Tables

Table 3-1

Mill Area Historical Soil Results -Exceedances

Event Date	Parameter	Units	Data Level	PL-1	PL-10	PL-11	PL-12	PL-2	PL-3	PL-4	PL-5	PL-6	PL-7	PL-8	PL-9	SB-1 SW	SB-1"	SB-10"	SB-2"	SB-2EW	SB-3"	SB-3WW	SB-4"	SB-4NW
10/24/1995	PCBs																							
	Physical Property																							
	Cyanide, total	mg/kg	Tier 2																					
	VOC-PAH																							
11/7/1995	Metal																							
	Arsenic	mg/kg	Tier 1																					
	Chromium	mg/kg	Tier 3																					
	Iron	mg/kg	Tier 1																					
	Iron	mg/kg	Tier 3																					
	Manganese	mg/kg	Tier 1																					
	Nickel	mg/kg	Tier 1																					
7/28/1998	Metal																							
	Antimony	mg/kg	Tier 3														**9**	**21**	4		**4.3**		**6.1**	
	Arsenic	mg/kg	Tier 3														**519**	**435**	**214**		**156**		**287**	
	Chromium	mg/kg	Tier 3														**346**	**1220**	**298**		**210**		**171**	
	Iron	mg/kg	Tier 3														**181000**	**178000**	**128000**		**98800**		**133000**	
	Lead	mg/kg	Tier 3	5.45	3.16	8.44	6.87	1.65	60.9	3.01	15.2	108	3.71	3.46	2.99		**530**	**525**	330		242		296	
	Magnesium	mg/kg	Tier 3														**9190**	**10000**	5800		5040		6210	
	Manganese	mg/kg	Tier 3														**142**	**1030**	**87.5**		**114**		**92**	
	Nickel	mg/kg	Tier 3														**780**	**745**	**345**		**330**		**535**	
	Silver	mg/kg	Tier 3														**41.9**	**904**	**26.7**		**16.1**		**29.2**	
	VOC																							
	1,2,4-Trimethylbenzene	ug/Kg	Tier 3	<51 U	<55 U	<53 U	<53 U	1800	<54 U	**5600**	<53 U	<57 U	<58 U	<56 U	<58 U									
	VOC-PAH																							
	Anthracene	ug/kg	Tier 3	<200 U	<220 U	<210 U	<210 U	14000	<220 U	**100000**	<210 U	<230 U	<230 U	<230 U	<230 U	<210 U				<210 U		<210 U		<210 U
	Phenanthrene	ug/kg	Tier 3	390	<220 U	<210 U	<210 U	19000	830	**110000**	<210 U	320	<230 U	260	<230 U	<210 U				<210 U		<210 U		<210 U

Prepared by: SVF
Checked by: CED1

Table 3-1
Mill Area Historical Soil Results -Exceedances

Event Date	Parameter	Units	Data Level	SB-5"	SB-5WF	SB-6"	SB-6EF	SB-7"	SB-8"	SB-9"	Scale #1	Stockpile	TP-17	TP-34	Drinking Water Protection[1]	Drinking Water Protection Code
10/24/1995	PCBs															
	Physical Property															
	Cyanide, total	mg/kg	Tier 2									**10.5**	**6.6**	0.9	4	
	VOC-PAH															
11/7/1995	Metal															
	Arsenic	mg/kg	Tier 1								**8**				4.6	
	Chromium	mg/kg	Tier 3								**100**				30	D
	Iron	mg/kg	Tier 1								**46000**				6	
	Iron	mg/kg	Tier 3								**46000**				6	
	Manganese	mg/kg	Tier 1								**900**				1	
	Nickel	mg/kg	Tier 1								**140**				100	
7/28/1998	Metal															
	Antimony	mg/kg	Tier 3	**16.1**		**13.2**		**11.1**	**8.7**	**30.7**					4.3	M
	Arsenic	mg/kg	Tier 3	**443**		**339**		**540**	**340**	**563**					4.6	
	Chromium	mg/kg	Tier 3	**402**		**396**		**173**	**245**	**337**					30	D
	Iron	mg/kg	Tier 3	**175000**		**174000**		**154000**	**143000**	**203000**					6	
	Lead	mg/kg	Tier 3	**625**		**510**		391	390	**525**					400	
	Magnesium	mg/kg	Tier 3	**12600**		**11500**		4220	5270	**13400**					8000	
	Manganese	mg/kg	Tier 3	**155**		**145**		**58.4**	**93.9**	**194**					1	
	Nickel	mg/kg	Tier 3	**366**		**695**		**735**	**570**	**443**					100	
	Silver	mg/kg	Tier 3	**42.5**		**34.8**		**35.9**	**35.6**	**46.6**					4.5	
	VOC															
	1,2,4-Trimethylbenzene	ug/Kg	Tier 3												2100	
	VOC-PAH															
	Anthracene	ug/kg	Tier 3		<210 U		<210 U								41000	
	Phenanthrene	ug/kg	Tier 3		<210 U		<210 U								56000	

Notes:

[1] = Analytical results were compared to drinking water protection criteria. Exceedances are highlighted. Value cited for lead is Direct Contact Criteria.

D = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit

M = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit

U = All - The analyte was not detected at or above the reporting limit.

< = All - The analyte was not detected at or above the reporting limit.

mg/kg = milligrams/kilogram

PAH = Polynuclear Aromatic Hydrocarbon

ug/kg = micrograms/kilogram

VOC = Volatile Organic Compound

PCB - polychlorinated biphenyl

Prepared by: SVF
Checked by: CED1

Table 3-2
Mill Area Historical Groundwater Results - Exceedances

Event Date	Parameter	Units	Data Level	MW-1	MW-10	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107	MW-11	MW-12	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	Residential Commercial Drinking Water Criteria[1]	Residential Commercial Code
8/6/1991																							
	VOC																						
	Benzene	ug/L	Tier 1															**20**				5	A
	Ethylbenzene	ug/L	Tier 1															**120**				74	E
	Xylenes	ug/L	Tier 1															**1800**				280	E
1/13/1992	VOC																						
	Xylenes	ug/L	Tier 1	<1 U											<1 U	<1 U	<1 U	**320**	<1 U	<1 U	<1 U	280	E
8/18/1992	Metal																						
	Arsenic	ug/L	Tier 3										**37**	9			**83**					10	
	Iron	ug/L	Tier 3										**300000**	**7000**			**170000**					300	E
	Lead	ug/L	Tier 3										**120**	<30 U			<30 U					4	L
	Manganese	ug/L	Tier 3										**13000**	**1900**			**62000**					50	E
	Nickel	ug/L	Tier 3										70	10			**940**					100	A
12/17/1992	Metal																						
	Arsenic	ug/L	Tier 3										**16**	**12**			**120**					10	
	Iron	ug/L	Tier 3										**240000**	**16000**			**170000**					300	E
	Lead	ug/L	Tier 3										**50**	**30**			<30 U					4	L
	Manganese	ug/L	Tier 3										**9700**	**1100**			**49000**					50	E
	Nickel	ug/L	Tier 3										20	<10 U			**790**					100	A
12/28/1992	Metal																						
	Iron	ug/L	Tier 3										**230000**	**5100**			**120000**					300	E
	Manganese	ug/L	Tier 3										**10000**	**1000**			**47000**					50	E
	Nickel	ug/L	Tier 3										20	10			**780**					100	A
8/10/1993	Metal																						
	Arsenic	ug/L	Tier 3										**10**	**14**			**180**					10	
	Iron	ug/L	Tier 3										**11000**	**200000**			**240000**					300	E
	Nickel	ug/L	Tier 3										<10 U	<10 U			**2200**					100	A
1/20/1994	VOC																						
	Ethylbenzene	ug/L	Tier 3	<1 U	<1 U										<1 U	<1 U	<1 U	**93**		<1 U	<1 U	74	E
	Xylenes	ug/L	Tier 3	<3 U	<3 U										<3 U	<3 U	<3 U	**1700**		<3 U	<3 U	280	E
2/2/1994	Metal																						
	Arsenic	ug/L	Tier 3										**30**	**400**			**66**					10	
	Iron	ug/L	Tier 3										**260000**	**37000**			**170000**					300	E
	Lead	ug/L	Tier 3										**50**	<30 U			<30 U					4	L
	Nickel	ug/L	Tier 3										<20 U	<20 U			**1300**					100	A
6/2/1994																							
	VOC																						
	Benzene	ug/L	Tier 3	<1 U	<1 U											<1 U	<1 U	**24**	<1 U	<1 U	<1 U	5	A
	Ethylbenzene	ug/L	Tier 3	<1 U	<1 U											<1 U	<1 U	**120**	<1 U	<1 U	<1 U	74	E
9/14/1994																							
	VOC																						
	Benzene	ug/L	Tier 3	<1 U	<1 U										<1 U	<1 U	<1 U	**20**		<1 U	<1 U	5	A
	Ethylbenzene	ug/L	Tier 3	<1 U	<1 U										<1 U	<1 U	<1 U	**130**		<1 U	<1 U	74	E
	Xylenes	ug/L	Tier 3	<3 U	<3 U										<3 U	<3 U	<3 U	**2000**		<3 U	<3 U	280	E
12/7/1994																							
	VOC																						
	Benzene	ug/L	Tier 3	IS	<1 U										<1 U	<1 U	<1 U	**19**		<1 U	<1 U	5	A
	Ethylbenzene	ug/L	Tier 3	IS	<1 U										<1 U	<1 U	<1 U	**94**		<1 U	<1 U	74	E
	Xylenes	ug/L	Tier 3	IS	<3 U										<3 U	<3 U	<3 U	**1600**		<3 U	<3 U	280	E
3/31/1995																							
	VOC																						
	Benzene	ug/L	Tier 3	<1 U	<1 U										<1 U	<1 U	<1 U	**24**			<1 U	5	A
	Ethylbenzene	ug/L	Tier 3	<1 U	<1 U										<1 U	<1 U	<1 U	**130**			<1 U	74	E
	Xylenes	ug/L	Tier 3	<3 U	<3 U										<3 U	<3 U	<3 U	**1900**			<3 U	280	E
6/2/1995																							
	Metal																						
	Arsenic	ug/L	Tier 3	7.2	4.8								6.4	6.9	5.3	4.8	**18**	**74**	dry	7.7	<2 U	10	
	Cadmium	ug/L	Tier 3	<5 U	<5 U								<5 U	<5 U	<5 U	<5 U	**26**	**5**	dry	**42**	<5 U	5	A
	Iron	ug/L	Tier 3	**21000**	**18000**								**140000**	**7400**	**1600**	**450**	**250000**	**200000**	dry	**170000**	120	300	E
	Lead	ug/L	Tier 3	**23**	<1 U								3.4	<1 U	<1 U	1.2	<1 U	1.2	dry	<2 U	<1 U	4	L
	Manganese	ug/L	Tier 3	**9400**	**23000**								**7800**	**1000**	**6000**	**1900**	**64000**	**6100**	dry	**76000**	**210**	50	E
	Nickel	ug/L	Tier 3	**210**	30								<10 U	<10 U	60	90	**2200**	30	dry	**3900**	20	100	A
6/13/1995																							
	VOC																						
	Benzene	ug/L	Tier 2	<5 U	<5 U										<5 U	<5 U	<5 U	**13**	<5 U	<5 U	<5 U	5	A
	Xylenes	ug/L	Tier 2	<3 U	<3 U										<3 U	<3 U	<3 U	**1100**	<3 U	<3 U	<3 U	280	E
9/18/1995	Metal																						

Prepared by: SVF
Checked by: JSL

Table 3-2
Mill Area Historical Groundwater Results - Exceedances

Event Date	Parameter	Units	Data Level	MW-1	MW-10	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107	MW-11	MW-12	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	Residential Commercial Drinking Water Criteria[1]	Residential Commercial Code
	Arsenic	ug/L	Tier 3	<2 U	3.6								6.8	6.4	2	dry	**46**	**94**	dry	2	<2 U	10	
	Cadmium	ug/L	Tier 3	<0.5 U	2.5								**16**	<0.5 U	<0.5 U	dry	**36**	**22**	dry	**26**	<0.5 U	5	A
	Iron	ug/L	Tier 3	**320**	**20000**								**120000**	**5500**	260	dry	**220000**	**140000**	dry	**160000**	100	300	E
	Lead	ug/L	Tier 3	<1 U	**4.8**								**13**	<1 U	<1 U	dry	**24**	**13**	dry	**18**	<1 U	4	L
	Manganese	ug/L	Tier 3	**310**	**35000**								**6600**	**990**	**4400**	dry	**41000**	**6100**	dry	**40000**	**660**	50	E
	Nickel	ug/L	Tier 3	9.2	49								12	1.1	36	dry	**1900**	57	dry	**1700**	25	100	A
	VOC																						
	Benzene	ug/L	Tier 2															**29**				5	A
	Ethylbenzene	ug/L	Tier 2															**900**				74	E
	Xylenes	ug/L	Tier 2															**5400**				280	E
10/24/1995	**Metal**																						
	Iron	ug/L	Tier 2			**1000**		**34000**	<100 U	**9400**	**2000**											300	E
	Lead	ug/L	Tier 2			<3 U	<3 U	<3 U	<3 U	<3 U	<3 U											4	L
	Manganese	ug/L	Tier 2			**5800**		**3200**	**3200**	**1200**	**7200**											50	E
	Mercury	ug/L	Tier 2			<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U											2	A
	Nickel	ug/L	Tier 2			<50 U	**1400**	<50 U	<50 U	<50 U	<50 U											100	A
	VOC																						
	Benzene	ug/L	Tier 2						**27**		<5 U											5	A
	Xylenes	ug/L	Tier 2						**500**		<3 U											280	E
10/26/1995	**Metal**																						
	Arsenic	ug/L	Tier 3				<5 U		**12**													10	
	Iron	ug/L	Tier 3				**390000**		**30000**													300	E
	Manganese	ug/L	Tier 3				**22000**															50	E
11/7/1995	**Metal**																						
	Arsenic	ug/L	Tier 3	<2 U	3	6	<2 U	<2 U	8	<2 U	<2 U		**13**	<2 U	<2 U	<2 U	<2 U	**140**	dry	<2 U	<2 U	10	
	Barium	ug/L	Tier 3	85	49	56	36	60	210	38	63		110	30	67	60	60	280	dry	18	37	2000	A
	Cadmium	ug/L	Tier 3	<0.5 U	<0.5 U	0.7	**130**	0.6	**6**	<0.5 U	<0.5 U		**19**	<0.5 U	<0.5 U	<0.5 U	**41**	**30**	dry	**20**	<0.5 U	5	A
	Iron	ug/L	Tier 3	**4500**	**330**	**5500**	**440000**	**2800**	**41000**	**2700**	**520**		**190000**	**1800**	66	170	**410000**	**300000**	dry	**190000**	150	300	E
	Lead	ug/L	Tier 3	<1 U	<1.4 U	<1 U	**68**	<1 U	**4**	<1 U	<1 U		**11**	<1 U	<1 U	<1 U	**24**	**14**	dry	**11**	<1 U	4	L
	Manganese	ug/L	Tier 3	**7000**	**30000**	**8400**	**25000**	**4200**	**5700**	**1400**	**7600**		**6200**	**1500**	**2300**	**70**	**46000**	**6700**	dry	**35000**	**220**	50	E
	Mercury	ug/L	Tier 3	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U		<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	dry	<0.2 U	<0.2 U	2	A
	Nickel	ug/L	Tier 3	**150**	39	1	**1600**	2	22	4	11		4	2	18	28	**1500**	60	dry	**1100**	21	100	A
11/29/1995	**Metal**																						
	Cadmium	ug/L	Tier 3				**130**	0.6	**6**	0.5	0.5											5	A
	Iron	ug/L	Tier 3				**440000**	**2800**	**41000**	**2700**	52											300	E
	Lead	ug/L	Tier 3				**68**	1	**4**	<1 U	<1 U											4	L
	Manganese	ug/L	Tier 3				**25000**	**4200**	**5700**	**1470**	**7600**											50	E
	Nickel	ug/L	Tier 3				**1600**	2	22	4	11											100	A
6/5/1996	**Metal**																						
	Arsenic	ug/L	Tier 3	<3 U	<3 U	5	<3 U	<3 U	**11**	<3 U	<3 U		<3 U	<3 U	<3 U	<3 U	<3 U	**39**	dry	7	3	10	
	Cadmium	ug/L	Tier 3	0.6	**6**	0.5	**110**	2	**6**	0.9	0.6		**13**	0.5	0.5	1	**9**	**13**	dry	**28**	0.5	5	A
	Iron	ug/L	Tier 3	160	**10000**	**5200**	**690000**	**23000**	**65000**	**11000**	**440**		**140000**	**1900**	500	250	**62000**	**140000**	dry	**150000**	**3300**	300	E
	Lead	ug/L	Tier 3	3	**7**	4	**69**	3	**7**	<4 U	<2 U		**12**	<2 U	<2 U	3	**17**	**13**	dry	**17**	3	4	L
	Manganese	ug/L	Tier 3	**2300**	**36000**	**12000**	**27000**	**5800**	**4600**	**1200**	**3500**		**8600**	**1100**	**5100**	**460**	**50000**	**5600**	dry	**57000**	**230**	50	E
	Nickel	ug/L	Tier 3	28	**130**	<0.5 U	**2500**	8	24	<0.5 U	14		2	1	14	77	**1800**	20	dry	**3200**	<0.5 U	100	A
11/8/1996	**VOC**																						
	Ethylbenzene	ug/L	Tier 3						**3900**													74	E
	Xylenes	ug/L	Tier 3						**12000**													280	E
	VOC-PAH																						
	Naphthalene	ug/L	Tier 3						**1700**													520	
	Phenanthrene	ug/L	Tier 3						**510**													52	
9/16/1997	**VOC**																						
	Benzene	ug/L	Tier 3	<1 U	<1 U				**29**		<1 U				<1 U	<1 U	<1 U	**20**		<1 U	<1 U	5	A
	Ethylbenzene	ug/L	Tier 3	<1 U	<1 U				**170**		<1 U				<1 U	<1 U	<1 U	**110**		<1 U	<1 U	74	E
	Xylenes	ug/L	Tier 3	<1 U	<1 U				**780**		<1 U				<1 U	<1 U	<3 U	**1700**		<1 U	<1 U	280	E
	VOC-PAH																						
	1-Methyl-naphthalene	ug/L	Tier 3	<5 U	<5 U				700						<5 U	<5 U	<5 U	900		<5 U	<5 U		
	2-Methyl naphthalene	ug/L	Tier 3	<5 U	<5 U				**670**						<5 U	<5 U	<5 U	**650**		<5 U	<5 U	280	
	Acenaphthylene	ug/L	Tier 3	<5 U	<5 U				**270**						<5 U	<5 U	<5 U	**250**		<5 U	<5 U	52	
10/19/1999																							
	Metal																						
	Arsenic	ug/L	Tier 2		<5 U	**36**	7	**13**				**15**		9	<5 U	<5 U	**35**	**139**	<5 U	<5 U		10	
	Arsenic	ug/L	Tier 3		5							**15**	8		5	5	**35**	**139**	5	5	8	10	
	Cadmium	ug/L	Tier 2		4	<1 U	**5**	<1 U				<1 U	<1 U	<1 U	<1 U	<1 U	4	<1 U	<1 U	4	<1 U	5	A
	Cadmium	ug/L	Tier 3		4		**10**					1	1		1	1	4	1	1	4	1	5	A
	Chromium	ug/L	Tier 2		<10 U	<10 U	**140**	<10 U				<10 U	10	<10 U	<10 U	<10 U	20	20	<10 U	<10 U	<10 U	100	A
	Chromium, total	ug/L	Tier 3		10		**140**					10	10		10	10	20	20	10	10	10	100	A

