Appendix E Site Monitoring Data and Ground Gas Risk Assessment

Hydrock

Site: Dunsbury Park, Portsmouth
Job number: Q2021.594
Client: Hydrock

Gas analyser: GA5000; GA505316
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Alex Thackray

Notes on site conditions: Area of site with WS4 points was busy with site traffic so didn't feel safe access was possible. Point WS6.01 has a post to mark the location but on arrival there is no borehole there to monitor.

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations												Local conditions
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		Notes on condition of borehole and surrounding ground
												Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	
11/08/21	11:28	WS1.01		5.40	2.66		1017		0.0	0.0	ND	ND	ND	ND	ND	0.1	0.1	19.8	17.2	1.0	1	
11/08/21	NR	WS4.03		NR	NR		NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unsafe access, site traffic
11/08/21	NR	WS4.04		NR	NR		NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unsafe access, site traffic
11/08/21	NR	WS4.05		NR	NR		NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unsafe access, site traffic
11/08/21	12:50	WS5.02		5.30	3.56		1017		0.1	0.0	ND	ND	ND	ND	ND	ND	ND	20.0	20.4	1.0	ND	
11/08/21	11:45	WS5.04		5.47	2.06		1017		0.0	0.0	ND	ND	ND	ND	ND	ND	ND	20.2	20.0	1.0	1	
11/08/21	11:41	WS5.05		5.54	1.54		1018		-0.1	0.1	ND	ND	ND	ND	ND	ND	ND	20.3	20.3	1.0	1	
11/08/21	11:35	WS5.08		5.47	0.86		1018		0.0	0.1	ND	ND	ND	ND	ND	ND	ND	20.4	20.4	1.0	1	
11/08/21	NR	WS6.01		NR	NR		NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	No borehole at location, see corresponding photo.
11/08/21	12:00	WS6.03		5.34	2.13		1017		0.1	0.0	0.1	ND	ND	ND	ND	3.3	3.5	18.3	14.2	1.0	1	
11/08/21	12:18	WS6.04		5.30	2.16		1016		0.1	0.0	0.1	ND	ND	ND	ND	2.1	2.1	19.8	15.5	1.0	ND	
11/08/21	12:08	WS6.06		5.45	2.43		1017		0.1	0.0	ND	ND	ND	ND	ND	2.5	2.5	18.0	16.1	2.0	1	
11/08/21	12:40	WS7.03		5.46	3.01		1015		0.2	0.0	ND	ND	ND	ND	ND	0.1	0.1	20.3	20.3	2.0	ND	
11/08/21	12:35	WS7.04		5.35	1.60		1015		0.1	0.0	ND	ND	ND	ND	ND	4.3	4.6	19.3	12.1	2.0	ND	

Hydrock

Site: Dunsbury Park, Portsmouth
Job number: Q2021.594
Client: Hydrock

Gas analyser: GA5000; G500691
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: Sunny. dry, ground dry, moderate breeze.

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
27/08/21	10:29	WS1.01		5.39	2.74		1021		-0.1	0.1	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.5	1.0	ND	All good.
27/08/21	11:42	WS4.03		5.49	2.48		1020		-27.0	-5.0	NA	ND	ND	ND	ND	0.1	1.6	20.8	18.4	3.0	ND	All good.
27/08/21	12:11	WS4.04		5.36	3.13		1021		0.1	0.0	NA	ND	ND	ND	ND	0.1	0.0	20.8	17.7	2.0	ND	All good.
27/08/21	11:58	WS4.05		5.45	2.57		1021		0.0	0.0	NA	ND	ND	ND	ND	0.1	0.3	20.8	18.6	2.0	ND	All good.
27/08/21	08:10	WS5.02		5.23	3.72		1019		2.6	0.0	NA	ND	4.0	ND	80	0.1	0.1	20.8	9.4	ND	ND	All good.
27/08/21	08:07	WS5.04		5.54	2.14		1019		-21.9	-5.2	NA	ND	0.2	ND	4	0.1	ND	20.8	10.9	1.0	1	All good.
27/08/21	08:02	WS5.05		5.51	1.61		1019		-46.3	-9.4	NA	ND	ND	ND	ND	0.1	0.4	20.8	17.5	ND	ND	All good.
27/08/21	07:56	WS5.08		5.44	1.13		1019		-12.2	-0.6	NA	ND	ND	ND	ND	0.1	0.2	20.8	20.5	1.0	ND	All good.
27/08/21	08:47	WS6.01		5.38	1.87		1017		-0.5	0.0	NA	ND	ND	ND	ND	0.1	6.5	20.8	17.3	1.0	ND	All good.
27/08/21	08:52	WS6.03		5.30	2.23		1018		-0.2	0.0	NA	ND	ND	ND	ND	0.1	10.4	20.8	13.8	1.0	ND	All good.
27/08/21	09:01	WS6.04		5.27	2.36		1019		-0.3	0.0	NA	ND	ND	ND	ND	0.1	5.5	20.8	17.4	2.0	ND	All good.
27/08/21	08:56	WS6.06		5.42	2.49		1019		-0.1	0.0	NA	ND	ND	ND	ND	0.1	5.1	20.8	18.0	2.0	ND	All good.
27/08/21	08:29	WS7.03		5.47	3.13		1017		-0.3	0.0	NA	ND	ND	ND	ND	0.1	0.8	20.8	20.0	ND	ND	All good.
27/08/21	09:16	WS7.04		5.32	2.00		1018		6.6	0.1	NA	ND	ND	ND	ND	0.1	8.7	20.8	14.9	1.0	ND	All good.
27/08/21	10:33	BH1.01		10.47	4.16		1022		0.2	0.0	NA	ND	0.1	ND	2	0.1	0.6	20.8	19.8	7.0	ND	All good.
27/08/21	NR	BH4.02		NR	NR		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unable to access borehole, bolt has been overscrewed during installation resulting in the cover being impossible to open with an allen key.
27/08/21	10:00	BH5.01		10.48	1.58		1019		0.0	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	19.7	1.0	ND	All good.
27/08/21	10:05	BH5.02		5.46	2.49		1020		0.0	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	20.3	2.0	ND	All good.
27/08/21	10:10	BH5.03		10.44	0.34		1020		14.5	4.5	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.8	ND	ND	All good.
27/08/21	10:17	BH5.05		10.02	1.78		1021		0.0	0.0	NA	ND	ND	ND	ND	0.1	0.2	20.8	19.2	4.0	ND	All good.
27/08/21	09:45	BH6.02		10.33	2.57		1018		-0.2	0.1	NA	ND	ND	ND	ND	0.1	2.2	20.8	18.1	2.0	ND	All good.
27/08/21	09:50	BH6.03		5.48	2.63		1019		0.0	0.0	NA	ND	ND	ND	ND	0.1	4.1	20.8	17.8	ND	ND	All good.
27/08/21	09:29	BH7.01		20.34	3.65		1018		-0.1	0.0	NA	ND	ND	ND	ND	0.1	1.4	20.8	17.7	2.0	ND	All good.
27/08/21	09:37	BH7.03		5.06	2.33		1018		-0.2	0.0	NA	ND	ND	ND	ND	0.1	1.3	20.8	19.4	3.0	ND	All good.

Hydrock

Site: Dunsbury Park, Portsmouth
Job number: Q2021.594
Client: Hydrock

Gas analyser: GA5000; G500691
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: Sunny, dry, ground dry, moderate breeze.

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
07/09/21	08:26	WS1.01		5.39	2.81		1019		-0.2	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.2	1.0	ND	All good.
07/09/21	09:16	WS4.03		5.49	2.14		1019		-0.3	0.0	NA	ND	ND	ND	ND	0.1	2.8	20.8	16.6	1.0	ND	All good.
07/09/21	09:19	WS4.04		5.36	3.31		1019		0.1	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	16.1	2.0	ND	All good.
07/09/21	09:25	WS4.05		5.45	2.68		1019		0.2	0.0	NA	ND	ND	ND	ND	0.1	1.2	20.8	14.9	1.0	1	All good.
07/09/21	09:04	WS5.02		5.23	3.85		1019		0.2	0.0	NA	ND	4.1	ND	82	0.1	0.1	20.8	4.8	1.0	ND	All good.
07/09/21	08:58	WS5.04		5.54	2.18		1019		-13.6	-3.4	NA	ND	0.1	ND	2	0.1	ND	20.8	9.9	2.0	ND	All good.
07/09/21	08:54	WS5.05		5.51	1.70		1020		-51.1	-11.7	NA	ND	ND	ND	ND	0.1	0.5	20.8	15.3	1.0	ND	All good.
07/09/21	08:44	WS5.08		5.44	1.31		1019		-15.6	-4.8	NA	ND	ND	ND	ND	0.1	0.4	20.8	19.3	4.0	ND	All good.
07/09/21	10:27	WS6.01		5.38	1.99		1017		0.1	0.0	NA	ND	ND	ND	ND	0.1	4.1	20.8	18.2	1.0	ND	All good.
07/09/21	10:32	WS6.03		5.30	2.26		1018		0.2	0.0	NA	ND	ND	ND	ND	0.1	8.3	20.8	15.8	1.0	1	All good.
07/09/21	10:44	WS6.04		5.27	2.42		1019		6.5	0.0	NA	ND	ND	ND	ND	0.1	1.5	20.8	19.5	2.0	ND	All good.
07/09/21	10:37	WS6.06		5.42	2.54		1019		0.4	0.0	NA	ND	ND	ND	ND	0.1	3.3	20.8	18.6	2.0	ND	All good.
07/09/21	10:16	WS7.03		5.47	3.18		1017		0.3	0.0	NA	ND	ND	ND	ND	0.1	0.4	20.8	20.2	1.0	ND	All good.
07/09/21	10:12	WS7.04		5.32	2.15		1017		0.2	0.0	NA	ND	ND	ND	ND	0.1	5.6	20.8	17.4	2.0	ND	All good.
07/09/21	08:29	BH1.01		10.47	4.23		1020		-0.2	0.0	NA	ND	0.1	ND	2	0.1	1.0	20.8	18.9	2.0	ND	All good.
27/08/21	NR	BH4.02		NR	NR		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unable to access borehole, bolt has been overscrewed during installation resulting in the cover being impossible to open with an allen key.
07/09/21	09:07	BH5.01		10.48	1.81		1019		0.1	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	18.6	1.0	1	All good.
07/09/21	09:00	BH5.02		5.46	2.60		1019		0.1	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	19.5	1.0	1	All good.
07/09/21	08:50	BH5.03		10.44	0.38		1019		0.0	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.0	1.0	ND	All good.
07/09/21	08:41	BH5.05		10.02	1.81		1019		-0.2	0.0	NA	ND	ND	ND	ND	0.1	0.3	20.8	19.2	1.0	ND	All good.
07/09/21	10:35	BH6.02		10.33	2.61		1018		0.3	0.0	NA	ND	ND	ND	ND	0.1	2.2	20.8	18.7	2.0	ND	All good.
07/09/21	10:40	BH6.03		5.48	2.69		1019		0.0	0.0	NA	ND	ND	ND	ND	0.1	2.7	20.8	18.8	1.0	1	All good.
07/09/21	10:20	BH7.01		20.34	3.71		1017		0.2	0.0	NA	ND	ND	ND	ND	0.1	1.9	20.8	17.7	2.0	ND	All good.
07/09/21	10:08	BH7.03		5.06	2.47		1017		0.1	0.0	NA	ND	ND	ND	ND	0.1	2.0	20.8	19.0	2.0	ND	All good.

Hydrock

Site: Dunsbury Park, Portsmouth
Job number:
Client: Hydrock

Gas analyser: G500691
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: Sunny, dry, ground dry, moderate breeze.

