

APPENDIX L

SUMMARY OF CHEMICAL RESULTS – RE-ENGINEERED FILL

SUMMARY OF LABORATORY SOIL TEST RESULTS

METALS AND SEMI-METALS

Job No.: 12923
Site: Land at Usk Way, Newport
Soil Type: Re-engineered Fill
Soil Organic Matter: 2.5%

No.	Location	Depth (m)	Arsenic (mg/kg)	Boron (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (Elemental) (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
3	TP2	0.60	25	3.2	0.84	2.9	310	< 4.0	290	230	< 0.3	37	< 1.0	77	970
7	TP4	0.40	23	2.5	1.4	45	69	< 4.0	240	370	< 0.3	26	< 1.0	39	730
8	TP5	0.50	30	3.4	1.1	1.4	51	< 4.0	130	220	< 0.3	26	< 1.0	42	280
9	TP6	0.30	14	7.4	0.93	6.3	920	< 4.0	320	670	< 0.3	56	< 1.0	170	3400
11	TP8	0.50	13	9.5	0.80	7.7	940	< 4.0	280	420	< 0.3	52	< 1.0	170	4000
14	TP10	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Trench 1	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-
Screening Criteria Value			37.0	290.0	1.7	11.0	-	6.0	2400.0	200.0	1.2	130.0	250.0	410.0	3700.0
Source of Screening Criteria Value			S4UL	S4UL	S4UL	S4UL	-	S4UL	S4UL	C4SL	S4UL	S4UL	S4UL	S4UL	S4UL

SUMMARY OF LABORATORY SOIL TEST RESULTS

INORGANIC CHEMICALS & OTHERS

Job No.: 12923
 Site: Land at Usk Way, Newport
 Soil Type: Re-engineered Fill
 Soil Organic Matter: 2.5%

No.	Location	Depth (m)	Cyanide (mg/kg)	Loss on ignition, dried solids (%)	Moisture content at 30 C (%)	Phenol (mg/kg)	pH (pH units)	Water Soluble Sulphate (g/l)	Sulphate Total as SO4 (mg/kg)	Sulphide (mg/kg)	Total Sulphur (mg/kg)	TOC by Ignition in O2 (%)	Equivalent SOM (%)	Asbestos in Soil	Asbestos Quantification (%)
3	TP2	0.60	< 1.0	5.3	7.4	< 1.0	10.3	0.26	3300	49	1800	1.5	2.58	Not-detected	#N/A
7	TP4	0.40	< 1.0	6.0	7.6	< 1.0	9.8	0.40	5000	130	2300	2.4	4.13	Detected	0.001
8	TP5	0.50	< 1.0	6.3	8.7	< 1.0	9.9	0.28	2800	30	1600	2.1	3.61	Not-detected	#N/A
9	TP6	0.30	< 1.0	3.8	5.0	< 1.0	10.4	0.18	3500	130	2000	1.7	2.92	Not-detected	#N/A
11	TP8	0.50	< 1.0	3.4	5.2	< 1.0	10.6	0.20	6200	18	2200	0.9	1.55	Not-detected	#N/A
14	TP10	0.40	-	-	-	-	-	-	-	-	-	-	<0.1	Not-detected	#N/A
15	Trench 1	0.50	-	-	-	-	-	-	-	-	-	-	<0.1	Detected	<0.001
Screening Criteria Value			34.0	-	-	200.0	-	-	-	-	-	-	-	-	0.001
Source of Screening Criteria Value			ATRISK	-	-	S4UL	-	-	-	-	-	-	-	-	IOM

SUMMARY OF LABORATORY SOIL TEST RESULTS

POLYAROMATIC HYDROCARBONS (PAH)

Job No.: 12923
 Site: Land at Usk Way, Newport
 Soil Type: Re-engineered Fill
 Soil Organic Matter: 2.5%

No.	Location	Depth (m)	Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthracene (mg/kg)	Benzo(a)anthracene (mg/kg)	Benzo(a)pyrene (mg/kg)	Benzo(b)fluoranthene (mg/kg)	Benzo(ghi)perylene (mg/kg)	Benzo(k)fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(ah)anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno(123cd)pyrene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
3	TP2	0.60	< 0.05	< 0.05	0.34	1.3	0.70	0.87	0.48	0.49	0.84	< 0.05	1.7	< 0.05	0.45	< 0.05	1.3	1.6
7	TP4	0.40	0.57	0.85	1.5	6.4	3.9	5.2	2.6	2.7	6.1	0.94	8.3	0.77	2.6	0.81	4.2	6.6
8	TP5	0.50	< 0.05	< 0.05	1.0	3.1	1.5	1.9	1.1	1.4	2.6	0.41	5.2	< 0.05	1.1	< 0.05	4.1	3.9
9	TP6	0.30	< 0.05	< 0.05	0.26	1.5	1.0	1.3	0.72	0.83	1.3	< 0.05	2.2	< 0.05	0.63	< 0.05	1.3	2.1
11	TP8	0.50	< 0.05	< 0.05	0.24	1.0	0.64	0.69	0.52	0.56	0.81	< 0.05	1.4	< 0.05	0.47	< 0.05	0.76	1.2
14	TP10	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Trench 1	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Screening Criteria Value			510.0	420.0	5400.0	11.0	2.7	3.3	240.0	93.0	22.0	0.28	560.0	400.0	36.0	5.6	220.0	1200.0
Source of Screening Criteria Value			S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL

SUMMARY OF LABORATORY SOIL TEST RESULTS

PETROLEUM HYDROCARBONS

Job No.: 12923
 Site: Land at Usk Way, Newport
 Soil Type: Re-engineered Fill
 Soil Organic Matter: 2.5%

No.	Location	Depth (m)	Aliphatic C5-C6 (mg/kg)	Aliphatic C6-C8 (mg/kg)	Aliphatic C8-C10 (mg/kg)	Aliphatic C10- C12 EPH (mg/kg)	Aliphatic C12- C16 EPH (mg/kg)	Aliphatic C16-C35 EPH (mg/kg)	Aliphatic C35- C44 EPH (mg/kg)	Aromatic C5-C7 (mg/kg)	Aromatic C7-C8 (mg/kg)	Aromatic C8-C10 (mg/kg)	Aromatic C10- C12 EPH (mg/kg)	Aromatic C12- C16 EPH (mg/kg)	Aromatic C16- C21 EPH (mg/kg)	Aromatic C21- C35 EPH (mg/kg)	Aromatic C35- C40 EPH (mg/kg)
3	TP2	0.60	< 0.001	< 0.001	< 0.001	< 1.0	31	370	64	< 0.001	< 0.001	< 0.001	< 1.0	11	69	110	43
7	TP4	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	TP5	0.50	< 0.001	< 0.001	< 0.001	< 1.0	9.9	360	100	< 0.001	< 0.001	< 0.001	< 1.0	3.2	54	190	93
9	TP6	0.30	< 0.001	< 0.001	< 0.001	< 1.0	< 2.0	130	130	< 0.001	< 0.001	< 0.001	< 1.0	< 2.0	12	200	270
11	TP8	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	TP10	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Trench 1	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Screening Criteria Value			78.0	230.0	65.0	330.0	2400.0	92000.0	92000.0	0.2	290.0	83.0	180.0	330.0	540.0	1500.0	1500.0
Source of Screening Criteria Value			S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL