

ALS

		Customer Sample ID	sp2_1	sp2_2	sp2_3	sp2_4	sp2_5
		Depth	0.00-0.00	0.00-0.00	0.00-0.00	0.00-0.00	0.00-0.00
SDG(s):	220210-51	AGS Id					
Customer:	PJA Civil Engineering Birmingham (11813)	Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID
Client Reference / Location:	Swansea	Sampled Date	09/01/2022	09/01/2022	09/01/2022	09/01/2022	09/01/2022
Order no:	PO to follow	Sample Received Date	10/02/2022	10/02/2022	10/02/2022	10/02/2022	10/02/2022
		Final Instruction Date	09/02/2022	09/02/2022	09/02/2022	09/02/2022	09/02/2022
		Report Completed Date	18/02/2022	18/02/2022	18/02/2022	18/02/2022	18/02/2022
		SDG	220210-51	220210-51	220210-51	220210-51	220210-51
		Lab Sample Number	25793080	25793086	25793093	25793098	25793104
		Sample Temperature	6.4	6.4	6.4	6.4	6.4
		Sample Time					

Soil Remedial Target
Values for Shallow Soils
0.0-1.0mbgl
Derived in Atkins Report
uptake.
5077146-TRA-OUT-0020-
July 2010

Analysis	Test	Method	Units	LOD					
Sample Description									
	Colour	PM024	No units		Dark Brown	Dark Brown	Light Brown	Light Brown	Dark Brown
	Description	PM024	No units		Loamy Sand	Sandy Loam	Sandy Loam	Sandy Clay Loam	Loamy Sand
	Inclusion 1)	PM024	No units		Stones	Stones	Stones	Stones	Stones
	Inclusion 2)	PM024	No units		Vegetation	Crushed Brick	Vegetation	None	Crushed Brick
	Moisture Content Ratio (% of as received sample)	PM024	%		12	14	19	12	9.8
Asbestos									
	Date of Analysis	TM048	No units		17/02/2022	17/02/2022	17/02/2022	17/02/2022	17/02/2022
	Analysed By	TM048	No units		James Richards (a	Chelmowska	James Richards	ieszka Chelmowska	ieszka Chelmowska
	Chrysotile (White) Asbestos	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Amosite (Brown) Asbestos	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Crocidolite (Blue) Asbestos	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Asbestos Anthophyllite	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Asbestos Tremolite	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Asbestos Actinolite	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Non-Asbestos Fibre	TM048	No units		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	Comments	TM048	No units		-	-	-	-	-
Carbon									
	Soil Organic Matter (SOM)	TM132	%	<0.35	1.44	-	3.15	-	0.978
Inorganics									
	pH	TM133	pH Units	<1	8.7	8.79	8.19	8.7	8.69
Metals - (Solids)									
	Chromium, Hexavalent	TM151	mg/kg	<0.6	-	<0.6	-	<0.6	-
	Arsenic	TM181	mg/kg	<0.6	184	37	8.64	8.73	7.98
	Cadmium	TM181	mg/kg	<0.02	82.2	11	0.211	0.255	0.217
	Chromium	TM181	mg/kg	<0.9	89.9	6	2.77	3.33	2.54
	Copper	TM181	mg/kg	<1.4	40400	2400	14.7	33.6	12.8
	Lead	TM181	mg/kg	<0.7	3280	200	17	23.6	14.3
	Mercury	TM181	mg/kg	<0.1	1850	1.2	<0.1	<0.1	<0.1
	Nickel	TM181	mg/kg	<0.2	473	130	18.2	17.6	17.6
	Selenium	TM181	mg/kg	<1	8130	250	<1	<1	<1
	Vanadium	TM181	mg/kg	<0.2	4270	410	17.9	16	15.4
	Zinc	TM181	mg/kg	<1.9	568000	3700	84.2	142	73.1
Gasoline Range Organ									
	Total Aliphatics >C5-C10	TM089	mg/kg	<50	<0.05	<0.05	<0.05	<0.05	<0.05
	Total Aromatics >EC5-EC10	TM089	mg/kg	<50	<0.05	<0.05	<0.05	<0.05	<0.05
	GRO >C5-C10	TM089	mg/kg	<20	<0.02	<0.02	<0.02	<0.02	<0.02