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
15/09/21	09:41	WS1.01		5.39	2.86		1012		-0.4	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.1	1.0	ND	All good.
15/09/21	11:48	WS4.03		5.49	2.25		1011		0.5	0.0	NA	ND	ND	ND	ND	0.1	5.6	20.8	14.6	1.0	ND	All good.
15/09/21	11:51	WS4.04		5.36	3.40		1011		0.4	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	16.2	1.0	ND	All good.
15/09/21	11:55	WS4.05		5.45	2.73		1011		-0.1	0.0	NA	ND	ND	ND	ND	0.1	1.5	20.8	15.0	1.0	ND	All good.
15/09/21	11:34	WS5.02		5.23	3.91		1012		-0.2	0.0	NA	ND	4.1	ND	82	0.1	0.1	20.8	5.3	1.0	ND	All good.
15/09/21	11:24	WS5.04		5.54	2.21		1012		-24.3	-6.4	NA	ND	0.2	ND	4	0.1	ND	20.8	8.7	2.0	ND	All good.
15/09/21	11:21	WS5.05		5.51	1.83		1012		-5.1	-7.9	NA	ND	ND	ND	ND	0.1	0.9	20.8	12.9	1.0	ND	All good.
15/09/21	11:08	WS5.08		5.44	1.40		1012		-1.3	0.1	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.3	1.0	ND	All good.
15/09/21	12:52	WS6.01		5.38	2.08		1009		-0.1	0.0	NA	ND	ND	ND	ND	0.1	3.2	20.8	19.2	1.0	ND	All good.
15/09/21	12:56	WS6.03		5.30	2.28		1011		0.2	0.0	NA	ND	ND	ND	ND	0.1	7.7	20.8	17.2	1.0	ND	All good.
15/09/21	13:17	WS6.04		5.27	2.45		1012		0.2	0.0	NA	ND	ND	ND	ND	0.1	2.8	20.8	19.3	1.0	ND	All good.
15/09/21	13:06	WS6.06		5.42	2.56		1011		0.0	0.0	NA	ND	ND	ND	ND	0.1	3.0	20.8	19.1	1.0	ND	All good.
15/09/21	12:47	WS7.03		5.47	3.21		1009		0.0	0.0	NA	ND	ND	ND	ND	0.1	1.1	20.8	20.3	1.0	ND	All good.
15/09/21	12:33	WS7.04		5.32	2.29		1010		0.1	0.0	NA	ND	ND	ND	ND	0.1	4.6	20.8	18.3	1.0	ND	All good.
15/09/21	09:46	BH1.01		10.47	4.29		1011		-0.5	0.0	NA	ND	0.1	ND	ND	0.1	1.2	20.8	18.3	1.0	ND	All good.
15/09/21	NR	BH4.02		NR	NR		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unable to access borehole, bolt has been overscrewed during installation resulting in the cover being impossible to open with an allen key.
15/09/21	11:37	BH5.01		10.48	1.88		1011		0.1	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	18.9	1.0	ND	All good.
15/09/21	11:27	BH5.02		5.46	2.64		1012		-0.2	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	19.8	1.0	1	All good.
15/09/21	11:13	BH5.03		10.44	0.56		1012		-0.1	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	19.6	1.0	ND	All good.
15/09/21	11:01	BH5.05		10.02	1.92		1012		-0.2	0.0	NA	ND	ND	ND	ND	0.1	0.4	20.8	19.7	1.0	ND	All good.
15/09/21	12:59	BH6.02		10.33	2.63		1011		0.3	0.0	NA	ND	ND	ND	ND	0.1	2.3	20.8	19.3	1.0	ND	All good.
15/09/21	13:09	BH6.03		5.48	2.71		1011		0.3	0.0	NA	ND	ND	ND	ND	0.1	2.4	20.8	19.7	1.0	ND	All good.
15/09/21	12:39	BH7.01		20.34	3.86		1009		0.0	0.0	NA	ND	ND	ND	ND	0.1	2.2	20.8	18.3	1.0	ND	All good.
15/09/21	12:30	BH7.03		5.06	2.50		1010		0.2	0.0	NA	ND	ND	ND	ND	0.1	2.3	20.8	19.0	1.0	ND	All good.

Hydrock

Site: Dunsbury Park, Portsmouth
Job number:
Client: Hydrock

Gas analyser: G500691
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: Sunny, dry, ground dry, moderate breeze.

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
20/09/21	10:00	WS1.01		5.39	2.90		1019		-0.6	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.6	ND	ND	All good.
20/09/21	13:31	WS4.03		5.49	2.20		1019		3.1	0.0	NA	ND	ND	ND	ND	0.1	5.8	20.8	14.7	1.0	ND	All good.
20/09/21	13:33	WS4.04		5.36	3.47		1020		7.1	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	16.4	2.0	ND	All good.
20/09/21	13:37	WS4.05		5.45	2.77		1020		0.2	0.0	NA	ND	ND	ND	ND	0.1	1.5	20.8	15.7	1.0	ND	All good.
20/09/21	12:34	WS5.02		5.23	3.97		1020		-0.1	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	4.4	1.0	1	All good.
20/09/21	12:21	WS5.04		5.54	2.21		1020		-16.1	-5.1	NA	ND	4.2	ND	84	0.1	ND	20.8	11.2	1.0	1	All good.
20/09/21	12:09	WS5.05		5.51	2.03		1020		-11.7	-3.9	NA	ND	ND	ND	ND	0.1	1.1	20.8	11.9	1.0	1	All good.
20/09/21	11:54	WS5.08		5.44	1.43		1020		-6.3	-1.8	NA	ND	ND	ND	ND	0.1	0.5	20.8	19.6	2.0	ND	All good.
20/09/21	14:03	WS6.01		5.38	2.13		1018		0.1	0.0	NA	ND	ND	ND	ND	0.1	2.9	20.8	19.2	1.0	ND	All good.
		WS6.02																				
20/09/21	14:10	WS6.03		5.30	2.30		1019		0.1	0.0	NA	ND	ND	ND	ND	0.1	4.1	20.8	18.8	1.0	ND	All good.
20/09/21	14:19	WS6.04		5.27	2.49		1020		0.2	0.0	NA	ND	ND	ND	ND	0.1	2.5	20.8	19.4	1.0	ND	All good.
20/09/21	14:15	WS6.06		5.42	2.58		1020		6.3	0.1	NA	ND	ND	ND	ND	0.1	2.7	20.8	19.3	1.0	ND	All good.
20/09/21	13:54	WS7.03		5.47	3.24		1019		0.2	-0.1	NA	ND	ND	ND	ND	0.1	0.3	20.8	20.6	1.0	ND	All good.
20/09/21	13:51	WS7.04		5.32	2.25		1019		0.1	0.0	NA	ND	ND	ND	ND	0.1	3.3	20.8	18.9	1.0	ND	All good.
20/09/21	10:02	BH1.01		10.47	4.34		1018		-0.2	-0.1	NA	ND	ND	ND	ND	0.1	0.7	20.8	19.5	ND	ND	All good.
20/09/21	NR	BH4.02		NR	NR		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unable to access borehole, bolt has been overscrewed during installation resulting in the cover being impossible to open with an allen key.
20/09/21	12:58	BH5.01		10.48	1.95		1018		0.4	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	19.1	1.0	ND	All good.
20/09/21	12:19	BH5.02		5.46	2.68		1019		-0.1	0.0	NA	ND	0.2	ND	4	0.1	ND	20.8	20.0	1.0	1	All good.
20/09/21	12:03	BH5.03		10.44	0.75		1020		-0.1	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	18.9	1.0	ND	All good.
20/09/21	11:51	BH5.05		10.02	1.95		1019		-0.4	0.0	NA	ND	ND	ND	ND	0.1	0.4	20.8	19.7	ND	ND	All good.
20/09/21	14:12	BH6.02		10.33	2.66		1020		0.1	0.0	NA	ND	ND	ND	ND	0.1	2.1	20.8	19.5	1.0	ND	All good.
20/09/21	14:17	BH6.03		5.48	2.74		1020		0.2	0.0	NA	ND	ND	ND	ND	0.1	2.1	20.8	19.4	1.0	ND	All good.
20/09/21	13:57	BH7.01		20.34	3.92		1018		3.4	0.0	NA	ND	ND	ND	ND	0.1	2.2	20.8	18.4	1.0	ND	All good.
20/09/21	13:48	BH7.03		5.06	2.53		1020		0.3	0.0	NA	ND	ND	ND	ND	0.1	2.3	20.8	19.1	1.0	ND	All good.

Hydrock

Site: Dunsbury Park, Portsmouth
Job number:
Client: Hydrock

Gas analyser: G500691
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: Sunny, dry, ground dry, moderate breeze.

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
24/09/21	09:19	WS1.01		5.39	2.92		1015		-0.5	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	19.5	ND	ND	All good.
24/09/21	10:23	WS4.03		5.49	2.24		1014		-0.1	0.0	NA	ND	ND	ND	ND	0.1	5.8	20.8	14.7	ND	ND	All good.
24/09/21	10:45	WS4.04		5.36	3.47		1014		0.1	-0.1	NA	ND	ND	ND	ND	0.1	ND	20.8	16.1	1.0	ND	All good.
24/09/21	10:49	WS4.05		5.45	2.78		1015		0.0	0.0	NA	ND	ND	ND	ND	0.1	1.5	20.8	15.1	1.0	ND	All good.
24/09/21	09:46	WS5.02		5.23	4.00		1015		0.1	0.0	NA	ND	2.6	ND	52	0.1	0.1	20.8	6.9	1.0	1	All good.
24/09/21	09:41	WS5.04		5.54	2.47		1015		-3.6	-0.7	NA	ND	0.4	ND	8	0.1	ND	20.8	4.4	1.0	1	All good.
24/09/21	09:39	WS5.05		5.51	2.20		1015		5.9	0.0	NA	ND	ND	ND	ND	0.1	1.2	20.8	12.9	ND	1	All good.
24/09/21	09:34	WS5.08		5.44	1.55		1015		12.0	4.1	NA	ND	ND	ND	ND	0.1	0.1	20.8	18.3	2.0	1	All good.
24/09/21	11:55	WS6.01		5.38	2.19		1012		3.0	0.0	NA	ND	ND	ND	ND	0.1	2.6	20.8	19.6	1.0	ND	All good.
25/09/21	11:59	WS6.02		5.37	2.49		1010		0.9	0.0	NA	ND	ND	ND	ND	0.1	3.8	20.8	19.3	1.0	ND	All good.
24/09/21	12:08	WS6.03		5.30	2.43		1014		0.2	0.0	NA	ND	ND	ND	ND	0.1	5.9	20.8	17.8	1.0	ND	All good.
24/09/21	12:18	WS6.04		5.27	2.56		1014		2.5	0.0	NA	ND	ND	ND	ND	0.1	2.3	20.8	19.6	1.0	ND	All good.
24/09/21	12:13	WS6.06		5.42	2.67		1014		2.5	0.0	NA	ND	ND	ND	ND	0.1	2.4	20.8	19.8	1.0	ND	All good.
24/09/21	11:38	WS7.03		5.47	3.62		1013		0.1	0.0	NA	ND	ND	ND	ND	0.1	0.7	20.8	20.5	1.0	ND	All good.
24/09/21	11:28	WS7.04		5.32	2.39		1012		2.7	0.1	NA	ND	ND	ND	ND	0.1	3.6	20.8	19.0	1.0	ND	All good.
24/09/21	09:23	BH1.01		10.47	4.35		1015		-0.5	0.0	NA	ND	ND	ND	ND	0.1	0.8	20.8	19.1	1.0	ND	All good.
24/09/21	NR	BH4.02		NR	NR		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Unable to access borehole, bolt has been overscrewed during installation resulting in the cover being impossible to open with an allen key.
24/09/21	09:49	BH5.01		10.48	2.00		1015		5.2	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	18.9	1.0	1	All good.
24/09/21	09:43	BH5.02		5.46	2.69		1015		-0.1	0.0	NA	ND	ND	ND	ND	0.1	ND	20.8	19.7	1.0	1	All good.
24/09/21	09:36	BH5.03		10.44	0.56		1015		-0.2	-0.1	NA	ND	ND	ND	ND	0.1	0.1	20.8	19.8	ND	1	All good.
24/09/21	09:31	BH5.05		10.02	1.98		1015		1.9	0.1	NA	ND	ND	ND	ND	0.1	0.4	20.8	19.6	1.0	ND	All good.
24/09/21	12:10	BH6.02		10.33	2.67		1014		3.8	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.6	1.0	ND	All good.
24/09/21	12:15	BH6.03		5.48	2.76		1014		0.3	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.8	20.7	1.0	ND	All good.
24/09/21	11:48	BH7.01		20.34	3.94		1013		3.1	0.0	NA	ND	ND	ND	ND	0.1	2.2	20.8	18.4	1.0	ND	All good.
24/09/21	11:13	BH7.03		5.06	2.54		1015		0.2	0.0	NA	ND	ND	ND	ND	0.1	2.2	20.8	19.1	1.0	ND	All good.

Hydrock

Site: Dunsbury Park
Job number:
Client: Hydrock

Gas analyser: G505363
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: dry, overcast, ground wet, light breeze

