



ENVIRONMENTAL STRATEGIES CORPORATION

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BUREAU OF RADIATION &
HAZARDOUS WASTE MANAGEMENT
DIVISION OF SOLID &
HAZARDOUS MATERIALS

**PHASE II
RCRA FACILITY INVESTIGATION
AL TECH SPECIALTY STEEL CORPORATION
WATERVLIET, NEW YORK FACILITY**

**VOLUME 2 OF 3
APPENDICES A THROUGH D**

PREPARED

BY

ENVIRONMENTAL STRATEGIES CORPORATION

DECEMBER 30, 1998

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Appendix A - Boring Logs and Well Construction Diagrams

Boring Log: MW-13

Project: ALTECH

Project No.: 493804-L

Location: Watervliet, NY

Geologist: MEF

Completion Date: 11/6/96

Surface Elevation (ft. MSL): 55.61

Total Depth (ft. bgs): 16

TOC Elevation (ft. MSL): 55.10

Borehole Diameter (in.) 6.25



Sample Data					SUBSURFACE PROFILE		Well Construction		
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description			
0	0					Ground Surface			
1						<i>Augered to 2'</i>			
2	-2								
3		6 11 10 13	75	0		<i>ML-SILT</i> Brown to dark gray silt, hard, damp, silt and gravel fill in the upper 1'			
4	-4								
5		9 10 12 7	100	0		<i>ML-SILT</i> Brown mottled, trace clay and very fine sand, moist			
6	-6								
7		9 11 12 12	50	0		<i>ML-SILT</i> Brown and gray, mottled			
8	-8								
9		8 8 8 8	100	10		<i>ML-SILT</i> Brown and gray, mottled, little clay, damp			
10	-10					<i>GP-GRAVEL</i> Wet, little silt and sand			
11		2 4 4 5	50	0					
12									
13		7 6 8 7	63	0					
14	-14								
15								<i>Augered to 16'</i>	
16	-16								
17						Boring Terminated			
18									
19									
20									

Subcontractor: Parratt Wolff

Method: HSA

Boring Log: MW-14

Completion Date: 11/4/96



Project: ALTECH

Surface Elevation (ft. MSL): 55.23

Project No.: 483804-L

Total Depth (ft. bgs): 15

Location: Watervliet, NY

TOC Elevation (ft. MSL): 26.93

Geologist: MEF

Borehole Diameter (in.) 6.25

Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	55.23					Ground Surface	
1						Augered to 2'	
2	53.23						
3		24 25 19 13	25			GM-SILT AND GRAVEL Dark gray and brown, little metal (FILL)	
4	51.23						
5			17			ML-SILT AND CLAY Dark gray and brown	
6	49.23						
7						ML-SILT Dark brown, mottled, with little clay and gravel, little plasticity, moist	
8	47.23						
9	45.73	2 7	100			GP- SAND AND GRAVEL Medium brown, moist to wet, alternating medium sand and gravel with silt and clay to clayey silt	
10	45.23	6 3				CL-CLAY Some silt, mottling, plastic	
11		2 3 4 5	100			CL-CLAY Same as above, with some sand and larger gravel, wet to saturated	
12	43.23						
13		3 3 2	100			ML-CLAYEY SILT Alternating clayey silt and fine sand with fine gravel	
14							
15	40.23					Boring Terminated	
16							
17							
18							
19							
20							

Subcontractor: Parratt Wolff

Method: HSA

Boring Log: MW-15

Completion Date: 11/5/96

Project: ALTECH

Surface Elevation (ft. MSL): 53.27

Project No.: 483804-L

Total Depth (ft. bgs): 10

Location: Watervliet, NY

TOC Elevation (ft. MSL): 55.01

Geologist:

Borehole Diameter (in.) 6.25"



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	0					Ground Surface	
1						<i>Augered to 2'</i>	
2	-2						
3				0		SM-SILTY SAND Medium to light brown, moist, no odor	
4	-4						
5						SP-SAND Medium to dark brown, slightly moist, with some fill material (yellow and red plastic), grades to medium brown dense clay.	
6	-6						
7						CL-CLAY Brown with gray mottles, grades to sand and clay around 7.25', 7.25' to 7.7.5' medium to dark brown sand, moist to wet	
8	-8						
9						CL-CLAY Brown, saturated, grades to fine sand, which grades to dark gray clayey silt (till)	
10	-10					Boring Terminated	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Subcontractor:

