

APPENDIX A

SOIL PRG EXCEEDANCES

Table A-1
SURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	OFF-SITE SAMPLES						
		SS-8 0-6"	SS-9 0-6"	SS-10 0-6"	SS-16 0-2"	SS-17 0-6"	SS-18 0-2"	SS-19 0-2"
Benzene	600	-	-	-	-	-	-	-
Naphthalene	13000	-	-	-	-	-	-	-
Acenaphthalene	50000	-	-	-	-	-	-	-
Phenanthrene	50000	-	-	-	-	-	-	-
Pyrene	50000	-	-	-	-	-	-	-
Benza(a)anthracene	300	760 J	540	390	-	-	1900	410
Chrysene	400	940 J	790	440	-	-	2000	700
Benzo(b)fluoranthene	1100	660 J	540	-	-	-	2800	-
Benzo(k)fluoranthene	1100	-	-	-	-	-	1600 JD	-
Benzo(a)pyrene	61	-	-	-	170	220 J	1900	530
Indeno(1,2,3-cd)pyrene	3200	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	300	-	-	-	-	-	-	-

Notes:

"-" indicates concentrations did not exceed SCGs (TAGM-4046)

Concentrations are presented in ug/kg

Table A-1
SURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	ON-SITE SAMPLES							
		SS-3 0-6"	SS-5 under asphalt	SS-6 under asphalt	SS-6 0-6"	SS-7 0-6"	SS-12 0-2"	SS-13 0-2"	SS-14 0-2"
Benzene	600	-	-	-	-	-	-	-	-
Naphthalene	13000	-	-	-	-	-	-	-	-
Acenaphthalene	50000	-	-	-	-	-	-	-	-
Phenanthrene	50000	-	-	-	-	-	-	-	-
Pyrene	50000	-	-	-	-	-	-	-	-
Benza(a)anthracene	300	-	-	-	-	1600 U	6900	5200	10000
Chrysene	400	-	-	-	-	-	-	-	13000
Benzo(b)fluoranthene	1100	-	-	1400 J	-	1600 U	5000	4100 J	7700 J
Benzo(k)fluoranthene	1100	-	-	-	-	-	-	-	-
Benzo(a)pyrene	61	1500	-	-	1300 J	1600 U	9100	6800	13000
Indeno(1,2,3-cd)pyrene	3200	-	-	-	-	-	4400	-	9100 J
Dibenzo(a,h)anthracene	300	-	1400 U	3700 U	-	1600 U	4300 U	-	9400 U

Notes:

"-" indicates concentrations did not exceed SCGs (TAGM-4046)

Concentrations are presented in ug/kg

Table A-2
SUBSURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	OFF-SITE			
		MW-8 2'-4'	MW-9D 2'-4'	MW-9D 6'-8'	MW-9D 44'-46'
Benzene	600				
Naphthalene	13000				83000 D
Acenaphthalene	50000				
Phenanthrene	50000				130000 D
Pyrene	50000				74000 D
Benza(a)anthracene	300				24000 JD
Chrysene	400				21000 JD
Benzo(b)fluoranthene	1100				8300 JD
Benzo(k)fluoranthene	1100				10000 JD
Benzo(a)pyrene	61	88 J	200 J	410	21000 JD
Indeno(1,2,3-cd)pyrene	3200				
Dibenzo(a,h)anthracene	300				

Notes:

"-" indicates concentrations did not exceed either SCGs (TAGM-4046)

Concentrations are presented in ug/kg

Table A-2
SUBSURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	ON-SITE							
		SB-2 6'-8'	SB-3 8'-10'	SB-3 14'-16'	SB-3 18'-20'	SB-10 4'-6'	SB-10 6'-8'	SB-10 10'-12'	SB-11 2'-4'
Benzene	600					390000D	570000D	300000D	
Naphthalene	13000					6400000D	4400000	1600000D	
Acenaphthalene	50000					1600000D	830000	290000	
Phenanthrene	50000					2800000D	1800000D	760000D	
Pyrene	50000								
Benza(a)anthracene	300		4900	4300 D	4300 D	330000	240000	120000	
Chrysene	400				3700 JD	290000	220000	100000	
Benzo(b)fluoranthene	1100		3700	2800 J	1900	120000	69000J	40000J	
Benzo(k)fluoranthene	1100				2300	140000	94000J	54000	
Benzo(a)pyrene	61	1500 U	7400	4600D	3200 JD	210000	150000	76000	780
Indeno(1,2,3-cd)pyrene	3200					52000J	46000J	19000J	
Dibenzo(a,h)anthracene	300					8700J	150000U	41000U	

Notes:

"-" indicates concentrations did not exceed either SCGs (TAC

Concentrations are presented in ug/kg

Table A-2
SUBSURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	ON-SITE							
		SB-18 2'-4'	SB-18 4'-8'	SB-18 (DUP) 4'-8'	SB-19 2'-4'	SB-20 2'-4'	SB-20 6'-8'	SB-21 2'-4'	SB-22 2'-4'
Benzene	600						380000 D		
Naphthalene	13000	19000UJ					3700000		
Acenaphthalene	50000	60000J					910000		
Phenanthrene	50000						1500000		
Pyrene	50000								
Benza(a)anthracene	300	79000J	15000J	16000J	1300	1000	220000		1800
Chrysene	400	99000J	20000J	20000J					
Benzo(b)fluoranthene	1100	34000J	9300	9000	1200J				2000
Benzo(k)fluoranthene	1100	34000J							
Benzo(a)pyrene	61	61000	20000	20000	1300	790		760	2200
Indeno(1,2,3-cd)pyrene	3200	16000J	4200J	4200J					
Dibenzo(a,h)anthracene	300	19000UJ	580J	620J				1700UJ	820U

Notes:

"-" indicates concentrations did not exceed either SCGs (TAC

Concentrations are presented in ug/kg

Table A-2
SUBSURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	ON-SITE							
		MW-RE 10'-12'	MW-2A 42'-44'	MW-2AD (DUP) 42'-44'	MW-2A 44'-46'	MW-3 44'-46'	MW-4 10'-12'	MW-4 20'-22'	MW-5 39'-40'
Benzene	600								
Naphthalene	13000								
Acenaphthalene	50000								
Phenanthrene	50000				110000 J				
Pyrene	50000								
Benza(a)anthracene	300	6700J	6000 J	5900	66000 J	2100 J	5300	26000	11000 D
Chrysene	400				66000 J			31000	
Benzo(b)fluoranthene	1100	4000J	2800 J	2400	21000 J		3600	13000	3800 JD
Benzo(k)fluoranthene	1100				37000 J			18000	
Benzo(a)pyrene	61	4100	4900 J	4700	56000 J	1700 J	7300	24000	7600 D
Indeno(1,2,3-cd)pyrene	3200				21000 J			11000	
Dibenzo(a,h)anthracene	300		1500 U	1500 U	5100 J	1900 U	1200 J	3900 J	

Notes:

"-" indicates concentrations did not exceed either SCGs (TAC

Concentrations are presented in ug/kg

Table A-2
SUBSURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	ON-SITE						
		MW-6 10'-12'	MW-6 42'-44'	MW-7D 4'-6'	MW-7D 6'-8'	MW-12 4'-6'	MW-14 4'-6'	MW-14 6'-8'
Benzene	600		3500					
Naphthalene	13000						20000 U	
Acenaphthalene	50000							
Phenanthrene	50000							
Pyrene	50000							
Benza(a)anthracene	300	5100	7600	7700 D	2200		3800 JD	1500
Chrysene	400							
Benzo(b)fluoranthene	1100	4000	2300 J	4200			2200 JD	1800 J
Benzo(k)fluoranthene	1100							
Benzo(a)pyrene	61	3900	4300	5200	1600	990	3300 JD	1400 J
Indeno(1,2,3-cd)pyrene	3200						20000 U	
Dibenzo(a,h)anthracene	300	1800 U	3800 U				20000 U	

Notes:

"-" indicates concentrations did not exceed either SCGs (TAC

Concentrations are presented in ug/kg

Table A-2
SUBSURFACE SOIL CONCENTRATIONS FOR CHEMICALS OF CONCERN

Chemicals of Concern	SCGs (TAGM 4046)	ON-SITE				
		TP-3 2'-3'	TP-3 6'-8'	TP-4 1'	TP-4 3'	TP-4 6-6, 5'
Benzene	600	7600				
Naphthalene	13000	9300000 JD				
Acenaphthalene	50000	2000000 JD				
Phenanthrene	50000	5200000 JD				
Pyrene	50000	2200000 JD				
Benza(a)anthracene	300	820000 JD		6500	26000	2000 J
Chrysene	400	860000 JD			33000	
Benzo(b)fluoranthene	1100	180000 JD	1600 J	16000	21000	3200 J
Benzo(k)fluoranthene	1100	200000 JD			27000	
Benzo(a)pyrene	61	290000 JD	2400 J	26000	41000	6400
Indeno(1,2,3-cd)pyrene	3200	3200		19000	23000	3400 J
Dibenzo(a,h)anthracene	300	700 J		9600	9400	1000 J

Notes:

"-" indicates concentrations did not exceed either SCGs (TAGM

Concentrations are presented in ug/kg

APPENDIX B

REMEDIAL ALTERNATIVE COST ESTIMATES

TABLE B-1
ALTERNATIVE COST ESTIMATE SUMMARY

Alternative	Capital	O&M (Annual)	Annual O&M NPV	Reviews NPV	Total O&M NPV	Total NPV
Soil Alternatives						
S-1 (No Action)	0	0	0	56,000	56,000	56,000
S-2 (Limited Action)	18,000	0	0	56,000	56,000	74,000
S-3 (Capping)	317,000	8,000	117,000	56,000	173,000	490,000
S-4a (Containment, Capping)	2,357,000	28,000	432,000	56,000	488,000	2,845,000
S-4b (Containment, Capping)	3,457,425	28,000	432,000	56,000	488,000	3,945,425
S-5a (Source Removal, Containment, Capping)	3,610,975	28,000	432,000	56,000	488,000	4,098,975
S-5b (Source Removal, Containment, Capping)	4,711,275	28,000	432,000	56,000	488,000	5,199,275
S-6a (Soil Removal, Containment)	7,930,000	25,000	381,000	56,000	437,000	8,367,000
S-6b (Soil Removal, Containment)	9,029,000	25,000	381,000	56,000	437,000	9,466,000
Groundwater Alternatives						
GW-1 (No Action)	0	0	0	56,000	56,000	56,000
GW-2 (Institutional Controls)	15,000	39,000	597,000	56,000	653,000	668,000
Ingalls Avenue	100,000					100,000
Selected Remedy						
(S-5a -3-sided containment, GW-2, Ingalls Ave.)	3,725,975	67,000	1,029,000	112,000	1,141,000	4,866,975
(S-5b -3-full containment, GW-2, Ingalls Ave.)	4,826,275	67,000	1,029,000	112,000	1,141,000	5,967,275

TABLE B-2
ALTERNATIVE S-2 CAPITAL COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
			Subtotal	\$ 12,000
			Contingency (40%)	\$ 4,800
			Engineering (N/A)	\$ -
			Legal and Administrative (10%)	\$ 1,200
			Grand Total	\$ 18,000

TABLE B-3
ALTERNATIVE S-3 CAPITAL COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMOBILIZATION				
Mobilization	1	LS	20,000	20,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SITE PREPARATION				
Clearing and grading	3250	SY	0.50	1,625
SUPPORT FACILITIES				
Office trailers	1	LS	10,000	10,000
Decon trailer	1	LS	7,000	7,000
CAPPING				
Topsoil layer	2145	CY	40	85,800
Fill	5400	CY	10	54,000
Geotextile	3250	SY	1	3,250
MISCELLANEOUS				
Pre-design investigation	0	LS		-
Misc. Disposal	1	LS	5,000	5,000
Health and Safety Oversight	2	MO	10,000	20,000
Subtotal				\$ 218,675
Contingency (20%)				\$ 43,700
Engineering (20%)				\$ 43,700
Legal and Administrative (5%)				\$ 10,900
Grand Total				\$ 316,975

