

TABLE 6 : RESULTS OF SOIL CHEMICAL ANALYSES - BLOCKS "U AND T" AND ADJACENT FLEET STREET AREA

Parameter	CCME Criteria (1)	MOE Criteria (2)	MDL	BH-01-10	BH-01-11	BH-01-12	MW-01-10		TP-01-75	TP-01-76	TP-01-77	TP-01-78	TP-0
	Residential/Parkl and	Residential/Parkl and		SS-1-2	SS-A	SS-A	SS-1	SS-2	GS-2	GS-1	GS-1	GS-1	GS-1
	mg/kg	mg/kg		0.61-0.94	0.46-1.22	0.61-1.52	0.30-0.69	0.91-1.14	1-1.5	0.2-1.0	0.1-0.45	0.1-0.6	0.3-0.9
PH	C6-C10 Petroleum Hydrocarbons	260	--	20	-	-	-	< 20	-	-	-	< 10	-
	C11-C16 Petroleum Hydrocarbons	900	--	10	-	-	-	< 10	-	-	-	40	-
	C17-C34 Petroleum Hydrocarbons	800	--	10	-	-	-	10	-	-	-	20	-
	>C34 Petroleum Hydrocarbons	5600	--	10	-	-	-	50	-	-	-	< 10	-
	Petroleum Hydrocarbons (gasoline)	--	1000	10	-	-	-	< 10	-	-	-	30	-
	Petroleum Hydrocarbons (diesel)	--	1000	10	-	-	-	< 10	-	-	-	450	-
	Petroleum Hydrocarbons (heavy oils)	--	1000	50	-	-	-	300	-	-	-	-	-
Metals	Antimony	--	13	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0
	Arsenic	12	20	1	12	< 1.0	< 1.0	< 1.0	2	4	9	-	4
	Barium	500	750	10	130	50	70	50	280	130	980	-	240
	Beryllium	--	1.2	0.5	0.5	< 0.50	< 0.50	< 0.50	1.5	< 0.50	< 0.50	-	< 0.50
	Cadmium	10	12	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0
	Calcium	--	--	200	18000	76000	140000	110000	28000	75000	53000	-	63000
	Chromium	64	750	5	10	5	20	10	55	15	25	-	15
	Cobalt	--	40	5	5	< 5.0	< 5.0	< 5.0	15	5	5	-	< 5.0
	Copper	63	225	5	20	10	10	10	15	10	35	-	45
	iron	--	--	200	15000	5600	8000	4400	32000	10000	13000	-	13000
	Lead	140	200	5	40	50	45	25	20	35	1300	-	1500
	Magnesium	--	--	200	1200	2600	3000	5000	5600	2000	2200	-	2800
	Molybdenum	--	40	1	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0
	Nickel	50	150	5	15	10	20	< 5.0	50	15	15	-	15
	Selenium	--	10	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0
	Silver	--	20	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0
	Sodium	--	--	200	600	400	800	400	2600	600	600	-	400
	Thallium	1	4.1	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0
	Tin	--	--	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5	40	-	200
	Vanadium	130	200	10	20	< 10	< 10	20	40	10	20	-	20
Zinc	200	600	20	< 20	20	< 20	20	40	80	340	-	120	
Mercury	6.6	10	0.1	< 0.10	1.3	0.4	0.1	0.2	0.6	5.9	-	0.3	
Boron (available)	--	1.5	1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	-	< 1.5	
Hexavalent Chromium	0.4	8	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
BTEX	Benzene	0.5	5.3	0.025	-	-	-	< 0.025	-	-	-	< 0.025	-
	Ethylbenzene	1.2	290	0.025	-	-	-	< 0.025	-	-	-	< 0.025	-
	Toluene	0.8	34	0.025	-	-	-	< 0.025	-	-	-	< 0.025	-
	m/p-Xylene	1	34	0.05	-	-	-	< 0.050	-	-	-	< 0.050	-
	o-Xylene	1	34	0.025	-	-	-	< 0.025	-	-	-	< 0.025	-
PAHs	Acenaphthene	--	1000	0.017	-	-	-	-	< 0.017	-	-	-	-
	Acenaphthylene	--	100	0.017	-	-	-	-	0.017	-	-	-	-
	Anthracene	--	28	0.017	-	-	-	-	0.066	-	-	-	-
	Benzo[a]anthracene	--	40	0.017	-	-	-	-	0.15	-	-	-	-
	Benzo[a]pyrene	0.7	1.2	0.017	-	-	-	-	0.15	-	-	-	-
	Benzo[b]fluoranthene	--	12	0.017	-	-	-	-	0.18	-	-	-	-
	Benzo[ghi]perylene	--	40	0.017	-	-	-	-	0.099	-	-	-	-
	Benzo[k]fluoranthene	--	12	0.017	-	-	-	-	0.18	-	-	-	-
	Biphenyl	--	4.3	0.017	-	-	-	-	< 0.017	-	-	-	-
	Chrysene	--	12	0.017	-	-	-	-	0.17	-	-	-	-
	Dibenzo[a,h]anthracene	--	1.2	0.017	-	-	-	-	0.05	-	-	-	-
	Fluoranthene	--	40	0.017	-	-	-	-	0.31	-	-	-	-
	Fluorene	--	350	0.017	-	-	-	-	< 0.017	-	-	-	-
	Indeno[1,2,3-cd]pyrene	--	12	0.017	-	-	-	-	0.099	-	-	-	-