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
22/01/22		BH1.01		9.97	3.90		1037		-1.8	0.0	NA	ND	2.6	ND	52	0.1	4.4	20.9	1.8	ND	1	All good.
22/01/22		BH5.01		10.41	1.37		1035		11.9	7.0	NA	ND	ND	ND	ND	0.1	0.7	20.9	7.5	ND	ND	All good.
22/01/22		BH5.02		5.53	2.21		1036		-1.5	0.0	NA	ND	1.0	ND	20	0.1	0.1	20.9	4.6	2.0	1	All good.
22/01/22		BH5.05		9.67	1.74		1037		19.2	0.0	NA	ND	ND	ND	ND	0.1	1.1	20.9	3.3	ND	1	All good.
22/01/22		BH6.02		10.25	1.38		1035		-0.9	0.0	NA	ND	ND	ND	ND	0.1	4.2	20.9	17.0	3.0	ND	All good.
22/01/22		BH6.03		5.46	1.87		1035		-0.8	0.0	NA	ND	ND	ND	ND	0.1	3.2	20.9	17.7	1.0	ND	All good.
22/01/22		BH7.02		20.33	2.16		1033		-0.8	0.0	NA	ND	ND	ND	ND	0.1	1.9	20.9	20.2	ND	ND	All good.
22/01/22		BH7.03		5.00	1.49		1036		-3.2	0.0	NA	ND	ND	ND	ND	0.1	5.8	20.9	14.1	1.0	ND	All good.
22/01/22		WS1.01		5.39	2.37		1036		-1.6	0.0	NA	ND	0.8	ND	16	0.1	0.2	20.9	1.9	1.0	1	All good.
22/01/22		WS4.03		5.41	0.88		1035		4.5	1.6	NA	ND	ND	ND	ND	0.1	2.6	20.9	6.5	1.0	ND	All good.
22/01/22		WS4.04		5.36	2.84		1035		4.7	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.9	20.1	ND	ND	All good.
22/01/22		WS4.05		5.45	2.38		1035		-0.8	0.0	NA	ND	4.0	ND	80	0.1	3.6	20.9	1.6	1.0	ND	All good.
22/01/22		WS5.02		5.24	3.54		1035		-0.8	0.0	NA	ND	37.9	ND	>>>>	0.1	0.1	20.9	1.4	1.0	ND	All good.
22/01/22		WS5.04		5.46	2.21		1036		-0.7	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.9	19.6	1.0	ND	All good.
22/01/22		WS5.05		5.51	1.88		1036		33.5	9.2	NA	ND	ND	ND	ND	0.1	1.3	20.9	1.4	1.0	ND	All good.
22/01/22		WS5.07		10.44	0.31		1036		-0.9	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.9	20.7	ND	ND	All good.
22/01/22		WS5.08		5.41	0.73		1036		-1.8	0.0	NA	ND	ND	ND	ND	0.1	0.4	20.9	14.4	ND	ND	All good.
22/01/22		WS6.01		5.37	1.37		1033		31.1	5.3	NA	ND	ND	ND	ND	0.1	5.2	20.9	12.3	1.0	ND	All good.
22/01/22		WS6.02		5.38	1.03		1034		-0.8	0.0	NA	ND	ND	ND	ND	0.1	3.2	20.9	20.1	ND	ND	All good.
22/01/22		WS6.03		5.30	1.18		1035		7.0	3.2	NA	ND	ND	ND	ND	0.1	6.3	20.9	6.8	1.0	ND	All good.
22/01/22		WS6.04		5.13	1.40		1035		-0.8	0.0	NA	ND	ND	ND	ND	0.1	0.2	20.9	20.9	1.0	ND	All good.
22/01/22		WS6.06		5.44	1.30		1035		4.5	0.0	NA	ND	ND	ND	ND	0.1	2.4	20.9	18.1	ND	ND	All good.
22/01/22		WS7.03		5.25	1.55		1033		-0.8	0.0	NA	ND	ND	ND	ND	0.1	0.2	20.9	21.0	ND	ND	All good.
22/01/22		WS7.04		5.31	1.03		1033		46.7	9.0	NA	ND	ND	ND	ND	0.1	7.0	20.9	11.5	2.0	ND	All good.

Hydrock

Site: Dunsbury Park
Job number:
Client:

Gas analyser: G505315
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Jaime de la Torre

Notes on site conditions:

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations												Local conditions
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		Notes on condition of borehole and surrounding ground
												Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	
28/01/22	08:53	WS1.01		5.41	2.42		1037		-2.7	-0.3	NA	0.0	0.8	0	16	0.1	0.2	20.9	0.7	0.0	0	Borehole in good condition
28/01/22	09:39	WS4.03		5.43	0.84		1035		1.3	0.1	NA	0.0	1.1	0	22	0.1	2.3	20.8	14.6	0.0	0	Borehole in good condition
28/01/22	10:57	WS4.04		5.37	2.78		1035		-6.2	-2.4	NA	0.0	0.0	0	0	0.1	0.2	20.9	14.7	0.0	0	Borehole in good condition
28/01/22	10:51	WS4.05		5.37	2.40		1036		-1.4	-0.2	NA	0.0	2.7	0	54	0.1	3.6	20.8	0.5	0.0	0	Borehole in good condition
28/01/22	09:28	WS5.02		5.27	3.52		1035		-0.1	0.0	NA	0.0	39.2	0	>>>>	0.1	0.1	20.9	0.6	0.0	0	Borehole in good condition
28/01/22	09:23	WS5.04		5.55	2.24		1036		-0.7	0.0	NA	0.0	0.5	0	10	0.1	0.2	20.9	12.2	1.0	0	Borehole in good condition
28/01/22	09:19	WS5.05		5.53	1.83		1036		19.8	4.1	NA	0.0	0.0	0	0	0.1	1.2	20.8	2.7	0.0	0	Borehole in good condition
28/01/22	09:09	WS5.08		5.46	0.75		1036		-0.4	-0.4	NA	0.0	0.0	0	0	0.1	0.8	20.9	16.3	0.0	0	Borehole in good condition
28/01/22	10:07	WS6.03		5.32	1.46		1035		-0.1	0.0	NA	0.0	0.0	0	0	0.1	5.4	20.9	9.3	0.0	0	Borehole in good condition
28/01/22	10:12	WS6.04		5.15	1.55		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Bung out of the pipe/Cover removed/Fixed
28/01/22	10:21	WS6.06		5.43	1.40		1035		-0.1	0.0	NA	0.0	0.0	0	0	0.1	2.2	20.9	19.4	0.0	0	Borehole in good condition
28/01/22	10:01	WS601		5.40	1.13		1034		4.6	0.5	NA	0.0	0.1	0	2	0.1	4.8	20.9	14.2	0.0	0	Borehole in good condition
28/01/22	10:37	WS7.03		5.48	1.80		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Bung out of the pipe/Cover removed/Unnable to find the bung
28/01/22	10:33	WS7.04		5.34	0.88		1034		8.6	1.7	NA	0.0	0.0	0	0	0.1	6.0	20.8	14.3	0.0	0	Borehole in good condition

Hydrock

Site: Dunsbury Park
Job number:
Client: Hydrock

Gas analyser: G505363
Equipment check OK: Y
Service in date: Y
Calibration check OK: Y
Name of person monitoring: Richard Ward

Notes on site conditions: dry, overcast, ground wet, light breeze

Notes: LEL = lower explosive limit = 5%v/v. * where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in **blue**). GSVs are rounded to 3 places.

Monitoring round		Borehole details					Pressure and flow				Gas concentrations											Local conditions
												CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases		
Date	Time	Borehole	Single or dual gas tap	Response zone depth (m)	Depth to water or depth of hole if dry (m)	D denotes dry hole	Atmospheric pressure (hPa)	Atm pressure falling / rising / steady	Relative BH pressure (hPa)	Gas flow* (l/hr)	VOC (as ppm using PID)	Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady	CO (PPM)	H_2S (PPM)	Notes on condition of borehole and surrounding ground
04/02/22	08:53	BH1.01		9.97	4.01		1007		3.4	0.0	NA	ND	2.5	ND	50	0.1	4.1	20.9	6.7	1.0	1	All good.
04/02/22	09:18	BH5.01		10.41	1.37		1006		6.6	0.0	NA	ND	ND	ND	ND	0.1	0.6	20.9	15.5	ND	ND	All good.
04/02/22	09:13	BH5.02		5.53	2.22		1006		-1.4	0.0	NA	ND	0.5	ND	10	0.1	0.1	20.9	11.4	3.0	ND	All good.
04/02/22	09:03	BH5.05		9.67	1.71		1007		5.1	0.0	NA	ND	ND	ND	ND	0.1	0.8	20.9	11.5	ND	ND	All good.
04/02/22	09:50	BH6.02		10.25	1.80		1007		-0.7	0.0	NA	ND	ND	ND	ND	0.1	4.3	20.9	17.8	1.0	ND	All good.
04/02/22	09:54	BH6.03		5.46	2.06		1007		-0.8	0.0	NA	ND	ND	ND	ND	0.1	3.6	20.9	20.0	1.0	ND	All good.
04/02/22	09:37	BH7.02		20.33	2.69		1005		-0.4	0.0	NA	ND	ND	ND	ND	0.1	2.2	20.9	20.7	1.0	ND	All good.
04/02/22	09:32	BH7.03		5.00	1.59		1006		-1.0	0.0	NA	ND	ND	ND	ND	0.1	5.5	20.9	17.4	1.0	ND	All good.
04/02/22	08:51	WS1.01		5.39	2.48		1006		2.0	0.0	NA	ND	0.5	ND	10	0.1	0.1	20.9	7.9	ND	1	All good.
04/02/22	09:22	WS4.03		5.41	0.99		1006		-0.8	0.0	NA	ND	0.3	ND	6	0.1	0.1	20.9	21.0	1.0	ND	All good.
04/02/22	09:23	WS4.04		5.36	2.89		1006		-0.8	0.0	NA	ND	0.1	ND	2	0.1	0.1	20.9	21.3	1.0	ND	All good.
04/02/22	09:25	WS4.05		5.45	2.41		1006		-0.8	0.0	NA	ND	ND	ND	ND	0.1	2.5	20.9	21.2	1.0	ND	All good.
04/02/22	09:16	WS5.02		5.24	3.48		1007		-0.7	0.0	NA	ND	41.3	ND	>>>>>	0.1	0.0	20.9	0.3	1.0	ND	All good.
04/02/22	09:10	WS5.04		5.46	2.25		1007		4.5	0.0	NA	ND	ND	ND	ND	0.1	0.1	20.9	20.4	1.0	ND	All good.
04/02/22	09:08	WS5.05		5.51	1.82		1007		22.8	6.9	NA	ND	ND	ND	ND	0.1	1.2	20.9	8.4	ND	ND	All good.
04/02/22	09:06	WS5.07		NR	NR		NR		NR	NR	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Flooded.
04/02/22	09:05	WS5.08		5.41	0.84		1007		1.3	0.0	NA	ND	ND	ND	ND	0.1	0.9	20.9	19.3	1.0	ND	All good.
04/02/22	09:44	WS6.01		5.37	1.37		1005		-0.8	0.0	NA	ND	ND	ND	ND	0.1	4.5	20.9	19.3	1.0	ND	All good.
04/02/22	09:47	WS6.02		5.38	1.33		1006		-12.1	-4.4	NA	ND	ND	ND	ND	0.1	3.2	20.9	20.7	1.0	ND	All good.
04/02/22	09:48	WS6.03		5.30	1.62		1006		-0.8	0.0	NA	ND	ND	ND	ND	0.1	5.7	20.9	16.6	1.0	ND	All good.
04/02/22	09:56	WS6.04		5.13	1.94		1008		-0.9	0.0	NA	ND	ND	ND	ND	0.1	3.6	20.9	20.2	1.0	ND	All good.
04/02/22	09:52	WS6.06		5.44	1.52		1007		-0.8	0.0	NA	ND	ND	ND	ND	0.1	3.9	20.9	19.4	1.0	ND	All good.
04/02/22	09:41	WS7.03		5.25	2.00		1005		-0.8	0.0	NA	ND	ND	ND	ND	0.1	0.2	20.9	21.3	ND	ND	All good.
04/02/22	09:34	WS7.04		5.31	0.99		1005		-2.2	0.0	NA	ND	ND	ND	ND	0.1	5.9	20.9	19.1	1.0	ND	All good.

Ground Gas Risk Assessment

Hydrock

Job Number 19453
Job Name Dunsbury Park, Havant
Client Portsmouth City Council

Data Plot 100

Max CH4	Max C02	Worst Case Flow	Worst Case GSV Methane	Worst Case GSV CO_2
2.6	4.4	0.1	0.0026	0.0044

Number of Readings	9
Number of Monitoring Rounds	9
Number of Readings with Flow Rate	16

CIRIA C665 Assessment

	Methane		Carbon Dioxide	
	Max Value	GSV	Max Value	GSV
CS1	14	16	16	16
CS2	2	0	0	0
CS3	N/A	0	N/A	0
CS4	N/A	0	N/A	0
CS5	N/A	0	N/A	0
CS6	N/A	0	N/A	0

Location	Pressure Tre0.0	Date	Relative Pressure (mb)	Flow Rate (l/hr)	Atmos. Pressure (m.bar)	CH_4 (% vol)		(%LEL)		CO_2 (% vol)		O_2 (% vol)		GSV – CH4	GSV – CO_2
						Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady		
WS1.01	Falling	11/08/21	-0.02	0.1	1017	0.0	0.0	0.0	0.0	0.1	0.1	19.8	17.2	0.0000	0.0001
WS1.01	Rising	27/08/21	-0.14	0.1	1021	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.5	0.0000	0.0001
BH1.01	Rising	27/08/21	0.24	0.1	1022	0.0	0.1	0.0	2.0	0.1	0.6	20.8	19.8	0.0001	0.0006
WS1.01	Steady	07/09/21	-0.17	0.1	1019	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.2	0.0000	0.0001
BH1.01	Steady	07/09/21	-0.24	0.1	1020	0.0	0.1	0.0	2.0	0.1	1.0	20.8	18.9	0.0001	0.0010
WS1.01	Falling	15/09/21	-0.35	0.1	1012	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.1	0.0000	0.0001
BH1.01	Falling	15/09/21	-0.53	0.1	1011	0.0	0.1	0.0	0.0	0.1	1.2	20.8	18.3	0.0001	0.0012
WS1.01	Steady	20/09/21	-0.57	0.1	1019	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.6	0.0000	0.0001
BH1.01	Steady	20/09/21	-0.24	-0.1	1018	0.0	0.0	0.0	0.0	0.1	0.7	20.8	19.5	0.0000	-0.0007
WS1.01	Steady	24/09/21	-0.48	0.1	1015	0.0	0.0	0.0	0.0	0.1	0.1	20.8	19.5	0.0000	0.0001
BH1.01	Steady	24/09/21	-0.48	0.1	1015	0.0	0.0	0.0	0.0	0.1	0.8	20.8	19.1	0.0000	0.0008
BH1.01	Steady	22/01/22	-1.75	0.1	1037	0.0	2.6	0.0	52.0	0.1	4.4	20.9	1.8	0.0026	0.0044
WS1.01	Steady	22/01/22	-1.61	0.1	1036	0.0	0.8	0.0	16.0	0.1	0.2	20.9	1.9	0.0008	0.0002
WS1.01	Falling	28/01/22	-2.74	-0.3	1037	0.0	0.8	0.0	16.0	0.1	0.2	20.9	0.7	-0.0024	-0.0006
BH1.01	Steady	04/02/22	3.41	0.1	1007	0.0	2.5	0.0	50.0	0.1	4.1	20.9	6.7	0.0025	0.0041
WS1.01	Steady	04/02/22	1.96	0.1	1006	0.0	0.5	0.0	10.0	0.1	0.1	20.9	7.9	0.0005	0.0001

