 17:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 18:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 19:02	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	1028	Closed
AUTO-LOG	27/10/2017 20:02	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	1030	Closed

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AUTO-LOG	05/11/2017 00:38	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	3004	Closed
AUTO-LOG	05/11/2017 01:38	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.8	3004	Closed
AUTO-LOG	05/11/2017 02:38	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.9	3004	Closed
AUTO-LOG	05/11/2017 03:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3004	Closed
AUTO-LOG	05/11/2017 04:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3005	Closed
AUTO-LOG	05/11/2017 05:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3005	Closed
AUTO-LOG	05/11/2017 06:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3006	Closed
AUTO-LOG	05/11/2017 07:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3006	Closed
AUTO-LOG	05/11/2017 08:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3007	Closed
AUTO-LOG	05/11/2017 09:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3008	Closed
AUTO-LOG	05/11/2017 10:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3008	Closed
AUTO-LOG	05/11/2017 11:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3009	Closed
AUTO-LOG	05/11/2017 12:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3009	Closed
AUTO-LOG	05/11/2017 13:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3009	Closed
AUTO-LOG	05/11/2017 14:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3010	Closed
AUTO-LOG	05/11/2017 15:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3010	Closed
AUTO-LOG	05/11/2017 16:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3011	Closed
AUTO-LOG	05/11/2017 17:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3012	Closed
AUTO-LOG	05/11/2017 18:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3014	Closed
AUTO-LOG	05/11/2017 19:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3015	Closed
AUTO-LOG	05/11/2017 20:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3015	Closed
AUTO-LOG	05/11/2017 21:38	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3016	Closed
AUTO-LOG	05/11/2017 22:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3017	Closed
AUTO-LOG	05/11/2017 23:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3017	Closed
AUTO-LOG	06/11/2017 00:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3018	Closed
AUTO-LOG	06/11/2017 01:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3019	Closed
AUTO-LOG	06/11/2017 02:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3019	Closed
AUTO-LOG	06/11/2017 03:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3019	Closed
AUTO-LOG	06/11/2017 04:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3019	Closed
AUTO-LOG	06/11/2017 05:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3020	Closed
AUTO-LOG	06/11/2017 06:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3020	Closed
AUTO-LOG	06/11/2017 07:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3020	Closed
AUTO-LOG	06/11/2017 08:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3021	Closed
AUTO-LOG	06/11/2017 09:39	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	3021	Closed
AUTO-LOG	06/11/2017 09:48	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	3021	Closed
AUTO-LOG	06/11/2017 10:48	0.1	0.1	21.8	78.0	2.0	0.1	0.1	21.6	3018	Closed
AUTO-LOG	06/11/2017 11:48	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.6	3021	Closed
AUTO-LOG	06/11/2017 12:48	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	3021	Closed
AUTO-LOG	06/11/2017 13:48	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.3	3021	Closed
AUTO-LOG	06/11/2017 14:48	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	3021	Closed
AUTO-LOG	06/11/2017 15:15	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	3021	Closed

Text in red represents low and falling pressure
Text in orange represents low and rising pressure
Text in purple represent erroneous data

Target number of readings	336
Achieved number of readings	314
Total number of readings with air bricks open	0
Total number of readings with air bricks closed	314
Maximum CH ₄ concentration	0.0% v/v
Maximum CO ₂ concentration	0.1% v/v
Minimum O ₂ concentration	21.5% v/v

27621 - Angmering - Void Monitoring Results - Plot 48

Gas Analyser Model GA2000
 MCERTS certified instrument Yes
 Serial No GA10941/G501108
 Date downloaded 10/11/2017
 Computer & User Info HH-GEO-LT-2828 - C Lewis
 Date of last user calibration N/A
 Date of last factory calibration 27/02/2017
 Next service due 27/08/2017
 Date of last Gas Check 27/02/2017
 Security code [E4D13BF6]

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	PEAK CH ₄ % v/v	PEAK CO ₂ % v/v	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	24/10/2017 11:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1019	Closed
AUTO-LOG	24/10/2017 12:32	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1019	Closed
AUTO-LOG	24/10/2017 13:32	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1019	Closed
AUTO-LOG	24/10/2017 14:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 15:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 16:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 17:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 18:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 19:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 20:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	24/10/2017 21:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	24/10/2017 22:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	24/10/2017 23:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	25/10/2017 00:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	25/10/2017 01:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	25/10/2017 02:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1018	Closed
AUTO-LOG	25/10/2017 03:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1018	Closed
AUTO-LOG	25/10/2017 04:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	25/10/2017 05:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	25/10/2017 06:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	25/10/2017 07:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	25/10/2017 08:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1021	Closed
AUTO-LOG	25/10/2017 09:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1021	Closed
AUTO-LOG	25/10/2017 10:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	25/10/2017 11:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	25/10/2017 12:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	25/10/2017 13:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	25/10/2017 14:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	25/10/2017 15:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	25/10/2017 16:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	25/10/2017 17:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	25/10/2017 18:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	25/10/2017 19:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	25/10/2017 20:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	25/10/2017 21:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	25/10/2017 22:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	25/10/2017 23:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	26/10/2017 00:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 01:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 02:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 03:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 04:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 05:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 06:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	26/10/2017 07:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	26/10/2017 08:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	26/10/2017 09:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	26/10/2017 10:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	26/10/2017 11:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	26/10/2017 12:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	26/10/2017 13:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	26/10/2017 14:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	26/10/2017 15:32	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	26/10/2017 16:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	26/10/2017 17:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	26/10/2017 18:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	26/10/2017 19:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	26/10/2017 20:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	26/10/2017 21:32	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	26/10/2017 22:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	26/10/2017 23:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	27/10/2017 00:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	27/10/2017 01:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	27/10/2017 02:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	27/10/2017 03:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	27/10/2017 04:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	27/10/2017 05:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1030	Closed
AUTO-LOG	27/10/2017 06:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1031	Closed
AUTO-LOG	27/10/2017 07:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1033	Closed
AUTO-LOG	27/10/2017 08:33	0.0	0.0	21.2	78.8	0.0	0.0	0.0	21.2	1034	Closed
AUTO-LOG	27/10/2017 09:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1034	Closed
AUTO-LOG	27/10/2017 10:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1035	Closed
AUTO-LOG	27/10/2017 11:33	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1035	Closed
AUTO-LOG	27/10/2017 12:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1035	Closed
AUTO-LOG	27/10/2017 13:33	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1034	Closed
AUTO-LOG	27/10/2017 14:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1035	Closed
AUTO-LOG	27/10/2017 15:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1035	Closed
AUTO-LOG	27/10/2017 16:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1035	Closed
AUTO-LOG	27/10/2017 17:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1035	Closed
AUTO-LOG	27/10/2017 18:33	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1035	Closed

ARUN DISTRICT COUNCIL A/155/21/DOC

ARUN DISTRICT COUNCIL A/155/21/DOC

Text in red represents low and falling pressure
Text in orange represents low and rising pressure
Text in purple represent erroneous data

Target number of readings	336
Achieved number of readings	359
Total number of readings with air bricks open	0
Total number of readings with air bricks closed	359
Maximum CH ₄ concentration	0.1% v/v

Maximum CO ₂ concentration	0.1% v/v
Minimum O ₂ concentration	20.6% v/v

27621 - Angmering - Void Monitoring Results - Plot 51

Gas Analyser Model GA5000
 MCERTS certified instrument Yes
 Serial No G500770
 Date downloaded 22/09/2017
 Computer & User Info HH-GEO-LT-2828 - C Lewis
 Date of last user calibration N/A
 Date of last factory calibration 10/11/2016
 Next service due 10/11/2017
 Date of last Gas Check N/A
 Security code [85F8F512]

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	PEAK CH ₄ % v/v	PEAK CO ₂ % v/v	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	04/10/2017 10:01	0.1	0.1	20.8	79.0	2.0	0.1	0.1	20.8	1025	Closed
AUTO-LOG	04/10/2017 11:01	0.1	0.1	21.0	78.8	2.0	0.1	0.1	20.9	1024	Closed
AUTO-LOG	04/10/2017 12:01	0.1	0.1	21.0	78.8	2.0	0.1	0.1	20.9	1024	Closed
AUTO-LOG	04/10/2017 13:01	0.1	0.1	21.0	78.8	2.0	0.1	0.1	20.9	1023	Closed
AUTO-LOG	04/10/2017 14:01	0.1	0.1	21.0	78.8	2.0	0.1	0.1	20.9	1023	Closed
AUTO-LOG	04/10/2017 15:01	0.1	0.1	21.0	78.8	2.0	0.1	0.1	21.0	1022	Closed
AUTO-LOG	04/10/2017 16:01	0.1	0.1	21.0	78.8	2.0	0.1	0.1	21.0	1022	Closed
AUTO-LOG	04/10/2017 17:01	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.0	1021	Closed
AUTO-LOG	04/10/2017 18:01	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1021	Closed
AUTO-LOG	04/10/2017 19:01	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1021	Closed
AUTO-LOG	09/10/2017 14:37	0.1	0.1	21.0	78.8	2.0	0.1	0.1	21.0	1018	Closed
AUTO-LOG	09/10/2017 15:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.2	1018	Closed
AUTO-LOG	09/10/2017 16:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.2	1017	Closed
AUTO-LOG	09/10/2017 17:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.2	1017	Closed
AUTO-LOG	09/10/2017 18:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.1	1018	Closed
AUTO-LOG	09/10/2017 19:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.1	1018	Closed
AUTO-LOG	09/10/2017 20:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1018	Closed
AUTO-LOG	09/10/2017 21:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.1	1017	Closed
AUTO-LOG	09/10/2017 22:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.1	1017	Closed
AUTO-LOG	09/10/2017 23:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1017	Closed
AUTO-LOG	10/10/2017 00:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1017	Closed
AUTO-LOG	10/10/2017 01:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.1	1017	Closed
AUTO-LOG	10/10/2017 02:37	0.1	0.1	21.2	78.6	2.0	0.1	0.1	21.1	1017	Closed
AUTO-LOG	10/10/2017 03:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1016	Closed
AUTO-LOG	10/10/2017 04:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.1	1016	Closed
AUTO-LOG	10/10/2017 05:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.0	1016	Closed
AUTO-LOG	10/10/2017 06:37	0.1	0.1	21.1	78.7	2.0	0.1	0.1	21.0	1016	Closed
AUTO-LOG	10/10/2017 07:37	0.1	0.1	21.0	78.8	2.0	0.1	0.1	21.0	1016	Closed
AUTO-LOG	10/10/2017 08:37	0.1	0.1	21.0	78.8	2.0	0.1	0.1	21.0	1016	Closed
AUTO-LOG	10/10/2017 09:37	0.1	0.1	20.9	78.9	2.0	0.1	0.1	20.9	1017	Closed
AUTO-LOG	10/10/2017 10:37	0.1	0.1	20.9	78.9	2.0	0.1	0.1	20.9	1016	Closed
AUTO-LOG	10/10/2017 11:37	0.1	0.1	20.9	78.9	2.0	0.1	0.1	20.9	1016	Closed
AUTO-LOG	10/10/2017 12:37	0.1	0.1	20.9	78.9	2.0	0.1	0.1	20.9	1016	Closed

Text in red represents low and falling pressure

Text in orange represents low and rising pressure

Text in purple represent erroneous data

Target number of readings 336
 Achieved number of readings 33
 Total number of readings with air bricks open 0
 Total number of readings with air bricks closed 33
 Maximum CH₄ concentration 0.1% v/v
 Maximum CO₂ concentration 0.1% v/v
 Minimum O₂ concentration 20.8% v/v

27621 - Angmering - Void Monitoring Results - Plot 53

Gas Analyser Model GAZ000
 MCERTS certified instrument Yes
 Serial No GA10941
 Date downloaded 17/10/2017
 Computer & User Info HH-GEO-LT-2828 - C Lewis
 Date of last user calibration N/A
 Date of last factory calibration 16/08/2017
 Next service due 16/02/2018
 Date of last Gas Check 16/08/2017
 Security code [86B84465]

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	PEAK CH ₄ % v/v	PEAK CO ₂ % v/v	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	04/10/2017 10:06	0.0	0.1	21.6	78.3	0.0	0.0	0.0	20.8	1020	Closed
AUTO-LOG	04/10/2017 11:06	0.0	0.1	21.8	78.1	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	04/10/2017 12:06	0.0	0.1	21.7	78.2	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 13:06	0.0	0.1	21.6	78.3	0.0	0.0	0.1	21.6	1020	Closed
AUTO-LOG	04/10/2017 14:06	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.8	1019	Closed
AUTO-LOG	04/10/2017 15:06	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1019	Closed
AUTO-LOG	04/10/2017 16:06	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.6	1019	Closed
AUTO-LOG	04/10/2017 17:06	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1018	Closed
AUTO-LOG	04/10/2017 18:06	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.5	1018	Closed
AUTO-LOG	04/10/2017 19:06	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.6	1017	Closed
AUTO-LOG	04/10/2017 20:06	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.6	1017	Closed
AUTO-LOG	04/10/2017 21:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1016	Closed
AUTO-LOG	04/10/2017 22:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1016	Closed
AUTO-LOG	04/10/2017 23:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.7	1016	Closed
AUTO-LOG	05/10/2017 00:07	0.0	0.1	21.7	78.2	0.0	0.0	0.0	21.7	1015	Closed
AUTO-LOG	05/10/2017 01:07	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.7	1015	Closed
AUTO-LOG	05/10/2017 02:07	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.7	1014	Closed
AUTO-LOG	05/10/2017 03:07	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.7	1013	Closed
AUTO-LOG	05/10/2017 04:07	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.8	1013	Closed
AUTO-LOG	05/10/2017 05:07	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1012	Closed
AUTO-LOG	05/10/2017 06:07	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1011	Closed
AUTO-LOG	05/10/2017 07:07	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1010	Closed
AUTO-LOG	05/10/2017 08:07	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1009	Closed
AUTO-LOG	05/10/2017 09:07	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.6	1009	Closed
AUTO-LOG	05/10/2017 10:07	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1009	Closed
AUTO-LOG	05/10/2017 11:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.6	1009	Closed
AUTO-LOG	05/10/2017 12:07	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.5	1010	Closed
AUTO-LOG	05/10/2017 13:07	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.6	1011	Closed
AUTO-LOG	05/10/2017 14:07	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.7	1012	Closed
AUTO-LOG	05/10/2017 15:07	0.0	0.0	21.2	78.8	0.0	0.0	0.0	21.6	1013	Closed
AUTO-LOG	05/10/2017 16:07	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	05/10/2017 17:07	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.4	1014	Closed
AUTO-LOG	05/10/2017 18:07	0.0	0.0	21.6	78.4	0.0	0.0	0.0	21.2	1015	Closed
AUTO-LOG	05/10/2017 19:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.5	1015	Closed
AUTO-LOG	05/10/2017 20:07	0.0	0.0	21.8	78.2	0.0	0.0	0.0	21.5	1016	Closed
AUTO-LOG	05/10/2017 21:07	0.0	0.1	21.8	78.1	0.0	0.0	0.0	21.6	1016	Closed
AUTO-LOG	05/10/2017 22:07	0.0	0.1	21.9	78.0	0.0	0.0	0.0	21.7	1017	Closed
AUTO-LOG	05/10/2017 23:07	0.0	0.1	21.9	78.0	0.0	0.0	0.0	21.8	1017	Closed
AUTO-LOG	06/10/2017 00:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.8	1017	Closed
AUTO-LOG	06/10/2017 01:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	1018	Closed
AUTO-LOG	06/10/2017 02:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	21.9	1018	Closed
AUTO-LOG	06/10/2017 03:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	21.9	1018	Closed
AUTO-LOG	06/10/2017 04:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	21.9	1019	Closed
AUTO-LOG	06/10/2017 05:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	1019	Closed
AUTO-LOG	06/10/2017 06:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	1018	Closed
AUTO-LOG	06/10/2017 07:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	1019	Closed
AUTO-LOG	06/10/2017 08:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	1019	Closed
AUTO-LOG	06/10/2017 09:07	0.0	0.1	22.0	77.9	0.0	0.0	0.1	22.0	1019	Closed
AUTO-LOG	06/10/2017 10:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	22.0	1019	Closed
AUTO-LOG	06/10/2017 11:07	0.0	0.1	21.8	78.1	0.0	0.0	0.1	22.0	1020	Closed
AUTO-LOG	06/10/2017 12:07	0.0	0.1	21.8	78.1	0.0	0.0	0.1	22.0	1021	Closed
AUTO-LOG	06/10/2017 13:07	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.9	1021	Closed
AUTO-LOG	06/10/2017 14:07	0.0	0.1	21.6	78.3	0.0	0.0	0.1	21.8	1022	Closed
AUTO-LOG	06/10/2017 15:07	0.0	0.0	21.4	78.6	0.0	0.0	0.1	21.8	1022	Closed
AUTO-LOG	06/10/2017 16:07	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1022	Closed
AUTO-LOG	06/10/2017 17:07	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.5	1022	Closed
AUTO-LOG	06/10/2017 18:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.4	1022	Closed
AUTO-LOG	06/10/2017 19:07	0.0	0.0	21.7	78.3	0.0	0.0	0.0	21.6	1022	Closed
AUTO-LOG	06/10/2017 20:07	0.0	0.1	21.8	78.1	0.0	0.0	0.0	21.6	1022	Closed
AUTO-LOG	06/10/2017 21:07	0.0	0.1	21.8	78.1	0.0	0.0	0.0	21.7	1022	Closed
AUTO-LOG	06/10/2017 22:07	0.0	0.1	21.9	78.0	0.0	0.0	0.0	21.7	1022	Closed
AUTO-LOG	06/10/2017 23:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.8	1022	Closed
AUTO-LOG	07/10/2017 00:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.8	1022	Closed
AUTO-LOG	07/10/2017 01:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	1022	Closed
AUTO-LOG	07/10/2017 02:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	1021	Closed
AUTO-LOG	07/10/2017 03:07	0.0	0.1	21.9	78.0	0.0	0.0	0.1	21.9	1021	Closed
AUTO-LOG	07/10/2017 04:07	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.9	1020	Closed
AUTO-LOG	07/10/2017 05:07	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.9	1020	Closed
AUTO-LOG	07/10/2017 06:07	0.0	0.1	21.8	78.1	0.0	0.0	0.1	21.9	1019	Closed
AUTO-LOG	07/10/2017 07:07	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.8	1018	Closed
AUTO-LOG	07/10/2017 08:07	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.8	1018	Closed
AUTO-LOG	07/10/2017 09:08	0.0	0.1	21.7	78.2	0.0	0.0	0.1	21.8	1017	Closed
AUTO-LOG	07/10/2017 10:08	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1016	Closed
AUTO-LOG	07/10/2017 11:08	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1016	Closed
AUTO-LOG	07/10/2017 12:08	0.0	0.0	21.6	78.4	0.0	0.0	0.1	21.7	1015	Closed
AUTO-LOG	07/10/2017 13:08	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.6	1015	Closed
AUTO-LOG	07/10/2017 14:08	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	07/10/2017 15:08	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.6	1014	Closed
AUTO-LOG	07/10/2017 16:08	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	07/10/2017 17:08	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1012	Closed