Method:

Boring Log: MW-16

Completion Date: 11/4/96



Project: ALTECH

Surface Elevation (ft. MSL): 53.27

Project No.: 483804-L

Total Depth (ft. bgs): 15

Location: Watervliet, NY

TOC Elevation (ft. MSL): 55.01

Geologist:

Borehole Diameter (in.) 6.25

Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	53.27					Ground Surface	
1						<i>Augered to 2'</i>	
2	51.27						
3		7		0		ML-SILT Red brown and gray, mottled, little clay and gravel, damp, Fill	
4	49.27	10					
5		5					
6	47.27	7		0		ML-SILT Gray, with 2 to 3 inch zones of gravel, gravel is wet	
7		6					
8	45.27	5				GP-Gravel Brown, saturated, zones of tight silt, no staining or odors	
9		11					
10		8					
11		8					
12		8					
13		6					
14						<i>Augered to 15'</i>	
15	38.27					Boring Terminated	
16							
17							
18							
19							
20							

Subcontractor: Parratt Wolff

Method: HSA

Boring Log: MW-17

Project: ALTECH
Project No.: 483804-L
Location: Watervliet, NY
Geologist:

Completion Date: 11/5/96
Surface Elevation (ft. MSL): 49.82
Total Depth (ft. bgs): 14.4
TOC Elevation (ft. MSL): 49.45
Borehole Diameter (in.) 6.25"



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	49.82					Ground Surface	
1						<i>Augered to 2'</i>	
2	47.82						
3		3 6 10 9	75	.4		ML-SILT Red brown and gray, mottled, little clay, hard damp	
4	45.32						
5		5 6 8 9	100	.4		GP-GRAVEL Little sand, gravel is wet, 4" zones of silt present	
6	43.82						
7		9 10 11 13		0		ML-SILT Red brown and gray mottled, stiff, little zones of gravel	
8	41.82						
9		4 5 9 7		.2		ML-SILT Red brown, damp, stiff, little clay	
10	39.82						
11		2 3 4 4		0		ML-SILT Gray, soft, moist, little clay, small 2" zones of gravel (round pebbles), saturated	
12	37.82						
13						<i>Augered to 14.4'</i>	
14	35.42						
15						Boring Terminated	
16							
17							
18							
19							
20							

Subcontractor: Parratt Wolff

Method: HSA

Boring Log: MW-18

Completion Date: 6/12/97



Project: ALTECH

Surface Elevation (ft. MSL): 45.23

Project No.: 483804

Total Depth (ft. bgs): 18

Location: Watervliet, NY

TOC Elevation (ft. MSL): 47.17

Geologist: PEP

Borehole Diameter (in.) 4

Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	0					Ground Surface	
1	-1					GW-GRAVEL Parking lot fill	
2		5 6 7	100			GM-GRAVELLY SILT Brown, some clay and sand, moist, fill material	
3	-3	3				CL-CLAY Blue gray, moist, plastic, some gravel, fill materials	
4		3 3 3	80				
5	-5	2				N/A-NO RECOVERY	
6		2 2 3 2	0				
7							
8	-8	3 4 4 5	100				
9						CL-CLAY Brown gray, trace sand and roots, mottlins, moist to wet, plastic, no odor or staining	
10							
11						CH-CLAY Gray, trace roots, highly plastic, wet, no odor or staining	
12							
13	-13	3 2 3 3	100				
14						SW-SAND Fine to coarse grained, well graded, wet, trace fines	
15	-15	2 1 0 4	100				
16						Boring Terminated	
17							
18	-18						
19							
20							

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: MW-19

Completion Date: 6/11/97

Project: ALTECH

Surface Elevation (ft. MSL): 46.27

Project No.: 483804

Total Depth (ft. bgs): 23

Location: Watervliet, NY

TOC Elevation (ft. MSL): 48.03

Geologist: Greg Frisch

Borehole Diameter (in.) 4



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	46.27					Ground Surface	
1		5				<i>OL-Silty Clay</i> Brownish gray, with gravel and organics, dry, no odor.	
2		15	30	0			
3		11	10				
4							
5	41.27	2				<i>GP-SLAG</i> Gravel and coal fragments, dark brown to black, dry, no odor, fill material	
6		2	50	1.0			
7		1					
8							
9							
10	36.27	1				<i>OL-SILTY CLAY</i> Medium gray, plastic, with trace organics (roots), damp, no odor.	
11		1	40	0			
12		1					
13							
14		1				<i>GM-SILTY GRAVEL</i> Gray to brown, fine to coarse grained sand, wet, no odor.	
15	31.27	1	20	0			
16		1					
17							
18		1					
19		1	60	0			
20	26.27	1					

