Human Health Soils Risk Assessment
VPI A Immingham
Vitol Power International

Analyte	Human Health GAC	I.D.	BH01	BH02	TP01	TP02	TP04	TP05	TP06	TP07	WS01	WS02	WS03	WS04	WS05
		Depth (m)	0.575	0.8	0.8	0.4	0.9	0.6	0.5	1.45	1.125	0.25	0.6	0.5	0.75
		Date	05/04/2018	11/04/2018	11/04/2018	11/04/2018	10/04/2018	10/04/2018	10/04/2018	09/04/2018	06/04/2018	10/04/2018	10/04/2018	06/04/2018	10/04/2018
VOC															
1,1,1,2-tetrachloroethane	120[#18]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
1,1,2,2-tetrachloroethane	260[#18]		**0.263**	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
1,1-dichloropropene			<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
1,2,3-trichloropropane	0.11[#11]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
1,2,4-trimethylbenzene	46.6[#19]		0.315	0.091	0.606	**0.833**	-	-	<0.006	-	0.111	<0.006	<0.006	-	<0.006
1,2-dibromo-3-chloropropane	0.064[#11]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
1,2-dichloroethane	0.42[#18]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
1,2-Dichloroethene			<0.01	0.005	<0.01	<0.01	-	-	<0.01	-	<0.01	0.005	0.005	-	0.005
1,2-dichloropropane	2.65[#19]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
1,3,5-trimethylbenzene	1,500[#11]		0.02	<0.003	0.044	0.051	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
1,3-dichloropropane	23,000[#11]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
2,2-dichloropropane			<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Bromochloromethane	630[#11]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Bromodichloromethane	1.3[#11]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Bromoform	730[#19]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Chlorodibromomethane	39[#11]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
cis-1,3-dichloropropene			<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Cyclohexane, 1,1,3-trimethyl-			-	-	-	4.705	-	-	-	-	-	-	-	-	-
Cyclohexane, ethyl-			-	-	-	2.325	-	-	-	-	-	-	-	-	-
Dibromomethane	99[#11]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Dodecane, 2,6,10-trimethyl-			-	-	2.465	7.253	-	-	-	-	1.528	-	-	-	-
Hexachlorobutadiene	33[#18]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Isopropylbenzene	1,540[#19]		0.024	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
Naphthalene, decahydro-2-methyl-			0.876	-	0.292 - 2.269	1.088	-	-	-	-	-	-	-	-	-
n-butylbenzene	58,000[#11]		<0.004	<0.004	0.063	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
n-propylbenzene	4,530[#19]		0.056	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
p-isopropyltoluene			0.092	<0.004	0.075	1.185	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
sec-butylbenzene	120,000[#11]		0.203	<0.004	0.05	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Styrene	3,550[#19]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
tert-butylbenzene	120,000[#11]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
trans-1,3-dichloropropene			<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
trans-Decalin, 2-methyl-			-	-	0.357 - 1.05	0.246 - 2.398	-	-	-	-	-	-	-	-	-
Trihalomethanes			<0.018	0.009	<0.018	<0.018	-	-	<0.018	-	<0.018	0.009	0.009	-	0.009
Chlorinated Hydrocarbons															
1,1,1-trichloroethane	640[#18]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
1,1,2-trichloroethane	89.7[#19]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
1,1-dichloroethane	208[#19]		<0.006	<0.006	<0.006	<0.006	-	-	<0.006	-	<0.006	<0.006	<0.006	-	<0.006
1,1-dichloroethene	22.6[#19]		<0.006	<0.006	<0.006	<0.006	-	-	<0.006	-	<0.006	<0.006	<0.006	-	<0.006
Carbon tetrachloride	3[#18]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Chloroethane	640[#19]		<0.006	<0.006	<0.006	<0.006	-	-	<0.006	-	<0.006	<0.006	<0.006	-	<0.006
Chloroform	81[#18]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
Chloromethane	0.573[#19]		<0.003	0.005	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
cis-1,2-dichloroethene	11.3[#19]		<0.007	<0.007	<0.007	<0.007	-	-	<0.007	-	<0.007	<0.007	<0.007	-	<0.007
Dichloromethane	162[#19]		<0.03	<0.03	***0.078***	***0.041***	-	-	<0.03	-	<0.03	<0.03	<0.03	-	<0.03
PCE+TCE+DCE+VC			<0.026	0.013	<0.026	<0.026	-	-	<0.026	-	<0.026	0.013	0.013	-	0.013
