



# TABLES

Table 4: Comparison of Soil Chemical Analyses with GAC

Laboratory ID					Commercial GAC 6% SOM	20-27828	20-27828	20-27828	20-27828	20-27828
						1081041	1081042	1081043	1081044	1081045
Sample ID	Client Sample ID.:				Commercial GAC 6% SOM	WS1	WS2	WS3	WS4	WS5
Borehole	Sample Location:					0.15	1.10	0.40	0.80	0.80
Depth	Top Depth (m):					13-Oct-2020	13-Oct-2020	13-Oct-2020	13-Oct-2020	13-Oct-2020
Sample Date	Date Sampled (\$):									
Determinand	Accred.	SOP	Units	LOD		[mg/kg unless stated]				
ACM Type	U	2192		N/A		-	-	-	-	-
Asbestos Identification	U	2192	%	0.001		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A		-	-	-	-	-
Moisture	N	2030	%	0.020		8.6	8.6	9.5	8.8	8.7
pH	M	2010		N/A		8.4	9.3	7.9		8.5
Arsenic	M	2450	mg/kg	1.0	640	21	21	22	26	120
Beryllium	U	2450	mg/kg	1.0	12	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium	M	2450	mg/kg	0.10	190	0.35	0.43	0.34	0.42	2.5
Copper	M	2450	mg/kg	0.50	68000	52	46	37	46	580
Mercury	M	2450	mg/kg	0.10	58 <sup>vap</sup> (25.8)	0.14	0.15	< 0.10	0.14	0.29
Nickel	M	2450	mg/kg	0.50	980	34	23	12	25	31
Lead	M	2450	mg/kg	0.50	2300	58	59	47	90	830
Selenium	M	2450	mg/kg	0.20	12000	0.53	0.50	< 0.20	0.32	0.41
Vanadium	U	2450	mg/kg	5.0	9000	75	18	15	49	31
Zinc	M	2450	mg/kg	0.50	730000	130	110	77	160	2500
Chromium (Trivalent)	N	2490	mg/kg	1.0	8600	67	16	17	68	53
Chromium (Hexavalent)	N	2490	mg/kg	0.50	33	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fraction of Organic Carbon	M	2625		0.0010		0.036	0.082	0.024	0.029	0.10
Calculated SOM from FOC						6.207	14.138	4.138	5.000	17.241
Calculated TOC from FOC						3.600	8.200	2.400	2.900	10.000
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	12000 <sup>sol</sup> (1150)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	40000 <sup>sol</sup> (736)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	11000 <sup>vap</sup> (451)	< 1.0	< 1.0	35	6	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	47000 <sup>vap</sup> (283)	< 1.0	< 1.0	12	21	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	90000 <sup>sol</sup> (142)	< 1.0	< 1.0	7	15	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	1800000	< 1.0	< 1.0	5	19	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0		15	14	30	93	< 1.0
Total Aliphatic Hydrocarbons:	N	2680	mg/kg	5.0		15	14	99	180	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	86000 <sup>sol</sup> (4710)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	180000 <sup>vap</sup> (4360)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	17000 <sup>vap</sup> (3580)	< 1.0	< 1.0	97	160	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	34000 <sup>sol</sup> (2150)	< 1.0	< 1.0	34	59	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	38000	< 1.0	< 1.0	35	85	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	28000	4.1	3.8	100	270	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	28000	64	79	340	1700	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		69	83	630	2500	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		83	97	730	2700	< 10
Naphthalene	M	2700	mg/kg	0.10	1100 <sup>sol</sup> (432)	< 0.10	2.0	0.60	0.72	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	100000	< 0.10	0.50	0.30	0.78	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	100000	< 0.10	3.6	0.39	1.3	< 0.10
Fluorene	M	2700	mg/kg	0.10	71000	< 0.10	4.0	0.45	1.2	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	23000	< 0.10	7.9	3.1	7.1	< 0.10
Anthracene	M	2700	mg/kg	0.10	540000	< 0.10	2.8	1.1	2.8	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	23000	< 0.10	12	7.4	20	< 0.10
Pyrene	M	2700	mg/kg	0.10	54000	< 0.10	11	6.8	20	< 0.10
Benzo(a)anthracene	M	2700	mg/kg	0.10	180	< 0.10	4.6	5.0	13	< 0.10
Chrysene	M	2700	mg/kg	0.10	350	< 0.10	5.3	4.7	11	< 0.10
Benzo(b)fluoranthene	M	2700	mg/kg	0.10	45	< 0.10	7.8	7.0	17	< 0.10
Benzo(k)fluoranthene	M	2700	mg/kg	0.10	1200	< 0.10	3.3	2.5	6.6	< 0.10
Benzo(a)pyrene	M	2700	mg/kg	0.10	36	< 0.10	5.8	5.3	14	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	510	< 0.10	3.6	3.6	9.1	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	3.6	< 0.10	1.5	1.3	2.7	< 0.10
Benzo(g,h,i)perylene	M	2700	mg/kg	0.10	4000	< 0.10	3.6	3.4	9.3	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0		< 2.0	79	53	140	< 2.0
Benzene	M	2760	µg/kg	1.0	90	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	M	2760	µg/kg	1.0	18000 <sup>vap</sup> (4360)	<0.001	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	M	2760	µg/kg	1.0	27000 <sup>vap</sup> (2840)	<0.001	<0.001	<0.001	<0.001	<0.001
m-Xylene	M	2760	µg/kg	1.0	31000 <sup>vap</sup> (3460)	<0.001	<0.001	<0.001	<0.001	<0.001
p-Xylene			µg/kg		30000 <sup>sol</sup> (3170)	<0.001	<0.001	<0.001	<0.001	<0.001
o-Xylene	M	2760	µg/kg	1.0	33000 <sup>sol</sup> (2620)	<0.001	<0.001	<0.001	<0.001	<0.001
Total Phenols	M	2920	mg/kg	0.30	1300 <sup>dir</sup> (34000)	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30