ARUN DISTRICT COUNCIL A/155/21/DOC

ARUN DISTRICT COUNCIL A/155/21/DOC

AUTO-LOG	15/10/2017 22:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	15/10/2017 23:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	16/10/2017 00:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	16/10/2017 01:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	16/10/2017 02:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	16/10/2017 03:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1013	Closed
AUTO-LOG	16/10/2017 04:36	0.0	0.0	21.5	78.5	0.0	0.0	0.0	21.5	1012	Closed
AUTO-LOG	16/10/2017 05:36	0.0	0.0	21.4	78.6	0.0	0.0	0.0	21.5	1012	Closed
AUTO-LOG	16/10/2017 06:36	0.0	0.0	21.4	78.6	0.0	0.0	0.0	21.5	1012	Closed
AUTO-LOG	16/10/2017 07:36	0.0	0.0	21.4	78.6	0.0	0.0	0.0	21.5	1012	Closed
AUTO-LOG	16/10/2017 08:36	0.0	0.0	21.4	78.6	0.0	0.0	0.0	21.4	1012	Closed
AUTO-LOG	16/10/2017 09:21	0.0	0.1	21.1	78.8	0.0	0.0	0.0	21.4	1011	Closed
AUTO-LOG	16/10/2017 10:21	0.0	0.0	21.3	78.7	0.0	0.0	0.0	21.4	1011	Closed

Text in red represents low and falling pressure

Text in orange represents low and rising pressure

Text in purple represent erroneous data

Target number of readings	336
Achieved number of readings	286
Total number of readings with air bricks open	0
Total number of readings with air bricks closed	286
Maximum CH ₄ concentration	0.0% v/v
Maximum CO ₂ concentration	0.1% v/v
Minimum O ₂ concentration	20.6% v/v

27621 - Angmering - Void Monitoring Results - Plot 55

Gas Analyser Model GA2000
 MCERTS certified instrument Yes
 Serial No GA10941/G501108
 Date downloaded 10/11/2017
 Computer & User Info HH-GEO-LT-2828 - C Lewis
 Date of last user calibration 22/09/2017
 Date of last factory calibration 20/03/2017
 Next service due 20/03/2018
 Date of last Gas Check 20/03/2017
 Security code [E628D104]

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	PEAK CH ₄ % v/v	PEAK CO ₂ % v/v	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	04/10/2017 10:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.8	1026	Closed
AUTO-LOG	04/10/2017 11:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 12:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 13:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 14:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	04/10/2017 15:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	04/10/2017 16:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	04/10/2017 17:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	04/10/2017 18:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 19:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 20:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 21:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 22:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1021	Closed
AUTO-LOG	04/10/2017 23:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	05/10/2017 00:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	05/10/2017 01:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	05/10/2017 02:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1018	Closed
AUTO-LOG	05/10/2017 03:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1017	Closed
AUTO-LOG	05/10/2017 04:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed
AUTO-LOG	05/10/2017 05:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1015	Closed
AUTO-LOG	05/10/2017 06:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1015	Closed
AUTO-LOG	05/10/2017 07:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1015	Closed
AUTO-LOG	05/10/2017 08:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed
AUTO-LOG	05/10/2017 09:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed
AUTO-LOG	05/10/2017 10:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	05/10/2017 11:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1019	Closed
AUTO-LOG	05/10/2017 12:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	05/10/2017 13:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	05/10/2017 14:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	05/10/2017 15:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	05/10/2017 16:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	05/10/2017 17:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	05/10/2017 18:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	05/10/2017 19:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	05/10/2017 20:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	05/10/2017 21:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	05/10/2017 22:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	05/10/2017 23:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 00:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 01:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 02:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 03:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 04:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	06/10/2017 05:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	06/10/2017 06:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	06/10/2017 07:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	06/10/2017 08:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	06/10/2017 09:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 10:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	06/10/2017 11:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	06/10/2017 12:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	06/10/2017 13:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 14:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 15:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 16:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 17:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 18:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 19:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 20:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 21:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 22:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 23:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	07/10/2017 00:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	07/10/2017 01:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	07/10/2017 02:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	07/10/2017 03:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	07/10/2017 04:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	07/10/2017 05:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1024	Closed
AUTO-LOG	07/10/2017 06:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1024	Closed
AUTO-LOG	07/10/2017 07:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1023	Closed
AUTO-LOG	07/10/2017 08:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	07/10/2017 09:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	07/10/2017 10:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	07/10/2017 11:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	07/10/2017 12:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	07/10/2017 13:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1019	Closed
AUTO-LOG	07/10/2017 14:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	07/10/2017 15:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1017	Closed
AUTO-LOG	07/10/2017 16:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1017	Closed
AUTO-LOG	07/10/2017 17:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed

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AUTO-LOG	16/10/2017 04:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	16/10/2017 05:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	16/10/2017 06:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	16/10/2017 07:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1017	Closed
AUTO-LOG	16/10/2017 08:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1017	Closed
AUTO-LOG	16/10/2017 09:43	0.0	0.0	20.3	79.7	0.0	0.0	0.0	20.3	1014	Closed
AUTO-LOG	16/10/2017 10:41	0.0	0.0	20.6	79.4	0.0	0.0	0.0	20.4	1018	Closed
Gas meter removed for charging											
AUTO-LOG	18/10/2017 11:40	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1012	Closed
AUTO-LOG	18/10/2017 12:40	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1012	Closed
AUTO-LOG	18/10/2017 13:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1012	Closed
AUTO-LOG	18/10/2017 14:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1012	Closed
AUTO-LOG	18/10/2017 15:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	18/10/2017 16:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	18/10/2017 17:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	18/10/2017 18:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1012	Closed
AUTO-LOG	18/10/2017 19:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1012	Closed
AUTO-LOG	18/10/2017 20:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	18/10/2017 21:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	18/10/2017 22:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1012	Closed
AUTO-LOG	18/10/2017 23:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	19/10/2017 00:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	19/10/2017 01:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	19/10/2017 02:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1010	Closed
AUTO-LOG	19/10/2017 03:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1009	Closed
AUTO-LOG	19/10/2017 04:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1009	Closed
AUTO-LOG	19/10/2017 05:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1008	Closed
AUTO-LOG	19/10/2017 06:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1008	Closed
AUTO-LOG	19/10/2017 07:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1007	Closed
AUTO-LOG	19/10/2017 08:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1007	Closed
AUTO-LOG	19/10/2017 09:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	19/10/2017 10:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	19/10/2017 11:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	19/10/2017 12:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1005	Closed
AUTO-LOG	19/10/2017 13:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1004	Closed
AUTO-LOG	19/10/2017 14:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1004	Closed
AUTO-LOG	19/10/2017 15:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1004	Closed
AUTO-LOG	19/10/2017 16:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1004	Closed
AUTO-LOG	19/10/2017 17:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1004	Closed
AUTO-LOG	19/10/2017 18:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1003	Closed
AUTO-LOG	19/10/2017 19:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1003	Closed
AUTO-LOG	19/10/2017 20:40	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1003	Closed
AUTO-LOG	19/10/2017 21:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1002	Closed
AUTO-LOG	19/10/2017 22:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1002	Closed
AUTO-LOG	19/10/2017 23:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1002	Closed
AUTO-LOG	20/10/2017 00:40	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1002	Closed
AUTO-LOG	20/10/2017 01:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1002	Closed
AUTO-LOG	20/10/2017 02:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1002	Closed
AUTO-LOG	20/10/2017 03:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1001	Closed
AUTO-LOG	20/10/2017 04:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1002	Closed
AUTO-LOG	20/10/2017 05:40	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1003	Closed
AUTO-LOG	20/10/2017 06:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1004	Closed
AUTO-LOG	20/10/2017 07:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1005	Closed
AUTO-LOG	20/10/2017 08:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1007	Closed
AUTO-LOG	20/10/2017 09:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1008	Closed
AUTO-LOG	20/10/2017 10:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1009	Closed
AUTO-LOG	20/10/2017 11:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1010	Closed
AUTO-LOG	20/10/2017 12:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1011	Closed
AUTO-LOG	20/10/2017 13:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1011	Closed
AUTO-LOG	20/10/2017 14:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1011	Closed
AUTO-LOG	20/10/2017 15:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1012	Closed
AUTO-LOG	20/10/2017 16:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1012	Closed
AUTO-LOG	20/10/2017 17:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1011	Closed
AUTO-LOG	20/10/2017 18:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1011	Closed
AUTO-LOG	20/10/2017 19:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1011	Closed
AUTO-LOG	20/10/2017 20:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1010	Closed
AUTO-LOG	20/10/2017 21:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1010	Closed
AUTO-LOG	20/10/2017 22:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1008	Closed
AUTO-LOG	20/10/2017 23:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1007	Closed
AUTO-LOG	21/10/2017 00:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	21/10/2017 01:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1005	Closed
AUTO-LOG	21/10/2017 02:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	21/10/2017 03:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1005	Closed
AUTO-LOG	21/10/2017 04:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1005	Closed
AUTO-LOG	21/10/2017 05:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 06:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 07:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 08:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1007	Closed
AUTO-LOG	21/10/2017 09:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1007	Closed
AUTO-LOG	21/10/2017 10:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1007	Closed
AUTO-LOG	21/10/2017 11:41	0.0	0.0	20.7	79.3	0.0	0.0	0.0	20.7	1006	Closed
AUTO-LOG	21/10/2017 12:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	21/10/2017 13:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	21/10/2017 14:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1006	Closed
AUTO-LOG	21/10/2017 15:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 16:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 17:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1007	Closed
AUTO-LOG	21/10/2017 18:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 19:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1006	Closed
AUTO-LOG	21/10/2017 20:41	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1006	Closed
AUTO-LOG	21/10/2017 21:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1007	Closed
AUTO-LOG	21/10/2017 22:41	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1008	Closed
AUTO-LOG	21/10/2017 23:41	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1009	Closed
AUTO-LOG	22/10/2017 00:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1009	Closed
AUTO-LOG	22/10/2017 01:41	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1010	Closed
AUTO-LOG	22/10/2017 02:41	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1011	Closed
AUTO-LOG	22/10/2017 03:41	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1011	Closed

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AUTO-LOG	07/11/2017 09:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	07/11/2017 10:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	07/11/2017 11:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	07/11/2017 12:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	07/11/2017 13:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	07/11/2017 14:29	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1019	Closed
AUTO-LOG	07/11/2017 15:29	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1019	Closed
AUTO-LOG	07/11/2017 16:29	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	07/11/2017 17:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	07/11/2017 18:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	07/11/2017 19:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	07/11/2017 20:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	07/11/2017 21:29	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1018	Closed
AUTO-LOG	07/11/2017 22:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1019	Closed
AUTO-LOG	07/11/2017 23:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1019	Closed
AUTO-LOG	08/11/2017 00:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1020	Closed
AUTO-LOG	08/11/2017 01:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1020	Closed
AUTO-LOG	08/11/2017 02:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1021	Closed
AUTO-LOG	08/11/2017 03:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1021	Closed
AUTO-LOG	08/11/2017 04:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1022	Closed
AUTO-LOG	08/11/2017 05:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1022	Closed
AUTO-LOG	08/11/2017 06:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1023	Closed
AUTO-LOG	08/11/2017 07:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1023	Closed
AUTO-LOG	08/11/2017 08:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1024	Closed
AUTO-LOG	08/11/2017 09:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	08/11/2017 10:29	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1025	Closed
AUTO-LOG	08/11/2017 11:29	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1025	Closed
AUTO-LOG	08/11/2017 12:29	0.0	0.0	20.7	79.3	0.0	0.0	0.0	20.7	1026	Closed
AUTO-LOG	08/11/2017 13:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1026	Closed
AUTO-LOG	08/11/2017 14:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1026	Closed
AUTO-LOG	08/11/2017 15:29	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	08/11/2017 16:29	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	08/11/2017 17:29	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	08/11/2017 18:29	0.0	0.0	21.1	78.9	0.0	0.0	0.0	21.1	1028	Closed
AUTO-LOG	08/11/2017 19:29	0.0	0.0	21.2	78.8	0.0	0.0	0.0	21.1	1028	Closed
AUTO-LOG	08/11/2017 20:29	0.0	0.0	21.2	78.8	0.0	0.0	0.0	21.2	1029	Closed
AUTO-LOG	08/11/2017 21:29	0.0	0.0	21.2	78.8	0.0	0.0	0.0	21.1	1029	Closed
AUTO-LOG	08/11/2017 22:29	0.0	0.0	21.2	78.8	0.0	0.0	0.0	21.1	1029	Closed
AUTO-LOG	08/11/2017 23:29	0.0	0.1	21.2	78.7	0.0	0.0	0.1	21.2	1029	Closed
AUTO-LOG	09/11/2017 00:29	0.0	0.0	21.2	78.8	0.0	0.0	0.1	21.2	1029	Closed
AUTO-LOG	09/11/2017 01:29	0.0	0.1	21.2	78.7	0.0	0.0	0.1	21.2	1030	Closed
AUTO-LOG	09/11/2017 02:29	0.0	0.1	21.2	78.7	0.0	0.0	0.1	21.2	1029	Closed
AUTO-LOG	09/11/2017 03:29	0.0	0.1	21.2	78.7	0.0	0.0	0.1	21.2	1029	Closed
AUTO-LOG	09/11/2017 04:29	0.0	0.1	21.2	78.7	0.0	0.0	0.1	21.2	1029	Closed
AUTO-LOG	09/11/2017 05:29	0.0	0.1	21.2	78.7	0.0	0.0	0.1	21.2	1029	Closed
AUTO-LOG	09/11/2017 06:29	0.0	0.1	21.1	78.8	0.0	0.0	0.1	21.1	1029	Closed
AUTO-LOG	09/11/2017 07:29	0.0	0.1	21.0	78.9	0.0	0.0	0.1	21.0	1029	Closed
AUTO-LOG	09/11/2017 08:29	0.0	0.1	21.0	78.9	0.0	0.0	0.1	21.0	1029	Closed
AUTO-LOG	09/11/2017 09:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1029	Closed
AUTO-LOG	09/11/2017 10:29	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1028	Closed
AUTO-LOG	09/11/2017 11:30	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1028	Closed
AUTO-LOG	09/11/2017 12:30	0.0	0.0	20.7	79.3	0.0	0.0	0.0	20.7	1027	Closed
AUTO-LOG	09/11/2017 13:30	0.0	0.0	20.7	79.3	0.0	0.0	0.0	20.7	1027	Closed
AUTO-LOG	09/11/2017 14:30	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1026	Closed
AUTO-LOG	09/11/2017 15:30	0.0	0.0	20.7	79.3	0.0	0.0	0.0	20.7	1026	Closed
AUTO-LOG	09/11/2017 16:30	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1026	Closed
AUTO-LOG	09/11/2017 17:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1026	Closed
AUTO-LOG	09/11/2017 18:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1026	Closed
AUTO-LOG	09/11/2017 19:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1026	Closed
AUTO-LOG	09/11/2017 20:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1026	Closed
AUTO-LOG	09/11/2017 21:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1027	Closed
AUTO-LOG	09/11/2017 22:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	09/11/2017 23:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	10/11/2017 00:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	10/11/2017 01:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	10/11/2017 02:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	10/11/2017 03:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	10/11/2017 04:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	10/11/2017 05:30	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	10/11/2017 06:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	10/11/2017 07:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	10/11/2017 08:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	10/11/2017 09:30	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	10/11/2017 10:30	0.0	0.0	20.4	79.6	0.0	0.0	0.0	20.4	1022	Closed
AUTO-LOG	10/11/2017 10:34	0.0	0.0	20.4	79.6	0.0	0.0	0.0	20.3	1022	Closed

Text in red represents low and falling pressure

Text in orange represents low and rising pressure

Text in purple represent erroneous data

Target number of readings	336
Achieved number of readings	830
Total number of readings with air bricks open	0
Total number of readings with air bricks closed	830
Maximum CH ₄ concentration	0.1% v/v
Maximum CO ₂ concentration	0.1% v/v
Minimum O ₂ concentration	20.4% v/v

27621 - Angmering - Void Monitoring Results - Plot 63

Gas Analyser Model GA2000
 MCERTS certified instrument Yes
 Serial No GA10156
 Date downloaded 17/10/2017
 Computer & User Info HH-GEO-LT-2828 - C Lewis
 Date of last user calibration 22/09/2017
 Date of last factory calibration 20/03/2017
 Next service due 20/03/2018
 Date of last Gas Check 20/03/2017
 Security code [E832D008]

ID	DATE	CH ₄ % v/v	CO ₂ % v/v	O ₂ % v/v	BALANCE % v/v	CH ₄ % LEL	PEAK CH ₄ % v/v	PEAK CO ₂ % v/v	MIN O ₂ % v/v	BAROMETRIC PRESSURE (mb)	VOID OPEN OR CLOSED
AUTO-LOG	04/10/2017 10:23	0.0	0.0	20.9	79.6	0.0	0.0	0.0	20.8	1020	Closed
AUTO-LOG	04/10/2017 11:23	0.0	0.0	21.0	79.1	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	04/10/2017 12:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 13:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 14:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	04/10/2017 15:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	04/10/2017 16:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	04/10/2017 17:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	04/10/2017 18:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	04/10/2017 19:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 20:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 21:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 22:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	04/10/2017 23:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1021	Closed
AUTO-LOG	05/10/2017 00:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1020	Closed
AUTO-LOG	05/10/2017 01:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	05/10/2017 02:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1019	Closed
AUTO-LOG	05/10/2017 03:23	0.0	0.0	20.9	79.0	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	05/10/2017 04:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1017	Closed
AUTO-LOG	05/10/2017 05:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed
AUTO-LOG	05/10/2017 06:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1015	Closed
AUTO-LOG	05/10/2017 07:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1015	Closed
AUTO-LOG	05/10/2017 08:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1015	Closed
AUTO-LOG	05/10/2017 09:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed
AUTO-LOG	05/10/2017 10:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1016	Closed
AUTO-LOG	05/10/2017 11:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	05/10/2017 12:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1019	Closed
AUTO-LOG	05/10/2017 13:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	05/10/2017 14:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	05/10/2017 15:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	05/10/2017 16:23	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	05/10/2017 17:23	0.0	0.0	21.0	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	05/10/2017 18:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	05/10/2017 19:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1022	Closed
AUTO-LOG	05/10/2017 20:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	05/10/2017 21:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1023	Closed
AUTO-LOG	05/10/2017 22:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1024	Closed
AUTO-LOG	05/10/2017 23:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 00:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 01:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 02:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 03:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 04:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1025	Closed
AUTO-LOG	06/10/2017 05:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	06/10/2017 06:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	06/10/2017 07:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	06/10/2017 08:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	06/10/2017 09:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	06/10/2017 10:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 11:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	06/10/2017 12:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	06/10/2017 13:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1029	Closed
AUTO-LOG	06/10/2017 14:23	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 15:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 16:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 17:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 18:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 19:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 20:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 21:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 22:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	06/10/2017 23:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	07/10/2017 00:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1028	Closed
AUTO-LOG	07/10/2017 01:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	07/10/2017 02:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1027	Closed
AUTO-LOG	07/10/2017 03:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	07/10/2017 04:24	0.0	0.0	21.0	79.0	0.0	0.0	0.0	21.0	1026	Closed
AUTO-LOG	07/10/2017 05:24	0.0	0.0	20.9	79.0	0.0	0.0	0.0	20.9	1025	Closed
AUTO-LOG	07/10/2017 06:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1024	Closed
AUTO-LOG	07/10/2017 07:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1024	Closed
AUTO-LOG	07/10/2017 08:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1023	Closed
AUTO-LOG	07/10/2017 09:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	07/10/2017 10:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1022	Closed
AUTO-LOG	07/10/2017 11:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1021	Closed
AUTO-LOG	07/10/2017 12:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	07/10/2017 13:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1020	Closed
AUTO-LOG	07/10/2017 14:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1019	Closed
AUTO-LOG	07/10/2017 15:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1018	Closed
AUTO-LOG	07/10/2017 16:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1017	Closed
AUTO-LOG	07/10/2017 17:24	0.0	0.0	20.9	79.1	0.0	0.0	0.0	20.9	1017	Closed