TABLE B-4
ALTERNATIVE S-4a CAPITAL COST ESTIMATE*

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMOBILIZATION				
Mobilization	1	LS	50,000	50,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SITE PREPARATION				
Clearing and grading	3250	SY	1	1,625
SUPPORT FACILITIES				
Office trailers	1	LS	10,000	10,000
Decon area	1	LS	35,000	35,000
CAPPING				
Asphalt layer (4")	6350	SY	11	69,850
Subbase (6")	1100	CY	20	22,000
Topsoil layer	2145	CY	40	85,800
Fill	5400	CY	10	54,000
Geotextile	3250	SY	1	3,250
CONTAINMENT WALL				
Sheet piling	28000	SF	40	1,120,000
Wall completion cap	1	LS	45,000	45,000
NAPL recovery wells	5	EA	7,500	37,500
MISCELLANEOUS				
Geotechnical Investigation and Hydraulic Modeling	1	LS	100,000	100,000
Health and Safety Oversight	10	MO	10,000	100,000
Subtotal				\$ 1,746,025
Contingency (20%)				\$ 349,200
Engineering (10%)				\$ 174,600
Legal and Administrative (5%)				\$ 87,300
Grand Total				\$ 2,357,125

* - three wall containment system

TABLE B-5
ALTERNATIVE S-4b CAPITAL COST ESTIMATE*

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMobilIZATION				
Mobilization	1	LS	50,000	50,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SITE PREPARATION				
Clearing and grading	3250	SY	1	1,625
SUPPORT FACILITIES				
Office trailers	1	LS	10,000	10,000
Decon area	1	LS	35,000	35,000
CAPPING				
Asphalt layer (4")	6350	SY	11	69,850
Subbase (6")	1100	CY	20	22,000
Topsoil layer	2145	CY	40	85,800
Fill	5400	CY	10	54,000
Geotextile	3250	SY	1	3,250
CONTAINMENT WALL				
Sheet piling	48000	SF	40	1,920,000
Wall completion cap	1	LS	60,000	60,000
NAPL recovery wells	5	EA	7,500	37,500
MISCELLANEOUS				
Geotechnical Investigation and Hydraulic Modeling	1	LS	100,000	100,000
Health and Safety Oversight	10	MO	10,000	100,000
Subtotal				\$ 2,561,025
Contingency (20%)				\$ 512,200
Engineering (10%)				\$ 256,100
Legal and Administrative (5%)				\$ 128,100
Grand Total				\$ 3,457,425

* - fully enclosed containment system

TABLE B-6
ALTERNATIVE S-5a CAPITAL COST ESTIMATE*

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMOBILIZATION				
Mobilization	1	LS	50,000	50,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SITE PREPARATION				
Clearing and grading	3250	SY	0.50	1,625
SUPPORT FACILITIES				
Office trailers	1	LS	15,000	15,000
Decon area	1	LS	42,000	42,000
CAPPING				
Asphalt layer (4")	6350	SY	11	69,850
Subbase (6")	1100	CY	20	22,000
Topsoil layer	2145	CY	40	85,800
Geotextile	3250	SY	1	3,250
EXCAVATION				
Remove Holder Contents	3500	CY	16	56,000
Material Handling	3500	CY	45	157,500
Support equipment operations	1	LS	100,000	100,000
Fill	8900	CY	10	89,000
Environmental controls	1	LS	125,000	125,000
CONTAINMENT WALL				
Sheet piling	28000	SF	40	1,120,000
Wall completion cap	1	LS	45,000	45,000
NAPL recovery wells	5	EA	7,500	37,500
DISPOSAL				
Disposal of excavated soil	5250	Ton	75	393,750
Disposal of oily water	6000	Gal	0.75	4,500
MISCELLANEOUS				
Geotechnical Investigation and Hydraulic Modeling	1	LS	100,000	100,000
Misc. Equipment	1	LS	25,000	25,000
Health and Safety Oversight	12	MO	10,000	120,000
Subtotal				\$ 2,674,775
Contingency (20%)				\$ 535,000
Engineering (10%)				\$ 267,500
Legal and Administrative (5%)				\$ 133,700
Grand Total				\$ 3,610,975

* - three wall containment system

TABLE B-7
ALTERNATIVE S-5b CAPITAL COST ESTIMATE*

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMOBILIZATION				
Mobilization	1	LS	50,000	50,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SITE PREPARATION				
Clearing and grading	3250	SY	0.50	1,625
SUPPORT FACILITIES				
Office trailers	1	LS	15,000	15,000
Decon area	1	LS	42,000	42,000
CAPPING				
Asphalt layer (4")	6350	SY	11	69,850
Subbase (6")	1100	CY	20	22,000
Topsoil layer	2145	CY	40	85,800
Geotextile	3250	SY	1	3,250
EXCAVATION				
Remove Holder Contents	3500	CY	16	56,000
Material Handling	3500	CY	45	157,500
Support equipment operations	1	LS	100,000	100,000
Fill	8900	CY	10	89,000
Environmental controls	1	LS	125,000	125,000
CONTAINMENT WALL				
Sheet piling	48000	SF	40	1,920,000
Wall completion cap	1	LS	60,000	60,000
NAPL recovery wells	5	EA	7,500	37,500
DISPOSAL				
Disposal of excavated soil	5250	Ton	75	393,750
Disposal of oily water	6000	Gal	0.75	4,500
MISCELLANEOUS				
Geotechnical Investigation and Hydraulic Modeling	1	LS	100,000	100,000
Misc. Equipment	1	LS	25,000	25,000
Health and Safety Oversight	12	MO	10,000	120,000
			Subtotal	\$ 3,489,775
			Contingency (20%)	\$ 698,000
			Engineering (10%)	\$ 349,000
			Legal and Administrative (5%)	\$ 174,500
			Grand Total	\$ 4,711,275

* - fully enclosed containment

TABLE B-8
ALTERNATIVE S-6a CAPITAL COST ESTIMATE*

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMobilIZATION				
Mobilization	1	LS	50,000	50,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SUPPORT FACILITIES				
Office trailers	1	LS	15,000	15,000
Decon area	1	LS	63,000	63,000
CAPPING				
Asphalt layer (4")	6350	SY	11	69,850
Subbase (6")	1100	CY	20	22,000
Topsoil layer	2145	CY	40	85,800
Geotextile	3250	SY	1	3,250
SOIL EXCAVATION				
Soil excavation (above water table)	17500	CY	16	280,000
Material Handling	17500	CY	45	787,500
Holder demolition	1500	CY	25	37,500
Sheet piling	15000	SF	40	600,000
Fill	15355	CY	10	153,550
Environmental controls	1	LS	175,000	175,000
DISPOSAL				
Disposal of excavated soil	26250	Ton	75	1,968,750
Off-site disposal of debris	2250	Ton	30	67,500
CONTAINMENT WALL				
Sheet piling	28000	SF	40	1,120,000
Wall completion cap	1	LS	45,000	45,000
NAPL recovery wells	5	EA	7,500	37,500
MISCELLANEOUS				
Geotechnical Investigation and Hydraulic Modeling	1	LS	100,000	100,000
Health and Safety Oversight	18	MO	10,000	180,000
Subtotal				\$ 5,873,200
Contingency (20%)				\$ 1,174,600
Engineering (10%)				\$ 587,300
Legal and Administrative (5%)				\$ 293,700
Grand Total				\$ 7,928,800

* - three wall containment system

TABLE B-9
ALTERNATIVE S-6b CAPITAL COST ESTIMATE*

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
MOBILIZATION/DEMobilIZATION				
Mobilization	1	LS	50,000	50,000
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	12,000	12,000
SUPPORT FACILITIES				
Office trailers	1	LS	15,000	15,000
Decon area	1	LS	63,000	63,000
CAPPING				
Asphalt layer (4")	6350	SY	11	69,850
Subbase (6")	1100	CY	20	22,000
Topsoil layer	2145	CY	40	85,800
Geotextile	3250	SY	1	3,250
SOIL EXCAVATION				
Soil excavation (above water table)	17500	CY	16	280,000
Material Handling	17500	CY	45	787,500
Holder demolition	1500	CY	25	37,500
Sheet piling	15000	SF	40	600,000
Fill	15355	CY	10	153,550
Environmental controls	1	LS	175,000	175,000
DISPOSAL				
Disposal of excavated soil	26250	Ton	75	1,968,750
Off-site disposal of debris	2250	Ton	30	67,500
CONTAINMENT WALL				
Sheet piling	48000	SF	40	1,920,000
Wall completion cap	1	LS	60,000	60,000
NAPL recovery wells	5	EA	7,500	37,500
MISCELLANEOUS				
Geotechnical Investigation and Hydraulic Modeling	1	LS	100,000	100,000
Health and Safety Oversight	18	MO	10,000	180,000
Subtotal				\$ 6,688,200
Contingency (20%)				\$ 1,337,600
Engineering (10%)				\$ 668,800
Legal and Administrative (5%)				\$ 334,400
Grand Total				\$ 9,029,000

* - fully enclosed containment system

TABLE B-10
ALTERNATIVE GW-2 CAPITAL COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Cost
ADMINISTRATIVE ACTIONS				
Institutional Controls	1	LS	10,000	10,000
Subtotal				\$ 10,000
Contingency (40%)				\$ 4,000
Engineering (20%)				\$ -
Legal and Administrative (10%)				\$ 1,000
Grand Total				\$ 15,000

TABLE B-11
ALTERNATIVE S-2 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MISCELLANEOUS				
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ -
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ -
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 55,600

TABLE B-12
ALTERNATIVE S-3 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MISCELLANEOUS				
Maintenance	8	% of Capital	85,800	6,900
Contingency	10	% of O&M	6,900	700
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ 7,600
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ 116,800
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 172,400

TABLE B-13
ALTERNATIVE S-4 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MISCELLANEOUS				
DNAPL Monitoring & Removal	4	event	2,500	10,000
Maintenance	8	% of Capital	193,150	15,500
Contingency	10	% of O&M	25,500	2,600
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ 28,100
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ 432,000
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 487,600

TABLE B-14
ALTERNATIVE S-5 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MISCELLANEOUS				
DNAPL Monitoring & Removal	4	event	2,500	10,000
Maintenance	8	% of Capital	193,150	15,500
Contingency	10	% of O&M	25,500	2,600
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ 28,100
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ 432,000
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 487,600

TABLE B-15
ALTERNATIVE S-6 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MISCELLANEOUS				
DNAPL Monitoring & Removal	4	Event	2,500	10,000
Maintenance	8	% of Capital	155,650	12,500
Contingency	10	% of O&M	22,500	2,300
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ 24,800
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ 381,200
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 436,800

TABLE B-16
ALTERNATIVE GW-1 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MISCELLANEOUS				
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ -
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ -
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 55,600

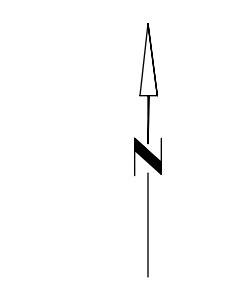
TABLE B-17
ALTERNATIVE GW-2 O&M COST ESTIMATE

Description	Estimated Quantity	Unit of Measure	Unit Cost (material and labor)	Estimated Annual Cost
MONITORING				
Groundwater sampling (labor)	160	hr/yr	80	12,800
Groundwater analysis	16	EA	1,000	16,000
Data Analysis/Reporting	1	LS	10,000	10,000
MISCELLANEOUS				
5-year reviews	6	EA	20,000	N/A
Annual O&M (excl. 5-yr reviews)				\$ 38,800
Project duration (years)				30
Interest rate				5%
NPV Annual O&M				\$ 596,500
NPV Reviews				\$ 55,600
Total NPV O&M				\$ 652,100

APPENDIX C

2004 SRI CROSS SECTIONS

Grid North



1"=40'

SD-5, SW-5
(LOCATED APPROXIMATELY
100' TO THE NORTH OF
15' OFFSHORE, IMMEDIATELY
NORTH OF LOCK CHANNEL)

Legend

- Monitoring Well Location
- Soil Boring Location
- Surface Soil Sample Location
- Soil Boring/Hydropunch Sample Location
- Surface Water/Sediment Sample Location
- Test Pit
- Water Valve
- Fire Hydrant
- Sanitary Sewer Line
- Gas Line
- Gas Line Valve
- Former MGP Structure
- Ground Surface Elevation Contour
- B — B' Cross-Section Location