Determinand concentration below the GAC  
 Determinand concentration in exceedance of GAC  
 Determinand concentration in exceedance of the vapour/solubility saturation limit.

NC: No published criteria  
 vap: Screening criteria presented exceed the vapour saturation limit, which is presented in brackets.  
 sol: Screening criteria presented exceed the solubility saturation limit, which is presented in brackets.  
 dir: Screening criteria based on threshold protective of direct skin contact (guideline in brackets based on health effects following long term exposure provided for illustration only).  
 (1): For assessment based on the use of the surrogate marker approach the GAC for Coal Tar must be used instead of benzo(a)pyrene.

Table 2: Gas Groundwater Monitoring Data

GAS & GROUNDWATER MONITORING DATA														Remada					
SITE		Poundstretcher Store, Gorseinon Road, Gorseinon, Swansea, SA4 9GE																	
PROJECT No.		795.02		Atmospheric & Ground Conditions										Ground Surface Conditions					
Carried Out by:		Idris Shafqat		Atmospheric Pressure Variations During Visit										992mb					
Date:		01.11.2020		Atmospheric Pressure Trend Over Previous 48hrs										Falling					
Instrument Details		GA 5000 G501261		Atmospheric Pressure Variations During Visit										Weather Conditions					
														Cold, windy, light rain					
Well No.	Cover Height (m AOD)	Well Diameter (mm)	CH <sub>4</sub> (% v/v)		CH <sub>4</sub> Steady LEL (%)	CO <sub>2</sub> (% v/v)		O <sub>2</sub> (% v/v)		Duration (secs) <sup>^</sup>	Flow Rate (l/hr)	Relative Pressure (Pa)	PID (ppm)		Atmospheric Pressure (mb)	Water Level (m bgl)	Water Level (m AoD)	Depth of Pipe (m bgl)	Comments
			Peak	Steady		Peak	Steady	Minimum	Steady				Peak	Steady					
BH1		50	0.2	0.1	2.0	0.3	0.2	18.8	19.4	60	0.4	-0.16	-	-	992	1.320	-	5.000	
BH2		50	55.2	55.0	1100.0	2.4	2.4	0.3	0.1	60	0.5	-0.07	-	-	992	2.710	-	5.000	
BH3		50	0.1	0.0	0.0	0.4	0.1	20.5	21.0	60	0.3	0.07	-	-	992	1.650	-	5.000	

Notes: NR = Not Recorded      ^ For measurement of gas concentrations      > = Above LEL      WST = Water Sample Taken      GL = Ground Level

GAS & GROUNDWATER MONITORING DATA														Remada					
SITE		Poundstretcher Store, Gorseinon Road, Gorseinon, Swansea, SA4 9GE																	
PROJECT No.		795.02		Atmospheric & Ground Conditions										Ground Surface Conditions					
Carried Out by:		Idris Shafqat		Atmospheric Pressure Variations During Visit										1020mb					
Date:		06.11.2020		Atmospheric Pressure Trend Over Previous 48hrs										Falling					
Instrument Details		GA 5000 G501261		Atmospheric Pressure Variations During Visit										Weather Conditions					
														Cold, windy, light rain					
Well No.	Cover Height (m AOD)	Well Diameter (mm)	CH <sub>4</sub> (% v/v)		CH <sub>4</sub> Steady LEL (%)	CO <sub>2</sub> (% v/v)		O <sub>2</sub> (% v/v)		Duration (secs) <sup>^</sup>	Flow Rate (l/hr)	Relative Pressure (Pa)	PID (ppm)		Atmospheric Pressure (mb)	Water Level (m bgl)	Water Level (m AoD)	Depth of Pipe (m bgl)	Comments
			Peak	Steady		Peak	Steady	Minimum	Steady				Peak	Steady					
BH1		50	0.2	0.1	2.0	1.2	0.5	19.8	20.1	60	0.6	-0.38	-	-	1020	1.350	-	5.000	
BH2		50	53.5	52.0	1040.0	2.5	2.0	0.5	0.1	60	0.3	-0.14	-	-	1020	2.650	-	5.000	
BH3		50	0.1	0.0	0.0	0.3	0.1	18.7	19.9	60	0.4	-0.07	-	-	1020	1.720	-	5.000	

