

APPENDIX B3:L

Contaminated land documentation

Golder Associates

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APPENDIX L

137632097



Field Blanks (SOIL)
 Filter: SDG in('EB1228782') and Site_ID IN('127683017')

SDG	EB1228782
Field_ID	QA6
Sampled_Date-Time	2/11/2012
Sample_Type	Trip_B

Chem_Group	ChemName	Units	EQL
MAH	Benzene	mg/kg	0.2
	Ethylbenzene	mg/kg	0.5
	Toluene	mg/kg	0.5
	Xylenes (m & p)	mg/kg	0.5
	Xylene (o)	mg/kg	0.5
	Xylenes (Sum of total)	mg/kg	0.5
	Total BTEX	mg/kg	0.2
	Naphthalene	mg/kg	0.5
			<1
Total Petroleum Hydrocarbons	TPH C 6 - C 9 Fraction	mg/kg	10
			<10

APPENDIX B3:L

137632097



Field Blanks (WATER)
Filter: SDG in('EB1228782') and Site_ID IN('127683017')

SDG	EB1228782
Field_ID	QA5
Sampled_Date-Time	2/11/2012
Sample_Type	Rinsate

Chem_Group	ChemName	Units	EQL	
Halogenated Benzenes	Hexachlorobenzene	mg/l	0.0005	<0.0005
Heavy Metals	Arsenic	mg/l	0.001	<0.001
	Cadmium	mg/l	0.0001	<0.0001
	Chromium	mg/l	0.001	<0.001
	Copper	mg/l	0.001	<0.001
	Lead	mg/l	0.001	<0.001
	Mercury	mg/l	0.0001	0.0004
	Nickel	mg/L	0.001	<0.001
	Zinc	mg/l	0.005	<0.005
MAH	Benzene	mg/l	0.001	<0.001
	Ethylbenzene	mg/l	0.002	<0.002
	Toluene	mg/l	0.002	<0.002
	Xylenes (m & p)	mg/l	0.002	<0.002
	Xylene (o)	mg/l	0.002	<0.002
	Xylenes (Sum of total)	mg/l	0.002	<0.002
	Total BTEX	mg/l	0.001	<0.001
Organochlorine Pesticides	a-BHC	mg/l	0.0005	<0.0005
	Aldrin	mg/l	0.0005	<0.0005
	Aldrin & Dieldrin (Sum of total)	mg/l	0.0005	<0.0005
	b-BHC	mg/l	0.0005	<0.0005
	Chlordane (Sum of total)	mg/l	0.0005	<0.0005
	cis-Chlordane	mg/l	0.0005	<0.0005
	trans-Chlordane	mg/l	0.0005	<0.0005
	d-BHC	mg/l	0.0005	<0.0005
	DDD	mg/l	0.0005	<0.0005
	DDE	mg/l	0.0005	<0.0005
	DDT	mg/l	0.002	<0.002
	DDT+DDE+DDD (Sum of total)	mg/l	0.0005	<0.0005
	Dieldrin	mg/l	0.0005	<0.0005
	Endosulfan I	mg/l	0.0005	<0.0005
	Endosulfan II	mg/L	0.0005	<0.0005