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: MW-19

Completion Date: 6/11/97

Project: ALTECH

Surface Elevation (ft. MSL): 46.27

Project No.: 483804

Total Depth (ft. bgs): 23

Location: Watervliet, NY

TOC Elevation (ft. MSL): 48.03

Geologist: Greg Frisch

Borehole Diameter (in.) 4



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
21					[Symbol]	<p>ML-SILTY CLAY Gray, wet, plastic, interbedded with silty gravel - fine grained, wet, no odor</p>	[Well Construction]
22							
23	23.27					<p><i>Bedrock encountered</i></p>	
24						<p>Boring Terminated</p>	
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: MW-19B

Completion Date: 6/13/97

Project: ALTECH

Surface Elevation (ft. MSL): 46.34

Project No.: 483804

Total Depth (ft. bgs): 50

Location: Watervliet, NY

TOC Elevation (ft. MSL): 48.16

Geologist: PEP

Borehole Diameter (in.) 8.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	46.34					Ground Surface	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12						No Sample See MW-19 Log	
13							
14							
15							
16							
17							
18							
19							
20							

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: MW-19B

Completion Date: 6/13/97

Project: ALTECH

Surface Elevation (ft. MSL): 46.34

Project No.: 483804

Total Depth (ft. bgs): 50

Location: Watervliet, NY

TOC Elevation (ft. MSL): 48.16

Geologist: PEP

Borehole Diameter (in.) 8.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
21							
22							
23	23.34						
24							
25							
26			42			Shale Dark gray to black slightly fractured throughout, some calcite filled thin fractures	
27							
28							
29							
30	16.34						
31							
32			42			Shale Gray to black, highly fractured from 32' to 34', large calcite filled fracture at 32.5'	
33							
34							
35	11.34						
36							
37			17			Same as Above More competent, increased calcite filled fractures.	
38							
39							
40	6.34						

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: MW-19B

Completion Date: 6/13/97



Project: ALTECH

Surface Elevation (ft. MSL): 46.34

Project No.: 483804

Total Depth (ft. bgs): 50

Location: Watervliet, NY

TOC Elevation (ft. MSL): 48.16

Geologist: PEP

Borehole Diameter (in.) 8.25

Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
41					[Dotted Pattern]	<i>Same as Above</i> No significant fractures, minor fractures at 42.5'	[Vertical Line]
42			60				
43					[Dotted Pattern]	<i>Same as Above</i> No significant fractures, only fractures as filled with calcite	[Vertical Line]
44							
45	1.34				[Dotted Pattern]	Boring Terminated	[Vertical Line]
46			68				
47					[Dotted Pattern]	Boring Terminated	[Vertical Line]
48							
49					[Dotted Pattern]	Boring Terminated	[Vertical Line]
50	-3.66						
51					[Dotted Pattern]	Boring Terminated	[Vertical Line]
52							
53					[Dotted Pattern]	Boring Terminated	[Vertical Line]
54							
55					[Dotted Pattern]	Boring Terminated	[Vertical Line]
56							
57					[Dotted Pattern]	Boring Terminated	[Vertical Line]
58							
59					[Dotted Pattern]	Boring Terminated	[Vertical Line]
60							

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: B-15

Project: ALTECH

Completion Date: 11/8/96

Project No.: 483804-L

Surface Elevation (ft. MSL):

Location: Watervliet, NY

Total Depth (ft. bgs): 12

Geologist:

Borehole Diameter (in.) 6.25



Depth	Elevation	Blow Count	% Recovery	PID	Symbol	Description
0	0					Ground Surface
1						<i>Augered to 4'</i> Encountered fill, large pieces of concrete with rebar
2						
3						<i>SP-SAND</i> Light brown and orange, fine grained, slightly moist, no stains, no odor
4	-4					
5						<i>SP-SAND</i> Brown to orange, fine grained, some silt, moist to wet, strong odor from 7 to 8', visible staining
6	-6					
7						<i>SP-SAND</i> Light brown and orange, strong odor, visible staining
8	-8					
9						<i>SP-SAND</i> Gray and brown, saturated, strong odor
10	-10					
11						Boring Terminated
12	-12					
13						
14						
15						
16						
17						
18						
19						
20						

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: PZ-16

Completion Date: 11/8/96

Project: ALTECH

Surface Elevation (ft. MSL): 53.59

Project No.: 483804-L

Total Depth (ft. bgs): 14

Location: Watervliet, NY

TOC Elevation (ft. MSL): 53.21

Geologist: MEF

Borehole Diameter (in.) 6.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	53.59					Ground Surface	
1						Augered to 2'	
2	51.59						
3						ML-SILT Dark to medium gray, mottled, damp, grading to brown mottled fine sand around 2.5', then grades to silt	
4	49.59						
5			33			SM-SILT AND SAND Brown and gray, very fine grained sand, black staining in upper 4"	
6	47.59						
7			100	0.4		SM-SILT AND SAND Same as above to 7.5, then grading to brown and gray silt, with some clay, moist	
8	45.59						
9			100	0.4		ML-SILT Brown, little clay and very fine sand, moist, black staining at 8.7'	
10	43.59						
11			100	0.4		ML-SILT Brown, some clay and very fine sand, moist, odor, grading to very fine sand with silt at 10.8'	
12	41.59						
13			100			SM-SAND Brown, very fine grained, little silt and gravel, wet, zones of clay	
14	39.59					Boring Terminated	
15							
16							
17							
18							
19							
20							

Subcontractor:

Method:

Boring Log: S-1 (B-10 Area)

Project: ALTECH

Completion Date: 11/7/96

Project No.: 483804-L

Surface Elevation (ft. MSL):

Location: Watervliet, NY

Total Depth (ft. bgs): 12

Geologist:

Borehole Diameter (in.) 6.25"



Depth	Elevation	Blow Count	% Recovery	PID	Symbol	Description
0	0					Ground Surface
1						<i>Augered to 2'</i>
2	-2					
3						SM-SAND AND SILT Light brown, dry to 2.5', below 2.5' a 2" lens of black stained sandy silt with some gravel, stained layer trapped above CLAYEY SILT, medium brown, slightly moist firm
4	-4					
5						ML-CLAYEY SILT Medium brown, with abundant large gravel fragments, moist
6	-6					
7						ML-SANDY SILT Some clay and abundant large gravel fragments, moist to wet, no odor, no discoloration
8	-8					
9						ML-SILTY SAND With gravel fragments, saturated to wet, no odor, no staining
10	-10					
11						SW-SAND Medium to fine grained, well sorted, saturated, no odor, no staining
12	-12					
13						Boring Terminated
14						
15						
16						
17						
18						
19						
20						

Subcontractor: Parratt-Wolff

Method: HSA

Boring Log: S-8 (B-10 Area)

Project: ALTECH

Completion Date: 11/7/96

Project No.: 483804-L

Surface Elevation (ft. MSL):

Location: Watervliet, NY

Total Depth (ft. bgs): 12

Geologist:

Borehole Diameter (in.) 6.25"



Depth	Elevation	Blow Count	% Recovery	PID	Symbol	Description
0	0					Ground Surface
1						<i>Augered to 2'</i>
2	-2					ML-CLAYEY SILT Dark gray, slightly moist, soft, no significant odor
3						<i>Same as above</i>
4	-4					ML-CLAYEY SILT Brown, slightly moist, sand lens from 6-6.3', slight odor and black staining in lens
5						<i>Same as above</i>
6	-6					ML-CLAYEY SILT Brown, slightly moist, sand lens from 6-6.3', slight odor and black staining in lens
7						<i>Same as above</i>
8	-8					ML-CLAYEY SILT Brown, slightly moist, sand lens from 6-6.3', slight odor and black staining in lens
9						<i>Same as above</i>
10	-10					SM-SILTY SAND Light brown, saturated
11						<i>Same as above</i>
12	-12					SM-SILTY SAND Light brown, saturated
13						Boring Terminated
14						
15						
16						
17						
18						
19						
20						

Subcontractor: Parratt Wolf

Method: HSA

Boring Log: S-9 (B-10 Area)

Project: ALTECH

Completion Date: 11/7/96

Project No.: 483804-L

Surface Elevation (ft. MSL):

Location: Watervliet, NY

Total Depth (ft. bgs): 12

Geologist:

Borehole Diameter (in.) 6.25"



Depth	Elevation	Blow Count	% Recovery	PID	Symbol	Description
0	0					Ground Surface
1						<i>Augered to 2'</i>
2	-2					
3				0		ML-CLAYEY SAND Brown, slightly moist to moist, with some gravel
4	-4					
5				7		ML-CLAYEY SILT Brown, moist to wet
6	-5.5					
6	-6					SM-SANDY SILT Gray, strong odor
7				42		SM-SILTY SAND Some gravel, heavily stained, strong odor
8	-8					
9				37		<i>Same as above</i>
10	-10					
11				7		ML-CLAYEY SILT Strong odor, saturated, oil sheen present in sample
12	-12					
13						Boring Terminated
14						
15						
16						
17						
18						
19						
20						

Subcontractor: Parratt Wolff

Method: HSA

Boring Log: S-11 (B-10 Area)

Project: ALTECH

Completion Date: 11/7/98

Project No.: 483804-L

Surface Elevation (ft. MSL):

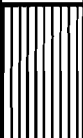


Location: Watervliet, NY

Total Depth (ft. bgs): 8

Geologist:

Borehole Diameter (in.) 6.25"



Depth	Elevation	Blow Count	% Recovery	PID	Symbol	Description
0	0					Ground Surface
1						<i>Augered to 2'</i>
2	-2					ML-CLAY SILT Gray with black staining, strong odor
3						
4	-4					<i>Same as above</i>
5						
6	-6					ML-SILT With sand and large gravel fragments, strong odor, saturated,
7						
8	-8					Boring Terminated
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Subcontractor: Parratt Wolff

Method: HSA

Boring Log: B-16

Project: ALTECH

Completion Date: 11/7/96

Project No.: 483804-L

Surface Elevation (ft. MSL):

Location: Watervliet, NY

Total Depth (ft. bgs): 11

Geologist: MEF

Borehole Diameter (in.) 6.25



Depth	Elevation	Blow Count	% Recovery	PID	Symbol	Description
0	0					Ground Surface
1						<i>Augered to 2'</i>
2	-2					
3				0.4		GP-GRAVEL Fill, brick stone gravel
4	-4					
5	-5					<i>Augered to 5'</i>
6			75	15		ML-SILT Brown and gray, some clay, moderately stiff, damp, strong odor
7	-7					
8						ML-SILT Gray, soft, moist to wet, odor
9	-9					
10						ML-SILT Gray, wet, soft, little sand, odor
11	-11					
12						Boring Terminated
13						
14						
15						
16						
17						
18						
19						
20						

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: PZ-14

Completion Date: 11/6/96

Project: ALTECH

Surface Elevation (ft. MSL): 51.95

Project No.: 483804-L

Total Depth (ft. bgs): 17

Location: Watervliet, NY

TOC Elevation (ft. MSL): 53.61

Geologist: BCD

Borehole Diameter (in.) 6.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	51.95					Ground Surface	
1				0		GM-SILT AND GRAVEL Dark brown, dry	
2	49.95						
3				0		GM-SILT AND GRAVEL Medium brown, dry, angular gravel, small to large grained gravel, angular cobble at 3.1', below cobble silt becomes clayey	
4	47.95						
5				0		GM-CLAYEY SILT AND GRAVEL Olive to gray, with some fill, slightly moist, grades to more clay at 5.5', then grades to more silt and gravel and becomes dryer	
6	45.95						
7				0		ML-CLAYEY SILT Orange brown with some dark brown grading to gray/olive, some fill material, some angular to subrounded gravel, slightly moist, no odor	
8	43.95						
9				0		ML-SILT AND CLAY Dark brown, with some gravel, large subrounded cobble at 8.5', moist around cobble, no odor	
10	41.95						
11				0		GP-SAND AND GRAVEL Saturated to 11.5', then becomes more silty and moist to 12'	
12	39.95						
13				0		GP-SAND AND GRAVEL AND SILT Medium brown, no odor	
14	37.95						
15						Augered to 17'	
16							
17	34.95					Boring Terminated	
18							
19							
20							

Subcontractor:

Method:

Boring Log: OW-20

Completion Date: 11/5/96

Project: ALTECH

Surface Elevation (ft. MSL): 56.51

Project No.: 483804-L

Total Depth (ft. bgs): 18

Location: Watervliet, NY

TOC Elevation (ft. MSL): 568.68

Geologist: BCD

Borehole Diameter (in.) 6.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	56.51					Ground Surface	
1				0		GM-SILT AND GRAVEL AND FILL Medium brown, dry	
2	54.51						
3				0		ML-CLAYEY SILT Dark brown, with gravel fragments and large cobbles in tip of sample, dry, no odor	
4	52.51						
5				0		GM- GRAVEL AND SILT Angular and fragmented gravel, some signs of iron oxidizing, dry	
6	50.51						
7				0		GC-SILTY CLAY AND GRAVEL Medium brown to dark gray, slightly moist, no odor	
8	48.51						
9				0		ML-SILTY CLAY Dry to moist, no odor, breaks apart easily	
10	46.51						
11			30	0		GC-SILT, CLAY, AND GRAVEL Gray and brown with orange oxidation stains, wet,	
12	44.01						
13				0			
14							
15				0		SW-SAND Gray, well graded, moist, no odor	
16							
17							
18	38.51					Boring Terminated	
19							
20							

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: OW-21

Completion Date: 11/6/96

Project: ALTECH

Surface Elevation (ft. MSL): 58.44

Project No.: 483804-L

Total Depth (ft. bgs): 18

Location: Watervliet, NY

TOC Elevation (ft. MSL): 60.87

Geologist: BCD

Borehole Diameter (in.) 6.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	58.44					Ground Surface	
1				0		GP-GRAVEL Fill, metal fragments and some silt	
2	56.44						
3				0		Same as Above	
4	54.44						
5				0		GM-CLAYEY SILT AND GRAVEL Brown and gray, moist, no odor	
6	52.44						
7				0		CL-SILTY CLAY Medium brown, dry, no odor	
8	50.44						
9				0		Same as above	
10	48.44						
11				0		SM-SILTY SAND Light brown, very fine grained, moist to wet, no odor	
12	46.44						
13						SW-SAND Light brown, well sorted, saturated, no odor	
14	44.44						
15							
16						Augered to 18'	
17							
18	40.44					Boring Terminated	
19							
20							

Subcontractor: Parrat Wolff

Method: HSA

Boring Log: MW-12

Completion Date: 11/5/96

Project: ALTECH

Surface Elevation (ft. MSL): 49.32

Project No.: 483804-L

Total Depth (ft. bgs): 17

Location: Watervliet, NY

TOC Elevation (ft. MSL): 50.96

Geologist: MEF

Borehole Diameter (in.) 6.25



Sample Data					SUBSURFACE PROFILE		Well Construction
Depth	Elevation	Blow Count	% Recovery	PID (ppm)	Symbol	Description	
0	49.32					Ground Surface	
1						Augered to 2'	
2	47.32						
	46.82	7				<i>ML-Silt</i>	
		7				Dark gray and black, medium soft, damp	
3		8	63	0		<i>ML-Silt</i>	
		12				Light gray, medium soft, damp	
4							
		16				<i>ML-Silt</i>	
5		11	50	0		Brown red, mottled, stiff	
		16					
6							
	42.47	14				<i>ML-Silt</i>	
7		16	75	0.6		Brown red, mottled silt, dry, some rounded gravel	
		12					
8	41.32	9				<i>GM-Gravel and Silt</i>	
						Brown gray and red, mottled, moist	
9		59	17	6.0		<i>GM-Gravel and Silt</i>	
		95				Dark gray to black, hard, dry	
10	39.32						
11			25	0		<i>GP-Sand and Gravel</i>	
						Dark brown, medium to coarse sand, some rounded gravel, saturated	
12	37.32						
13							
14							
15						Augered to 17'	
16							
17	32.32					Boring Terminated	
18							
19							
20							

Subcontractor: Parratt Wolf

Method: HSA