Notes: NR = Not Recorded      ^ For measurement of gas concentrations      > = Above LEL      WST = Water Sample Taken      GL = Ground Level

GAS & GROUNDWATER MONITORING DATA														Remada					
SITE		Poundstretcher Store, Gorseinon Road, Gorseinon, Swansea, SA4 9GE																	
PROJECT No.		795.02		Atmospheric & Ground Conditions										Ground Surface Conditions					
Carried Out by:		Idris Shafqat		Atmospheric Pressure Variations During Visit										1008mb					
Date:		12.11.2020		Atmospheric Pressure Trend Over Previous 48hrs										Falling					
Instrument Details		GA 5000 G501261		Atmospheric Pressure Variations During Visit										Weather Conditions					
														Cold, cloudy, raining					
Well No.	Cover Height (m AOD)	Well Diameter (mm)	CH <sub>4</sub> (% v/v)		CH <sub>4</sub> Steady LEL (%)	CO <sub>2</sub> (% v/v)		O <sub>2</sub> (% v/v)		Duration (secs) <sup>^</sup>	Flow Rate (l/hr)	Relative Pressure (Pa)	PID (ppm)		Atmospheric Pressure (mb)	Water Level (m bgl)	Water Level (m AoD)	Depth of Pipe (m bgl)	Comments
			Peak	Steady		Peak	Steady	Minimum	Steady				Peak	Steady					
BH1		50	0.1	0.0	0.0	0.3	0.0	18.6	19.4	60	0.3	-0.07	-	-	1008	1.170	-	5.000	
BH2		50	46.2	45.0	900.0	2.1	1.8	0.6	0.2	60	0.4	-0.17	-	-	1008	2.530	-	5.000	
BH3		50	0.1	0.0	0.0	0.5	0.3	20.0	20.6	60	0.5	-0.14	-	-	1008	1.500	-	5.000	

Notes: NR = Not Recorded      ^ For measurement of gas concentrations      > = Above LEL      WST = Water Sample Taken      GL = Ground Level

GAS & GROUNDWATER MONITORING DATA														Remada					
SITE		Poundstretcher Store, Gorseinon Road, Gorseinon, Swansea, SA4 9GE																	
PROJECT No.		795.02		Atmospheric & Ground Conditions										Ground Surface Conditions					
Carried Out by:		Idris Shafqat		Atmospheric Pressure Variations During Visit										1029mb					
Date:		19.11.2020		Atmospheric Pressure Trend Over Previous 48hrs										Rising					
Instrument Details		GA 5000 G501261		Atmospheric Pressure Variations During Visit										Weather Conditions					
														Cold, cloudy, raining					
Well No.	Cover Height (m AOD)	Well Diameter (mm)	CH <sub>4</sub> (% v/v)		CH <sub>4</sub> Steady LEL (%)	CO <sub>2</sub> (% v/v)		O <sub>2</sub> (% v/v)		Duration (secs) <sup>^</sup>	Flow Rate (l/hr)	Relative Pressure (Pa)	PID (ppm)		Atmospheric Pressure (mb)	Water Level (m bgl)	Water Level (m AoD)	Depth of Pipe (m bgl)	Comments
			Peak	Steady		Peak	Steady	Minimum	Steady				Peak	Steady					
BH1		50	0.1	0.0	0.0	0.2	0.1	19.3	20.0	60	0.4	-0.45	-	-	1029	1.350	-	5.000	
BH2		50	26.5	26.0	520.0	1.2	0.2	10.1	13.5	60	0.4	-0.56	-	-	1029	2.720	-	5.000	
BH3		50	0.1	0.0	0.0	0.4	0.1	20.0	20.3	60	0.5	-0.62	-	-	1029	1.810	-	5.000	

Notes: NR = Not Recorded      ^ For measurement of gas concentrations      > = Above LEL      WST = Water Sample Taken      GL = Ground Level