	1-Methylnaphthalene	--	280	0.017	-	-	-	-	-	< 0.017	-	-	-	-
	2-Methylnaphthalene	--	280	0.017	-	-	-	-	-	< 0.017	-	-	-	-
	Naphthalene	0.6	40	0.017	-	-	-	-	-	< 0.017	-	-	-	-
	Phenanthrene	--	40	0.017	-	-	-	-	-	0.21	-	-	-	-
	Pyrene	--	250	0.017	-	-	-	-	-	0.25	-	-	-	-
<b>PCBs</b>	Total PCBs	1.3	5	0.05	-	-	-	-	-	-	-	-	-	-
<b>VOCs</b>	Benzene	0.5	5.3	0.002	-	-	-	-	-	-	-	-	-	-
	Bromodichloromethane	--	14	0.002	-	-	-	-	-	-	-	-	-	-
	Bromoform	--	2.3	0.002	-	-	-	-	-	-	-	-	-	-
	Bromomethane	--	0.061	0.003	-	-	-	-	-	-	-	-	-	-
	Carbon Tetrachloride	--	0.1	0.002	-	-	-	-	-	-	-	-	-	-
	Chlorobenzene	--	8	0.002	-	-	-	-	-	-	-	-	-	-
	Chloroethane	--	--	0.005	-	-	-	-	-	-	-	-	-	-
	Chloroform	--	0.79	0.003	-	-	-	-	-	-	-	-	-	-
	Chloromethane	--	--	0.015	-	-	-	-	-	-	-	-	-	-
	Dibromochloromethane	--	10	0.002	-	-	-	-	-	-	-	-	-	-
	1,2-Dibromoethane	--	--	0.002	-	-	-	-	-	-	-	-	-	-
	m-Dichlorobenzene	--	30	0.002	-	-	-	-	-	-	-	-	-	-
	o-Dichlorobenzene	--	30	0.002	-	-	-	-	-	-	-	-	-	-
	p-Dichlorobenzene	--	30	0.002	-	-	-	-	-	-	-	-	-	-
	1,1-Dichloroethane	--	22	0.002	-	-	-	-	-	-	-	-	-	-
	1,2-Dichloroethane	--	0.022	0.002	-	-	-	-	-	-	-	-	-	-
	1,1-Dichloroethylene	--	0.0024	0.002	-	-	-	-	-	-	-	-	-	-
	c-1,2-Dichloroethylene	--	2.3	0.002	-	-	-	-	-	-	-	-	-	-
	t-1,2-Dichloroethylene	--	4.1	0.003	-	-	-	-	-	-	-	-	-	-
	1,2-Dichloropropane	--	0.019	0.002	-	-	-	-	-	-	-	-	-	-
	c-1,3-Dichloropropene	--	0.0066	0.002	-	-	-	-	-	-	-	-	-	-
	t-1,3-Dichloropropene	--	0.0066	0.002	-	-	-	-	-	-	-	-	-	-
	Ethylbenzene	1.2	290	0.002	-	-	-	-	-	-	-	-	-	-
	Methylene Chloride	--	120	0.02	-	-	-	-	-	-	-	-	-	-
	Styrene	--	1.2	0.002	-	-	-	-	-	-	-	-	-	-
	1,1,2,2-Tetrachloroethane	0.2	0.037	0.003	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethylene	0.2	0.45	0.002	-	-	-	-	-	-	-	-	-	-
	Toluene	0.8	34	0.002	-	-	-	-	-	-	-	-	-	-
	1,1,1-Trichloroethane	--	26	0.002	-	-	-	-	-	-	-	-	-	-
	1,1,2-Trichloroethane	3	2.3	0.002	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	3	1.1	0.003	-	-	-	-	-	-	-	-	-	-	
Trichlorofluoromethane	--	--	0.005	-	-	-	-	-	-	-	-	-	-	
1,3,5-Trimethylbenzene	--	--	0.003	-	-	-	-	-	-	-	-	-	-	
Vinyl Chloride	--	0.003	0.002	-	-	-	-	-	-	-	-	-	-	
m/p-Xylene	1	34	0.002	-	-	-	-	-	-	-	-	-	-	
o-Xylene	1	34	0.002	-	-	-	-	-	-	-	-	-	-	

