

TABLE 4 : RESULTS OF SOIL CHEMICAL ANALYSES - X & W SOUTH OF ORP AND PROJECTED OREGON STREET AREA

Parameter	CCME Criteria <sup>(1)</sup>	MOE Criteria <sup>(2)</sup>	MDL	Sampling site. sample number and depth						
	Residential/Parkland	Residential/Parkland		TP-01-69		TP-01-87	TP-01-88	TP-01-89		
	mg/kg	mg/kg		GS-1	GS-2	GS-A	GS-1	GS-2	GS-A	
				0.1-0.5	0.8-1.5	2.1-2.8	1.0-1.5	0-0.5	0.5-1.9	
PH	C6-C10 Petroleum Hydrocarbons	260	na	20	-	-	< 20	-	-	100
	C11-C16 Petroleum Hydrocarbons	900	na	10	-	-	210	-	-	5900
	C17-C34 Petroleum Hydrocarbons	800	na	10	-	-	200	-	-	2700
	>C34 Petroleum Hydrocarbons	5600	na	10	-	-	140	-	-	200
	Petroleum Hydrocarbons (gasoline)	na	1000	10	-	-	< 10	-	-	-
	Petroleum Hydrocarbons (diesel)	na	1000	10	-	-	230	-	-	-
	Petroleum Hydrocarbons (heavy oils)	na	1000	50	-	-	400	-	-	-
Metals	Antimony	--	13	1	5	2	-	< 1.0	< 1.0	< 1.0
	Arsenic	12	20	1	6	6	-	1	2	4
	Barium	500	750	10	80	130	-	120	70	110
	Beryllium	--	1.2	0.5	< 0.50	0.5	-	0.5	< 0.50	< 0.50
	Cadmium	10	12	1	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0
	Calcium	--	--	200	81000	39000	-	100000	180000	66000
	Chromium	64	750	5	15	20	-	25	10	20
	Cobalt	--	40	5	5	5	-	5	< 5.0	5
	Copper	63	225	5	45	35	-	15	50	70
	iron	--	--	200	14000	12000	-	15000	12000	25000
	Lead	140	200	5	190	140	-	70	85	140
	Magnesium	--	--	200	3400	3000	-	5600	6600	13000
	Molybdenum	--	40	1	< 1.0	1	-	< 1.0	< 1.0	< 1.0
	Nickel	50	150	5	20	20	-	20	20	20
	Selenium	--	10	1	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0
	Silver	--	20	5	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0
	Sodium	--	--	200	600	400	-	200	< 200	200
	Thallium	1	4.1	1	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0
	Tin	--	--	5	35	10	-	< 5.0	10	15
	Vanadium	130	200	10	20	20	-	20	20	30
Zinc	200	600	20	420	300	-	40	180	100	
Mercury	6.6	10	0.1	-	-	-	0.7	0.1	0.4	
Boron (available)	--	1.5	1.5	-	-	-	< 1.5	< 1.5	< 1.5	
Hexavalent Chromium	0.4	8	0.1	-	-	-	< 0.10	< 0.10	< 0.10	
BTEX	Benzene	0.5	5.3	0.025	-	-	< 0.025	-	-	< 0.025
	Ethylbenzene	1.2	290	0.025	-	-	0.1	-	-	0.63
	Toluene	0.8	34	0.025	-	-	< 0.025	-	-	0.13
	m/p-Xylene	1	34	0.05	-	-	0.3	-	-	1.3
	o-Xylene	1	34	0.025	-	-	< 0.025	-	-	0.58
PAHS	Acenaphthene	--	1000	0.017	-	-	0.18	-	-	4.3
	Acenaphthylene	--	100	0.017	-	-	0.099	-	-	2.1
	Anthracene	--	28	0.017	-	-	0.45	-	-	2.3
	Benzo[a]anthracene	--	40	0.017	-	-	0.76	-	-	0.99
	Benzo[a]pyrene	0.7	1.2	0.017	-	-	0.58	-	-	0.83
	Benzo[b]fluoranthene	--	12	0.017	-	-	0.71	-	-	1.2
	Benzo[ghi]perylene	--	40	0.017	-	-	0.43	-	-	0.83
	Benzo[k]fluoranthene	--	12	0.017	-	-	0.71	-	-	1.2
	Biphenyl	--	4.3	0.017	-	-	0.099	-	-	6.6
	Chrysene	--	12	0.017	-	-	0.74	-	-	1.3
	Dibenzo[a,h]anthracene	--	1.2	0.017	-	-	0.2	-	-	0.33
	Fluoranthene	--	40	0.017	-	-	1.6	-	-	2.5
	Fluorene	--	350	0.017	-	-	0.18	-	-	8.6