Prepared by: SVF
Checked by: JSL

Table 3-2

Mill Area Historical Groundwater Results - Exceedances

Event Date	Parameter	Units	Data Level	MW-1	MW-10	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107	MW-11	MW-12	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	Residential Commercial I Drinking Water Criteria[1]	Residential Commercial Code
	Iron	ug/L	Tier 2		280	**28900**	**1680000**	**74500**				**104000**		**9450**	210	<30 U	**305000**	**166000**		**182000**	**8060**	300	E
	Iron	ug/L	Tier 3		280							**104000**	**127000**		210	10	**305000**	**166000**	**399000**	**182000**		300	E
	Lead	ug/L	Tier 2		**10**	<10 U	<10 U	<10 U				<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U		<10 U	<10 U	4	L
	Lead	ug/L	Tier 3		**10**		**10**					**10**	**10**		**10**	**10**	**10**	**10**	**10**	<10 U	**10**	4	L
	Manganese	ug/L	Tier 2		**540**	**10400**		**7080**				**37800**		**1120**	**3300**	**60**	**41800**	**4870**	**24400**	**23400**		50	E
	Manganese	ug/L	Tier 3		**540**		**33400**					**37800**	**6490**		**3300**	**60**	**41800**	**4870**		**23400**	**1170**	50	E
	Nickel	ug/L	Tier 2		20	<10 U	**3800**	<10 U				<10 U	<10 U	<10 U	30	30	**1460**	50		**590**	10	100	A
	Nickel	ug/L	Tier 3		20							10	10		30	30	**1460**	50	**110**	**640**		100	A
	Sodium	ug/L	Tier 3		2000							24000	**167000**		14000	4000	14000	112000		9000		120000	
	Physical Property																						
	Nitrogen, Ammonia	mg/L	Tier 2		0.2	1.6	3.7	1.4	2.5			3.5	**12.6**	0.7	<0.1 U	<0.1 U	2.8	3.3		2.5	0.3	10	N
	Sulfate	mg/L	Tier 2		25	16	**6490**	**260**				**660**	25	5	215	91	**1550**	1		**1070**	94	250	E
	Sulfate	mg/L	Tier 3		25										215	91	**1550**	1		**1070**		250	E
	VOC																						
	Benzene	ug/L	Tier 2									<1.0 U						**18**				5	A
	Ethylbenzene	ug/L	Tier 2									<1.0 U						**96**				74	E
	VOC-PAH																						
	Naphthalene	ug/L	Tier 3						**19600**													520	
	Phenanthrene	ug/L	Tier 2						**16000**									<10 U				52	

Notes: [1] = Analytical results were compared to the residential/commercial I drinking water criteria. Exceedances are highlighted.

A = Criterion is the State of Michigan drinking water standard established persuant to Section 5 of 1976 PA 399, MCL 325.1005.

E = Criterion is the aesthetic drinking water value, see MDEQ operational memoranda for the Part 201 and Part 231 programs for more details.

L = Criterion for lead are derived using a biologically based model, see MDEQ operational memoranda for the Part 201 and Part 231 programs for more details.

N = The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater this is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 ug/L. Where leaching to groundwter is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5 ug/kg.

PAH = Polynuclear aromatic hydrocarbon

U = Analyte not detected at a level above the method detection limit

ug/L = micrograms/liter

VDC = Volatile Organic Compound

< = Analyte not detected at a level above the method detection limit

mg/L = milligrams/liter

IS = insufficient sample

Prepared by: SVF
Checked by: JSL

Table 3-3
Mill Area Historical Surface Water Results - Exceedances

Event Date	Parameter	Units	Data Level	Pyrite Pad	Conv	SW-1	SW-1	SW-2	SW-2	SW-3	SW-3	HNV	WV	HCV	FCV	AMV	FAV
11/7/1995							Duplicate		Duplicate		Duplicate						
	Metal																
	Arsenic	ug/L	Tier 1	<3 U	68	**240**	**330**	**200**	**250**	19	62	260			150	340	680
	Mercury	ug/L	Tier 1	**2.8**	<0.2 U	<0.2 U		<0.2 U		<0.2 U		0.0018	0.0013		0.77	1.4	2.8
	Silver	ug/L	Tier 1	<0.5 U	<0.5 U	<0.5 U	**0.8**	<0.5 U		<0.5 U		11000			0.06	0.54	1.1
	Zinc	ug/L	Tier 1	100	1400	3500	3000	1400	990	990	840	16000					

Notes:
Analytical results were compared to the lowest value (highlighted)
of the Michigan Department of Environmental Quality Rule 57 Water Quality Values
Exceedances are highlighted.
Source: MDEQ Rule 57 Water Quality Values
AMV - Aquatic maximum value
FAV - Final acute value
FCV - Final chronic value
HCV - Human cancer value
HNV - Human noncancer value
WV - Wildlife value
U - The analyte was not detected at or above the reporting limit
ug/L - micrograms/liter
< - The analyte was not detected at a level above the method detection limit

Table 4-1

Well Construction and Soil Boring Details

Location ID	Location [Northing]	Location [Easting]	Date Completed	Drilling Method	Depth of Borehole (feet bgs)	Boring diameter (inches)	Surface Elevation (feet msl)	Well Diameter (inches)	TOC Elevation (feet)	Screen type and slot size (type/inches)	Depth to top of screen (feet)	Depth to bottom of screen (feet)	Depth to Top of Filter Pack (feet)	Date Developed	Date Abandoned
Monitoring Wells and Piezometers															
KMW-1	621492.58	26019934.42	9/18/2006	Sonic	15.0	6	1587.24	2	1588.75	SCH 40/0.01	5.0	15.0	4	10/4/2006	NA
KMW-2	621307.65	26020363.4	9/19/2006	Sonic	19.0	6	1589.43	2	1589.19	SCH 40/0.01	8	18	6	10/4/2006	NA
KMW-3	621078.65	26019986.7	9/26/2006	Sonic	32.0	6	1588.52	2	1590.58	SCH 40/0.01	22	32	20	10/4/2006	NA
KMW-4P	621249.69	26019645.27	9/26/2006	Sonic	43.0	6	1584.67	2	1586.62	SCH 40/0.01	33	43	31	9/29/2006	NA
KMW-5	621772.56	26019415.03	9/25/2006	Sonic	54.0	6	1596.51	2	1597.88	SCH 40/0.01	43	53	41	9/27/2006	NA
KMW-6	621641.17	26019348.2	9/19/2006	Sonic	34.0	6	1596.78	2	1598.47	SCH 40/0.01	23	33	21	9/19/2006	NA
KMW-6A	621641.17	26019348.2	10/3/2006	Sonic	46.0	6	1596.78	2	1598.47	SCH 40/0.01	36	46	33	10/4/2006	NA
KMW-7	621378.12	26019393.02	9/21/2006	Sonic	30.0	6	1580.37	2	1582.5	SCH 40/0.01	20	30	18	9/29/2006	NA
KMW-9	621430.84	26019202.45	9/21/2006	Sonic	32.0	6	1579.54	2	1581.4	SCH 40/0.01	22	32	20	9/29/2006	NA
KMW-9P	621432.53	26019193.56	9/21/2006	Sonic	57.0	6	1579.60	2	1581.47	SCH 40/0.01	52	57	50	9/29/2006	NA
KMW-10	620702.26	26021143.72	9/26/2006	Sonic	15.0	6	1595.03	2	1596.92	SCH 40/0.01	4	14	3	10/4/2006	NA
MW-601	621246.68	26021173.49	10/4/2006	Sonic	14.0	6	1601.06	2	1603.07	SCH 40/0.01	4	14	3	10/5/2006	NA
MW-602	620694.07	26022470.72	9/27/2006	H S A	22.0	6	1618.41	2	1621.41	SCH 40/0.01	11	21	9	9/28/2006	NA
MW-603	620342.91	26021748.82	9/19/2006	H S A	24.0	6	1610.89	2	1613.8	SCH 40/0.01	14	24	12	9/29/2006	NA
MW-604	620576.98	26020834.76	9/28/2006	Sonic	12.0	6	1594.63	2	1595.56	SCH 40/0.01	2	12	1.5	10/5/2006	NA
MW-605	620126.52	26021263.01	10/2/2006	Sonic	14.0	6	1594.56	2	1596.68	SCH 40/0.01	4	14	3	10/5/2006	NA
MW-606	620145.39	26022653.6	9/27/2006	H S A	18.0	6	1612.31	2	1615.1	SCH 40/0.01	7	17	5	9/28/2006	NA
P-602	620692.55	26022476.9	9/27/2006	H S A	46.0	6	1618.28	2	1621.32	SCH 40/0.01	41	46	39	9/28/2006	NA
P-604	620570.81	26020843.75	9/27/2006	Sonic	28.0	6	1594.59	2	1595.42	SCH 40/0.01	21.5	26.5	19	10/5/2006	NA
P-605	620116.04	26021264.96	10/2/2006	Sonic	34.5	6	1594.58	2	1596.6	SCH 40/0.01	27	34	29.5	10/5/2006	NA
Soil Borings															
KSB-1	621424.67	26020364	9/12/2006	H S A	7.0	6	1590.39	NA	NA	NA	NA	NA	NA	NA	9/12/2006
KSB-3	621476.83	26020181.23	9/12/2006	H S A	16.0	6	1589.36	NA	NA	NA	NA	NA	NA	NA	9/12/2006
KSB-4/4A	621500.32	26020090.72	9/12/2006	Sonic	16.0	6	1588.94	NA	NA	NA	NA	NA	NA	NA	9/12/2006
KSB-5	621492.6	26019992.3	9/18/2006	Sonic	20.0	6	1587.11	NA	NA	NA	NA	NA	NA	NA	9/18/2006
KSB-6	621439.48	26020036.68	9/18/2006	Sonic	20.0	6	1588.38	NA	NA	NA	NA	NA	NA	NA	9/18/2006
KSB-7	621297.43	26020409.5	9/19/2006	Sonic	20.0	6	1589.51	NA	NA	NA	NA	NA	NA	NA	9/19/2006
KSB-8	621202.81	26020520.3	10/4/2006	Sonic	9.0	6	1592.66	NA	NA	NA	NA	NA	NA	NA	BN
KSB-9	621179.02	26020384.48	9/14/2006	H S A	21.5	6	1594.14	NA	NA	NA	NA	NA	NA	NA	9/14/2006
KSB-10	621158.26	26020280.16	9/14/2006	H S A	6.0	6	1592.94	NA	NA	NA	NA	NA	NA	NA	9/14/2006
KSB-11	621199.3	26020056.03	9/13/2006	H S A	6.5	6	1588.80	NA	NA	NA	NA	NA	NA	NA	9/13/2006
KSB-12	621628.2	26019566.54	9/19/2006	Sonic	30.0	6	1599.31	NA	NA	NA	NA	NA	NA	NA	9/19/2006
KSB-13	621569.18	26019487.03	9/22/2006	Sonic	21.0	6	1598.57	NA	NA	NA	NA	NA	NA	NA	9/22/2006
KSB-14	621241.8	26020669.96	9/25/2006	Sonic	15.0	6	1593.90	NA	NA	NA	NA	NA	NA	NA	BN
KSB-15	621262.93	26020600.98	9/26/2006	Sonic	15.0	6	1594.46	NA	NA	NA	NA	NA	NA	NA	9/26/2006
KSB-16	621691.66	26019234.29	10/3/2006	Sonic	9.0	6	1595.92	NA	NA	NA	NA	NA	NA	NA	10/3/2006
KSB-18	621031.73	26020767.56	10/2/2006	Sonic	29.0	6	1594.49	NA	NA	NA	NA	NA	NA	NA	10/2/2006
KSB-19	621252.89	26021257.24	10/4/2006	Sonic	19.0	6	1603.03	NA	NA	NA	NA	NA	NA	NA	10/4/2006
SB-603	620342.91	26021748.82	9/19/2006	H S A	31.0	6	1610.89	NA	NA	NA	NA	NA	NA	NA	9/19/2006
SB-607	621120.54	26020809.82	9/12/2006	H S A	7.8	6	1595.73	NA	NA	NA	NA	NA	NA	NA	BN
SB-607A	621120.91	26020825.21	9/12/2006	H S A	16.0	6	1596.15	NA	NA	NA	NA	NA	NA	NA	9/12/2006
SB-608	621091.77	26020991.77	9/12/2006	H S A	6.1	6	1597.41	NA	NA	NA	NA	NA	NA	NA	BN
SB-608A	621089.58	26020997.22	9/12/2006	H S A	11.0	6	1597.44	NA	NA	NA	NA	NA	NA	NA	9/12/2006
SB-609	620932.59	26021586.88	9/13/2006	H S A	15.0	6	1605.11	NA	NA	NA	NA	NA	NA	NA	9/13/2006
SB-610	620927.29	26021384.46	9/13/2006	H S A	4.0	6	1601.38	NA	NA	NA	NA	NA	NA	NA	BN
SB-610A	620925.31	26021391.14	9/13/2006	H S A	18.0	6	1601.70	NA	NA	NA	NA	NA	NA	NA	9/13/2006
SB-611	620863.55	26021174.86	9/13/2006	H S A	28.0	6	1599.33	NA	NA	NA	NA	NA	NA	NA	9/13/2006
SB-612	620896.43	26020955.55	9/14/2006	H S A	18.0	6	1594.84	NA	NA	NA	NA	NA	NA	NA	9/14/2006
SB-613	620909.91	26020743.27	9/14/2006	H S A	22.0	6	1593.00	NA	NA	NA	NA	NA	NA	NA	9/14/2006
SB-614	620975.89	26020517.31	9/14/2006	H S A	24.0	6	1591.12	NA	NA	NA	NA	NA	NA	NA	BN

