# *Preliminary*
# *Draft Remedial Investigation Report*

## *for*

## *Brownfield Cleanup Agreements*
## *Former General Motors Assembly Plant Site*
## *Sleepy Hollow, New York*

## *Volume II of II*

**General Motors Corporation**
**Detroit, Michigan**
**and**
**Roseland/Sleepy Hollow, LLC**
**Short Hills, New Jersey**

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# Notice

This *Preliminary Draft Remedial Investigation Report* presents findings of the investigations of the East and West Parcels of the Former General Motors Assembly Plant Site performed under the New York State Brownfield Cleanup Program. This draft is provided for public review as background information to support the Applicants' proposed Interim Remedial Measures Scope of Work, and will be updated and revised upon completion of Interim Remedial Measures and/or off-site investigation of the Hudson River.

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# *Appendix A*

# Soil and Groundwater Data from Previous Investigations

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# Appendix A

# Soil and Groundwater Data from Previous Investigations

**Appendix A-1: Phase II Investigation – 1996 (EMCON 1997)**

**Appendix A-2: Phase III Investigation – 1997 (EMCON 2001)**

**Appendix A-3: Interim Corrective Measures – 1998 (EMCON 2001)**

**Appendix A-4: Supplemental Phase II Investigation – 2000 (EMCON 2003)**

**Appendix A-5: Due Diligence Investigation – 2002 (EcolSciences 2002)**

# Appendix A-1

# Phase II Investigation – 1996 (EMCON 1997)

**Table 5**
**Background Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **FA** | **FA** | **FA** | **FA** | **FC** | **FC** | **FC** |
| **Sample Depth (ft.)** | **Screening Value** | **1-3** | **3-5** | **7-9** | **9-11** | **0.5-2.5** | **6-8** | **22-24** |
| **Saturationn (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** | **S** | **U** | **S** | **S** |
| *TCL Organics (ug/kg)* | *(ug/kg)* | | | | | | | |
| Acetone (1) | 200 | 19 | ND | 70 | 37 | 24 | ND | 54 |
| Benzene | 60 | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | 15 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | 5.7 | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane (2) | 600 | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | 8.1 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND | ND | 720 |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND | 440 | ND |
| Anthracene | 50000 | ND | ND | ND | ND | ND | ND | 1200 |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND | 740 | 540 | 2000 |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | ND | 720 | 730 | 1700 |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | ND | 860 | 800 | 2100 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND | 790 | ND | 810 |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | ND | 740 | ND |
| Di-n-Butylphthalate | 8100 | 920 | 3500 | 460 | 420 | 2800 | 3200 | 3400 |
| Carbazole | 50000 | ND | ND | ND | ND | ND | ND | 560 |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | ND | ND | ND | 740 | 580 | 1900 |
| Dibenzo(a,h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | ND | ND | ND | ND | 1300 | 730 | 4100 |
| Fluorene | 50000 | ND | ND | ND | ND | ND | ND | 840 |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND | 580 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND | ND | 1100 | ND | 4100 |
| Pyrene | 50000 | ND | ND | ND | ND | 1300 | 1000 | 3800 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND | ND | ND |
| PCB 1254 | 1000/10000 (3) | ND | ND | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | | | 3850 | 2650 | 8510 |
| **Total Semi-VOCS** | 500000 | 920 | 3500 | 460 | 420 | 10350 | 8760 | 27810 |

Constituents With Levels Above TAGM 4046 Values
(1) Acetone attributable to laboratory artifact
(2) 1,1,2,2-Tetrachloroethane limited to background location
(3) Total PCB Values for Surface/Subsurface
SB - Site Background
-- Not Analyzed
ND - Not Detected

**Table 5**
**Background Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **FD** | **FD** | **FD** | **FE** | **FE** | **FE** |
| **Sample Depth (ft.)** | **Screening Value** | **2-4** | **20-23** | **23-24** | **1-3** | **7-9** | **9-11** |
| **Saturationn (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **S** | **U** | **S** | **S** |
| *TCL Organics (ug/kg)* | *(ug/kg)* | | | | | | |
| Acetone (1) | 200 | 15 | 1700 | 35 | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | 6.2 | ND | 6.9 | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane (2) | 600 | ND | ND | ND | ND | ND | ND |
| Toluene | 1500 | 5.6 | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | 640 | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | 890 | ND | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | 720 | ND | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | 970 | ND | ND | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | 680 | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | 540 | 540 | 1400 | 790 | 1100 | 1000 |
| Carbazole | 50000 | ND | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND | ND |
| Chrysene | 400 | 370 | 960 | ND | ND | ND | ND |
| Dibenzo(a,h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | 560 | 1800 | ND | ND | ND | ND |
| Fluorene | 50000 | ND | 600 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | 2400 | ND | ND | ND | ND |
| Pyrene | 50000 | 750 | 1700 | ND | ND | ND | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND | ND |
| PCB 1254 | 1000/10000 (3) | ND | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 370 | 4220 | | | | |
| **Total Semi-VOCS** | 500000 | 2220 | 11900 | 1400 | 790 | 1100 | 1000 |

Constituents With Levels Above TAGM 4046 Values
(1) Acetone attributable to laboratory artifact
(2) 1,1,2,2-Tetrachloroethane limited to background location
(3) Total PCB Values for Surface/Subsurface
SB - Site Background
-- Not Analyzed
ND - Not Detected

**Table 5**
**Background Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **FF** | **FF** | **FF-DUP** | **FF** | **FF** | **FG** | **FG** |
| **Sample Depth (ft.)** | **Screening Value** | **1.5-2.5** | **7-9** | **7-9** | **9-11** | **19-21** | **0-0.5** | **5-5.5** |
| **Saturationn (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **S** | **S** | **S** | **U** | **S** |
| *TCL Organics (ug/kg)* | *(ug/kg)* | | | | | | | |
| Acetone (1) | 200 | ND | ND | ND | 96 | 17 | ND | ND |
| Benzene | 60 | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | 6.5 | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane (2) | 600 | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | 23 | 6.4 | ND | 5.7 | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | 27000 | 24000 | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | 40000 | 34000 | ND | ND | 390 | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | 41000 | 38000 | ND | 490 | 1400 | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | 30000 | 30000 | ND | 470 | 1300 | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | 30000 | 36000 | ND | 600 | 2300 | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | 9000 | 9200 | ND | ND | 570 | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | 17000 | 19000 | ND | ND | 840 | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | ND | 4100 | ND |
| Di-n-Butylphthalate | 8100 | 490 | ND | ND | ND | 1200 | 650 | ND |
| Carbazole | 50000 | ND | 21000 | 15000 | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | 9500 | 9500 | ND | ND | 550 | ND |
| Chrysene | 400 | ND | 34000 | 31000 | ND | 560 | 1600 | ND |
| Dibenzo(a,h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | 17000 | 15000 | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | 470 | 460 | ND |
| Fluoranthene | 50000 | ND | 84000 | 77000 | ND | 990 | 2500 | ND |
| Fluorene | 50000 | ND | 32000 | 27000 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | 110000 | 100000 | ND | 1100 | 1300 | ND |
| Pyrene | 50000 | ND | 75000 | 68000 | ND | 1100 | 2500 | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND | ND | ND |
| PCB 1254 | 1000/10000 (3) | ND | ND | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | 161500 | 163500 | | 2120 | 7990 | |
| **Total Semi-VOCS** | 500000 | 490 | 576500 | 532700 | | 6980 | 20460 | |

Constituents With Levels Above TAGM 4046 Values
(1) Acetone attributable to laboratory artifact
(2) 1,1,2,2-Tetrachloroethane limited to background location
(3) Total PCB Values for Surface/Subsurface
SB - Site Background
-- Not Analyzed
ND - Not Detected

**Table 5**
**Background Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **FH** | **FI** | **FI** | **FI** | **FI** |
| **Sample Depth (ft.)** | **Screening Value** | **0-0.5** | **3-5** | **9-11** | **11-13** | **17-19** |
| **Saturationn (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **S** | **S** | **S** |
| *TCL Organics (ug/kg)* | *(ug/kg)* | | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane (2) | 600 | ND | ND | ND | ND | ND |
| Toluene | 1500 | 5.4 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | 7700 | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND |
| Anthracene | 50000 | 29000 | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | 100000 | ND | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | 70000 | ND | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | 110000 | ND | ND | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | 30000 | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | 49000 | 370 | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | 18000 | 8500 | ND | ND | 1700 |
| Di-n-Butylphthalate | 8100 | ND | 1500 | 3600 | 4200 | 1700 |
| Carbazole | 50000 | 8100 | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | 30000 | ND | ND | ND | ND |
| Chrysene | 400 | 100000 | ND | ND | ND | ND |
| Dibenzo(a,h)Anthracene | 14 or MDL | 12000 | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | 7300 | 5400 | ND |
| Fluoranthene | 50000 | 120000 | ND | ND | ND | ND |
| Fluorene | 50000 | 7400 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | 72000 | ND | ND | ND | ND |
| Pyrene | 50000 | 130000 | ND | ND | ND | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND |
| PCB 1254 | 1000/10000 (3) | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 471000 | 370 | | | |
| **Total Semi-VOCS** | 500000 | 893200 | 10370 | 10900 | 9600 | 3400 |

Constituents With Levels Above TAGM 4046 Values
(1) Acetone attributable to laboratory artifact
(2) 1,1,2,2-Tetrachloroethane limited to background location
(3) Total PCB Values for Surface/Subsurface
SB - Site Background
-- Not Analyzed
ND - Not Detected