Source

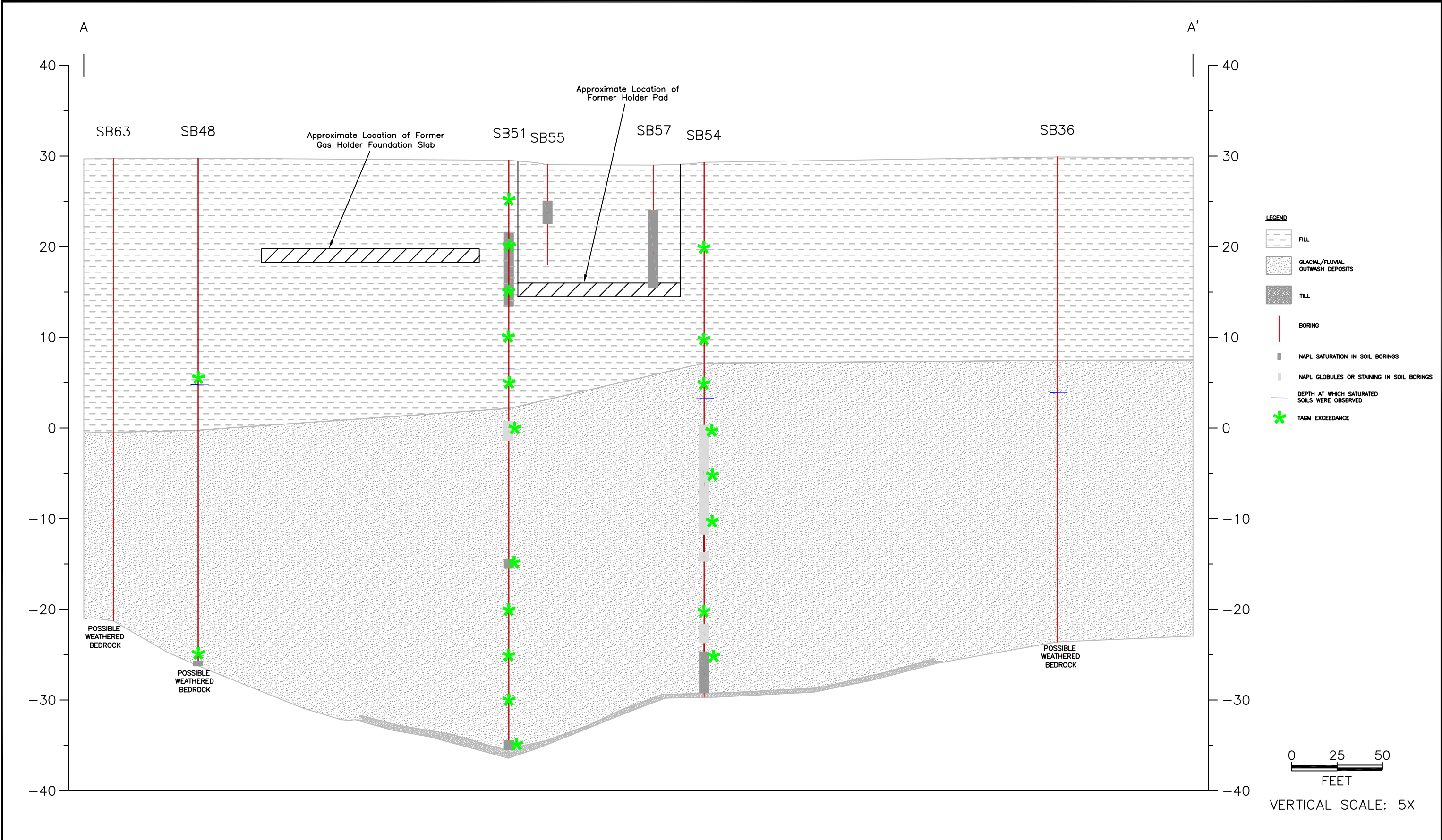
Base map adapted from Niagara Mohawk Drawing No. D-31434-E, Index 21.0-R1.16-M49, dated 9/8/94. Primary survey control for photogrammetric mapping was established from an on-the-ground survey, performed on 5/24/94 using the global position system (GPS) and conforms to Order 2, Class 2 FGCS accuracy specifications. The horizontal reference datum North American Datum of 1983 (NAD 83) is based on a reference ellipsoid associated with the Geodetic Reference System of 1980 (GRS 80). Coordinates are based on the New York State Plan Geodetic System of 1983 (East Zone 3101). Geodetic coordinates from least squares, fully constrained. Adjustment of the primary control network tied to monuments 186, Van Renselaer Reset and 851 8995 D Tidal. Reference materials included Tax Map, City of Troy, Rensselaer County, N.Y. SH 090.62 and NYP&L Corp. Maps - Land and Land Rights, SH 925-7 and 1025-1. Additional survey work, including supplemental sample location information, was performed by Creighton Manning Engineering, LLP from September through December 2004.

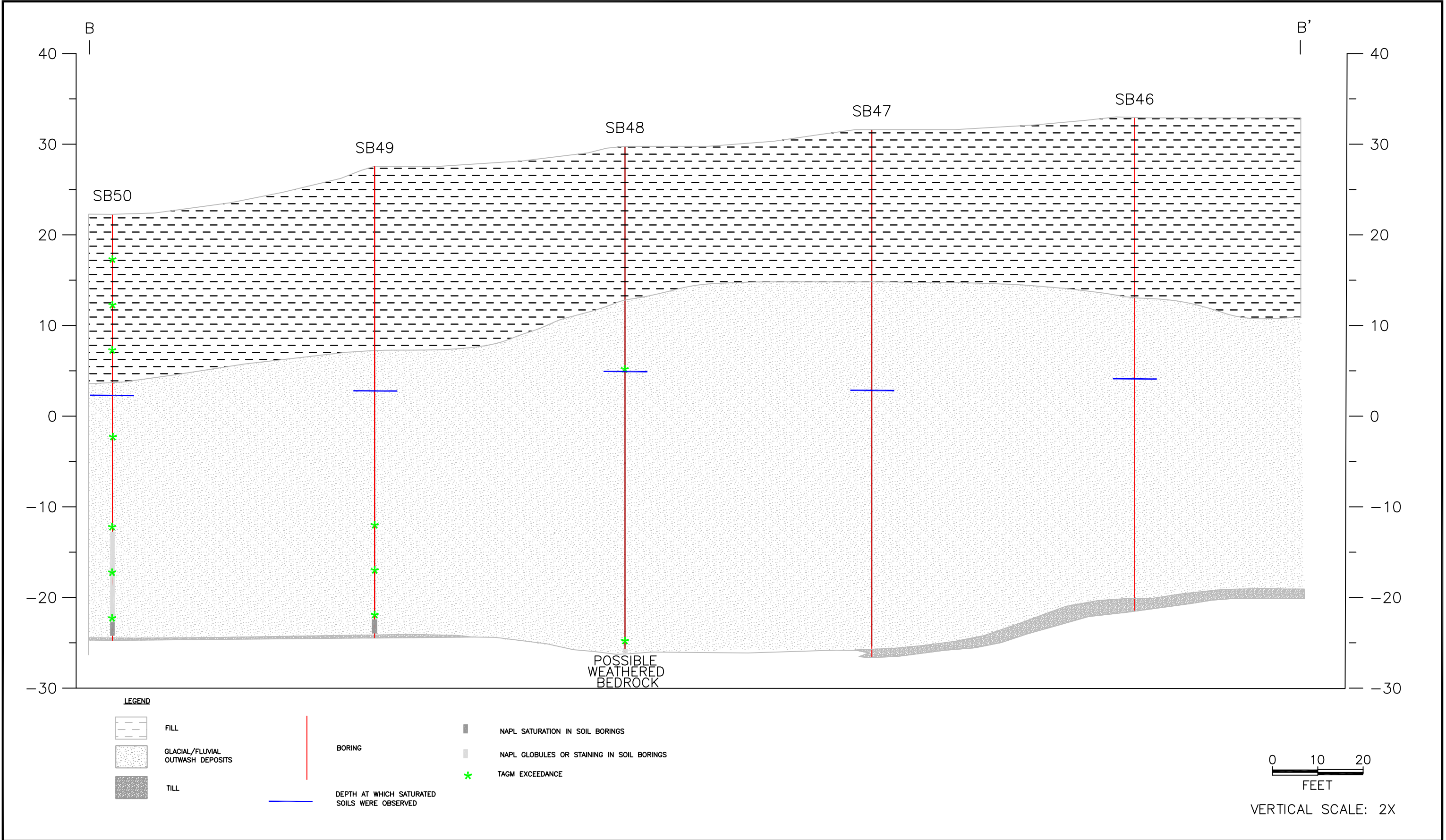


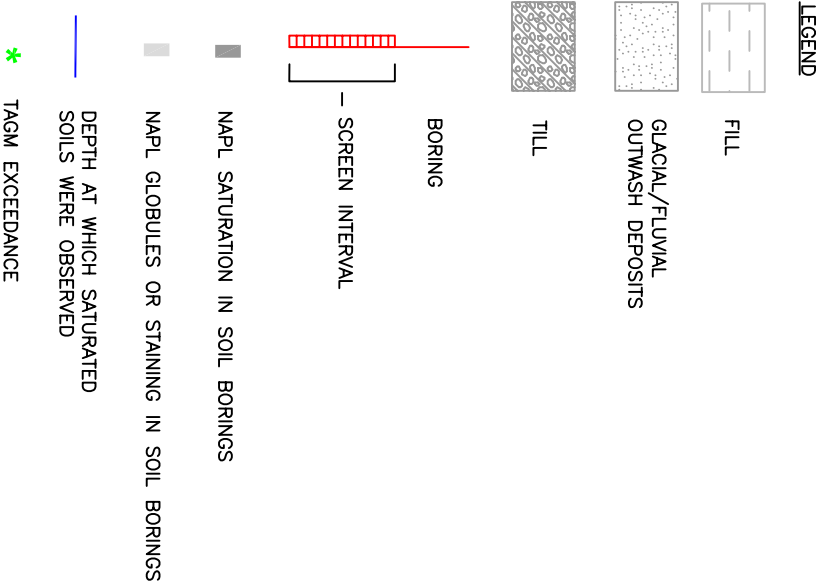
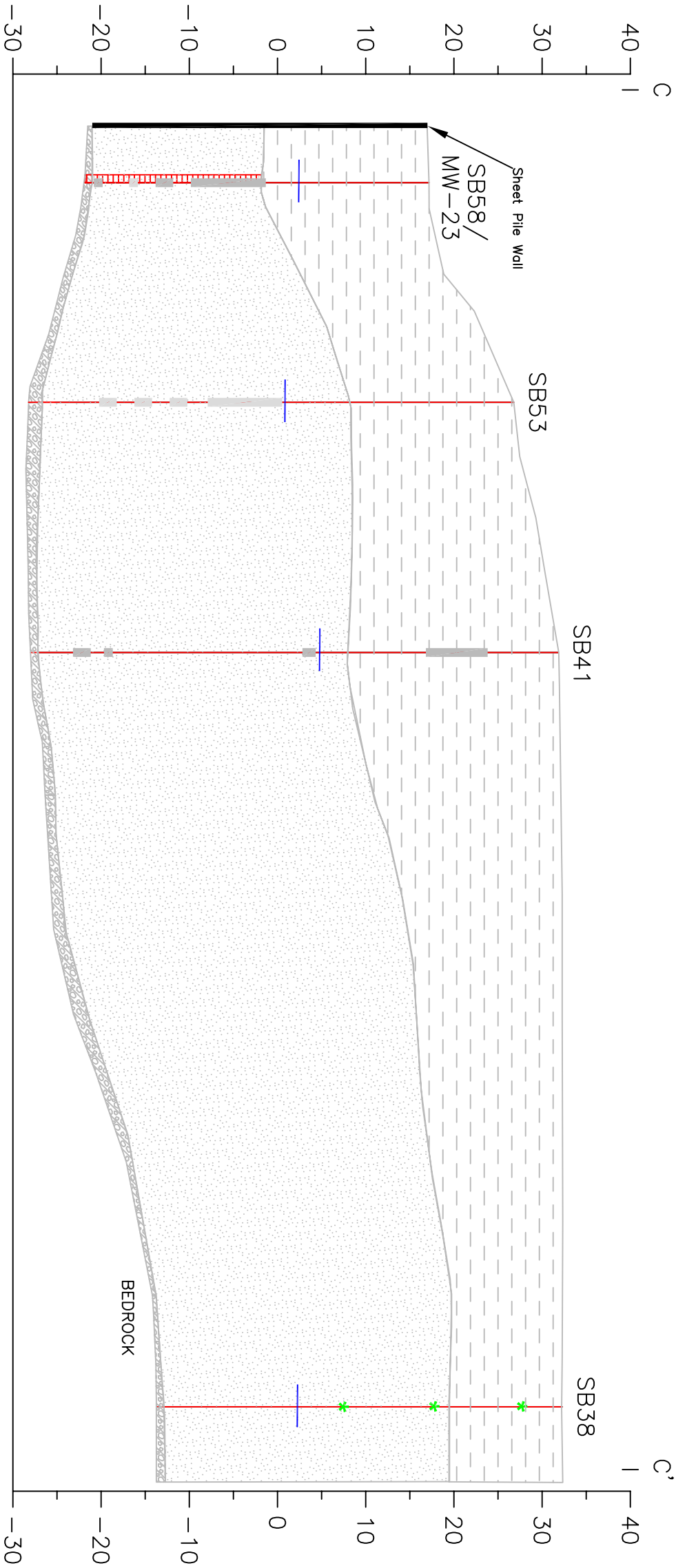
TETRA TECH FW, INC.