Prepared by: JSL
Checked by: SVF

Table 4-1

Well Construction and Soil Boring Details

Location ID	Location [Northing]	Location [Easting]	Date Completed	Drilling Method	Depth of Borehole (feet bgs)	Boring diameter (inches)	Surface Elevation (feet msl)	Well Diameter (inches)	TOC Elevation (feet)	Screen type and slot size (type/inches)	Depth to top of screen (feet)	Depth to bottom of screen (feet)	Depth to Top of Filter Pack (feet)	Date Developed	Date Abandoned
SB-615	620742.92	26020733.21	9/15/2006	H S A	16.0	6	1592.85	NA	NA	NA	NA	NA	NA	NA	9/15/2006
SB-616	620741.46	26020959.65	10/2/2006	Sonic	29.0	6	1591.99	NA	NA	NA	NA	NA	NA	NA	10/2/2006
SB-617	620728.04	26021321.31	9/26/2006	Sonic	28.0	6	1599.43	NA	NA	NA	NA	NA	NA	NA	9/26/2006
SB-618	620760.61	26021538.54	10/3/2006	Sonic	29.0	6	1603.84	NA	NA	NA	NA	NA	NA	NA	10/3/2006
SB-619	620749.97	26021783.55	10/3/2006	Sonic	1.0	6	1607.09	NA	NA	NA	NA	NA	NA	NA	9/20/2006
SB-619A	620749.97	26021783.55	9/28/2006	H S A	1.0	6	1607.09	NA	NA	NA	NA	NA	NA	NA	10/3/2006
SB-620	620500.91	26022173.85	9/20/2006	H S A	51.5	6	1618.13	NA	NA	NA	NA	NA	NA	NA	9/20/2006
SB-621	620573.87	26021976.5	9/20/2006	H S A	51.0	6	1612.36	NA	NA	NA	NA	NA	NA	NA	9/20/2006
SB-622	NR	NR	9/15/2006	H S A	14.0	6	NR	NA	NA	NA	NA	NA	NA	NA	9/15/2006
SB-622A	620533.79	26021389.61	9/27/2006	Sonic	28.0	6	1599.74	NA	NA	NA	NA	NA	NA	NA	9/27/2006
SB-622B	NR	NR	NR	NR	5.0	6	NR	NA	NA	NA	NA	NA	NA	NA	9/15/2006
SB-622C	NR	NR	NR	NR	3.0	6	NR	NA	NA	NA	NA	NA	NA	NA	9/15/2006
SB-623	620517.68	26021223.35	9/14/2006	H S A	12.0	6	1597.00	NA	NA	NA	NA	NA	NA	NA	BN
SB-623A	NR	NR	NR	H S A	12.0	6	NR	NA	NA	NA	NA	NA	NA	NA	9/14/2006
SB-623B	NR	NR	NR	H S A	3.0	6	NR	NA	NA	NA	NA	NA	NA	NA	9/14/2006
SB-623C	NR	NR	NR	H S A	10.0	6	NR	NA	NA	NA	NA	NA	NA	NA	9/14/2006
SB-624	620369.27	26021385.76	10/2/2006	Sonic	34.0	6	1599.93	NA	NA	NA	NA	NA	NA	NA	10/2/2006
SB-625	620558.34	26021614.49	10/3/2006	Sonic	24.0	6	1603.80	NA	NA	NA	NA	NA	NA	NA	10/3/2006
SB-626	620437.51	26021911.99	9/20/2006	H S A	23.5	6	1614.21	NA	NA	NA	NA	NA	NA	NA	BN
SB-627	NR	NR	NR		23.5	6	NR	NA	NA	NA	NA	NA	NA	NA	9/20/2006
SB-627B	620360.66	26022324.77	9/25/2006	H S A	56.0	6	1614.37	NA	NA	NA	NA	NA	NA	NA	9/25/2006
SB-628	620416.26	26022512.02	9/25/2006	H S A	66.0	6	1616.60	NA	NA	NA	NA	NA	NA	NA	9/25/2006
SB-629	620215.76	26022461.39	9/22/2006	H S A	53.0	6	1614.61	NA	NA	NA	NA	NA	NA	NA	9/22/2006
SB-630	620259.01	26022158.98	9/22/2006	H S A	50.5	6	1613.54	NA	NA	NA	NA	NA	NA	NA	9/22/2006
SB-631	620262.58	26021976.71	9/21/2006	H S A	51.0	6	1612.75	NA	NA	NA	NA	NA	NA	NA	9/21/2006
SB-632	620131.82	26021833.68	9/19/2006	H S A	41.0	6	1610.81	NA	NA	NA	NA	NA	NA	NA	9/19/2006
SB-633	619984.65	26021690.87	9/18/2006	H S A	47.0	6	1608.79	NA	NA	NA	NA	NA	NA	NA	9/18/2006
SB-634	619952.28	26021837.51	9/18/2006	H S A	43.5	6	1608.77	NA	NA	NA	NA	NA	NA	NA	9/18/2006
SB-635	620141.03	26021563.15	9/20/2006	H S A	36.0	6	1609.46	NA	NA	NA	NA	NA	NA	NA	9/20/2006
SB-636	619947.91	26021423.04	9/19/2006	H S A	45.0	6	1610.16	NA	NA	NA	NA	NA	NA	NA	9/19/2006
SB-637	619805.67	26021603.49	9/13/2006	H S A	29.0	6	1608.08	NA	NA	NA	NA	NA	NA	NA	9/13/2006
SB-638	619804.39	26021896.97	9/21/2006	H S A	51.0	6	1607.73	NA	NA	NA	NA	NA	NA	NA	9/21/2006
SB-639	620060.14	26021985.58	9/21/2006	H S A	51.0	6	1610.61	NA	NA	NA	NA	NA	NA	NA	9/21/2006
SB-640	620044.44	26022147.44	9/26/2006	H S A	51.0	6	1611.14	NA	NA	NA	NA	NA	NA	NA	9/26/2006
SB-641	619789.85	26022151.31	9/26/2006	H S A	41.0	6	1609.00	NA	NA	NA	NA	NA	NA	NA	9/26/2006
SB-642	620031.82	26022345.89	9/25/2006	H S A	50.5	6	1611.64	NA	NA	NA	NA	NA	NA	NA	9/25/2006
SB-643	619655.89	26022017.01	9/21/2006	H S A	29.5	6	1607.60	NA	NA	NA	NA	NA	NA	NA	9/21/2006
SB-644	619675.01	26021762.00	9/13/2006	H S A	32.5	6	1607.76	NA	NA	NA	NA	NA	NA	NA	9/13/2006
SB-645	619667.41	26021477.45	9/28/2006	H S A	14.0	6	1613.82	NA	NA	NA	NA	NA	NA	NA	9/28/2006
SB-645A	NR	NR	9/28/2007	H S A	6.0	6	1614.15	NA	NA	NA	NA	NA	NA	NA	9/28/2006
SB-646	619508.46	26021625.34	9/28/2006	H S A	1.5	6	1612.27	NA	NA	NA	NA	NA	NA	NA	BN
SB-647	619448.16	26021920.89	9/28/2006	H S A	5.1	6	1610.53	NA	NA	NA	NA	NA	NA	NA	BN
SB-647A	619447.49	26021914.14	9/28/2006	H S A	4.0	6	1610.29	NA	NA	NA	NA	NA	NA	NA	9/28/2006
SB-648	619437.45	26022141.84	9/26/2006	H S A	36.0	6	1606.18	NA	NA	NA	NA	NA	NA	NA	9/26/2006

Notes: Survey data in U.S. State Plane 1983, Michigan North , 2111
bgs = below ground surface
msl = mean sea level
NA = Not applicable
HSA = hollow stem auger
NR = not recorded
BN = backfilled w/ native soil

Prepared by: JSL
Checked by: SVF

Table 4-2
Soil Analytical Program Summary

Boring ID (Sample Depth)	Total Metals	Cyanide	TCLP RCRAS Metals	SPLP RCRAS Metals	SPLP VOC	SPLP PAH	VOC	PAH	pH	PCB	Grain Size Analysis/Hydrometer (ASTM D422)	Consolidation Test (ASTM D2435)	Specific Gravity (ASTM D854)	Consolidated, Drained Direct Shear Test (ASTM D3080)	Flexible Well Hydraulic Conductivity Test (ASTM D5084)
SB-607 (2-2.9')	X	X	X						X						
SB-607 (6-7.1')											X		X		X
SB-607 (7.2-7.5')											X (H)				
SB 608 (2-3.1')	X	X	X						X						
SB 609 (14-16')	X	X	X						X						
SB 610A (12-14')	X	X	X						X						
SB 611 (4-6')	X	X	X						X						
SB 611 (14-16')											X (H)				
SB 612 (4-6')	X	X	X						X						
SB 613 (6-8')	X	X	X						X						
SB 614 (6-8')	X	X	X						X						
SB 615 (10-12')	X	X	X						X						
SB 616 (2-4')	X	X	X						X						
SB 616 (24-29')											X				
SB 617 (4-7')	X	X	X						X						
SB 618 (8-9')	X	X	X	X					X						
SB 619 (3-9')	X	X	X						X						
SB 620 (19-21')	X	X	X						X						
SB 621 (14-16')	X	X	X						X						
SB 622A (2-9')	X	X	X						X						
SB 623 (4-6')	X	X	X						X						
SB 624 (0-4')	X	X	X						X						
SB 625 (1-3')	X	X	X						X						
SB 625 (9-14')											X (H)				
SB 625 (14-19')											X				
SB 626 (14-16')	X	X	X						X						
SB 627 (24-26')	X	X	X						X						
SB 628 (14-16')	X	X	X						X						
SB 628 (29-31')	X	X	X						X						
SB 629 (9-11')											X	X	X		X
SB 629 (14-16')	X	X	X						X						
SB 630 (14-16')	X	X	X						X						
SB 631 (14-16')	X	X	X						X						
SB 632 (14-16')	X	X	X						X						
SB 633 (5-7')	X	X	X						X						
SB 634 (14-16')	X	X	X	X		X			X						
SB 635 (14-16')	X	X	X						X						
SB 636 (4-6')	X	X	X						X						
SB 637 (12-14')	X	X	X						X						
SB 638 (9-11')	X	X	X						X						
SB 639 (14-16')	X	X	X						X						
SB 639 (19-21')	X	X	X						X						
SB 640 (14-16')	X	X	X						X						
SB 641 (19-21')	X	X	X						X						
SB 642 (34-36')	X	X	X						X						

Prepared by: TMK1
Checked by: JSL

Table 4-2
Soil Analytical Program Summary

Boring ID (Sample Depth)	Total Metals	Cyanide	TCLP RCRAS Metals	SPLP RCRAS Metals	SPLP VOC	SPLP PAH	VOC	PAH	pH	PCB	Grain Size Analysis/Hydrometer (ASTM D422)	Consolidation Test (ASTM D2435)	Specific Gravity (ASTM D854)	Consolidated, Drained Direct Shear Test (ASTM D3080)	Flexible Well Hydraulic Conductivity Test (ASTM D5084)
SB 643 (14-16')	X	X	X						X						
SB 644 (12-15')	X	X	X						X						
SB 645 (4-6')	X	X	X						X						
SB 646															
SB 647 (4-6')	X	X	X						X						
SB 648 (4-6')	X	X	X						X						
MW-601 (8-9')	X	X	X				X	X	X					X	
MW-601 (9-11')											X (H)				
MW-602 (11-21')											X				
P-602 (14-16')	X	X	X						X						
P-602 (44-46')											X				
MW-603 (14-16')	X	X	X						X						
MW-603 (14-21')											X (H)				
MW-604 (9-11')											X (H)				
P-604 (9-14')	X	X	X						X						
P-604 (19-26')											X				
MW-605															
P-605 (8-9')											X				
MW-606 (14-16')	X	X	X						X		X (H)				
KSB-1 (5-7')	X	X	X		X		X	X	X						
KSB-2															
KSB-3 (0-2')	X	X	X						X						
KSB-3 (4-6')					X		X								
KSB-4 (0-2')	X	X	X						X						
KSB-4 (6-8')					X		X								
KSB-5 (5.7-8.5')	X	X	X				X	X	X						
KSB-6 (0-1.6')	X	X	X		X		X	X	X						
KSB-7 (4-5')	X	X	X	X	X	X	X	X							
KSB-8 (0-2')	X	X	X						X						
KSB-9 (4-6')	X	X	X						X						
KSB-9 (10-12')											X	X	X		X
KSB-9 (14-16')											X	X	X		X
KSB-10 (4-6')	X	X	X						X						
KSB-11 (0-2')	X	X	X						X						
KSB-12 (6-9')	X	X	X						X						
KSB-13 (4-9')	X	X	X						X						
KSB-14 (11.5-12')	X	X	X				X	X	X						
KSB-15 (3.5-4')	X	X	X	X	X	X	X	X	X						
KSB-16 (0-4')	X	X	X	X					X						
KSB-17															
KSB-18 (0-4')	X	X	X	X					X						
KSB-19 (2-4')	X	X	X						X						
KSB-19 (5-7')				X			X	X							

Prepared by: TMK1
Checked by: JSL

Table 4-2
Soil Analytical Program Summary

Boring ID (Sample Depth)	Total Metals	Cyanide	TCLP RCRAS Metals	SPLP RCRAS Metals	SPLP VOC	SPLP PAH	VOC	PAH	pH	PCB	Grain Size Analysis/Hydrometer (ASTM D422)	Consolidation Test (ASTM D2435)	Specific Gravity (ASTM D854)	Consolidated, Drained Direct Shear Test (ASTM D3080)	Flexible Well Hydraulic Conductivity Test (ASTM D5084)
KMW-1 (3-4')	X	X	X		X		X	X	X						
KMW-1 (4-15')											X (H)				
KMW-2 (9-9.5')	X	X	X	X	X	X	X	X	X						
KMW-2 (14-17')											X				
KMW-2 (17-18')											X (H)				
KMW-3 (6-7')	X	X	X						X						
KMW-3 (24-29')											X				
KMW-3 (29-32')											X				
KMW-4															
KMW-4P (12-14')	X	X	X						X						
KMW-4P (34-39')											X				
KMW-4P (40-41')											X (H)				
KMW-5 (14-14.5')	X	X	X						X						
KMW-5 (45-49')											X (H)				
KMW-6 (4-9')	X	X	X						X						
KMW-6A (3-4')	X	X	X	X		X		X	X	X					
KMW-6A (36-46')											X (H)				
KMW-7 (0-5')	X	X	X						X						
KMW-7 (24-29')											X				
KMW-8															
KMW-9 (24-29')											X				
KMW-9P (9-14')	X	X	X						X						
KMW-9P (52-57')											X				
KMW-10 (0.9-4')	X	X	X						X						

Notes: TCLP = Toxicity Characteristic Leaching Procedure
RCRA = Resource Conservation and Recovery Act
SPLP = Synthetic Precipitate Leaching Procedure
VOC = Volatile Organic Compound
PAH = Polynuclear Aromatic Hydrocarbon
PCB = Polychlorinated Byphenyl
ASTM = American Society for Testing & Materials
(H) = Hydrometer

Table 4-3
Groundwater Monitoring Program Summary

		Location ID	HW-1	HW-1A	HW-2	HW-3	HW-4	HW-5	HW-5A	HW-6	HW-6	HYG-1	KMW-1	KMW-2	KMW-3	KMW-4	KMW-5	KMW-6A	KMW-7	KMW-9	KMW-9P	KMW-10	MW-5	MW-6	MW-7	MW-9	MW-11	MW-12	MW-101	MW-102
Parameter	Analytical Method	Units																												
Field																														
Groundwater Elevation	Field	ft msl	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Temperature	Field	°C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D.O.	EPA-360.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Specific Conductance	Field	umhos/cm	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Redox	Field	mV	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
pH	EPA-9040C	S.U.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Turbidity	Field	--	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Metals																														
Aluminum	EPA-200.7/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Antimony	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Arsenic	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Barium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Beryllium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Boron	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cadmium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chromium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Copper	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cobalt	EPA-200.8/6010B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iron	EPA-200.7/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lead	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lithium	EPA-200.7/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Manganese	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Molybdenum	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nickel	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Selenium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Silver	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Zinc	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mercury (low level)	EPA-1631E	ng/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Thallium	EPA-200.8/6020	ug/L	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vanadium	EPA-200.8/6020	ug/L	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Anions																														
Alkalinity, Bicarbonate	310.1/SM 2320 B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alkalinity, Carbonate	310.1/SM 2320 B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloride	EPA-325.2/300.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fluoride	EPA-300.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrate	EPA-353.2/300.1	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrite	EPA-353.2 /300.1	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrogen, Ammonia	350.1/4500 NH36	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sulfate	EPA-300.1	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sulfide	376.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cations																														
Calcium	EPA-200.7/6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sodium	USEPA-6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Magnesium	EPA-200.7/6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Potassium	EPA-200.7/6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Others																														
Cyanide	USEPA-9012	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hardness (calc) as CaCO3	SM 2340B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Volatile Organic Campounds																														
1,1,1-Trichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1,2,2-Tetrachloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1,2-Trichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1-Dichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1-Dichloroethene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,2-Dichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,2-Dichloroethene, Total	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,2-Dichloropropane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2-Butanone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2-Hexanone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4-Methyl-2-pentanone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Acetone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Benzene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bromodichloromethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bromoform	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bromomethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carbon Disulfide	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carbon Tetrachloride	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chlorobenzene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chlorodibromomethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloroform	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloromethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
cis-1,3-Dichloropropene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ethylbenzene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Methylene Chloride	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Styrene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Prepared By : SVF
Checked by: JSL

Table 4-3
Groundwater Monitoring Program Summary

		Location ID	HW-1	HW-tA	HW-2	HW-3	HW-4	HW-5	HW-5A	HW-6	HW-6	HYG-1	KMW-1	KMW-2	KMW-3	KMW-4	KMW-5	KMW-6A	KMW-7	KMW-9	KMW-9P	KMW-10	MW-5	MW-6	MW-7	MW-9	MW-11	MW-12	MW-101	MW-102
Parameter	Analytical Method	Units																												
Tetrachloroethene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Toluene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
trans-1,3-Dichloropropene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Trichloroethene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vinyl Chloride	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Xylene, Total	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Polyaromatic Nuclear Hydracarbon																														
Acenaphthene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Acenaphthylene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Anthracene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Benzo(a)anthracene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Benzo(a)pyrene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Benzo(b)fluoranthene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Benzo(ghi)perylene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Benzo(k)fluoranthene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Chrysene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Dibenzo(ah)anthracene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Fluoranthene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Fluorene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Indeno(123-cd)pyrene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Naphthalene	SW846-8260B	ug/l											X	X		X		X					X	X		X	X		X	X
Phenanthrene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Pyrene	8720C (SIM)	ug/l											X	X		X		X					X	X		X	X		X	X
Polychlorinated Biphenyl																														
PCB total	8082A	ug/l											X	X		X		X					X	X		X	X		X	X

Table 4-3
Groundwater Monitoring Program Summary

		Location ID	MW-103	MW-104	MW-601	MW-602	MW-603	MW-604	MW-605	MW-606	P-602	P-604	P-605	PW-1	PW-2	PW-3	PW-4
Parameter	**Analytical Method**	**Units**															
Field																	
Groundwater Elevation	Field	ft msl	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Temperature	Field	°C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D.O.	EPA-360.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Specific Conductance	Field	umhos/cm	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Redox	Field	mV	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
pH	EPA-9040C	S.U.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Turbidity	Field	--	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Metals																	
Aluminum	EPA-200.7/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Antimony	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Arsenic	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Barium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Beryllium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Boron	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cadmium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chromium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Copper	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cobalt	EPA-200.8/6010B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iron	EPA-200.7/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lead	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lithium	EPA-200.7/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Manganese	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Molybdenum	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nickel	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Selenium	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Silver	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Zinc	EPA-200.8/6020	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mercury (low level)	EPA-1631E	ng/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Thallium	EPA-200.8/6020	ug/L	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vanadium	EPA-200.8/6020	ug/L	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Anions																	
Alkalinity, Bicarbonate	310.1/SM 2320 B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alkalinity, Carbonate	310.1/SM 2320 B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloride	EPA-325.2/300.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fluoride	EPA-300.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrate	EPA-353.2/300.1	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrite	EPA-353.2/300.1	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrogen, Ammonia	350.1/4500 NH36	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sulfate	EPA-300.1	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sulfide	376.1	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cations																	
Calcium	EPA-200.7/6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sodium	USEPA-6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Magnesium	EPA-200.7/6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Potassium	EPA-200.7/6010B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Others																	
Cyanide	USEPA-9012	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hardness (calc) as CaCO3	SM 2340B	mg/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Volatile Organic Compounds																	
1,1,1-Trichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1,2,2-Tetrachloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1,2-Trichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1-Dichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,1-Dichloroethene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,2-Dichloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,2-Dichloroethene, Total	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1,2-Dichloropropane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2-Butanone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2-Hexanone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4-Methyl-2-pentanone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Acetone	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Benzene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bromodichloromethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bromoform	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bromomethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carbon Disulfide	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carbon Tetrachloride	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chlorobenzene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chlorodibromomethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloroethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloroform	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chloromethane	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
cis-1,3-Dichloropropene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ethylbenzene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Methylene Chloride	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Styrene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Prepared By : SVF
Checked by: JSL