Sum of PCE and TCE			<0.008	0.004	<0.008	<0.008	-	-	<0.008	-	<0.008	0.004	0.004	-	0.004
TCE+DCE+VC			<0.023	0.0115	<0.023	<0.023	-	-	<0.023	-	<0.023	0.0115	0.0115	-	0.0115
Tetrachloroethene	19[#18]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
trans-1,2-dichloroethene	18.9[#19]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
Trichloroethene	1.2[#18]		<0.005	<0.005	<0.005	<0.005	-	-	<0.005	-	<0.005	<0.005	<0.005	-	<0.005
Vinyl chloride	0.04[#18]		<0.002	<0.002	<0.002	<0.002	-	-	<0.002	-	<0.002	<0.002	<0.002	-	<0.002
Halogenated Benzenes															
1,2,3-trichlorobenzene	110[#18]		<0.007	<0.007	<0.007	<0.007	-	-	<0.007	-	<0.007	<0.007	<0.007	-	<0.007
1,2,4-trichlorobenzene	240[#18]		<0.007	<0.007	<0.007	<0.007	-	-	<0.007	-	<0.007	<0.007	<0.007	-	<0.007
1,2-dichlorobenzene	2,200[#18]		<0.004	<0.004	<0.004	<0.01 - 0.926	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
1,3-dichlorobenzene	34[#18]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
1,4-dichlorobenzene	4,800[#18]		<0.004	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
2-chlorotoluene	23,000[#11]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
4-chlorotoluene	23,000[#11]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
Bromobenzene	105[#19]		<0.002	<0.002	<0.002	<0.002	-	-	<0.002	-	<0.002	<0.002	<0.002	-	<0.002
Chlorobenzene	59[#18]		**<0.004 - 1.372**	<0.004	<0.004	<0.004	-	-	<0.004	-	<0.004	<0.004	<0.004	-	<0.004
Hexachlorobenzene	110[#18]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Trichlorobenzene (total)			<0.014	0.007	<0.014	<0.014	-	-	<0.014	-	<0.014	0.007	0.007	-	0.007
Halogenated Hydrocarbons															
1,2-dibromoethane	0.16[#11]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
Bromomethane	30[#11]		<0.001	<0.001	<0.001	<0.001	-	-	<0.001	-	<0.001	<0.001	<0.001	-	<0.001
Dichlorodifluoromethane	370[#11]		<0.002	<0.002	<0.002	<0.002	-	-	<0.002	-	<0.002	<0.002	<0.002	-	<0.002
Trichlorofluoromethane	350,000[#11]		<0.003	<0.003	<0.003	<0.003	-	-	<0.003	-	<0.003	<0.003	<0.003	-	<0.003
PAH															
Acenaphthene	90,000[#18]		<0.1	<0.1	<0.01	**1.651**	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Acenaphthylene	90,000[#18]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Anthracene	530,000[#18]		<0.1	<0.1	*0.603*	*1.072*	-	-	*0.05*	-	<0.1	<0.01	*0.046*	-	*0.041*
Benz(a)anthracene	170[#18]		<0.1	<0.1	0.662	1.52	-	-	0.072	-	<0.1	<0.01	0.089	-	0.056
Benzo(a) pyrene	36[#18]		<0.1	<0.1	***0.938***	***1.089***	-	-	***0.096***	-	<0.1	<0.01	***0.089***	-	***0.105***
Benzo(b)&(k)fluoranthene			<0.1	<0.1	0.796	1.19	-	-	0.158	-	<0.1	<0.01	0.18	-	0.159
Benzo(b)fluoranthene	45[#18]		<0.1	<0.1	*0.573*	*0.857*	-	-	*0.114*	-	<0.1	<0.01	*0.13*	-	*0.114*
Benzo(g,h,i)perylene	4,000[#18]		<0.1	<0.1	*0.581*	*0.591*	-	-	*0.105*	-	<0.1	<0.01	*0.114*	-	*0.104*
benzo(g,h,i)perylene + indeno(1,2,3-cd)pyrene			<0.2	0.1	0.818	0.854	-	-	0.145	-	<0.2	0.01	0.151	-	0.151
Benzo(k)fluoranthene	1,200[#18]		<0.1	<0.1	*0.223*	*0.333*	-	-	*0.044*	-	<0.1	<0.01	*0.05*	-	*0.045*
Chrysene	350[#18]		<0.1	<0.1	2.415	3.179	-	-	0.258	-	<0.1	<0.01	0.318	-	0.288
Dibenz(a,h)anthracene	3.6[#18]		<0.1	<0.1	**0.255**	**0.346**	-	-	0.05	-	<0.1	<0.01	0.04	-	0.038
Fluoranthene	23,000[#18]		<0.1	<0.1	<0.01	***1.569***	-	-	*0.023*	-	<0.1	<0.01	*0.026*	-	*0.029*
Fluorene	66,000[#18]		<0.1	<0.1	<0.01	**2.305**	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Indeno(1,2,3-c,d)pyrene	510[#18]		<0.1	<0.1	0.237	0.263	-	-	0.04	-	<0.1	<0.01	0.037	-	0.047
Naphthalene	220[#18]		<0.027	<0.027	***0.066 - 0.60***	***0.252 - 1.36***	-	-	<0.01	-	<0.027	<0.01	<0.01	-	<0.01
PAHs (sum of 4)			<0.4	0.2	1.614	2.044	-	-	0.303	-	<0.4	0.02	0.331	-	0.31
Phenanthrene	22,000[#18]		<0.1	<0.1	**1.872**	**7.6**	-	-	0.11	-	<0.1	<0.01	0.13	-	0.124
Pyrene	54,000[#18]		<0.1	**2.817**	**2.469**	**4.18**	-	-	0.091	-	<0.1	<0.01	0.11	-	0.171
Phenolics															
2,4-dimethylphenol	20,000[#19]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
2-chloronaphthalene	460[#19]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
2-methylphenol	41,000[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
2-nitrophenol			<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
4-chloro-3-methylphenol	82,000[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
4-methylphenol	82,000[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
4-nitrophenol			<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Phenol	620[#18]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Halogenated Phenols															
2,4,5-trichlorophenol	82,000[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
2,4,6-trichlorophenol	210[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
2,4-dichlorophenol	2,500[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
2-chlorophenol	5,800[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Pentachlorophenol	400[#18]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01
Phthalates															
Bis(2-ethylhexyl) phthalate	85,800[#19]		<1	<1	***1.926***	***3.119***	-	-	<0.1	-	<1	<0.1	<0.1	-	<0.1
Butyl benzyl phthalate	944,000[#19]		<1	<1	<0.1	<0.1	-	-	<0.1	-	<1	<0.1	<0.1	-	<0.1
Di-n-butyl phthalate	15,400[#19]		<1	<1	<0.1	<0.1	-	-	<0.1	-	<1	<0.1	<0.1	-	<0.1
Di-n-octyl phthalate	89,100[#19]		<1	<1	<0.1	<0.1	-	-	<0.1	-	<1	<0.1	<0.1	-	<0.1
Diethylphthalate	182,000[#19]		<1	<1	<0.1	<0.1	-	-	<0.1	-	<1	<0.1	<0.1	-	<0.1
Dimethyl phthalate			<1	<1	<0.1	<0.1	-	-	<0.1	-	<1	<0.1	<0.1	-	<0.1
TICS															
2-Bromododecane (TIC)			-	-	3.906	-	-	-	-	-	-	-	-	-	-
Octane, 3-methyl-			-	-	-	1.413	-	-	-	-	-	-	-	-	-
288246-53-7			-	-	2.246	2.517	-	-	-	-	-	-	-	-	-
Heptacosane			-	-	-	12.91	-	-	-	-	-	-	-	-	-
TPH															
>C5-C6 Aliphatics	3,300[#18]		<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1
>C6-C8 Aliphatics	9,200[#18]		<0.1	<0.1	<0.1	1.3	-	-	<0.1	-	0.2	<0.1	<0.1	-	<0.1
>C8-C10 Aliphatics	2,500[#18]		1	<0.1	0.3	5.6	-	-	<0.1	-	1.1	<0.1	<0.1	-	<0.1
>C10-C12 Aliphatics	12,000[#18]		588.8	23.2	154.5	325.9	-	-	<0.2	-	51.8	<0.2	9.7	-	4.9
>C12-C16 Aliphatics	66,000[#18]		1,627	251	789	925	-	-	<4	-	343	9	101	-	52
>C16-C21 Aliphatics			2,885	858	1,715	1,534	-	-	<7	-	977	26	367	-	256
>C16-C35 Aliphatics	1,600,000[#18]		8,057	2,985	5,129	4,535	-	-	<14	-	3,500	108	1,243	-	931
>C21-C35 Aliphatics			5,172	2,127	3,414	3,001	-	-	<7	-	2,523	82	876	-	675
>C5-C35 Aliphatics			10,274	3,259	6,073	5,793	-	-	<19	-	3,896	117	1,354	-	988
>EC5-EC7 Aromatics	23,000[#18]		<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1
>EC7-EC8 Aromatics	58,000[#18]		<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1
>EC8-EC10 Aromatics	4,300[#18]		<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1
>EC10-EC12 Aromatics	19,000[#18]		**92.9**	<0.2	**33.9**	**103.8**	-	-	<0.2	-	**10.3**	<0.2	<0.2	-	<0.2
>EC12-EC16 Aromatics	37,000[#18]		**809**	<4	**358**	**688**	-	-	<4	-	**104**	<4	**37**	-	**32**
>EC16-EC21 Aromatics	28,000[#18]		**3,404**	<7	**1,663**	**1,953**	-	-	<7	-	**629**	**17**	**357**	-	**322**
>EC21-EC35 Aromatics	28,000[#18]		**8,205**	40	**5,036**	**5,372**	-	-	<7	-	**3,203**	**158**	**1,790**	-	**1,581**
>EC5-EC35 Aromatics			12,511	40	7,091	8,117	-	-	<19	-	3,946	175	2,184	-	1,935
>C5-C35 Aliphatics & Aromatics			22,785	3,299	13,164	13,910	-	-	<38	-	7,842	292	3,538	-	2,923
TPH Hazard Indicies	1		0	0	0	0	-	-	0	-	0	0	0	-	0
BTEX															
Benzene	24[#18]		***0.046***	***0.028***	***0.045 - 1.926***	***0.06 - 0.868***	-	-	<0.005	-	***0.047***	<0.005	<0.005	-	<0.005
Toluene	58,000[#18]		0.007	0.006	0.005	0.019	-	-	<0.003	-	0.015	<0.003	<0.003	-	<0.003
Ethylbenzene	6,200[#18]		0.06	0.024	0.039	*0.121*	-	-	<0.003	-	0.031	<0.003	<0.003	-	<0.003
Xylene (m & p)			0.114	0.078	0.213	0.115	-	-	<0.004	-	0.089	<0.004	0.009	-	<0.004
Xylene Total	6,400[#18]		*0.15*	0.101	*0.262*	*0.169*	-	-	<0.008	-	0.12	0.004	0.011	-	0.004
Xylene (o)	7,200[#18]		0.036	0.023	0.049	0.054	-	-	<0.004	-	0.031	<0.004	<0.004	-	<0.004
Total BTEX			0.263	0.159	2.232	1.177	-	-	<0.019	-	0.213	0.0095	0.0165	-	0.0095
Oxygenates															
MTBE	5,740[#19]		<0.006	<0.006	<0.006	<0.006	-	-	<0.006	-	<0.006	<0.006	<0.006	-	<0.006

Analyte	Number of Result	Number of Detects	Minimum Concentration	Minimum Detect	Maximum Concentration	Maximum Detect	Average Concentration	Median Concentration	Standard Deviation	Number of Guideline	Number of Guideline Exceedances
VOC											
1,1,1,2-tetrachloroethane	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	9	0
