



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

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C.G. 541.460.1)



DEFENSE LOGISTICS AGENCY
DEFENSE DISTRIBUTION DEPOT MEMPHIS
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210



IN REPLY
REFER TO

DDMT-DE

MAR 4 1997

Mr. Jordan English
Tennessee Department of Environment and Conservation
Division of Superfund
2510 Mt. Moriah, E-645
Memphis, Tennessee 38115-1520

Dear Mr. English:

The Defense Distribution Depot Memphis is pleased to submit the enclosed data from the groundwater sampling conducted by CH2M Hill in February 1996. We have been assured by CH2M Hill that the Groundwater Characterization Technical Memorandum will be received by March 10, 1997.

Please be aware that CH2M Hill will send personnel to the Depot next Monday afternoon for the purpose of sampling three monitoring wells within the boundary of Dunn Field. The sampling analytical objective is to determine what provisions need to be included in the Groundwater Interim Remedial Action Design for the treatment system to accommodate the iron present in the extracted groundwater. The sampling next week is expressly for no other purpose (such as risk assessment).

A copy of this information has been forwarded to Mr. Dann Spariosu, USEPA.

Please contact Mr. Shawn Phillips at 775-6372 if you have any other questions.

Sincerely,

G.L. KADEN, R.E.M.

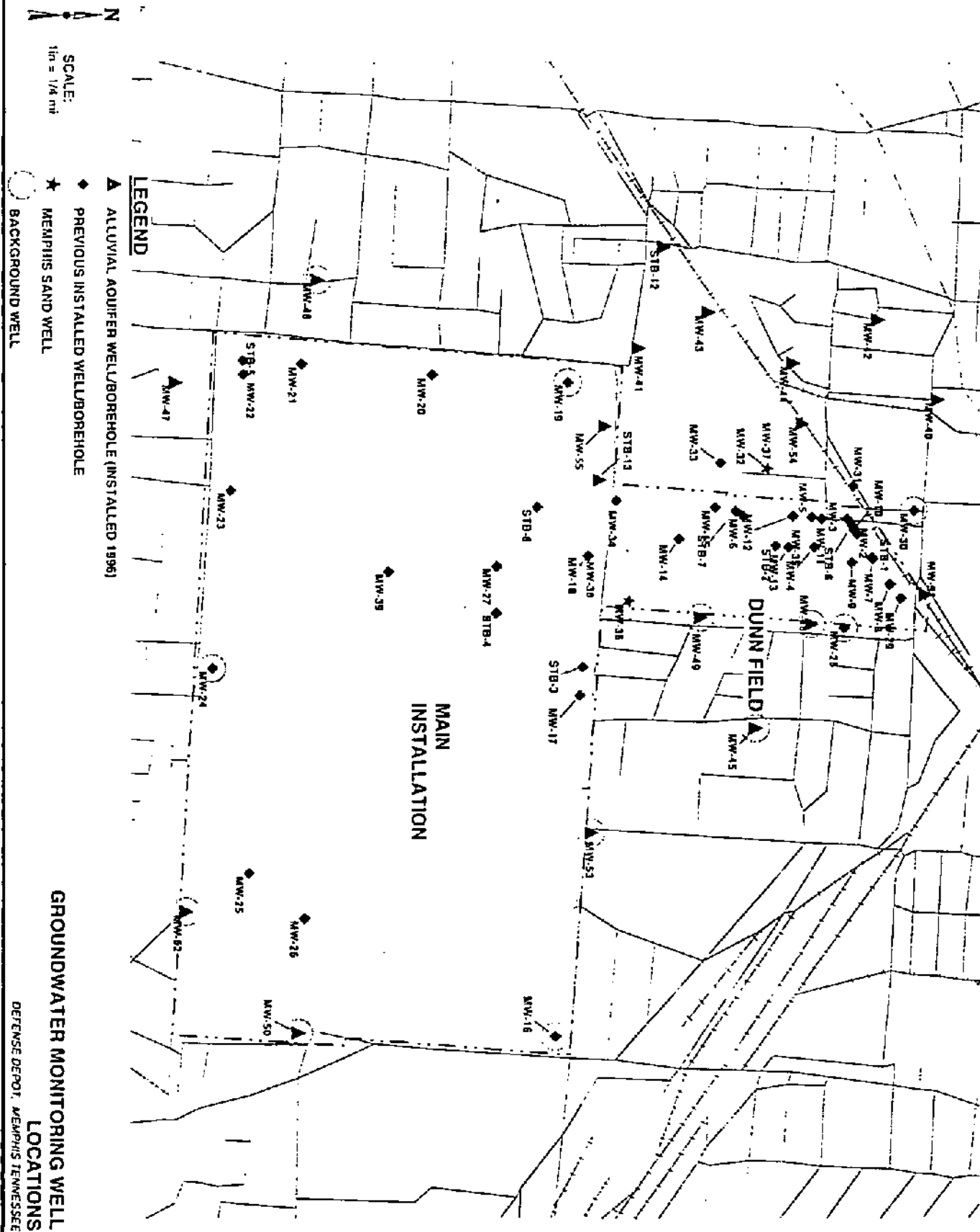
Chief

Environmental Protection and Safety Office

Enclosure

cc (w/out encl):

CEHNC, Julian Savage
CH2M Hill, Greg Underberg
DDRE-ASCE-WP, Mike Dobbs



DDMT GROUNDWATER RECOVERY SYSTEM
ANALYTICAL DATA 1 M RECOVERY WELLS
Sampled in February, 1996.

PARAMETER	UNITS	MW02	MW03	MW04	MW05	MW06	MW07	MW08	MW09	MW10	MW11	MW12
Inorganic												
ARSENIC	UG/L	.68 U	.68 U	.68 U	.68 U	.68 U	1.2 J	.68 U	.68 U	.81 U	.68 U	1.4 U
LEAD	UG/L	9.9 =	1.8 J	9.4 =	1.4 U	5.2 =	1.4 U	6.7 =	18.4 =	3.5 =	1.4 U	24.4 =
SELENIUM	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	6.9 U