Figure 1 DRAFT
2004 Geologic Cross Section Transects
Troy (Smith Ave.) Former MGP Site

DWN:	BC/DB	DES:	BS	PROJECT NO.:
CHKD:	RC	APPD:		FIGURE NO.:
DATE:	12/04/06	REV.:	1	1

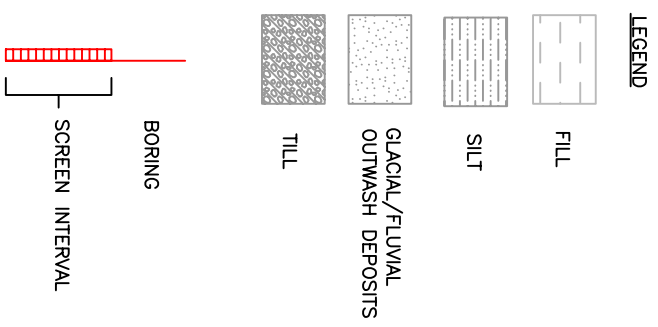
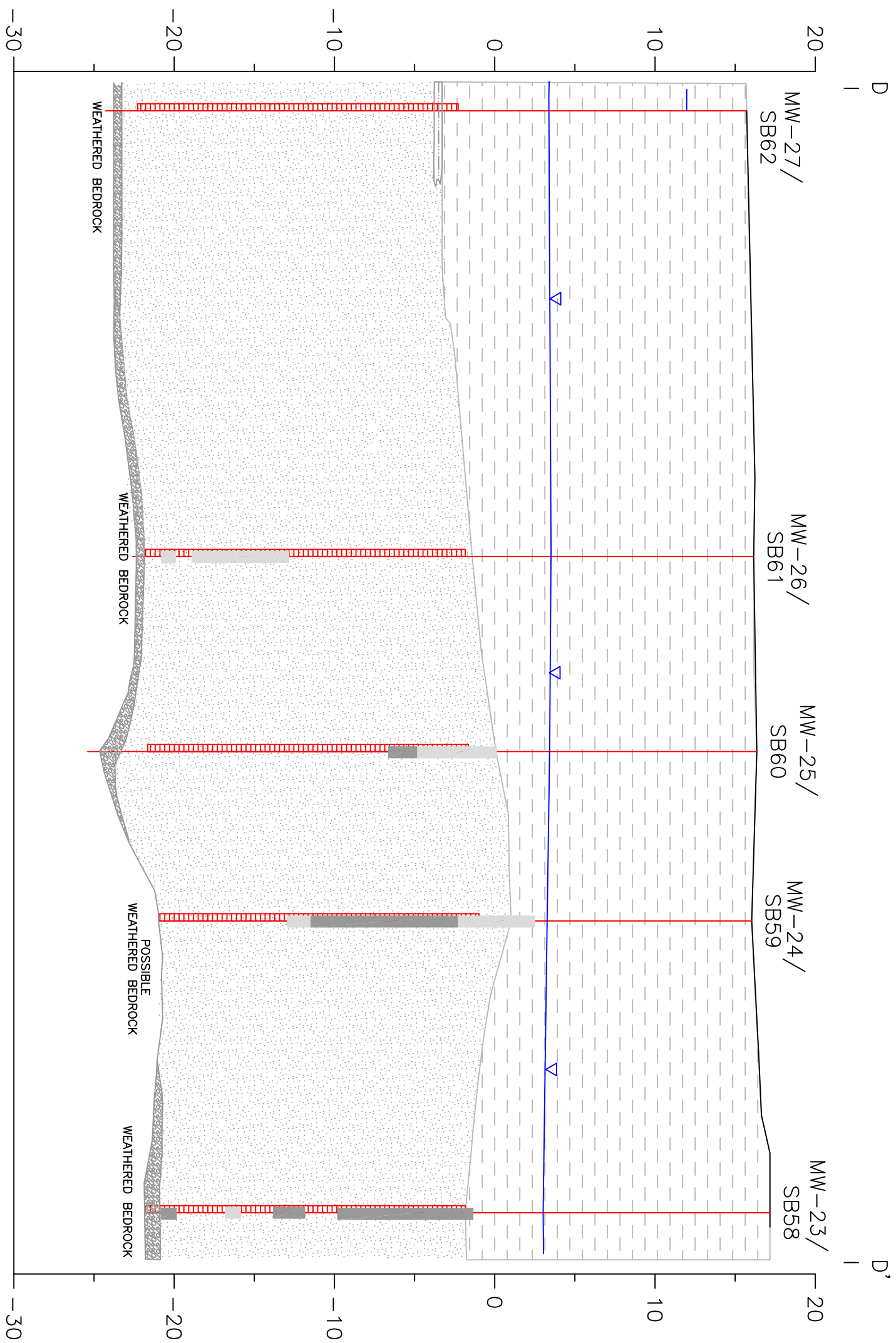






VERTICAL SCALE: 2X

A National Grid Company					



GROUNDWATER ELEVATION
IN MONITORING WELLS
MARCH 9, 2005

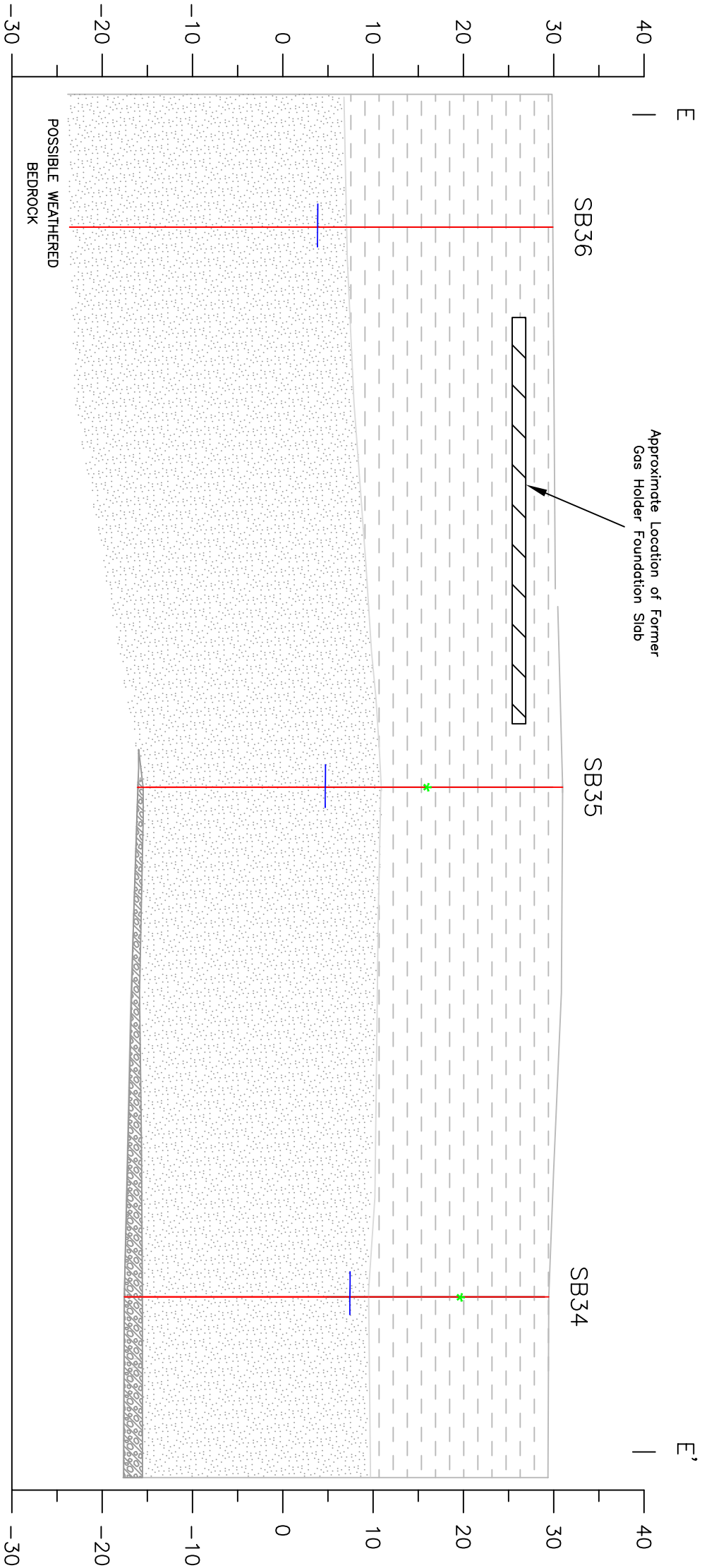
 NAPL SATURATION IN SOIL BORINGS

NAPL GLOBULES OR STAINING IN SOIL BORINGS



VERTICAL SCALE: 2X

 Niagara Mohawk A National Grid Company		TETRA TECH EC, INC.	
TITLE: CROSS SECTION D-D' Remedial Investigation Report Troy (Smith Ave.) Former MGP Site			
DWN.:	CTS	DATE:	04/20/06
CHKD:	DPC	REV.:	0
DES.:	CTS	APPD:	RC
		PROJECT NO.:	2907.0001.0001
		FIGURE NO.:	FIGURE 5



- LEGEND**
- FILL
 - GLACIAL/FLUVIAL
OUTWASH DEPOSITS
 - TILL

- BORING
- DEPTH AT WHICH SATURATED
SOILS WERE OBSERVED
- TAGM EXCEEDANCE



VERTICAL SCALE: 2X

**Niagara Mohawk**
A National Grid Company

**TETRA TECH EC, INC.**

TITLE:
CROSS SECTION E-E'
Remedial Investigation Report
Troy (Smith Ave.) Former MGP Site

DWN.:	CTS	DATE:	04/20/06	PROJECT NO.:	2907.0001.0001
CHKD:	DPC	REV.:	0	FIGURE NO.:	FIGURE 6
DES.:	CTS	APPD:	RC		

APPENDIX D

2001 GROUNDWATER DATA

UNVALIDATED DATA RESULTS

**Volatile Organic Compounds - Groundwater
NM Troy (Smith Avenue) Site**

Page 1 of 8

Client ID	MW-03	MW-06	US-MW02	US-204	US-201	MW-13	MW-17
Lab Sample ID	010236B-03	010236B-04	010236B-05	010236B-06	010236B-08	010236B-09	010236B-10
Date Sampled	02/06/01	02/06/01	02/06/01	02/06/01	02/07/01	02/07/01	02/07/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Chloromethane	10 U	10 U	10 U	10 U	10 U	50 U	50 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	50 U	50 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	50 U	50 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	50 U	50 U
Methylene Chloride	5 U	2 J	2 J	2 J	1 J	14 J	20 J
Acetone	10 U	2 JB	2 JB	4 JB	3 JB	28 JB	170 B
Carbon Disulfide	5 U	0.3 J	5 U	0.4 J	5 U	25 U	25 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	50 U	50 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Chloroform	2 J	5 U	5 U	5 U	5 U	25 U	4 J
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	50 U	50 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Trichloroethene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Benzene	5 U	2 J	2 J	.7 J	2 J	230	4 J
trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Bromoform	5 U	5 U	5 U	5 U	5 U	25 U	25 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	50 U	50 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	50 U	50 U