Table 4-3
Groundwater Monitoring Program Summary

		Location ID	MW-103	MW-104	MW-601	MW-602	MW-603	MW-604	MW-605	MW-606	P-602	P-604	P-605	PW-1	PW-2	PW-3	PW-4
Parameter	Analytical Method	Units															
Tetrachloroethene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Toluene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
trans-1,3-Dichloropropene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Trichloroethene	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vinyl Chloride	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Xylene, Total	SW846 8260B	ug/l	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Polyaromatic Nuclear Hydrocarbon																	
Acenaphthene	8720C (SIM)	ug/l	X	X	X									X			X
Acenaphthylene	8720C (SIM)	ug/l	X	X	X									X			X
Anthracene	8720C (SIM)	ug/l	X	X	X									X			X
Benzo(a)anthracene	8720C (SIM)	ug/l	X	X	X									X			X
Benzo(a)pyrene	8720C (SIM)	ug/l	X	X	X									X			X
Benzo(b)fluoranthene	8720C (SIM)	ug/l	X	X	X									X			X
Benzo(ghi)perylene	8720C (SIM)	ug/l	X	X	X									X			X
Benzo(k)fluoranthene	8720C (SIM)	ug/l	X	X	X									X			X
Chrysene	8720C (SIM)	ug/l	X	X	X									X			X
Dibenzo(ah)anthracene	8720C (SIM)	ug/l	X	X	X									X			X
Fluoranthene	8720C (SIM)	ug/l	X	X	X									X			X
Fluorene	8720C (SIM)	ug/l	X	X	X									X			X
Indeno(123-cd)pyrene	8720C (SIM)	ug/l	X	X	X									X			X
Naphthalene	SW846-8260B	ug/l	X	X	X									X			X
Phenanthrene	8720C (SIM)	ug/l	X	X	X									X			X
Pyrene	8720C (SIM)	ug/l	X	X	X									X			X
Polychlorinated Biphenyl																	
PCB total	8082A	ug/l	X	X	X									X			X

Notes:
ft msl = feet mean sea level
mV = millivolt
mg/l = milligrams per liter
ng/L = nanograms per liter
°C = degrees Celcius
S.U. = Standard Unit
ug/l = micrograms/liter
umhos/cm = micro mhos per centimeter
DO = Dissolved oxygen

Prepared By : SVF
Checked by: JSL

Table 4-4
Water Truck Sample Results

Event Date	Location	Parameter	Units	Flag	Result	Residential Commercial I Drinking Water Criteria	Residential Commercial Code
9/12/06	MINISONIC	Carbonate Alkalinity	mg/L	U	<1.7		
9/12/06	MINISONIC	Chloride	mg/L		52	250	E
9/12/06	MINISONIC	Chlorobenzene	ug/L	U	<0.41	100	A
9/12/06	MINISONIC	Chlorodibromomethane	ug/L	U	<0.81	100	A,W
9/12/06	MINISONIC	Chloroethane	ug/L	U	<0.97	430	
9/12/06	MINISONIC	Chloroform	ug/L		43	80	A,W
9/12/06	MINISONIC	Chloromethane	ug/L	U	<0.24	260	
9/12/06	MINISONIC	Chrysene	ug/L	U	<0.019	1.6	S
9/12/06	MINISONIC	cis-1,2-Dichloroethene	ug/L	U	<0.83	70	S
9/12/06	MINISONIC	cis-1,3-Dichloropropene	ug/L	U	<0.19	8.5	
9/12/06	MINISONIC	Dibenzo (a,h) anthracene	ug/l	U	<0.019	2	M
9/12/06	MINISONIC	Dibromomethane	ug/L	U	<0.60	80	
9/12/06	MINISONIC	Dichlorodifluoromethane	ug/L	U	<0.99	1700	
9/12/06	MINISONIC	Diisopropyl Ether	ug/L	U	<0.76	30	
9/12/06	MINISONIC	Ethylbenzene	ug/l	U	<0.54	74	E
9/12/06	MINISONIC	Fluoranthene	ug/L	U	<0.015	210	S
9/12/06	MINISONIC	Fluorene	ug/L	U	<0.0091	880	
9/12/06	MINISONIC	Fluoride	mg/L		1.1		
9/12/06	MINISONIC	Fluorotrichloromethane	ug/L	U	<0.79	2600	
9/12/06	MINISONIC	Hexachlorobutadiene	ug/L	U	<0.67	15	
9/12/06	MINISONIC	Indeno (1,2,3 - cd) pyrene	ug/l	U	<0.019	2	M
9/12/06	MINISONIC	Isopropylbenzene	ug/L	U	<0.59	800	
9/12/06	MINISONIC	Mercury - low level	ng/L		0.900	2000	A
9/12/06	MINISONIC	Methylene Chloride	ug/L	U	<0.43	5	A
9/12/06	MINISONIC	Methy T-Butyl ether	ug/L	U	<0.61	40	E
9/12/06	MINISONIC	Naphthalene	ug/L	U	<0.012	520	
9/12/06	MINISONIC	Naphthalene	ug/L	U	<0.74	520	
9/12/06	MINISONIC	n-Butylbenzene	ug/L	U	<0.93	80	
9/12/06	MINISONIC	Nitrogen, Ammonia	mg/L	U	<0.20	10	N
9/12/06	MINISONIC	n-Propylbenzene	ug/L	U	<0.81	80	
9/12/06	MINISONIC	Phenanthrene	ug/L	U	<0.011	52	
9/12/06	MINISONIC	p-Isopropyltoluene	ug/L	U	<0.67		
9/12/06	MINISONIC	Pyrene	ug/L	U	<0.015	140	S
9/12/06	MINISONIC	s-Butylbenzene	ug/L	U	<0.89	80	
9/12/06	MINISONIC	Styrene	ug/L	U	<0.86	100	A
9/12/06	MINISONIC	Sulfate	mg/L		26	250	E
9/12/06	MINISONIC	t-Butylbenzene	ug/L	U	<0.97	80	
9/12/06	MINISONIC	Tetrachloroethene	ug/L	U	<0.45	5	A
9/12/06	MINISONIC	Toluene	ug/L	U	<0.67	790	E
9/12/06	MINISONIC	trans-1,2-Dichloroethene	ug/L	U	<0.89	100	A
9/12/06	MINISONIC	trans-1,3-Dichloropropene	ug/L	U	<0.19	8.5	
9/12/06	MINISONIC	Trichloroethene	ug/L	U	<0.48	5	A
9/12/06	MINISONIC	Vinyl Chloride	ug/L	U	<0.18	2	A
9/12/06	MINISONIC	Xylenes, m + p	ug/L	U	<1.8	280	E
9/12/06	MINISONIC	xylenes, o	ug/L	U	<0.83	280	E
9/12/06	MINISONIC	Thallium	ug/L	U	<0.020	2	A
9/12/06	MINISONIC	Vanadium	ug/L		0.24	4.5	
9/12/06	MINISONIC	Potassium	ug/L		1480		
9/12/06	MINISONIC	Zinc	ug/L		19	2400	
9/12/06	MINISONIC	Aluminum	ug/L		11	50	V
9/12/06	MINISONIC	Manganese	ug/L		5.3	50	E
9/12/06	MINISONIC	Sodium	ug/L		30500	120000	
9/12/06	MINISONIC	Iron	ug/L		225	300	E

Prepared By: JSL
Checked By: SVF

Table 4-4
Water Truck Sample Results

Event Date	Location	Parameter	Units	Flag	Result	Residential Commercial I Drinking Water Criteria	Residential Commercial Code
9/12/06	MINISONIC	Molybdenum	ug/L		0.35	73	
9/12/06	MINISONIC	Total Hardness	ug/L		191000		
9/12/06	MINISONIC	Chromium	ug/L	J	0.25	100	A
9/12/06	MINISONIC	Silver	ug/L	U	<0.043	34	
9/12/06	MINISONIC	Selenium	ug/L	J	0.29	50	A
9/12/06	MINISONIC	Lithium	ug/L		2.1	170	
9/12/06	MINISONIC	Nickel	ug/L		0.77	100	A
9/12/06	MINISONIC	Lead	ug/L		0.66	4	L
9/12/06	MINISONIC	Barium	ug/L		14.8	2000	A
9/12/06	MINISONIC	Calcium	ug/L		52500		
9/12/06	MINISONIC	Cobalt	ug/L		0.077	40	
9/12/06	MINISONIC	Antimony	ug/L	J	0.064	6	A
9/12/06	MINISONIC	Cadmium	ug/L	U	<0.017	5	A
9/12/06	MINISONIC	Copper	ug/L		3.3	1000	E
9/12/06	MINISONIC	Arsenic	ug/L		1.4	10	
9/12/06	MINISONIC	Beryllium	ug/L	U	<0.017	4	A
9/12/06	MINISONIC	Boron	ug/L		16.6	500	F
9/12/06	MINISONIC	Magnesium	ug/L		14500	400000	
9/12/06	MINISONIC	1,1,1,2-Tetrachloroethane	ug/L	U	<0.92	77	
9/12/06	MINISONIC	1,1,1-Trichloroethane	ug/L	U	<0.90	200	A
9/12/06	MINISONIC	1,1,2,2-Tetrachloroethane	ug/L	U	<0.20	8.5	
9/12/06	MINISONIC	1,1,2-Trichloroethane	ug/L	U	<0.42	5	A
9/12/06	MINISONIC	1,1-Dichloroethane	ug/L	U	<0.75	880	
9/12/06	MINISONIC	1,1-Dichloroethene	ug/L	U	<0.57	7	A
9/12/06	MINISONIC	1,1-Dichloropropene	ug/L	U	<0.75		
9/12/06	MINISONIC	1,2,3-Trichlorobenzene	ug/L	U	<0.74		
9/12/06	MINISONIC	1,2,3-Trichloropropane	ug/L	U	<0.99	42	
9/12/06	MINISONIC	1,2,4-Trichlorobenzene	ug/L	U	<0.97	70	A
9/12/06	MINISONIC	1,2,4-Trimethylbenzene	ug/L	U	<0.97	63	E
9/12/06	MINISONIC	chloropropane	ug/L	U	<0.87	0.2	A
9/12/06	MINISONIC	1,2-Dibromoethane	ug/L	U	<0.56		
9/12/06	MINISONIC	1,2-Dichlorobenzene	ug/L	U	<0.83	600	A
9/12/06	MINISONIC	1,2-Dichloroethane	ug/L	U	<0.36	5	A
9/12/06	MINISONIC	1,2-Dichloropropane	ug/L	U	<0.46	5	A
9/12/06	MINISONIC	1,3,5-Trimethylbenzene	ug/L	U	<0.83	72	E
9/12/06	MINISONIC	1,3-Dichlorobenzene	ug/L	U	<0.87	6.6	
9/12/06	MINISONIC	1,3-Dichloropropane	ug/L	U	<0.61	8.5	
9/12/06	MINISONIC	1,4-Dichlorobenzene	ug/L	U	<0.95	75	A
9/12/06	MINISONIC	1-Methyl-naphthalene	ug/L	U	<0.010		
9/12/06	MINISONIC	2,2-Dichloropropane	ug/L	U	<0.62		
9/12/06	MINISONIC	2-Chlorotoluene	ug/L	U	<0.85	150	
9/12/06	MINISONIC	2-Methyl naphthalene	ug/L	U	<0.011	260	
9/12/06	MINISONIC	4-Chlorotoluene	ug/L	U	<0.74		
9/12/06	MINISONIC	Acenaphthene	ug/L	J	0.011	1300	
9/12/06	MINISONIC	Acenaphthylene	ug/L	U	<0.0081	52	
9/12/06	MINISONIC	Anthracene	ug/L	U	<0.012	43	S
9/12/06	MINISONIC	Benzene	ug/L	U	<0.41	5	A
9/12/06	MINISONIC	Benzo (a) anthracene	ug/L	U	<0.016	2.1	
9/12/06	MINISONIC	Benzo (a) pyrene	ug/L	U	<0.018	5	A
9/12/06	MINISONIC	Benzo (b) Fluoranthene	ug/L	U	<0.016	1.5	S, AA
9/12/06	MINISONIC	Benzo (g,h,i) perylene	ug/L	U	<0.019	1.0	M
9/12/06	MINISONIC	Benzo (k) Fluoranthene	ug/l	U	<0.019	1.0	M
9/12/06	MINISONIC	Bicarbonate Alkalinity	mg/L		160		

Prepared By: JSL
Checked By: SVF

Table 4-4
Water Truck Sample Results

Event Date	Location	Parameter	Units	Flag	Result	Residential Commercial I Drinking Water Criteria	Residential Commercial Code
9/12/06	MINISONIC	Bromobenzene	ug/L	U	<0.82	18	
9/12/06	MINISONIC	Bromochloromethane	ug/L	U	<0.97		
9/12/06	MINISONIC	Bromodichloromethane	ug/L		6.3	80	A,W
9/12/06	MINISONIC	Bromoform	ug/L	U	<0.94	80	A,W
9/12/06	MINISONIC	Bromomethane	ug/L	U	<0.91	10	
9/12/06	MINISONIC	Carbon Tetrachloride	ug/L	U	<0.49	5	A
9/12/06	C WATER	Sulfide	mg/L	U	<2.5		
9/12/06	C WATER	Nitrogen, Nitrate	mg/L	B	0.25	10	A,N
9/12/06	C WATER	Nitrogen, Nitrite	mg/L	U	<0.040	1	A,N
9/12/06	TRUCK	Thallium	ug/L	U	<0.020	2	A
9/12/06	TRUCK	Vanadium	ug/L		0.23	4.5	
9/12/06	TRUCK	Acenaphthene	ug/L	U	<0.0082	1300	
9/12/06	TRUCK	Acenaphthylene	ug/L	U	<0.0081	52	
9/12/06	TRUCK	Mercury - low level	ng/L		0.741	2000	A
9/12/06	TRUCK	Bicarbonate Alkalinity	mg/L		160		
9/12/06	TRUCK	Chloride	mg/L		57	250	E
9/12/06	TRUCK	Sulfate	mg/L		26	250	E
9/12/06	TRUCK	Carbonate Alkalinity	mg/L	U	<1.7		
9/12/06	TRUCK	Fluoride	mg/L		0.96		
9/12/06	TRUCK	Nitrogen, Ammonia	mg/L	U	<0.20	10	N
9/12/06	TRUCK	Chloroform	ug/L		56	80	A,W
9/12/06	TRUCK	Bromodichloromethane	ug/L		7.2	80	A,W
9/12/06	TRUCK	Xylenes, m + p	ug/L	U	<1.8	280	E
9/12/06	TRUCK	Toluene	ug/L		1.4	790	E
9/12/06	TRUCK	1,2,3-Trichloropropane	ug/L	U	<0.99	42	
9/12/06	TRUCK	Dichlorodifluoromethane	ug/L	U	<0.99	1700	
9/12/06	TRUCK	1,2,4-Trichlorobenzene	ug/L	U	<0.97	70	A
9/12/06	TRUCK	1,2,4-Trimethylbenzene	ug/L	U	<0.97	63	E
9/12/06	TRUCK	Bromochloromethane	ug/L	U	<0.97		
9/12/06	TRUCK	Chloroethane	ug/L	U	<0.97	430	
9/12/06	TRUCK	t-Butylbenzene	ug/L	U	<0.97	80	
9/12/06	TRUCK	1,4-Dichlorobenzene	ug/L	U	<0.95	75	A
9/12/06	TRUCK	Bromoform	ug/L	U	<0.94	100	A,W
9/12/06	TRUCK	n-Butylbenzene	ug/L	U	<0.93	80	
9/12/06	TRUCK	1,1,1,2-Tetrachloroethane	ug/L	U	<0.92	77	
9/12/06	TRUCK	Bromomethane	ug/L	U	<0.91	10	
9/12/06	TRUCK	1,1,1-Trichloroethane	ug/L	U	<0.90	200	A
9/12/06	TRUCK	Calcium	ug/L		50300		
9/12/06	TRUCK	s-Butylbenzene	ug/L	U	<0.89	80	
9/12/06	TRUCK	Cobalt	ug/L		0.078	40	
9/12/06	TRUCK	trans-1,2-Dichloroethene	ug/L	U	<0.89	100	A
9/12/06	TRUCK	Silver	ug/L	U	<0.043	34	
9/12/06	TRUCK	chloropropane	ug/L	U	<0.87	0.2	A
9/12/06	TRUCK	Antimony	ug/L	J	0.065	6	A
9/12/06	TRUCK	1,3-Dichlorobenzene	ug/L	U	<0.87	6.6	
9/12/06	TRUCK	Magnesium	ug/L		14400	400000	
9/12/06	TRUCK	Styrene	ug/L	U	<0.86	100	A
9/12/06	TRUCK	Boron	ug/L		16.2	500	F
9/12/06	TRUCK	2-Chlorotoluene	ug/L	U	<0.85	150	
9/12/06	TRUCK	Sodium	ug/L		29900	120000	
9/12/06	TRUCK	1,2-Dichlorobenzene	ug/L	U	<0.83	600	A