THALLIUM	UG/L	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	1.86 U	.86 U	1.86 U	.86 U	.86 U
ALUMINUM	UG/L	601 J	718 J	292 J	127 U	1120 J	679 J	3610 J	16210 J	730 =	1115 U	20600 =
ANTIMONY	UG/L	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U
BARIUM	UG/L											
BERYLLIUM	UG/L	3.7 J	1.9 U	1.1 U	1.5 U	25 U	67.3 J	39 U	96 U	15 U	15 U	2.9 J
CADMIUM	UG/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
CALCIUM	UG/L				19400 =		16900 =			20100 =		1.8 U
CHROMIUM, TOTAL	UG/L	2.2 U	9.9 J	2.2 U	2.2 U	21.9 =	7.4 U	26.4 =	12.4 U	10.8 =	2.2 U	63 =
COBALT	UG/L											
COPPER	UG/L	32.5 =	2 U	2.8 J	2 U	2 U	1.6 U	2 U	33.9 =	14.2 U	2 U	105 =
IRON	UG/L		3810 J		160 U	4250 =	3270 J	12600 J		1450 =		
MANGANESE	UG/L				10400 =		8300 =			10300 =		
NICKEL	UG/L				6.3 U	23.2 =	23.2 =			20.5 =		
POTASSIUM	UG/L	7.7 U	10.4 J	7.7 U	7.7 U	25.3 J	10.3 U	16 J	7.7 U	8.7 J	7.7 U	46 =
SILICON	UG/L				1110 J		767 U			767 U		
SILVER	UG/L											
SODIUM	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
VANADIUM	UG/L				48300 J		21700 J			25600 J		
ZINC	UG/L	53.1 U	18 U	10.8 U	4.3 U	21.6 U	2.9 J	19.3 U	38.8 U	1.7 J	5.6 U	132 =
MERCURY	UG/L	.84 =	.07 U	.07 U	.12 U	.33 U	.07 U	.07 U	.09 U	.07 U	.07 U	.17 J
Pesticides/PCBs												
ALDRIN	UG/L				.05 U		.05 U			.05 U		
ALPHA BHC (ALPHA)	UG/L				.05 U		.05 U			.05 U		
ALPHA ENDOSULFAN	UG/L				.05 U		.05 U			.05 U		
ALPHA-CHLORDANE	UG/L				.05 U		.05 U			.05 U		
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	UG/L				.05 U		.05 U			.05 U		
BETA ENDOSULFAN	UG/L				.05 U		.05 U			.05 U		
DECA-CHLOROBIPHENYL	UG/L				.77 =		.110 =			.97 =		
DELTA BHC (DELTA)	UG/L				.05 U		.05 U			.05 U		
DIELDRIN	UG/L				.1 U		.1 U			.1 U		
ENDOSULFAN SULFATE	UG/L				.1 U		.1 U			.1 U		
ENDRIN	UG/L				.1 U		.1 U			.1 U		
ENDRIN ALDEHYDE	UG/L				.1 U		.1 U			.1 U		
ENDRIN KETONE	UG/L				.1 U		.1 U			.1 U		
GAMMA BHC (LINDANE)	UG/L				.05 U		.05 U			.05 U		
GAMMA-CHLORDANE	UG/L				.05 U		.05 U			.05 U		
HEPTACHLOR	UG/L				.05 U		.05 U			.05 U		