Notes:

- 45 Exceeding CCME Criteria
- 56 Exceeding MOE criteria
- Not analysed
- No criteria for this parameter

(1) CCME Soil criteria for residential/parkland, commercial and industrial land use

(2) MOE Table B Surface soil and groundwater criteria for residential/parkland, industrial/commercial land use for a non potable groundwater condition (coarse textured soil with pH between 5,0 and 11,0)

11-79
GS-2
1.0-1.8
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0.12
3.9
2.2
4.2
6.9
7.5
5.5
7.5
0.017
4.5
1.9
5.2
0.2
4.5



TABLE 6 : RESULTS OF SOIL CHEMICAL ANALYSES - BLOCKS "U AND T" AND ADJACENT FLEET STREET AREA

Parameter	CCME Criteria (1)	MOEE Criteria (2)	MDL												
	Residential/Parkl and	Residential/Parkl and		TP-01-80	TP-01-81	TP-01-82	TP-01-83		TP-01-84		TP-01-85		TP-01-86		
	mg/kg	mg/kg		GS-1	GS-1	GS-1	GS-1	GS-2	GS-1	GS-2	GS-1	GS-2	GS-1	GS-2	
				0.1-0.45	0.1-0.6	0.2-0.8	0.3-0.8	1.2-1.8	0.3-0.9	1.2-1.7	0.1-0.85	0.85-1.8	0.3-1.0	1.1-1.8	
PH	C6-C10 Petroleum Hydrocarbons	260	--	20	-	-	-	-	< 20	-	-	-	-	-	< 20
	C11-C16 Petroleum Hydrocarbons	900	--	10	-	-	-	-	< 10	-	-	-	-	-	< 10
	C17-C34 Petroleum Hydrocarbons	800	--	10	-	-	-	-	10	-	-	-	-	-	440
	>C34 Petroleum Hydrocarbons	5600	--	10	-	-	-	-	< 10	-	-	-	-	-	220
	Petroleum Hydrocarbons (gasoline)	--	1000	10	-	-	-	-	< 10	-	-	-	-	-	< 10
	Petroleum Hydrocarbons (diesel)	--	1000	10	-	-	-	-	20	-	-	-	-	-	30
	Petroleum Hydrocarbons (heavy oils)	--	1000	50	-	-	-	-	150	-	-	-	-	-	2000
Metals	Antimony	--	13	1	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-
	Arsenic	12	20	1	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	-	4	-	7	-
	Barium	500	750	10	80	150	160	400	-	110	-	220	-	310	-
	Beryllium	--	1.2	0.5	1	< 0.50	< 0.50	< 0.50	-	< 0.50	-	< 0.50	-	< 0.50	-
	Cadmium	10	12	1	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-
	Calcium	--	--	200	47000	45000	83000	67000	-	48000	-	49000	-	61000	-
	Chromium	64	750	5	25	30	25	110	-	20	-	20	-	20	-
	Cobalt	--	40	5	10	10	< 5.0	5	-	5	-	< 5.0	-	< 5.0	-
	Copper	63	225	5	5	30	20	40	-	15	-	80	-	55	-
	iron	--	--	200	16000	17000	6800	11000	-	11000	-	11000	-	14000	-
	Lead	140	200	5	20	95	170	580	-	80	-	480	-	720	-
	Magnesium	--	--	200	3000	5000	4200	4400	-	4200	-	1800	-	3400	-
	Molybdenum	--	40	1	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-
	Nickel	50	150	5	20	15	40	15	-	10	-	10	-	20	-
	Selenium	--	10	1	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-
	Silver	--	20	5	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	-	< 5.0	-	< 5.0	-
	Sodium	--	--	200	600	600	200	600	-	800	-	400	-	1400	-
	Thallium	1	4.1	1	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-
	Tin	--	--	5	< 5.0	< 5.0	5	10	-	< 5.0	-	60	-	85	-
	Vanadium	130	200	10	20	30	20	20	-	30	-	20	-	20	-
Zinc	200	600	20	20	60	120	220	-	60	-	180	-	440	-	
Mercury	6.6	10	0.1	0.1	0.1	0.2	0.5	-	0.1	-	1.1	-	2.3	-	
Boron (available)	--	1.5	1.5	< 1.5	< 1.5	< 1.5	< 1.5	-	< 1.5	-	< 1.5	-	< 1.5	-	
Hexavalent Chromium	0.4	8	0.1	< 0.10	< 0.10	< 0.10	< 0.10	-	< 0.10	-	< 0.10	-	< 0.10	-	
BTEX	Benzene	0.5	5.3	0.025	-	-	-	-	< 0.025	-	-	-	-	-	< 0.025
	Ethylbenzene	1.2	290	0.025	-	-	-	-	< 0.025	-	-	-	-	-	0.05
	Toluene	0.8	34	0.025	-	-	-	-	< 0.025	-	-	-	-	-	0.025
	m/p-Xylene	1	34	0.05	-	-	-	-	0.1	-	-	-	-	-	-
	o-Xylene	1	34	0.025	-	-	-	-	0.075	-	-	-	-	-	0.05
PAHs	Acenaphthene	--	1000	0.017	-	-	-	-	-	-	0.45	-	-	-	-
	Acenaphthylene	--	100	0.017	-	-	-	-	-	-	1.6	-	-	-	-
	Anthracene	--	28	0.017	-	-	-	-	-	-	3.3	-	-	-	-
	Benzo[a]anthracene	--	40	0.017	-	-	-	-	-	-	10	-	-	-	-
	Benzo[a]pyrene	0.7	1.2	0.017	-	-	-	-	-	-	9.9	-	-	-	-
	Benzo[b]fluoranthene	--	12	0.017	-	-	-	-	-	-	12	-	-	-	-
	Benzo[ghi]perylene	--	40	0.017	-	-	-	-	-	-	5.2	-	-	-	-
	Benzo[k]fluoranthene	--	12	0.017	-	-	-	-	-	-	12	-	-	-	-
	Biphenyl	--	4.3	0.017	-	-	-	-	-	-	0.17	-	-	-	-
	Chrysene	--	12	0.017	-	-	-	-	-	-	11	-	-	-	-
	Dibenzo[a,h]anthracene	--	1.2	0.017	-	-	-	-	-	-	2.6	-	-	-	-
	Fluoranthene	--	40	0.017	-	-	-	-	-	-	23	-	-	-	-
	Fluorene	--	350	0.017	-	-	-	-	-	-	0.97	-	-	-	-
	Indeno[1,2,3-cd]pyrene	--	12	0.017	-	-	-	-	-	-	5.4	-	-	-	-

	1-Methylnaphthalene	--	280	0.017	-	-	-	-	-	-	0.58	-	-	-	-
	2-Methylnaphthalene	--	280	0.017	-	-	-	-	-	-	0.46	-	-	-	-
	Naphthalene	0.6	40	0.017	-	-	-	-	-	-	0.74	-	-	-	-
	Phenanthrene	--	40	0.017	-	-	-	-	-	-	18	-	-	-	-
	Pyrene	--	250	0.017	-	-	-	-	-	-	20	-	-	-	-
<b>PCBs</b>	Total PCBs	1.3	5	0.05	-	-	-	-	-	-	-	-	-	-	-
<b>VOCs</b>	Benzene	0.5	5.3	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Bromodichloromethane	--	14	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Bromoform	--	2.3	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Bromomethane	--	0.061	0.003	-	-	-	-	-	-	-	-	< 0.0030	-	-
	Carbon Tetrachloride	--	0.1	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Chlorobenzene	--	8	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Chloroethane	--	--	0.005	-	-	-	-	-	-	-	-	< 0.0050	-	-
	Chloroform	--	0.79	0.003	-	-	-	-	-	-	-	-	< 0.0030	-	-
	Chloromethane	--	--	0.015	-	-	-	-	-	-	-	-	< 0.015	-	-
	Dibromochloromethane	--	10	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,2-Dibromoethane	--	--	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	m-Dichlorobenzene	--	30	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	o-Dichlorobenzene	--	30	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	p-Dichlorobenzene	--	30	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,1-Dichloroethane	--	22	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,2-Dichloroethane	--	0.022	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,1-Dichloroethylene	--	0.0024	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	c-1,2-Dichloroethylene	--	2.3	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	t-1,2-Dichloroethylene	--	4.1	0.003	-	-	-	-	-	-	-	-	< 0.0030	-	-
	1,2-Dichloropropane	--	0.019	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	c-1,3-Dichloropropene	--	0.0066	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	t-1,3-Dichloropropene	--	0.0066	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Ethylbenzene	1.2	290	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Methylene Chloride	--	120	0.02	-	-	-	-	-	-	-	-	< 0.020	-	-
	Styrene	--	1.2	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,1,2,2-Tetrachloroethane	0.2	0.037	0.003	-	-	-	-	-	-	-	-	< 0.0030	-	-
	Tetrachloroethylene	0.2	0.45	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	Toluene	0.8	34	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,1,1-Trichloroethane	--	26	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
	1,1,2-Trichloroethane	3	2.3	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-
Trichloroethylene	3	1.1	0.003	-	-	-	-	-	-	-	-	< 0.0030	-	-	
Trichlorofluoromethane	--	--	0.005	-	-	-	-	-	-	-	-	< 0.0050	-	-	
1,3,5-Trimethylbenzene	--	--	0.003	-	-	-	-	-	-	-	-	< 0.0030	-	-	
Vinyl Chloride	--	0.003	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-	
m/p-Xylene	1	34	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-	
o-Xylene	1	34	0.002	-	-	-	-	-	-	-	-	< 0.0020	-	-	

Notes:

45 Exceeding CCME Criteria

56 Exceeding MOEE criteria

- Not analysed

-- No criteria for this parameter

<sup>(1)</sup> CCME Soil criteria for residential/parkland, commercial and industrial land use

<sup>(2)</sup> MOEE Table B Surface soil and groundwater criteria for residential/parkland, industrial/commercial land use for a non potable groundwater condition (coarse textured soil with pH between 5,0 and 11,0)