

TABLE 1: GROUNDWATER CHEMISTRY RESULTS - DISSOLVED METALS (ug/L)

Sample ID	MW08-04	MW09-50	MW09-A (BFD of MW09-50)	MW09-55	CCME AMW X 10	CSR AWM
Date	4-Nov-2009	4-Nov-2009	4-Nov-2009	4-Nov-2009		
Hardness (mg/L)	481	300	296	519	ns	ns
Aluminum	18	79	79	138	ns	ns
Antimony	< 1.0	< 1.0	< 1.0	< 1.0	ns	200
Arsenic	< 1.4	6.0	6.0	17.7	125	125
Barium	88	85	83	209	ns	5000
Beryllium	< 2.0	< 2.0	< 2.0	< 2.0	ns	1000
Boron	320	280	280	270	ns	50000
Cadmium	< 0.034	0.041	< 0.034	0.037	1.2	1
Total Chromium	< 6.0	< 3.0	< 6.0	< 6.0	ns	ns
Cobalt	< 0.60	3.38	3.40	27.3	ns	40
Copper	< 2.0	< 2.0	2.7	< 2.0	ns	20
Iron	26700	12500	12300	42500	ns	ns
Lead	< 1.0	< 1.0	< 1.0	< 1.0	ns	20
Lithium	< 10	< 10	< 10	< 10	ns	ns
Magnesium	20900	18200	17900	33300	ns	ns
Manganese	3540	2150	2150	8670	ns	ns
Mercury	< 0.020	< 0.020	< 0.020	< 0.020	0.16	1
Molybdenum	< 2.0	< 2.0	< 2.0	5.2	ns	10000
Nickel	2.8	3.9	8.5	27.5	ns	83
Selenium	< 4.0	< 2.0	< 2.0	< 2.0	ns	540
Silver	< 0.040	< 0.040	< 0.040	< 0.040	ns	15
Thallium	< 0.40	< 0.40	< 0.40	< 0.40	ns	3
Tin	< 1.0	< 1.0	< 1.0	< 1.0	ns	ns
Titanium	< 10	< 10	< 10	< 10	ns	1000
Uranium	< 0.40	< 0.40	< 0.40	1.38	ns	1000
Vanadium	< 2.0	9.6	9.6	10.7	ns	ns
Zinc	< 5.0	9.1	< 5.0	< 5.0	ns	100

Notes:

ug/L - micrograms per litre

mg/L - milligrams per litre

H - Hardness in mg/L CaCO₃

< - less than analytical detection limit indicated

'---' - sample not analyzed for parameter indicated

ns - no standard listed

Exceeds CCME AMW: CCME Canadian Environmental Quality Guidelines for Water, Marine Aquatic Life

Exceeds CSR AWM: BC CSR, Schedule 6 Generic Numerical Water Standards, Marine Aquatic Life

TABLE 2: GROUNDWATER CHEMISTRY RESULTS - PETROLEUM HYDROCARBON CONSTITUENTS AND MTBE (ug/L)

Sample ID	MW08-04	MW09-50	MW09-A (BFD of MW09-50)	MW09-55	CCME AMW	CSR AWM
Date	4-Nov-2009	4-Nov-2009	4-Nov-2009	4-Nov-2009		
Benzene	< 0.50	< 0.50	< 0.50	< 0.50	110	1000
Ethylbenzene	< 0.50	< 0.50	< 0.50	< 0.50	25	2500
Toluene	< 1.0	< 1.0	< 1.0	2.8	215	3300
Xylenes	< 1.0	< 1.0	< 1.0	< 1.0	ns	ns
MTBE	< 0.50	< 0.50	< 0.50	< 0.50	5000	4400
VPHw	< 100	< 100	< 100	< 100	ns	1500
VHw	< 100	< 100	< 100	< 100	ns	15000
EPHw (C10-19)	< 250	< 250	< 250	1590	ns	5000
LEPHw	< 250	< 250	< 250	1590	ns	500
EPHw (C19-32)	< 250	< 250	< 250	1130	ns	ns
HEPHw	< 250	< 250	< 250	1130	ns	ns

Notes:

ug/L - micrograms per litre

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'---' - sample not analyzed for parameter indicated

MTBE - methyl tertiary-butyl ether

VPHw - volatile petroleum hydrocarbons (C6-10), excluding benzene, ethylbenzene, toluene and xylenes

VHw - volatile petroleum hydrocarbons (C6-10), including benzene, ethylbenzene, toluene and xylenes

EPHw - extractable petroleum hydrocarbons in water

LEPHw - light extractable petroleum hydrocarbons (C10 -19), excluding specific polycyclic aromatic hydrocarbon parameters

HEPHw - heavy extractable petroleum hydrocarbons (C19-32), excluding specific polycyclic aromatic hydrocarbon parameters

ns - no standard listed

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TABLE 3: GROUNDWATER CHEMISTRY RESULTS - PAH PARAMETERS (ug/L)

Sample ID	MW08-04	MW09-50	MW09-A (BFD of MW09-50)	MW09-55	CCME AMW	CSR AWM
Date	4-Nov-2009	4-Nov-2009	4-Nov-2009	4-Nov-2009		
Acenaphthene	< 0.010	< 0.010	< 0.010	< 0.040	ns	60
Acenaphthylene	< 0.010	< 0.010	< 0.010	< 0.010	ns	ns
Acridine	< 0.010	< 0.010	< 0.010	< 0.020	ns	0.5
Anthracene	< 0.010	< 0.010	< 0.010	< 0.030	ns	1
Benzo(a)anthracene	< 0.010	< 0.010	< 0.010	< 0.010	ns	1
Benzo(a)pyrene	< 0.010	< 0.010	< 0.010	< 0.010	ns	0.1
Benzo(b)fluoranthene	< 0.010	< 0.010	< 0.010	< 0.010	ns	ns
Benzo(g,h,i)perylene	< 0.010	0.011	< 0.010	< 0.010	ns	ns
Benzo(k)fluoranthene	< 0.010	< 0.010	< 0.010	< 0.010	ns	ns
Chrysene	< 0.020	< 0.020	< 0.020	< 0.030	ns	1
Dibenzo(a,h)anthracene	< 0.010	< 0.010	< 0.010	< 0.010	ns	ns
Fluoranthene	< 0.010	< 0.010	< 0.010	< 0.010	ns	2
Fluorene	< 0.010	< 0.010	< 0.010	0.026	ns	120
Indeno(1,2,3-c,d)pyrene	< 0.010	< 0.010	< 0.010	< 0.010	ns	ns
Naphthalene	< 0.020	< 0.020	< 0.020	0.064	1.4	10
Phenanthrene	< 0.020	< 0.020	< 0.020	< 0.040	ns	3
Pyrene	< 0.010	< 0.010	< 0.010	0.017	ns	0.2
Quinoline	< 0.010	< 0.010	< 0.010	< 0.010	ns	34

Notes:

ug/L - micrograms per litre

PAH - polycyclic aromatic hydrocarbons

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