UNVALIDATED DATA RESULTS

**Volatile Organic Compounds - Groundwater
NM Troy (Smith Avenue) Site**

Page 2 of 8

Client ID Lab Sample ID Date Sampled Units	MW-03 010236B-03 02/06/01 ug/L	MW-06 010236B-04 02/06/01 ug/L	US-MW02 010236B-05 02/06/01 ug/L	US-204 010236B-06 02/06/01 ug/L	US-201 010236B-08 02/07/01 ug/L	MW-13 010236B-09 02/07/01 ug/L	MW-17 010236B-10 02/07/01 ug/L
Compound							
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
1,1,2,2-Tetrachloroethane	5 U	0.6 J	5 U	5 U	1 J	17 J	13 J
Toluene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Ethylbenzene	5 U	8	2 J	5	29	820	500
Styrene	5 U	5 U	5 U	5 U	5 U	25 U	25 U
Xylene (total)	5 U	8	2 J	3 J	30	290	480

UNVALIDATED DATA RESULTS

Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

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Client ID	MW-170	MW-4A	MW-15	MW-16	MW-01	MW-9S	MW-9D
Lab Sample ID	010236B-11	010236B-13	010236A-02	010236A-03	010236A-04	010236A-07	010236A-08
Date Sampled	02/07/01	02/07/01	01/31/01	01/31/01	01/31/01	02/01/01	02/01/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Chloromethane	50 U	20 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	50 U	20 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	50 U	20 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	50 U	20 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	18 J	4 J	5	4 J	1 J	4 J	4 J
Acetone	84 B	10 JB	5 JB	4 JB	4 JB	4 JB	4 JB
Carbon Disulfide	25 U	0.5 J	5 U	5 U	5 U	5 U	2 J
Vinyl Acetate	50 U	20 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Chloroform	4 J	10 U	5 U	5 U	1 J	1 J	5 U
1,2-Dichloroethane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	20 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Benzene	4 J	8 J	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Bromoform	25 U	10 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone	50 U	20 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50 U	20 U	10 U	10 U	10 U	10 U	10 U

UNVALIDATED DATA RESULTS

Volatile Organic Compounds - Groundwater NM Troy (Smith Avenue) Site

Page 4 of 8

Client ID	MW-170	MW-4A	MW-15	MW-16	MW-01	MW-9S	MW-9D
Lab Sample ID	010236B-11	010236B-13	010236A-02	010236A-03	010236A-04	010236A-07	010236A-08
Date Sampled	02/07/01	02/07/01	01/31/01	01/31/01	01/31/01	02/01/01	02/01/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Tetrachloroethene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	13 J	3 J	5 U	5 U	5 U	5 U	5 U
Toluene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	510	64	5 U	5 U	5 U	5 U	5 U
Styrene	25 U	10 U	5 U	5 U	5 U	5 U	5 U
Xylene (total)	490	540	5 U	5 U	5 U	5 U	5 U

UNVALIDATED DATA RESULTS

Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

Page 5 of 8

Client ID	MW-14	MW-140	MW-2A	MW-7S	MW-7D	MW-5S	MW-5D
Lab Sample ID	010236A-09	010236A-10	010236A-11	010236A-12	010236A-13	010236A-16	010236A-17
Date Sampled	02/01/01	02/01/01	02/02/01	02/02/01	02/02/01	02/05/01	02/05/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	4 J	5	4 J	0.6 J	4 J	0.5 J	0.8 J
Acetone	4 JB	4 JB	3 JB	2 JB	5 JB	2 JB	10 U
Carbon Disulfide	0.4 J	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	11	9	5 U	0.4 J	2 J
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U

UNVALIDATED DATA RESULTS

Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

Page 6 of 8

Client ID	MW-14	MW-140	MW-2A	MW-7S	MW-7D	MW-5S	MW-5D
Lab Sample ID	010236A-09	010236A-10	010236A-11	010236A-12	010236A-13	010236A-16	010236A-17
Date Sampled	02/01/01	02/01/01	02/02/01	02/02/01	02/02/01	02/05/01	02/05/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Tetrachloroethene	5 U	5 U	5 U	.4 J	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylene (total)	5 U	5 U	5 U	5 U	5 U	5 U	5 U

UNVALIDATED DATA RESULTS

Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

Page 7 of 8

Client ID	MW-12	MW-8
Lab Sample ID	010236A-18	010236A-19
Date Sampled	02/05/01	02/05/01
Units	ug/L	ug/L
Compound		
Chloromethane	10 U	10 U
Bromomethane	10 U	10 U
Vinyl Chloride	10 U	10 U
Chloroethane	10 U	10 U
Methylene Chloride	2 J	0.3 J
Acetone	72 B	10 U
Carbon Disulfide	5 U	0.4 J
Vinyl Acetate	10 U	10 U
1,1-Dichloroethene	5 U	5 U
1,1-Dichloroethane	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U
trans-1,2-Dichloroethene	5 U	5 U
Chloroform	5 U	5 U
1,2-Dichloroethane	5 U	5 U
2-Butanone	14	10 U
1,1,1-Trichloroethane	5 U	5 U
Carbon Tetrachloride	5 U	5 U
Bromodichloromethane	5 U	5 U
1,2-Dichloropropane	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U
Trichloroethene	5 U	5 U
Dibromochloromethane	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U
Benzene	48	5 U
trans-1,3-Dichloropropene	5 U	5 U
Bromoform	5 U	5 U
4-Methyl-2-Pentanone	10 U	10 U
2-Hexanone	10	10 U

UNVALIDATED DATA RESULTS

Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

Page 8 of 8

Client ID	MW-12	MW-8
Lab Sample ID	010236A-18	010236A-19
Date Sampled	02/05/01	02/05/01
Units	ug/L	ug/L
Compound		
Tetrachloroethene	5 U	5 U
1,1,2,2-Tetrachloroethane	1 J	5 U
Toluene	5 U	5 U
Chlorobenzene	5 U	5 U
Ethylbenzene	30	5 U
Styrene	5 U	5 U
Xylene (total)	17	5 U

UNVALIDATED DATA RESULTS

BTEX Compounds - Groundwater

NM Troy (Smith Avenue) Site

Page 1 of 1

Client ID	MW2192501	MW2292501	MW2092501	MW1891701	MW1991701
Lab Sample ID	303163	303164	303165	301064	301065
Date Sampled	09/25/01	09/25/01	09/25/01	09/17/01	09/17/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Compound					
Benzene	1 U	1 U	1 U	1 U	1 U
Toluene	5 U	0.9 J	5 U	5 U	5 U
Ethylbenzene	4 U	4 U	4 U	4 U	4 U
Xylene (total)	5 U	5 U	5 U	5 U	5 U

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

Page 1 of 12

Client ID Lab Sample ID Date Sampled Units	MW-15 010236A-02 01/31/01 ug/L	MW-16 010236A-03 01/31/01 ug/L	MW-01 010236A-04 01/31/01 ug/L	MW-9S 010236A-07 02/01/01 ug/L	MW-9D 010236A-08 02/01/01 ug/L	MW-14 010236A-09 02/01/01 ug/L	MW-140 010236A-10 02/01/01 ug/L
Compound							
Phenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
bis(2-Chloroethyl)ether	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2-Chlorophenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
1,3-Dichlorobenzene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
1,4-Dichlorobenzene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Benzyl alcohol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
1,2-Dichlorobenzene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2-Methylphenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2,2'-oxybis(1-Chloropropane)	17 U	13 U	15 U	12 U	13 U	13 U	14 U
4-Methylphenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
N-Nitroso-di-n-propylamine	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Hexachloroethane	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Nitrobenzene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Isophorone	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2-Nitrophenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2,4-Dimethylphenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Benzoic acid	86 U	67 U	74 U	60 U	65 U	63 U	68 U
bis(2-Chloroethoxy)methane	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2,4-Dichlorophenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
1,2,4-Trichlorobenzene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Naphthalene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
4-Chloroaniline	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Hexachlorobutadiene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
4-Chloro-3-methylphenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2-Methylnaphthalene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Hexachlorocyclopentadiene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2,4,6-Trichlorophenol	17 U	13 U	15 U	12 U	13 U	13 U	14 U

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater

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Client ID Lab Sample ID Date Sampled Units	MW-15 010236A-02 01/31/01 ug/L	MW-16 010236A-03 01/31/01 ug/L	MW-01 010236A-04 01/31/01 ug/L	MW-9S 010236A-07 02/01/01 ug/L	MW-9D 010236A-08 02/01/01 ug/L	MW-14 010236A-09 02/01/01 ug/L	MW-140 010236A-10 02/01/01 ug/L
Compound							
2,4,5-Trichlorophenol	86 U	67 U	74 U	60 U	65 U	63 U	68 U
2-Chloronaphthalene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2-Nitroaniline	86 U	67 U	74 U	60 U	65 U	63 U	68 U
Dimethylphthalate	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Acenaphthylene	17 U	13 U	15 U	.2 J	13 U	13 U	14 U
2,6-Dinitrotoluene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
3-Nitroaniline	86 U	67 U	74 U	60 U	65 U	63 U	68 U
Acenaphthene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2,4-Dinitrophenol	86 U	67 U	74 U	60 U	65 U	63 U	68 U
4-Nitrophenol	86 U	67 U	74 U	60 U	65 U	63 U	68 U
Dibenzofuran	17 U	13 U	15 U	12 U	13 U	13 U	14 U
2,4-Dinitrotoluene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Diethylphthalate	17 U	13 U	15 U	12 U	13 U	13 U	14 U
4-Chlorophenyl-phenylether	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Fluorene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
4-Nitroaniline	34 U	27 U	29 U	24 U	26 U	25 U	27 U
4,6-Dinitro-2-methylphenol	86 U	67 U	74 U	60 U	65 U	63 U	68 U
N-Nitrosodiphenylamine (1)	17 U	13 U	15 U	12 U	13 U	13 U	14 U
4-Bromophenyl-phenylether	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Hexachlorobenzene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Pentachlorophenol	86 U	67 U	74 U	60 U	65 U	63 U	68 U
Phenanthrene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Anthracene	17 U	13 U	15 U	.3 J	13 U	13 U	14 U
Carbazole	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Di-n-butylphthalate	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Fluoranthene	17 U	13 U	15 U	.5 J	.7 J	13 U	14 U
Pyrene	17 U	13 U	15 U	.9 J	.9 J	13 U	14 U

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater

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Client ID Lab Sample ID Date Sampled Units	MW-15 010236A-02 01/31/01 ug/L	MW-16 010236A-03 01/31/01 ug/L	MW-01 010236A-04 01/31/01 ug/L	MW-9S 010236A-07 02/01/01 ug/L	MW-9D 010236A-08 02/01/01 ug/L	MW-14 010236A-09 02/01/01 ug/L	MW-140 010236A-10 02/01/01 ug/L
Compound							
Butylbenzylphthalate	17 U	13 U	15 U	12 U	13 U	13 U	14 U
3,3'-Dichlorobenzidine	34 U	27 U	29 U	24 U	26 U	25 U	27 U
Benzo(a)anthracene	17 U	13 U	15 U	.6 J	13 U	13 U	14 U
Chrysene	17 U	13 U	15 U	.7 J	13 U	13 U	14 U
bis(2-Ethylhexyl)phthalate	3 J	13 U	15 U	12 U	13 U	13 U	14 U
Di-n-octylphthalate	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Benzo(b)fluoranthene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Benzo(k)fluoranthene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Benzo(a)pyrene	17 U	13 U	15 U	.7 J	13 U	13 U	14 U
Indeno(1,2,3-cd)pyrene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Dibenzo(a,h)anthracene	17 U	13 U	15 U	12 U	13 U	13 U	14 U
Benzo(g,h,i)perylene	17 U	13 U	15 U	12 U	13 U	13 U	14 U