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AUTO-LOG	16/10/2017 03:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1019	Closed
AUTO-LOG	16/10/2017 04:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1019	Closed
AUTO-LOG	16/10/2017 05:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	16/10/2017 06:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	16/10/2017 07:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1018	Closed
AUTO-LOG	16/10/2017 08:41	0.0	0.0	20.8	79.2	0.0	0.0	0.0	20.8	1017	Closed
AUTO-LOG	16/10/2017 09:41	0.0	0.0	20.3	79.2	0.0	0.0	0.0	20.3	1017	Closed
AUTO-LOG	16/10/2017 10:41	0.0	0.0	20.6	79.7	0.0	0.0	0.0	20.4	1014	Closed

Text in red represents low and falling pressure

Text in orange represents low and rising pressure

Text in purple represent erroneous data

Target number of readings	336
Achieved number of readings	281
Total number of readings with air bricks open	
Total number of readings with air bricks closed	281
Maximum CH ₄ concentration	0.1% v/v
Maximum CO ₂ concentration	0.0% v/v
Minimum O ₂ concentration	20.3% v/v

APPENDIX C

PHOTOGRAPHS

		Report No: 27621-L19-dbj	PHOTOGRAPHIC LOG
Client: CALA Homes (South Homes Limited)		Site Location: Cresswell Park, Angmering	Plots: 48, 55 and Phase 1B general overview
Photo No. 1	Date:		
Direction Photo Taken:			
Description: Plot 48 - Trial pit showing soil profile			

Photo No. 2	Date:	
Direction Photo Taken:		
Description: Plot 48 - Close up of arisings		



Report No: 27621-L19-dbj

PHOTOGRAPHIC LOG

Client: CALA Homes (South
Homes Limited

Site Location: Cresswell Park, Angmering

Plots: 48, 55 and Phase
1B general overview

Photo No.
3

Date:

Direction Photo
Taken:

Description:

Plot 55 - Trial pit
showing soil profile



Photo No.
4

Date:
15/11/17

Direction Photo
Taken:

Description:

Phase 1B - Typical soil
profile found in
delineation work



		Report No: 27621-L19-dbj	PHOTOGRAPHIC LOG
Client: CALA Homes (South Homes Limited)		Site Location: Cresswell Park, Angmering	Plots: 48, 55 and Phase 1B general overview
Photo No. 5	Date:		
Direction Photo Taken:			
Description: Phase 1B - Typical soil arisings found in delineation work			

Photo No. 6	Date:	
Direction Photo Taken:		
Description: Phase 1B - Typical foundation excavation showing soil profile		

APPENDIX C

REGULATORY CORRESPONDANCE

Catherine Latimer

From: Matthew Kennett [Matthew.Kennett@arun.gov.uk]
Sent: 30 June 2016 11:37
To: Catherine Latimer
Subject: RE: Angmering Clarifications

Hi Cathy,

We agree that a frequency of 250m³ is sufficient coverage for validation purposes in the public open space areas.

thanks

Matthew Kennett
Pollution Officer
Environmental Health Department
01903 737696 (direct line)
Arun Civic Centre, Maltrovers Road, Littlehampton BN17 5LF
<http://www.arun.gov.uk/eh>



From: CLatimer@rsk.d [REDACTED]
Sent: 30 June 2016 10:47
To: Matthew Kennett [REDACTED]
Subject: FW: Angmering Clarifications

Hi Matthew,

Our client Cala Homes have requested we get in touch to discuss the below comment you made in regards to the validation sample coverage of the public open space areas proposed at the Angmering site.

Based on Figure 6 included within the recent remedial strategy report (27621 R03 (01), there is approximately 21 942m² of public open space areas which requires a 600mm capping layer to be placed upon it. This would equate to 53 validation samples in total assuming a 250m³ frequency. This calculation includes the bunded areas for which I have calculated the number of samples required per bund for your information:

NW bund area = 2009.09m² * 0.6 m² – 5 samples
SWA bund area = 1379 m² * 0.6 m² - 4 samples
SWB bund area = 482 m² * 0.6 m² – 2 samples
NE bund area = 1482 m² * 0.6 m² – 4 samples
SE bund area = 137 m² * 0.6 m² – 1 sample
(All rounded up to the nearest whole number)

There is approximately 10 127m² of public open space requiring a 450mm capping layer to placed upon it this would equate to 19 validation samples from these areas in total.

On review we consider that a frequency of 250m³ is sufficient coverage for validation purposes in the public open space areas. Please confirm whether you are in agreement with this?

If you have any questions please do not hesitate to contact myself or Andrew James.

Kind regards,

Cathy

Cathy Latimer
Senior Geo-Environmental Consultant

RSK
Unit 18, Beaconfield Abbey Enterprise Centre, Premier Way, Boreham, Hampshire, SO51 0AQ, UK

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From: Matthew Kennett [<mailto:Matthew.Kennett@arun.gov.uk>]
Sent: 25 April 2016 14:04
To: Gary Biggs
Subject: RE: Angmering Clarifications

Hi Gary,

The method statement and risk assessments are acceptable.

The Deployment Form that I have had seen details 1 in 250m3 for asbestos control, the remedial strategy details 1 in 50m3 for verification. How many samples at 1 in 50m3 do you anticipate in the communal landscaping. If 1 in 250m3 provides sufficient coverage/information then it would be acceptable.

thanks

Matthew Kennett
Pollution Officer
Environmental Health Department
01903 737696 (direct line)
Arun Civic Centre, Maltravers Road, Littlehampton BN17 5LF
<http://www.arun.gov.uk/eh>



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Catherine Latimer

From: Matthew Kennett [Matthew.Kennett@arun.gov.uk]
Sent: 28 February 2017 09:07
To: Catherine Latimer
Subject: RE: Angmering PP-05292458

Hi Cathy,

If it is covered in the verification report that will be fine,

thanks

Matthew Kennett
Pollution Officer
Environmental Health Department
01903 737696 (direct line)
Arun Civic Centre, Maltrovers Road, Littlehampton BN17 5LF
<http://www.arun.gov.uk/eh>



From: CLatin [REDACTED] [uk]
Sent: 27 February 2017 19:02
To: Matthew Kennett
Cc: JRV [REDACTED]
Subject: RE: Angmering PP-05292458

Hi Matthew,

Thank you for your time yesterday. As discussed the site manager at Angmering has concerns regarding any investigation works being undertaken in the southwest bund B at the Angmering site due to its proximity to neighbouring residents. We had discussed during our last meeting undertaking some hand pits in this area to check if the bund contained asbestos containing materials.

Given the site managers concerns and that they have now confirmed they will be unable to cap this area due to the over head cables, we propose to assume a worst case scenario and fence this area off from the public and plant prickly vegetation to deter trespassers. Photographic evidence confirming these measures have been incorporated shall be included in the verification report for this area of the site.

Please let me know if you have any issues or questions associated with this approach.

Kind regards,

Cathy

Cathy Latimer
Principal Geo-Environmental Consultant
(Please note I work Monday to Thursday, should you have any urgent queries on a Friday please call the Southampton office number)

BSK
Unit 26, Basepoint Abbey Enterprise Centre, Premier Way, Romsey, Hampshire, SO51 9AQ, UK





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Catherine Latimer

From: Matthew Kennett [Matthew.Kennett@arun.gov.uk]
Sent: 21 November 2017 10:37
To: David Jacob
Cc: GBIGGS@cala.co.uk; JRwodzi@cala.co.uk; JSlater@cala.co.uk; Catherine Latimer; BGraham@nhbc.co.uk
Subject: RE: 27621 - Cresswell Park, Angmering - Letter to Downgrade Gas Regime on Site

Dear David,

I have read all the information in the letter report and looked at the monitoring data. I can see that the gassing regime in the sub-floor voids is suitable for a CS1 development with this additional information.

Kind Regards

Matthew Kennett
Snr. Pollution Officer
Environmental Health Department
01903 737696 (direct line)
Arun Civic Centre, Maltravers Road, Littlehampton BN17 5LF
<http://www.arun.gov.uk/eh>



From: D.Jacob [REDACTED]
Sent: 21 November 2017 08:53
To: Matthew Kennett; BGraham@nhbc.co.uk
Cc: G [REDACTED]
Subject: 27621 - Cresswell Park, Angmering - Letter to Downgrade Gas Regime on Site

Matthew, Brian

I hope both of you are well since we last spoke.

We have completed the void monitoring of the original seven plots on Phase 1A as proposed. Three further plots were monitored to provide some additional data due to Plots 44, 48 and 55 not being quite ready enough for void monitoring. With residents taking occupation in the area of these plots the additional data gave us further comfort on top of the existing gas resistant membrane and ventilated sub floor void.

In total we collected just over 3400 hours worth of ground gas void monitoring data and an additional 600 hours from the three extra plots.

A review of the data collected under differing temporal conditions has shown consistent very low concentrations of ground gas (no greater than 0.1% V/V) and our further site works to provide the gardens on site with a cover system and foundation excavation supervision has not encountered any significant sources of organic material that would give rise to the potential for ongoing ground gas generation.

Please find attached our letter to CALA Homes that formalises this process and further lines of evidence that demonstrate that the site is exhibiting a Green/CS1 ground gas regime.

As such, we would appreciate your review of this letter and request that both Arun District Council and the NHBC support our assessment that the Cresswell Park development site is now to be classified as Green/CS1 and that no special ground gas protective measures are required from this point on.

Please let me know if you have any queries

Kind Regards

Dave

David Jacob
Technical Director

RSK
18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT, UK



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Catherine Latimer

Subject: FW: 27621 - Cresswell Park, Angmering - Confirmation in regards to downgrade gas regime on site FYI
Attachments: RE: 27621 - Cresswell Park, Angmering - Letter to Downgrade Gas Regime on Site
Importance: High

From: Brian Graham [mailto: [REDACTED]]
Sent: 04 December 2017 11:31
To: David Jacob
Subject: RE: 27621 - Cresswell Park, Angmering - Letter to Downgrade Gas Regime on Site

David

It got reviewed last week and gas condition has been removed, so this should make things easier going forward

Brian



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From: [REDACTED]
Sent: 21 November 2017 08:53
To: Matthew.Kennett@arun.gov.uk; Brian Graham
Cc: G [REDACTED]
Subject: 27621 - Cresswell Park, Angmering - Letter to Downgrade Gas Regime on Site

Matthew, Brian

I hope both of you are well since we last spoke.

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A review of the data collected under differing temporal conditions has shown consistent very low concentrations of ground gas (no greater than 0.1% V/V) and our further site works to provide the gardens on site with a cover system and foundation excavation supervision has not encountered any significant sources of organic material that would give rise to the potential for ongoing ground gas generation.

Please find attached our letter to CALA Homes that formalises this process and further lines of evidence that demonstrate that the site is exhibiting a Green/CS1 ground gas regime.

As such, we would appreciate your review of this letter and request that both Arun District Council and the NHBC support our assessment that the Cresswell Park development site is now to be classified as Green/CS1 and that no special ground gas protective measures are required from this point on.

Please let me know if you have any queries

Kind Regards

Dave

David Jacob
Technical Director

RSK

HP3 9RT, UK



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APPENDIX D

RSK GUIDELINE VALUES

Generic assessment criteria for human health: residential scenario with home-grown produce

Background

RSK's generic assessment criteria (GAC) were initially prepared following the publication by the Environment Agency (EA) of soil guideline value (SGV) and toxicological (TOX) reports, and associated publications in 2009⁽¹⁾. RSK GAC were updated following the publication of GAC by LQM/CIEH in 2009⁽²⁾. RSK GAC are periodically revised when updated information on toxicological, land use or receptor parameters is published.

Updates to the RSK GAC: 2015

In 2014, the publication of Category 4 Screening Levels (C4SL)^(3,4), as part of the Defra-funded research project SP1010, included modifications to certain exposure assumptions documented within EA Science Report SC050221/SR3 (herein after referred to as SR3)⁽⁵⁾ used in the generation of SGVs.

C4SL were published for six substances (cadmium, arsenic, benzene, benzo(a)pyrene, chromium VI and lead) for a sandy loam soil type with 6% soil organic matter, based on a low level of toxicological concern (LLTC; see Section 2.3 of research project report SP1010⁽³⁾). Where a C4SL has been published, the RSK GAC duplicates the C4SL published values using all input parameters within the SP1010 final project report⁽³⁾ and associated appendices⁽⁶⁾, and adopts them as GAC for these six substances.

For all other substances the C4SL exposure modifications, with the exception of the "top two" produce type approach taken in the C4SL, have been applied to the current RSK GAC. These include alterations to daily inhalation rates for residential and commercial scenarios, reducing soil adherence factors in children (age classes 1 to 12 only) for residential land use, reducing exposure frequency for dermal contact outdoors for residential land use, and updated produce type consumption rates (90th percentile) based on recent data from the National Diet and Nutrition Survey.

The RSK GAC have also been revised with updated toxicology published by LQM/CIEH in 2015⁽⁷⁾, where a C4SL has not been published.

RSK GAC derivation for metals and organic compounds

Model selection

Soil assessment criteria (SAC) were calculated using the Contaminated Land Exposure Assessment (CLEA) tool v1.06, supporting EA guidance^(5,8,9) and revised exposure scenarios published for the C4SL⁽³⁾. Groundwater assessment criteria (GrAC) protective of human health via the inhalation pathway were derived using the RBCA 1.3b model. RSK has updated the inputs within RBCA to reflect EA guidance^(1,5,8,9). The SAC and GrAC collectively are termed GAC.

Conceptual model

In accordance with SR3⁽⁵⁾, the residential with home-grown produce scenario considers risks to a female child between the ages of 0 and 6 years old as the highest risk scenario. In accordance

with Box 3.1 of SR3⁽⁵⁾, the pathways considered for production of the SAC in the residential with home-grown produce scenario are

- direct soil and dust ingestion
- consumption of home-grown produce
- consumption of soil attached to home-grown produce
- dermal contact with soil and indoor dust
- inhalation of indoor and outdoor dust and vapours.

Figure 1 is a conceptual model illustrating these linkages.

In line with guidance in the EA SGV report for cadmium⁽¹⁾, the RSK GAC for cadmium has been derived based on estimates representative of lifetime exposure. Although young children are generally more likely to have higher exposures to soil contaminants, the renal toxicity of cadmium, and the derivation of the TDI_{oral} and TDI_{inh} , are based on considerations of the kidney burden accumulated over 50 years or so. It is therefore reasonable to consider exposure not just in childhood but averaged over a longer period.

The pathway considered in production of the GrAC is the volatilisation of compounds from groundwater and subsequent vapour inhalation by residents while indoors. Figure 2 illustrates this linkage. Although the outdoor air inhalation pathway is also valid, this contributes little to the overall risks owing to the dilution in outdoor air. Within RBCA, the solubility limit of the chemical restricts the extent of volatilisation, which in turn drives the indoor air inhalation pathway. While the same restriction is not built into the CLEA model, the CLEA model output cells are flagged red where the soil saturation limit has been exceeded.

With respect to volatilisation, the CLEA model assumes a simple linear partitioning of a chemical in the soil between the sorbed, dissolved and vapour phase⁽⁹⁾. The upper boundaries of this partitioning are represented by the maximum aqueous solubility and pure saturated vapour concentration of the chemical. The CLEA model estimates saturated soil concentrations where these limits are reached⁽⁹⁾. The CLEA software uses a traffic light system to identify when individual and/or combined assessment criteria exceed the lower of either the aqueous- or vapour-based soil saturation limits. Model output cells are flagged red where the saturated soil concentration has been exceeded and the contribution of the indoor and outdoor vapour pathway to total exposure is greater than 10%. In this case, further consideration of the following is required⁽⁹⁾:

- Free phase contamination may be present.
- Exposure from the vapour pathways will be over-predicted by the model, as in reality the vapour phase concentration will not increase at concentrations above saturation limits
- Where the vapour pathway contribution is greater than 90%, it is unlikely the relevant health criteria value (HCV) will be exceeded at soil concentrations at least a factor of ten higher than the relevant HCV.

Where the vapour pathway is the predominant pathway (contributes greater than 90% of exposure) or the only exposure route considered and the cell is highlighted red (SAC exceeds saturation limit), the risk based on the assumed conceptual model is likely to be negligible as the vapour risk is assumed to be tolerable at maximum possible soil concentrations. In such circumstances, the vapour pathway exposure should be considered based on the presence of free phase or non-aqueous phase liquid sources and the measured concentrations of volatile organic compounds (VOC) in the vapour phase. Screening could be considered based on setting

the SAC as the modelled soil saturation limits. However, as stated within the CLEA handbook⁽⁹⁾, this is likely to not be practical in many cases because of the very low saturation limits and, in any case, is highly conservative.

It should also be noted that for mixtures of compounds, free phase may be present where soil (or groundwater) concentrations are well below saturation limits for individual compounds.

Where the vapour pathway is only one of the exposure pathways considered, an additional approach can then be utilised as detailed within Section 4.12 of the CLEA model handbook⁽⁹⁾, which explains how to calculate an effective assessment criterion manually.

SR3⁽⁵⁾ states that, as a general rule of thumb, it is recognised that estimating vapour phase concentrations from dissolved and sorbed phase contamination by petroleum hydrocarbons are at least a factor of ten higher than those likely to be measured on-site. RSK has therefore applied an empirical subsurface to indoor air correction factor of 10 into the CLEA model chemical database for all petroleum hydrocarbon fractions (including BTEX, trimethylbenzenes and the polycyclic aromatic hydrocarbons (PAH) naphthalene, acenaphthene and acenaphthylene) to reduce this conservatism.

Input selection

The most up-to-date published chemical and toxicological data was obtained from EA Report SC050021/SR7⁽¹⁰⁾, the EA TOX⁽¹¹⁾ reports, the C4SL SP1010 project report and associated appendices^(3,6) or the 2015 LQM/CIEH report⁽⁷⁾. Where a C4SL has been published, the RSK GAC have duplicated the C4SL published values using all input parameters within the SP1010 final project report⁽³⁾ and associated appendices⁽⁶⁾, and has adopted them as GAC for these six substances. Toxicological and specific chemical parameters for aromatic hydrocarbon C₈–C₉ (styrene), 1,2,4-trimethylbenzene and methyl tertiary-butyl ether (MTBE) were obtained from the CL:AIRE Soil Generic Assessment Criteria report⁽¹¹⁾.

For TPH, aromatic hydrocarbons C₅–C₈ were not modelled, as this range comprises benzene and toluene, which are modelled separately. The aromatic C₈–C₉ hydrocarbon fraction comprises ethylbenzene, xylene and styrene. As ethylbenzene and xylene are being modelled separately, the physical, chemical and toxicological data for aromatic C₈–C₉ have been taken from styrene.

For the GrAC, owing to the lack of UK-specific data, default information in the RBCA model was used to evaluate MTBE. No published UK data was available for 1,3,5-trimethylbenzene, so information was obtained from the RBCA model. RBCA uses toxicity data for the inhalation pathway in different units to the CLEA model and cannot consider separately the mean daily intake (MDI), occupancy periods or breathing rates. Therefore, the HCV in RBCA was amended to take account of

- amendments to the MDI using Table 3.4 of SR2⁽⁸⁾
- a child weighing 13.3kg (average of 0–6 year old female in accordance with Table 4.6 of SR3⁽⁵⁾) and breathing 11.85m³ (average daily inhalation rate for a 0–6-year old female in accordance with Table 4.14 of SR3⁽⁵⁾). Inhalation rates used in the derivation of the GrAC have not been updated in line with the 2011 USEPA published values⁽¹²⁾; these will be updated in subsequent revisions of the RSK GAC. The lower inhalation rates presented by the USEPA in 2011 for ages classes 1 to 11 (values are higher for age classes 12 to 18) are not considered to make a significant difference.
- the 50% rule (for petroleum hydrocarbons, trimethylbenzenes and MTBE)^(8,9) where MDI data is not available but background exposure is considered important in the overall exposure.