	Indeno[1,2,3-cd]pyrene	--	12	0.017	-	-	0.4	-	-	0.66
	1-Methylnaphthalene	--	280	0.017	-	-	1.2	-	-	68
	2-Methylnaphthalene	--	280	0.017	-	-	1.1	-	-	37
	Naphthalene	0.6	40	0.017	-	-	0.36	-	-	14
	Phenanthrene	--	40	0.017	-	-	1.7	-	-	12
	Pyrene	--	250	0.017	-	-	1.3	-	-	2.8
<b>PCBs</b>	Total PCBs	1.3	5	0.05	-	-	-	-	-	-
<b>VOCs</b>	Benzene	0.5	5.3	0.002	-	-	< 0.0020	-	-	< 0.0020
	Bromodichloromethane	--	14	0.002	-	-	< 0.0020	-	-	< 0.0020
	Bromoform	--	2.3	0.002	-	-	< 0.0020	-	-	< 0.0020
	Bromomethane	--	0.061	0.003	-	-	< 0.0030	-	-	< 0.0030
	Carbon Tetrachloride	--	0.1	0.002	-	-	< 0.0020	-	-	< 0.0020
	Chlorobenzene	--	8	0.002	-	-	< 0.0020	-	-	< 0.0020
	Chloroethane	--	--	0.005	-	-	< 0.0050	-	-	< 0.0050
	Chloroform	--	0.79	0.003	-	-	< 0.0030	-	-	< 0.0030
	Chloromethane	--	--	0.015	-	-	< 0.015	-	-	< 0.015
	Dibromochloromethane	--	10	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,2-Dibromoethane	--	--	0.002	-	-	< 0.0020	-	-	< 0.0020
	m-Dichlorobenzene	--	30	0.002	-	-	< 0.0020	-	-	< 0.0020
	o-Dichlorobenzene	--	30	0.002	-	-	< 0.0020	-	-	< 0.0020
	p-Dichlorobenzene	--	30	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,1-Dichloroethane	--	22	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,2-Dichloroethane	--	0.022	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,1-Dichloroethylene	--	0.0024	0.002	-	-	< 0.0020	-	-	< 0.0020
	c-1,2-Dichloroethylene	--	2.3	0.002	-	-	< 0.0020	-	-	< 0.0020
	t-1,2-Dichloroethylene	--	4.1	0.003	-	-	< 0.0030	-	-	< 0.0030
	1,2-Dichloropropane	--	0.019	0.002	-	-	< 0.0020	-	-	< 0.0020
	c-1,3-Dichloropropane	--	0.0066	0.002	-	-	< 0.0020	-	-	< 0.0020
	t-1,3-Dichloropropane	--	0.0066	0.002	-	-	< 0.0020	-	-	< 0.0020
	Ethylbenzene	1.2	290	0.002	-	-	0.008	-	-	0.006
	Methylene Chloride	--	120	0.02	-	-	< 0.020	-	-	0.04
	Styrene	--	1.2	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,1,2,2-Tetrachloroethane	0.2	0.037	0.003	-	-	< 0.0030	-	-	< 0.0030
	Tetrachloroethylene	0.2	0.45	0.002	-	-	< 0.0020	-	-	< 0.0020
	Toluene	0.8	34	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,1,1-Trichloroethane	--	26	0.002	-	-	< 0.0020	-	-	< 0.0020
	1,1,2-Trichloroethane	3	2.3	0.002	-	-	< 0.0020	-	-	< 0.0020
	Trichloroethylene	3	1.1	0.003	-	-	< 0.0030	-	-	< 0.0030
	Trichlorofluoromethane	--	--	0.005	-	-	< 0.0050	-	-	< 0.0050
1,3,5-Trimethylbenzene	--	--	0.003	-	-	0.015	-	-	0.006	
Vinyl Chloride	--	0.003	0.002	-	-	< 0.0020	-	-	< 0.0020	
m/p-Xylene	1	34	0.002	-	-	0.008	-	-	0.004	
o-Xylene	1	34	0.002	-	-	< 0.0020	-	-	0.004	

**Notes:**

45 Exceeding CCME Criteria

56 Exceeding MOE criteria

- Not analysed

-- No criteria for this parameter

(1) CCME Soil criteria for residential/parkland land use

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