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

DDMT GROUNDWATER RECOVERY SYSTEM
ANALYTICAL DATA F M RECOVERY WELLS
Sampled in February, 1996.

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PARAMETER	MW13	MW14	MW15	MW28	MW29	MW30	MW31	MW32	MW33	MW35	MW45	MW46
Inorganic												
ARSENIC	.68 U	.9 J	.68 U	.68 U	.68 U	.68 U	.81 J	.66 U	.68 U	.68 U	.1 U	.68 U
LEAD	2.3 J	19.3 =	2.6 J	1.4 U	1.4 U	1.4 U	2.3 U	1.5 J	2.3 U	8.4 =	2.3 U	2.3 U
SELENIUM	2.3 U	2.3 U	2.3 U	4.6 U	2.3 U	2.3 U	2.3 U	6.9 U	2.3 U	2.3 U	2.3 U	2.3 U
THALLIUM	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U	.86 U
ALUMINUM	1270 J	22600 J	210 J	287 J	768 J	166 U	47.6 U	21.3 U	73.4 U	3660 =	586 J	103 U
ANTIMONY	10.9 U	10.9 U	10.9 U	19.7 U	10.9 U	11.8 U	10.9 U	16.1 U	10.9 U	10.9 U	17.2 J	10.9 U
BARIUM	.312 =	.705 J	.476 J	.21 J	.15 U	.15 U	.15 U	.15 U	.15 U	.124 J	.127 J	.993 J
BERYLLIUM	18 U	2.9 J	.53 J	2.1 J	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.4 U	1.35 J	1.15 U
CADMIUM	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U
CALCIUM	16900 =	14300 =	14300 =	14300 =	22900 =	22900 =	2.2 U	57400 =	8910 =	13100 =	34700 =	17400 =
CHROMIUM, TOTAL	12.5 U	42.6 =	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	23.4 =	14.9 U	4.6 U
COBALT	61.9 =	4.0	6.1 U	2.0	1.8 U	1.8 U	2.2 U	2.2 U	2.2 U	11.7 J	19.5 J	18.5 U
COPPER	3.2 U	36 =	.75 =	4.4 J	2.0	2.0	3.0	2.0	2.0	5.8 U	3.8 J	2.0
IRON	5370 =	96100 J	271 U	598 J	340 U	340 U	329 U	147 U	16200 =	2280 J	2280 J	648 =
MAGNESIUM	8920 =	6280 =	6470 =	12000 =	3.2 U	3.2 U	13300 =	4750 J	6700 =	19500 =	18660 =	1228 =
MANGANESE	12.6 U	25.3 J	7.7 U	7.7 U	7.7 U	7.7 U	8.6 J	7.7 U	13 J	17.7 U	17.7 U	17.7 U
NICKEL	2470 J	1900 J	767 U	767 U	767 U	767 U	1280 J	767 U	1170 J	1849 J	1858 J	1858 J
POTASSIUM	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
SILICON	16200 =	11600 U	15000 U	17000 U	16 U	16 U	19900 J	24100 U	17800 J	20300 U	27400 U	27400 U
SODIUM	101 =	82 J	5.1 J	17.8 U	13.5 U	12.9 U	4.4 U	13.5 U	9.8 U	29.6 U	12.2 U	54.9 U
VANADIUM	19.8 U	100 =	23.2 U	17.8 U	13.5 U	12.9 U	4.4 U	13.5 U	9.8 U	29.6 U	12.2 U	54.9 U
ZINC	.07 U	.46 U	.37 U	.14 U	.07 U	.07 U	.07 U	.55 U	.07 U	.07 U	.19 U	.07 U
MERCURY												
Pesticides/PCBs												
ALDRIN	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ALPHA BHC (ALPHA)	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ALPHA ENDOSULFAN	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ALPHA-CHLORANE	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
BETA ENDOSULFAN	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
DECACHLOROBIPHENYL	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
DELTA BHC (DELTA)	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
DIELDRIN	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ENDOSULFAN SULFATE	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ENDRIN	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ENDRIN ALDEHYDE	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
ENDRIN KETONE	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
GAMMA BHC (LINDANE)	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
GAMMA-CHLORANE	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
HEPTACHLOR	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