Physical parameters

For the residential with home-grown produce scenario, the CLEA default building is a small, two-storey terrace house with a concrete ground-bearing slab. The house is assumed to have a 100m² private garden consisting of lawn and flowerbeds, incorporating a 20m² plot for growing fruit and vegetables consumed by the residents. SR3⁽⁵⁾ notes this residential building type to be the most conservative in terms of potential for vapour intrusion. The building parameters used in the production of the RSK GACs are the default CLEA v1.06 inputs presented in Table 3.3 of SR3⁽³⁾, with a dust loading factor detailed in Section 9.3 of SR3⁽⁵⁾. The parameters for a sandy loam soil type were used in line with Table 4.4 of SR3⁽⁵⁾. This includes a value of 6% for the percentage of soil organic matter (SOM) within the soil. In RSK's experience, this is rather high for many sites. To avoid undertaking site-specific risk assessments for SOM, RSK has produced an additional set of GAC for SOM of 1% and 2.5% for all substances using the CLEA tool.

For the GrAC, the depth to groundwater was taken as 2.5m based on RSK's experience of assessing the volatilisation pathway from groundwater. The GrAC were produced using the input parameters in Table 4.

Summary of modifications to the default CLEA 1.06/SR3⁽⁵⁾ input parameters for residential with home-grown produce land-use scenario

In summary, the RSK GAC were produced using the default input parameters for soil properties, the air dispersion model, building properties and the vapour model detailed in SR3⁽⁵⁾. Modifications to the default SR3⁽⁵⁾ exposure scenarios based on the C4SL exposure scenarios⁽³⁾ are presented in Tables 2 and 3 below.

The final selected GAC are presented by pathway in Table 5 and the combined GAC in Table 6.

Figure 1: Conceptual model for residential scenario with home-grown produce

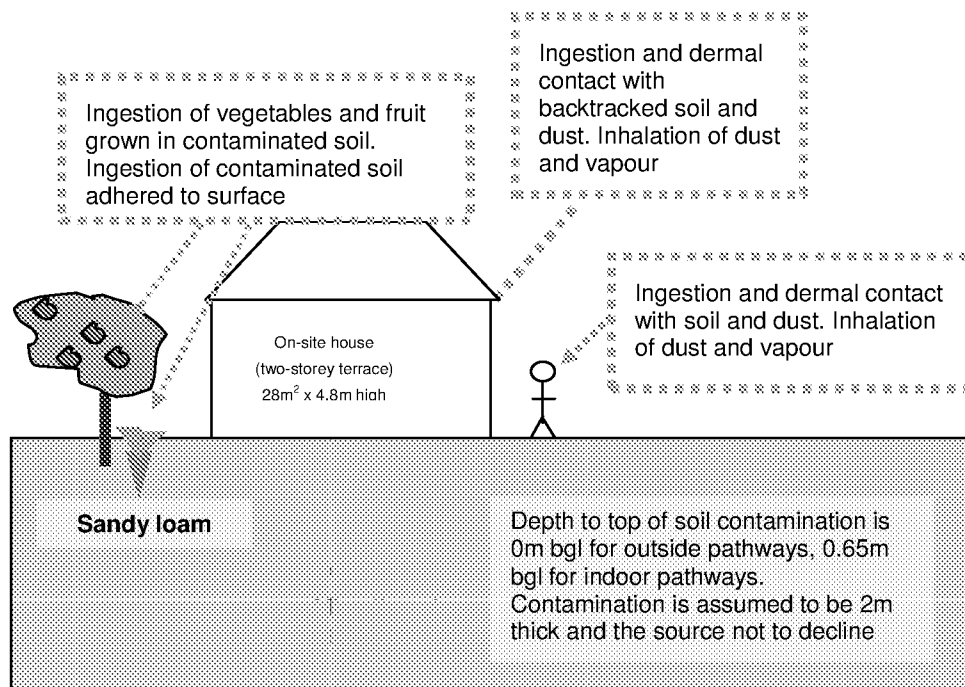


Table 1: Exposure assessment parameters for residential scenario with home-grown produce – inputs for CLEA model

Parameter	Value	Justification
Land use	Residential with homegrown produce	Chosen land use
Receptor	Female child age 1 to 6	Key generic assumption given in Box 3.1, SR3 ⁽⁵⁾
Building	Small terraced house	Key generic assumption given in Box 3.1, SR3. Small, two-storey terraced house chosen, as it is the most conservative residential building type in terms of protection from vapor intrusion (Section 3.4.6, SR3) ⁽⁵⁾
Soil type	Sandy Loam	Most common UK soil type (Section 4.3.1, from Table 3.1, SR3) ⁽⁵⁾
Start AC (age class)	1	Range of age classes corresponding to key generic assumption that the critical receptor is a young female child aged 0–6. From Box 3.1, SR3 ⁽⁵⁾
End AC (age class)	6	
SOM (%)	6	Representative of sandy loamy soil according to EA guidance note dated January 2009 entitled 'Changes We Have Made to the CLEA Framework Documents' ⁽¹³⁾
	1	To provide SAC for sites where SOM <6% as often observed by RSK
	2.5	
pH	7	Model default

Table 2: Residential with home-grown produce – modified home-grown produce data

Name	Consumption rate 90 th percentile (g FW kg ⁻¹ BW day ⁻¹) by age class						Dry weight conversion factor (g DW g ⁻¹ FW)	Home-grown fraction (average)	Home-grown fraction (high end)	Soil loading factor (g g ⁻¹ DW)	Preparation correction factor
	1	2	3	4	5	6					
Green vegetables	7.12	5.87	5.87	5.87	4.53	4.53	0.096	0.05	0.33	1.00E-03	2.00E-01
Root vegetables	10.7	2.83	2.83	2.83	2.14	2.14	0.103	0.06	0.4	1.00E-03	1.00E+00
Tuber vegetables	16	6.6	6.6	6.6	4.95	4.95	0.21	0.02	0.13	1.00E-03	1.00E+00
Herbaceous fruit	1.83	3.39	3.39	3.39	2.24	2.24	0.058	0.06	0.4	1.00E-03	6.00E-01
Shrub fruit	2.23	0.46	0.46	0.46	0.19	0.19	0.166	0.09	0.6	1.00E-03	6.00E-01
Tree fruit	3.82	10.3	10.3	10.3	5.16	5.16	0.157	0.04	0.27	1.00E-03	6.00E-01
Justification	Table 3.4, SP1010 ⁽³⁾						Table 6.3, SR3 ⁽⁵⁾	Table 4.19, SR3 ⁽⁵⁾		Table 6.3, SR3 ⁽⁵⁾	

Table 3: Residential with home-grown produce – modified and use and receptor data

Parameter	Unit	Age class					
		1	2	3	4	5	6
EF (soil and dust ingestion)	day yr ⁻¹	180	365	365	365	365	365
EF (consumption of home-grown produce)	day yr ⁻¹	180	365	365	365	365	365
EF (skin contact, indoor)	day yr ⁻¹	180	365	365	365	365	365
EF (skin contact, outdoor)	day yr ⁻¹	170	170	170	170	170	170
EF (inhalation of dust and vapour, indoor)	day yr ⁻¹	365	365	365	365	365	365
EF (inhalation of dust and vapour, outdoor)	day yr ⁻¹	365	365	365	365	365	365
Justification		Table 3.5, SP1010 ⁽³⁾ ; Table 3.1, SR3 ⁽⁵⁾					
Soil to skin adherence factor (outdoor)	mg cm ⁻² day ⁻¹	0.1	0.1	0.1	0.1	0.1	0.1
Justification		Table 3.5, SP1010 ⁽³⁾					
Inhalation rate	m ³ day ⁻¹	5.4	8.0	8.9	10.1	10.1	10.1
Justification		Mean value USEPA, 2011 ⁽¹²⁾ ; Table 3.2, SP1010 ⁽³⁾					
Notes: For cadmium , the exposure assessment for a residential land use is based on estimates representative of lifetime exposure AC1-18. This is because the TDI _{oral} and TDI _{inh} are based on considerations of the kidney burden accumulated over 50 years. It is therefore reasonable to consider exposure not just in childhood but averaged over a longer period. See the Environment Agency Science Report SC05002/ TOX 3 ⁽¹⁾ , Science Report SC050021/Cadmium SGV ⁽¹⁾ and the project report SP1010 ⁽³⁾ for more information.							

Figure 2: GrAC conceptual model for RBCA residential with home-grown produce scenario

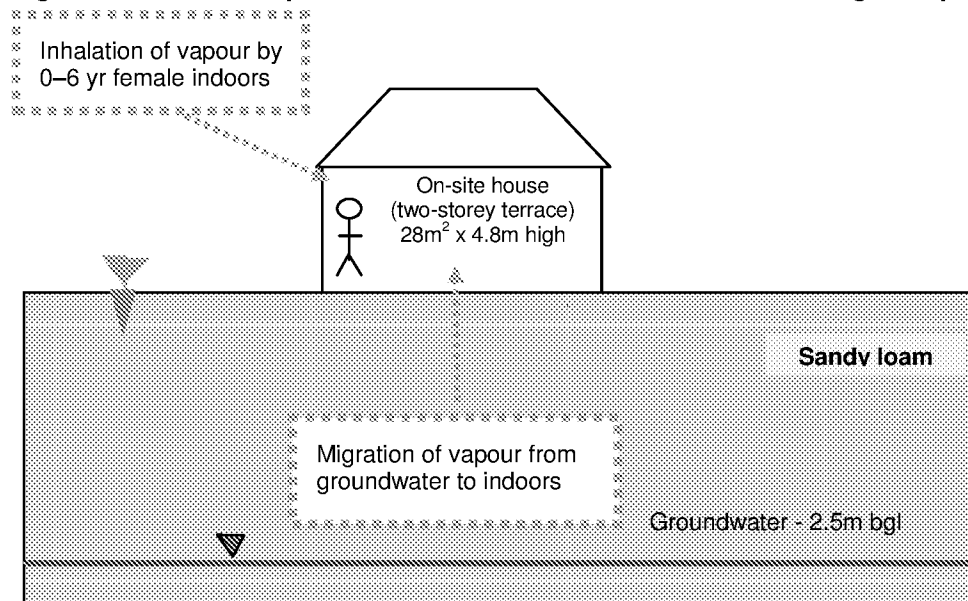


Table 4: Residential with home-grown produce – RBCA inputs

Parameter	Unit	Value	Justification
Receptor			
Averaging time	Years	6	From Box 3.1, SR3 ⁽⁵⁾
Receptor weight	kg	13.3	Average of CLEA 0–6 year old female data, Table 4.6, SR3 ⁽⁵⁾
Exposure duration	Years	6	From Box 3.1, report, SR3 ⁽⁵⁾
Exposure frequency	Days/yr	350	Weighted using occupancy period of 23 hours per day for 365 days of the year
Soil type – sandy loam			
Total porosity	-	0.53	CLEA value for sandy loam. Parameters for sandy loam from Table 4.4, SR3 ⁽⁵⁾
Volumetric water content	-	0.33	
Volumetric air content	-	0.20	
Dry bulk density	g cm ⁻³	1.21	
Vertical hydraulic conductivity	cm s ⁻¹	3.56E-3	CLEA value for saturated conductivity of sandy loam, Table 4.4, SR3 ⁽⁵⁾
Vapour permeability	m ²	3.05E-12	Calculated for sandy loam using equations in Appendix 1, SR3 ⁽⁵⁾
Capillary zone thickness	m	0.1	Professional judgement
Fraction organic carbon	%	0.0348	Representative of sandy loam according to EA guidance note dated January 2009 entitled 'Changes We Have Made to the CLEA Framework Documents' ⁽¹³⁾
Building			
Building volume/area ratio	m	4.8	Table 3.3, SR3 ⁽⁵⁾
Foundation area	m ²	28	
Foundation perimeter	m	22	Calculated assuming building measures 7m x 4m to give 28m ² foundation area
Building air exchange rate	d ⁻¹	12	Table 3.3, SR3 ⁽⁵⁾
Depth to bottom of foundation slab	m	0.15	
Foundation thickness	m	0.15	
Foundation crack fraction	-	0.0151	Calculated from floor crack area of 423 cm ² and building footprint of 28m ² in Table 4.21, SR3 ⁽⁵⁾
Volumetric water content of cracks	-	0.33	Assumed equal to underlying soil type in assumption that cracks become filled with soil over time. Parameters for sandy loam from Table 4.4, SR3 ⁽⁵⁾
Volumetric air content of cracks	-	0.2	
Indoor/outdoor differential pressure	Pa	3.1	From Table 3.3, SR3 ⁽⁵⁾

References

1. Environment Agency (2009), 'Science Reports SC050021 - SGV and TOX reports for: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs'; 'Supplementary information for the derivation of SGV for: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs', and 'Contaminants in soil: updated collation of toxicological data and intake values for humans: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs'. Available at: <https://www.gov.uk/government/publications/contaminants-in-soil-updated-collation-of-toxicological-data-and-intake-values-for-humans> and <https://www.gov.uk/government/publications/land-contamination-soil-guideline-values-sgvs> (accessed 4 February 2015)
2. Nathanial, C. P., McCaffrey, C., Ashmore, M., Cheng, Y., Gillet, A. G., Ogden, R. C. and Scott, D. (2009), *LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment*, second edition (Nottingham: Land Quality Press).
3. Contaminated Land: Applications in Real Environment (CL:AIRE) (2014). 'Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination', Revision 2, DEFRA research project SP1010.
4. Department for Environment, Food and Rural Affairs (Defra) (2014), 'SP1010: Development of Category 4 Screening Levels for assessment of land affected by contamination – Policy Companion Document', Revision 2.
5. Environment Agency (2009), *Science Report – SC050021/SR3. Updated technical background to the CLEA model* (Bristol: Environment Agency).
6. Contaminated Land: Applications in Real Environment (CL:AIRE) (2014). 'Appendices C to H). DEFRA research project SP1010'.
7. Nathanial, C. P., McCaffrey, C., Gillet, A. G., Ogden, R. C. and Nathanial, J. F. (2015), *The LQM/CIEH S4ULs for Human Health Risk Assessment* (Nottingham: Land Quality Press).
8. Environment Agency (2009), *Human health toxicological assessment of contaminants in soil. Science Report – Final SC050021/SR2* (Bristol: Environment Agency).
9. Environment Agency (2009), *Science Report – SC050021/SR4 CLEA Software (version 1.05) Handbook* (Bristol: Environment Agency).
10. Environment Agency (2008), *Science Report SC050021/SR7. Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values* (Bristol: Environment Agency).
11. CL:AIRE (2009), *Soil Generic Assessment Criteria for Human Health Risk Assessment* (London: CL:AIRE).
12. USEPA (2011), *Exposure factors handbook*, EPA/600/R-090/052F (Washington, DC: Office of Research and Development).
13. Environment Agency (2009), 'Changes made to the CLEA framework documents after the three-month evaluation period in 2008', released January 2009.

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE



Table 5

Human Health Generic Assessment Criteria by Pathway for Residential With Home-Grown Produce Scenario