Ground Gas Risk Assessment

Hydrock

Job Number 19453
Job Name Dunsbury Park, Havant
Client Portsmouth City Council

Data Plot 400

Max CH4	Max C02	Worst Case Flow	Worst Case GSV Methane	Worst Case GSV CO_2
4.0	5.8	1.6	0.0640	0.0928

Number of Readings	9
Number of Monitoring Rounds	9
Number of Readings with Flow Rate	24

CIRIA C665 Assessment

	Methane		Carbon Dioxide	
	Max Value	GSV	Max Value	GSV
CS1	21	24	21	24
CS2	3	0	3	0
CS3	N/A	0	N/A	0
CS4	N/A	0	N/A	0
CS5	N/A	0	N/A	0
CS6	N/A	0	N/A	0

Location	Pressure Tre0.0	Date	Relative Pressure (mb)	Flow Rate (l/hr)	Atmos. Pressure (m.bar)	CH_4 (% vol)		(%LEL)		CO_2 (% vol)		O_2 (% vol)		GSV – CH4	GSV – CO_2
						Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady		
WS4.03	Rising	27/08/21	-27.04	-5.0	1020	0.0	0.0	0.0	0.0	0.1	1.6	20.8	18.4	0.0000	-0.0800
WS4.04	Rising	27/08/21	0.12	0.1	1021	0.0	0.0	0.0	0.0	0.1	0.0	20.8	17.7	0.0000	0.0000
WS4.05	Rising	27/08/21	-0.02	0.1	1021	0.0	0.0	0.0	0.0	0.1	0.3	20.8	18.6	0.0000	0.0003
WS4.03	Steady	07/09/21	-0.28	0.1	1019	0.0	0.0	0.0	0.0	0.1	2.8	20.8	16.6	0.0000	0.0028
WS4.04	Steady	07/09/21	0.09	0.1	1019	0.0	0.0	0.0	0.0	0.1	0.0	20.8	16.1	0.0000	0.0000
WS4.05	Steady	07/09/21	0.21	0.1	1019	0.0	0.0	0.0	0.0	0.1	1.2	20.8	14.9	0.0000	0.0012
WS4.03	Falling	15/09/21	0.47	0.1	1011	0.0	0.0	0.0	0.0	0.1	5.6	20.8	14.6	0.0000	0.0056
WS4.04	Falling	15/09/21	0.36	0.1	1011	0.0	0.0	0.0	0.0	0.1	0.0	20.8	16.2	0.0000	0.0000
WS4.05	Falling	15/09/21	-0.09	0.1	1011	0.0	0.0	0.0	0.0	0.1	1.5	20.8	15.0	0.0000	0.0015
WS4.03	Steady	20/09/21	3.12	0.1	1019	0.0	0.0	0.0	0.0	0.1	5.8	20.8	14.7	0.0000	0.0058
WS4.04	Steady	20/09/21	7.11	0.1	1020	0.0	0.0	0.0	0.0	0.1	0.0	20.8	16.4	0.0000	0.0000
WS4.05	Steady	20/09/21	0.19	0.1	1020	0.0	0.0	0.0	0.0	0.1	1.5	20.8	15.7	0.0000	0.0015
WS4.03	Steady	24/09/21	-0.07	0.1	1014	0.0	0.0	0.0	0.0	0.1	5.8	20.8	14.7	0.0000	0.0058
WS4.04	Steady	24/09/21	0.10	-0.1	1014	0.0	0.0	0.0	0.0	0.1	0.0	20.8	16.1	0.0000	0.0000
WS4.05	Steady	24/09/21	-0.03	0.1	1015	0.0	0.0	0.0	0.0	0.1	1.5	20.8	15.1	0.0000	0.0015
WS4.03	Steady	22/01/22	4.54	1.6	1035	0.0	0.0	0.0	0.0	0.1	2.6	20.9	6.5	0.0000	0.0416
WS4.04	Steady	22/01/22	4.69	0.1	1035	0.0	0.0	0.0	0.0	0.1	0.1	20.9	20.1	0.0000	0.0001
WS4.05	Steady	22/01/22	-0.81	0.1	1035	0.0	4.0	0.0	80.0	0.1	3.6	20.9	1.6	0.0040	0.0036
WS4.03	Falling	28/01/22	1.29	0.1	1035	0.0	1.1	0.0	22.0	0.1	2.3	20.8	14.6	0.0011	0.0023
WS4.04	Falling	28/01/22	-6.18	-2.4	1035	0.0	0.0	0.0	0.0	0.1	0.2	20.9	14.7	0.0000	-0.0048
WS4.05	Falling	28/01/22	-1.35	-0.2	1036	0.0	2.7	0.0	54.0	0.1	3.6	20.8	0.5	-0.0054	-0.0072
WS4.03	Steady	04/02/22	-0.80	0.1	1006	0.0	0.3	0.0	6.0	0.1	0.1	20.9	21.0	0.0003	0.0001
WS4.04	Steady	04/02/22	-0.81	0.1	1006	0.0	0.1	0.0	2.0	0.1	0.1	20.9	21.3	0.0001	0.0001
WS4.05	Steady	04/02/22	-0.76	0.1	1006	0.0	0.0	0.0	0.0	0.1	2.5	20.9	21.2	0.0000	0.0025

Ground Gas Risk Assessment

Hydrock

Job Number 19453
Job Name Dunsbury Park, Havant
Client Portsmouth City Council

Data Plot 600

Max CH4	Max C02	Worst Case Flow	Worst Case GSV Methane	Worst Case GSV CO_2
0.1	10.4	5.3	0.0053	0.5512

Number of Readings	9
Number of Monitoring Rounds	9
Number of Readings with Flow Rate	51

CIRIA C665 Assessment

	Methane		Carbon Dioxide	
	Max Value	GSV	Max Value	GSV
CS1	51	51	40	49
CS2	0	0	11	2
CS3	N/A	0	N/A	0
CS4	N/A	0	N/A	0
CS5	N/A	0	N/A	0
CS6	N/A	0	N/A	0

Location	Pressure Tre0.0	Date	Relative Pressure (mb)	Flow Rate (l/hr)	Atmos. Pressure (m.bar)	CH_4 (% vol)		(%LEL)		CO_2 (% vol)		O_2 (% vol)		GSV – CH4	GSV – CO_2
						Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady		
WS6.03	Falling	11/08/21	0.09	0.1	1017	0.0	0.0	0.0	0.0	3.3	3.5	18.3	14.2	0.0000	0.0032
WS6.04	Falling	11/08/21	0.11	0.1	1016	0.0	0.0	0.0	0.0	2.1	2.1	19.8	15.5	0.0000	0.0023
WS6.06	Falling	11/08/21	0.07	0.1	1017	0.0	0.0	0.0	0.0	2.5	2.5	18.0	16.1	0.0000	0.0018
WS6.01	Rising	27/08/21	-0.45	0.1	1017	0.0	0.0	0.0	0.0	0.1	6.5	20.8	17.3	0.0000	0.0065
WS6.03	Rising	27/08/21	-0.19	0.1	1018	0.0	0.0	0.0	0.0	0.1	10.4	20.8	13.8	0.0000	0.0104
WS6.04	Rising	27/08/21	-0.29	0.1	1019	0.0	0.0	0.0	0.0	0.1	5.5	20.8	17.4	0.0000	0.0055
WS6.06	Rising	27/08/21	-0.09	0.1	1019	0.0	0.0	0.0	0.0	0.1	5.1	20.8	18.0	0.0000	0.0051
BH6.02	Rising	27/08/21	-0.24	0.1	1018	0.0	0.0	0.0	0.0	0.1	2.2	20.8	18.1	0.0000	0.0022
BH6.03	Rising	27/08/21	0.03	0.1	1019	0.0	0.0	0.0	0.0	0.1	4.1	20.8	17.8	0.0000	0.0041
WS6.01	Steady	07/09/21	0.09	0.1	1017	0.0	0.0	0.0	0.0	0.1	4.1	20.8	18.2	0.0000	0.0041
WS6.03	Steady	07/09/21	0.22	0.1	1018	0.0	0.0	0.0	0.0	0.1	8.3	20.8	15.8	0.0000	0.0083
WS6.04	Steady	07/09/21	6.47	0.1	1019	0.0	0.0	0.0	0.0	0.1	1.5	20.8	19.5	0.0000	0.0015
WS6.06	Steady	07/09/21	0.38	0.1	1019	0.0	0.0	0.0	0.0	0.1	3.3	20.8	18.6	0.0000	0.0033
BH6.02	Steady	07/09/21	0.31	0.1	1018	0.0	0.0	0.0	0.0	0.1	2.2	20.8	18.7	0.0000	0.0022
BH6.03	Steady	07/09/21	-0.02	0.1	1019	0.0	0.0	0.0	0.0	0.1	2.7	20.8	18.8	0.0000	0.0027
WS6.01	Falling	15/09/21	-0.14	0.1	1009	0.0	0.0	0.0	0.0	0.1	3.2	20.8	19.2	0.0000	0.0032
WS6.03	Falling	15/09/21	0.19	0.1	1011	0.0	0.0	0.0	0.0	0.1	7.7	20.8	17.2	0.0000	0.0077
WS6.04	Falling	15/09/21	0.17	0.1	1012	0.0	0.0	0.0	0.0	0.1	2.8	20.8	19.3	0.0000	0.0028
WS6.06	Falling	15/09/21	0.03	0.1	1011	0.0	0.0	0.0	0.0	0.1	3.0	20.8	19.1	0.0000	0.0030
BH6.02	Falling	15/09/21	0.31	0.1	1011	0.0	0.0	0.0	0.0	0.1	2.3	20.8	19.3	0.0000	0.0023
BH6.03	Falling	15/09/21	0.31	0.1	1011	0.0	0.0	0.0	0.0	0.1	2.4	20.8	19.7	0.0000	0.0024
WS6.01	Steady	20/09/21	0.09	0.1	1018	0.0	0.0	0.0	0.0	0.1	2.9	20.8	19.2	0.0000	0.0029
WS6.03	Steady	20/09/21	0.09	0.1	1019	0.0	0.0	0.0	0.0	0.1	4.1	20.8	18.8	0.0000	0.0041
WS6.04	Steady	20/09/21	0.21	0.1	1020	0.0	0.0	0.0	0.0	0.1	2.5	20.8	19.4	0.0000	0.0025
WS6.06	Steady	20/09/21	6.33	0.1	1020	0.0	0.0	0.0	0.0	0.1	2.7	20.8	19.3	0.0000	0.0027
BH6.02	Steady	20/09/21	0.14	0.1	1020	0.0	0.0	0.0	0.0	0.1	2.1	20.8	19.5	0.0000	0.0021
BH6.03	Steady	20/09/21	0.21	0.1	1020	0.0	0.0	0.0	0.0	0.1	2.1	20.8	19.4	0.0000	0.0021
WS6.01	Steady	24/09/21	2.95	0.1	1012	0.0	0.0	0.0	0.0	0.1	2.6	20.8	19.6	0.0000	0.0026
WS6.02	Steady	25/09/21	0.85	0.1	1010	0.0	0.0	0.0	0.0	0.1	3.8	20.8	19.3	0.0000	0.0038
WS6.03	Steady	24/09/21	0.16	0.1	1014	0.0	0.0	0.0	0.0	0.1	5.9	20.8	17.8	0.0000	0.0059
WS6.04	Steady	24/09/21	2.47	0.1	1014	0.0	0.0	0.0	0.0	0.1	2.3	20.8	19.6	0.0000	0.0023
WS6.06	Steady	24/09/21	2.50	0.1	1014	0.0	0.0	0.0	0.0	0.1	2.4	20.8	19.8	0.0000	0.0024
BH6.02	Steady	24/09/21	3.83	0.1	1014	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.6	0.0000	0.0001
BH6.03	Steady	24/09/21	0.28	0.1	1014	0.0	0.0	0.0	0.0	0.1	0.1	20.8	20.7	0.0000	0.0001
BH6.02	Steady	22/01/22	-0.90	0.1	1035	0.0	0.0	0.0	0.0	0.1	4.2	20.9	17.0	0.0000	0.0042
BH6.03	Steady	22/01/22	-0.76	0.1	1035	0.0	0.0	0.0	0.0	0.1	3.2	20.9	17.7	0.0000	0.0032
WS6.01	Steady	22/01/22	31.07	5.3	1033	0.0	0.0	0.0	0.0	0.1	5.2	20.9	12.3	0.0000	0.2756
WS6.02	Steady	22/01/22	-0.81	0.1	1034	0.0	0.0	0.0	0.0	0.1	3.2	20.9	20.1	0.0000	0.0032
WS6.03	Steady	22/01/22	6.96	3.2	1035	0.0	0.0	0.0	0.0	0.1	6.3	20.9	6.8	0.0000	0.2016
WS6.04	Steady	22/01/22	-0.80	0.1	1035	0.0	0.0	0.0	0.0	0.1	0.2	20.9	20.9	0.0000	0.0002
WS6.06	Steady	22/01/22	4.54	0.1	1035	0.0	0.0	0.0	0.0	0.1	2.4	20.9	18.1	0.0000	0.0024
WS6.03	Falling	28/01/22	-0.12	0.1	1035	0.0	0.0	0.0	0.0	0.1	5.4	20.9	9.3	0.0000	0.0054
WS6.06	Falling	28/01/22	-0.14	0.1	1035	0.0	0.0	0.0	0.0	0.1	2.2	20.9	19.4	0.0000	0.0022
WS6.01	Falling	28/01/22	4.59	0.5	1034	0.0	0.1	0.0	2.0	0.1	4.8	20.9	14.2	0.0005	0.0240
BH6.02	Steady	04/02/22	-0.73	0.1	1007	0.0	0.0	0.0	0.0	0.1	4.3	20.9	17.8	0.0000	0.0043
BH6.03	Steady	04/02/22	-0.81	0.1	1007	0.0	0.0	0.0	0.0	0.1	3.6	20.9	20.0	0.0000	0.0036
WS6.01	Steady	04/02/22	-0.76	0.1	1005	0.0	0.0	0.0	0.0	0.1	4.5	20.9	19.3	0.0000	0.0045
WS6.02	Steady	04/02/22	-12.07	-4.4	1006	0.0	0.0	0.0	0.0	0.1	3.2	20.9	20.7	0.0000	0.0032
WS6.03	Steady	04/02/22	-0.76	0.1	1006	0.0	0.0	0.0	0.0	0.1	5.7	20.9	16.6	0.0000	-0.2508
WS6.04	Steady	04/02/22	-0.88	0.1	1008	0.0	0.0	0.0	0.0	0.1	3.6	20.9	20.2	0.0000	0.0036
WS6.06	Steady	04/02/22	-0.76	0.1	1007	0.0	0.0	0.0	0.0	0.1	3.9	20.9	19.4	0.0000	0.0039