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Client ID	MW-2A	MW-7S	MW-7D	MW-5S	MW-5D	MW-12	MW-8
Lab Sample ID	010236A-11	010236A-12	010236A-13	010236A-16	010236A-17	010236A-18	010236A-19
Date Sampled	02/02/01	02/02/01	02/02/01	02/05/01	02/05/01	02/05/01	02/05/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Phenol	11 U	12 U	12 U	11 U	12 U	2 J	11 U
bis(2-Chloroethyl)ether	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2-Chlorophenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
1,3-Dichlorobenzene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
1,4-Dichlorobenzene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Benzyl alcohol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
1,2-Dichlorobenzene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2-Methylphenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2,2'-oxybis(1-Chloropropane)	11 U	12 U	12 U	11 U	12 U	11 U	11 U
4-Methylphenol	11 U	12 U	12 U	11 U	12 U	2 J	11 U
N-Nitroso-di-n-propylamine	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Hexachloroethane	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Nitrobenzene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Isophorone	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2-Nitrophenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2,4-Dimethylphenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Benzoic acid	57 U	60 U	61 U	56 U	60 U	56 U	55 U
bis(2-Chloroethoxy)methane	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2,4-Dichlorophenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
1,2,4-Trichlorobenzene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Naphthalene	11 U	12 U	12 U	11 U	12 U	50	11 U
4-Chloroaniline	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Hexachlorobutadiene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
4-Chloro-3-methylphenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2-Methylnaphthalene	11 U	12 U	12 U	11 U	12 U	4 J	11 U
Hexachlorocyclopentadiene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2,4,6-Trichlorophenol	11 U	12 U	12 U	11 U	12 U	11 U	11 U

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater

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Client ID Lab Sample ID Date Sampled Units	MW-2A 010236A-11 02/02/01 ug/L	MW-7S 010236A-12 02/02/01 ug/L	MW-7D 010236A-13 02/02/01 ug/L	MW-5S 010236A-16 02/05/01 ug/L	MW-5D 010236A-17 02/05/01 ug/L	MW-12 010236A-18 02/05/01 ug/L	MW-8 010236A-19 02/05/01 ug/L
Compound							
2,4,5-Trichlorophenol	57 U	60 U	61 U	56 U	60 U	56 U	55 U
2-Chloronaphthalene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
2-Nitroaniline	57 U	60 U	61 U	56 U	60 U	56 U	55 U
Dimethylphthalate	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Acenaphthylene	.3 J	12 U	12 U	.3 J	2 J	11 U	11 U
2,6-Dinitrotoluene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
3-Nitroaniline	57 U	60 U	61 U	56 U	60 U	56 U	55 U
Acenaphthene	3 J	12 U	12 U	11 U	4 J	3 J	11 U
2,4-Dinitrophenol	57 U	60 U	61 U	56 U	60 U	56 U	55 U
4-Nitrophenol	57 U	60 U	61 U	56 U	60 U	56 U	55 U
Dibenzofuran	11 U	12 U	12 U	.3 J	.5 J	11 U	11 U
2,4-Dinitrotoluene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Diethylphthalate	11 U	12 U	12 U	11 U	12 U	11 U	11 U
4-Chlorophenyl-phenylether	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Fluorene	1 J	12 U	12 U	.6 J	1 J	11 U	11 U
4-Nitroaniline	23 U	24 U	24 U	22 U	24 U	22 U	22 U
4,6-Dinitro-2-methylphenol	57 U	60 U	61 U	56 U	60 U	56 U	55 U
N-Nitrosodiphenylamine (1)	11 U	12 U	12 U	11 U	12 U	11 U	11 U
4-Bromophenyl-phenylether	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Hexachlorobenzene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Pentachlorophenol	57 U	60 U	61 U	56 U	60 U	56 U	55 U
Phenanthrene	1 J	12 U	12 U	.5 J	5 J	1 J	11 U
Anthracene	.4 J	12 U	12 U	11 U	2 J	11 U	11 U
Carbazole	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Di-n-butylphthalate	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Fluoranthene	.4 J	12 U	2 J	2 J	2 J	11 U	11 U
Pyrene	.5 J	12 U	10 J	1 J	4 J	11 U	.2 J

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Semi-Volatile Organic Compounds - Groundwater

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Client ID	MW-2A	MW-7S	MW-7D	MW-5S	MW-5D	MW-12	MW-8
Lab Sample ID	010236A-11	010236A-12	010236A-13	010236A-16	010236A-17	010236A-18	010236A-19
Date Sampled	02/02/01	02/02/01	02/02/01	02/05/01	02/05/01	02/05/01	02/05/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Butylbenzylphthalate	11 U	12 U	12 U	11 U	12 U	11 U	11 U
3,3'-Dichlorobenzidine	23 U	24 U	24 U	22 U	24 U	22 U	22 U
Benzo(a)anthracene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Chrysene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
bis(2-Ethylhexyl)phthalate	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Di-n-octylphthalate	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Benzo(b)fluoranthene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Benzo(k)fluoranthene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Benzo(a)pyrene	11 U	12 U	12 U	.4 J	12 U	11 U	11 U
Indeno(1,2,3-cd)pyrene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Dibenzo(a,h)anthracene	11 U	12 U	12 U	11 U	12 U	11 U	11 U
Benzo(g,h,i)perylene	11 U	12 U	12 U	11 U	12 U	11 U	11 U

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater

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Client ID	MW-03	MW-06	US-MW02	US-204	US-201	MW-13	MW-17
Lab Sample ID	010236B-03	010236B-04	010236B-05	010236B-06	010236B-08	010236B-09	010236B-10
Date Sampled	02/06/01	02/06/01	02/06/01	02/06/01	02/07/01	02/07/01	02/07/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Phenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
bis(2-Chloroethyl)ether	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2-Chlorophenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
1,3-Dichlorobenzene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
1,4-Dichlorobenzene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Benzyl alcohol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
1,2-Dichlorobenzene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2-Methylphenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2,2'-oxybis(1-Chloropropane)	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
4-Methylphenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
N-Nitroso-di-n-propylamine	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Hexachloroethane	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Nitrobenzene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Isophorone	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2-Nitrophenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2,4-Dimethylphenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Benzoic acid	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
bis(2-Chloroethoxy)methane	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2,4-Dichlorophenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
1,2,4-Trichlorobenzene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Naphthalene	13 U	60	62 U	7 J	23 J	3300	4000
4-Chloroaniline	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Hexachlorobutadiene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
4-Chloro-3-methylphenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2-Methylnaphthalene	13 U	3 J	62 U	12 U	46 U	240 J	730 J
Hexachlorocyclopentadiene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2,4,6-Trichlorophenol	13 U	50 U	62 U	12 U	46 U	560 U	1000 U

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Client ID Lab Sample ID Date Sampled Units	MW-03 010236B-03 02/06/01 ug/L	MW-06 010236B-04 02/06/01 ug/L	US-MW02 010236B-05 02/06/01 ug/L	US-204 010236B-06 02/06/01 ug/L	US-201 010236B-08 02/07/01 ug/L	MW-13 010236B-09 02/07/01 ug/L	MW-17 010236B-10 02/07/01 ug/L
Compound							
2,4,5-Trichlorophenol	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
2-Chloronaphthalene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
2-Nitroaniline	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
Dimethylphthalate	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Acenaphthylene	13 U	120	18 J	11 J	24 J	560 U	1000 U
2,6-Dinitrotoluene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
3-Nitroaniline	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
Acenaphthene	13 U	360	380	81	200	260 J	340 J
2,4-Dinitrophenol	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
4-Nitrophenol	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
Dibenzofuran	13 U	22 J	8 J	3 J	9 J	560 U	1000 U
2,4-Dinitrotoluene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Diethylphthalate	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
4-Chlorophenyl-phenylether	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Fluorene	13 U	160	73	15	61	54 J	78 J
4-Nitroaniline	25 U	100 U	120 U	24 U	92 U	1100 U	2000 U
4,6-Dinitro-2-methylphenol	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
N-Nitrosodiphenylamine (1)	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
4-Bromophenyl-phenylether	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Hexachlorobenzene	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Pentachlorophenol	63 U	250 U	310 U	59 U	230 U	2800 U	5000 U
Phenanthrene	13 U	49 J	3 J	2 J	9 J	75 J	120 J
Anthracene	13 U	55	7 J	3 J	12 J	560 U	24 J
Carbazole	13 U	1 J	62 U	1 J	2 J	560 U	1000 U
Di-n-butylphthalate	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Fluoranthene	13 U	39 J	16 J	10 J	17 J	560 U	1000 U
Pyrene	13 U	59	23 J	16	20 J	7 J	12 J

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater NM Troy (Smith Avenue) Site

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Client ID	MW-03	MW-06	US-MW02	US-204	US-201	MW-13	MW-17
Lab Sample ID	010236B-03	010236B-04	010236B-05	010236B-06	010236B-08	010236B-09	010236B-10
Date Sampled	02/06/01	02/06/01	02/06/01	02/06/01	02/07/01	02/07/01	02/07/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound							
Butylbenzylphthalate	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
3,3'-Dichlorobenzidine	25 U	100 U	120 U	24 U	92 U	1100 U	2000 U
Benzo(a)anthracene	13 U	21 J	6 J	3 J	6 J	560 U	1000 U
Chrysene	13 U	20 J	5 J	4 J	6 J	560 U	1000 U
bis(2-Ethylhexyl)phthalate	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Di-n-octylphthalate	13 U	50 U	62 U	12 U	46 U	560 U	1000 U
Benzo(b)fluoranthene	13 U	7 J	2 J	2 J	2 J	560 U	1000 U
Benzo(k)fluoranthene	13 U	9 J	4 J	2 J	3 J	560 U	1000 U
Benzo(a)pyrene	13 U	14 J	5 J	4 J	4 J	560 U	1000 U
Indeno(1,2,3-cd)pyrene	13 U	4 J	1 J	1 J	.9 J	560 U	1000 U
Dibenzo(a,h)anthracene	13 U	2 J	62 U	12 U	46 U	560 U	1000 U
Benzo(g,h,i)perylene	13 U	5 J	2 J	2 J	1 J	560 U	1000 U

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Client ID	MW-170	MW-4A
Lab Sample ID	010236B-11	010236B-13
Date Sampled	02/07/01	02/07/01
Units	ug/L	ug/L
Compound		
Phenol	360 U	24 U
bis(2-Chloroethyl)ether	360 U	24 U
2-Chlorophenol	360 U	24 U
1,3-Dichlorobenzene	360 U	24 U
1,4-Dichlorobenzene	360 U	24 U
Benzyl alcohol	360 U	24 U
1,2-Dichlorobenzene	360 U	24 U
2-Methylphenol	360 U	24 U
2,2'-oxybis(1-Chloropropane)	360 U	24 U
4-Methylphenol	360 U	24 U
N-Nitroso-di-n-propylamine	360 U	24 U
Hexachloroethane	360 U	24 U
Nitrobenzene	360 U	24 U
Isophorone	360 U	24 U
2-Nitrophenol	360 U	24 U
2,4-Dimethylphenol	360 U	2 J
Benzoic acid	1800 U	120 U
bis(2-Chloroethoxy)methane	360 U	24 U
2,4-Dichlorophenol	360 U	24 U
1,2,4-Trichlorobenzene	360 U	24 U
Naphthalene	2200	140
4-Chloroaniline	360 U	24 U
Hexachlorobutadiene	360 U	24 U
4-Chloro-3-methylphenol	360 U	24 U
2-Methylnaphthalene	260 J	65
Hexachlorocyclopentadiene	360 U	24 U
2,4,6-Trichlorophenol	360 U	24 U

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Client ID	MW-170	MW-4A
Lab Sample ID	010236B-11	010236B-13
Date Sampled	02/07/01	02/07/01
Units	ug/L	ug/L
Compound		
2,4,5-Trichlorophenol	1800 U	120 U
2-Chloronaphthalene	360 U	24 U
2-Nitroaniline	1800 U	120 U
Dimethylphthalate	360 U	24 U
Acenaphthylene	360 U	1 J
2,6-Dinitrotoluene	360 U	24 U
3-Nitroaniline	1800 U	120 U
Acenaphthene	110 J	9 J
2,4-Dinitrophenol	1800 U	120 U
4-Nitrophenol	1800 U	120 U
Dibenzofuran	360 U	2 J
2,4-Dinitrotoluene	360 U	24 U
Diethylphthalate	360 U	.4 JB
4-Chlorophenyl-phenylether	360 U	24 U
Fluorene	18 J	5 J
4-Nitroaniline	710 U	48 U
4,6-Dinitro-2-methylphenol	1800 U	120 U
N-Nitrosodiphenylamine (1)	360 U	24 U
4-Bromophenyl-phenylether	360 U	24 U
Hexachlorobenzene	360 U	24 U
Pentachlorophenol	1800 U	120 U
Phenanthrene	17 J	6 J
Anthracene	360 U	1 J
Carbazole	360 U	.6 J
Di-n-butylphthalate	360 U	24 U
Fluoranthene	360 U	1 J
Pyrene	360 U	3 J