Compound	Notes	GrAC (mg/l)	SAC Appropriate to Pathway SOM 1% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 2.5% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 6% (mg/kg)			Soil Saturation Limit (mg/kg)
			Oral	Inhalation	Combined		Oral	Inhalation	Combined		Oral	Inhalation	Combined	
Metals														
Arsenic	(a,b)	-	3.71E+01	5.28E+00	NR	NR	3.71E+01	5.28E+00	NR	NR	3.71E+01	5.28E+00	NR	NR
Cadmium	(a)	-	NR	NR	2.60E+01	NR	NR	NR	2.60E+01	NR	NR	NR	2.60E+01	NR
Chromium (III) - trivalent	(c)	-	1.84E+04	9.07E+02	8.85E+02	NR	1.84E+04	9.07E+02	8.85E+02	NR	1.84E+04	9.07E+02	8.85E+02	NR
Chromium (VI) - hexavalent	(a,d)	-	2.92E+01	2.06E+01	NR	NR	2.92E+01	2.06E+01	NR	NR	2.92E+01	2.06E+01	NR	NR
Copper	-	-	2.73E+03	1.41E+04	8.47E+03	NR	2.73E+03	1.41E+04	8.47E+03	NR	2.73E+03	1.41E+04	8.47E+03	NR
Lead	(a)	-	2.81E+02	NR	NR	NR	2.81E+02	NR	NR	NR	2.81E+02	NR	NR	NR
Elemental Mercury (Hg ⁰)	(d)	9.40E-03	NR	2.95E+01	NR	4.31E+00	NR	5.80E+01	NR	1.07E+01	NR	1.22E+00	NR	2.58E+01
Inorganic Mercury (Hg ²⁺)	-	-	3.95E+01	3.69E+03	3.91E+01	NR	3.95E+01	3.69E+03	3.91E+01	NR	3.95E+01	3.69E+03	3.91E+01	NR
Methyl Mercury (Hg ⁴⁺)	-	2.00E+01	1.29E+01	1.87E+01	7.33E+00	7.33E+01	1.39E+01	3.68E+01	3.24E+00	1.42E+02	1.39E+01	7.58E+01	1.08E+01	3.04E+02
Nickel	(d)	-	1.27E+02	1.81E+02	NR	NR	1.27E+02	1.81E+02	NR	NR	1.27E+02	1.81E+02	NR	NR
Selenium	(b)	-	2.58E+02	NR	NR	NR	2.58E+02	NR	NR	NR	2.58E+02	NR	NR	NR
Zinc	(b)	-	2.89E+03	3.89E+07	NR	NR	3.89E+03	3.89E+07	NR	NR	2.89E+03	3.89E+07	NR	NR
Cyanide	-	-	2.74E+01	4.09E+00	3.78E+00	NR	2.74E+01	4.09E+00	3.78E+00	NR	2.74E+01	4.09E+00	3.78E+00	NR
Volatile Organic Compounds														
Benzene	(a)	7.20E+00	3.82E+01	8.01E+01	2.03E+01	1.22E+03	5.39E+01	1.88E+00	4.06E+01	2.26E+03	1.16E+00	3.48E+00	8.72E+01	4.71E+03
Toluene	-	8.90E+02	1.63E+02	9.08E+02	1.31E+02	8.69E+02	3.49E+02	2.00E+03	2.97E+02	1.92E+03	7.95E+02	4.55E+03	6.77E+02	4.36E+03
Ethylbenzene	-	1.60E+02	1.10E+02	3.34E+01	4.74E+01	5.18E+02	2.61E+00	1.98E+02	1.12E+02	1.22E+03	9.00E+02	4.59E+02	2.90E+02	2.84E+03
Xylene - m	-	8.40E+01	2.10E+02	8.25E+01	5.92E+01	6.25E+02	5.01E+03	1.46E+02	1.40E+02	1.47E+03	1.15E+03	4.59E+02	3.27E+02	3.46E+03
Xylene - o	-	1.00E+02	1.89E+02	6.87E+01	6.07E+01	4.78E+02	1.58E+02	2.08E+02	1.43E+02	1.12E+03	1.05E+03	4.89E+02	3.12E+02	2.62E+03
Xylene - p	-	8.70E+01	1.89E+02	7.98E+01	6.69E+01	5.76E+02	4.70E+02	1.96E+02	1.38E+02	1.35E+03	1.09E+03	4.89E+02	3.10E+02	3.17E+03
Total xylene	-	8.40E+01	1.82E+02	7.89E+01	5.86E+01	6.25E+02	4.56E+02	1.96E+02	1.39E+02	1.47E+03	1.05E+03	4.89E+02	3.10E+02	3.46E+03
Methyl tertiary-Butyl ether (MTBE)	-	2.20E+03	1.54E+02	1.04E+00	1.84E+02	2.04E+04	2.97E+02	1.69E+03	2.53E+02	3.31E+04	6.09E+02	3.21E+03	5.08E+02	6.27E+04
Trichloroethene	-	1.80E+00	2.83E+01	1.72E+02	1.62E+02	1.54E+03	8.38E+01	3.59E+02	3.40E+02	3.22E+03	1.44E+00	1.96E+02	7.95E+02	7.14E+03
Tetrachloroethene	-	3.60E+00	4.49E+00	1.79E+01	1.79E+01	4.24E+02	1.04E+01	4.02E+01	3.94E+01	9.51E+02	2.39E+01	8.21E+01	8.04E+01	2.18E+03
1,1,1-Trichloroethane	-	2.60E+01	3.39E+02	8.01E+00	8.77E+00	1.43E+03	7.89E+02	1.84E+01	1.89E+01	2.92E+03	1.62E+03	4.94E+01	3.94E+01	6.39E+03
1,1,1,2-Tetrachloroethane	-	1.40E+01	5.29E+00	1.54E+00	1.80E+00	2.60E+03	1.27E+01	3.56E+00	2.78E+00	6.02E+03	2.98E+01	8.29E+00	8.49E+00	1.40E+04
1,1,2,2-Tetrachloroethane	-	1.40E+01	2.81E+00	2.95E+00	1.64E+00	2.67E+03	5.09E+00	3.04E+00	3.47E+00	5.46E+03	1.26E+01	1.79E+01	7.87E+00	1.20E+04
Carbon Tetrachloride	-	5.50E+02	3.19E+04	5.39E+03	2.57E+02	1.52E+03	1.11E+00	5.69E+02	5.98E+02	3.32E+03	1.82E+01	1.89E+01	1.27E+01	7.54E+03
1,2-Dichloroethane	-	3.00E+01	2.13E+02	5.20E+03	7.19E+02	3.41E+03	3.79E+02	1.39E+02	1.98E+02	4.91E+03	1.09E+01	3.89E+02	1.89E+02	8.43E+03
Vinyl Chloride	-	1.90E+02	3.82E+03	7.79E+04	8.43E+04	1.36E+03	6.87E+03	1.06E+03	8.73E+04	1.76E+03	1.25E+02	1.53E+03	1.39E+03	2.69E+03
1,2,4-Trimethylbenzene	-	7.50E+02	NR	1.75E+00	NR	4.74E+02	NR	4.86E+00	NR	1.16E+03	NR	3.72E+00	NR	2.76E+03
1,3,5-Trimethylbenzene	(e)	4.70E+02	NR	NR	NR	2.30E+02	NR	NR	NR	5.52E+02	NR	NR	NR	1.30E+03
Semi-Volatile Organic Compounds														
Acenaphthene	-	3.26E+00	2.27E+02	4.86E+04	2.28E+02	5.70E+01	5.41E+02	1.18E+05	5.38E+02	1.41E+02	1.16E+03	2.88E+05	1.17E+05	3.36E+02
Acenaphthylene	-	4.20E+00	1.85E+02	4.59E+04	1.84E+02	8.61E+01	4.42E+02	1.11E+05	4.40E+02	2.12E+02	9.78E+02	2.53E+05	9.74E+02	5.06E+02
Acridene	-	2.10E+02	2.43E+03	1.59E+05	3.39E+03	1.17E+00	5.53E+02	3.77E+05	5.45E+03	2.91E+00	1.10E+04	8.76E+05	1.09E+04	6.96E+00
Benzo[a]anthracene	-	3.80E+03	1.01E+01	2.47E+01	7.18E+00	1.71E+00	1.42E+01	4.37E+01	1.07E+01	4.28E+00	1.89E+01	6.29E+01	1.39E+01	1.03E+01
Benzo[b]fluoranthene	-	2.00E+03	2.96E+00	1.89E+01	2.56E+00	1.22E+00	3.89E+00	2.13E+01	3.29E+00	3.04E+00	4.45E+00	2.22E+01	2.69E+00	7.29E+00
Benzo[g,h,i]perylene	-	2.80E+04	3.77E+02	1.87E+03	3.14E+02	1.54E+02	4.09E+02	1.94E+03	3.38E+02	3.85E+02	4.23E+02	1.97E+03	2.48E+02	9.23E+02
Benzo[k]fluoranthene	-	8.00E+04	8.92E+01	5.41E+02	7.86E+01	6.87E+01	1.10E+02	9.76E+02	9.22E+01	1.72E+00	1.21E+02	5.91E+02	1.00E+02	4.12E+00
Chrysene	-	2.00E+03	1.68E+01	1.19E+02	1.48E+01	4.40E+01	2.84E+01	1.49E+02	2.17E+01	1.10E+00	3.19E+01	1.66E+02	2.87E+01	2.64E+00
Dibenz[a,h]anthracene	-	8.00E+04	2.90E+01	1.45E+00	2.41E+01	3.93E+03	2.43E+01	1.64E+00	2.84E+01	9.82E+03	5.69E+01	1.74E+00	3.04E+01	2.36E+02
Fluoranthene	-	2.30E+01	2.87E+02	3.89E+04	2.85E+02	1.89E+01	5.69E+02	6.87E+04	5.60E+02	4.73E+01	9.00E+02	1.83E+05	8.90E+02	1.13E+02
Fluorene	-	1.80E+00	1.77E+02	6.20E+03	1.72E+02	3.09E+01	4.13E+02	1.53E+04	4.07E+02	7.65E+01	8.86E+02	3.69E+04	8.78E+02	1.83E+02
Indeno[1,2,3-cd]pyrene	-	2.00E+04	3.09E+01	2.12E+02	2.78E+01	6.13E+02	4.22E+01	2.38E+02	3.59E+01	1.53E+01	4.92E+01	2.50E+02	4.11E+01	3.68E+01
Phenanthrene	-	5.30E+01	8.85E+01	7.17E+03	9.72E+01	3.60E+01	2.24E+02	1.76E+04	2.22E+02	8.96E+01	4.48E+02	4.07E+04	4.43E+02	2.14E+02
Pyrene	-	1.30E+01	6.29E+02	8.79E+04	6.20E+02	2.20E+00	1.25E+02	2.04E+03	1.24E+03	5.49E+00	2.05E+03	4.23E+05	2.04E+03	1.32E+01
Benzo[a]pyrene	(a)	3.80E+03	4.91E+00	3.51E+01	4.30E+00	9.11E+01	4.91E+00	3.77E+01	4.34E+00	2.28E+00	4.91E+00	3.89E+01	4.39E+00	5.46E+00
Naphthalene	-	1.80E+01	2.78E+01	2.39E+01	1.37E+01	7.64E+01	8.89E+01	3.56E+01	3.04E+01	1.83E+02	1.50E+02	1.21E+02	2.96E+01	4.32E+02
Phenol	-	-	1.80E+02	4.96E+02	1.30E+02	2.42E+04	2.98E+02	8.99E+02	8.79E+02	3.81E+04	5.89E+02	1.19E+03	2.89E+02	7.03E+04

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE



Table 5

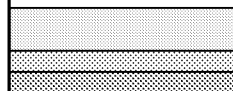
Human Health Generic Assessment Criteria by Pathway for Residential With Home-Grown Produce Scenario

Compound	Notes	GrAC (mg/l)	SAC Appropriate to Pathway SOM 1% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 2.5% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 6% (mg/kg)			Soil Saturation Limit (mg/kg)
			Oral	Inhalation	Combined		Oral	Inhalation	Combined		Oral	Inhalation	Combined	
Total Petroleum Hydrocarbons														
Aliphatic hydrocarbons <EC ₉ -EC ₃		1.00E+01	4.96E+03	4.24E+01	4.23E+01	3.04E+02	1.12E+04	7.79E+01	7.78E+01	5.58E+02	2.41E+04	1.81E+02	1.80E+02	1.15E+03
Aliphatic hydrocarbons >EC ₉ -EC ₅		5.40E+00	1.46E+04	1.04E+02	1.03E+02	1.44E+02	3.27E+04	3.31E+02	3.31E+02	3.22E+02	6.47E+04	3.89E+02	3.88E+02	7.36E+02
Aliphatic hydrocarbons >EC ₉ -EC ₁₀		2.30E+01	1.45E+03	2.66E+03	3.87E+01	7.77E+01	2.42E+03	6.59E+01	6.50E+01	1.90E+02	3.29E+03	1.36E+02	1.34E+02	4.51E+02
Aliphatic hydrocarbons >EC ₁₀ -EC ₁₂		3.40E+02	3.47E+03	1.33E+02	1.32E+02	4.75E+01	3.98E+03	3.31E+02	3.24E+02	1.18E+02	4.23E+03	7.93E+02	7.52E+02	2.83E+02
Aliphatic hydrocarbons >EC ₁₇ -EC ₁₆		7.60E+04	4.36E+03	1.11E+03	1.03E+03	2.37E+01	4.40E+03	2.78E+03	2.22E+03	5.91E+01	4.41E+03	6.67E+03	3.47E+03	1.42E+02
Aliphatic hydrocarbons >EC ₁₆ -EC ₃₅	(b)	-	5.28E+04	NR	NR	8.48E+00	6.95E+04	NR	NR	2.12E+01	7.94E+04	NR	NR	5.09E+01
Aliphatic hydrocarbons >EC ₃₅ -EC ₄₄	(b)	-	5.28E+04	NR	NR	8.48E+00	6.95E+04	NR	NR	2.12E+01	7.94E+04	NR	NR	5.09E+01
Aromatic hydrocarbons >EC ₉ -EC ₉ (styrene)		7.40E+00	1.67E+01	5.22E+02	1.05E+01	6.26E+02	2.51E+01	1.20E+03	2.46E+01	1.44E+03	5.73E+01	3.79E+03	5.80E+01	3.35E+03
Aromatic hydrocarbons >EC ₉ -EC ₁₀		7.40E+00	6.71E+01	4.74E+04	3.44E+01	6.13E+02	1.96E+02	1.16E+02	8.39E+01	1.50E+03	2.81E+03	2.77E+02	1.69E+02	3.58E+02
Aromatic hydrocarbons >EC ₁₀ -EC ₁₂		2.50E+01	8.17E+01	2.59E+02	7.42E+01	3.64E+02	1.90E+02	6.39E+02	1.74E+02	8.99E+02	3.95E+02	1.58E+03	3.67E+02	2.15E+03
Aromatic hydrocarbons >EC ₁₂ -EC ₁₃		5.60E+00	1.42E+02	2.85E+03	1.41E+02	1.69E+02	3.18E+02	7.07E+03	3.14E+02	4.19E+02	6.06E+02	1.68E+04	6.03E+02	1.00E+03
Aromatic hydrocarbons >EC ₁₃ -EC ₂₁	(b)	-	2.46E+02	NR	NR	5.37E+01	4.84E+02	NR	NR	1.34E+02	7.69E+02	NR	NR	3.21E+02
Aromatic hydrocarbons >EC ₂₁ -EC ₂₅	(b)	-	8.72E+02	NR	NR	4.83E+00	1.10E+03	NR	NR	1.21E+01	1.22E+03	NR	NR	2.90E+01
Aromatic hydrocarbons >EC ₂₅ -EC ₄₄	(b)	-	8.72E+02	NR	NR	4.83E+00	1.10E+03	NR	NR	1.21E+01	1.22E+03	NR	NR	2.90E+01

Notes:

EC - equivalent carbon; GrAC - groundwater assessment criteria; SAC - soil assessment criteria.

The CLEA model output is colour coded depending upon whether the soil saturation limit has been exceeded.



Calculated SAC exceeds soil saturation limit and may significantly affect the interpretation of any exceedances since the contribution of the indoor and outdoor vapour pathway to total exposure is >10%. This shading has also been used for the RSCA output where the theoretical solubility limit has been exceeded.

Calculated SAC exceeds soil saturation limit but will not affect the SSV significantly since the contribution of the indoor and outdoor vapour pathway to total exposure is <10%.

Calculated SAC does not exceed the soil saturation limit.

For consistency where the theoretical solubility limit within RSCA has been exceeded in production of the GrAC, these cells have also been hatched red.

The SAC for organic compounds are dependent upon soil organic matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58. 1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.

SAC for TPH fractions, polycyclic aromatic hydrocarbons, MTBE, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway (Section 10.1.1, SR3)

(a) SAC for arsenic, benzenes, benzo(a)pyrene, cadmium, chromium VI and lead are derived using the C4SL toxicology data.

(b) SAC for selenium should not include the inhalation pathway as no expert group HCV has been derived; aliphatic and aromatic hydrocarbons >EC16 should not include inhalation pathway due to their non-volatile nature and inhalation exposure being minimal (oral, dermal and inhalation exposure is compared to the oral HCV); arsenic should only be based on oral contribution (rather than combined) owing to the relative small contribution from inhalation in accordance with the SGV report. The Oral SAC should be adopted for zinc and benzo(a)pyrene.

(c) SAC for CrIII should be based on the lower of the oral and inhalation SAC (see LQM/CIEH 2015 Section 6.8)

(d) SAC for elemental mercury, chromium VI and nickel should be based on the inhalation pathway only.

(e) SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4 trimethylbenzene may be used.

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE



Table 6
Human Health Generic Assessment Criteria for Residential with home-grown produce

Compound	GrAC for Groundwater (mg/l)	SAC for Soil SOM 1% (mg/kg)	SAC for Soil SOM 2.5% (mg/kg)	SAC for Soil SOM 6% (mg/kg)
Metals				
Arsenic	-	37	37	37
Cadmium	-	30	30	30
Chromium (III) - trivalent	-	910	910	910
Chromium (VI) - hexavalent	-	21	21	21
Copper	-	2,500	2,500	2,500
Lead	-	200	200	200
Elemental Mercury (Hg ⁰)	0.0094	0.2	0.6	1.2
Inorganic Mercury (Hg ²⁺)	-	39	39	39
Methyl Mercury (Hg ⁴⁺)	20	10	10	10
Nickel	-	130	130	130
Selenium	-	258	258	258
Zinc	-	3,900	3,900	3,900
Cyanide	-	3.8	3.8	3.8
Volatile Organic Compounds				
Benzene	7.2	0.20	0.41	0.87
Toluene	590	130	300	680
Ethylbenzene	180	50	110	260
Xylene - m	84	59	140	327
Xylene - o	100	61	143	332
Xylene - p	87	57	133	310
Total xylene	84	57	133	310
Methyl tertiary-Butyl ether (MTBE)	2200	130	250	510
Trichloroethene	1.8	0.02	0.03	0.08
Tetrachloroethene	3.6	0.2	0.4	0.9
1,1,1-Trichloroethane	26	9	18	39
1,1,1,2-Tetrachloroethane	14	1.2	2.8	6.5
1,1,2,2-Tetrachloroethane	14	1.6	3.5	7.7
Carbon Tetrachloride	0.055	0.026	0.056	0.127
1,2-Dichloroethane	0.3	0.007	0.011	0.019
Vinyl Chloride	0.019	0.0006	0.0009	0.0014
1,2,4-Trimethylbenzene	0.075	1.8	4.3	9.7
1,3,5-Trimethylbenzene	0.047	NR	NR	NR
Semi-Volatile Organic Compounds				
Acenaphthene	3.2	230	540	1,170
Acenaphthylene	4.2	180	440	970
Anthracene	0.021	2,400	5,500	10,900
Benzo(a)anthracene	0.0038	7	11	13
Benzo(b)fluoranthene	0.002	2.6	3.3	3.7
Benzo(g,h,i)perylene	0.00026	310	340	350
Benzo(k)fluoranthene	0.0008	77	92	100
Chrysene	0.002	15	22	27
Dibenzo(a,h)anthracene	0.0006	0.24	0.28	0.30
Fluoranthene	0.23	280	560	900
Fluorene	1.9	170	410	880
Indeno(1,2,3-cd)pyrene	0.0002	27	36	41
Phenanthrene	0.53	100	220	440
Pyrene	0.13	620	1,240	2,040
Benzo(a)pyrene	0.0038	5	5	5
Naphthalene	19	13	30	71
Phenol	-	120	210	390
Total Petroleum Hydrocarbons				
Aliphatic hydrocarbons EC ₅ -EC ₈	10	42	78	160
Aliphatic hydrocarbons >EC ₈ -EC ₈	5.4	100	230	530
Aliphatic hydrocarbons >EC ₈ -EC ₁₀	0.23	27	65	154
Aliphatic hydrocarbons >EC ₁₀ -EC ₁₂	0.034	130 (48)	320 (118)	750 (283)
Aliphatic hydrocarbons >EC ₁₂ -EC ₁₆	0.00076	1,000 (24)	2,200 (59)	3,500 (142)
Aliphatic hydrocarbons >EC ₁₆ -EC ₃₅	-	53,000 (8)	70,000 (21)	79,000
Aliphatic hydrocarbons >EC ₃₅ -EC ₄₄	-	53,000 (8)	70,000 (21)	79,000
Aromatic hydrocarbons >EC ₈ -EC ₉ (styrene)	7.4	11	25	56
Aromatic hydrocarbons >EC ₉ -EC ₁₀	7.4	34	83	189
Aromatic hydrocarbons >EC ₁₀ -EC ₁₂	25	74	174	367
Aromatic hydrocarbons >EC ₁₂ -EC ₁₆	5.8	100	300	600
Aromatic hydrocarbons >EC ₁₆ -EC ₂₁	-	200	500	800
Aromatic hydrocarbons >EC ₂₁ -EC ₃₅	-	900	1,100	1,200
Aromatic hydrocarbons >EC ₃₅ -EC ₄₄	-	900	1,100	1,200
Minerals				
Asbestos	-	No asbestos detected with ID or <0.001% dry weight ¹		

Notes:

¹ Generic assessment criteria not calculated owing to low volatility of substance and therefore no pathway, or an absence of toxicological data.

NR - SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4-trimethylbenzene may be used

EC - equivalent carbon, GrAC - groundwater assessment criteria, SAC - soil assessment criteria.

¹ LOD for weight of asbestos per unit weight of soil calculated on a dry weight basis using PLM, handpicking and gravimetry.

The SAC for organic compounds are dependent on Soil Organic Matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58.

1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.

SAC for TPH fractions, polycyclic aromatic hydrocarbons, MTBE, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway, section 10.1.1, SR3.

(VALUE IN BRACKETS) The SAC has been set as the model calculated SAC with the saturation limit shown in brackets.

RSK has adopted an approach for petroleum hydrocarbons in accordance with LQM/CIEH whereby the concentration modelled for each petroleum hydrocarbon fraction has been tabulated as the SAC with the corresponding solubility or vapour saturation limits given in brackets.

(VALUE IN BRACKETS) For consistency where the GrAC exceeds the solubility limit, GrAC has been set at the solubility limit. The GrAC is conservative since concentrations of the chemical are very unlikely to be at sufficient concentration to result in an exceedance of the health criteria value at the point of exposure (i.e. indoor air) provided free-phase product is absent.