DDMT GROUNDWATER RECOVERY SYSTEM
ANALYTICAL DATA FROM RECOVERY WELLS
Sampled in February, 1996.

PARAMETER	MMW49.3	MMW51.2	MMW54.9
ARSENIC	.68 U	.68 U	1 U
LEAD	2.6 J	2.3 U	1.4 U
SELENIUM	2.3 U	2.3 U	2.3 U
THALLIUM	.86 U	.86 U	.86 U
ALUMINUM	86.2 U	153 U	173 U
ANTIMONY	10.9 U	10.9 U	10.9 U
BARIUM	96.4 J	86.4 J	106 J
BERYLLIUM	.15 U	.15 U	.15 U
CADMIUM	1.8 U	1.8 U	1.8 U
CALCIUM	16500 =	21600 =	14900 =
CHROMIUM, TOTAL	3 U	2.2 U	2.2 U
COBALT	1.5 U	6.9 U	3.9 J
COPPER	2 U	2 U	2.7 U
IRON	328 U	322 U	4660 =
MAGNESIUM	6140 =	10500 =	7440 =
MANGANESE	57.6 =	112 =	445 =
NICKEL	7.7 U	7.7 U	7.7 U
POTASSIUM	1260 J	946 J	767 U
SILICON	2.2 U	2.2 U	2.2 U
SILVER	14600 U	19100 U	18400 J
SODIUM	1.6 U	1.6 U	1.6 U
VANADIUM	15 U	15.2 U	7 U
ZINC	.07 U	.07 U	.07 U
MERCURY	.07 U	.07 U	.07 U
ALDRIN	.05 U	.05 U	.05 U
ALPHA BHC (ALPHA)	.05 U	.05 U	.05 U
ALPHA ENDOSULFAN	.05 U	.05 U	.05 U
ALPHA-CHLORDANE	.05 U	.05 U	.05 U
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	.05 U	.05 U	.05 U
BETA ENDOSULFAN	.1 U	.1 U	.1 U
DECACHLOROBIPHENYL	86 =	100 =	104 =
DELTA BHC (DELTA)	.05 U	.05 U	.05 U
DIELDRIN	1 U	1 U	1 U
ENDOSULFAN SULFATE	1 U	1 U	1 U
ENDRIN	1 U	1 U	1 U
ENDRIN ALDEHYDE	1 U	1 U	1 U
ENDRIN KETONE	1 U	1 U	1 U
GAMMA BHC (LINDANE)	.05 U	.05 U	.05 U
GAMMA-CHLORDANE	.05 U	.05 U	.05 U
HEPTACHLOR	.05 U	.05 U	.05 U

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

PEST/PCB (CONT'D)