	Endosulfan sulphate	mg/l	0.0005	<0.0005
	Endrin	mg/L	0.0005	<0.0005
	Endrin aldehyde	mg/l	0.0005	<0.0005
	Endrin ketone	mg/l	0.0005	<0.0005
	g-BHC	mg/l	0.0005	<0.0005
	Heptachlor	mg/L	0.0005	<0.0005
	Heptachlor epoxide	mg/l	0.0005	<0.0005
	Methoxychlor	mg/L	0.002	<0.002
Organophosphorous Pesticides	Azinphos-methyl	mg/L	0.0005	<0.0005
	Bromophos-ethyl	mg/L	0.0005	<0.0005
	Carbophenothion	mg/L	0.0005	<0.0005
	Chlorfenvinphos	mg/l	0.0005	<0.0005
	Chlorpyrifos	mg/l	0.0005	<0.0005
	Chlorpyrifos-methyl	mg/l	0.0005	<0.0005
	Diazinon	mg/L	0.0005	<0.0005
	Dichlorvos	mg/L	0.0005	<0.0005
	Dimethoate	mg/L	0.0005	<0.0005
	Ethion	mg/l	0.0005	<0.0005
	Fenamiphos	mg/l	0.0005	<0.0005
	Fenthion	mg/l	0.0005	<0.0005
	Malathion	mg/l	0.0005	<0.0005
	Parathion-methyl	mg/l	0.002	<0.002
	Monocrotophos	mg/l	0.002	<0.002
	Parathion	mg/l	0.002	<0.002
	Pririphos-ethyl	mg/l	0.0005	<0.002
	Prothiofos	mg/l	0.0005	<0.0005
Other	Benzo(a)pyrene (TEQs)	mg/l	0.0005	<0.0005
PAH	Acenaphthene	mg/L	0.001	<0.001
	Acenaphthylene	mg/l	0.001	<0.001
	Anthracene	mg/l	0.001	<0.001
	Benzo(a)anthracene	mg/l	0.001	<0.001
	Benzo(a)pyrene	mg/L	0.0005	<0.0005
	Benzo(b)fluoranthene	mg/l	0.001	<0.001
	Benzo(g,h,i)perylene	mg/l	0.001	<0.001
	Benzo(k)fluoranthene	mg/l	0.001	<0.001
	Chrysene	mg/l	0.001	<0.001
	Dibenz(a,h)anthracene	mg/l	0.001	<0.001
	Fluoranthene	mg/l	0.001	<0.001
	Fluorene	mg/L	0.001	<0.001
	Indeno(1,2,3-c,d)pyrene	mg/l	0.001	<0.001
	Naphthalene	mg/l	0.001	<0.005
	Phenanthrene	mg/L	0.001	<0.001
	Pyrene	mg/l	0.001	<0.001
	PAH (Sum of Common 16 PAHs - Lab Reported)	mg/l	0.0005	<0.0005
Pesticides-Others	Demeton-s-methyl	mg/l	0.0005	<0.0005
Total Petroleum Hydrocarbons	TPH C 6 - C 9 Fraction	mg/L	0.02	0.03
	TPH C10 - C14 Fraction	mg/l	0.05	<0.05
	TPH C15 - C28 Fraction	mg/L	0.1	<0.1
	TPH C29-C36 Fraction	mg/l	0.05	<0.05
	TPH+C10 - C36 (Sum of total) (Lab Reported)	mg/l	0.05	<0.05