APPENDIX E

VALIDATION SAMPLING RESULTS SINCE PHASE 1A REPORTING

FINAL ANALYTICAL TEST REPORT SUPPLEMENT TO TEST REPORT 17/02965/1

Envirolab Job Number: 17/02965
Issue Number: 2

Date: 17 May, 2017

Client: RSK Environment Ltd Romsey
Unit 18 Basepoint Abbey Enterprise Centre
Premier Way
Romsey
Hampshire
SO51 9AQ

Project Manager: Cathy Latimer/Craig Lewis
Project Name: Former West End Nursery, Angmering
Project Ref: 27621
Order No: N/A
Date Samples Received: 27/04/17
Date Instructions Received: 28/04/17
Date Analysis Completed: 10/05/17

Prepared by:

Approved by:

Melanie Marshall
Laboratory Coordinator

Richard Wong
Client Service Manager

Envirolab Job Number: 17/02965

Client Project Name: Former West End Nursery, Angmering

Client Project Ref: 27621

Lab Sample ID	17/02965/1	17/02965/2	17/02965/3	17/02965/4	17/02965/5	17/02965/6	17/02965/7	17/02965/8	Units	Method ref
Client Sample No										
Client Sample ID	VPOS1	VPOS2	VPOS3	VPOS4	TPBOILER1	TPBOILER2	TPBOILER3	TPBOILER5		
Depth to Top	0.3	0.2	0.1	0.4	0.3	0.4	0.7	0.5		
Depth To Bottom										
Date Sampled	24-Apr-17	24-Apr-17	24-Apr-17	24-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5	5A	5A	5A	6A	6AE	6AE	6A		
% Stones >10mm _A [#]	<0.1	27.4	11.7	25.4	2.8	11.9	21.7	21.8	% w/w	A-T-044
pH _D ^{M#}	6.60	7.66	7.81	7.66	-	-	-	-	pH	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.14	0.07	0.11	0.06	-	-	-	-	g/l	A-T-026s
Sulphate (acid soluble) _D ^{M#}	450	<200	350	<200	-	-	-	-	mg/kg	A-T-028s
Arsenic _D ^{M#}	2	4	<1	<1	-	-	-	-	mg/kg	A-T-024s
Cadmium _D ^{M#}	0.6	0.8	0.6	0.5	-	-	-	-	mg/kg	A-T-024s
Copper _D ^{M#}	13	9	11	7	-	-	-	-	mg/kg	A-T-024s
Chromium _D ^{M#}	25	17	23	19	-	-	-	-	mg/kg	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1	-	-	-	-	mg/kg	A-T-040s
Lead _D ^{M#}	14	10	16	10	-	-	-	-	mg/kg	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	-	-	-	-	mg/kg	A-T-024s
Nickel _D ^{M#}	25	23	19	18	-	-	-	-	mg/kg	A-T-024s
Selenium _D	<1	<1	<1	<1	-	-	-	-	mg/kg	A-T-024s
Zinc _D ^{M#}	47	38	50	34	-	-	-	-	mg/kg	A-T-024s

Envirolab Job Number: 17/02965

Client Project Name: Former West End Nursery, Angmering

Client Project Ref: 27621

Lab Sample ID	17/02965/1	17/02965/2	17/02965/3	17/02965/4	17/02965/5	17/02965/6	17/02965/7	17/02965/8	Units	Method ref
Client Sample No										
Client Sample ID	VPOS1	VPOS2	VPOS3	VPOS4	TPBOILER1	TPBOILER2	TPBOILER3	TPBOILER5		
Depth to Top	0.3	0.2	0.1	0.4	0.3	0.4	0.7	0.5		
Depth To Bottom										
Date Sampled	24-Apr-17	24-Apr-17	24-Apr-17	24-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5	5A	5A	5A	6A	6AE	6AE	6A		
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD		A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Envirolab Job Number: 17/02965

Client Project Name: Former West End Nursery, Angmering

Client Project Ref: 27621

Lab Sample ID	17/02965/1	17/02965/2	17/02965/3	17/02965/4	17/02965/5	17/02965/6	17/02965/7	17/02965/8	Units	Method ref
Client Sample No										
Client Sample ID	VPOS1	VPOS2	VPOS3	VPOS4	TPBOILER1	TPBOILER2	TPBOILER3	TPBOILER5		
Depth to Top	0.3	0.2	0.1	0.4	0.3	0.4	0.7	0.5		
Depth To Bottom										
Date Sampled	24-Apr-17	24-Apr-17	24-Apr-17	24-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5	5A	5A	5A	6A	6AE	6AE	6A		
PAH 16										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	0.02	0.07	0.23	0.29	mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	0.02	mg/kg	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02	<0.02	0.12	0.31	0.33	mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	0.48	1.21	1.06	mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	0.36	1.17	0.94	mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05	0.48	1.50	1.13	mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05	0.28	0.79	0.66	mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07	0.14	0.44	0.34	mg/kg	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	<0.06	<0.06	<0.06	0.53	1.58	1.15	mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	0.15	0.12	mg/kg	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	0.08	<0.08	<0.08	1.11	3.26	2.38	mg/kg	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	0.04	0.06	0.22	0.25	mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	0.03	<0.03	<0.03	0.31	0.91	0.78	mg/kg	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.14	0.05	mg/kg	A-T-019s
Phenanthrene _A ^{M#}	<0.03	<0.03	0.05	<0.03	0.09	0.49	0.84	1.47	mg/kg	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	0.08	<0.07	<0.07	1.06	2.99	2.23	mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	<0.08	<0.08	0.26	<0.08	0.16	5.60	15.8	13.2	mg/kg	A-T-019s

Envirolab Job Number: 17/02965

Client Project Name: Former West End Nursery, Angmering

Client Project Ref: 27621

Lab Sample ID	17/02965/1	17/02965/2	17/02965/3	17/02965/4	17/02965/5	17/02965/6	17/02965/7	17/02965/8	Units	Method ref
Client Sample No										
Client Sample ID	VPOS1	VPOS2	VPOS3	VPOS4	TPBOILER1	TPBOILER2	TPBOILER3	TPBOILER5		
Depth to Top	0.3	0.2	0.1	0.4	0.3	0.4	0.7	0.5		
Depth To Bottom										
Date Sampled	24-Apr-17	24-Apr-17	24-Apr-17	24-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17	25-Apr-17		
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES		
Sample Matrix Code	5	5A	5A	5A	6A	6AE	6AE	6A		
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C8-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Ali >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	<0.1	mg/kg	A-T-023s
Ali >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	8.9	<0.1	mg/kg	A-T-023s
Ali >C16-C21 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	15.8	<0.1	mg/kg	A-T-023s
Ali >C21-C35 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	4.5	<0.1	mg/kg	A-T-023s
Total Aliphatics _A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	30.6	<0.1	mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C8-C9 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
Aro >C9-C10 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	mg/kg	A-T-022s
Aro >C10-C12 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.1	<0.1	mg/kg	A-T-023s
Aro >C12-C16 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	8.8	6.3	mg/kg	A-T-023s
Aro >C16-C21 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	14.6	20.1	mg/kg	A-T-023s
Aro >C21-C35 _A [#]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	8.7	37.7	mg/kg	A-T-023s
Total Aromatics _A	<0.1	<0.1	<0.1	<0.1	<0.1	1.3	34.1	64.1	mg/kg	A-T-023s
TPH (Ali & Aro) _A	<0.1	<0.1	<0.1	<0.1	<0.1	1.3	64.8	64.1	mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	A-T-022s

REPORT NOTES

General:

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All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Final Test Report

Envirolab Job Number:	17/05615	Date:	1-Sep-17
Issue Number:	1		
Client:	RSK Environment Ltd Southampton Unit 26 Basepoint Abbey Enterprise Centre Premier Way Romsey, Hampshire, UK, SO51 9AQ		
Project Manager:	Catherine Latimer/Craig Lewis		
Project Name:	Angmering		
Project Ref:	27621		
Order No:	N/A		
Date Samples Received:	18-Aug-17		
Date Instructions Received:	18-Aug-17		
Date Analysis Completed:	1-Sep-17		

Notes - Soil analysis

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

Superscript "M" indicates method accredited to MCERTS.

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Superscript # indicates method accredited to ISO 17025.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

Prepared by:

Approved by:

Melanie Marshall
Laboratory Coordinator

Gill Walker
Laboratory Manager



Sample Details					Landfill Waste Acceptance Criteria Limits			
Lab Sample ID	Method	ISO17025	MCERTS	17/05615/1				
Client Sample Number					Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill	
Client Sample ID				PIB/TV				
Depth to Top				1.5				
Depth to Bottom								
Date Sampled				15/08/2017				
Sample Type				Soil				
Sample Matrix Code				6A				
Solid Waste Analysis								
pH (pH Units) _D	A-T-031	Y	Y	8.71	-	>6	-	
ANC to pH 4 (mol/kg) _D	A-T-ANC	N	N	0.66	-	to be evaluated	to be evaluated	
ANC to pH 6 (mol/kg) _D	A-T-ANC	N	N	0.17	-	to be evaluated	to be evaluated	
Loss on Ignition (%) _D	A-T-030	Y	N	6.8	-	-	10	
Total Organic Carbon (%) _D	A-T-032	Y	Y	4.88	3	5	6	
PAH Sum of 17 (mg/kg) _A	A-T-019	N	N	854	100	-	-	
Mineral Oil (mg/kg) _A	A-T-007	N	N	1900	500	-	-	
Sum of 7 PCBs (mg/kg) _D	A-T-004	N	N	0.026	1	-	-	
Sum of BTEX (mg/kg) _A	A-T-022	N	N	0.38	6	-	-	
Eluate Analysis				10:1 mg/l	10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic	A-T-025	Y	N	0.002	0.020	0.5	2	25
Barium	A-T-025	Y	N	0.067	0.670	20	100	300
Cadmium	A-T-025	Y	N	<0.001	<0.01	0.04	1	5
Chromium	A-T-025	Y	N	<0.001	<0.01	0.5	10	70
Copper	A-T-025	Y	N	0.003	0.030	2	50	100
Mercury	A-T-025	Y	N	<0.0005	<0.005	0.01	0.2	2
Molybdenum	A-T-025	Y	N	0.001	0.010	0.5	10	30
Nickel	A-T-025	Y	N	<0.001	<0.01	0.4	10	40
Lead	A-T-025	Y	N	<0.001	<0.01	0.5	10	50
Antimony	A-T-025	Y	N	<0.001	<0.01	0.06	0.7	5
Selenium	A-T-025	Y	N	<0.001	<0.01	0.1	0.5	7
Zinc	A-T-025	Y	N	0.013	0.130	4	50	200
Chloride	A-T-026	Y	N	<1.00	<10	800	15000	25000
Fluoride	A-T-026	Y	N	<5.00	<1	10	150	500
Sulphate as SO ₄	A-T-026	Y	N	90	897	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	140	1400	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<0.2	<200	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	Y	6.6				
Conductivity (µS/cm)	A-T-037	N	N	279				
Mass Sample (kg)				0.195				
Dry Matter (%)	A-T-044	N	N	89.8				
Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation								

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 17/05615
Issue Number: 1

Date: 14 September, 2017

Client: RSK Environment Ltd Southampton
Unit 26
Basepoint Abbey Enterprise Centre
Premier Way
Romsey,
Hampshire
UK
SO51 9AQ

Project Manager: Catherine Latimer/Craig Lewis
Project Name: Angmering
Project Ref: 27621
Order No: N/A
Date Samples Received: 18/08/17
Date Instructions Received: 18/08/17
Date Analysis Completed: 14/09/17

Prepared by:

Approved by:

Gill Walker
Laboratory Manager

John Gustafson
Director

Envirolab Job Number: 17/05615

Client Project Name: Angmering

Client Project Ref: 27621

Lab Sample ID	17/05615/1	17/05615/2							Units	Method ref
Client Sample No										
Client Sample ID	PIB/TV	PIB/TVB1								
Depth to Top	1.50	2.00								
Depth To Bottom										
Date Sampled	15-Aug-17	15-Aug-17								
Sample Type	Soil	Soil								
Sample Matrix Code	6A	6A								
% Stones >10mm _A	<0.1	<0.1							% w/w	A-T-044

Envirolab Job Number: 17/05615

Client Project Name: Angmering

Client Project Ref: 27621

Lab Sample ID	17/05615/1	17/05615/2							Units	Method ref
Client Sample No										
Client Sample ID	PIB/TV	PIB/TVB1								
Depth to Top	1.50	2.00								
Depth To Bottom										
Date Sampled	15-Aug-17	15-Aug-17								
Sample Type	Soil	Soil								
Sample Matrix Code	6A	6A								
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	Amosite & Chrysotile	Chrysotile								A-T-045
Asbestos Matrix (microscope) _A	Loose Fibres	Loose Fibres								A-T-045
Asbestos ACM - Suitable for Water Absorption Test?	N/A	N/A								
Asbestos in Soil Quantification % (Hand Picking & Weighing)										
Asbestos in soil % composition (hand picking and weighing) ₀	<0.001	<0.001							% w/w	A-T-054

Envirolab Job Number: 17/05615

Client Project Name: Angmering

Client Project Ref: 27621

Lab Sample ID	17/05615/1	17/05615/2							Units	Method ref
Client Sample No										
Client Sample ID	PIB/TV	PIB/TVB1								
Depth to Top	1.50	2.00								
Depth To Bottom										
Date Sampled	15-Aug-17	15-Aug-17								
Sample Type	Soil	Soil								
Sample Matrix Code	6A	6A								
PAH 16										
Acenaphthene _A ^{M#}	33.3	0.07							mg/kg	A-T-019s
Acenaphthylene _A ^{M#}	<1.00	0.01							mg/kg	A-T-019s
Anthracene _A ^{M#}	12.4	0.11							mg/kg	A-T-019s
Benzo(a)anthracene _A ^{M#}	<4.00	0.63							mg/kg	A-T-019s
Benzo(a)pyrene _A ^{M#}	<4.00	0.73							mg/kg	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<5.00	0.93							mg/kg	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<5.00	0.47							mg/kg	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<7.00	0.28							mg/kg	A-T-019s
Chrysene _A ^{M#}	<6.00	0.61							mg/kg	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<4.00	0.11							mg/kg	A-T-019s
Fluoranthene _A ^{M#}	<8.00	0.91							mg/kg	A-T-019s
Fluorene _A ^{M#}	78.4	0.17							mg/kg	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<3.00	0.51							mg/kg	A-T-019s
Naphthalene _A ^{M#}	591	0.09							mg/kg	A-T-019s
Phenanthrene _A ^{M#}	102	0.57							mg/kg	A-T-019s
Pyrene _A ^{M#}	15.3	1.19							mg/kg	A-T-019s
PAH (total 16) _A ^{M#}	853	7.38							mg/kg	A-T-019s

Envirolab Job Number: 17/05615

Client Project Name: Angmering

Client Project Ref: 27621

Lab Sample ID	17/05615/1	17/05615/2								
Client Sample No										
Client Sample ID	PIB/TV	PIB/TVB1								
Depth to Top	1.50	2.00								
Depth To Bottom										
Date Sampled	15-Aug-17	15-Aug-17								
Sample Type	Soil	Soil								
Sample Matrix Code	6A	6A								
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Ali >C6-C8 _A [#]	0.06	<0.01							mg/kg	A-T-022s
Ali >C8-C10 _A [#]	0.32	<0.01							mg/kg	A-T-022s
Ali >C10-C12 _A [#]	454	<0.1							mg/kg	A-T-023s
Ali >C12-C16 _A [#]	1240	3.4							mg/kg	A-T-023s
Ali >C16-C21 _A [#]	1020	10.3							mg/kg	A-T-023s
Ali >C21-C35 _A [#]	199	16.1							mg/kg	A-T-023s
Total Aliphatics _A	2920	29.8							mg/kg	A-T-023s
Aro >C5-C7 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01							mg/kg	A-T-022s
Aro >C8-C9 _A [#]	0.23	<0.01							mg/kg	A-T-022s
Aro >C9-C10 _A [#]	5.94	<0.01							mg/kg	A-T-022s
Aro >C10-C12 _A [#]	376	4.5							mg/kg	A-T-023s
Aro >C12-C16 _A [#]	2090	23.3							mg/kg	A-T-023s
Aro >C16-C21 _A [#]	1160	17.4							mg/kg	A-T-023s
Aro >C21-C35 _A [#]	109	0.8							mg/kg	A-T-023s
Total Aromatics _A	3740	46.0							mg/kg	A-T-023s
TPH (Ali & Aro) _A	6650	75.8							mg/kg	A-T-023s
BTEX - Benzene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01							mg/kg	A-T-022s
BTEX - Ethyl Benzene _A [#]	0.06	<0.01							mg/kg	A-T-022s
BTEX - m & p Xylene _A [#]	0.18	<0.01							mg/kg	A-T-022s
BTEX - o Xylene _A [#]	0.16	<0.01							mg/kg	A-T-022s
MTBE _A [#]	<0.01	<0.01							mg/kg	A-T-022s

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A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Envirolab Deviating Samples Report



Client: RSK Environment Ltd South
Romsey,, Hampshire, UK, SO51 9AQ

17/05615

Date Instructions Received: 18/08/2017 (am)

Project: Angmering

Clients Project No: 27621

Lab Sample ID	17/05615/1	17/05615/2
Client Sample No		
Client Sample ID/Depth	PIB/TV 1.50m	PIB/TVB1 2.00m
Date Sampled	15/08/17	15/08/17
Deviation Code		
F	✓	✓

Key

F Maximum holding time exceeded between sampling date and analysis for analytes listed below

HOLDING TIME EXCEEDANCES

Lab Sample ID	17/05615/1	17/05615/2
Client Sample No		
Client Sample ID/Depth	PIB/TV 1.50m	PIB/TVB1 2.00m
Date Sampled	15/08/17	15/08/17
PAH-16MS	✓	✓
VPH CWG		✓



APPENDIX F

TRIAL PIT LOGS



FINAL
TRIAL PIT LOG

Contract: Land at West End Nursery, Angmering			Client: CALA Homes (South Home Counties) Ltd		Trial Pit: VPOS1
Contract Ref: 27621	Start: 24.04.17 End: 24.04.17	Ground Level: ---	Co-ordinates: ---	Sheet: 1 of 1	

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.30	1	ES				Light brown sandy gravelly CLAY. Gravel is fine to coarse and angular to subrounded flint. (REWORKED RIVER TERRACE DEPOSITS)	(0.60)	
						Trial pit terminated at 0.60 m as geo marker encountered.	0.60	

General Remarks					
1. Geomembrane encountered at 0.6 m.					
All dimensions in metres			Scale:	1:25	
Method Hand dug	Plant Used:	Hand tools		Logged By: CLewis	Checked By:



FINAL TRIAL PIT LOG

Contract: Land at West End Nursery, Angmering			Client: CALA Homes (South Home Counties) Ltd		Trial Pit: VPOS2
Contract Ref: 27621	Start: 24.04.17 End: 24.04.17	Ground Level: ---	Co-ordinates: ---	Sheet: 1 of 1	

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.20	1	ES				Light brown sandy gravelly CLAY. Gravel is fine to coarse and angular to subrounded flint. (REWORKED RIVER TERRACE DEPOSITS)	(0.60)	
						Trial pit terminated at 0.60 m as geo marker encountered.	0.60	

General Remarks					
1. Geomembrane encountered at 0.6 m.					
All dimensions in metres			Scale:	1:25	
Method Hand dug	Plant Used:	Hand tools		Logged By: CLewis	Checked By:



FINAL TRIAL PIT LOG

Contract: Land at West End Nursery, Angmering		Client: CALA Homes (South Home Counties) Ltd		Trial Pit: VPOS3	
Contract Ref: 27621	Start: 24.04.17 End: 24.04.17	Ground Level: ---	Co-ordinates: ---	Sheet: 1 of 1	

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.10	1	ES				Light brown sandy gravelly CLAY. Gravel is fine to coarse and angular to subrounded flint. (REWORKED RIVER TERRACE DEPOSITS)	(0.60)	
						Trial pit terminated at 0.60 m as geo marker encountered.	0.60	

General Remarks

1. Geomembrane encountered at 0.6 m.

All dimensions in metres

Scale:

1:25

Method

Hand dug

Plant
Used:

Hand tools

Logged
By:

CLewis

Checked
By:





FINAL TRIAL PIT LOG

Contract: Land at West End Nursery, Angmering		Client: CALA Homes (South Home Counties) Ltd		Trial Pit: VPOS4	
Contract Ref: 27621		Start: 24.04.17 End: 24.04.17	Ground Level: ---	Co-ordinates: ---	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00	1	ES				Light brown sandy gravelly CLAY. Gravel is fine to coarse and angular to subrounded flint. (REWORKED RIVER TERRACE DEPOSITS)	(0.60)	
						Trial pit terminated at 0.60 m as geo marker encountered.	0.60	

General Remarks

1. Geomembrane encountered at 0.6 m.

All dimensions in metres

Scale:

1:25

Method

Hand dug

Plant
Used:

Hand tools

Logged
By:

CLewis

Checked
By:



APPENDIX G

PHOTOGRAPHIC LOG



Report No: 27621 R09

PHOTOGRAPHIC LOG

Client: CALA Homes

Site Location: Former West End Nursery,
Angmering

Central POS

Photo No.
1

Date:
24/4/17

Direction Photo
Taken:

N/A

Description:

Location POS1, geo-
marker membrane
noted at 0.6m bgl.



Photo No.
2

Date:
24/04/17

Direction Photo
Taken:

N/A

Description:

Capping layer
thickness noted at
0.6m bgl in validation
location POS1.



		Report No: 27621 R09	PHOTOGRAPHIC LOG
Client: CALA Homes		Site Location: Former West End Nursery, Angmering	Central POS
Photo No. 3	Date: 24/4/17		
Direction Photo Taken: N/A			
Description: Arising from validation hole POS1.			

Photo No. 4	Date: 24/04/17	
Direction Photo Taken: N/A		
Description: Geo-marker membrane noted at 0.6m bgl in validation location POS2.		

		Report No: 27621 R09	PHOTOGRAPHIC LOG
Client: CALA Homes		Site Location: Former West End Nursery, Angmering	Central POS
Photo No. 5	Date: 24/4/17		
Direction Photo Taken: N/A			
Description: Capping layer thickness noted at 0.6m bgl in validation location POS2.			

Photo No. 6	Date: 24/04/17	
Direction Photo Taken: N/A		
Description: Arising from validation location POS3.		

		Report No: 27621 R09	PHOTOGRAPHIC LOG
Client: CALA Homes		Site Location: Former West End Nursery, Angmering	Central POS
Photo No. 7	Date: 24/04/17		
Direction Photo Taken: N/A			
Description: Geo-marker membrane noted at 0.6m bgl in validation location POS3.			

Photo No. 8	Date: 24/04/17	
Direction Photo Taken: N/A		
Description: Capping layer thickness noted at 0.6m bgl in validation location POS3.		



Report No: 27621 R09

PHOTOGRAPHIC LOG

Client: CALA Homes

Site Location: Former West End Nursery,
Angmering

Central POS

Photo No.
9

Date:
24/04/17

Direction Photo
Taken:

N/A

Description:

Arising from validation
location POS3.



Photo No.
10

Date:
24/04/17

Direction Photo
Taken:

N/A

Description:

Geo-marker
membrane membrane
noted at 0.6m bgl in
validation location
POS4.



		Report No: 27621 R09	PHOTOGRAPHIC LOG
Client: CALA Homes		Site Location: Former West End Nursery, Angmering	Central POS
Photo No. 11	Date: 24/04/17		
Direction Photo Taken: N/A			
Description: Capping layer thickness noted at 0.6m bgl in validation location POS4.			

Photo No. 12	Date: 24/04/17	
Direction Photo Taken: N/A		
Description: Arising from validation location POS4.		



APPENDIX H

IMPORTED TOPSOIL TICKETS

Our Ref: 23571/CH/CD/609

Email

01st March 2017,

FAO Mr. S Lee

CALA Homes (South Home Counties) Limited
Tilford House
Farnham Business Park
Weydon Lane
Farnham
Surrey
GU9 8QT

Dear Sir

Re: Contract at Angmering

With reference to the above contract we attach certificate for imported topsoil for the bund.

Assuring you of our best attention at all times.

Yours faithfully,

Chas Howe

BLAZE CONSTRUCTION LTD

Enc

cc: Miss Elaine Broderick, Mr Sean Alger

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1331

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 02-03-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITMORE LANE

WORTHING

Description of material: TOPSOIL

Cubic Metres Collected: Tonnes Collected: 20

EW Code(s):

Vehicle Reg. No: WNC1 JXK

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: 50 CALA HOMES ROUNDSTONE LANE

ANGMERING BN16 4AX

Driver Signature

entirely on their own responsibility

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titmore Lane, Worthing, West Sussex, BN12 6NZ

Info

From: Caleb McIntyre | Eurogreen | caleb@eurogreen-uk.com
Sent: 27 February 2017 13:32
To: Info
Subject: BS3882 Topsoil
Attachments: BS3882 Batch 4 OCLA16637sk.pdf

Good afternoon Paul

Further to our discussions please find attached BS3882 Cert for the soil being delivered to your site tomorrow.

Kind Regards

Caleb McIntyre | Eurogreen | 07880 358770

EUROGREEN
ENVIRONMENTAL

GREENWASTE RECYCLING & LANDSCAPING SUPPLIES

Client Address:	Eurogreen, North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ
Our ref:	OCLA16637sk
Client Ref:	Verbal Caleb
Date:	21 October 2016



OEM Achem Ltd
Unit 4 Westwood Court
Brunel Road, Totton,
Southampton
SO40 3WX

Soil Analysis Test against BS 3882

Sampled	10/10/2016	Report No	16-08988
Received	11/10/2016	Sample ref	76756
Product	Soil	Location	
Sampled By	Client	Site	Batch Four

Table 1 : Soil Texture (% m/m)

Texture	Method	Sample	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low fertility Acidic	Low fertility Calcareous
Clay Content	5.05	17		5 to 35				
Silt Content	5.05	37		0 to 65				
Sand Content	5.05	39		30 to 85				
Soil Texture Class	5.05	Sandy Silt Loam		Note: See soil texture triangle in BS3882:2015 for allowed soils				

Table 2 : Mass Loss on ignition (%)

	Method	Sample	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low fertility Acidic	Low fertility Calcareous
Clay (5 – 20 %)	6.07	5.66	3 to 20	3 to 30	3 to 20	2 to 20	2 to 30	2 to 20
Clay (20 – 35%)	-		5 to 20	5 to 30	5 to 20	2 to 20	2 to 30	2 to 20

Table 3: Maximum Coarse Fragment Content (% (m/m))

	Sample	Multipurpose Topsoil Range	Specific Purpose Range				
			Acidic	Calcareous	Low Fertility	Low fertility Acidic	Low fertility Calcareous
> 2 mm	7		0 – 30				
> 20 mm	<1		0 – 10				
> 50 mm	<1		0				

Table 4: Chemical Analysis (air-dried, sieved (< 2 mm) soil)

Analyte	Method	Sample	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low fertility Acidic	Low fertility Calcareous
Soil pH Value	5.03	7.7	5.5 – 8.5	3.5 – 5.5	7.5 – 9.0	3.5 – 9.0	3.5 – 5.5	7.5 – 9.0
Carbonate (%)	6.07	2.6	—	—	>1	—		> 1

Table 5: Available Plant Nutrient Content

	Method	Sample	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low fertility Acidic	Low fertility Calcareous
Nitrogen % m/m		0.4	>0.15	>0.15	>0.15	-	-	-
Extractable Phosphate mg/l	6.08	93	16 - 140	16 - 140	16 - 140	<20	<20	<20
Extractable Potassium mg/l	6.08	369	121 - 1500	121 - 1500	121 - 1500	-	-	-
Extractable Magnesium	6.08	213	51 - 600	51 - 600	51 - 600	-	-	-
Carbon:Nitrogen ratio	6.08	15:1	< 20:1	< 20:1	< 20:1	<35:1	<35:1	<20:1
Soil Electrical Conductivity		2670	3300					
Exchangeable sodium percentage % ¹⁾	6.08	N/A	< 15					

¹⁾ Need be measured only if the electrical conductivity is greater than 2800

Table 6: Phytotoxic Contaminants (by soil pH) (mg/kg) analyses carried out on air dried samples

	Method	Sample	Multipurpose and specific purpose topsoils		
Soil pH Range			< 6.0	6.0 - 7.0	> 7.0
Zinc	6.08	111	< 200	< 200	< 300
Copper	6.08	26	< 100	< 135	< 200
Nickel	6.08	18.5	< 60	< 75	< 110

Table 7: Additional Physical characteristics

	Method	Sample	Multipurpose and specific purpose topsoils
Plastics	6.01	<0.01	0.25%
Sharps	6.07	0	0%
Total Visible contaminants	—	<0.01	<0.5%

Comments (including details of weeds and other visible contaminants - all comments are beyond the scope of our accreditation

This sample does meet the requirements of BS3882 and is compliant to the following:

	Multipurpose Topsoil Range	Specific Purpose Range				
		Acidic	Calcareous	Low Fertility	Low fertility Acidic	Low fertility Calcareous
Compliant:	YES	NO	YES	No	No	No

Mark Chiverton
Managing Director
Oemachem Ltd

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE
TRANSFER NOTE

Note No: 1325

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 01-03-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TIMORE LANE

Description of material: TOPSOIL

Cubic Metres Collected: ☐ Tonnes Collected: ☐ 20

EMC Code(s):

Vehicle Reg. No: LN161 JXK

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: 40 CALA HOMES, SANDSTONE LANE

ANGLING BN16 4PX

Driver Signature:

entirely on their own responsibility

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CB0U58167

North Barn Farm, Timore Lane, Worthing, West Sussex, BN12 6NZ

ARUN DISTRICT COUNCIL A15521.DOC

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE
TRANSFER NOTE

Note No: 1326

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 01-03-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TIMORE LANE

Description of material: TOPSOIL

Cubic Metres Collected: ☐ Tonnes Collected: ☐ 20

EMC Code(s):

Vehicle Reg. No: LN161 JXK

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: 40 CALA HOMES, SANDSTONE LANE

ANGLING BN16 4PX

entirely on their own responsibility

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CB0U58167

North Barn Farm, Timore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE
TRANSFER NOTE
Note No: 1327

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 01-03-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITMORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres Collected: Tonnes Collected: 20

EWG Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: 70 CALA HOMES, ROUNDSTONE LANE

ANGMERING BN16 4AX

Driver
Signature: [Redacted]

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titmore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE
TRANSFER NOTE
Note No: 1592

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 1-3-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITMORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres Collected: Tonnes Collected:

EWG Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material:

Address:

Driver
Signature: [Redacted]

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titmore Lane, Worthing, West Sussex, BN12 6NZ

Note No: 1593

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: Date:

Customer Name: Time:

Site Address:

Description of material:

Cubic Metres Collected:		Tonnes Collected:	
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EWC Code(s):

Vehicle Reg. No.

Company Name Receiving Waste/Material:

Address:

Drive
Signal

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: C80U58167

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1316

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE

WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWC Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: % CALA HOMES, ROUNDSTONE LANE

ANGMERING BN16 4AX

Driver

Signature:

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE
TRANSFER NOTE

Note No: 1317

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

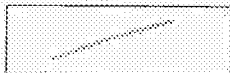
Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITMORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWG Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: % CALA HOMES, ROUNDSTONE LANE

ANSMERING BN16 4AX

Driver
Signature



I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titmore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1318

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:



EWC Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: % CALA HOMES, ROUNDSTONE LANE

ARUN DISTRICT COUNCIL

Driver

Signature:

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1319

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

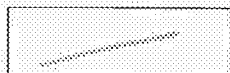
Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWG Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: C/O CALA HOMES ROUNDSTONE LANE,

ANGMERING BN16 4AX

Driver

Signature:

I confirm that I
Waste (England)

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1320

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

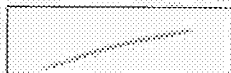
Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWC Code(s):

Vehicle Reg. No: WN61 JXK

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: % CALA HOMES, BOUNDSTONE LANE

ANGMERING BN16 4AX

Driver
Signature

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE
TRANSFER NOTE

Note No: 1321

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

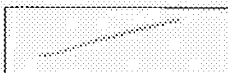
Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:



EW Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: 50 CALA HOMES, ROUNDSTONE LANE

ANSMERING BN16 4AX

Driver

Signature:

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the use thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1322

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN

Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION

Time:

Site Address: TITNORE LANE

WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWC Code(s):

Vehicle Reg. No: WNG1JXK

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: % CALA HOMES ROUNDSTONE LANE

ANGMERING BN16 4AX

Driver

Signature:

Customers ordering vehicles off the public highway do so
entirely on their own responsibility

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the
Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the
vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the
same thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1323

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE

WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWC Code(s):

Vehicle Reg. No: WN61 JXX

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: 50 CALA HOMES, ROUNDSTONE LANE

ANSMERING BN16 4AX

Driver

Signature: [Redacted Signature]

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1324

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

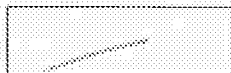
Collected From: EUROGREEN Date: 28-02-17

Customer Name: BLAZE CONSTRUCTION Time:

Site Address: TITNORE LANE
WORTHING

Description of material: TOPSOIL

Cubic Metres
Collected:



Tonnes
Collected:

20

EWG Code(s):

Vehicle Reg. No: WN61 JXK

Company Name Receiving Waste/Material: BLAZE CONSTRUCTION

Address: c/o CALA HOMES, ROUNDSTONE LANE

ANEMERING, BN16 4AX

Driver

Signature:

I confirm that I
Waste (England

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1586

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date:

Customer Name: WASTE COLLECTION Time:

Site Address:

Description of material: 12 TONS TOPSOIL

Cubic Metres
Collected:

Tonnes
Collected:

EWG Code(s):

Vehicle Reg. No: V 562 YDP

Company Name Receiving Waste/Material:

Address:

Driver
Signature:

I confirm that
Waste (Engl)

Certified that

vehicle described, which Waste/Material is being conveyed in pursuance of; a sale or agreement for the
le thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1587

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: Eurogreen Date: 25.2.14

Customer Name: Stone Construction Time: 12.00

Site Address: Cold House

Description of material: 10 Tons Topsoil

Cubic Metres
Collected:

Tonnes
Collected:

EWC Code(s):

Vehicle Reg. No: Y562 KDD

Company Name Receiving Waste/Material:

Address:

Driver
Signature

[Redacted Signature]

entirely on their own responsibility

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1588

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN

Date: 26-2-11

Customer Name: Stone Construction

Time: 12.30

Site Address: CHURCH LANE

Description of material: 10 TONS TOPSOIL

Cubic Metres
Collected:

Tonnes
Collected:

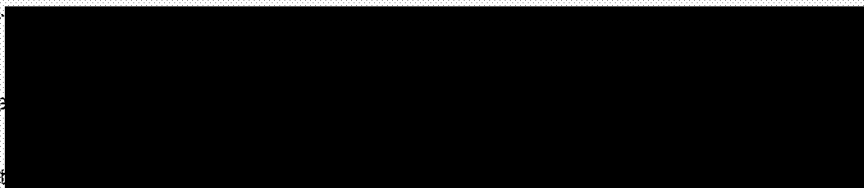
EWG Code(s):

Vehicle Reg. No: X502 FDC

Company Name Receiving Waste/Material:

Address:

Driver
Signature



I confirm that the above particulars are true and relate to the Waste/Materials being conveyed in the
Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the
vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the
sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1589

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: Dec 2 2011

Customer Name: St. Paul's Convent Time: 16:15

Site Address: Cole House

Description of material: 10 Trunk Top Soil

Cubic Metres
Collected:

Tonnes
Collected:

EWC Code(s):

Vehicle Reg. No: Y562 RDD

Company Name Receiving Waste/Material:

Address:

Driver
Signature

I confirm
Waste

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1590

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 26-2-20

Customer Name: SHANE CO. LTD Time: 15:00

Site Address: Sale Road

Description of material: 10 Tons of Soil

Cubic Metres
Collected:

Tonnes
Collected:

EWC Code(s):

Vehicle Reg. No: Y3 12 500

Company Name Receiving Waste/Material:

Address:

Driver
Signature:



I confirm that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the sale thereof made by the cubic metre or ton.

CARRIER REG. NO: CBDU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

EUROGREEN ENVIRONMENTAL

CONVEYANCE WASTE TRANSFER NOTE

Note No: 1591

SUPPLIERS OF: COMPOST TOPSOIL TURF LOGS WOODCHIP HORSE MANURE AGGREGATES

Collected From: EUROGREEN Date: 26.2.11

Customer Name: SLATE CONSTRUCTION Time: 16.30

Site Address: 55A HORNES

Description of material: 10 TONS TOPSOIL

Cubic Metres
Collected:

Tonnes
Collected:

EWC Code(s):

Vehicle Reg. No: Y512 FOL

Company Name Receiving Waste/Material:

Address:

Driver
Signature



Customers ordering vehicles on the public highway do so
entirely on their own responsibility

I confirm that I have fulfilled my duty to apply the waste hierarchy as requested by Regulation 12 of the
Waste (England and Wales) Regulations 2011.

Certified that the above particulars are true and relate to the Waste/Materials being conveyed in the
vehicle described, which Waste/Material is being conveyed in pursuance of: a sale or agreement for the
sale thereof made by the cubic metre or ton.

CARRIER REG. NO: C8DU58167

North Barn Farm, Titnore Lane, Worthing, West Sussex, BN12 6NZ

APPENDIX I

BLAZE HEALTH AND SAFETY AND METHOD STATEMENT DOCUMENTATION

BLAZE

CONSTRUCTION LTD

Angmering - Phase 1B

Addendum to Risk Assessment & Method Statement

**for work with materials potentially
contaminated with Asbestos**

Prepared By	Paul Broderick
Revision	2
Date	07/08/2017

Revision	Date	Comments
0	24/07/2017	Initial Issue
1	31/07/2017	Revised to provide greater detail following comments from Cala & RSK
2	04/08/2017	Revised following further comments from Cala & RSK

Site Address	Phase 1B (Plots 65-121) Cala Homes development Roundstone Lane Angmering BN16 4AX
Client	Cala Homes (South Home Counties) Ltd Tilford House, Farnham Business Park Weydon Lane Farnham Surrey GU9 8QT
Principal Contractor	Cala Homes (South Home Counties) Ltd Tilford House, Farnham Business Park Weydon Lane Farnham Surrey GU9 8QT
Scope of Works	This document covers the completion of works in Phase 1B - including excavation for foundations, the removal / addition of soils to correct levels, installation of capping system and completion of associated groundworks. This does not cover works to the public open space (which were carried out previously by Keltbray), the treatment of materials (which will be carried out by others), or the removal of any materials from site (which will be at the sole discretion of the client).
Current Phase 1B Status and Remedial Requirements Summary	Geo-environmental investigations carried out by RSK identified hydrocarbon, metal and asbestos (sporadic cement bonded asbestos containing materials (ACM) and low level concentrations of asbestos fibres) in made ground across Phase 1B. In accordance with the remedial strategy for the site (RSK report 27621 R03 (01) the primary measures to mitigate potential risks to personnel from these compounds during the construction process are good personal hygiene practices and dust mitigation measures. Any additional mitigation measures proposed within this RAMS have been included as precautionary measures to protect personnel in the event that higher risk contaminants are unexpectedly identified during the works, such as licensable ACM (i.e. lagging etc). A watching brief by all personnel conducting any excavation works at the site should be maintained at all times for unexpected contamination (staining, odours, suspected ACM). In the event that any unexpected contamination is identified, works are to immediately cease (<u>with exception of dust mitigation which must be maintained</u>) and advice sought from RSK personnel who shall maintain a presence on site during all excavation works in Phase 1B. Implementation of mitigation measures relating to future residents (such as garden and soft landscaping capping layers /gas membrane requirements) and the environment i.e. materials management and measures to prevent cross contamination to 'clean' areas of the site are also referred to in this document.
Supervision	All works to be supervised by Blaze -- including management of access to work area. All contractors entering this area to comply with Blaze requirements. All operatives to have received asbestos awareness training, and stop works to seek advice of RSK consultant upon discovery of suspected Asbestos or other contaminants (eg visual or olfactory evidence of hydrocarbons). RSK consultant to provide watching brief, and advise on whether additional contractors need to be called in (eg if works have become licensable) or additional control measures required.

