

Table 2: Screening of Core Samples against Human Health Criteria

Determinand	Units	Number of Samples	Minimum	Maximum	Location of Maximum	S4UL Residential with plant uptake in gardens (small house)	S4UL Commercial/ Industrial (1970s office)	C45L Residential with plant uptake in gardens (small house)	C45L Commercial/ Industrial (1970s office)
Arsenic	mg/kg	20	<1	4.4	4.4mg/kg at G4 at 1m	37 (0)	640 (0)	37 (0)	640 (0)
Cadmium	mg/kg	20	<0.1	0.1	More than 2 maximum values	11 (0)	190 (0)	22 (0)	410 (0)
Chromium III	mg/kg	20	33	85.2	85.2mg/kg at VC6-2-1 0.00-0.50 at 1m	910 (0)	8600 (0)	0 (0)	0 (0)
Copper	mg/kg	20	6.8	49.3	49.3mg/kg at VC6-2-1 0.00-0.50 at 1m	2400 (0)	68000 (0)	0 (0)	0 (0)
Lead	mg/kg	20	12	26	26mg/kg at G11 at 1m	0 (20)	0 (20)	200 (0)	2300 (0)
Elemental Mercury	mg/kg	20	<0.01	0.01	0.01mg/kg at G4 at 1m and at VC9-1-1 0.00-0.43 at 1m	1.2 (0)	58 (0)	0 (0)	0 (0)
Nickel	mg/kg	20	13.7	35.3	35.3mg/kg at VC6-2-1 0.00-0.50 at 1m	180 (0)	980 (0)	0 (20)	0 (20)
Zinc	mg/kg	20	18.5	112	112mg/kg at VC6-2-1 0.00-0.50 at 1m	3700 (0)	730000 (0)	0 (20)	0 (20)
-	-	-	-	-	-	-	-	-	-
Tot.Moisture @ 105C	%	20	13.4	27.7	27.7% at VC1-2-1 0.00-0.42 at 1m and at VC5-2-2 0.56-1.14 at 1m	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Tin	µg/kg	20	<5.00	<5.00	-	0 (0)	0 (0)	0 (0)	0 (0)
Tin	µg/kg	20	<2.00	<2.00	-	0 (0)	0 (0)	0 (0)	0 (0)
-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	% M/M	20	<0.04	0.34	0.34% M/M at VC6-2-2 0.50-1.00 at 1m	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Fraction of sample abcd	%	7	0	82	82% at GRVC8 at 1m	-	-	-	-
PCB28	µg/kg	20	<6.1	12.4	12.4µg/kg at GRVC8 at 1m	-	-	-	-
PCB52	µg/kg	20	<6.1	<6.1	-	-	-	-	-
PCB101	µg/kg	20	<6.1	<6.1	-	-	-	-	-
PCB118	µg/kg	20	<6.1	<6.1	-	-	-	-	-
PCB153	µg/kg	20	<6.1	<6.1	-	-	-	-	-
PCB138	µg/kg	20	<6.1	<6.1	-	-	-	-	-
PCB180	µg/kg	20	<6.1	<6.1	-	-	-	-	-
Naphthalene	µg/mg	20	<0.001	<0.001	-	2.3 (0)	190 (0)	0 (0)	0 (0)
Acenaphthylene	µg/mg	20	<0.001	<0.001	-	-	-	-	-
Acenaphthene	µg/mg	20	<0.001	0.002271515	2.27151515151515E-03µg/mg at VC2-2-1 0.00-0.50 at 1m	-	-	-	-
Fluorene	µg/mg	20	<0.001	0.001463227	1.46322717010136E-03µg/mg at VC6-2-2 0.50-1.00 at 1m	170 (0)	63000 (0)	0 (0)	0 (0)
Phenanthrene	µg/mg	20	<0.001	0.015201998	1.52019983667195E-02µg/mg at VC6-2-2 0.50-1.00 at 1m	95 (0)	22000 (0)	0 (0)	0 (0)
Dibenzothiophene	µg/mg	20	<0.001	0.001240332	1.24033242061776E-03µg/mg at VC6-2-2 0.50-1.00 at 1m	-	-	-	-
Anthracene	µg/mg	20	<0.001	0.004057261	4.05726089253975E-03µg/mg at VC6-2-2 0.50-1.00 at 1m	2400 (0)	520000 (0)	0 (0)	0 (0)
Fluoranthene	µg/mg	20	<0.001	0.026482202	2.64822020464044E-02µg/mg at VC6-2-2 0.50-1.00 at 1m	280 (0)	23000 (0)	0 (0)	0 (0)
Pyrene	µg/mg	20	<0.001	0.025114089	2.51140894461258E-02µg/mg at VC6-2-2 0.50-1.00 at 1m	620 (0)	54000 (0)	0 (0)	0 (0)
Anthracene	µg/mg	20	<0.001	0.010669165	1.06691646250661E-02µg/mg at VC6-2-2 0.50-1.00 at 1m	2400 (0)	520000 (0)	0 (0)	0 (0)
Chrysene	µg/mg	20	<0.001	0.012890426	1.28904260940577E-02µg/mg at VC6-2-2 0.50-1.00 at 1m	15 (0)	350 (0)	0 (0)	0 (0)
Fluoranthene	µg/mg	20	<0.001	0.008695777	8.69577748955181E-03µg/mg at VC6-2-2 0.50-1.00 at 1m	280 (0)	23000 (0)	0 (0)	0 (0)
Fluoranthene	µg/mg	20	<0.001	0.012873133	1.28731325359082E-02µg/mg at VC6-2-2 0.50-1.00 at 1m	280 (0)	23000 (0)	0 (0)	0 (0)
Benzo[a]pyrene	µg/mg	20	<0.001	0.011106263	1.11062626262626E-02µg/mg at VC2-2-1 0.00-0.50 at 1m	2.2 (0)	35 (0)	0 (0)	77 (0)
Pyrene	µg/mg	20	<0.001	0.009253333	9.25333333333333E-03µg/mg at VC2-2-1 0.00-0.50 at 1m	620 (0)	54000 (0)	0 (0)	0 (0)
Anthracene	µg/mg	20	<0.001	0.001344646	1.34464646464646E-03µg/mg at VC2-2-1 0.00-0.50 at 1m	2400 (0)	520000 (0)	0 (0)	0 (0)
Benzo[ghi]perylene	µg/mg	20	<0.001	0.00688	0.00688µg/mg at VC2-2-1 0.00-0.50 at 1m	-	-	-	-