UNVALIDATED DATA RESULTS

Semi-Volatile Organic Compounds - Groundwater

NM Troy (Smith Avenue) Site

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Client ID	MW-170	MW-4A
Lab Sample ID	010236B-11	010236B-13
Date Sampled	02/07/01	02/07/01
Units	ug/L	ug/L
Compound		
Butylbenzylphthalate	360 U	24 U
3,3'-Dichlorobenzidine	710 U	48 U
Benzo(a)anthracene	360 U	.7 J
Chrysene	360 U	.8 J
bis(2-Ethylhexyl)phthalate	360 U	42 B
Di-n-octylphthalate	360 U	24 U
Benzo(b)fluoranthene	360 U	.4 J
Benzo(k)fluoranthene	360 U	.7 J
Benzo(a)pyrene	360 U	.8 J
Indeno(1,2,3-cd)pyrene	360 U	24 U
Dibenzo(a,h)anthracene	360 U	24 U
Benzo(g,h,i)perylene	360 U	.5 J

UNVALIDATED DATA RESULTS

PAH Compounds - Groundwater

NM Troy (Smith Avenue) Site

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Client ID	MW2192501	MW2292501	MW2092501	MW1891701	MW1991701
Lab Sample ID	303163	303164	303165	301064	301065
Date Sampled	09/25/01	09/25/01	09/25/01	09/17/01	09/17/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Compound					
Naphthalene	10 U	10 U	10 U	0.3 J	10 U
Acenaphthylene	10 U	10 U	10 U	1.2 J	10 U
Acenaphthene	10 U	0.5 J	10 U	8.5 J	1.2 J
Fluorene	10 U	10 U	10 U	5.9 J	10 U
Phenanthrene	10 U	10 U	10 U	8.4 J	10 U
Anthracene	10 U	10 U	10 U	2.1 J	10 U
Fluoranthene	10 U	10 U	10 U	3.6 J	10 U
Pyrene	10 U	10 U	10 U	5.3 J	10 U
Benzo(a)anthracene	1 U	1 U	1 U	0.8 J	1 U
Chrysene	10 U	10 U	10 U	0.6 J	10 U
Benzo(b)fluoranthene	1 U	1 U	1 U	0.2 J	1 U
Benzo(k)fluoranthene	1 U	1 U	1 U	1 U	1 U
Benzo(a)pyrene	1 U	1 U	1 U	0.3 J	1 U
Indeno(1,2,3-cd)pyrene	1 U	1 U	1 U	1 U	1 U
Dibenz(a,h)anthracene	1 U	1 U	1 U	1 U	1 U
Benzo (g, h, i) perylene	10 U	10 U	10 U	10 U	10 U

Pesticides/PCBs - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-15 010236A-02 01/31/01 ug/L	MW-16 010236A-03 01/31/01 ug/L	MW-01 010236A-04 01/31/01 ug/L	MW-9S 010236A-07 02/01/01 ug/L	MW-9D 010236A-08 02/01/01 ug/L	MW-14 010236A-09 02/01/01 ug/L	MW-140 010236A-10 02/01/01 ug/L
Compound							
alpha-BHC	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
beta-BHC	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
delta-BHC	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
gamma-BHC (Lindane)	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
Heptachlor	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
Aldrin	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
Heptachlor Epoxide	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
Endosulfan I	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
Dieldrin	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
4,4'-DDE	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Endrin	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Endosulfan II	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
4,4'-DDD	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Endosulfan Sulfate	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
4,4'-DDT	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Methoxychlor	0.50 U	0.62 U	0.65 U	0.63 U	0.62 U	0.71 U	0.67 U
Endrin Ketone	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Endrin Aldehyde	0.10 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
alpha-Chlordane	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
gamma-Chlordane	0.050 U	0.062 U	0.065 U	0.063 U	0.062 U	0.071 U	0.067 U
Toxaphene	2.5 U	3.1 U	3.2 U	3.2 U	3.1 U	3.6 U	3.3 U
Aroclor-1016	1.0 U	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.3 U
Aroclor-1221	2.0 U	2.5 U	2.6 U	2.5 U	2.5 U	2.8 U	2.7 U
Aroclor-1232	1.0 U	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.3 U
Aroclor-1242	1.0 U	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.3 U
Aroclor-1248	1.0 U	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.3 U
Aroclor-1254	1.0 U	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.3 U
Aroclor-1260	1.0 U	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.3 U

Pesticides/PCBs - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-2A 010236A-11 02/02/01 ug/L	MW-7S 010236A-12 02/02/01 ug/L	MW-7D 010236A-13 02/02/01 ug/L	MW-5S 010236A-16 02/05/01 ug/L	MW-5D 010236A-17 02/05/01 ug/L	MW-12 010236A-18 02/05/01 ug/L	MW-8 010236A-19 02/05/01 ug/L
Compound							
alpha-BHC	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
beta-BHC	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
delta-BHC	0.062 U	0.067 U	0.0076 J	0.061 U	0.062 U	0.025 J	0.065 U
gamma-BHC (Lindane)	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
Heptachlor	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
Aldrin	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
Heptachlor Epoxide	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
Endosulfan I	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
Dieldrin	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
4,4'-DDE	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
Endrin	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
Endosulfan II	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
4,4'-DDD	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
Endosulfan Sulfate	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
4,4'-DDT	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
Methoxychlor	0.62 U	0.67 U	0.50 U	0.61 U	0.62 U	0.59 U	0.65 U
Endrin Ketone	0.12 U	0.13 U	0.10 U	0.12 U	0.12 U	0.12 U	0.13 U
Endrin Aldehyde	0.12 U	0.13 U	0.10 U	0.014 J	0.019 J	0.12 U	0.13 U
alpha-Chlordane	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
gamma-Chlordane	0.062 U	0.067 U	0.050 U	0.061 U	0.062 U	0.059 U	0.065 U
Toxaphene	3.1 U	3.3 U	2.5 U	3.0 U	3.1 U	2.9 U	3.2 U
Aroclor-1016	1.2 U	1.3 U	1.0 U	1.2 U	1.2 U	1.2 U	1.3 U
Aroclor-1221	2.5 U	2.7 U	2.0 U	2.4 U	2.5 U	2.4 U	2.6 U
Aroclor-1232	1.2 U	1.3 U	1.0 U	1.2 U	1.2 U	1.2 U	1.3 U
Aroclor-1242	1.2 U	1.3 U	1.0 U	1.2 U	1.2 U	1.2 U	1.3 U
Aroclor-1248	1.2 U	1.3 U	1.0 U	1.2 U	1.2 U	1.2 U	1.3 U
Aroclor-1254	1.2 U	1.3 U	1.0 U	1.2 U	1.2 U	1.2 U	1.3 U
Aroclor-1260	1.2 U	1.3 U	1.0 U	1.2 U	1.2 U	1.2 U	1.3 U

Pesticides/PCBs - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-03 010236B-03 02/06/01 ug/L	MW-06 010236B-04 02/06/01 ug/L	US-MW02 010236B-05 02/06/01 ug/L	US-204 010236B-06 02/06/01 ug/L	US-201 010236B-08 02/07/01 ug/L	MW-13 010236B-09 02/07/01 ug/L	MW-17 010236B-10 02/07/01 ug/L
Compound							
alpha-BHC	0.057 U	0.11	0.062 U	0.059 U	0.031 J	0.057 U	0.086 U
beta-BHC	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
delta-BHC	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.14
gamma-BHC (Lindane)	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
Heptachlor	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
Aldrin	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
Heptachlor Epoxide	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
Endosulfan I	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
Dieldrin	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
4,4'-DDE	0.11 U	0.035 J	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
Endrin	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
Endosulfan II	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
4,4'-DDD	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
Endosulfan Sulfate	0.11 U	0.11 U	0.055 J	0.12 U	0.031 J	0.014 J	0.025 J
4,4'-DDT	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
Methoxychlor	0.57 U	0.54 U	0.62 U	0.59 U	0.61 U	0.57 U	0.86 U
Endrin Ketone	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.17 U
Endrin Aldehyde	0.11 U	0.11 U	0.12 U	0.016 J	0.12 U	0.11 U	0.17 U
alpha-Chlordane	0.057 U	0.054 U	0.062 U	0.059 U	0.061 U	0.057 U	0.086 U
gamma-Chlordane	0.057 U	0.074	0.062 U	0.030 J	0.037 J	0.016 J	0.029 J
Toxaphene	2.9 U	2.7 U	3.1 U	2.9 U	3.0 U	2.9 U	4.3 U
Aroclor-1016	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.7 U
Aroclor-1221	2.3 U	2.2 U	2.5 U	2.4 U	2.4 U	2.3 U	3.4 U
Aroclor-1232	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.7 U
Aroclor-1242	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.7 U
Aroclor-1248	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.7 U
Aroclor-1254	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.7 U
Aroclor-1260	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.7 U

Pesticides/PCBs - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID	MW-170	MW-4A
Lab Sample ID	010236B-11	010236B-13
Date Sampled	02/07/01	02/07/01
Units	ug/L	ug/L
Compound		
alpha-BHC	0.079 U	0.029 J
beta-BHC	0.079 U	0.062 U
delta-BHC	0.079 U	0.062 U
gamma-BHC (Lindane)	0.079 U	0.021 J
Heptachlor	0.079 U	0.062 U
Aldrin	0.079 U	0.062 U
Heptachlor Epoxide	0.079 U	0.062 U
Endosulfan I	0.079 U	0.062 U
Dieldrin	0.16 U	0.12 U
4,4'-DDE	0.16 U	0.12 U
Endrin	0.16 U	0.12 U
Endosulfan II	0.16 U	0.12 U
4,4'-DDD	0.16 U	0.12 U
Endosulfan Sulfate	0.16 U	0.0083 J
4,4'-DDT	0.16 U	0.12 U
Methoxychlor	0.79 U	0.62 U
Endrin Ketone	0.16 U	0.12 U
Endrin Aldehyde	0.16 U	0.12 U
alpha-Chlordane	0.079 U	0.062 U
gamma-Chlordane	0.030 J	0.062 U
Toxaphene	4.0 U	3.1 U
Aroclor-1016	1.6 U	1.2 U
Aroclor-1221	3.2 U	2.5 U
Aroclor-1232	1.6 U	1.2 U
Aroclor-1242	1.6 U	1.2 U
Aroclor-1248	1.6 U	1.2 U
Aroclor-1254	1.6 U	1.2 U
Aroclor-1260	1.6 U	1.2 U

Metals - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-15 010236A-02 01/31/01 ug/L	MW-16 010236A-03 01/31/01 ug/L	MW-01 010236A-04 01/31/01 ug/L	MW-9S 010236A-07 02/01/01 ug/L	MW-9D 010236A-08 02/01/01 ug/L	MW-14 010236A-09 02/01/01 ug/L	MW-140 010236A-10 02/01/01 ug/L
Compound							
Aluminum	899.	47.0 B	2100	533.	24.0 U	567.	546.
Antimony	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Arsenic	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Barium	1270	132. B	127. B	91.4 B	87.4 B	1790	1860
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.7	7.1
Calcium	8680	104000	109000	79100	95300	9840	10300
Chromium	21.8	1.0 U	58.0	10.9	1.0 U	10.0	10.1
Cobalt	1.1 B	1.0 U	6.1 B	1.1 B	1.0 U	1.0 U	1.0 U
Copper	14.0 B	1.0 U	14.1 B	4.0 B	1.0 U	1.8 B	1.5 B
Iron	1160	202.	5130	1260	621.	954.	1010
Lead	2.0 U	2.0 U	3.1	2.0 U	2.0 U	2.0 U	2.0 U
Magnesium	1810 B	17200	19400	11000	18500	3460 B	3550 B
Manganese	89.0	1130	1790	892.	639.	59.8	60.5
Mercury	0.16 B	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	13.2 B	1.3 B	43.4	10.3 B	1.5 B	7.2 B	6.8 B
Potassium	16500	6610	9270	10500	6280	62500	65600
Selenium	4.0 UN	4.0 UN	4.0 UN	4.0 UN	4.0 UN	4.0 UN	4.0 UN
Silver	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	111000	41200	27800	123000	41700	164000	165000
Thallium	5.8 B	5.0 U	5.7 B	5.0 U	5.0 U	5.0 U	5.9 B
Vanadium	3.3 B	1.0 U	2.4 B	1.0 U	1.0 U	1.2 B	1.0 U
Zinc	21.4	6.0 B	40.2	27.0	6.8 B	104.	129.