Preparatory Works

1. Fence off all stockpiles with herras panels (double clipped), record location and assign Stockpile references. RSK to carry out testing on unknown piles and advise on consolidation of stockpiles / removal of materials.
2. Permanent stockpiles to have signage erected (all as Appendix 1 & 2):
 - Natural Soil Stockpile – Sign A at entrance point, Sign B to be erected along outside of fencing at regular intervals
 - Main Made Ground Stockpile – Sign C at entrance point, Sign E to be erected along outside of fencing at regular intervals
 - Asbestos Stockpile – Sign G at entrance point, Sign H to be erected along outside of fencing at regular intervals

Allowance made for future 'Grey' (awaiting testing) Soil Stockpile – Sign D at entrance point, Sign F to be erected along outside of fencing at regular intervals.

3. Herras panels already erected around Phase 1b to be fixed securely to timber posts by others (to prevent blowing over in windy conditions) & extended as necessary to match plan in Appendix 1. Signage (Sign K in Appendix 2) to be erected along outside of fencing at regular intervals, and signs (Sign I in Appendix 2 to outside, Sign J in Appendix 2 to inside) to be erected at entrance area.
4. Place decontamination unit as per location on route plan (appendix 1).
5. Set up vehicle exit & washdown area at Road 7a (as per location on route plan – appendix 1).
 - Polythene to be laid to existing tarmac surface, weighed down with blocks and water flowing into pit dug in adjacent POS area and lined with terram. Upon completion of works - Polythene to be disposed of into Asbestos skip and silt to adjacent POS area to be moved to correct stockpile / asbestos skip as advised by RSK consultant.
 - Trailer mounted water bowser with pressure washer to be available
 - CALA Homes to provide water supply to this area.
6. Ensure plant is marked "clean" or "dirty" (see stickers L & M in Appendix 2) and ensure "dirty" plant only in work area.
 - Gateman to issue construction plant with dirty stickers if moved into work area (see Appendix 3 for list of plant proposed to be moved).
 - Gateman to ensure plant jetted clean and dirty stickers removed if to be removed from work area. Plant decontamination form to be completed upon removal of construction plant from work area (see Appendix 4).
7. Fence off route for transport of clean materials from clean natural soils stockpile to site roads across rough ground. RSK consultant to check route for possible contamination before use.

Main Works – Area 1

1. Set out.
2. Damp down soils.
3. Excavate & concrete foundations, build up substructure blockwork & associated works upto oversite level (refer to method statement SMS01 & SMS 08).
 - Soils to be additionally dampened during excavation if required.
 - Deliveries of materials to work area to be offloaded from clean routes:
 - i. Screen walls to be left down at Plots 65 / 74 to allow for access.
 - ii. Forklift or hiab offload in washdown area (accessed from clean area) for collection by machine or forklift (accessed from dirty area) and distribution.
 - iii. Remove herras panel and offload from road (if necessary) by machine or forklift to avoid vehicles entering work area.
 - iv. Concrete to be placed by pump or machine in such a way that concrete lorry & operator do not leave 'clean' area.

- v. If necessary, mortar to be mixed outside of working area and muck skip delivered as i or ii (Note – muck skip to be jetwashed before removal for refilling)
 - * If delivery drivers are required to enter the area to complete delivery (eg tipper lorry for aggregates), they are not to leave the vehicle – and vehicle to be decontaminated using same procedure as plant, including decontamination form & completion of plant register.
- 4. Re-grade existing soils to achieve underside of capping layer.
- 5. Move surplus soils to correct spoil heap (as determined by advisor from RSK), using dumpers marked "dirty". Ensure soils remain 10cm below lip of dumper to prevent accidental dispersal. Or, if necessary fill with soils from main made ground stockpile to achieve correct levels for underside of capping layer.
- 6. Form up driveways etc. (refer to method statement SMS 11).
- 7. Remove plant from area.
 - * If not removing to another dirty area via approved route, ensure plant is jetwashed prior to leaving work area. Ensure machine buckets, inside of dumper skip etc are also jetwashed. Plant decontamination form to be completed upon removal of construction plant from work area (see Appendix 4).
- 8. Lay Terram to garden areas.
 - * Great care is to be taken in laying Terram to prevent contamination.
 - i. Terram to be rolled out with 'clean' inside facing up, 300mm laps to be used.
 - ii. Terram to be laid first to front gardens, moving in an anti-clockwise direction from Plot 77 to Plot 83.
 - iii. Terram to rear gardens to be laid so that no area is required to be walked over once laid, starting with the rear of Plot 65, and ending with Plot 77.
 - * Once Terram is laid, houses are completed to oversite level, and hardstanding areas (patios, drives, etc) are formed the foreman will sign the handover form and ask the RSK consultant to clean his boots and walk the area to confirm it is to be considered "clean" (ie capped off & ready for clean fill). Operatives should clean (eg boots, respirator) or dispose of potentially contaminated PPE (eg gloves, filters, etc) if continuing to work in area now designated "clean".
- 9. Adjust Herras Panels
 - * Great care should be taken in removing debris netting, to prevent fibres from becoming airborne it should be wetted down using backpack sprayer prior to being disturbed. If panels are not to be reused in another dirty area, debris netting to be double bagged/wrapped and disposed of in Asbestos skip.
 - * If not to be reused in dirty area Herras panels are to be removed from clean side, ensuring herras panels remain in position to 'dirty route' until no longer required (see Appendix 5 for plans showing adjusted fencing & routes).
- 10. Using "clean" dumpers or dump truck, move clean natural subsoil from stockpile to garden areas laying at advised depths for cover system.
 - * Ensure that plant passes only over designated "clean" routes.
- 11. Place screed to plots following installation of gas membrane by specialist contractors.
- 12. Externals to plots as and when required.
 - * Topsoil to be imported Freelands topsoil.

Main Works – Areas 2 & 3

1. All as Area 1
2. All as Area 1
3. Excavate & concrete foundations, build up substructure blockwork & associated works upto oversite level (refer to method statement SMS01 & SMS 08).

- i. All as Area 1, but Plot 97 only to have foundations dug & poured at this stage to allow for access.
4. All as Area 1.
5. All as Area 1.
6. All as Area 1.
7. All as Area 1.
8. Lay Terram to garden areas.
 - * Great care is to be taken in laying Terram to prevent contamination.
 - i. Terram to be rolled out with 'clean' inside facing up, with operatives standing on terram to wear disposable overshoes. 300mm laps to be used.
 - ii. Terram to be laid first to front gardens, moving in an anti-clockwise direction from Plot 96 to Plot 102.
 - iii. Terram to rear gardens to be laid so that no area is required to be walked over once laid, starting with the rear of Plots 85-92 & 108-110, and ending with Plots 101 & 103.
 - iv. Sacrificial Terram to be laid to rear garden of Plot 97.
 - * Once Terram is laid, houses are completed to oversite level, and hardstanding areas (patios, drives, etc) are formed the foreman will sign the handover form and ask the RSK consultant to put on disposable overshoes and walk the area to confirm it is to be considered "clean" (ie capped off & ready for clean fill). Operatives should clean (eg boots, respirator) or dispose of potentially contaminated PPE (eg gloves, filters, etc) if continuing to work in area now designated "clean".
9. Adjust Herras Panels
 - * Great care should be taken in removing debris netting, to prevent fibres from becoming airborne it should be wetted down using backpack sprayer prior to being disturbed. Debris netting to be disposed of in Asbestos skip.
 - * Herras panels to be removed from clean side, ensuring herras panels remain in position to 'dirty route' until no longer required (see Appendix 6 for plans showing adjusted fencing)
10. Using "clean" dumpers or dump truck, move clean natural subsoil from stockpile to garden areas laying at advised depths for cover system.
 - * Ensure that plant passes only over designated "clean" routes.
 - * Stockpile additional subsoil for rear garden of Plot 97 in adjacent plot.
11. Adjust Herras to allow access via front of Plots 98-101, and closing off Plot 97 to clean areas (see Appendix 6 for plans showing adjusted fencing).
12. Construct Plot 97 & garage to oversite level.
13. Remove sacrificial terram (disposing in Asbestos skip) and replace.
 - * The foreman will sign the handover form and ask the RSK consultant to clean his boots and walk the area to confirm it is to be considered "clean" (ie capped off & ready for clean fill).
14. Remove fencing (spraying debris netting and disposing of as above), and using "clean" operatives and plant spread clean subsoil capping layer to rear garden of Plot 97, bringing in clean subsoil for front gardens via clean route.
15. Place screed to plots following installation of gas membrane by specialist contractors.
16. External to plots as and when required.
 - * Topsoil to be imported Freelands topsoil.

Main Works – Area 4

1. All as Area 1
2. All as Area 1

3. Excavate & concrete foundations, build up substructure blockwork & associated works upto oversite level (refer to method statement SMS01 & SMS 08).
 - Soils to be additionally dampened during excavation if required.
 - Deliveries of materials to work area to be offloaded from clean routes:
 - i. Screen wall to be left down at Plot 111 to allow for access.
 - ii. Forklift or hiab offload in washdown area (accessed from clean area) for collection by machine or forklift (accessed from dirty area) and distribution.
 - iii. Remove herras panel and offload from road (if necessary) by machine or forklift to avoid vehicles entering work area.
 - iv. Concrete to be placed by pump or machine in such a way that concrete lorry & operator do not leave 'clean' area.
 - v. If necessary, mortar to be mixed outside of working area and muck skip delivered as i or ii (Note - muck skip to be jetwashed before removal for refilling)
 - If delivery drivers are required to enter the area to complete delivery (eg tipper lorry for aggregates), they are not to leave the vehicle - and vehicle to be decontaminated using same procedure as plant, including decontamination form & completion of plant register.
4. All as Area 1
5. All as Area 1
6. All as Area 1
7. All as Area 1
8. Lay Terram to garden areas.
 - Great care is to be taken in laying Terram to prevent contamination.
 - i. Terram to be rolled out with 'clean' inside facing up, with operatives standing on terram to wear disposable overshoes. 300mm laps to be used.
 - ii. Terram to be laid first to front gardens, moving in an anti-clockwise direction from Plot 77 to Plot 83.
 - iii. Terram to rear gardens to be laid so that no area is required to be walked over once laid, starting with the rear of Plot 65, and ending with Plot 77.
 - Once Terram is laid, houses are completed to oversite level, and hardstanding areas (patios, drives, etc) are formed the foreman will sign the handover form and ask the RSK consultant to clean his boots and walk the area to confirm it is to be considered "clean" (ie capped off & ready for clean fill). Operatives should clean (eg boots, respirator) or dispose of potentially contaminated PPE (eg gloves, filters, etc) if continuing to work in area now designated "clean".
9. Erect Herras Panels to close off this 'clean' area from the 'dirty' route.
10. Prepare to open this area as 'clean'
 - Remove any contaminated materials from front of plots 78-82 (POS area used as temporary haul route), and place in correct stockpile as advised by RSK consultant.
 - Remove dirty plant from area, using correct decontamination procedure.
 - Erect herras to close stockpile area off from Phase 1B.
 - Clean road using jetwash.
 - Remove herras panels between Phase 1B and 'dirty route'
 - i. Great care should be taken in removing debris netting, to prevent fibres from becoming airborne it should be wetted down using backpack sprayer prior to being disturbed. Debris netting to be disposed of in Asbestos skip.
 - Lay terram to front of plots 78-82 (if required).
 - Remove contaminated terram/polythene/arisisings from jetwash area and dispose of in asbestos skip.

- * All operatives leave area via decontamination unit, making sure to follow procedure outlined in HSE Asbestos Essentials "EMB -- Personal Decontamination", particularly double bagging and disposal of all contaminated PPE.
11. Using "clean" dumpers or dump truck, move clean natural subsoil from stockpile to garden areas laying at advised depths for cover system.
- * Ensure that plant passes only over designated "clean" routes.
 - * Once this is complete remove hedges and debris netting erected to clean route across rough ground.
12. Place screed to plots following installation of gas membrane by specialist contractors.
13. Externals to plots as and when required.
- * Topsoil to be imported Freelands topsoil.

Control Measures Required (at all times)

1. All operatives to be inducted in these RAMS.
2. All operatives to have received asbestos awareness training, and be aware that they should contact RSK consultant if concerned about potential contaminants.
3. All visitors to receive induction relevant to their work.
4. Operatives to wear P3 filtering face pieces when breaking ground.
5. Stockpiles & any exposed soils to be dampened down as required to prevent fibres becoming airborne. Asbestos stockpile to be covered in terram, weighted down with blocks, when access not required.
6. Plant not to be removed from designated dirty areas unless jetwashed externally. Gateman to ensure plant jetted clean, dirty stickers removed and plant decontamination form to be completed upon removal of construction plant from work area (see Appendix 4).
7. Operatives to have separate worksuits and boots for working in the area. Boots to be of wellington style (ie no laces or stitching), and meet EN 20345 requirements for midsole and toe protection.
8. All operatives to clean boots and remove potentially contaminated PPE when leaving the work area. This PPE is to remain in the 'dirty' area for the lifetime of the works and be disposed of upon completion of works.

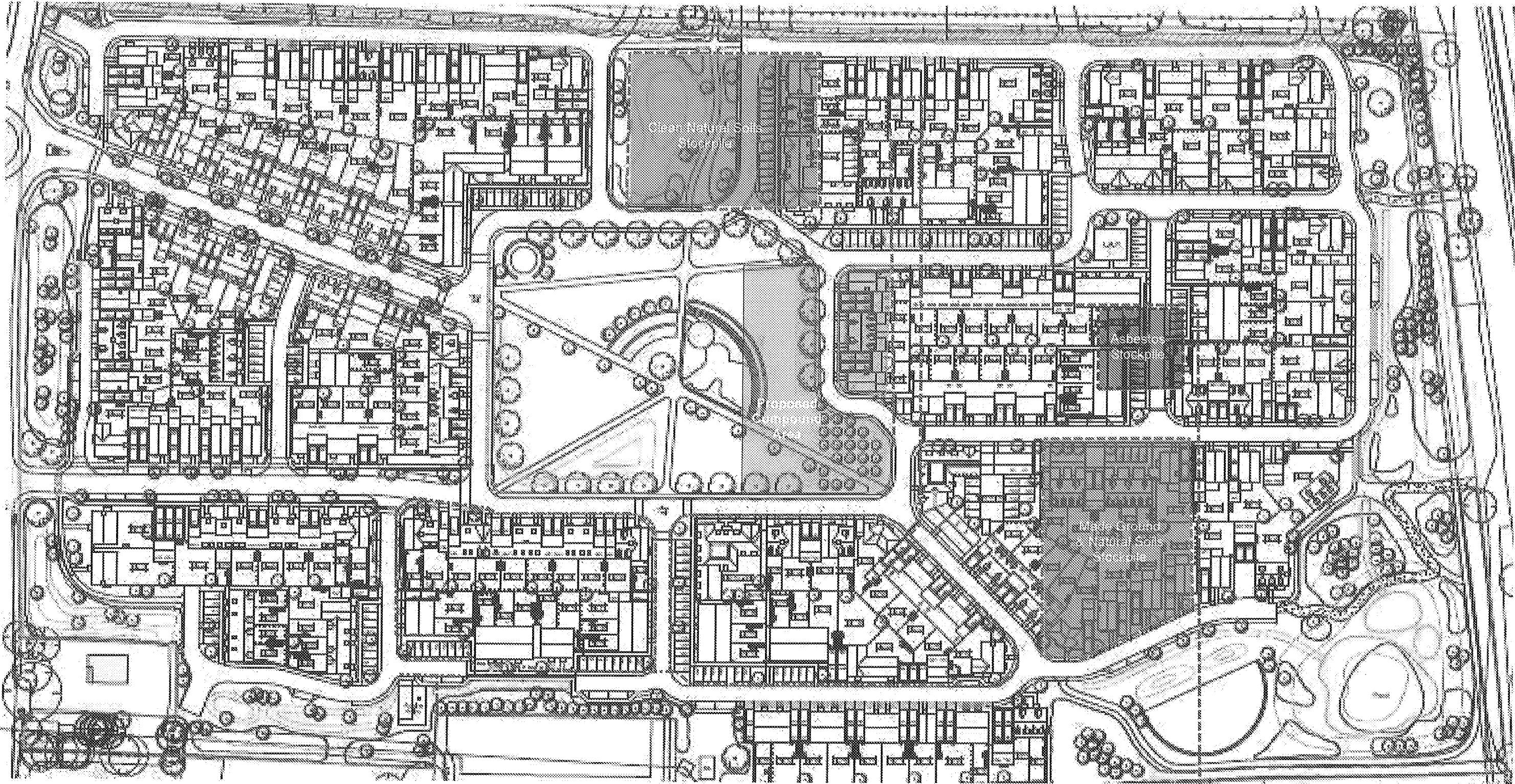
Risk Matrix

Hazard	Person(s) at risk	Worst Case	Initial Risk	Control Measures to be put in place	Residual Risk
Inhalation of asbestos fibres	Operatives	Asbestosis	High	All operatives to have received asbestos awareness training	Medium
				Consultant from RSK to be on site to identify & pick asbestos as necessary. (Only sporadic non-licensable ACM materials to be handpicked by RSK, in accordance with RSK technical procedure TP216A. If any licensable or large quantities of non-licensable ACM are observed, works are to cease in this area, and the area made safe i.e. dampened down, covered/boarded and fenced off, and advice sought from a licensed asbestos contractor such as Kelibray.)	
				All operatives to be face-fit tested for P3 filtering facepiece or provided with powered respirator. Masks must be worn whilst breaking ground.	
	Persons outside the work area (due to wind dispersal)		Medium	Debris Netting to be erected on Herras fencing	Low
				Soils to be wetted down to prevent fibres becoming airborne	
				Asbestos stockpile to be covered in terram	
	Persons outside the work area (due to contact dispersal)		High	Covered skip available for picked asbestos disposal	Low
				Area to be herrassed off and signed to prevent unauthorised access	
				Workers to clean boots when leaving 'dirty' area	
Ingestion of Metals / Oil	Operatives	Ingestion of Metals / Oil	High	Plant to be jetwashed before leaving 'dirty' area	Low
				Operatives to wear gloves. No Smoking / Drinking /	

Substances		Substances		Eating in work area – welfare facilities in clean area.	
				Hands & face to be washed before leaving dirty area.	
	Future users of land		Medium	Terram & clean subsoil capping to be laid to prevent absorption by future growing of foodstuffs	Low
Contamination of clean soils	Client	Increased cost for disposal of contaminated soils / importation of additional clean soils	Medium	Plant to be clearly labelled 'clean' or 'dirty'	Low
				Separate routes to be established for clean & dirty plant	
				'Dirty' dumpers not to be filled above the rim	

Appendix 1

Plans showing initial layout of fencing, signage & designation of routes.



Symbol	Description
	Made Ground Stockpile
	Asbestos Stockpile
	Clean Soil Stockpile
	Herras, with Green debris netting
	Herras, with Green debris netting (fixed to Timber Posts)
	Herras, with Red debris netting
	Herras, with Blue debris netting