Prepared By: JSL
Checked By: SVF

Table 4-4
Water Truck Sample Results

Event Date	Location	Parameter	Units	Flag	Result	Residential Commercial I Drinking Water Criteria	Residential Commercial Code
9/12/06	TRUCK	Beryllium	ug/L	U	<0.017	4	A
9/12/06	TRUCK	1,3,5-Trimethylbenzene	ug/L	U	<0.83	72	E
9/12/06	TRUCK	Potassium	ug/L		1440		
9/12/06	TRUCK	cis-1,2-Dichloroethene	ug/L	U	<0.83	70	S
9/12/06	TRUCK	Cadmium	ug/L	U	<0.017	5	A
9/12/06	TRUCK	xylenes, o	ug/L	U	<0.83	280	E
9/12/06	TRUCK	Barium	ug/L		14.6	2000	A
9/12/06	TRUCK	Bromobenzene	ug/L	U	<0.82	18	
9/12/06	TRUCK	Iron	ug/L		146	300	E
9/12/06	TRUCK	Chlorodibromomethane	ug/L	U	<0.81	100	A,W
9/12/06	TRUCK	Arsenic	ug/L		1.1	10	
9/12/06	TRUCK	n-Propylbenzene	ug/L	U	<0.81	80	
9/12/06	TRUCK	Zinc	ug/L		16.8	2400	
9/12/06	TRUCK	Fluorotrichloromethane	ug/L	U	<0.79	2600	
9/12/06	TRUCK	Total Hardness	ug/L		185000		
9/12/06	TRUCK	Diisopropyl Ether	ug/L	U	<0.76	30	
9/12/06	TRUCK	Aluminum	ug/L		7.7	50	V
9/12/06	TRUCK	1,1-Dichloroethane	ug/L	U	<0.75	880	
9/12/06	TRUCK	Lithium	ug/L		2.1	170	
9/12/06	TRUCK	1,1-Dichloropropene	ug/L	U	<0.75		
9/12/06	TRUCK	Manganese	ug/L		4.7	50	E
9/12/06	TRUCK	1,2,3-Trichlorobenzene	ug/L	U	<0.74		
9/12/06	TRUCK	Selenium	ug/L	J	0.36	50	A
9/12/06	TRUCK	4-Chlorotoluene	ug/L	U	<0.74		
9/12/06	TRUCK	Copper	ug/L		2.6	1000	E
9/12/06	TRUCK	Naphthalene	ug/L	U	<0.74	520	
9/12/06	TRUCK	Molybdenum	ug/L		0.34	73	
9/12/06	TRUCK	Ethylbenzene	ug/l	J	0.71	74	E
9/12/06	TRUCK	Chromium	ug/L	J	0.16	100	A
9/12/06	TRUCK	Hexachlorobutadiene	ug/L	U	<0.67	15	
9/12/06	TRUCK	Nickel	ug/L		0.56	100	A
9/12/06	TRUCK	p-Isopropyltoluene	ug/L	U	<0.67		
9/12/06	TRUCK	Lead	ug/L		0.43	4	L
9/12/06	TRUCK	2,2-Dichloropropane	ug/L	U	<0.62		
9/12/06	TRUCK	1,3-Dichloropropane	ug/L	U	<0.61	8.5	
9/12/06	TRUCK	Methy T-Butyl ether	ug/L	U	<0.61	40	E
9/12/06	TRUCK	Dibromomethane	ug/L	U	<0.60	80	
9/12/06	TRUCK	Isopropylbenzene	ug/L	U	<0.59	800	
9/12/06	TRUCK	1,1-Dichloroethene	ug/L	U	<0.57	7	A
9/12/06	TRUCK	1,2-Dibromoethane	ug/L	U	<0.56		
9/12/06	TRUCK	Carbon Tetrachloride	ug/L	U	<0.49	5	A
9/12/06	TRUCK	Trichloroethene	ug/L	U	<0.48	5	A
9/12/06	TRUCK	1,2-Dichloropropane	ug/L	U	<0.46	5	A
9/12/06	TRUCK	Tetrachloroethene	ug/L	U	<0.45	5	A
9/12/06	TRUCK	Methylene Chloride	ug/L	U	<0.43	5	A
9/12/06	TRUCK	1,1,2-Trichloroethane	ug/L	U	<0.42	5	A
9/12/06	TRUCK	Benzene	ug/L	U	<0.41	5	A
9/12/06	TRUCK	Chlorobenzene	ug/L	U	<0.41	100	A
9/12/06	TRUCK	1,2-Dichloroethane	ug/L	U	<0.36	5	A
9/12/06	TRUCK	Chloromethane	ug/L	U	<0.24	260	
9/12/06	TRUCK	1,1,2,2-Tetrachloroethane	ug/L	U	<0.20	8.5	

Prepared By: JSL
Checked By: SVF

Table 4-4
Water Truck Sample Results

Event Date	Location	Parameter	Units	Flag	Result	Residential Commercial I Drinking Water Criteria	Residential Commercial Code
9/12/06	TRUCK	cis-1,3-Dichloropropene	ug/L	U	<0.19	8.5	
9/12/06	TRUCK	trans-1,3-Dichloropropene	ug/L	U	<0.19	8.5	
9/12/06	TRUCK	Vinyl Chloride	ug/L	U	<0.18	2	A
9/12/06	TRUCK	Benzo (g,h,i) perylene	ug/L	U	<0.019	1.0	M
9/12/06	TRUCK	Benzo (k) Fluoranthene	ug/l	U	<0.019	1.0	M
9/12/06	TRUCK	Chrysene	ug/L	U	<0.019	1.6	S
9/12/06	TRUCK	Dibenzo (a,h) anthracene	ug/l	U	<0.019	2	M
9/12/06	TRUCK	Indeno (1,2,3 - cd) pyrene	ug/l	U	<0.019	2	M
9/12/06	TRUCK	Benzo (a) pyrene	ug/L	U	<0.018	5	A
9/12/06	TRUCK	Benzo (a) anthracene	ug/L	U	<0.016	2.1	
9/12/06	TRUCK	Benzo (b) Fluoranthene	ug/L	U	<0,016	1.5	S,AA
9/12/06	TRUCK	Fluoranthene	ug/L	U	<0.015	210	S
9/12/06	TRUCK	Pyrene	ug/L	U	<0.015	140	S
9/12/06	TRUCK	Anthracene	ug/L	U	<0.012	43	S
9/12/06	TRUCK	Naphthalene	ug/L	U	<0.012	520	
9/12/06	TRUCK	2-Methyl naphthalene	ug/L	U	<0.011	260	
9/12/06	TRUCK	Phenanthrene	ug/L	U	<0.011	52	
9/12/06	TRUCK	1-Methyl-naphthalene	ug/L	U	<0.010		
9/12/06	TRUCK	Fluorene	ug/L	U	<0.0091	880	
9/12/06	WATER	Sulfide	mg/L	U	<2.5		
9/12/06	WATER	Nitrogen, Nitrate	mg/L	B	0.39	10	A,N
9/12/06	WATER	Nitrogen, Nitrite	mg/L	U	<0.040	1	A,N

Notes: mg/L - milligrams/liter

ug/L - micrograms/liter

U = The analyte was not detected at or above the reporting limit

< = The analyte was not detected at or above the reporting limit

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Nat Res & EPA Act, 1994 PA 451, as amended.

A = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

W = Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the MI drinking water standard of 80 ug/L. Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criterion of 1,600 ug/kg.

M = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

S = Criterion defaults to the hazardous substance-specific water solubility limit.

N = The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 ug/L. Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5 ug/kg.

F = Criterion is based on adverse impacts to plant life and phytotoxicity.

V = Criterion is the aesthetic drinking water value as required by Section 20120(a)(5) of the NREPA. Concentrations up to 200 ug/L may be acceptable, and still allow for drinking water use, as part of a site-specific cleanup under Section 20120a(2) of the NREPA.

L = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specified rules.
Water results were compared to the Res/Comm I DW Criteria Res/Comm I DW criteria source: MDEQ Part 201 Generic cleanup criteria screening levels.

J = Concentration detected equal to or greater than the method detection limit but less than the reporting limit.

B = Inorganic - The analyte has been detected between the method detection limit and the reporting limit.

ng/L = nanograms/liter

Prepared By: JSL
Checked By: SVF

Table 4-5
Groundwater Quality Monitoring Program
Inorganic Parameter List

Parameter	Analytical Method	Target Detection Limit[1]	Units
Field			
Groundwater Elevation	Field	NA	ft MSL
Temperature	Field	NA	°C
D.O.	EPA-360.1	NA	mg/l
Specific Conductance	Field	NA	umhos/cm
Redox	Field	NA	mV
pH	EPA-9040C	NA	S.U.
Turbidity	Field	NA	--
Metals			
Aluminum	EPA-200.7/6020	50	ug/l
Antimony	EPA-200.8/6020	2.0	ug/l
Arsenic	EPA-200.8/6020	5.0	ug/l
Barium	EPA-200.8/6020	100	ug/l
Beryllium	EPA-200.8/6020	1.0	ug/l
Boron	EPA-200.8/6020	300	ug/l
Cadmium	EPA-200.8/6020	1.0	ug/l
Chromium	EPA-200.8/6020	10	ug/l
Copper	EPA-200.8/6020	4.0	ug/l
Cobalt	EPA-200.8/6010B	20	ug/l
Iron	EPA-200.7/6020	200	ug/l
Lead	EPA-200.8/6020	3.0	ug/l
Lithium	EPA-200.7/6020	10	ug/l
Manganese	EPA-200.8/6020	50	ug/l
Molybdenum	EPA-200.8/6020	50	ug/l
Nickel	EPA-200.8/6020	20	ug/l
Selenium	EPA-200.8/6020	5.0	ug/l
Silver	EPA-200.8/6020	0.2	ug/l
Zinc	EPA-200.8/6020	10	ug/l
Mercury (low level)	EPA-1631E	1	ng/l
Thallium	EPA-200.8/6020	2	ug/L
Vanadium	EPA-200.8/6020	4	ug/L
Anions			
Alkalinity, Bicarbonate	310.1/SM 2320 B	2.0	mg/l
Alkalinity, Carbonate	310.1/SM 2320 B	2.0	mg/l
Chloride	EPA-325.2/300.1	10	mg/l
Fluoride	EPA-300.1	1.0	mg/l
Nitrate	EPA-353.2/300.1	100	ug/l
Nitrite	EPA-353.2 /300.1	100	ug/l
Nitrogen, Ammonia	350.1/4500 NH36	25	ug/l
Sulfate	EPA-300.1	1	ug/l
Sulfide	376.1	0.2	mg/l

Table 4-5 *(cont'd)*

Parameter	Analytical Method	Target Detection Limit[1]	Units
Cations			
Calcium	EPA-200.7/6010B	NL	mg/l
Sodium	USEPA-6010B	1.0	mg/l
Magnesium	EPA-200.7/6010B	1.0	mg/l
Potassium	EPA-200.7/6010B	0.50	mg/l
Others			
Cyanide	USEPA-9012	5	ug/l
Hardness (calc) as CaCO3	SM 2340B	NL	mg/l

1 Per MDEQ RRD Operational Memorandum No. 2
NL – not listed in RRD Operational Memorandum No. 2
NA – not applicable
ft MSL – feet mean sea level
°C – Degrees Celsius
mg/L – milligrams/liter
umhos/cm – micromhos/centimeter
mV = millivolt
SU = standard unit
ug/L – micrograms/liter
EPA – Environmental Protection Agency
US – United States
DO – dissolved oxygen

Prepared by: JSL
Checked by: JSK

Table 4-6
Groundwater Quality Monitoring Program
Volatile Organic Compounds Parameter List

Parameter	Analytical Method	Target Detection Limit[1]	Units
1,1,1-Trichloroethane	SW846 8260B	1	ug/l
1,1,2,2-Tetrachloroethane	SW846 8260B	1	ug/l
1,1,2-Trichloroethane	SW846 8260B	1	ug/l
1,1-Dichloroethane	SW846 8260B	1	ug/l
1,1-Dichloroethene	SW846 8260B	1	ug/l
1,2-Dichloroethane	SW846 8260B	1	ug/l
1,2-Dichloroethene, Total	SW846 8260B	1	ug/l
1,2-Dichloropropane	SW846 8260B	1	ug/l
2-Butanone	SW846 8260B	25	ug/l
2-Hexanone	SW846 8260B	50	ug/l
4-Methyl-2-pentanone	SW846 8260B	50	ug/l
Acetone	SW846 8260B	50	ug/l
Benzene	SW846 8260B	1	ug/l
Bromodichloromethane	SW846 8260B	1	ug/l
Bromoform	SW846 8260B	1	ug/l
Bromomethane	SW846 8260B	5	ug/l
Carbon Disulfide	SW846 8260B	5	ug/l
Carbon Tetrachloride	SW846 8260B	1	ug/l
Chlorobenzene	SW846 8260B	1	ug/l
Chlorodibromomethane	SW846 8260B	5	ug/l
Chloroethane	SW846 8260B	5	ug/l
Chloroform	SW846 8260B	1	ug/l
Chloromethane	SW846 8260B	5	ug/l
cis-1,3-Dichloropropene	SW846 8260B	1	ug/l
Ethylbenzene	SW846 8260B	1	ug/l
Methylene Chloride	SW846 8260B	5	ug/l
Styrene	SW846 8260B	1	ug/l
Tetrachloroethene	SW846 8260B	1	ug/l
Toluene	SW846 8260B	1	ug/l
trans-1,3-Dichloropropene	SW846 8260B	1	ug/l
Trichloroethene	SW846 8260B	1	ug/l
Vinyl Chloride	SW846 8260B	1	ug/l
Xylene, Total	SW846 8260B	3	ug/l

1 Per MDEQ RRD Operational Memorandum No. 2
ug/L – micrograms/liter
SW – solid waste

Prepared by: JSL
Checked by: JSK

Table 4-7
Groundwater Quality Monitoring Program
Polynuclear Aromatic Hydrocarbon Parameter List

Parameter	Analytical Method	Target Detection Limit[1]	Units
Acenaphthene	EPA 8270C (SIM)	5	ug/l
Acenaphthylene	EPA 8270C (SIM)	5	ug/l
Anthracene	EPA 8270C (SIM)	5	ug/l
Benzo(a)anthracene	EPA 8270C (SIM)	1	ug/l
Benzo(a)pyrene	EPA 8270C (SIM)	1	ug/l
Benzo(b)fluoranthene	EPA 8270C (SIM)	1	ug/l
Benzo(ghi)perylene	EPA 8270C (SIM)	1	ug/l
Benzo(k)fluoranthene	EPA 8270C (SIM)	1	ug/l
Chrysene	EPA 8270C (SIM)	1	ug/l
Dibenzo(ah)anthracene	EPA 8270C (SIM)	2	ug/l
Fluoranthene	EPA 8270C (SIM)	1	ug/l
Fluorene	EPA 8270C (SIM)	5	ug/l
Indeno(123-cd)pyrene	EPA 8270C (SIM)	2	ug/l
Naphthalene	SW 846-EPA 8260B	1.8	ug/l
Phenanthrene	EPA 8270C (SIM)	2	ug/l
Pyrene	EPA 8270C (SIM)	5	ug/l

Polychlorinated Biphenyls

Parameter	Analytical Method	Target Detection Limit[1]	Units
PCB total	EPA 8082A	0.2	ug/l

1 Per MDEQ RRD Operational Memorandum No. 2
ug/L – micrograms/liter
SIM – selected ion monitoring
EPA – Environmental Protection Agency

Prepared by: JSL
Checked by: JSK

Table 4-8
Surface Water Quality Monitoring Program
Parameter List

Parameter	Analytical Method	Method Reporting Limit	Units
Field			
Temperature	Field	NA	°C
D.O.	Field	NA	mg/l
Specific Conductance	Field	NA	umhos/cm
pH	Field	NA	S.U.
Metals			
Aluminum	EPA-200.7/6020	50	ug/l
Lithium	EPA-200.7/6020	10	ug/l
Antimony	EPA-200.8/6020	2.0	ug/l
Arsenic	EPA-200.8/6020	1.0	ug/l
Barium	EPA-200.8/6020	10	ug/l
Iron	EPA-200.7/6020	40	ug/l
Beryllium	EPA-200.8/6020	1.0	ug/l
Boron	EPA-200.8/6020	50	ug/l
Cadmium	EPA-200.8/6020	0.40	ug/l
Chromium	EPA-200.8/6020	1.0	ug/l
Copper	EPA-200.8/6020	2.0	ug/l
Cobalt	EPA-200.8/6010B	10	ug/l
Lead	EPA-200.8/6020	1.0	ug/l
Manganese	EPA-200.8/6020	10	ug/l
Molybdenum	EPA-200.8/6020	10	ug/l
Nickel	EPA-200.8/6020	1.2	ug/l
Selenium	EPA-200.8/6020	4.0	ug/l
Silver	EPA-200.8/6020	0.4	ug/l
Zinc	EPA-200.8/6020	10	ug/l
Mercury	EPA-1631E	0.25	ng/l
Thallium	EPA-200.8/6020	1.2	ug/l
Vanadium	EPA-200.8/6020	1.2	ug/l
Anions			
Alkalinity, Bicarbonate	310.1/SM 2320 B	2.0	mg/l
Alkalinity, Carbonate	310.1/SM 2320 B	2.0	mg/l
Chloride	325.2/4500-CLE	1.0	mg/l
Fluoride	SM 4500 F-C	0.10	mg/l
Nitrate	353.2/4500 NO3F	0.05	mg/l
Nitrite	EPA-353.2 or 354.1/4500 NO2B	0.05	mg/l
Nitrogen, Ammonia	350.1/4500 NH36	0.50	mg/l
Sulfate	EPA-375.4/4038	1.0	mg/l
Sulfide[1]	376.1/4500 S2-F	5.0	mg/l

Table 4-8 *(cont'd)*

Parameter	Analytical Method	Method Reporting Limit	Units
Cations			
Calcium	EPA-200.7/6010B	0.50	mg/l
Potassium	EPA-200.7/6010B	0.50	mg/l
Magnesium	EPA-200.7/6010B	0.50	mg/l
Sodium	EPA-200.7/6010B	0.50	mg/l
General Chemistry			
Hardness (calc) as CaCO3	EPA-6010/6020	0.002	mg/l
Total Dissolved Solids	EPA-160.1/SM 2540 C	50	mg/l
Total Suspended Solids	EPA 160.2/SM 2540 D	1.0	mg/l
Alkalinity, Total	310.1/SM 2320 B	2.0	mg/l
COD	410.4/SM 5220 D	2.0	mg/l
Carbon, Dissolved Organic	415.1/5310 D/9060	1.0	mg/l
Carbon, Total Organic	415.1/5310 D/9060	1.0	mg/l
Turbidity	EPA 180.1	10	mg/l
Gross-Alpha	703	3.0	pCi/L
Gross-Beta	703	4.0	pCi/L
Organics (BETX)			
Benzene	EPA 8260	1.0	ug/l
Ethylbenzene	EPA 8260	1.0	ug/l
Toluene	EPA 8260	1.0	ug/l
Xylene (total)	EPA 8260	3.0	ug/l
SGT-HEM; Nonpolar Material (Total Petroleum Hydrocarbons)	EPA 1664	10.0	mg/l

°C – degrees Celsius
mg/L – milligrams/liter
umhos/cm – micromhos/centimeter
S.U. – standard unit
ug/L – micrograms/liter
pCi/L – picocuries/liter
EPA – Environmental Protection Agency
SM – standard method
D.O. – dissolved oxygen

Prepared by: JSL
Checked by: JSK

Table 4-9
Sediment Quality Monitoring Program
Parameter List

Parameter	Analytical Method	Target Detection Limit	Units
Metals			
Aluminum	SW-846-6010B	1000	ug/Kg
Lithium	SW-846-6010B	400	ug/Kg
Antimony	SW-846-6010B	300	ug/Kg
Arsenic	SW-846-6010B	100	ug/Kg
Barium	SW-846-6010B	1000	ug/Kg
Iron	SW-846-6010B	5000	ug/Kg
Beryllium	SW-846-6010B	500	ug/Kg
Boron	SW-846-6010B	8000	ug/Kg
Cadmium	SW-846-6010B	200	ug/Kg
Chromium	SW-846-6010B	2000	ug/Kg
Copper	SW-846-6010B	1000	ug/Kg
Cobalt	SW-846-6010B	500	ug/Kg
Lead	SW-846-6010B	1000	ug/Kg
Manganese	SW-846-6010B	1000	ug/Kg
Magnesium	SW-846-6010B	1000	ug/Kg
Molybdenum	SW-846-6010B	1000	ug/Kg
Nickel	SW-846-6010B	1000	ug/Kg
Selenium	SW-846-6010B	200	ug/Kg
Silver	SW-846-6010B	100	ug/Kg
Zinc	SW-846-6010B	1000	ug/Kg
Mercury	SW-846-7471A	50	ug/Kg
Thallium	SW-846-6010B	500	ug/Kg
Vanadium	SW-846-6010B	1000	ug/Kg
Sulfide	SW-846 9030B	1000	ug/Kg

ug/Kg – micrograms per kilogram
SW – solid waste

Prepared by: JSK
Checked by: JSL

Table 4-10
Mill Buildings Analytical Parameters

Metal	Type of Analysis
Aluminum	Total
Antimony	Total
Arsenic	Total, TCLP
Barium	Total, TCLP
Beryllium	Total
Cadmium	Total, TCLP
Chromium	Total, TCLP
Cobalt	Total
Copper	Total
Cyanide	Total
Iron	Total
Lead	Total, TCLP
Magnesium	Total
Manganese	Total
Mercury	Total, TCLP
Nickel	Total
Selenium	Total, TCLP
Silver	Total, TCLP
Thallium	Total
Vanadium	Total
Zinc	Total

TCLP = Toxicity characteristic leaching procedure

Prepared by: JSK
Checked by: JSL

Table 4-11
Description of Stockpile Samples

Map ID	Sample ID	Field Description
1	South Storage Pile A	Small aboveground pile of material located outdoors immediately to the south of the mill building.
2	Leachate Residue Pile	Storage area located outdoors to the southeast of the mill building; sample was collected using a hand auger. Sample appearance was sand with steel pellets mixed within.
3	Shop Supersack	This material was representative of supersacks of gray material stored in the maintenance shop. One portion was coarse hard material, with the other being soft and fine.
4	Shop Bin 2	This sample was obtained from a metal bin in the maintenance shop. The sample consisted of very fine material with flour consistency.
5	Shop Bin 1	Very hard fine sandy and gravel material; very dusty. A composite was obtained by advancing two borings into the material
6	Crusher – East End #2 (EECB 2)	This material was located in the east end of the crusher building. This was a pile of material on the bare ground that was best described as coarse sandy material with a gray color.
7	Crusher – East End #1 (EECB 1)	This material was located directly on the floor in the east end of the crusher building. The material was finely ground material with a gray color that was similar in consistency to sand. Although located in the same vicinity, this material is visibly different from that described for EECB 2.
8	Crusher – East End #4 (EECB 4)	This material was located in the east end of the crusher building. It consisted of light gray gravel sized chunks. The consistency was very dusty.
9	Crusher – East End #3 (EECB 3)	This is a large pile of material located in the central to east end of the crusher building. The majority of the material is dark gray to yellow, with iron pellets mixed within.
10	Crusher – Floor	This is a composite of floor material from eight different locations near the center to east end of the crusher building. The sample appearance was coarse black sand and gravel with pyrite-looking fragments.
11	Mill Basement Floor	This is a composite of floor material in the lower level of the mill building. It is described as being gray to black mixed with floury-like material seen in other bags throughout the mill.
12	Gold Contact	This material is located in the mill basement approximately in the south center of the building. It is a small pile on the floor. It is best described as a fine white powder.
13	Mill Basement Bin	This material is located in a bin in the lower level of the mill building. It is best described as medium grain brown sandy-type material with a hard crust.
14	Active Mill Product	This material is located in the east portion of the main mill on the first floor. This was a sample of black fine powder from one of eight open 55-gallon drums.

Table 4-11 *(cont'd)*

Map ID	Sample ID	Field Description
15	Filter Press Floor	This material was collected from the floor in the vicinity of the filter presses. The presses were generally located on the first floor of the mill near the south side. The material can be best described as coarse hard brown sand-sized particles.
16	Concrete Mill Floor	This sample was obtained on the west side of the main building. This is a composite of light gray material and black rocky material mixed together that has been spilled on the ground throughout this particular area.
17	Mill Hopper	This sample was collected from a hopper on the main floor of the mill building. The sample can be described as gray powder mixed with some sand-type material.
18	Mill Supersacks	This sample was a composite obtained from supersacks stored in the west portion of the mill building on the main floor. It is representative of up to 22 supersacks being stored in this area. Some of the bags are split and material has spilled on the ground.
19	Mill RR Floor	This is a composite of floor material that has collected in the northwest portion of the main mill building. It is located generally in the area of railroad tracks that once served this area. The sample can best be described as being medium brown sand with gravel.
20	Lunch Room Slag	This sample was obtained from deteriorated fiber drums located in the former lunch room area near the offices. It appears to be fire assay waste from former on-site laboratory operations. Rainwater has come into contact with the drums and caused yellow staining on the floor.

Prepared by: CED1
Checked by: JSL

Table 5-1
2006 Soil Results - Exceedances

Event Date	Parameter	Units	Data Level	Location Name	HA-1-BP	HA-2-BP	HA-3-BP	HA-1	HA-2	HA-2 (dup)	HA-3	KMW-1	KMW-2	KMW-3	KMW-4	KMW-5	KMW-6	KMW-6A	KMW-7	KMW-9P	KMW-10	KSB-1	KSB-3	KSB-3	KSB-4	KSB-4
				Field ID	HA-1	HA-2	HA-3	HA-1	HA-2	DUP	HA-3	KMW-1-3-4'	KMW-2-9-9	KMW-3-6-7'	KMW-4P 12'-14'	KMW-5-14'-14_5'	KMW-6-4-9'	KMW-6A-3-4	KMW-7 S-1	KMW-9P S-3	KMW-10-0_9-4'	KSB-1-3	KSB-3-1	KSB-3-3,4'-6'	KSB-4-1	KSB-4-4
				Depth (ft)								3-4'	9-9.5	6-7'	12-14'	14-14.5	4-9'	3-4	0-5	9-14'	0.9-4'	3	1	4-6	1	4
6/6/2006	Metal																									
	Arsenic	mg/kg	Tier 1		**320**	**60**	**32**																			
	Nickel	mg/kg	Tier 1		**300**	34	27																			
	Silver	mg/kg	Tier 1		**18**	3.4	<1.0																			
9/12/2006	Metal																									
	Aluminum	mg/kg	Tier 1									**5230**	**7840**	**8780**	**15600**	**4130**	**1340**	**2100**	**5300**	**3980**	**3140**	**18000**	**19000**		**21000**	
	Antimony	mg/kg	Tier 1									**21.9**	0.4	0.17	0.19	0.16	0.29	0.35	0.25	0.11	0.12	0.11 B	0.82		0.93	
	Arsenic	mg/kg	Tier 1									2.1	**8.9**	**6.9**	**5.1**	2.1	**9.4**	**12**	**7.3**	4	4.3	**4.7**	3.6		3	
	Boron	mg/kg	Tier 1									<3.3 U	3.6	3.2	4.8	2.1 J	1.8 J	<3.3 U	<5.4 U	2.1	2.7	**12**	**12**		**13**	
	Cobalt	mg/kg	Tier 1									**8.1**	**7.3**	**8.2**	**10.8**	**6**	**8.4**	**8.5**	**4.9**	**3.9**	**4.1**	**14**	**9.8**		**13**	
	Iron	mg/kg	Tier 1									**28800**	**17900**	**23800**	**46100**	**9080**	**69700**	**30000**	**45000**	**11000**	**11400**	**27000**	**25000**		**27000**	
	Lead	mg/kg	Tier 1									13.6	5	3.6	6.1	2.2	**889**	**12000**	24	1.3	2	8	7.5		7.7	
	Lithium	mg/kg	Tier 1									**6.2**	**7.8**	**10.1**	**14.5**	**3.9**	2.2	2.7	**7.8**	**4.9**	**4.6**	**11**	3		**5.2**	
	Magnesium	mg/kg	Tier 1									2370	2780	3840	6210	1430	983	1100	3450	2060	1860	**13000**	**13000**		**14000**	
	Manganese	mg/kg	Tier 1									**211**	**191**	**461**	**247**	**201**	**298**	**300**	**205**	**71.5**	**167**	**470**	**390**		**480**	
	Molybdenum	mg/kg	Tier 1									<0.33 U	**2.7**	0.59	**2.1**	0.43	**2.1**	**3.3**	**1.5**	0.63	1.4	0.87 B	0.71 B		1.0 B	
	Nickel	mg/kg	Tier 1									14	27.8	21.7	33	13.5	29.5	14	22.4	13.2	10.8	32	29		35	
	Selenium	mg/kg	Tier 1									<0.33 U	<0.26 U	<0.25 U	<0.23 U	<0.054 U	<0.27 U	0.3	<0.27 U	<0.23 U	<0.26 U	0.19 B	<0.19 U		<0.20 U	
	Silver	mg/kg	Tier 1									<0.22 U	0.24	0.29	0.12 J	0.9	0.25	0.037 B	<0.11 U	0.63	0.82	<0.014 U	0.5		0.11 B	
	Thallium	mg/kg	Tier 1									<0.44 U	0.056 J	0.065 J	0.11	<0.054 U	<0.054 U	0.011 B	<0.054 U	<0.045 U	<0.051 U	0.071 B	<0.016 U		0.059 B	
	Zinc	mg/kg	Tier 1									20.1	28.8	20.2	58.7	9.3	35.7	19	34.B	11.2	14.4	57	51		56	
	Inorganics																									
	Cyanide, total	mg/kg	Tier 1									<0.16 U	<0.24 U	<0.21 U	<0.37 U	<0.28 U	<0.28 U	<0.17 U	<0.22 U	<0.13 U	<0.26 U	<0.22 U	<0.21 U		<0.31 U	
	VOC																									
	1,2,4-Trimethylbenzene	ug/Kg	Tier 1					<30 U	**35000**	**15000**	<23 U	34 J	<21 U									<21 U		<20 U		**5600**
	1,3,5-Trimethylbenzene	ug/Kg	Tier 1					<14 U	**27000**	**11000**	<11 U	<10 U	<10 U									<10 U		<9.9 U		1600
	n-Propylbenzene	ug/Kg	Tier 1					<16 U	**2500**	1000	<12 U	67	<11 U									<11 U		<11 U		660
	s-Butylbenzene	ug/Kg	Tier 1					<13 U	**2300**	880	<9.7 U	600	<8.9 U									<8.7 U		<8.6 U		520

Prepared by: SVF
Checked by: JSL

Table 5-1
2006 Soil Results - Exceedances

Event Date	Parameter	Units	Data Level	Location Name	KSB-5	KSB-6	KSB-7	KSB-8	KSB-9	KSB-10	KSB-11	KSB-12	KSB-13	KSB-14	KSB-15	KSB-16	KSB-18	KSB-18 (dup)	KSB-19	KSB-19 (dup)	KSB-19	MW-601	MW-603	MW-606
				Field ID	KSB-5-5_7-8_5'	KSB-6-0-1_6'	KSB-7-4-5'	KSB-8-0-2	KSB-9-3	KSB-10-3	KSB-11-1	KSB-12-6-9'	KSB-13-S-2	KSB-14-11_5-12'	KSB-15-3_5-4'	KSB-16-0-4	KSB-18-0-4	DUP-10-2	KSB-19-2-4	DUP-10-4A	KSB-19-5'-7'	MW-601-8'-9'	MW-603-14-16	MW-606-14-16
				Depth (ft)	5.7-8.5	0-1.6	4-5	0-2	3	3'	1	6-9	4-9'	11.5-12	3.5-4	0-4	0-4	0-4	2-4	2-4	5-7	9-9	14-16	14-16
6/6/2006	Metal																							
	Arsenic	mg/kg	Tier 1																					
	Nickel	mg/kg	Tier 1																					
	Silver	mg/kg	Tier 1																					
9/12/2006	Metal																							
	Aluminum	mg/kg	Tier 1		5960	5570	16000	2000	1910	2250	4590	5170	3270	17900	10800	8000	2000	1100	8400	9500		9000	2000	2200
	Antimony	mg/kg	Tier 1		13.7	35.8	0.34	37	54.7	65.3	79.1	0.33	27.8	0.044 J	0.18	180	2.6	2	0.31	0.36		0.36	0.13	0.099 B
	Arsenic	mg/kg	Tier 1		1.1	<0.28 U	23.7	39	<0.28 U	13.3	<0.3 U	9.2	150	2.7	2.8	420	15	15	5.1	5		11	5.3	0.94
	Boron	mg/kg	Tier 1		<3.2 U	<3.7 U	13.1	<3.5 U	<3.7 U	<3.6 U	<4 U	4.3	5.3	3.8	2.6	<3.9 U	<3.7 U	<3.6 U	<3.7 U	<3.7 U		<3.6 U	3.5	<4.0 U
	Cobalt	mg/kg	Tier 1		10.4	8.2	28.5	11	8.7	4.5	8.6	6.5	103	19.8	12.6	260	4.1	2.5	5.7	7.2		7.3	4.5	3.2
	Iron	mg/kg	Tier 1		20100	61200	60300	33000	77600	104000	123000	59100	102000	31800	34600	200000	24000	22000	15000	18000		20000	35600	16000
	Lead	mg/kg	Tier 1		9.2	14.6	9.4	110	12.2	10.7	51.2	8.6	282	3.9	5.4	330	14	7.8	3.2	3.2		5.2	1.2	1
	Lithium	mg/kg	Tier 1		5.8	4.8	18.4	4.6	0.97	1.4	6	7.2	3.9	29.4	15.6	6.6	3.1	4.2	7.9	7.5		9.6	3.5	4.8
	Magnesium	mg/kg	Tier 1		2060	1880	7590	2500	632	1060	3650	2620	4270	12700	7600	10000	1200	580	3500	4200		4600	890	1200
	Manganese	mg/kg	Tier 1		7830	283	637	63	331	204	2570	323	99.4	321	265	120	97	69	180	200		270	98.2	160
	Molybdenum	mg/kg	Tier 1		<0.32 U	<0.37 U	9.6	55	<0.37 U	<0.36 U	<0.4 U	1.3	111	0.63	2.2	220	5.4	2.8	0.50 B	0.41 B		1.4	0.75	0.87 B
	Nickel	mg/kg	Tier 1		22	13.8	104	66	31.4	11.8	53.8	17.7	223	54.9	49.7	740	11	8.7	14	14		20	11.3	12
	Selenium	mg/kg	Tier 1		3.2	<0.37 U	0.35 J	0.95	<0.37 U	<0.36 U	<0.4 U	<0.27 U	3	<0.22 U	<0.25 U	6.2	0.31	0.3	0.18	0.19		0.23	<0.3 U	0.29
	Silver	mg/kg	Tier 1		1.4	<0.25 U	0.23	9.3	0.5	0.3 J	1.1	0.98	17	0.71	0.25	36	0.68	0.47	0.041 B	0.063		0.045 B	0.23 J	0.034 B
	Thallium	mg/kg	Tier 1		3.3	<0.49 U	0.3	0.027 B	<0.5 U	<0.48 U	<0.54 U	<0.053 U	0.046 J	0.23	<0.05 U	0.069 B	<0.0067 U	<0.0066 U	0.049 B	0.068 B		0.096 B	<0.059 U	<0.0074 U
	Zinc	mg/kg	Tier 1		29.7	30.2	153	52	52.3	12.2	109	20.7	49.2	40.5	59.2	170	13	8.7	19	23		35	6.1	9.9
	Inorganics																							
	Cyanide, total	mg/kg	Tier 1		<0.21 U	<0.16 U	<0.20 U	2.9	<0.16 U	<0.15 U	0.44	<0.29 U	<0.21 U	<0.22 U	0.27 B	37	14	12	<0.26 U	<0.20 U		<0.23 U	<0.25 U	<0.21 U
	VDC																							
	1,2,4-Trimethylbenzene	ug/Kg	Tier 1		<22 U	<21 U	<21 U							<21 U	730						<21 U	<21 U		
	1,3,5-Trimethylbenzene	ug/Kg	Tier 1		<11 U	<10 U	<10 U							<10 U	210						<10 U	<10 U		
	n-Propylbenzene	ug/Kg	Tier 1		<12 U	<11 U	<11 U							<11 U	120						<11 U	<11 U		
	s-Butylbenzene	ug/Kg	Tier 1		<9.4 U	<8.9 U	<8.9 U							<9.0 U	79						<8.7 U	<8.8 U		