No. of exceedance shown in brackets

Table 1: Results of Chemical Analysis of Core Samples

	Ground Type	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material	Dredge Material
	Sample Type	Grab	Grab	1.14m core	0.93m core	0.93m core	1.0m core	0.84m core		Grab	0.25m core	1.5m core		Grab	0.84m core	1.14m core	1.0m core	0.25m core	0.43m core	1.5m core	1.5m core
	Customer Sample ID	G4	G7	VC5-2-1 0.00-0.56	VC3-2-1 0.00-0.47	VC3-2-2 0.47-0.93	VC2-2-2 0.50-1.00	VC1-2-2 0.42-0.84	GRVC4	VC10	VC7-1-1 0.00- 0.25	VC6-2-3 1.00- 1.50	GRVC8	G11	VC1-2-1 0.00- 0.42	VC5-2-2 0.56 1.14	VC2-2-1 0.50 0.25	VC11-1 0.00- 0.25	VC9-1-1 0.00 0.43	VC6-2-2 0.50 1.00	VC6-2-1 0.00 0.50
	Depth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	HTX Lab Sample Number	S1623838	S1623839	S1623841	S1623842	S1623843	S1623844	S1623845	S1623852	S1623853	S1623854	S1623855	S1623856	S1623857	S1623858	S1623859	S1623860	S1623862	S1623863	S1623864	S1623865
	PAH Lab Sample Number	CL1623838	CL1623839	CL1623841	CL1623842	CL1623843	CL1623844	CL1623845	CL1623852	CL1623853	CL1623854	CL1623855	CL1623856	CL1623857	CL1623858	CL1623859	CL1623860	CL1623862	CL1623863	CL1623864	CL1623865
Test Units																					
HTX																					
Arsenic	mg/kg	4.4	2.8	1.6	<1	<1	<1	1	3.3	2.9	3.7	1.5	3	3.4	1.9	<1	1.6	2.8	3.4	2	2.9
Cadmium	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1	0.1	0.1	0.1	0.1
Chromium III	mg/kg	40.2	56	41.9	43.7	38.3	36.8	46.4	36.5	67.4	58.5	74.2	51.9	68.2	57.3	44.2	50.7	33	46.7	65.2	85.2
Copper	mg/kg	8.9	13.5	14	19.3	14	13.6	13	10.1	14.7	6.8	44	25.7	18	14.5	17.8	13.2	15.2	7.06	35.1	49.3
Lead	mg/kg	14	14.2	12	12.1	13.5	15.9	14.6	15.7	12.8	13.6	18.6	17.7	26	17	19.2	15	17.8	14.1	15	22.4
Elemental Mercury	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	mg/kg	17.9	19.5	15.8	18.6	17.1	16.2	20.7	13.7	30.3	22.3	33.6	34.2	29.5	19.6	16.4	22.1	15.3	16.4	33.1	35.3
Zinc	mg/kg	26.6	34	25	22.8	18.5	20.4	27.2	29.4	46.4	30.6	45.3	45.6	43.3	33.9	24.3	26.4	91.5	28.1	36.8	112
PAH	µg/kg	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req
Tot.Moisture @ 105C	%	16.2	19	17	16.7	17.3	16.6	15.7	24	19.4	13.4	22.5	22	20.2	27.7	27.7	17	22	26.8	22.7	18.6
PCB-7 Congeners Analysis	µg/kg	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req
Dibutyltin	ug/kg	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Tributyltin	ug/kg	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Particle Size (Malv)	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req
Total Organic Carbon	% M/M	0.15	0.09	0.05	0.04	<0.04	<0.04	0.04	0.21	0.16	0.08	0.16	0.25	0.06	0.06	0.05	0.05	0.26	0.17	0.34	0.11
Fraction of non-crushable material %	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fraction of sample above 4 mm %	%	0	11	0	0	0	0	0	29	56	29	0	82	0	0	0	0	16	16	0	0
PCB Con1																					
PCB28	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	12.4	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
PCB52	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	<5.0	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
PCB101	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	<5.0	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
PCB118	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	<5.0	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
PCB153	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	<5.0	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
PCB138	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	<5.0	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
PCB180	µg/kg	<6.0	<6.2	<6.0	<6.0	<6.0	<6.1	<5.9	<6.7	<6.2	<5.8	<5.0	<5.0	<5.0	<6.9	<6.9	<6.0	<6.4	<6.8	<6.5	<6.1
EPA 16 PAHs																					
Naphthalene	µg/mg	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthylene	µg/mg	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthene	µg/mg	0.0011022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00227152	0.00124298	<0.001	0.00204737	<0.001
Fluorene	µg/mg	0.0011632	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00113374	<0.001	<0.001	0.00146323	<0.001
Phenanthrene	µg/mg	0.0053301	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0090804	0.00679779	<0.001	0.015202	0.00104136
Dibenzothiophene	µg/mg	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00124033	<0.001
Anthracene	µg/mg	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00173737	<0.001	<0.001	0.00405726	<0.001
Fluoranthene	µg/mg	0.0057566	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.02310788	0.00743545	<0.001	0.0264822	0.00175308
Pyrene	µg/mg	0.0047391	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.011748929	0.00608918	<0.001	0.02511409	0.00302368
Benzo[a]anthracene	µg/mg	0.0014082	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00878788	0.00235484	<0.001	0.01066916	<0.001
Chrysene	µg/mg	0.0032715	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0102796	0.00336252	<0.001	0.01289043	0.00122262
Benzo[b]fluoranthene	µg/mg	0.0017468	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00781333	0.00245723	<0.001	0.00869578	<0.001
Benzo[k]fluoranthene	µg/mg	0.0027424	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01163071	0.00358974	<0.001	0.01287313	<0.001
Benzo[a]pyrene	µg/mg	0.0015906	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01110626	0.00220306	<0.001	0.01033098	<0.001
Indeno[1,2,3,cd]pyrene	µg/mg	0.001514	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00925333	0.00233958	<0.001	0.00751309	<0.001
Dibenz[a,h]anthracene	µg/mg	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00134465	<0.001	<0.001	0.0124225	<0.001
Benzo[ghi]perylene	µg/mg	0.0016467	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00688	0.00182586	<0.001	0.00631023	<0.001

Table 3: Results of Chemical Analysis of Leachate and Screening Against Marine EQS

Client:	Aspect Land & Hydrographic Surveys Ltd													
Site:	Geotechnical Survey, Kyleakin													
	Marine EQS Value			No EQS			-			3.26				
	Analyte:	pH units w	Conductivity uS/cm @ 25C w	Chloride as Cl w	Fluoride as F a	Total Sulphur as SO4 (Dissolved) a	Barium as Ba (Dissolved) a	Nickel as Ni (Dissolved)	Chromium as Cr (Dissolved)	Cadmium as Cd (Dissolved)	Copper as Cu (Dissolved)	Lead as Pb (Dissolved)	Zinc as Zn (Dissolved)	
	Method Code:	WSLM3	WSLM2	KONENS	ISEF	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	
	Units:	pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
Sample ID	Sample Desc	Date Sampled												
EX/1715835	G4	22/07/2016	7.3	6620	2050	0.6	289	0.25	0.002	<0.001	0.0002	0.021	0.002	0.091
EX/1715836	G7	22/07/2016	8.2	5740	1990	0.6	133	0.38	0.004	0.001	<0.0001	0.011	0.002	0.103
EX/1716375	VC5-2-1 0.00-0.56	25/07/2016	7.1	6400	2000	0.5	292	0.11	<0.001	<0.001	<0.0001	0.005	0.001	0.026
EX/1716376	VC3-2-1 0.00-0.47	25/07/2016	7	5690	1860	0.8	300	0.18	<0.001	<0.001	0.0007	0.004	<0.001	0.037
EX/1716377	VC3-2-2 0.47-0.93	25/07/2016	6.9	6180	1960	2.4	266	0.12	<0.001	<0.001	<0.0001	0.002	0.003	0.041
EX/1716378	VC2-2-2 0.50-1.00	25/07/2016	6.8	5800	1940	0.6	261	0.09	<0.001	<0.001	<0.0001	0.001	0.001	0.044
EX/1716379	VC1-2-2 0.42-0.84	25/07/2016	7.2	5600	1690	0.6	245	0.34	0.001	<0.001	<0.0001	0.004	<0.001	0.037
EX/1716380	GRVC4	25/07/2016	8	7450	2790	0.9	176	0.21	0.003	<0.001	<0.0001	0.009	0.002	0.051
EX/1716381	VC10	25/07/2016	7.8	4360	1150	0.7	199	0.15	0.002	<0.001	<0.0001	0.018	0.005	0.087
EX/1716382	VC7-1-1 0.00-0.25	25/07/2016	7.6	4380	1320	0.7	209	0.15	0.001	<0.001	0.0001	0.007	0.001	0.039
EX/1716383	VC6-2-3 1.00-1.50	25/07/2016	7.2	6910	2290	0.7	370	0.28	0.009	0.002	0.0003	0.012	0.006	0.175
EX/1716384	GRVC8	25/07/2016	8	1560	321	0.3	68.1	0.18	0.004	0.004	0.0001	0.029	0.016	0.117
EX/1716385	G11	25/07/2016	7.9	6350	2130	0.4	275	0.13	0.001	0.001	<0.0001	0.006	0.003	0.065
EX/1716386	VC1-2-1 0.00-0.42	25/07/2016	7.6	5820	1890	1.1	324	0.13	0.001	<0.001	<0.0001	0.011	0.003	0.032
EX/1716387	VC5-2-2 0.56-1.14	25/07/2016	7.2	6260	1980	0.4	262	0.14	<0.001	<0.001	<0.0001	0.003	<0.001	0.025
EX/1716388	VC2-2-1 0.00-0.50	25/07/2016	7.2	5130	1640	0.5	238	0.11	<0.001	<0.001	<0.0001	0.008	<0.001	0.018
EX/1716389	VC11-1 0.00-0.25	25/07/2016	7.8	7660	2340	0.6	464	0.32	0.002	<0.001	0.0002	0.006	0.003	0.077
EX/1716390	VC9-1-1 0.00-0.43	25/07/2016	7.9	5430	1690	0.4	319	0.11	0.002	<0.001	<0.0001	0.005	0.003	0.054
EX/1716391	VC6-2-2 0.50-1.00	25/07/2016	7.6	7560	2280	0.5	494	0.18	0.003	<0.001	<0.0001	0.004	0.004	0.082
EX/1716392	VC6-2-1 0.00-0.50	25/07/2016	7.5	5910	1930	0.7	285	0.12	0.001	<0.001	<0.0001	0.004	0.003	0.053
SUM of Exceedances		54		No. of exceedances	0	0	0	0	0	0	2	17	1	20

Table 3: Results of Chemical Analysis of Leachate and Screening Against Marine EQS

Client:	Aspect Land & Hydrographic Surveys Ltd											
Site:	Geotechnical Survey, Kyleakin											
	Analyte:	Marine EQS Value	0.025	0.00005	-	-	-	0.02	0.0006	0.0077	-	
	Method Code:	pH units w	Arsenic as As (Dissolved)	Mercury as Hg (Dissolved)	Selenium as Se (Dissolved)	Molybdenum as Mo (Dissolved)	Antimony as Sb (Dissolved)	Ammoniacal Nitrogen as N	Chromium VI as Cr	Phenol Index as C6H5OH	Total Dissolved Solids w	
	Units:	WSLM3	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	WSLM27	
Sample ID	Sample Desc	Date Sampled	pH units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
EX/1715835	G4	22/07/2016	7.3	0.027	<0.0001	0.004	0.008	0.001	1.7	<0.01	<0.05	4600
EX/1715836	G7	22/07/2016	8.2	0.063	<0.0001	0.004	0.01	0.004	1	<0.01	0.05	4400
EX/1716375	VC5-2-1 0.00-0.56	25/07/2016	7.1	0.002	<0.0001	0.007	0.006	0.001	<0.01	<0.01	<0.05	4700
EX/1716376	VC3-2-1 0.00-0.47	25/07/2016	7	0.002	<0.0001	0.008	0.017	0.002	<0.01	<0.01	<0.05	4500
EX/1716377	VC3-2-2 0.47-0.93	25/07/2016	6.9	0.001	<0.0001	0.007	0.006	<0.001	<0.01	<0.01	<0.05	4700
EX/1716378	VC2-2-2 0.50-1.00	25/07/2016	6.8	0.001	<0.0001	0.007	0.005	<0.001	<0.01	<0.01	<0.05	44600
EX/1716379	VC1-2-2 0.42-0.84	25/07/2016	7.2	0.006	<0.0001	0.011	0.005	0.003	<0.01	<0.01	<0.05	
EX/1716380	GRVC4	25/07/2016	8	0.144	<0.0001	0.014	0.012	0.002	15.3	<0.01	<0.05	4900
EX/1716381	VC10	25/07/2016	7.8	0.017	<0.0001	0.006	0.017	0.007	6.4	<0.01	0.12	2900
EX/1716382	VC7-1-1 0.00-0.25	25/07/2016	7.6	0.013	<0.0001	0.005	0.013	0.001	4.3	<0.01	<0.05	3100
EX/1716383	VC6-2-3 1.00-1.50	25/07/2016	7.2	0.003	<0.0001	0.009	0.073	0.002	0.3	<0.01	<0.05	5400
EX/1716384	GRVC8	25/07/2016	8	0.03	<0.0001	0.001	0.005	0.001	0.3	<0.01	<0.05	1100
EX/1716385	G11	25/07/2016	7.9	0.006	<0.0001	0.008	0.008	<0.001	4.5	<0.01	<0.05	5100
EX/1716386	VC1-2-1 0.00-0.42	25/07/2016	7.6	0.004	<0.0001	0.009	0.035	0.004	13.8	<0.01	<0.05	4400
EX/1716387	VC5-2-2 0.56-1.14	25/07/2016	7.2	0.003	<0.0001	0.009	0.003	<0.001	<0.01	<0.01	<0.05	4600
EX/1716388	VC2-2-1 0.00-0.50	25/07/2016	7.2	0.003	<0.0001	0.007	0.009	0.001	0.2	<0.01	<0.05	3900
EX/1716389	VC11-1 0.00-0.25	25/07/2016	7.8	0.01	<0.0001	0.013	0.051	0.002	3.2	<0.01	<0.05	6000
EX/1716390	VC9-1-1 0.00-0.43	25/07/2016	7.9	0.019	<0.0001	0.008	0.121	0.005	5.2	<0.01	<0.05	4300
EX/1716391	VC6-2-2 0.50-1.00	25/07/2016	7.6	0.002	<0.0001	0.01	0.032	0.001	0.11	<0.01	<0.05	5700
EX/1716392	VC6-2-1 0.00-0.50	25/07/2016	7.5	0.002	<0.0001	0.008	0.039	0.001	0.12	<0.01	<0.05	4600
SUM of Exceedances		54		4	0	0	0	0	0	0	2	0

Table 3: Results of Chemical Analysis of Leachate and Screening Against Marine EQS

Client:	Aspect Land & Hydrographic Surveys Ltd										
Site:	Geotechnical Survey, Kyleakin										
	Marine EQS Value			1	0.02	-	1.2	-			
	Analyte:	pH units w	Aluminium as Al (Dissolved) a	Ammonia (Free) as N calc a	Dissolved Organic Carbon w	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	
	Method Code:	WSLM3	ICPWATVAR	FNH3CALC	WSLM13	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	
	Units:	pH units	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	
Sample ID	Sample Desc	Date Sampled									
EX/1715835	G4	22/07/2016	7.3	0.21	0.01	7	<0.020	<0.010	<0.010	<0.010	
EX/1715836	G7	22/07/2016	8.2	0.17	0.05	22	<0.020	<0.010	<0.010	0.016	
EX/1716375	VC5-2-1 0.00-0.56	25/07/2016	7.1	0.02	<0.01	0.3	<0.020	<0.010	<0.010	0.016	
EX/1716376	VC3-2-1 0.00-0.47	25/07/2016	7	0.04	<0.01	2.1	<0.020	<0.010	<0.010	<0.010	
EX/1716377	VC3-2-2 0.47-0.93	25/07/2016	6.9	0.06	<0.01	2	0.024	<0.010	0.015	<0.010	
EX/1716378	VC2-2-2 0.50-1.00	25/07/2016	6.8	0.05	<0.01	1.6	0.021	<0.010	<0.010	0.013	
EX/1716379	VC1-2-2 0.42-0.84	25/07/2016	7.2	0.03	<0.01	4.5	<0.020	<0.010	<0.010	0.023	
EX/1716380	GRVC4	25/07/2016	8	0.03	0.55	18	<0.020	<0.010	0.015	<0.010	
EX/1716381	VC10	25/07/2016	7.8	0.03	0.16	11	<0.020	<0.010	0.014	0.012	
EX/1716382	VC7-1-1 0.00-0.25	25/07/2016	7.6	0.08	0.06	4.6	<0.020	<0.010	0.014	<0.010	
EX/1716383	VC6-2-3 1.00-1.50	25/07/2016	7.2	0.09	<0.01	6.1	<0.020	<0.010	<0.010	<0.010	
EX/1716384	GRVC8	25/07/2016	8	0.06	0.01	33	<0.010	<0.010	<0.010	0.03	
EX/1716385	G11	25/07/2016	7.9	0.04	0.13	5.1	0.057	<0.010	<0.010	0.019	
EX/1716386	VC1-2-1 0.00-0.42	25/07/2016	7.6	0.04	0.2	2.9	<0.020	<0.010	0.017	<0.010	
EX/1716387	VC5-2-2 0.56-1.14	25/07/2016	7.2	0.06	<0.01	1.5	0.029	<0.010	0.014	<0.010	
EX/1716388	VC2-2-1 0.00-0.50	25/07/2016	7.2	0.04	<0.01	1.1	0.024	<0.010	0.013	<0.010	
EX/1716389	VC11-1 0.00-0.25	25/07/2016	7.8	0.03	0.08	12	<0.020	<0.010	<0.010	<0.010	
EX/1716390	VC9-1-1 0.00-0.43	25/07/2016	7.9	0.05	0.15	6.4	0.033	<0.010	<0.010	<0.010	
EX/1716391	VC6-2-2 0.50-1.00	25/07/2016	7.6	0.03	<0.01	6.1	0.041	<0.010	0.011	<0.010	
EX/1716392	VC6-2-1 0.00-0.50	25/07/2016	7.5	0.03	<0.01	4.2	0.038	<0.010	<0.010	0.013	
SUM of Exceedances		54		0	8	0	0	0	0	0	

Table 4: Leachate Results with Dilution Factor Screened Agasint Marine EQS

Client:	Aspect Land & Hydrographic Surveys Ltd		Marine EQS Value	-	5	-	-	0.02	0.006	0.0002	3.26	0.0072	0.0079		
Site:	Geotechnical Survey, Kyleakin		Analyte:	pH units w	Conductivity uS/cm @ 25C w	Chloride as Cl w	Fluoride as F a	Total Sulphur as SO4 (Dissolved) a	Barium as Ba (Dissolved) a	Nickel as Ni (Dissolved)	Chromium as Cr (Dissolved)	Cadmium as Cd (Dissolved)	Copper as Cu (Dissolved)	Lead as Pb (Dissolved)	Zinc as Zn (Dissolved)
	Method Code:	WSLM3	WSLM2	KONENS	ISEF	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	
	Units:	pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
Sample ID	Sample Desc	Date Sampled													
EX/1715835	G4	22/07/2016	7.3	1789.189189	554.0540541	0.162162162	78.10810811	0.067567568	0.000540541	<0.001	5.40541E-05	0.005675676	0.000540541	0.024594595	
EX/1715836	G7	22/07/2016	8.2	1551.351351	537.8378378	0.162162162	35.94594595	0.102702703	0.001081081	0.00027027	<0.0001	0.002972973	0.000540541	0.027837838	
EX/1716375	VC5-2-1 0.00-0.56	25/07/2016	7.1	1729.72973	540.5405405	0.135135135	78.91891892	0.02972973	<0.001	<0.001	<0.0001	0.001351351	0.00027027	0.007027027	
EX/1716376	VC3-2-1 0.00-0.47	25/07/2016	7	1537.837838	502.7027027	0.216216216	81.08108108	0.048648649	<0.001	<0.001	0.000189189	0.001081081	<0.001	0.01	
EX/1716377	VC3-2-2 0.47-0.93	25/07/2016	6.9	1670.27027	529.7297297	0.648648649	71.89189189	0.032432432	<0.001	<0.001	<0.0001	0.000540541	0.000810811	0.011081081	
EX/1716378	VC2-2-2 0.50-1.00	25/07/2016	6.8	1567.567568	524.3243243	0.162162162	70.54054054	0.024324324	<0.001	<0.001	<0.0001	0.00027027	0.00027027	0.011891892	
EX/1716379	VC1-2-2 0.42-0.84	25/07/2016	7.2	1513.513514	456.7567568	0.162162162	66.21621622	0.091891892	0.00027027	<0.001	<0.0001	0.001081081	<0.001	0.01	
EX/1716380	GRVC4	25/07/2016	8	2013.513514	754.0540541	0.243243243	47.56756757	0.056756757	0.000810811	<0.001	<0.0001	0.002432432	0.000540541	0.013783784	
EX/1716381	VC10	25/07/2016	7.8	1178.378378	310.8108108	0.189189189	53.78378378	0.040540541	0.000540541	<0.001	<0.0001	0.004864865	0.001351351	0.023513514	
EX/1716382	VC7-1-1 0.00-0.25	25/07/2016	7.6	1183.783784	356.7567568	0.189189189	56.48648649	0.040540541	0.00027027	<0.001	2.7027E-05	0.001891892	0.00027027	0.010540541	
EX/1716383	VC6-2-3 1.00-1.50	25/07/2016	7.2	1867.567568	618.9189189	0.189189189	100	0.075675676	0.002432432	0.000540541	8.10811E-05	0.003243243	0.001621622	0.047297297	
EX/1716384	GRVC8	25/07/2016	8	421.6216216	86.75675676	0.081081081	18.40540541	0.048648649	0.001081081	0.001081081	2.7027E-05	0.007837838	0.004324324	0.031621622	
EX/1716385	G11	25/07/2016	7.9	1716.216216	575.6756757	0.108108108	74.32432432	0.035135135	0.00027027	0.00027027	<0.0001	0.001621622	0.000810811	0.017567568	
EX/1716386	VC1-2-1 0.00-0.42	25/07/2016	7.6	1572.972973	510.8108108	0.297297297	87.56756757	0.035135135	0.00027027	<0.001	<0.0001	0.002972973	0.000810811	0.008648649	
EX/1716387	VC5-2-2 0.56-1.14	25/07/2016	7.2	1691.891892	535.1351351	0.108108108	70.81081081	0.037837838	<0.001	<0.001	<0.0001	0.000810811	<0.001	0.006756757	
EX/1716388	VC2-2-1 0.00-0.50	25/07/2016	7.2	1386.486486	443.2432432	0.135135135	64.32432432	0.02972973	<0.001	<0.001	<0.0001	0.002162162	<0.001	0.004864865	
EX/1716389	VC11-1 0.00-0.25	25/07/2016	7.8	2070.27027	632.4324324	0.162162162	125.4054054	0.086486486	0.000540541	<0.001	5.40541E-05	0.001621622	0.000810811	0.020810811	
EX/1716390	VC9-1-1 0.00-0.43	25/07/2016	7.9	1467.567568	456.7567568	0.108108108	86.21621622	0.02972973	0.000540541	<0.001	<0.0001	0.001351351	0.000810811	0.014594595	
EX/1716391	VC6-2-2 0.50-1.00	25/07/2016	7.6	2043.243243	616.2162162	0.135135135	133.5135135	0.048648649	0.000810811	<0.001	<0.0001	0.001081081	0.001081081	0.022162162	
EX/1716392	VC6-2-1 0.00-0.50	25/07/2016	7.5	1597.297297	521.6216216	0.189189189	77.02702703	0.032432432	0.00027027	<0.001	<0.0001	0.001081081	0.000810811	0.014324324	
SUM of Exceedances			29	No. of exceedances	0	0	0	0	0	0	0	3	0	17	

Table 4: Leachate Results with Dilution Factor Screened Agasint Marine EQS

Client:	Aspect Land & Hydrographic Surveys Ltd												
Site:	Geotechnical Survey, Kyleakin												
	Marine EQS Value			0.025	0.00005	-	-	-	0.02	0.0006	0.0077	-	1
	Analyte:	pH units w	Arsenic as As (Dissolved)	Mercury as Hg (Dissolved)	Selenium as Se (Dissolved)	Molybdenum as Mo (Dissolved)	Antimony as Sb (Dissolved)	Ammoniacal Nitrogen as N	Chromium VI as Cr	Phenol Index as C6H5OH	Total Dissolved Solids w	Aluminium as Al (Dissolved) a	
	Method Code:	WSLM3	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	WSLM27	ICPWATVAR	
	Units:	pH units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
Sample ID	Sample Desc	Date Sampled											
EX/1715835	G4	22/07/2016	7.3	0.007297297	<0.0001	0.001081081	0.002162162	0.00027027	0.459459459	<0.01	<0.05	1243.243243	0.056756757
EX/1715836	G7	22/07/2016	8.2	0.017027027	<0.0001	0.001081081	0.002702703	0.001081081	0.27027027	<0.01	0.013513514	1189.189189	0.045945946
EX/1716375	VC5-2-1 0.00-0.56	25/07/2016	7.1	0.000540541	<0.0001	0.001891892	0.001621622	0.00027027	<0.01	<0.01	<0.05	1270.27027	0.005405405
EX/1716376	VC3-2-1 0.00-0.47	25/07/2016	7	0.000540541	<0.0001	0.002162162	0.004594595	0.000540541	<0.01	<0.01	<0.05	1216.216216	0.010810811
EX/1716377	VC3-2-2 0.47-0.93	25/07/2016	6.9	0.00027027	<0.0001	0.001891892	0.001621622	<0.001	<0.01	<0.01	<0.05	1270.27027	0.016216216
EX/1716378	VC2-2-2 0.50-1.00	25/07/2016	6.8	0.00027027	<0.0001	0.001891892	0.001351351	<0.001	<0.01	<0.01	<0.05	12054.05405	0.013513514
EX/1716379	VC1-2-2 0.42-0.84	25/07/2016	7.2	0.001621622	<0.0001	0.002972973	0.001351351	0.000810811	<0.01	<0.01	<0.05	0	0.008108108
EX/1716380	GRVC4	25/07/2016	8	0.038918919	<0.0001	0.003783784	0.003243243	0.000540541	4.135135135	<0.01	<0.05	1324.324324	0.008108108
EX/1716381	VC10	25/07/2016	7.8	0.004594595	<0.0001	0.001621622	0.001891892	0.00027027	1.72972973	<0.01	0.032432432	783.7837838	0.008108108
EX/1716382	VC7-1-1 0.00-0.25	25/07/2016	7.6	0.003513514	<0.0001	0.001351351	0.003513514	0.00027027	1.162162162	<0.01	<0.05	837.8378378	0.021621622
EX/1716383	VC6-2-3 1.00-1.50	25/07/2016	7.2	0.000810811	<0.0001	0.002432432	0.01972973	0.000540541	0.081081081	<0.01	<0.05	1459.459459	0.024324324
EX/1716384	GRVC8	25/07/2016	8	0.008108108	<0.0001	0.00027027	0.001351351	0.00027027	0.081081081	<0.01	<0.05	297.2972973	0.016216216
EX/1716385	G11	25/07/2016	7.9	0.001621622	<0.0001	0.002162162	0.002162162	<0.001	1.216216216	<0.01	<0.05	1378.378378	0.010810811
EX/1716386	VC1-2-1 0.00-0.42	25/07/2016	7.6	0.001081081	<0.0001	0.002432432	0.009459459	0.001081081	3.72972973	<0.01	<0.05	1189.189189	0.010810811
EX/1716387	VC5-2-2 0.56-1.14	25/07/2016	7.2	0.000810811	<0.0001	0.002432432	0.000810811	<0.001	<0.01	<0.01	<0.05	1243.243243	0.016216216
EX/1716388	VC2-2-1 0.00-0.50	25/07/2016	7.2	0.000810811	<0.0001	0.001891892	0.002432432	0.00027027	0.054054054	<0.01	<0.05	1054.054054	0.010810811
EX/1716389	VC11-1 0.00-0.25	25/07/2016	7.8	0.002702703	<0.0001	0.003513514	0.013783784	0.000540541	0.864864865	<0.01	<0.05	1621.621622	0.008108108
EX/1716390	VC9-1-1 0.00-0.43	25/07/2016	7.9	0.005135135	<0.0001	0.002162162	0.032702703	0.001351351	1.405405405	<0.01	<0.05	1162.162162	0.013513514
EX/1716391	VC6-2-2 0.50-1.00	25/07/2016	7.6	0.000540541	<0.0001	0.002702703	0.008648649	0.00027027	0.02972973	<0.01	<0.05	1540.540541	0.008108108
EX/1716392	VC6-2-1 0.00-0.50	25/07/2016	7.5	0.000540541	<0.0001	0.002162162	0.010540541	0.00027027	0.032432432	<0.01	<0.05	1243.243243	0.008108108
SUM of Exceedances			29	1	0	0	0	0	0	2	0	0	

Table 4: Leachate Results with Dilution Factor Screened Agasint Marine EQS

Client:	Aspect Land & Hydrographic Surveys Ltd		Marine EQS Value		0.03	0.05			0.02	
Site:	Geotechnical Survey, Kyleakin		Analyte:	pH units w	Benzo[k]fluoranthene	Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene	Dibenzo[a,h]anthracene	Benzo[g,h,i]perylene	Total (USEPA16) PAHs
	Method Code:	WSLM3	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	PAH_MS-SIM_10	
	Units:	pH units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
Sample ID	Sample Desc	Date Sampled								
EX/1715835	G4	22/07/2016	7.3	<0.010	<0.010	<0.010	<0.010	<0.010	<0.234	
EX/1715836	G7	22/07/2016	8.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.176	
EX/1716375	VC5-2-1 0.00-0.56	25/07/2016	7.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.176	
EX/1716376	VC3-2-1 0.00-0.47	25/07/2016	7	<0.010	<0.010	<0.010	<0.010	<0.010	<0.181	
EX/1716377	VC3-2-2 0.47-0.93	25/07/2016	6.9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.296	
EX/1716378	VC2-2-2 0.50-1.00	25/07/2016	6.8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.174	
EX/1716379	VC1-2-2 0.42-0.84	25/07/2016	7.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.183	
EX/1716380	GRVC4	25/07/2016	8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.280	
EX/1716381	VC10	25/07/2016	7.8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.197	
EX/1716382	VC7-1-1 0.00-0.25	25/07/2016	7.6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.175	
EX/1716383	VC6-2-3 1.00-1.50	25/07/2016	7.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.214	
EX/1716384	GRVC8	25/07/2016	8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.258	
EX/1716385	G11	25/07/2016	7.9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.219	
EX/1716386	VC1-2-1 0.00-0.42	25/07/2016	7.6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.223	
EX/1716387	VC5-2-2 0.56-1.14	25/07/2016	7.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.196	
EX/1716388	VC2-2-1 0.00-0.50	25/07/2016	7.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.182	
EX/1716389	VC11-1 0.00-0.25	25/07/2016	7.8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.175	
EX/1716390	VC9-1-1 0.00-0.43	25/07/2016	7.9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.183	
EX/1716391	VC6-2-2 0.50-1.00	25/07/2016	7.6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.210	
EX/1716392	VC6-2-1 0.00-0.50	25/07/2016	7.5	<0.010	<0.010	<0.010	<0.010	<0.010	<0.216	
SUM of Exceedances			29	0	0	0	0	0	0	