PARAMETER	UNIT	MW02	MW03	MW04	MW05	MW06	MW07	MW08	MW09	MW10	MW11	MW12
HEPTACHLOR EPOXIDE	UG/L											
METHOXYCHLOR	UG/L											
p,p'-DDD	UG/L											
p,p'-DDE	UG/L											
p,p'-DDI	UG/L											
PCB-1016 (AROCHEOR 1016)	UG/L											
PCB-1221 (AROCHEOR 1221)	UG/L											
PCB-1232 (AROCHEOR 1232)	UG/L											
PCB-1242 (AROCHEOR 1242)	UG/L											
PCB-1248 (AROCHEOR 1248)	UG/L											
PCB-1254 (AROCHEOR 1254)	UG/L											
PCB-1260 (AROCHEOR 1260)	UG/L											
TOXAPHENE	UG/L											
Semivolatile Organic Compounds												
1,2,4-TRICHLORO BENZENE	UG/L											
1,2-DICHLORO BENZENE	UG/L											
1,3-DICHLORO BENZENE	UG/L											
1,4-DICHLORO BENZENE	UG/L											
2,2'-OXYBIS(1-CHLORO)PROPANE	UG/L											
2,4,5-TRICHLORO PHENOL	UG/L											
2,4,6-TRIBROMO PHENOL	UG/L											
2,4,6-TRICHLORO PHENOL	UG/L											
2,4-DICHLORO PHENOL	UG/L											
2,4-DIMETHYL PHENOL	UG/L											
2,4-DINITRO PHENOL	UG/L											
2,4-DINITROTOLUENE	UG/L											
2,6-DINITROTOLUENE	UG/L											
2-CHLORONAPHTHALENE	UG/L											
2-CHLORO PHENOL	UG/L											
2-METHYLNAPHTHALENE	UG/L											
2-METHYL PHENOL (o-CRESOL)	UG/L											
2-NITROANILINE	UG/L											
2-NITRO PHENOL	UG/L											
3,3'-DICHLORO BENZIDINE	UG/L											
3-NITROANILINE	UG/L											
4,6-DINITRO-2-METHYL PHENOL	UG/L											
4-BROMOPHENYL PHENYL ETHER	UG/L											
4-CHLORO-3-METHYL PHENOL	UG/L											
4-CHLOROANILINE	UG/L											
4-CHLOROPHENYL PHENYL ETHER	UG/L											
4-METHYL PHENOL (p-CRESOL)	UG/L											
4-NITROANILINE	UG/L											

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

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U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "-" = detected value

DDMT GROUNDWATER RECOVERY SYSTEM
ANALYTICAL DATA F A RECOVERY WELLS
Sampled in February, 1996.

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PESTICIDES/PCB (CONT'D)

PARAMETER	1. MW49E	2. MW51E	3. MW64E
HEPTACHLOR EPOXIDE	105 U	105 U	105 U
METHOXYCHLOR	5 U	5 U	5 U
p,p'-DDD	1 U	1 U	1 U
p,p'-DDE	1 U	1 U	1 U
p,p'-DDT	1 U	1 U	1 U
PCB-1016 (AROCHEOR 1016)	1 U	1 U	1 U
PCB-1221 (AROCHEOR 1221)	2 U	2 U	2 U
PCB-1232 (AROCHEOR 1232)	1 U	1 U	1 U
PCB-1242 (AROCHEOR 1242)	1 U	1 U	1 U
PCB-1248 (AROCHEOR 1248)	1 U	1 U	1 U
PCB-1254 (AROCHEOR 1254)	1 U	1 U	1 U
PCB-1260 (AROCHEOR 1260)	1 U	1 U	1 U
TOXAPHENE	5 U	5 U	5 U
4. Semivolatile Organic Compounds			
1,2,4-TRICHLORO BENZENE	10 U	10 U	10 U
1,2-DICHLORO BENZENE	10 U	10 U	10 U
1,3-DICHLORO BENZENE	10 U	10 U	10 U
1,4-DICHLORO BENZENE	10 U	10 U	10 U
2,2'-OXYBIS(1-CHLORO)PROPANE	10 U	10 U	10 U
2,4,5-TRICHLORO PHENOL	25 U	25 U	25 U
2,4,6-TRIBROMO PHENOL	52 =	52 =	75 =
2,4,6-TRICHLORO PHENOL	10 U	10 U	10 U
2,4-DICHLORO PHENOL	10 U	10 U	10 U
2,4-DIMETHYL PHENOL	10 U	10 U	10 U
2,4-DINITRO PHENOL	25 U	25 U	25 U
2,4-DINITRO TOLUENE	10 U	10 U	10 U
2,6-DINITRO TOLUENE	10 U	10 U	10 U
2-CHLORO NAPHTHALENE	10 U	10 U	10 U
2-CHLORO PHENOL	10 U	10 U	10 U
2-METHYL NAPHTHALENE	10 U	10 U	10 U
2-METHYL PHENOL (o-CRESOL)	10 U	10 U	10 U
2-NITROANILINE	25 U	25 U	25 U
2-NITRO PHENOL	10 U	10 U	10 U
3,3'-DICHLORO BENZIDINE	10 U	10 U	10 U
3-NITROANILINE	25 U	25 U	25 U
4,6-DINITRO-2-METHYL PHENOL	25 U	25 U	25 U
4-BROMOPHENYL PHENYL ETHER	10 U	10 U	10 U
4-CHLORO-3-METHYL PHENOL	10 U	10 U	10 U
4-CHLOROANILINE	10 U	10 U	10 U
4-CHLORO PHENYL PHENYL ETHER	10 U	10 U	10 U
4-METHYL PHENOL (p-CRESOL)	10 U	10 U	10 U
4-NITROANILINE	25 U	25 U	25 U