Table 5-1
2006 Soil Results - Exceedances

Event Date	Parameter	Units	Data Level	Location Name	P-602	P-604	SB-607	SB-608	SB-609	SB-610A	SB-611	SB-612	SB-613	SB-614	SB-615	SB-616	SB-617	SB-618	SB-618 (dup)	SB-619	SB-620	SB-621	SB-622
				Field ID	P-602-14-16	P-604-9-14	SB607S-2,2'-2_9'	SB808S-2,2'-3_1'	SB-609-S-8	SB-610A-S-5A	SB-611-S-3	SB-612-S-3	SB-613-S-4	SB-614-S-4	SB-615-S-6	SB-616-2-4	SB617-4-7'	SB-618-8-9	DUP-10-3	SB-619-3-9	SB-620 S-4	SB-621 S-3	SB-622-S-2
				Depth (ft)	14-16	9-14	2-2.9	2-3.1	14-16	12-14	4-6	4-6	6-8	6-6	10-12	2-4	4-7	8-9	8-9	3-9	19-21	14-16	2-9
6/6/2006	Metal																						
	Arsenic	mg/kg	Tier 1																				
	Nickel	mg/kg	Tier 1																				
	Silver	mg/kg	Tier 1																				
9/12/2006	Metal																						
	Aluminum	mg/kg	Tier 1		**2400**	**11000**	**10000**	**9600**	**7690**	**4530**	**4460**	**3190**	**9700**	**6870**	**2620**	**11000**	**1940**	**10000**	**7800**	**1600**	**3280**	**1340**	**4500**
	Antimony	mg/kg	Tier 1		0.11 B	0.38	0.34	0.25 B	**26**	**7.7**	**6.5**	**20.8**	**18.7**	**9.9**	**50.6**	0.3	0.067 J	0.24	0.27	0.32	<0.061 U	<0.049 U	**18.8**
	Arsenic	mg/kg	Tier 1		0.71	**6.4**	2.3 B	**25**	**8.2**	<0.32 U	0.37 J	<0.25 U	4.2	<0.3 U	<0.3 U	2.7	0.75	**5**	**5.7**	1.7	1.3	0.83	<0.28 U
	Boron	mg/kg	Tier 1		<4.4 U	<4.1 U	3.3 B	4.4 B	<3.6 U	<4.3 U	<3.5 U	<3.4 U	<3.7 U	<4 U	<4 U	9.6 B	5.7	<3.6 U	<3.6 U	<3.5 U	4.6	2.9	<3.7 U
	Cobalt	mg/kg	Tier 1		**3**	**9.6**	**9.9**	**5.8**	**9.8**	**3.6**	**3.1**	**3.8**	**6.4**	**6.1**	**8.3**	**18**	**2**	**8.3**	**7**	**1.8**	**3.6**	**1.9**	**4.8**
	Iron	mg/kg	Tier 1		**12000**	**33000**	**28000**	**32000**	**32000**	**9280**	**7690**	**25000**	**20400**	**10700**	**64300**	**33000**	**12800**	**21000**	**16000**	**14000**	**20700**	**15600**	**21500**
	Lead	mg/kg	Tier 1		0.77	4	4.2	9.2	5.3	3.2	3.7	5.1	6.1	4.2	11.4	2.2	2.2	3	2.8	1.9	1.2	1.5	4.6
	Lithium	mg/kg	Tier 1		**6.3**	**18**	**4.3**	**16**	**4.4**	1.1	2.1	0.81	**5.5**	3.3	3.2	**23**	**5.1**	**7.8**	**8.6**	**4.2**	**6.5**	**4.2**	**16.9**
	Magnesium	mg/kg	Tier 1		1100	5900	6000	5300	5010	1530	1350	1400	3330	1830	1680	**7100**	884	5200	4200	600	1390	757	2010
	Manganese	mg/kg	Tier 1		**130**	**170**	**320**	**210**	**403**	**79.5**	**60.1**	**122**	**216**	**125**	**360**	**480**	**33**	**380**	**460**	**77**	**152**	**78.5**	**120**
	Molybdenum	mg/kg	Tier 1		0.76 B	1.2 B	0.96 B	**4.4**	<0.36 U	<0.43 U	<0.35 U	<0.34 U	<0.37 U	<0.4 U	<0.4 U	0.57 B	1.2	0.54 B	0.66 B	1.3	0.55	0.44	<0.37 U
	Nickel	mg/kg	Tier 1		9.3	36	19	33	18	11.6	8.4	8.3	18.4	10.4	16.3	27	5.8	18	16	6.2	9.6	4.7	11.2
	Selenium	mg/kg	Tier 1		0.42	<0.086 U	<0.21 U	<0.18 U	<0.36 U	<0.43 U	<0.35 U	<0.34 U	<0.37 U	<0.4 U	<0.4 U	0.2	0.23 J	0.21	0.24	0.17	<0.31 U	<0.24 U	<0.37 U
	Silver	mg/kg	Tier 1		0.041 B	0.010 B	0.061 B	0.024 B	<0.24 U	<0.29 U	<0.23 U	<0.23 U	<0.25 U	<0.26 U	<0.27 U	0.037 B	0.17	0.025 B	0.032 B	0.065	0.14 J	0.18 J	<0.25 U
	Thallium	mg/kg	Tier 1		<0.0080 U	0.16	0.070 B	0.14 B	<0.48 U	<0.58 U	<0.47 U	<0.45 U	<0.5 U	<0.53 U	<0.53 U	0.047 B	<0.041 U	0.074 B	0.081 B	<0.0063 U	<0.061 U	<0.049 U	<0.49 U
	Zinc	mg/kg	Tier 1		12	26	50	29	28.9	11.9	17.1	18.8	17.5	14.3	10.6	24	2.7 J	27	22	4.9	7.9	5.1	12.8
	Inorganics																						
	Cyanide, total	mg/kg	Tier 1		<0.25 U	<0.15 U	<0.21 U	<0.27 U	<0.25 U	<0.31 U	<0.30 U	<0.22 U	<0.25 U	<0.28 U	<0.17 U	<0.27 U	<0.22 U	<0.17 U	<0.28 U	<0.20 U	<0.23 U	<0.16 U	<0.23 U
	VOC																						
	1,2,4-Trimethylbenzene	ug/Kg	Tier 1																				
	1,3,5-Trimethylbenzene	ug/Kg	Tier 1																				
	n-Propylbenzene	ug/Kg	Tier 1																				
	s-Butylbenzene	ug/Kg	Tier 1																				

Table 5-1
2006 Soil Results - Exceedances

Event Date	Parameter	Units	Data Level	Location Name	SB-622 (dup)	SB-623	SB-624	SB-625	SB-626	SB-627	SB-628	SB-628	SB-629	SB-630	SB-631	SB-632	SB-633	SB-634	SB-635	SB-636	SB-637	SB-637 (dup)	SB-638
				Field ID	DUP-15	SB-623-S-3	SB-624-0-4	SB-625-1-3	SB-626 S-3	SB627-24-26'	SB628-14-16'	SB628-29-31'	SB-629 14-16'	SB-630 14-16'	SB-631 14-16'	SB-632-14-16'	SB-633-5-7'	SB-634-14-16'_	SB-635 S-3	SB-636-4-6'	SB-637-S-7	DUP-13	SB-638 9'-11'
				Depth (ft)	2-9	S-3	0-4	1-3	14-16	24-26	14-16	29-31	14-16	14-16	14-16	14-16	5-7	14-16	14-16	4-6	12-14	12-14	9-11
6/6/2006	**Metal**																						
	Arsenic	mg/kg	Tier 1																				
	Nickel	mg/kg	Tier 1																				
	Silver	mg/kg	Tier 1																				
9/12/2006	**Metal**																						
	Aluminum	mg/kg	Tier 1		**4700**	**3000**	**3800**	**5500**	**1710**	**2450**	**5640**	**1800**	**1920**	**3570**	**3530**	**2750**	**2380**	**4140**	**4140**	**2780**	**3920**	**3400**	**3630**
	Antimony	mg/kg	Tier 1		0.61	**17.1**	0.36	0.11	0.072 J	0.047 J	0.27	0.051 J	0.1 J	0.074 J	0.06 J	0.11 J	**22**	**31.5**	0.12	0.059 J	**46.2**	0.29	0.072 J
	Arsenic	mg/kg	Tier 1		3.8	<0.29 U	**8.8**	2.2	**5**	1.1	2.6	0.94	1.3	1.5	0.8	0.92	<0.27 U	<0.3 U	1.5	1	<0.32 U	1.2	0.98
	Boron	mg/kg	Tier 1		<3.4 U	<3.8 U	<3.7 U	<3.4 U	6.1 J	6.1	4.6	2.8	1.6 J	5.8	6.7	2.5	<3.6 U	<4.1 U	2.8	1.3 J	<4.2 U	4.2 B	<5.7 U
	Cobalt	mg/kg	Tier 1		**8.6**	**2.4**	**8.1**	**9.6**	**5.4**	**2.7**	**8**	**2.8**	**3.8**	**4**	**7.3**	**4.7**	**2.9**	**5.1**	**5.3**	**3.4**	**5.5**	**3.8**	**4.8**
	Iron	mg/kg	Tier 1		**16000**	**20900**	**20000**	**17000**	**26000**	**26600**	**79900**	**19600**	**37100**	**33500**	**28400**	**40800**	**29100**	**43500**	**61700**	**26800**	**56300**	**27000**	**25100**
	Lead	mg/kg	Tier 1		5.5	3.6	8.1	2.5	1.4	1.4	5.1	1.2	1.8	1.1	1.2	1.6	3.2	4.4	4.4	1.3	6.6	1.2	0.93
	Lithium	mg/kg	Tier 1		**19**	1.5	**6.4**	**11**	**5.9**	**6.8**	**9.4**	**5.3**	**4.6**	**7.2**	**7.7**	**5.8**	**3.7**	**6.8**	**7.5**	**3.9**	**7.9**	**6**	**8.2**
	Magnesium	mg/kg	Tier 1		2800	1200	1900	2800	1100	1330	2830	1020	1180	2210	2200	1450	1220	2090	2020	1300	2070	1700	1850
	Manganese	mg/kg	Tier 1		**170**	**110**	**230**	**290**	**87.1**	**131**	**333**	**127**	**184**	**334**	**274**	**211**	**158**	**241**	**283**	**164**	**245**	**210**	**178**
	Molybdenum	mg/kg	Tier 1		0.56 B	<0.38 U	1.2	0.98 B	0.76	1	**2.3**	0.58	1.1	0.95	1.2	1.1	<0.36 U	<0.41 U	**2**	0.79	<0.42 U	0.55 B	0.5
	Nickel	mg/kg	Tier 1		17	5.8	14	16	13.1	7.8	43.1	6.9	15.9	10.1	27.1	19.2	6.6	10	27	7.5	24.8	9.5	10
	Selenium	mg/kg	Tier 1		0.32	<0.38 U	0.2	0.24	<0.26 U	<0.23 U	0.35 J	0.29 J	<0.3 U	<0.26 U	<0.3 U	<0.31 U	<0.36 U	<0.41 U	<0.3 U	<0.26 U	<0.42 U	0.19	<0.29 U
	Silver	mg/kg	Tier 1		0.06	<0.26 U	0.031 B	0.15	0.12 J	0.2	0.69	0.12 J	0.54	0.2 J	0.14 J	0.29	<0.24 U	<0.27 U	<0.12 U	0.11 J	<0.28 U	0.045 B	0.76
	Thallium	mg/kg	Tier 1		0.042 B	<0.51 U	0.036 B	0.041 B	<0.053 U	<0.045 U	<0.053 U	<0.05 U	<0.061 U	<0.052 U	<0.06 U	<0.061 U	<0.48 U	<0.54 U	<0.059 U	<0.052 U	<0.56 U	0.015 B	<0.057 U
	Zinc	mg/kg	Tier 1		23	10	36	24	10.3	7.9	16	10.5	11.2	23.1	18.2	11.1	9.8	10.8	16.6	7.7	11.1	12	8.7
	Inorganics																						
	Cyanide, total	mg/kg	Tier 1		<0.18 U	<0.21 U	<0.15 U	<0.21 U	<0.25 U	<0.26 U	<0.37 U	<0.25 U	<0.34 U	<0.22 U	<0.25 U	<0.30 U	<0.30 U	<0.23 U	<0.35 U	<0.31 U	<0.31 U	<0.33 U	<0.31 U
	VOC																						
	1,2,4-Trimethylbenzene	ug/Kg	Tier 1																				
	1,3,5-Trimethylbenzene	ug/Kg	Tier 1																				
	n-Propylbenzene	ug/Kg	Tier 1																				
	s-Butylbenzene	ug/Kg	Tier 1																				

Table 5-1
2006 Soil Results - Exceedances

Event Date	Parameter	Units	Data Level	Location Name	SB-639	SB-639	SB-640	SB-640 (dup)	SB-641	SB-642	SB-643	SB-644	SB-645	SB-647	SB-648	Drinking Water Protection	Drinking Water Protection Code
				Field ID	SB-639 14-16'	SB-639-19-21'	SB640-14-16'	DUP-9-26	SB641-19-21'	SB642-34-36'	SB-643 14'-16'	SB-644-S-4	SB-645-4-6	SB-647-4-6	SB-648-4-6		
				Depth (ft)	14-16	19-21	14-16	14-16	19-21	34-36	14-16	12-15	4-6	4-6	4-6		
6/6/2006	Metal																
	Arsenic	mg/kg	Tier 1													4.6	
	Nickel	mg/kg	Tier 1													100	
	Silver	mg/kg	Tier 1													4.5	
9/12/2006	Metal																
	Aluminum	mg/kg	Tier 1		**3050**	**7010**	**2880**	**2900**	**1860**	**2020**	**2380**	**2850**	**3600**	**5900**	**2900**	1	
	Antimony	mg/kg	Tier 1		<0.06 U	0.45	0.11	0.10 B	0.089 J	<0.057 U	0.085 J	**25.4**	0.17	0.19	0.17	4.3	
	Arsenic	mg/kg	Tier 1		0.72	4	0.95	1	0.91	0.49	1.2	<0.32 U	1.6	**8**	1.2	4.6	
	Boron	mg/kg	Tier 1		4.6 J	9.7	2.9	<4.3 U	2 J	6.3	<6 U	<4.3 U	<3.8 U	<3.5 U	<3.5 U	10	
	Cobalt	mg/kg	Tier 1		**4.1**	**11**	**4**	**3.3**	**2.6**	**2.3**	**3.7**	**3.7**	**3.8**	**4.9**	**3.5**	0.8	
	Iron	mg/kg	Tier 1		**22900**	**118000**	**24100**	**18000**	**30900**	**26600**	**38200**	**29100**	**25000**	**19000**	**21000**	6	
	Lead	mg/kg	Tier 1		1.2	6.6	1.2	1	2.5	1.2	1.7	3.4	1.2	2	1.7	700	
	Lithium	mg/kg	Tier 1		**7**	**18.2**	**5.7**	**5.3**	**5**	**6.6**	**5.4**	**3.4**	**6.5**	**5.3**	**4.2**	3.4	
	Magnesium	mg/kg	Tier 1		1820	3590	1790	1700	1150	1220	1360	1360	2000	3000	1500	8000	
	Manganese	mg/kg	Tier 1		**214**	**410**	**216**	**220**	**130**	**104**	**167**	**174**	**210**	**220**	**240**	1	
	Molybdenum	mg/kg	Tier 1		0.56	**2.9**	0.7	0.84 B	0.94	0.84	0.88	<0.43 U	0.72 B	0.83 B	0.72 B	1.5	
	Nickel	mg/kg	Tier 1		11.4	60.7	11.2	9.7	9.7	6.5	17.5	8.6	8.1	12	7.7	100	
	Selenium	mg/kg	Tier 1		<0.3 U	<0.35 U	<0.27 U	0.23	0.33 J	<0.29 U	<0.3 U	<0.43 U	0.17	0.23	0.17	4	
	Silver	mg/kg	Tier 1		<0.12 U	1.1	0.33	0.087	0.24	0.18 J	0.21 J	<0.29 U	0.024 B	0.07	0.031 B	4.5	
	Thallium	mg/kg	Tier 1		<0.06 U	<0.07 U	<0.053 U	0.013 B	<0.054 U	<0.057 U	<0.06 U	<0.57 U	0.0095 B	0.040 B	0.011 B	2.3	
	Zinc	mg/kg	Tier 1		10.6	19.1	11.2	11	7.9	5.7	10	8.5	11	15	12	2400	
	Inorganics																
	Cyanide, total	mg/kg	Tier 1		<0.36 U	<0.33 U	<0.32 U	<0.36 U	<0.22 U	<0.37 U	<0.35 U	<0.35 U	<0.28 U	<0.31 U	<0.21 U	4	
	VOC																
	1,2,4-Trimethylbenzene	ug/Kg	Tier 1													2100	
	1,3,5-Trimethylbenzene	ug/Kg	Tier 1													1800	
	n-Propylbenzene	ug/Kg	Tier 1													1600	
	s-Butylbenzene	ug/Kg	Tier 1													1600	

Notes:

mg/kg = milligrams/kilogram
ug/kg = micrograms/kilogram
B = Inorganic - the analyte has been detected between the method detection limit and the reporting limit
J = All - concentration detected equal to or greater than the method detection limit but less than the reporting limit
M = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
VOC = Volatile organic compound
U = The analyte was not detected at or above the reporting limit.
Dup = duplicate
< = All - the analyte was not detected at or above the reporting limit.
Results were compared to the MDEQ drinking water protection criteria. Exceedances are highlighted.
Drinking water protection criteria source: MDEQ Part 201 generic cleanup and screening levels.
ft = feet