Field Duplicate (SOCL)
Filter: SDG in (E11226762) and Site_ID in (12768017)

Chem Group	Chem Name	Units	EQCL	EB11226762 RPD	EB11226762 RPD	EB11226762 RPD	EB11226762 RPD	EB11226762 RPD	EB11226762 RPD	
Halogenated Benzenes	Hexachlorobenzene	mg/kg 0.05	<1.33	0	<1.33	0	<1.33	<0.05	0	
	Heavy Metals	Arsenic	mg/kg 5 (2.1 Interlab)	<5	0	<5	<2	0	<5	2.8 166
		Cadmium	mg/kg 1 (0.5 Interlab)	<1	<1	<1	<0.5	0	<1	0.5 67
	Chromium	Chromium	mg/kg 2 (5 Interlab)	14	12	15	24	14	<5	96 24
		Chromium 6	mg/kg 2 (5 Interlab)	35	34	20	22	30	<5	143 22
		Chromium 3	mg/kg 2 (5 Interlab)	35	34	20	22	30	<5	143 22
		Chromium 6+3	mg/kg 2 (5 Interlab)	35	34	20	22	30	<5	143 22
	Mercury	Mercury	mg/kg 0.1	0.9	0.5	<0.1	<0.1	0.9	0.8	12 0.1
		Nickel	mg/kg 2 (5 Interlab)	10	12	16	6	12	10	<5
	Zinc	Zinc	mg/kg 5	188	3	395	384	3	188	<5
Zinc		mg/kg 5	188	3	395	384	3	188	<5	
MAH	Benzene	mg/kg 0.2 (0.05 Interlab)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	Ethylbenzene	mg/kg 0.5 (0.05 Interlab)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Toluene	mg/kg 0.5 (0.05 Interlab)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylenes (o, m & p)	mg/kg 0.5 (0.05 Interlab)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylenes (o)	mg/kg 0.5 (0.05 Interlab)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylenes (m & p)	mg/kg 0.5 (0.05 Interlab)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Total BTEX	mg/kg 0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	Organochlorine Pesticides	α-BHC	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05
		Alrin	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05
		Alrin & Dieldrin (Sum of total)	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05
Chlordane		mg/kg 0.05 (0.1 Interlab)	<2.66	<2.66	<2.66	<0.1	<2.66	<0.1	<2.66	
cis-Chlordane		mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
trans-Chlordane		mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
DDD		mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
DDE		mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
DDT		mg/kg 0.2 (0.05 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
DDT + DDE + DDD (Sum of total)		mg/kg 0.2 (0.05 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
Organophosphorous Pesticides	Disulfoton	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Endosulfan I	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Endosulfan II	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Endosulfan sulfate	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Erin	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Erin aldehyde	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Erin ketone	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Heptachlor epoxide	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Heptachlor	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Methoxychlor	mg/kg 0.2 (0.05 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
Organophosphorous Pesticides	Azinphos-methyl	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Bromophos-ethyl	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Carbofenthothion	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Chlorpyrifos	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Chlorpyrifos-methyl	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Diazinon	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Dichlorvos	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Disulfoton	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Emamectin	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Fenitrothion	mg/kg 0.2	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
Other	Acetaminophen	mg/kg 0.2	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Acetaminophen-methyl	mg/kg 0.2	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Parathion	mg/kg 0.2	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Monocrotophos	mg/kg 0.2	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Propoxaflor	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Propoxaflor	mg/kg 0.05 (0.2 Interlab)	<1.33	<1.33	<1.33	<1.33	<0.2	<1.33	<0.2	
	Benzo(a)pyrene (ECo)	mg/kg 0.5	<1.2	<1.2	<0.5	<0.5	<1.2	<0.5	<0.5	
	Acenaphthene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Acenaphthylene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Anthracene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
PAH	Benzo(a)anthracene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Benzo(b)fluoranthene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Benzo(k)fluoranthene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Benzo(a)pyrene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Benzo(b)fluoranthene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Benzo(a)anthracene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
	Fluorene	mg/kg 0.5	3.7	2.6	<0.5	<0.5	3.7	<0.5	15.2	
	Fluorene	mg/kg 0.5	<7	<7	<0.5	<0.5	<7	<0.5	<0.5	
	Indeno(1,2,3-cd)pyrene	mg/kg 1 (0.5 Interlab)	<1	<1	<0.5	<0.5	<1	<0.5	<0.5	
	Naphthalene	mg/kg 0.5	<2.4	<2.4	<0.5	<0.5	<2.4	<0.5	<0.5	
Pesticides-Other	Permethrin	mg/kg 0.5	41.2	28.6	<0.5	<0.5	41.2	40	<0.5	
	Permethrin	mg/kg 0.5	41.2	28.6	<0.5	<0.5	41.2	40	<0.5	
	PAH (Sum of Common 16 PAHs - Lab Reported)	mg/kg 0.5	62.7	39.8	<0.5	<0.5	62.7	65	<0.5	
	Demeton-methyl	mg/kg 0.05	<1.33	<1.33	<1.33	<1.33	<0.05	<1.33	<0.05	
	Total Petroleum Hydrocarbons	PH C6 - C9 Fraction	mg/kg 10 (20 Interlab)	<10	<10	<10	<10	<20	<10	<20
		PH C10 - C14 Fraction	mg/kg 10 (20 Interlab)	26.90	25.70	5	7.20	7.60	5	26.90
		PH C15 - C28 Fraction	mg/kg 100 (50 Interlab)	79800	66400	15	33200	28000	24	79800
		PH C29 - C36 Fraction	mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600
		PH C37 - C50 Fraction	mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600
		PH C51 - C60 Fraction	mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600
PH C61 - C70 Fraction		mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600	
PH C71 - C80 Fraction		mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600	
PH C81 - C90 Fraction		mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600	
PH C91 - C100 Fraction		mg/kg 100 (50 Interlab)	80600	66400	15	33200	28000	24	80600	

RPDs have only been conducted where a concentration is greater than 5 times the EQCL.
 **High RPDs are in bold (Acceptable RPDs for each EQCL multiplier range are 50 (0-0.5 x EQCL), 50 (10-30 x EQCL), 50 (1-30 x EQCL).)
 ***Interlab Duplicates are enabled on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory.