Ground Gas Risk Assessment

Hydrock

Job Number 19453
Job Name Dunsbury Park, Havant
Client Portsmouth City Council

Data Plot 700

Max CH4	Max C02	Worst Case Flow	Worst Case GSV Methane	Worst Case GSV CO_2
0.0	8.7	9.0	0.0000	0.7830

Number of Readings	9
Number of Monitoring Rou0.0s	9
Number of Readings with Flow Rate	31

CIRIA C665 Assessment

	Methane		Carbon Dioxide	
	Max Value	GSV	Max Value	GSV
CS1	31	31	24	29
CS2	0	0	7	2
CS3	N/A	0	N/A	0
CS4	N/A	0	N/A	0
CS5	N/A	0	N/A	0
CS6	N/A	0	N/A	0

Location	Pressure Tre0.0	Date	Relative Pressure (mb)	Flow Rate (l/hr)	Atmos. Pressure (m.bar)	CH_4 (% vol)		(%LEL)		CO_2 (% vol)		O_2 (% vol)		GSV – CH4	GSV – CO_2
						Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady		
WS7.03	Falling	11/08/21	0.19	0.2	1015	0.0	0.0	0.0	0.0	0.1	0.1	20.3	20.3	0.0000	0.0002
WS7.04	Falling	11/08/21	0.09	0.1	1015	0.0	0.0	0.0	0.0	4.3	4.6	19.3	12.1	0.0000	0.0041
WS7.03	Rising	27/08/21	-0.26	0.1	1017	0.0	0.0	0.0	0.0	0.1	0.8	20.8	20.0	0.0000	0.0008
WS7.04	Rising	27/08/21	6.59	0.1	1018	0.0	0.0	0.0	0.0	0.1	8.7	20.8	14.9	0.0000	0.0087
BH7.01	Rising	27/08/21	-0.12	0.1	1018	0.0	0.0	0.0	0.0	0.1	1.4	20.8	17.7	0.0000	0.0014
BH7.03	Rising	27/08/21	-0.16	0.1	1018	0.0	0.0	0.0	0.0	0.1	1.3	20.8	19.4	0.0000	0.0013
WS7.03	Steady	07/09/21	0.26	0.1	1017	0.0	0.0	0.0	0.0	0.1	0.4	20.8	20.2	0.0000	0.0004
WS7.04	Steady	07/09/21	0.17	0.1	1017	0.0	0.0	0.0	0.0	0.1	5.6	20.8	17.4	0.0000	0.0056
BH7.01	Steady	07/09/21	0.16	0.1	1017	0.0	0.0	0.0	0.0	0.1	1.9	20.8	17.7	0.0000	0.0019
BH7.03	Steady	07/09/21	0.14	0.1	1017	0.0	0.0	0.0	0.0	0.1	2.0	20.8	19.0	0.0000	0.0020
WS7.03	Falling	15/09/21	0.03	0.1	1009	0.0	0.0	0.0	0.0	0.1	1.1	20.8	20.3	0.0000	0.0011
WS7.04	Falling	15/09/21	0.05	0.1	1010	0.0	0.0	0.0	0.0	0.1	4.6	20.8	18.3	0.0000	0.0046
BH7.01	Falling	15/09/21	0.03	0.1	1009	0.0	0.0	0.0	0.0	0.1	2.2	20.8	18.3	0.0000	0.0022
BH7.03	Falling	15/09/21	0.19	0.1	1010	0.0	0.0	0.0	0.0	0.1	2.3	20.8	19.0	0.0000	0.0023
WS7.03	Steady	20/09/21	0.17	-0.1	1019	0.0	0.0	0.0	0.0	0.1	0.3	20.8	20.6	0.0000	-0.0003
WS7.04	Steady	20/09/21	0.05	0.1	1019	0.0	0.0	0.0	0.0	0.1	3.3	20.8	18.9	0.0000	0.0033
BH7.01	Steady	20/09/21	3.36	0.1	1018	0.0	0.0	0.0	0.0	0.1	2.2	20.8	18.4	0.0000	0.0022
BH7.03	Steady	20/09/21	0.29	0.1	1020	0.0	0.0	0.0	0.0	0.1	2.3	20.8	19.1	0.0000	0.0023
WS7.03	Steady	24/09/21	0.14	0.1	1013	0.0	0.0	0.0	0.0	0.1	0.7	20.8	20.5	0.0000	0.0007
WS7.04	Steady	24/09/21	2.74	0.1	1012	0.0	0.0	0.0	0.0	0.1	3.6	20.8	19.0	0.0000	0.0036
BH7.01	Steady	24/09/21	3.11	0.1	1013	0.0	0.0	0.0	0.0	0.1	2.2	20.8	18.4	0.0000	0.0022
BH7.03	Steady	24/09/21	0.22	0.1	1015	0.0	0.0	0.0	0.0	0.1	2.2	20.8	19.1	0.0000	0.0022
BH7.01	Steady	22/01/22	-0.81	0.1	1033	0.0	0.0	0.0	0.0	0.1	1.9	20.9	20.2	0.0000	0.0019
BH7.03	Steady	22/01/22	-3.22	0.1	1036	0.0	0.0	0.0	0.0	0.1	5.8	20.9	14.1	0.0000	0.0058
WS7.03	Steady	22/01/22	-0.81	0.1	1033	0.0	0.0	0.0	0.0	0.1	0.2	20.9	21.0	0.0000	0.0002
WS7.04	Steady	22/01/22	46.70	9.0	1033	0.0	0.0	0.0	0.0	0.1	7.0	20.9	11.5	0.0000	0.6300
WS7.04	Falling	28/01/22	8.63	1.7	1034	0.0	0.0	0.0	0.0	0.1	6.0	20.8	14.3	0.0000	0.1020
BH7.01	Steady	04/02/22	-0.36	0.1	1005	0.0	0.0	0.0	0.0	0.1	2.2	20.9	20.7	0.0000	0.0022
BH7.03	Steady	04/02/22	-0.97	0.1	1006	0.0	0.0	0.0	0.0	0.1	5.5	20.9	17.4	0.0000	0.0055
WS7.03	Steady	04/02/22	-0.81	0.1	1005	0.0	0.0	0.0	0.0	0.1	0.2	20.9	21.3	0.0000	0.0002
WS7.04	Steady	04/02/22	-2.15	0.1	1005	0.0	0.0	0.0	0.0	0.1	5.9	20.9	19.1	0.0000	0.0059

Appendix F Contamination Test Results and Statistical Analysis

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Analytical Report Number : 21-10737

Project / Site name:	Dunsbury Park	**Samples received on:**	16/09/2021
Your job number:	19453 GELO ALL UNITS	**Samples instructed on/ Analysis started on:**	17/09/2021
Your order number:	PO10000	**Analysis completed by:**	24/09/2021
Report Issue Number:	1	**Report issued on:**	24/09/2021
Samples Analysed:	8 water samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-10737
Project / Site name: Dunsbury Park

Your Order No: PO10000

Lab Sample Number				2015467	2015468	2015469	2015470	2015471
Sample Reference				BH1.01	BH5.01	BH5.02	BH5.03	BH5.05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.29	1.88	2.64	0.56	1.92
Date Sampled				15/09/2021	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	7.7	8.0	7.9	7.9	7.9
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	430	590	1500	510	850
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	22700	19000	133000	15200	74500
Chloride	mg/l	0.15	ISO 17025	20	52	350	38	140
Fluoride	µg/l	50	ISO 17025	370	500	480	490	660
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	170	85	57	190	36
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	210	100	69	230	44
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	220	110	73	240	47
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.09	2.96	4.35	3.09	3.09
Nitrate as N	mg/l	0.01	ISO 17025	0.48	0.17	0.17	0.19	0.66
Nitrate as NO3	mg/l	0.05	ISO 17025	2.12	0.77	0.77	0.83	2.94
Nitrite as N	µg/l	1	ISO 17025	< 1.0	13	6.0	2.8	< 1.0
Nitrite as NO2	µg/l	5	ISO 17025	< 5.0	44	20	9.3	< 5.0
Hardness - Total	mgCaCO3/l	1	ISO 17025	192	278	400	264	308
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAH Sums								
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Analytical Report Number: 21-10737
Project / Site name: Dunsbury Park

Your Order No: PO10000

Lab Sample Number				2015467	2015468	2015469	2015470	2015471
Sample Reference				BH1.01	BH5.01	BH5.02	BH5.03	BH5.05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.29	1.88	2.64	0.56	1.92
Date Sampled				15/09/2021	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Boron (dissolved)	µg/l	10	ISO 17025	62	200	560	180	260
Calcium (dissolved)	mg/l	0.012	ISO 17025	43	55	100	49	84
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	2.0	4.1	2.6	2.5	2.0
Iron (dissolved)	mg/l	0.004	ISO 17025	0.029	0.025	0.021	0.024	0.020
Iron (dissolved)	µg/l	4	ISO 17025	29	25	21	24	20
Magnesium (dissolved)	mg/l	0.005	ISO 17025	20	34	34	35	24
Sodium (dissolved)	mg/l	0.01	ISO 17025	26	60	210	25	110
Aluminium (dissolved)	µg/l	1	ISO 17025	24	25	3.6	3.3	6.2
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	0.7	0.7	0.9	0.5
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.32	4.30	3.82	1.58	2.42
Barium (dissolved)	µg/l	0.06	ISO 17025	72	32	34	42	21
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.0	4.1	2.6	2.5	2.0
Cobalt (dissolved)	µg/l	0.2	ISO 17025	0.6	0.3	1.9	0.7	1.0
Copper (dissolved)	µg/l	0.5	ISO 17025	3.4	3.6	4.6	3.0	4.4
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	21	8.9	110	33	16
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.4	2.7	5.0	1.6	3.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.8	2.1	< 0.6	1.0
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	0.35	< 0.20	0.43	0.52	0.70
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.6	5.0	3.2	1.9	3.0
Zinc (dissolved)	µg/l	0.5	ISO 17025	4.4	3.0	4.5	17	8.1

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Analytical Report Number: 21-10737
Project / Site name: Dunsbury Park

Your Order No: PO10000

Lab Sample Number				2015467	2015468	2015469	2015470	2015471
Sample Reference				BH1.01	BH5.01	BH5.02	BH5.03	BH5.05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.29	1.88	2.64	0.56	1.92
Date Sampled				15/09/2021	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 21-10737
Project / Site name: Dunsbury Park

Your Order No: PO10000

Lab Sample Number				2015472	2015473	2015474
Sample Reference				BH6.02	BH6.03	BH7.01
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				2.63	2.71	3.86
Date Sampled				15/09/2021	15/09/2021	15/09/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
General Inorganics						
pH	pH Units	N/A	ISO 17025	7.8	7.5	7.3
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	510	1900	710
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	37900	184000	48900
Chloride	mg/l	0.15	ISO 17025	33	400	43
Fluoride	µg/l	50	ISO 17025	380	410	170
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	110	28	79
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	130	34	96
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	140	36	100
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	1.06	4.29	2.69
Nitrate as N	mg/l	0.01	ISO 17025	0.27	0.31	1.83
Nitrate as NO3	mg/l	0.05	ISO 17025	1.19	1.39	8.10
Nitrite as N	µg/l	1	ISO 17025	5.9	< 1.0	280
Nitrite as NO2	µg/l	5	ISO 17025	19	< 5.0	920
Hardness - Total	mgCaCO3/l	1	ISO 17025	303	479	392
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002
Total Phenols						
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
PAH Sums						
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040
Total PAH						
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16

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Analytical Report Number: 21-10737
Project / Site name: Dunsbury Park