Metals - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-2A 010236A-11 02/02/01 ug/L	MW-7S 010236A-12 02/02/01 ug/L	MW-7D 010236A-13 02/02/01 ug/L	MW-5S 010236A-16 02/05/01 ug/L	MW-5D 010236A-17 02/05/01 ug/L	MW-12 010236A-18 02/05/01 ug/L	MW-8 010236A-19 02/05/01 ug/L
Compound							
Aluminum	29.9 B	143. B	25.5 B	1320	32.3 B	5940	178. B
Antimony	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Arsenic	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Barium	111. B	115. B	140. B	268.	105. B	3630	234.
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	102000	109000	103000	78200	87300	51600	68900
Chromium	1.8 B	4.4 B	1.0 U	4.4 B	1.0 U	11.8	1.1 B
Cobalt	3.3 B	1.0 U	1.0 U	1.6 B	1.0 U	1.0 U	1.0 U
Copper	1.0 U	1.1 B	1.0 U	6.0 B	1.0 U	12.1 B	1.0 U
Iron	42.1 B	327.	23.3 B	3720	6.0 U	95.2 B	2230
Lead	2.0 U	2.0 U	2.0 U	30.7	2.0 U	3.4	2.0 U
Magnesium	19000	20200	20100	12800	15100	34.9 B	12300
Manganese	51.4	28.6	618.	1040	130.	23.2	1760
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	2.2 B	2.8 B	2.1 B	5.6 B	1.3 B	3.9 B	1.2 B
Potassium	7370	8780	6400	3850 B	7820	80400	4280 B
Selenium	4.0 UN	4.0 UN	4.0 UN	4.0 UN	4.0 UN	4.0 UN	4.0 UN
Silver	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	48000	57900	43200	21000	60700	383000	10600
Thallium	5.0 U	5.0 U	6.9 B	5.0 U	5.0 U	5.0 U	5.0 U
Vanadium	1.0 U	1.0 U	1.0 U	1.9 B	1.0 U	4.6 B	1.0 U
Zinc	7.4 B	11.7 B	7.6 B	25.8	7.0 B	35.4	8.3 B

Metals - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-03 010236B-03 02/06/01 ug/L	MW-03D 010236B-03D 02/06/01 ug/L	MW-03S 010236B-03S 02/06/01 ug/L	MW-06 010236B-04 02/06/01 ug/L	US-MW02 010236B-05 02/06/01 ug/L	US-204 010236B-06 02/06/01 ug/L	US-201 010236B-08 02/07/01 ug/L
Compound							
Aluminum	9.0 U	9.0 U	1740	9730	4900	874.	2180
Antimony	2.0 U	2.0 U	437.	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	3.0 U	3.0 U	36.2	13.7	5.8 B	3.0 U	3.6 B
Barium	117. B	115. B	1740	354.	320.	236.	411.
Beryllium	1.0 U	1.0 U	44.5	1.0 U	1.0 U	1.0 U	1.0 U
Cadium	1.0 U	1.0 U	4.1 B	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	97400	96200		97100	95400	83900	95300
Chromium	1.0 U	2.5 B	170.	41.0	18.2	3.5 B	29.6
Cobalt	1.0 U	1.0 U	426.	15.8 B	4.3 B	1.0 U	2.4 B
Copper	1.0 B	2.4 B	211.	57.7	19.0 B	3.0 B	7.6 B
Iron	33.0 B	59.4 B	867.	28000	17800	2510	6580
Lead	3.0 U	3.0 U	17.0	27.4	10.7	3.2	3.8
Magnesium	17500	17200		23000	21000	15500	19600
Manganese	16.0	15.2	430.	1600	1080	467.	701.
Mercury	0.10 U	0.10 U	1.0	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	1.5 B	1.7 B	427.	41.7	16.5 B	3.4 B	22.1 B
Potassium	6910 E	6840		9390 E	7800 E	6240 E	7200 E
Selenium	4.0 B	3.2 B	13.1	4.6 B	3.9 B	3.0 U	4.2 B
Silver	1.0 U	1.0 U	43.6	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	54200 E	53400		56900 E	49900 E	54600 E	54700 E
Thallium	10.6	9.7 B	50.0	9.0 U	9.0 U	9.0 U	9.5 B
Vanadium	1.0 U	1.0 U	423.	18.7 B	8.7 B	1.1 B	3.7 B
Zinc	4.4 B	7.1 B	443.	103.	42.0	9.9 B	20.3

Metals - Groundwater
NM Troy (Smith Avenue) Site
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Shading indicates data results updated with validation qualifiers.

Client ID Lab Sample ID Date Sampled Units	MW-13 010236B-09 02/07/01 ug/L	MW-17 010236B-10 02/07/01 ug/L	MW-170 010236B-11 02/07/01 ug/L	MW-4A 010236B-13 02/07/01 ug/L
Compound				
Aluminum	126. B	8520	158000	385.
Antimony	2.0 U	11.2 B	3.6 B	2.0 U
Arsenic	3.0 U	14.6	97.6	5.9 B
Barium	2350	346.	5840	395.
Beryllium	1.0 U	1.0 U	7.8	1.0 U
Cadium	1.0 U	1.0 U	1.0 U	15.7
Calcium	70100	14300	170000	126000
Chromium	1.6 B	45.0	668.	2.4 B
Cobalt	1.0 U	5.0 B	113.	2.8 B
Copper	1.0 U	29.4	576.	11.6 B
Iron	172.	11400	330000	8630
Lead	3.0 U	8.0	154.	5.0
Magnesium	13600	3210 B	96900	22200
Manganese	177.	357.	10800	1230
Mercury	0.10 U	0.10 U	0.58	0.10 U
Nickel	1.8 B	31.0 B	568.	5.8 B
Potassium	8940 E	275000 E	199000 E	8170 E
Selenium	3.3 B	9.6	7.6	3.0 U
Silver	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	54100 E	296000 E	204000 E	92700 E
Thallium	9.0 U	9.0 U	9.0 U	9.0 U
Vanadium	1.0 U	36.9 B	278.	1.0 U
Zinc	8.1 B	56.3	682.	18.4 B

UNVALIDATED DATA RESULTS

**Cyanide - Groundwater
NM Troy (Smith Avenue) Site**

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Client ID	MW2192501	MW2292501	MW2092501	MW1891701	MW1991701	MW-15
Lab Sample ID	303163	303164	303165	301064	301065	010236A-02
Date Sampled	09/25/01	09/25/01	09/25/01	09/17/01	09/17/01	01/31/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound						
Total Cyanide	10 U	10 U	10 U	10 U	10 U	10 U

UNVALIDATED DATA RESULTS

Cyanide - Groundwater
NM Troy (Smith Avenue) Site
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Client ID	MW-16	MW-01	MW-9S	MW-9D	MW-7S	MW-7D
Lab Sample ID	010236A-03	010236A-04	010236A-07	010236A-08	010236A-12	010236A-13
Date Sampled	01/31/01	01/31/01	02/01/01	02/01/01	02/02/01	02/02/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound						
Total Cyanide	10 U	10 U	10 U	10 U	10 U	10 U

UNVALIDATED DATA RESULTS

**Cyanide - Groundwater
NM Troy (Smith Avenue) Site**

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Client ID	MW-5S	MW-5D	MW-03	MW-06	MW-4A	US-MW02
Lab Sample ID	010236A-16	010236A-17	010236B-03	010236B-04	010236B-13	010236B-05
Date Sampled	02/05/01	02/05/01	02/06/01	02/06/01	02/07/01	02/06/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound						
Total Cyanide	10 U	10 U	10 U	10 U	10 U	10 U

UNVALIDATED DATA RESULTS

Cyanide - Groundwater
NM Troy (Smith Avenue) Site
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Client ID	US-204	US-201	MW-13	MW-17	MW-170	MW-14
Lab Sample ID	010236B-06	010236B-08	010236B-09	010236B-10	010236B-11	010236A-09
Date Sampled	02/06/01	02/07/01	02/07/01	02/07/01	02/07/01	02/01/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Compound						
Total Cyanide	10 U	10 U	10 U	10 U	10 U	10 U

UNVALIDATED DATA RESULTS

Cyanide - Groundwater
NM Troy (Smith Avenue) Site
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Client ID	MW-140	MW-2A	MW-12	MW-8	MW-03D	MW-03S
Lab Sample ID	010236A-10	010236A-11	010236A-18	010236A-19	010236B-03D	010236B-03S
Date Sampled	02/01/01	02/02/01	02/05/01	02/05/01	02/06/01	02/06/01
Units	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L
Compound						
Total Cyanide	10 U	10 U	10 U	10 U	10 U	53.9 N

UNVALIDATED DATA RESULTS

Water Quality/Natural Attenuation Parameters - Groundwater

NM Troy (Smith Avenue) Site

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Client ID Lab Sample ID Date Sampled Units	MW-15 010236A-02 01/31/01 ug/L	MW-16 010236A-03 01/31/01 ug/L	MW-01 010236A-04 01/31/01 ug/L	MW-9S 010236A-07 02/01/01 ug/L	MW-9D 010236A-08 02/01/01 ug/L	MW-7S 010236A-12 02/02/01 ug/L	MW-7D 010236A-13 02/02/01 ug/L
Parameter							
Alkalinity	NA	NA	294	196	247	272	253
BOD5	NA	NA	2 U	2 U	2 U	2 U	2 U
Carbon Dioxide	350 U	NA	350 U	350 U	350 U	350 U	350 U
Chloride	NA	NA	85.9	323	99.8	149	123
COD	10 U	NA	10 U	10.4	10 U	10 U	10 U
Ferrous Iron	0.7	NA	0.5 U	0.5 U	0.5 U	.5 U	0.5 U
Hardness	29.1	331	353	243	314	355	341
Methane	5400 D	NA	2.0 U	2.0 U	2.6	2.0 U	2.0 U
Nitrate	NA	NA	0.3	0.1 U	.331	3.39	1.87
Nitrite	NA	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Oil and Grease	1.4	NA	1 U	1.9	1.7	1.2	1 U
pH	NA	NA	7.64	6.91	7.53	7.48	7.68
Sulfate	NA	NA	43.9	32.6	76.7	71.5	66.5
Sulfide	NA	NA	1 U	1 U	1 U	1 U	1 U
TDS	NA	NA	471	746	500	627	563
TKN	5.6	NA	0.35	0.38	0.1 U	0.1 U	0.1 U
TOC	1 U	NA	1.22	3.28	1 U	1 U	4.58

UNVALIDATED DATA RESULTS

**Water Quality/Natural Attenuation Parameters - Groundwater
NM Troy (Smith Avenue) Site
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Client ID	MW-5S	MW-5D	MW-03	MW-06	MW-4A	MW-03D	MW-03S
Lab Sample ID	010236A-16	010236A-17	010236B-03	010236B-04	010236B-13	010236B-03D	010236B-03S
Date Sampled	02/05/01	02/05/01	02/06/01	02/06/01	02/07/01	02/06/01	02/06/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L
Parameter							
Alkalinity	213	244	271	274	402	274	NA
BOD5	2 U	2 U	2 U	2 U	8.7	2 U	10.8
Carbon Dioxide	350 U	350 U	350 U	350 U	350 U	NA	NA
Chloride	62.2	136	124	133	207	125	346
COD	10 U	10 U	10 U	25	36	10 U	110
Ferrous Iron	0.5 U	0.5 U	0.5 U	8.5	8.2	0.5 U	2.05
Hardness	248	280	315	337	404	311	407 N
Methane	2.0 U	2.0	2.0 U	6.1	5300 D	NA	NA
Nitrate	1.45	3.65	1.64	0.1 U	1.61	1.64	3.64
Nitrite	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.75
Oil and Grease	1 U	1.1	4.7	5.2	6.6	4.5	15.1
pH	7.24	7.07	7.23	7.54	6.71	7.25	NA
Sulfate	19.6	56.8	57.7	41.6	21.2	57.6	74.6
Sulfide	1 U	1 U	1 U	1 U	1 U	1 U	4.1
TDS	363	550	563	521	791	566	NA
TKN	0.1 U	0.1 U	0.1 U	0.12	0.67	0.15	1.9
TOC	1.34	1.48	1 U	2.24	12.9	1 U	24.8