1,1,2,2-tetrachloroethane	9	1	<0.003	0.263	0.263	0.263	0.032	0.003	0.087	9	1
1,1-dichloropropene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
1,2,3-trichloropropane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	9	0
1,2,4-trimethylbenzene	9	5	<0.006	0.091	0.833	0.833	0.22	0.091	0.31	1	1
1,2-dibromo-3-chloropropane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	9	0
1,2-dichloroethane	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	9	0
1,2-Dichloroethene	9	4	0.005	0.005	<0.01	0.005	0.0078	0.01	0.0026	0	0
1,2-dichloropropane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
1,3,5-trimethylbenzene	9	3	<0.003	0.02	0.051	0.051	0.015	0.003	0.019	0	0
1,3-dichloropropane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
2,2-dichloropropane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Bromochloromethane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Bromodichloromethane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Bromoform	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Chlorodibromomethane	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	0	0
cis-1,3-dichloropropene	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Cyclohexane, 1,1,3-trimethyl-	1	1	4.705	4.705	4.705	4.705		4.705		0	0
Cyclohexane, ethyl-	1	1	2.325	2.325	2.325	2.325		2.325		0	0
Dibromomethane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	9	0
Dodecane, 2,6,10-trimethyl-	3	3	1.528	1.528	7.253	7.253	3.7	2.465	3.1	0	0
Hexachlorobutadiene	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Isopropylbenzene	9	1	<0.003	0.024	0.024	0.024	0.0053	0.003	0.007	0	0
Naphthalene, decahydro-2-methyl-	3	3	0.292	0.292	2.269	2.269	1.1	1.088	0.2	0	0
n-butylbenzene	9	1	<0.004	0.063	0.063	0.063	0.011	0.004	0.02	0	0
n-propylbenzene	9	1	<0.004	0.056	0.056	0.056	0.0098	0.004	0.017	0	0
p-isopropyltoluene	9	3	<0.004	0.075	1.185	1.185	0.15	0.004	0.39	0	0
sec-butylbenzene	9	2	<0.004	0.05	0.203	0.203	0.031	0.004	0.066	0	0
Styrene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
tert-butylbenzene	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	0	0
trans-1,3-dichloropropene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
trans-Decalin, 2-methyl-	2	2	0.246	0.246	2.398	2.398		1.01275		0	0
Trihalomethanes	9	4	0.009	0.009	<0.018	0.009	0.014	0.018	0.0047	0	0
Chlorinated Hydrocarbons											
1,1,1-trichloroethane	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	0	0
1,1,2-trichloroethane	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	9	0
1,1-dichloroethane	9	0	<0.006	ND	<0.006	ND	0.006	0.006	0	9	0
1,1-dichloroethene	9	0	<0.006	ND	<0.006	ND	0.006	0.006	0	0	0
Carbon tetrachloride	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
Chloroethane	9	0	<0.006	ND	<0.006	ND	0.006	0.006	0	0	0
Chloroform	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	9	0
Chloromethane	9	1	<0.003	0.005	0.005	0.005	0.0032	0.003	0.00067	0	0
cis-1,2-dichloroethene	9	0	<0.007	ND	<0.007	ND	0.007	0.007	0	0	0
Dichloromethane	9	2	<0.03	0.041	0.078	0.078	0.037	0.03	0.016	9	2
PCE+TCE+DCE+VC	9	4	0.013	0.013	<0.026	0.013	0.02	0.026	0.0069	0	0
Sum of PCE and TCE	9	4	0.004	0.004	<0.008	0.004	0.0062	0.008	0.0021	0	0
TCE+DCE+VC	9	4	0.0115	0.0115	<0.023	0.0115	0.018	0.023	0.0061	0	0
Tetrachloroethene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
trans-1,2-dichloroethene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
Trichloroethene	9	0	<0.005	ND	<0.005	ND	0.005	0.005	0	0	0
Vinyl chloride	9	0	<0.002	ND	<0.002	ND	0.002	0.002	0	9	0
Halogenated Benzenes											
1,2,3-trichlorobenzene	9	0	<0.007	ND	<0.007	ND	0.007	0.007	0	9	0
1,2,4-trichlorobenzene	9	0	<0.007	ND	<0.007	ND	0.007	0.007	0	9	0
1,2-dichlorobenzene	9	1	<0.004	ND	0.926	0.926	0.056	0.004	0.15	0	0
1,3-dichlorobenzene	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
1,4-dichlorobenzene	9	0	<0.004	ND	<0.004	ND	0.004	0.004	0	0	0
2-chlorotoluene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
4-chlorotoluene	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
Bromobenzene	9	0	<0.002	ND	<0.002	ND	0.002	0.002	0	0	0
Chlorobenzene	9	1	<0.004	ND	1.372	1.372	0.08	0.004	0.23	1	1
Hexachlorobenzene	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	3	0