TPH Criteria Working C										
GRO Surrogate % recovery**	TM089	%				126	100	105	84.1	98.7
Aliphatics >C5-C6	TM089	mg/kg	<10	1600	42	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C6-C8	TM089	mg/kg	<10	1740000	100	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C8-C10	TM089	mg/kg	<10	68.2	27	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C10-C12	TM414	mg/kg	<1000	54800	130	<1	<1	<1	<1	<1
Aliphatics >C12-C16	TM414	mg/kg	<1000	60200	140	<1	<1	<1	<1	<1
Aliphatics >C16-C21	TM414	mg/kg	<1000		260	<1	<1	<1	1.82	<1
Aliphatics >C21-C35	TM414	mg/kg	<1000		1100	2.11	6.45	6.38	14.9	6.46
Aliphatics >C35-C44	TM414	mg/kg	<1000		1100	<1	3.22	2.53	38	<1
Total Aliphatics >C10-C44	TM414	mg/kg	<5000			<5	10	9	55.6	6.46
Total Aliphatics & Aromatics >C10-C44	TM414	mg/kg	<10000			11.7	32.5	47.6	78.4	19.8
Aromatics >EC5-EC7	TM089	mg/kg	<10	0.451	70	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC7-EC8	TM089	mg/kg	<10	33700	130	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC8-EC10	TM089	mg/kg	<10	80.1	34	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics > EC10-EC12	TM414	mg/kg	<1000	9810	74	<1	<1	<1	<1	<1
Aromatics > EC12-EC16	TM414	mg/kg	<1000	23600	140	<1	<1	<1	<1	<1
Aromatics > EC16-EC21	TM414	mg/kg	<1000	10000	260	<1	<1	<1	<1	<1
Aromatics > EC21-EC35	TM414	mg/kg	<1000		1100	5.19	11.8	18.6	15.9	7.12
Aromatics >EC35-EC44	TM414	mg/kg	<1000		1100	4.35	10.4	19.4	6.64	5.55
Aromatics > EC40-EC44	TM414	mg/kg	<1000			<1	2.57	5.34	2.64	<1
Total Aromatics > EC10-EC44	TM414	mg/kg	<5000			9.54	22.5	38.6	22.8	13.3
Total Aliphatics & Aromatics >C5-C44	TM414	mg/kg	<10000			<10	32.5	47.6	78.4	19.8
Polyaromatic Hydroca										
Naphthalene-d8 % recovery**	TM218	%				97.5	97.3	96.3	95.9	98.8
Acenaphthene-d10 % recovery**	TM218	%				106	107	108	106	112
Phenanthrene-d10 % recovery**	TM218	%				95.6	98.2	95.5	97.4	111
Chrysene-d12 % recovery**	TM218	%				89	93.3	89.4	94.1	99.1
Perylene-d12 % recovery**	TM218	%				95.2	102	96	100	94.4
Naphthalene	TM218	mg/kg	<9		2.3	<0.045	<0.009	<0.045	<0.009	<0.009
Acenaphthylene	TM218	mg/kg	<12		170	<0.06	<0.012	<0.06	<0.012	<0.012
Acenaphthene	TM218	mg/kg	<8		210	<0.04	<0.008	<0.04	<0.008	<0.008
Fluorene	TM218	mg/kg	<10		170	<0.05	<0.01	<0.05	<0.01	<0.01
Phenanthrene	TM218	mg/kg	<15		95	<0.075	0.0197	<0.075	0.0228	0.0772
Anthracene	TM218	mg/kg	<16		2400	<0.08	<0.016	<0.08	<0.016	0.0217
Fluoranthene	TM218	mg/kg	<17		280	<0.085	0.0376	<0.085	0.109	0.141
Pyrene	TM218	mg/kg	<15		620	<0.075	0.032	<0.075	0.0981	0.116
Benz(a)anthracene	TM218	mg/kg	<14		7.2	<0.07	0.0248	<0.07	0.0856	0.0783
Chrysene	TM218	mg/kg	<10		15	0.0637	0.0241	0.071	0.0892	0.0688
Benzo(b)fluoranthene	TM218	mg/kg	<15		2.6	0.0889	0.0309	0.115	0.132	0.106
Benzo(k)fluoranthene	TM218	mg/kg	<14		77	<0.07	<0.014	<0.07	0.0522	0.0391
Benzo(a)pyrene	TM218	mg/kg	<15		2.2	<0.075	0.024	<0.075	0.0881	0.0742
Indeno(1,2,3-cd)pyrene	TM218	mg/kg	<18		27	<0.09	<0.018	<0.09	0.0591	0.0563
Dibenzo(a,h)anthracene	TM218	mg/kg	<23		0.24	<0.115	<0.023	<0.115	<0.023	<0.023
Benzo(g,h,i)perylene	TM218	mg/kg	<24		320	<0.12	<0.024	<0.12	0.0506	0.0512
PAH, Total Detected USEPA 16	TM218	mg/kg	<118			<0.59	0.193	<0.59	0.787	0.83
Volatile Organic Comp										
Dibromofluoromethane**	TM116	%				105	107	105	108	107
Toluene-d8**	TM116	%				100	101	100	100	100
4-Bromofluorobenzene**	TM116	%				94.5	95.9	96.5	94.5	95.8
Methyl Tertiary Butyl Ether	TM116	mg/kg	<10			<0.2	<0.2	<0.2	<0.2	<0.2
Benzene	TM116	mg/kg	<9	0.451		<0.18	<0.18	<0.18	<0.18	<0.18
Toluene	TM116	mg/kg	<7	33700		<0.14	<0.14	<0.14	<0.14	<0.14
Ethylbenzene	TM116	mg/kg	<4	286		<0.08	<0.08	<0.08	<0.08	<0.08
p/m-Xylene	TM116	mg/kg	<10			<0.2	<0.2	<0.2	<0.2	<0.2
o-Xylene	TM116	mg/kg	<10			<0.2	<0.2	<0.2	<0.2	<0.2

Sum of Detected Xylenes	TM116	mg/kg	<0.02	98.9	<0.4	<0.4	<0.4	<0.4	<0.4
Sum of BTEX	TM116	mg/kg	<40		<0.8	<0.8	<0.8	<0.8	<0.8