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

PARAMETER	UNITS	MW02	MW03	MW04	MW05	MW06	MW07	MW08	MW09	MW10	MW11	MW12
4-NITROPHENOL	UG/L				25 U	25 U	25 U			25 U		
ACENAPHTHENE	UG/L				10 U	10 U	10 U			10 U		
ACENAPHTHYLENE	UG/L				10 U	10 U	10 U			10 U		
ANTHRACENE	UG/L				10 U	10 U	10 U			10 U		
BENZO(a)ANTHRACENE	UG/L				10 U	10 U	10 U			10 U		
BENZO(b)PYRENE	UG/L				10 U	10 U	10 U			10 U		
BENZO(b)FLUORANTHENE	UG/L				10 U	10 U	10 U			10 U		
BENZO(a,h)PERYLENE	UG/L				10 U	10 U	10 U			10 U		
BENZO(k)FLUORANTHENE	UG/L				10 U	10 U	10 U			10 U		
BENZYL BUTYL PHTHALATE	UG/L				10 U	10 U	10 U			10 U		
bis(2-CHLOROETHOXY) METHANE	UG/L				10 U	10 U	10 U			10 U		
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL	UG/L				10 U	10 U	10 U			10 U		
bis(2-ETHYLHEXYL) PHTHALATE	UG/L				10 U	10 U	10 U			10 U		
CARBAZOLE	UG/L				10 U	10 U	10 U			10 U		
CHRYSENE	UG/L				10 U	10 U	10 U			10 U		
Di-n-BUTYL PHTHALATE	UG/L				10 U	10 U	10 U			10 U		
Di-n-OCTYL PHTHALATE	UG/L				10 U	10 U	10 U			10 U		
DIBENZO(a,h)ANTHRACENE	UG/L				2 J	10 U	10 U			2 J		
DIBENZO(f,h)ANTHRACENE	UG/L				10 U	10 U	10 U			10 U		
DIBENZO(g,h)ANTHRACENE	UG/L				10 U	10 U	10 U			10 U		
DIETHYL PHTHALATE	UG/L				10 U	10 U	10 U			10 U		
DIMETHYL PHTHALATE	UG/L				10 U	10 U	10 U			10 U		
FLUORANTHENE	UG/L				10 U	10 U	10 U			10 U		
FLUORENE	UG/L				10 U	10 U	10 U			10 U		
HEXACHLOROBENZENE	UG/L				10 U	10 U	10 U			10 U		
HEXACHLOROCYCLOPENTADIENE	UG/L				10 U	10 U	10 U			10 U		
HEXACHLOROCYCLOPENTADIENE	UG/L				10 U	10 U	10 U			10 U		
INDENO(1,2,3-c,d)PYRENE	UG/L				10 U	10 U	10 U			10 U		
ISOPHTHORENE	UG/L				10 U	10 U	10 U			10 U		
N-NITROSODI-n-PROPYLAMINE	UG/L				10 U	10 U	10 U			10 U		
N-NITROSODIPHENYLAMINE	UG/L				10 U	10 U	10 U			10 U		
NAPHTHALENE	UG/L				10 U	10 U	10 U			10 U		
NITROBENZENE	UG/L				10 U	10 U	10 U			10 U		
PENTACHLOROPHENOL	UG/L				5 U	10 U	10 U			5 U		
PHENANTHRENE	UG/L				10 U	10 U	10 U			10 U		
PHENOL	UG/L				10 U	10 U	10 U			10 U		
PYRENE	UG/L				10 U	10 U	10 U			10 U		
1,1,1-TRICHLOROETHANE	UG/L	10 U	10 U	10 U	10 U	10 U	2 J	2 J	10 U	10 U	3 J	10 U
1,1,2,2-TETRACHLOROETHANE	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 =	4 J
1,1,2,2-TRICHLOROETHANE	UG/L	10 U	10 U	10 U	10 U	10 U	7 J	10 U	10 U	10 U	10 U	130 =
1,1-DICHLOROETHANE	UG/L	10 U	10 U	10 U	10 U	10 U	2 J	2 J	10 U	10 U	2 J	50 U

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

SEMI-VOLATILES (CONT'D)

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DDMT GROUNDWATER RECOVERY SYSTEM
ANALYTICAL DATA FROM RECOVERY WELLS
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PARAMETER	3-MW13	3-MW14	3-MW15	3-MW28	3-MW29	3-MW30	3-MW31	3-MW32	3-MW33	3-MW35	3-MW45	3-MW46
4-NITROPHENOL	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
ACENAPHTHENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ACENAPHTHYLENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ANTHRACENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
BENZO(a)ANTHRACENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
BENZO(b)PYRENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
BENZO(k)FLUORANTHENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
BENZO(g,h,i)PERYLENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
BENZO(a,h,i)PERYLENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
BENZYL BUTYL PHTHALATE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-CHLOROETHOXY) METHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-ETHYLHEXYL) PHTHALATE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
CARBAZOLE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
CHRYSENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-BUTYL PHTHALATE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-OCTYL PHTHALATE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
DIBENZ(a,h)ANTHRACENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
DIBENZOFURAN	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
DIETHYL PHTHALATE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
DIMETHYL PHTHALATE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
FLUORANTHENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
FLUORENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
HEXACHLOROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
HEXACHLOROBUTADIENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
HEXACHLOROCYCLOPENTADIENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
HEXACHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
INDENO(1,2,3-c,d)PYRENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ISOPHORONE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-NITROSODI-n-PROPYLAMINE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-NITROSODIPHENYLAMINE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
NAPHTHALENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
NITROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PENTACHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHENANTHRENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PYRENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Volatile Organic Compounds												
1,1,1-TRICHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-TETRACHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-TRICHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-DICHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

U = undetected, UU = undetected (estimated detection limit), J = estimated below detection limit, "d" = detected value

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SEMI-VOLS (CONT'D)

PARAMETER	Q MW49	Q MW51	Q MW54
4-NITROPHENOL	25 U	25 U	25 U
ACENAPHHENE	10 U	10 U	10 U
ACENAPHHYLENE	10 U	10 U	10 U
ANTHRACENE	10 U	10 U	10 U
BENZO(a)ANTHRACENE	10 U	10 U	10 U
BENZO(a)PYRENE	10 U	10 U	10 U
BENZO(b)FLUORANTHENE	10 U	10 U	10 U
BENZO(g,h,i)PERYLENE	10 U	10 U	10 U
BENZO(k)FLUORANTHENE	10 U	10 U	10 U
BENZYL BURN PHthalate	10 U	10 U	10 U
bis(2-CHLOROETHOXY) METHANE	10 U	10 U	10 U
bis(2-ETHYLHEXYL) PHthalate	10 U	10 U	10 U
CARBAZOLE	10 U	10 U	10 U
CHRYSENE	10 U	10 U	10 U
Di-n-BUTYL PHthalate	10 U	10 U	10 U
Di-n-OCTYLPHthalate	10 U	10 U	10 U
DIBENZO(a,h)ANTHRACENE	10 U	10 U	5 U
DIBENZOFURAN	10 U	10 U	10 U
DIETHYL PHthalate	10 U	10 U	10 U
DIMETHYL PHthalate	10 U	10 U	10 U
FLUORANTHENE	10 U	10 U	10 U
FLUORENE	10 U	10 U	10 U
HEXACHLORO BENZENE	10 U	10 U	10 U
HEXACHLOROBUTADIENE	10 U	10 U	10 U
HEXACHLOROCYCLOPENTADIENE	10 U	10 U	10 U
HEXACHLOROETHANE	10 U	10 U	10 U
INDENO(1,2,3-c,d)PYRENE	10 U	10 U	10 U
ISOPHORONE	10 U	10 U	10 U
N-NITROSODI-n-PROPYLAMINE	10 U	10 U	10 U
N-NITROSODIPHENYLAMINE	10 U	10 U	10 U
NAPHTHALENE	10 U	10 U	10 U
NITROBENZENE	10 U	10 U	10 U
PENTACHLOROPHENOL	5 U	5 U	5 U
PHENANTHRENE	10 U	10 U	10 U
PHENOL	10 U	10 U	10 U
PYRENE	10 U	10 U	10 U
Volatiles Organic Compounds	10 U	10 U	10 U
1,1,1-TRICHLOROETHANE	10 U	10 U	10 U
1,1,2,2-TETRACHLOROETHANE	10 U	10 U	10 U
1,1,2,2-TETRACHLOROETHANE	10 U	10 U	10 U
1,1-DICHLOROETHANE	10 U	10 U	10 U