Your Order No: PO10000

Lab Sample Number				2015472	2015473	2015474
Sample Reference				BH6.02	BH6.03	BH7.01
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				2.63	2.71	3.86
Date Sampled				15/09/2021	15/09/2021	15/09/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Boron (dissolved)	µg/l	10	ISO 17025	110	660	94
Calcium (dissolved)	mg/l	0.012	ISO 17025	91	110	130
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	2.0	3.6	3.5
Iron (dissolved)	mg/l	0.004	ISO 17025	0.037	0.016	0.006
Iron (dissolved)	µg/l	4	ISO 17025	37	16	5.8
Magnesium (dissolved)	mg/l	0.005	ISO 17025	18	48	19
Sodium (dissolved)	mg/l	0.01	ISO 17025	98	270	25
Aluminium (dissolved)	µg/l	1	ISO 17025	3.0	2.6	3.6
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.4	0.6	0.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.14	2.44	0.71
Barium (dissolved)	µg/l	0.06	ISO 17025	17	23	15
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.0	3.6	3.5
Cobalt (dissolved)	µg/l	0.2	ISO 17025	0.3	3.8	0.6
Copper (dissolved)	µg/l	0.5	ISO 17025	3.1	4.8	4.1
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	40	310	49
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.0	6.1	3.3
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	2.6	0.8
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	0.48	0.50	0.35
Vanadium (dissolved)	µg/l	0.2	ISO 17025	1.6	1.2	0.8
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.6	4.3	8.7

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Analytical Report Number: 21-10737
Project / Site name: Dunsbury Park

Your Order No: PO10000

Lab Sample Number				2015472	2015473	2015474
Sample Reference				BH6.02	BH6.03	BH7.01
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				2.63	2.71	3.86
Date Sampled				15/09/2021	15/09/2021	15/09/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Monoaromatics & Oxygenates						
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0	< 2.0
Petroleum Hydrocarbons						
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number : 21-10737
Project / Site name: Dunsbury Park

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding.	L070-PL	W	NONE

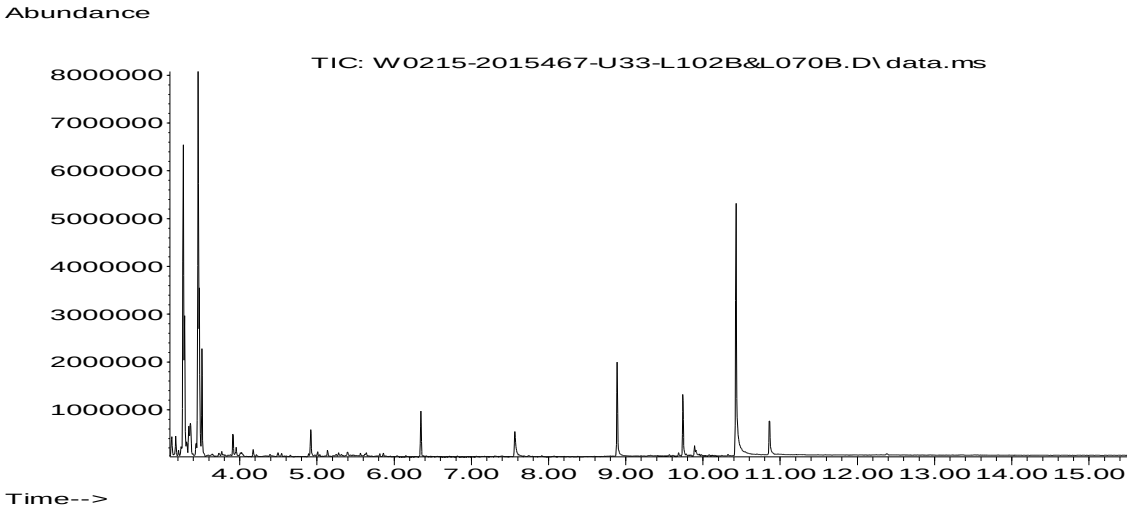
Analytical Report Number : 21-10737
Project / Site name: Dunsbury Park

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
TPH Chromatogram in Water	TPH Chromatogram in Water.	In-house method	L070-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry.Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.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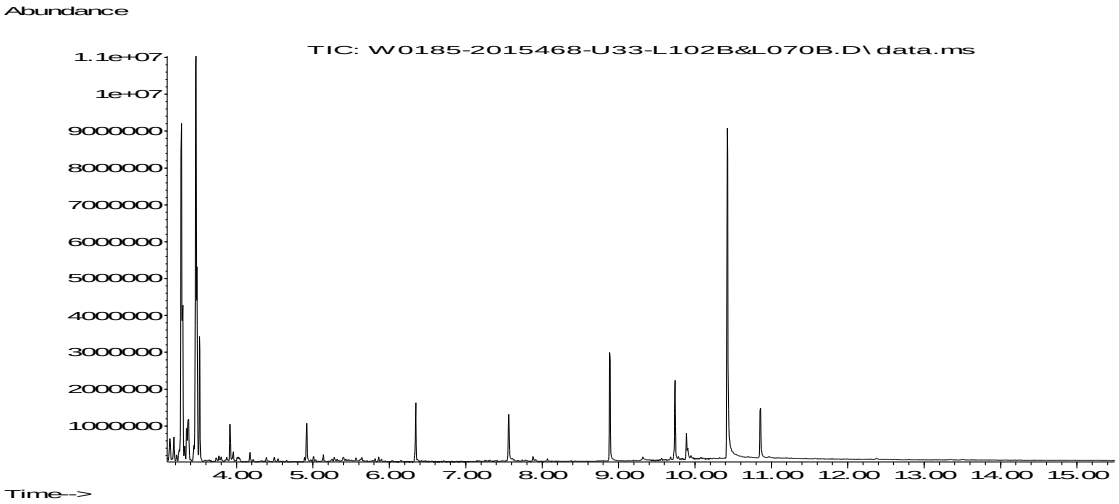
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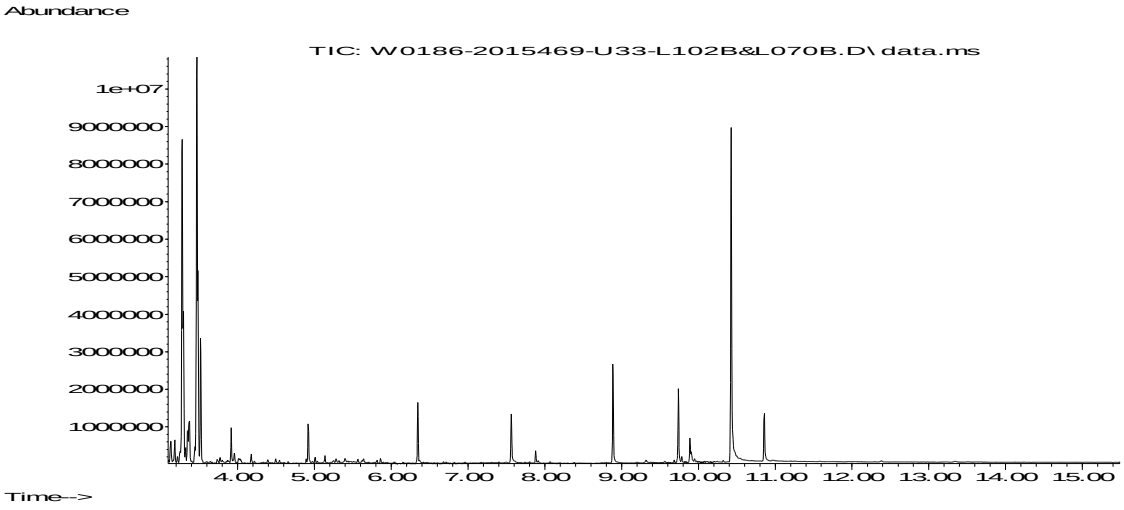
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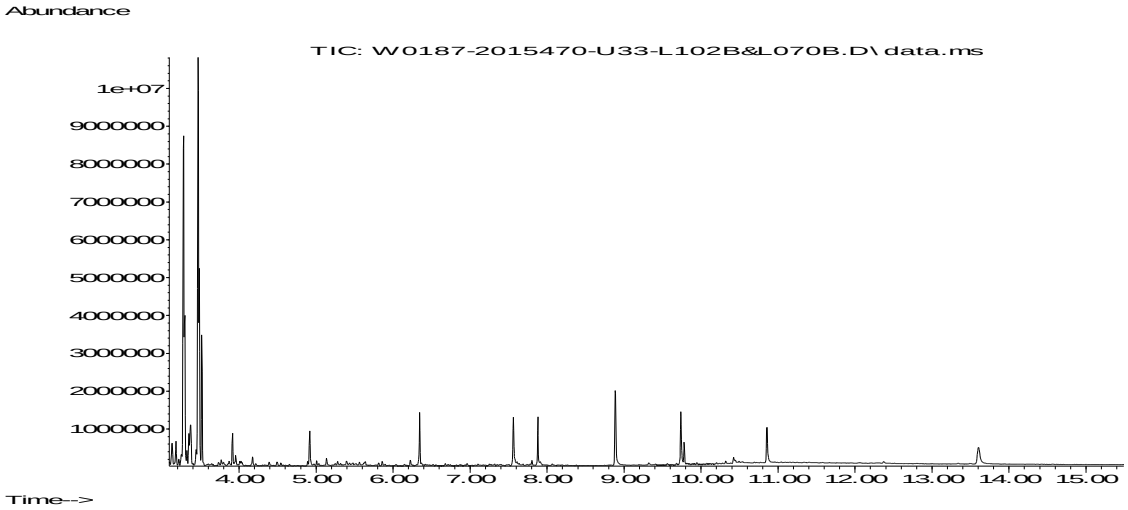
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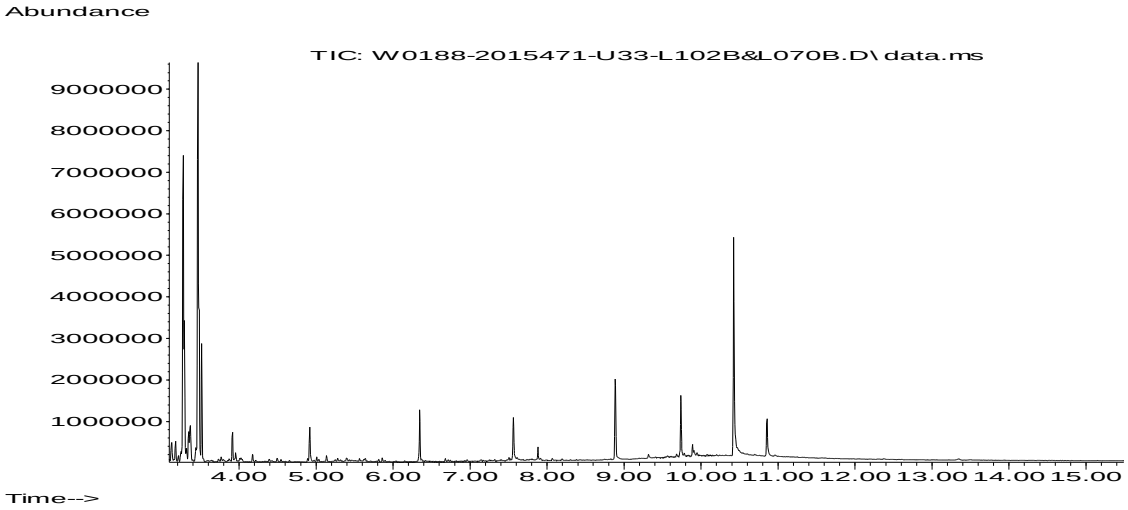
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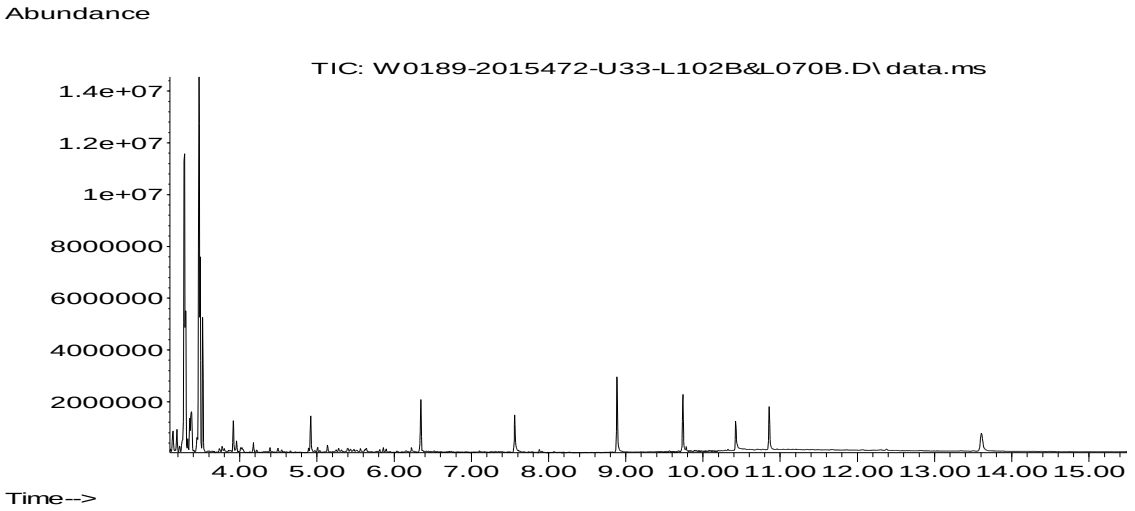
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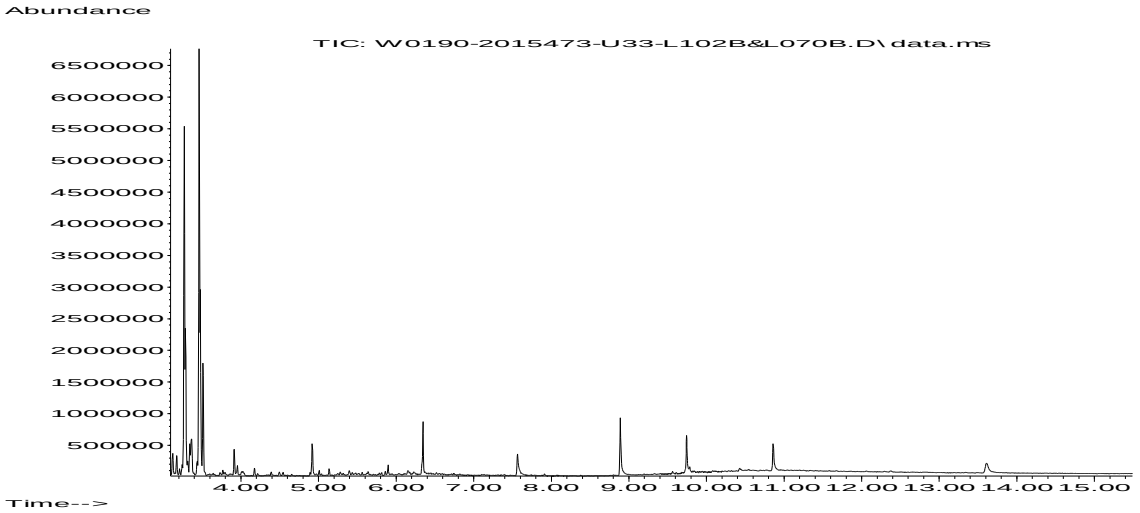
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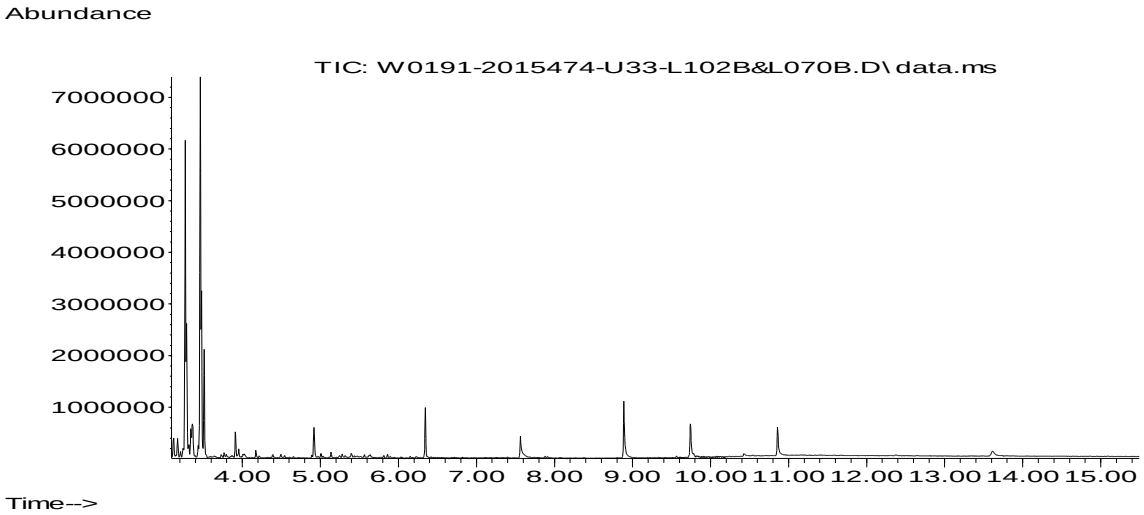
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Sample Deviation Report

Analytical Report Number : 21-10737
Project / Site name: Dunsbury Park

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH1.01	None Supplied	W	2015467	c	Ammonia as NH3 in water	L082-PL	c
BH1.01	None Supplied	W	2015467	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1.01	None Supplied	W	2015467	c	Ammonium as NH4 in water	L082-PL	c
BH1.01	None Supplied	W	2015467	c	Electrical conductivity at 20oC of water	L031-PL	c
BH1.01	None Supplied	W	2015467	c	pH at 20oC in water (automated)	L099-PL	c
BH5.01	None Supplied	W	2015468	c	Ammonia as NH3 in water	L082-PL	c
BH5.01	None Supplied	W	2015468	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH5.01	None Supplied	W	2015468	c	Ammonium as NH4 in water	L082-PL	c
BH5.01	None Supplied	W	2015468	c	Electrical conductivity at 20oC of water	L031-PL	c
BH5.01	None Supplied	W	2015468	c	pH at 20oC in water (automated)	L099-PL	c
BH5.02	None Supplied	W	2015469	c	Ammonia as NH3 in water	L082-PL	c
BH5.02	None Supplied	W	2015469	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH5.02	None Supplied	W	2015469	c	Ammonium as NH4 in water	L082-PL	c
BH5.02	None Supplied	W	2015469	c	Electrical conductivity at 20oC of water	L031-PL	c
BH5.02	None Supplied	W	2015469	c	pH at 20oC in water (automated)	L099-PL	c
BH5.03	None Supplied	W	2015470	c	Ammonia as NH3 in water	L082-PL	c
BH5.03	None Supplied	W	2015470	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH5.03	None Supplied	W	2015470	c	Ammonium as NH4 in water	L082-PL	c
BH5.03	None Supplied	W	2015470	c	Electrical conductivity at 20oC of water	L031-PL	c
BH5.03	None Supplied	W	2015470	c	pH at 20oC in water (automated)	L099-PL	c
BH5.05	None Supplied	W	2015471	c	Ammonia as NH3 in water	L082-PL	c
BH5.05	None Supplied	W	2015471	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH5.05	None Supplied	W	2015471	c	Ammonium as NH4 in water	L082-PL	c
BH5.05	None Supplied	W	2015471	c	Electrical conductivity at 20oC of water	L031-PL	c
BH5.05	None Supplied	W	2015471	c	pH at 20oC in water (automated)	L099-PL	c
BH6.02	None Supplied	W	2015472	c	Ammonia as NH3 in water	L082-PL	c
BH6.02	None Supplied	W	2015472	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH6.02	None Supplied	W	2015472	c	Ammonium as NH4 in water	L082-PL	c
BH6.02	None Supplied	W	2015472	c	Electrical conductivity at 20oC of water	L031-PL	c
BH6.02	None Supplied	W	2015472	c	pH at 20oC in water (automated)	L099-PL	c
BH6.03	None Supplied	W	2015473	c	Ammonia as NH3 in water	L082-PL	c
BH6.03	None Supplied	W	2015473	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH6.03	None Supplied	W	2015473	c	Ammonium as NH4 in water	L082-PL	c
BH6.03	None Supplied	W	2015473	c	Electrical conductivity at 20oC of water	L031-PL	c
BH6.03	None Supplied	W	2015473	c	pH at 20oC in water (automated)	L099-PL	c
BH7.01	None Supplied	W	2015474	c	Ammonia as NH3 in water	L082-PL	c
BH7.01	None Supplied	W	2015474	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH7.01	None Supplied	W	2015474	c	Ammonium as NH4 in water	L082-PL	c
BH7.01	None Supplied	W	2015474	c	Electrical conductivity at 20oC of water	L031-PL	c
BH7.01	None Supplied	W	2015474	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 21-11194

Project / Site name:	Dunsbury Park	**Samples received on:**	21/09/2021
Your job number:	19453-GELO ALL UNITS	**Samples instructed on/ Analysis started on:**	21/09/2021
Your order number:	PO10051	**Analysis completed by:**	28/09/2021
Report Issue Number:	1	**Report issued on:**	28/09/2021
Samples Analysed:	5 water samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-11194
Project / Site name: Dunsbury Park

Your Order No: PO10051

Lab Sample Number				2017861	2017862	2017863	2017864	2017865
Sample Reference				WS1.01	WS5.02	WS5.04	WS5.05	WS5.08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.90	3.97	2.21	2.03	1.43
Date Sampled				20/09/2021	20/09/2021	20/09/2021	20/09/2021	20/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	6.9	8.4	7.6	8.0	7.7
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	580	1400	670	590	630
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	4.8	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	39000	12500	29200	62100	79600
Chloride	mg/l	0.15	ISO 17025	35	110	70	52	53
Fluoride	µg/l	50	ISO 17025	120	640	430	300	210
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	64	5700	120	37	45
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	77	6900	140	45	54
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	82	7300	150	47	58
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.52	24.6	4.94	1.83	16.3
Nitrate as N	mg/l	0.01	ISO 17025	3.60	0.48	0.06	0.05	0.09
Nitrate as NO3	mg/l	0.05	ISO 17025	15.9	2.12	0.26	0.21	0.41
Nitrite as N	µg/l	1	ISO 17025	150	< 1.0	4.7	1.4	< 1.0
Nitrite as NO2	µg/l	5	ISO 17025	500	< 5.0	16	< 5.0	< 5.0
Hardness - Total	mgCaCO3/l	1	ISO 17025	272	794	296	264	301
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	9400	4.1	2.5	2.0
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAH Sums								
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Analytical Report Number: 21-11194
Project / Site name: Dunsbury Park

Your Order No: PO10051

Lab Sample Number				2017861	2017862	2017863	2017864	2017865
Sample Reference				WS1.01	WS5.02	WS5.04	WS5.05	WS5.08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.90	3.97	2.21	2.03	1.43
Date Sampled				20/09/2021	20/09/2021	20/09/2021	20/09/2021	20/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Boron (dissolved)	µg/l	10	ISO 17025	86	110	160	120	99
Calcium (dissolved)	mg/l	0.012	ISO 17025	73	280	74	71	82
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	2.4	2.3	2.1	1.6	2.2
Iron (dissolved)	mg/l	0.004	ISO 17025	0.008	0.11	0.49	0.14	< 0.004
Iron (dissolved)	µg/l	4	ISO 17025	8.0	110	490	140	< 4.0
Magnesium (dissolved)	mg/l	0.005	ISO 17025	22	24	27	21	23
Sodium (dissolved)	mg/l	0.01	ISO 17025	34	71	45	43	31
Aluminium (dissolved)	µg/l	1	ISO 17025	1.5	19	1.4	22	260
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.6	1.2	0.5	< 0.4	< 0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.24	32.6	1.61	3.51	3.60
Barium (dissolved)	µg/l	0.06	ISO 17025	67	55	120	50	60
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.17	0.08	0.02	0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.4	2.3	2.1	1.6	2.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	6.0	4.6	0.7	0.3	1.0
Copper (dissolved)	µg/l	0.5	ISO 17025	2.7	1.8	5.5	2.8	1.4
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	300	210	120	46	260
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	13	77	2.7	1.6	2.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6	13	1.1	< 0.6	< 0.6
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	0.45	0.33	0.79	0.74
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.2	6.1	0.5	0.6	1.5
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.4	3.2	5.3	4.5	2.3
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	31.9	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

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Analytical Report Number: 21-11194
Project / Site name: Dunsbury Park

Your Order No: PO10051

Lab Sample Number				2017861	2017862	2017863	2017864	2017865
Sample Reference				WS1.01	WS5.02	WS5.04	WS5.05	WS5.08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.90	3.97	2.21	2.03	1.43
Date Sampled				20/09/2021	20/09/2021	20/09/2021	20/09/2021	20/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	32	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	32	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	32	< 10	< 10	< 10
TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	32	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number : 21-11194
Project / Site name: Dunsbury Park