Trichlorobenzene (total)	9	4	0.007	0.007	<0.014	0.007	0.011	0.014	0.0037	0	0
Halogenated Hydrocarbons											
1,2-dibromoethane	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	9	0
Bromomethane	9	0	<0.001	ND	<0.001	ND	0.001	0.001	0	0	0
Dichlorodifluoromethane	9	0	<0.002	ND	<0.002	ND	0.002	0.002	0	0	0
Trichlorofluoromethane	9	0	<0.003	ND	<0.003	ND	0.003	0.003	0	0	0
PAH											
Acenaphthene	9	1	<0.01	1.651	1.651	1.651	0.22	0.01	0.54	1	1
Acenaphthylene	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
Anthracene	9	5	<0.01	0.041	1.072	1.072	0.24	0.1	0.36	9	5
Benz(a)anthracene	9	5	<0.01	0.056	1.52	1.52	0.3	0.1	0.5	0	0
Benzo(a) pyrene	9	5	<0.01	0.089	1.089	1.089	0.29	0.1	0.41	9	5
Benzo(b)&(k)fluoranthene	9	5	<0.01	0.158	1.19	1.19	0.31	0.158	0.4	0	0
Benzo(b)fluoranthene	9	5	<0.01	0.114	0.857	0.857	0.23	0.114	0.28	8	5
Benzo(g,h,i)perylene	9	5	<0.01	0.104	0.591	0.591	0.2	0.104	0.22	9	5
benzo(g,h,i)perylene + indeno(1,2,3-cd)pyrene	9	7	0.01	0.01	0.854	0.854	0.29	0.151	0.31	0	0
Benzo(k)fluoranthene	9	5	<0.01	0.044	0.333	0.333	0.11	0.1	0.1	8	5
Chrysene	9	5	<0.01	0.258	3.179	3.179	0.75	0.258	1.2	0	0
Dibenz(a,h)anthracene	9	5	<0.01	0.038	0.346	0.346	0.12	0.1	0.11	2	2
Fluoranthene	9	4	<0.01	0.023	1.569	1.569	0.22	0.029	0.51	9	4
Fluorene	9	1	<0.01	2.305	2.305	2.305	0.3	0.01	0.76	1	1
Indeno(1,2,3-c,d)pyrene	9	5	<0.01	0.037	0.263	0.263	0.1	0.1	0.089	0	0
Naphthalene	9	2	<0.01	0.066	1.36	1.36	0.14	0.027	0.27	5	2
PAHs (sum of 4)	9	7	0.02	0.02	2.044	2.044	0.62	0.331	0.7	0	0
Phenanthrene	9	5	<0.01	0.11	7.6	7.6	1.1	0.11	2.5	2	2
Pyrene	9	6	<0.01	0.091	4.18	4.18	1.1	0.11	1.6	3	3
Phenolics											
2,4-dimethylphenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
2-chloronaphthalene	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
2-methylphenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
2-nitrophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
4-chloro-3-methylphenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
4-methylphenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
4-nitrophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
Phenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Halogenated Phenols											
2,4,5-trichlorophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
2,4,6-trichlorophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
2,4-dichlorophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
2-chlorophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
Pentachlorophenol	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Phthalates											
Bis(2-ethylhexyl) phthalate	9	2	<0.1	1.926	3.119	3.119	0.94	1	1	9	2
Butyl benzyl phthalate	9	0	<0.1	ND	<1	ND	0.4	0.1	0.45	9	0
Di-n-butyl phthalate	9	0	<0.1	ND	<1	ND	0.4	0.1	0.45	3	0
Di-n-octyl phthalate	9	0	<0.1	ND	<1	ND	0.4	0.1	0.45	0	0
Diethylphthalate	9	0	<0.1	ND	<1	ND	0.4	0.1	0.45	3	0
Dimethyl phthalate	9	0	<0.1	ND	<1	ND	0.4	0.1	0.45	3	0
TICS											
2-Bromododecane (TIC)	1	1	3.906	3.906	3.906	3.906		3.906		0	0
Octane, 3-methyl-	1	1	1.413	1.413	1.413	1.413		1.413		0	0
288246-53-7	2	2	2.246	2.246	2.517	2.517		2.3815		0	0
Heptacosane	1	1	12.91	12.91	12.91	12.91		12.91		0	0
TPH											
>C5-C6 Aliphatics	9	0	<0.1	ND	<0.1	ND	0.1	0.1	0	0	0
>C6-C8 Aliphatics	9	2	<0.1	0.2	1.3	1.3	0.24	0.1	0.4	0	0
>C8-C10 Aliphatics	9	4	<0.1	0.3	5.6	5.6	0.94	0.1	1.8	0	0
>C10-C12 Aliphatics	9	7	<0.2	4.9	588.8	588.8	129	23.2	203	0	0
>C12-C16 Aliphatics	9	8	<4	9	1627	1627	456	251	553	0	0
>C16-C21 Aliphatics	9	8	<7	26	2885	2885	958	858	952	0	0
>C16-C35 Aliphatics	9	8	<14	108	8057	8057	2945	2985	2677	0	0
>C21-C35 Aliphatics	9	8	<7	82	5172	5172	1986	2127	1733	0	0
>C5-C35 Aliphatics	9	8	<19	117	10274	10274	3530	3259	3399	0	0
>EC5-EC7 Aromatics	9	0	<0.1	ND	<0.1	ND	0.1	0.1	0	9	0
>EC7-EC8 Aromatics	9	0	<0.1	ND	<0.1	ND	0.1	0.1	0	0	0
>EC8-EC10 Aromatics	9	0	<0.1	ND	<0.1	ND	0.1	0.1	0	0	0
>EC10-EC12 Aromatics	9	4	<0.2	10.3	103.8	103.8	27	0.2	42	4	4
>EC12-EC16 Aromatics	9	6	<4	32	809	809	227	37	318	6	6
>EC16-EC21 Aromatics	9	7	<7	17	3404	3404	929	357	1174	7	7
>EC21-EC35 Aromatics	9	8	<7	40	8205	8205	2821	1790	2870	7	7
>EC5-EC35 Aromatics	9	8	<19	40	12511	12511	4002	2184	4368	0	0
>C5-C35 Aliphatics & Aromatics	9	8	<38	292	22785	22785	7532	3538	7655	0	0