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "x" = detected value

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VOC'S (CONT'D) 215 12

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "-" = detected value

DDMT GROUNDWATER RECOVERY SYSTEM
ANALYTICAL DATA FROM RECOVERY WELLS
Sampled in February, 1996.

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PARAMETER	W-202	MW133	MW143	MW154	MW283	MW293	MW303	MW31	MW32	MW33	MW35	MW45	MW46
1,1-DICHLOROETHYLENE	10 U	10 U	10 U	10 U	10 U	27 U	10 U	10 U	10 U	10 U	200 U	2 U	10 U
1,2-DICHLOROETHYLENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
1,2-DICHLOROPROPANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2-HEXANONE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
ACETONE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
BENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
BROMODICHLOROMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
BROMOFORM	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
BROMOMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
CARBON DISULFIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
CARBON TETRACHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
CHLOROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
CHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
CHLOROFORM	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
CIS-1,3-DICHLOROPROPENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
DIBROMOCHLOROMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
ETHYLBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
METHYL ETHYL KETONE (2-BUTANONE)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
METHYLENE CHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
STYRENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
TETRACHLOROETHYLENE (PCE)	5 U	10 U	10 U	2 U	10 U	32 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
TOLUENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
TOTAL 1,2-DICHLOROETHYLENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Isol Xylenes	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
trans-1,3-DICHLOROPROPENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
TRICHLOROETHYLENE (TCE)	2 U	10 U	10 U	11 U	10 U	13 U	10 U	10 U	10 U	10 U	1000 U	10 U	10 U
VINYL CHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Other Parameters:													
CHLORIDE (AS CL)	11.7 =	10.1 =											
FLUORIDE													
NITROGEN AMMONIA (AS N)													
NITROGEN NITRATE (AS N)													
NITROGEN, NITRATE-NITRITE													
SULFATE (AS SO4)	21.6 =	23.7 =											

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

DDMT GROUNDWAT RECOVERY SYSTEM
ANALYTICAL DATA FROM RECOVERY WELLS
Sampled In February, 1996.

PARAMETER	MMW49	MMW51	MMW54
1,1-DICHLOROETHENE	10U	4J	10U
1,2-DICHLOROETHANE	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U
2-HEXANONE	10U	10U	10U
ACETONE	10U	10U	10U
BENZENE	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U
BROMOFORM	10U	10U	10U
BROMOMETHANE	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U
CHLOROBENZENE	10U	10U	10U
CHLOROETHANE	10U	10U	10U
CHLOROFORM	10U	10U	10U
CHLOROMETHANE	10U	10U	10U
cis-1,3-DICHLOROPROPENE	10U	10U	10U
DIBROMOCHLOROMETHANE	10U	10U	10U
ETHYLBENZENE	10U	10U	10U
METHYL ETHYL KETONE (2-BUTANONE)	10U	10U	10U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U
STYRENE	10U	10U	10U
TETRACHLOROETHYLENE(PCE)	10U	2J	10U
TOLUENE	10U	10U	10U
TOTAL 1,2-DICHLOROETHENE	10U	10U	10U
Total Xylenes	10U	10U	10U
trans-1,3-DICHLOROPROPENE	10U	10U	10U
TRICHLOROETHYLENE (TCE)	10U	5J	17 =
VINYL CHLORIDE	10U	10U	10U
Other Parameters			
CHLORIDE (AS CL)			
FLUORIDE			
NITROGEN, AMMONIA (AS N)			
NITROGEN, NITRATE (AS N)			
NITROGEN, NITRATE-NITRITE			
SULFATE (AS SO4)			

U = undetected, UJ = undetected (estimated detection limit), J = estimated below detection limit, "=" = detected value

VOC's (contd)

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ADMINISTRATIVE RECORD

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