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding.	L070-PL	W	NONE

Analytical Report Number : 21-11194
Project / Site name: Dunsbury Park

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
TPH Chromatogram in Water	TPH Chromatogram in Water.	In-house method	L070-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry.Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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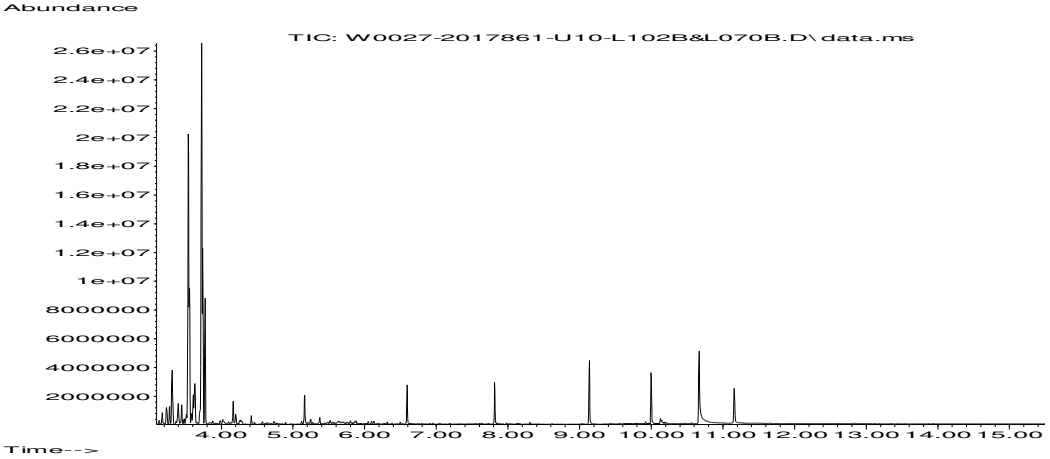
The results included within the report are representative of the samples submitted for analysis.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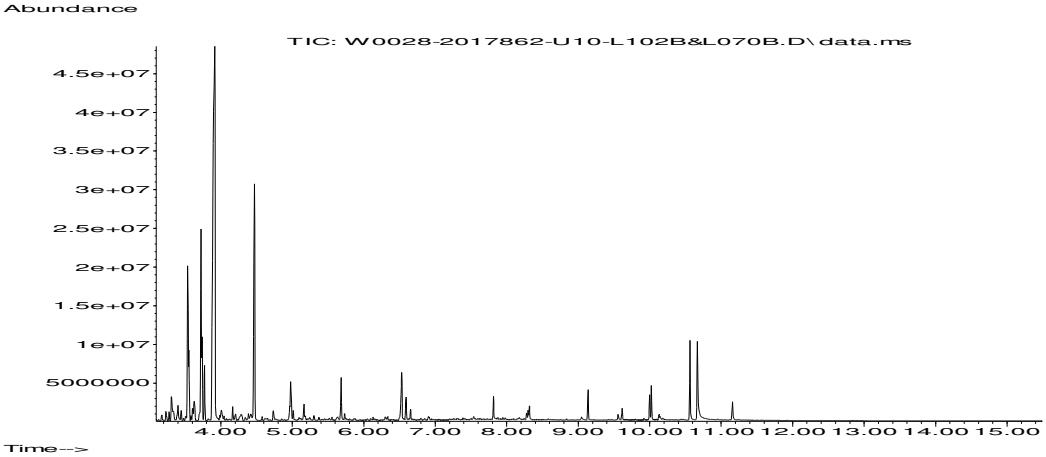
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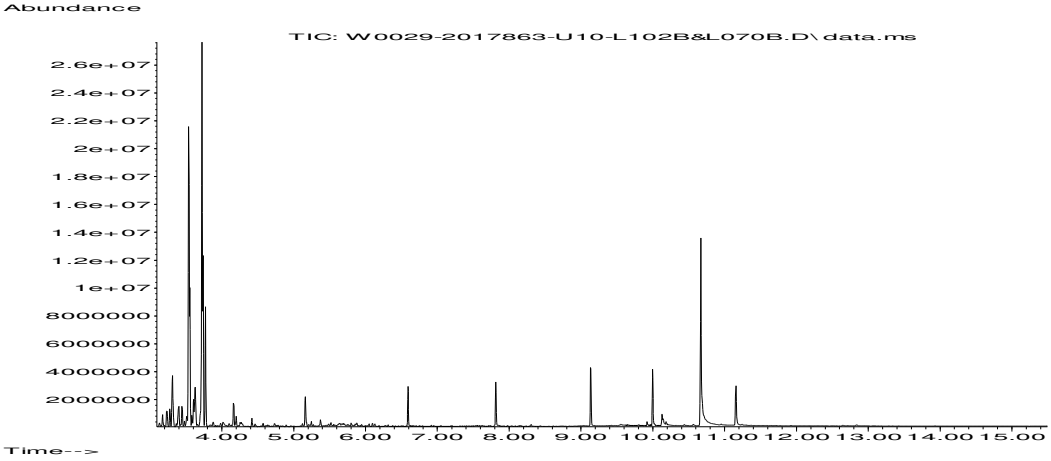
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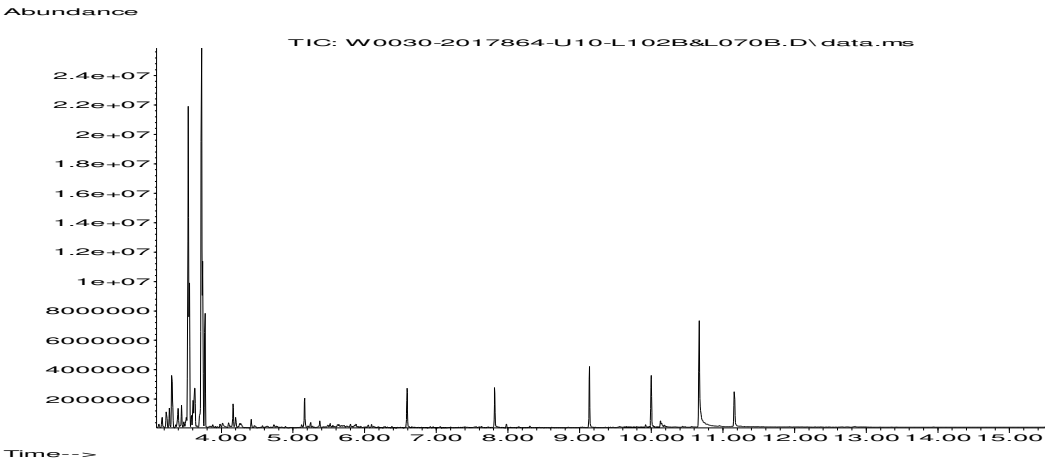
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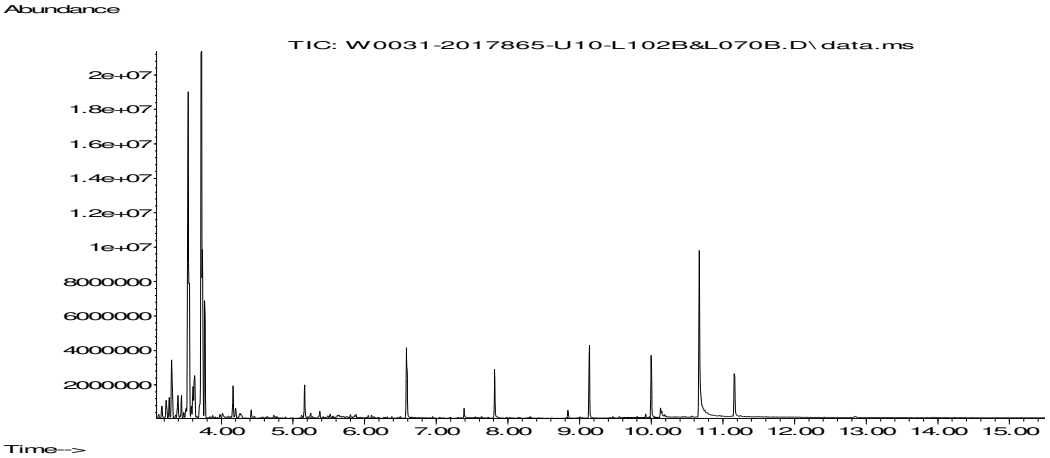
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Analytical Report Number : 21-12364

Project / Site name:	Dunsbury Park	**Samples received on:**	27/09/2021
Your job number:	19453-GELO ALL UNITS	**Samples instructed on/ Analysis started on:**	27/09/2021
Your order number:	PO10146	**Analysis completed by:**	01/10/2021
Report Issue Number:	1	**Report issued on:**	01/10/2021
Samples Analysed:	7 water samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-12364
Project / Site name: Dunsbury Park

Your Order No: PO10146

Lab Sample Number				2024167	2024168	2024169	2024170	2024171
Sample Reference				WS4.03	WS4.05	BH7.03	WS7.03	WS7.04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.24	2.78	2.54	3.62	2.39
Date Sampled				24/09/2021	24/09/2021	24/09/2021	24/09/2021	24/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	7.1	7.3	7.6	7.3	6.5
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	690	500	2100	560	320
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	210000	83200	177000	47200	50400
Chloride	mg/l	0.15	ISO 17025	30	16	430	14	16
Fluoride	µg/l	50	ISO 17025	180	180	140	140	130
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	65	27	31	110	32
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	79	32	37	130	39
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	84	34	39	140	41
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.04	3.65	8.14	2.69	2.45
Nitrate as N	mg/l	0.01	ISO 17025	0.09	0.11	1.44	2.03	3.80
Nitrate as NO3	mg/l	0.05	ISO 17025	0.41	0.47	6.36	9.00	16.8
Nitrite as N	µg/l	1	ISO 17025	< 1.0	< 1.0	480	320	110
Nitrite as NO2	µg/l	5	ISO 17025	< 5.0	< 5.0	1600	1000	380
Hardness - Total	mgCaCO3/l	1	ISO 17025	363	278	441	317	143
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Analytical Report Number: 21-12364
Project / Site name: Dunsbury Park

Your Order No: PO10146

Lab Sample Number				2024167	2024168	2024169	2024170	2024171
Sample Reference				WS4.03	WS4.05	BH7.03	WS7.03	WS7.04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.24	2.78	2.54	3.62	2.39
Date Sampled				24/09/2021	24/09/2021	24/09/2021	24/09/2021	24/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
PAH Sums								
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Heavy Metals / Metalloids								
Boron (dissolved)	µg/l	10	ISO 17025	41	31	710	42	49
Calcium (dissolved)	mg/l	0.012	ISO 17025	110	80	120	95	34
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	1.9	1.8	3.8	4.4	9.7
Iron (dissolved)	mg/l	0.004	ISO 17025	0.035	0.031	0.008	0.011	0.34
Iron (dissolved)	µg/l	4	ISO 17025	35	31	8.2	11	340
Magnesium (dissolved)	mg/l	0.005	ISO 17025	24	19	35	19	14
Sodium (dissolved)	mg/l	0.01	ISO 17025	39	13	390	13	13
Aluminium (dissolved)	µg/l	1	ISO 17025	3.5	2.4	12	10	43
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	< 0.4	0.8	0.7	0.5
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.72	0.59	2.16	0.59	0.33
Barium (dissolved)	µg/l	0.06	ISO 17025	45	33	51	32	41
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	0.02	< 0.02	0.16
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.9	1.8	3.8	4.4	9.7
Cobalt (dissolved)	µg/l	0.2	ISO 17025	3.5	0.8	2.4	4.4	10
Copper (dissolved)	µg/l	0.5	ISO 17025	1.1	3.0	6.6	1.5	4.3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	570	360	130	390	180
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.3	4.4	5.2	9.9	24
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.9	0.7	21	1.0	1.7
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	0.58	0.22	< 0.20	0.71
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.2	0.2	1.2	< 0.2	0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.4	3.8	3.0	8.8	31
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-12364
Project / Site name: Dunsbury Park

Your Order No: PO10146

Lab Sample Number				2024167	2024168	2024169	2024170	2024171
Sample Reference				WS4.03	WS4.05	BH7.03	WS7.03	WS7.04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.24	2.78	2.54	3.62	2.39
Date Sampled				24/09/2021	24/09/2021	24/09/2021	24/09/2021	24/09/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-12364
Project / Site name: Dunsbury Park

Your Order No: PO10146

Lab Sample Number				2024172	2024173
Sample Reference				WS6.02	WS6.04
Sample Number				None Supplied	None Supplied
Depth (m)				2.49	2.56
Date Sampled				24/09/2021	24/09/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH	pH Units	N/A	ISO 17025	7.8	7.5
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	550	470
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	81700	44400
Chloride	mg/l	0.15	ISO 17025	31	23
Fluoride	µg/l	50	ISO 17025	140	270
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	94
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	< 15	110
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	< 15	120
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	6.21	8.48
Nitrate as N	mg/l	0.01	ISO 17025	0.06	0.19
Nitrate as NO3	mg/l	0.05	ISO 17025	0.26	0.83
Nitrite as N	µg/l	1	ISO 17025	< 1.0	< 1.0
Nitrite as NO2	µg/l	5	ISO 17025	< 5.0	< 5.0
Hardness - Total	mgCaCO3/l	1	ISO 17025	289	264
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	15
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

Analytical Report Number: 21-12364
Project / Site name: Dunsbury Park

Your Order No: PO10146

Lab Sample Number				2024172	2024173
Sample Reference				WS6.02	WS6.04
Sample Number				None Supplied	None Supplied
Depth (m)				2.49	2.56
Date Sampled				24/09/2021	24/09/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
PAH Sums					
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040
Total PAH					
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16
Heavy Metals / Metalloids					
Boron (dissolved)	µg/l	10	ISO 17025	33	43
Calcium (dissolved)	mg/l	0.012	ISO 17025	77	72
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	2.0	2.3
Iron (dissolved)	mg/l	0.004	ISO 17025	0.13	0.12
Iron (dissolved)	µg/l	4	ISO 17025	130	120
Magnesium (dissolved)	mg/l	0.005	ISO 17025	24	21
Sodium (dissolved)	mg/l	0.01	ISO 17025	23	25
Aluminium (dissolved)	µg/l	1	ISO 17025	1.9	5.4
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	0.7
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.76	2.55
Barium (dissolved)	µg/l	0.06	ISO 17025	44	34
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	2.0	2.3
Cobalt (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	0.8	0.9
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	250	190
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.2	1.3
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6	0.9
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	0.31
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.5
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.7	1.9
Monoaromatics & Oxygenates					
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-12364
Project / Site name: Dunsbury Park

Your Order No: PO10146

Lab Sample Number				2024172	2024173
Sample Reference				WS6.02	WS6.04
Sample Number				None Supplied	None Supplied
Depth (m)				2.49	2.56
Date Sampled				24/09/2021	24/09/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10
TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-12364
Project / Site name: Dunsbury Park

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding.	L070-PL	W	NONE

Analytical Report Number : 21-12364
Project / Site name: Dunsbury Park

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
TPH Chromatogram in Water	TPH Chromatogram in Water.	In-house method	L070-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry.Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.