TPH Hazard Indicies											
BTEX											
Benzene	9	5	<0.005	0.028	1.926	1.926	0.18	0.028	0.34	9	5
Toluene	9	5	<0.003	0.005	0.019	0.019	0.0071	0.005	0.0059	0	0
Ethylbenzene	9	5	<0.003	0.024	0.121	0.121	0.032	0.024	0.039	1	1
Xylene (m & p)	9	6	<0.004	0.009	0.213	0.213	0.07	0.078	0.072	0	0
Xylene Total	9	8	0.004	0.004	0.262	0.262	0.092	0.101	0.092	3	3
Xylene (o)	9	5	<0.004	0.023	0.054	0.054	0.023	0.023	0.02	0	0
Total BTEX	9	8	0.0095	0.0095	2.232	2.232	0.46	0.159	0.76	0	0
Oxygenates											
MTBE	9	0	<0.006	ND	<0.006	ND	0.006	0.006	0	0	0

Analyte	Human Health GAC	I.D.	BH01	BH02	TP01	TP02	TP04	TP05	TP06	TP07	WS01	WS02	WS03	WS04	WS05	Number of Result	Number of Detects	Minimum Concentration	Minimum Detect	Maximum Concentration	Maximum Detect	Average Concentration	Median Concentration	Standard Deviation	Number of Guideline	Number of Guideline Exceedances
		Depth (m)	0.575	0.8	0.8	0.4	0.9	0.6	0.5	1.45	1.125	0.25	0.6	0.5	0.75											
		Date	05/04/2018	11/04/2018	11/04/2018	11/04/2018	10/04/2018	10/04/2018	10/04/2018	09/04/2018	06/04/2018	10/04/2018	10/04/2018	06/04/2018	10/04/2018											
SVOC																										
2-methylnaphthalene	3,000[#11]		**1.998**	**1.136**	**2.857**	**4.537**	-	-	<0.01	-	<0.1	0.127	0.053	-	0.044	9	7	<0.01	0.044	4.537	4.537	1.2	0.127	1.6	4	4
4-bromophenyl phenyl ether			<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
4-chlorophenyl phenyl ether			<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
Azobenzene	26[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Bis(2-chloroethoxy) methane	2,500[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Bis(2-chloroethyl)ether	1[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Carbazole			<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Dibenzofuran	1,000[#11]		<0.1	<0.1	<0.01	**0.818**	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	1	<0.01	0.818	0.818	0.818	0.13	0.01	0.26	1	1
Hexachlorocyclopentadiene	7.8[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
Hexachloroethane	24.9[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
1-Methylnaphthalene	75[#11]		-	-	**3.064**	-	-	-	-	-	-	-	-	-	-	1	1	3.064	3.064	3.064	3.064		3.064		1	1
Benzoic Acid	3,300,000[#11]		-	-	1.725	-	-	-	-	-	-	-	-	-	-	1	1	1.725	1.725	1.725	1.725		1.725		0	0
Phenanthrene, 1-methyl-			-	-	6.045	-	-	-	-	-	-	-	-	-	-	1	1	6.045	6.045	6.045	6.045		6.045		0	0
Anthracene, 1-methyl-			-	-	-	8.606	-	-	-	-	-	-	-	-	-	1	1	8.606	8.606	8.606	8.606		8.606		0	0
Benzene, 1-ethyl-2,3-dimethyl-			1.034	-	-	1.224	-	-	-	-	-	-	-	-	-	2	2	1.034	1.034	1.224	1.224		1.129		0	0
Hexane, 3-methyl-			-	-	-	0.783	-	-	-	-	-	-	-	-	-	1	1	0.783	0.783	0.783	0.783		0.783		0	0
1-Methyl-4-ethyl 2-phenylsuccinate			-	-	-	6.689	-	-	-	-	-	-	-	-	-	1	1	6.689	6.689	6.689	6.689		6.689		0	0
Pyrene, 1-methyl-			-	-	2.957	-	-	-	-	-	-	-	-	-	-	1	1	2.957	2.957	2.957	2.957		2.957		0	0
Phenanthrene, 2-methyl-			-	-	-	9.265	-	-	-	-	-	-	-	-	-	1	1	9.265	9.265	9.265	9.265		9.265		0	0
Azulene, 7-ethyl-1,4-dimethyl-			-	-	2.686	1.926	-	-	-	-	-	-	-	-	-	2	2	1.926	1.926	2.686	2.686		2.306		0	0
Pyrene, 1,3-dimethyl-			-	-	2.93	-	-	-	-	-	-	-	-	-	-	1	1	2.93	2.93	2.93	2.93		2.93		0	0
Phenanthrene, 4-methyl-			-	-	5.121	3.804	-	-	-	-	-	-	-	-	-	2	2	3.804	3.804	5.121	5.121		4.4625		0	0
1,3-Cyclopentadiene, 1,2,3,4-tetramethyl-			0.396	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.396	0.396	0.396	0.396		0.396		0	0
Benzene, (1-methyl-1-butenyl)-			-	-	-	2.858	-	-	-	-	-	-	-	-	-	1	1	2.858	2.858	2.858	2.858		2.858		0	0
Cyclohexane, butyl-			-	-	-	0.657	-	-	-	-	-	-	-	-	-	1	1	0.657	0.657	0.657	0.657		0.657		0	0
Pentadecane, 2,6,10-trimethyl-			-	-	-	8.945	-	-	-	-	-	-	-	-	-	1	1	8.945	8.945	8.945	8.945		8.945		0	0
D-Homoandrostane, (5.alpha.,13.alpha.)-			-	-	1.244	-	-	-	-	-	-	-	-	-	-	1	1	1.244	1.244	1.244	1.244		1.244		0	0
Amino Aliphatics																										
N-nitrosodi-n-propylamine	0.35[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Anilines																										
2-nitroaniline	8,000[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
3-nitroaniline			<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
4-chloroaniline	11[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
4-nitroaniline	110[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Explosives																										
2,4-Dinitrotoluene	3.76[#10]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
2,6-dinitrotoluene	1.86[#10]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	9	0
Nitrobenzene	22[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	0	0
Solvents																										
Cyclohexane	27,000[#11]		0.461	-	-	1.11 - 3.109	-	-	-	-	-	-	-	-	-	2	2	0.461	0.461	3.109	3.109		1.28525		0	0
Decane			-	-	-	0.425 - 2.04	-	-	-	-	-	-	-	-	-	1	1	0.425	0.425	2.04	2.04		1.2325		0	0
Heptane			-	-	-	0.955 - 1.611	-	-	-	-	-	-	-	-	-	1	1	0.955	0.955	1.611	1.611		1.283		0	0
Hexane	2,500[#11]		-	-	-	2.024	-	-	-	-	-	-	-	-	-	1	1	2.024	2.024	2.024	2.024		2.024		0	0
Isophorone	2,400[#11]		<0.1	<0.1	<0.01	<0.01	-	-	<0.01	-	<0.1	<0.01	<0.01	-	<0.01	9	0	<0.01	ND	<0.1	ND	0.04	0.01	0.045	3	0
Octane			-	-	-	1.479 - 3.026	-	-	-	-	-	-	-	-	-	1	1	1.479	1.479	3.026	3.026		2.2525		0	0
Pentane	3,400[#11]		0.299	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.299	0.299	0.299	0.299		0.299		0	0
Metals																										
Arsenic	640[#18]		***0 - 21***	***0 - 35.8***	***26.3***	***21.6***	***7.4***	***9***	***10.3***	***9.4***	***0 - 16.3***	***11.4***	***7.3***	***8.9***	***10.5***	13	13	0		7.3	35.8	35.8	12	10.3	5.9	13	13
Barium	22,100[#19]		**0 - 504**	**0 - 350**	**369**	**337**	**116**	**162**	**118**	**127**	**0 - 310**	**121**	**169**	**169**	**147**	13	13	0		116	504	504	186	162	82	13	13
Beryllium	12[#18]		0 - 2.1	0 - 2.3	1.9	1.8	1.1	1.3	1.3	1.3	0 - 1.9	1.3	1.5	1.3	1.5	13	13	0	1.1	2.3	2.3	1.3	1.3	0.28	0	0
Boron	240,000[#18]		0 - 2.9	0 - 4.2	3.4	3.6	1.5	1.6	4.4	1	0 - 2.6	1.8	3.4	2.1	2.2	13	13	0	1	4.4	4.4	2.3	2.1	1.1	0	0
Cadmium	190[#18]		***0 - 3.1***	***0 - 1.7***	***1.8***	***0.8***	*0.2*	*0.2*	*0.3*	*0.2*	***0 - 1.6***	*0.3*	*0.2*	<0.1	*0.4*	13	12	0	0.2	3.1	3.1	0.59	0.3	0.55	13	12
Chromium (hexavalent)	93[#18]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	13	0	<0.3	ND	<0.3	ND	0.3	0.3	0	13	0
Chromium (III+VI)	8,600[#18]		0 - 79.8	0 - 82.2	75.1	63.4	64	60.4	36	69	0 - 68.7	60	65.2	85.2	71.5	13	13	0	36	85.2	85.2	59	63.4	16	0	0
Chromium (Trivalent)	8,600[#18]		0 - 79.8				64	60.4	0	69	0 - 68.7	60	65.2	85.2	71.5	11	11	0	60	85.2	85.2	50	60.4	28	0	0
Copper	68,000[#18]		*0 - 148*	***0 - 291***	***205***	*158*	*11*	*15*	*18*	*9*	*0 - 113*	*20*	*45*	*15*	*28*	13	13	0	9	291	291	62	62	28	13	13
Lead	2,300[#15]		***0 - 124***	***0 - 126***	***103***	***71***	*9*	*11*	***28***	*15*	***0 - 73***	*22*	***42***	*16*	***34***	13	13	0	9	126	126	39	34	28	13	13
Mercury	1,100[#18]		0 - 1.7	<0.1 - 0	2.3	1.7	<0.1	<0.1	<0.1	<0.1	<0.1 - 0	<0.1	0.2	<0.1	<0.1	13	6	0	0.2	2.3	2.3	0.45	0.1	0.73	0	0
Nickel	980[#18]		***0 - 163.1***	***0 - 111.9***	***121.9***	***81.6***	***26.5***	***28.2***	***29.7***	***28.6***	***0 - 92.4***	***36.1***	***45.8***	***30.1***	***29.8***	13	13	0	26.5	163.1	163.1	49	36.1	29	13	13
Selenium	12,000[#18]		**0 - 10**	**0 - 4**	**4**	**4**	**2**	**2**	<1	**2**	**0 - 4**	**1**	<1	**2**	**2**	13	11	0	1	10	10	2.3	2	1.3	13	11
Vanadium	9,000[#18]		***0 - 338***	***0 - 227***	***275***	***186***	***39***	***45***	***58***	***46***	***0 - 231***	***67***	***87***	***54***	***69***	13	13	0	39	338	338	102	69	70	13	13
Zinc	730,000[#18]		***0 - 1,275***	***0 - 937***	***947***	***623***	*50*	*56*	*84*	*62*	***0 - 663***	*131*	***231***	*67*	*149*	13	13	0	50	1275	1275	295	149	289	13	13
Organics																										
Organic Matter (%)			0	0	-	-	0.6	1	0	0.8	0	2	7.9	1	3.9	11	11	0	0.6	7.9	7.9	1.6	0.8	2.4	0	0
Inorganics																										
Ammoniacal Nitrogen as N			-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	99999	ND	0	ND				0	0
Ammoniacal Nitrogen as NH4			39.3	12.8	41.7	13.5	<0.6	<0.6	8.3	<0.6	30.5	2.6	20.2	<0.6	14.2	13	9	<0.6	2.6	41.7	41.7	14	12.8	15	0	0
Chloride			0 - 39	0 - 11	-	-	-	-	-	-	0 - 89	1,582	58	-	54	6	6	0	54	1582	1582	294	49.25	631	0	0
Fluoride	47,000[#11]		4.5	11.2	8	16.4	-	-	6.9	-	3.7	0.9	2.3	-	3.7	9	9	0.9	0.9	16.4	16.4	6.4	4.5	4.9	0	0
Nitrate (as N)			-	<2.5 - 0	-	-	-	-	-	-	-	-	-	-	-	1	1	2.5	ND	0	ND		1.25		0	0
Nitrate (as NO3-)	1,900,000[#11]		<2.5 - 0	-	<2.5	<2.5	-	-	<2.5 - 0	-	<2.5 - 0	<2.5	<2.5	-	<2.5	8	3	<2.5	ND	<2.5	ND	2	2.5	0.65	0	0