Prepared by: SVF
Checked by: JSL

Table 5-2
November 2006 Groundwater Results - Exceedances

Event Date	Parameter	Units	Data Level	Location	Field Blank	KMW-1	KMW-1	KMW-10	KMW-2	KMW-3	KMW-3	KMW-4	KMW-5	KMW-6A	KMW-7	KMW-7	KMW-9	KMW-9P	MW-101	MW-102	MW-103	MW-104	MW-11	MW-12	MW-12
				Field ID	Field Blank	KMW-1	Dup	KMW-10	KMW-2	KMW-3	Dup	KMW-4	KMW-5	KMW-6A	KMW-7	Dup	KMW-9	KMW-9P	MW-101	MW-102	MW-103	MW-104	MW-11	MW-12	Dup
11/2/06	Metal																								
	Aluminum	ug/L	Tier 1			**62**		9.0 B	16 B	<6.3 U	<6.3 U	12 B	8.9 B	26 B	23 B	26 B	16 B	<6.3 U	37 B	**400000**	13 B	**80**	**430**	19 B	8.2 B
	Arsenic	ug/L	Tier 1			7.9		3.6	**24**	7.7	7.6	1.4	0.95 B	**12**	4.4	4.6	3.8	3.4	**31**	**5600**	**14**	**28**	**18**	**10**	**10**
	Beryllium	ug/L	Tier 1			<0.10 U		<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	0.18 B	0.18 B	0.26 B	<0.10 U	<0.10 U	**29**	<0.10 U	<0.10 U	0.18 B	<0.10 U	<0.10 U
	Cadmium	ug/L	Tier 1			<0.14 U		<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	**49**	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U
	Chromium	ug/L	Tier 1			2.2		0.37 B	<0.32 U	0.34 B	0.42 B	<0.32 U	0.69 B	2	1.6	1.6	1.3	0.87 B	1.8	**8000**	1.4	2.9	8.9	0.91 B	0.36 B
	Cobalt	ug/L	Tier 1			3.4		2.5	1.3	1.8	1.7	3.3	**67**	14	**120**	**120**	11	17	0.22 B	**6400**	0.31 B	0.19 B	12	0.27 B	0.27 B
	Copper	ug/L	Tier 1			0.33 B		0.3 B	<0.15 U	0.15 B	0.65 B	0.46 B	1	0.33 B	0.22 B	0.31 B	0.44 B	0.25 B	0.23 B	**10000**	<0.15 U	0.3 B	2.2	<0.15 U	<0.15 U
	Iron	ug/L	Tier 1			**9300**		**3800**	**10000**	**23000**	**23000**	**4700**	**6100**	**73000**	**170000**	**170000**	**8000**	**160000**	**37000**	**5100000**	**57000**	**59000**	**270000**	**10000**	**9900**
	Lithium	ug/L	Tier 1			0.63		2.4	2	2.2	2.4	0.57	10	0.63	4.9	4.8	0.97	5.9	0.63	**450**	1	1	1.8	1.6	1.5
	Manganese	ug/L	Tier 1			**3300**		**2000**	**3900**	**5700**	**5600**	**4900**	**2300**	**17000**	**21000**	**22000**	**8700**	**27000**	**6800**	**17000**	**4500**	**2500**	**19000**	**970**	**940**
	Nickel	ug/L	Tier 1			1.1		2.5	1.5	0.66 B	0.69 B	4.7	7.4	44	84	85	13	1.5	0.41 B	**14000**	0.47 B	0.91 B	2.4	0.4 B	<0.32 U
	Vanadium	ug/L	Tier 1			4.2		0.88 B	0.69 B	0.66 B	0.65 B	0.45 B	0.48 B	3.2	**4.8**	**4.9**	1.8	1.2	3.5	**220**	2.6	**4.6**	**16**	1.2	0.97 B
	Zinc	ug/L	Tier 1			5.6 B		4.8 B	5.8 B	5.4 B	5.1 B	15	10	7.6 B	9.1 B	13	57	5.4 B	2.9 B	**5800**	<0.98 U	11	8.5 B	<0.98 U	<0.98 U
	Physical Property																								
	Nitrogen, Ammonia	mg/L	Tier 1		<0.20 U	0.87		0.24 B	0.46 B	<0.50 U	0.71 B	0.62	<0.20 U	1.6	1.8	1.8	0.62	1.3	2.1	<0.50 U	1.4		**22**	0.84	0.89
	Sulfate	mg/L	Tier 1		<0.77 U	7.9		13	61	130	130	86	91	**360**	**750**	**750**	150	**850**	1.5 B	**13000**	170		<0.77 U	12	12
	VOC																								
	Benzene	ug/L	Tier 1		<0.41 U	<0.41 U		<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<4.1 U	<0.41 U	0.65 J	<0.41 U	<0.41 U	<0.41 U
	Ethylbenzene	ug/l	Tier 1		<0.54 U	<0.54 U		<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<5.4 U	<0.54 U	3.2	<0.54 U	<0.54 U	<0.54 U
	Xylenes	ug/l	Tier 1		<2.6 U	<2.6 U		<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<26 U	<2.6 U	27	<2.6 U	<2.6 U	<2.6 U

Prepared by: ECB/SVF
Checked by: JSL

Table 5-2
November 2006 Groundwater Results - Exceedances

Event Date	Parameter	Units	Data Level	MW-5	MW-601	MW-602	MW-603	MW-604	MW-605	MW-606	MW-9	P-602	P-602	P-604	P-605	PW-1	PW-1	PW-2	PW-4	Residential Commercial Drinking Water Criteria	Residential Commercial Code
				MW-5	MW-601	MW-602	MW-603	MW-604	MW-605	MW-606	MW-9	P-602	Dup	P-604	P-605	PW-1	Dup	PW-2	PW-4		
11/2/06	**Metal**																				
	Aluminum	ug/L	Tier 1	**360**	**58**	9.0 B	17 B	32 B	11 B	9.9 B	7.0 B	9.7 B	11 B	11 B	13 B	**130**	**130**	22 B	**230**	50	V
	Arsenic	ug/L	Tier 1	**160**	**26**	1.1	3.3	2.9	1.1	0.63 B	**29**	6.6	6.4	1.4	6.9	3.1	3.2	0.33 B	**93**	10	EPA 2006
	Beryllium	ug/L	Tier 1	<0.10 U	0.12 B	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	<0.10 U	4	A
	Cadmium	ug/L	Tier 1	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	<0.14 U	2.1	<0.14 U	5	A
	Chromium	ug/L	Tier 1	10	2.6	<0.32 U	<0.32 U	0.44 B	0.44 B	<0.32 U	<0.32 U	<0.32 U	<0.32 U	<0.32 U	<0.32 U	2.2	2.3	0.41 B	5.5	100	A
	Cobalt	ug/L	Tier 1	5.5	9.2	3.9	11	2.2	2.2	0.66 B	1.5	0.44 B	0.48 B	3.4	0.45 B	0.12 B	0.10 B	27	1.1	40	
	Copper	ug/L	Tier 1	2.3	1	0.32 B	<0.15 U	0.2 B	0.97 B	0.19 B	5.1	<0.15 U	<0.15 U	<0.15 U	<0.15 U	0.2 B	0.17 B	1.3	0.57 B	1000	E
	Iron	ug/L	Tier 1	**140000**	**41000**	**5500**	**2600**	**9200**	100	**410**	**30000**	**2300**	**2400**	**1000**	**4800**	**17000**	**18000**	**580**	**81000**	300	E
	Lithium	ug/L	Tier 1	0.33	1	5.9	7.3	4.4	2.3	4	1.4	3.1	2.8	0.61	2.3	0.056	0.089 B	9.2	0.4	170	
	Manganese	ug/L	Tier 1	**3600**	**7800**	**5000**	**1200**	**2800**	**4900**	**1100**	**1500**	**900**	**950**	**390**	**3500**	**2100**	**2100**	**810**	**6100**	50	E
	Nickel	ug/L	Tier 1	24	8.5	15	67	1.2	6.1	6.3	2.7	<0.32 U	<0.32 U	0.85 B	1.7	<0.32 U	<0.32 U	79	3.4	100	A
	Vanadium	ug/L	Tier 1	**21**	**5**	0.32 B	0.53 B	1.1	0.67 B	0.61 B	0.78 B	0.49 B	0.51 B	0.61 B	0.89 B	**5.2**	**5.3**	0.49 B	**11**	4.1	
	Zinc	ug/L	Tier 1	6.8 B	12	6.2 B	4.7 B	5.4 B	5.4 B	5.4 B	7.8 B	4.9 B	4.4 B	4.8 B	3.7 B	5.3 B	5 B	50	5.2 B	2400	
	Physical Property																				
	Nitrogen, Ammonia	mg/L	Tier 1	**19**	6.9	<0.20 U	<0.20 U	0.46 B	0.34 B	<0.20 U	0.33 B	0.33 B	0.33 B	<0.20 U	0.32 B	0.89	0.95	<0.20 U	4.9	10	N
	Sulfate	mg/L	Tier 1	1.4 B	15	34	16	2.8 B	11	25	51	2.4 B	2.5 B	9.6	9.1	19	19	160	3.7 B	250	E
	VDC																				
	Benzene	ug/L	Tier 1	**10**	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	5	A
	Ethylbenzene	ug/l	Tier 1	**90**	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	<0.54 U	74	E
	Xylenes	ug/l	Tier 1	**1400**	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.8 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	<2.6 U	280	E

Notes:

mg/l = milligram/liter

ug/L = micrograms/liter

VOC = volatile organic compound

B = Inorganic - The analyte has been detected between the method detection limit and the

Dup = duplicate

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Nat Res & EPA Act, 1994 PA 451, as amended.

EQB = equipment blank

FB = field blank

L = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specified rules.

J = Concentration detected equal to or greater than the method detection limit but less than the reporting limit.

N = The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 ug/L. Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5 ug/kg.

PCB = polychlorinated byphenyls

U = The analyte was not detected at or above the reporting limit.

V = Criterion is the aesthetic drinking water value as required by Section 20120(a)(5) of the NREPA. Concentrations up to 200 ug/L may be acceptable, and still allow for drinking water use, as part of a site-specific cleanup under Section 20120a(2) of the NREPA.

< = All the analyte was not detected at or above the reporting limit

Residential Commercial I drinking water criteria source = MDEQ Part 201 generic cleanup criteria and screening levels

Results were compared to the MDEQ res/com I DW criteria. Exceedances are highlighted.

Prepared by: ECB/SVF
Checked by: JSL

Table 5-3
August and October 2006 Surface Water Results - Exceedances

EventDate	Parameter	Units	Data Level	Location ID	EBR-001	Field Blank	Field Blank	Field Blank	HMP-001	HMP-001	HTP-001	HTP-002	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	MBR-001	MBR-001	MER-001	MER-002	MER-002	MER-003	WBR-001
				Field ID	EBRS-001	FBKS	FBKS-001	FBKS-001	HMPS-001E	HMPS-001H	HTPS-001E	HTPS-002E	DUPS--002	LKLS-001E	LKLS-001H	LKLS-002E	LKLS-002H	DUPS-001	MBRS-001	MERS-001	DUPS--001	MERS-002	MERS-003	WBRS-001
				Sample Depth (ft)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/3/2006	Metal																							
	Copper, total	ug/L	Tier 1			**1.7**																		
	Lead, total	ug/L	Tier 1			**0.26**																		
	Manganese, total	ug/L	Tier 1														**2400**							
	Manganese, total	ug/L	Tier 1												**2140**									
	Mercury - low level	ng/L	Tier 1		1		<0.169 U	0.213 B	0.557	0.521	**1.56**	1.06		0.689	**1.85**	0.775	**2.21**		**1.32**	**1.55**	**3.16**	**3**	**1.51**	**11.7**
	Nickel	ug/L	Tier 1							**187**														
	Silver, total	ug/L	Tier 1		<0.14	<0.14		<0.14			<0.14	**0.15**		<0.14	<0.14	0.048 J	<0.14		<0.14	<0.14	<0.14	0.048 J	<0.14	<0.14
	Zinc, total	ug/L	Tier 1			**5**																		
10/2/2006	Metal																							
	Copper, total	ug/L	Tier 1				**2**																	
	Lead, total	ug/L	Tier 1				**0.2**																	
	Mercury - low level	ng/L	Tier 1		1.23		<0.169 U		0.290 B	0.296 B	**1.42**	0.812	0.681	0.7		0.633		0.807	0.724	1.04		1.15	1.27	**3.8**
	Nickel, total	ug/L	Tier 1				**0.24**																	
	Nickel, total	ug/L	Tier 1							**214**														
	Zinc, total	ug/L	Tier 1				**3.3**																	
	Zinc, total	ug/L	Tier 1																					**81**

Table 5-3
August and October 2006 Surface Water Results - Exceedances

EventDate	Parameter	Units	Data Level	Location ID	WBR-002	WBR-003	WLD-001	WLD-002	WLD-003	WLD-003	HNV	WV	HCV	FCV	AMV	FAV
				Field ID	WBRS-002	WBRS-003	WLDS-001	WLDS-002E	DUPS001	WLDS-003E						
				Sample Depth (ft)	NA	NA	NA	NA	NA	NA						
8/3/2006	Metal															
	Copper, total	ug/L	Tier 1								38000			0.015	0.012	0.023
	Lead, total	ug/L	Tier 1								190			0.002	0.016	0.031
	Manganese, total	ug/L	Tier 1								59000			827	1784	3567
	Manganese, total	ug/L	Tier 1								59000			765	1651	3303
	Mercury - low level	ng/L	Tier 1		**3.43**	**2.23**	0.738	0.69	0.741	0.543	1.8	1.3		770	1400	2800
	Nickel	ug/L	Tier 1								210000			117	1051	2102
	Silver, total	ug/L	Tier 1		<0.14	<0.14	<0.14		<0.14	<0.14	11000			0.060	0.54	1.1
	Zinc, total	ug/L	Tier 1								16000			0.21	0.20	0.41
10/2/2006	Metal															
	Copper, total	ug/L	Tier 1								38000			0.017	0.014	0.027
	Lead, total	ug/L	Tier 1								190			0.002	0.019	0.038
	Mercury - low level	ng/L	Tier 1		0.947	0.747	0.338 B	0.989		0.638	1.8	1.3		770	1400	2800
	Nickel, total	ug/L	Tier 1								210000			0.11	0.95	1.91
	Nickel, total	ug/L	Tier 1								210000			109	985	1970.97
	Zinc, total	ug/L	Tier 1								16000			0.24	0.24	0.47
	Zinc, total	ug/L	Tier 1								16000			37	37	73

Notes:
AMV - Aquatic maximum value
B = inorganic - The analyte has been detected between the method detection limit and the reporting limit
dup = duplicate
EQB = equipment blank
FAV - Final acute value
FCV - Final chronic value
HCV - Human cancer value
HNV - Human noncancer value
J = Concentration was detected equal to or greater than the method detection limit but less than the reporting limit
< = All the analyte was not detected at or above the reporting limit
ng/L = nanograms/liter
ug/l = micrograms/liter
U = The analyte was not detected at or above the reporting limit
WV - Wildlife value

Table 5-4
2006 Sediment Results-Exceedances

Event Date	Parameter	Units	Data Level	PEC Criteria	EPA RCRA ESL	RCRA ESL Code	Location	EBR-001	HMP-001	HMP-004	HMP-005	HMP-005	HMP-006	HMP-007	HMP-009	HPL-004	HPL-004	HTP-001	HTP-002	LKL-001	LKL-002	MBR-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WLD-001	WLD-003	WLD-003
							Field ID	EBRD-001	HMPD-001	HMPD-004	DUPD-002	HMPD-005	HMPD-006	HMPD-007	HMPD-009	PSED-1	PSED-1D	HTPD-001	HTPD-002	LKLD-001	LKLD-002	MBRD-001	MERD-001	DUPD-001	MERD-002	MERD-003	WBRD-001	WBRD-002	WBRD-003	WLDD-001	DUPD-001	WLDD-003
8/3/2006	**Metal**																															
	Arsenic	mg/kg	Tier 1	33	9.79	u		**56.9**	**165**									8.8	19.4	16	**33.4**	16.8	20.9	9.6	7.7	10.2	2	11.2	8.6	11.5	4.1	4.6
	Chromium	mg/kg	Tier 1	111	43.4	u		23.5	**560**									30.3	64.8	30.2	30.4	17.1	23	51	31.2	9.4	6.3	9.1	20.4	11.8	16.7	18.9
	Cobalt	mg/kg	Tier 1		50	t		10.7	**74.6**									3.3	3.7	15.4	10.6	8	5.9	3.9	4.8	3	1.1	4	4.8	3.1	3.6	4.6
	Copper	mg/kg	Tier 1	149	31.6	u		27.5	**491**									11.5	4.6	42.9	23.9	33.6	12.5	24.3	18.1	5.2	3.4	9.1	16.2	26.5	9.8	11.2
	Lead	mg/kg	Tier 1	128	35.8	u		23.3	**238**									7.6	9.1	17.9	28.8	66.6	6.6	3.4	47.1	2.6	6.9	2.3	2.8	11	23.3	26.1
	Nickel	mg/kg	Tier 1	48.6				46.4	**615**									11.2	24.4	**59.5**	**54.1**	14.1	21.7	28.9	16.5	9.4	4.7	13.7	19.6	11.3	9.2	10.3
	Silver	mg/kg	Tier 1		0.5	t		**5.8**	**3.2**									**0.99**	0.26	**2.4**	**0.97**	<0.22	0.16 J	<0.23	<0.2	0.22 J	0.33	0.11	0.1	1 J	**2.2**	**0.76**

B = Inorganic - The analyte has been detected between the method detection limit and the reporting limit.
EPA = Environmental Protection Agency
ESL = Environmental Screening Level
J = All - Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
mg/kg = milligrams/kilograms
PEC = Probable Effect Concentration
r = Environment Canada. September 1994. Interim Sediment Quality Assessment Values. Ecosystem Conservation Directorate. Evaluation and Interpretation Branch.
RCRA = Resource Conservation and Recovery Act
t = Ontario Ministry of the Environment. August 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario.
u = Consensus based threshold effect concentration (TEC)
< = All - The analyte was not detected at or above the reporting limit.

Table 5-5
Groundwater Results Exceedances Compared to GSI

Event Date	Parameter	Units	Data Level	Location	Equipment Blank	Equipment Blank	KMW-3	KMW-3	KMW-4	KMW-7	KMW-7	KMW-9	KMW-9P	MW-11	MW-11	MW-12	MW-12	MW-604	MW-605	P-604	P-605	GSI Criteria	GSI Criteria Code
				Field ID	EQB-001	EQB-002	KMW-3	Dup	KMW-4	KMW-7	Dup	KMW-9	KMW-9P	MW-11	Dup	MW-12	Dup	MW-604	MW-605	P-604	P-605		
6/22/06	Metal																						
	Barium, total	ug/L	Tier 1											582	583							210	G,X
	Beryllium	ug/L	Tier 1		41											4.8						0.41	G
	Beryllium, total	ug/L	Tier 1			37.6								2.6	2.6							0.41	G
	Manganese, total	ug/L	Tier 1											21200	26900							1050	G,X
11/2/2006	Metal																						
	Barium	ug/L	Tier 1				110	110	65	60	60	130	55	490		32	33	74	29	26	34	210	G,X
	Cobalt	ug/L	Tier 1				1.8	1.7	3.3	120	120	11	17	12		0.27 B	0.27 B	2.2	2.2	3.4	0.45 B	100	
	Manganese	ug/L	Tier 1				5700	5600	4900	21000	22000	8700	27000	19000		970	940	2800	4900	390	3500	1050	G,X
	Mercury - Low Level - Dissolved	ng/L	Tier 1				0.46 B	0.5	0.6	0.29 B	<0.18 U	0.47 B	0.20 B	1.55		0.356 B	0.360 B	0.33 B	0.43 B	0.43 B	0.31 B	1.3	
	Nickel	ug/L	Tier 1				0.66 B	0.69 B	4.7	84	85	13	1.5	2.4		0.4 B	<0.32 U	1.2	6.1	0.85 B	1.7	28.9	G
	Vanadium	ug/L	Tier 1				0.66 B	0.65 B	0.45 B	4.8	4.9	1.8	1.2	16		1.2	0.97 B	1.1	0.67 B	0.61 B	0.89 B	12	

Notes:
GSI = Groundwater Surface Water Interface
ng/L = nanograms/liter
ug/L = micrograms/liter
B = Inorganic - The analyte has been detected between the method detection limit and the reporting limit.
G = GSI criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water.
U = The analyte was not detected at or above the reporting limit.
X = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
< = All the analyte was not detected at or above the reporting limit
Residential Commercial I drinking water criteria source = MDEQ Part 201 generic cleanup criteria and screening levels