pH (Lab) (pH units)			7.31	7.17	7.22	7.67	8.09	8.52	7.67	8.25	7.29	7.52	7.34	8.5	7.55	13	13	7.17	7.17	8.52	8.52	7.7	7.55	0.48	0	0
Sulphide			53	<10	30	21	-	-	<10	-	25	<10	53	-	<100	9	5	<10	21	<100	53	35	25	30	0	0
Total Sulphate			0 - 8,841	0 - 44,355	16,251	6,783	-	-	856	-	0 - 10,971	701	6,510	-	2,252	9	9	0	701	44355	44355	7271	5485.5	7284	0	0
Asbestos																										
Asbestos Type			Chrysotile	Chrysotile	Chrysotile	Chrysotile	NAD	NAD	Chrysotile	NAD	Chrysotile	NAD	NAD	NAD	NAD	0	0	99999	ND	0	ND				0	0
Asbestos Level			<0.1	<0.1	<0.1	<0.1	NAD	NAD	<0.1	NAD	<0.1	NAD	NAD	NAD	NAD	6	0	<0.1	ND	<0.1	ND	0.1	0.1	0	0	0
Asbestos Gravimetric & PCOM Total			<0.001	-	<0.001	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	5	0	<0.001	ND	<0.001	ND	0.001	0.001	0	0	0
Asbestos Gravimetric Quantification (ACMs)			<0.001	-	<0.001	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	5	0	<0.001	ND	<0.001	ND	0.001	0.001	0	0	0
Asbestos fibres			Fibre bundles	Fibre bundles	Fibre bundles	Fibre bundles	NAD	NAD	Fibre bundles	NAD	Fibre bundles	NAD	NAD	NAD	NAD	0	0	99999	ND	0	ND				0	0
Other																										
1,4-Methanonaphthalene			-	-	4.447	3.154	-	-	-	-	-	-	-	-	-	2	2	3.154	3.154	4.447	4.447		3.8005		0	0
1H-Indene, 2,3-dihydro-1,6-dimethyl-			-	-	-	7.319	-	-	-	-	-	-	-	-	-	1	1	7.319	7.319	7.319	7.319		7.319		0	0
3-Methylpentane			-	-	-	0.334	-	-	-	-	-	-	-	-	-	1	1	0.334	0.334	0.334	0.334		0.334		0	0
Antra-9,10-quinone			-	-	3.885	1.164	-	-	-	-	-	-	-	-	-	2	2	1.164	1.164	3.885	3.885		2.5245		0	0
Carbonyl Sulphide	280[#11]		-	0.186	-	-	-	-	-	-	-	-	-	-	-	1	1	0.186	0.186	0.186	0.186		0.186		0	0
Cyclohexane, 1,2,3-trimethyl-, (1.a.,2.b.,3.a.)-			0.372	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.372	0.372	0.372	0.372		0.372		0	0
Cyclohexane, 1,2,4-trimethyl-, (1.a.,2.b.,4.b.)-			0.34	-	-	0.664	-	-	-	-	-	-	-	-	-	2	2	0.34	0.34	0.664	0.664		0.502		0	0
Cyclohexane, 1,2-dimethyl-, trans-			0.35	-	-	2.017	-	-	-	-	-	-	-	-	-	2	2	0.35	0.35	2.017	2.017		1.1835		0	0
Cyclopentane, 1,2,4-trimethyl-			-	-	-	0.957	-	-	-	-	-	-	-	-	-	1	1	0.957	0.957	0.957	0.957		0.957		0	0
Dibenzothiophene (ug/kg)	17,000,000[#11]		-	-	5,352	5,853	-	-	-	-	-	-	-	-	-	2	2	5352	5352	5853	5853		5602.5		0	0
Dodecane			-	-	6.256	-	-	-	-	-	-	-	-	-	-	1	1	6.256	6.256	6.256	6.256		6.256		0	0
Eicosane			-	-	-	2.08	-	-	-	-	-	-	-	-	-	1	1	2.08	2.08	2.08	2.08		2.08		0	0
Ethyl 2-Chloro Acetoacetate			-	-	-	1.565	-	-	-	-	-	-	-	-	-	1	1	1.565	1.565	1.565	1.565		1.565		0	0
Natural Moisture Content (%)			0	0	-	-	17.6	23.8	-	13.7	0	20.7	34.3	17.5	22	10	10	0	13.7	34.3	34.3	15	17.55	12	0	0
Nonane	72[#11]		0.82	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.82	0.82	0.82	0.82		0.82		0	0
Octadecane			-	-	-	2.717	-	-	-	-	-	-	-	-	-	1	1	2.717	2.717	2.717	2.717		2.717		0	0
Octadecanoic Acid			-	-	-	0.519	-	-	-	-	-	-	-	-	-	1	1	0.519	0.519	0.519	0.519		0.519		0	0
Pentane, 2,3-dimethyl			0.163	-	-	0.828	-	-	-	-	-	-	-	-	-	2	2	0.163	0.163	0.828	0.828		0.4955		0	0
Pentane, 2,4-dimethyl-			-	-	-	0.154	-	-	-	-	-	-	-	-	-	1	1	0.154	0.154	0.154	0.154		0.154		0	0
Tetracosane			0.623	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.623	0.623	0.623	0.623		0.623		0	0

All units are in mg/kg unless stated
All grey values were reported below the MDL
MDL-Method Detection Limit
NAD-No Asbestos Detected

Comments
#1 WS Regs 2016 (Eng/Wal)
#2 WHO Petroleum DWG 2008
#3 WHO DWG 2017
#4 WHO 2017 - Taste
#5 WHO 2017 - Odour
#6 WFD England/Wales. 2015 - Saltwater Standards
#7 WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#8 WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#9 Water Env't Regs (Scotland) 2015. AA-EQS Coast
#10 USEPA RSL (tapwater) [June 2017]
#11 USEPA RSL (June 2017)
#12 SEPA WAT-SG-53 Marine EQS - MAC - 2015
#13 SEPA WAT-SG-53 Marine EQS - AA - 2015
#14 PNEC (EU REACH) - Coastal
#15 Defra C4SL 12/2014
#16 California Draft health protective concentration
#17 AECOM DWG (WHO method)
#18 AECOM (modified LQM/CIEH S4ULs)
#19 AECOM (modified EIC)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed
DWS: Drinking Water Standard
EQS: Environmental Quality Standard
HH: Human Health

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sand. TOC >=1.45 to <3.48%