**Table 5**
**Background Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **FJ** | **FJ** | **FJ** | **FJ** | **FK** | **FK** | **FK** |
| **Sample Depth (ft.)** | **Screening Value** | **1-3** | **3-5** | **7-9** | **9-11** | **0.4-2** | **10-12** | **16-18** |
| **Saturationn (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **S** | **S** | **U** | **S** | **S** |
| *TCL Organics (ug/kg)* | *(ug/kg)* | | | | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND | ND | ND | 51 |
| Benzene | 60 | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane (2) | 600 | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | 7.6 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND | ND | 710 |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND | ND | ND | 1900 |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND | ND | ND | 2400 |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | ND | ND | ND | 1700 |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | ND | ND | ND | 2400 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND | ND | 420 |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND | ND | ND | 1700 |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | 490 | 500 | 460 | ND | 2100 | 2100 | 420 |
| Carbazole | 50000 | ND | ND | ND | ND | ND | ND | 870 |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND | ND | 460 |
| Chrysene | 400 | ND | ND | ND | ND | ND | ND | 2500 |
| Dibenzo(a,h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND | 620 |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | ND | ND | ND | ND | ND | ND | 4700 |
| Fluorene | 50000 | ND | ND | ND | ND | ND | ND | 1100 |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND | ND | ND | ND | 5200 |
| Pyrene | 50000 | 440 | ND | ND | ND | ND | ND | 4300 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND | ND | ND |
| PCB 1254 | 1000/10000 (3) | ND | ND | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | | | | | 11160 |
| **Total Semi-VOCS** | 500000 | 930 | 500 | 460 | | 2100 | 2100 | 31400 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) 1,1,2,2-Tetrachloroethane limited to background location

(3) Total PCB Values for Surface/Subsurface

SB - Site Background

-- Not Analyzed

ND - Not Detected

**Table 5**
**Background Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | Original Ground Pre-1914 Fill & Soil | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **1FL** | **1FL-DUP** | **1FL** | **0GA** | **0GA** | **0GB** | **0GB** |
| **Sample Depth (ft.)** | **Screening Value** | **2-4** | **2-4** | **6-8** | **0-2** | **6-8** | **0.5-2.5** | **10-12** |
| **Saturationn (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **S** | **U** | **U** | **U** | **S** |
| *TCL Organics (ug/kg)* | *(ug/kg)* | | | | | | | |
| Acetone (1) | 200 | ND | 16 | 20 | 16 | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND | ND | ND | 3900 |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND | ND | 6900 |
| 2-Hexanone | NA | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane (2) | 600 | ND | ND | ND | ND | ND | ND | 7100 |
| Toluene | 1500 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | 1300 |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND | 8900 |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | ND | ND | 3800 | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | 1600 | ND | ND | 12000 | ND |
| Di-n-Butylphthalate | 8100 | 3300 | 370 | 2400 | ND | 1300 | ND | ND |
| Carbazole | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | ND | ND | ND | ND | ND | ND |
| Dibenzo(a,h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | 400 | ND | ND | ND | ND | 34000 |
| Fluoranthene | 50000 | ND | ND | ND | ND | ND | 8800 | ND |
| Fluorene | 50000 | ND | ND | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | 49000 |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND | 67000 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND | ND | ND | 9000 | 18000 |
| Pyrene | 50000 | ND | ND | ND | ND | ND | 7100 | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND | ND | 59 |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND | ND | 80 |
| PCB 1254 | 1000/10000 (3) | ND | ND | ND | ND | ND | ND | 1800 |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | | | | 3800 | |
| **Total Semi-VOCS** | 500000 | 3300 | 770 | 4000 | | 1300 | 40700 | 168000 |

Constituents With Levels Above TAGM 4046 Values
(1) Acetone attributable to laboratory artifact
(2) 1,1,2,2-Tetrachloroethane limited to background location
(3) Total PCB Values for Surface/Subsurface
SB - Site Background
-- Not Analyzed
ND - Not Detected

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **FA** | **FA** | **FA** | **FA** |
| **Sample Depth (ft.)** | | **1-3** | **3-5** | **7-9** | **9-11** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | |
| Aluminum | SB | 7130 | 4660 | 8720 | 7400 |
| Antimony | SB | <6.40 | <6.83 | <7.83 | <7.63 |
| Arsenic | 7.5 or SB | <1.07 | 3.76 | 3.78 | 1.99 |
| Barium | 300 or SB | 42.2 | 177 | 32.4 | 27.3 |
| Beryllium | 0.16 or SB | <0.533 | <0.569 | <0.653 | <0.636 |
| Cadmium | 1 or SB | <0.533 | <0.569 | <0.653 | <0.636 |
| Calcium | SB | 6650 | 4630 | 3150 | 4250 |
| Chromium | 10 or SB | 12.6 | 12.4 | 19 | 15 |
| Cobalt | 30 or SB | 5.88 | 7.37 | 8.86 | 7.17 |
| Copper | 25 or SB | 14.5 | 25.1 | 13.7 | 13.8 |
| Iron | 2000 or SB | 14900 | 19500 | 19600 | 18000 |
| Lead | 500 (Urban) or SB | 5.28 | 112 | 17.1 | 17.9 |
| Magnesium | SB | 3860 | 2500 | 4510 | 4270 |
| Manganese | SB | 302 | 156 | 291 | 264 |
| Mercury | 0.1 | <0.160 | <0.171 | <0.196 | <0.191 |
| Nickel | 13 or SB | 16.1 | 17.9 | 18.1 | 15.1 |
| Potassium | SB | 996 | 702 | 1810 | 1380 |
| Selenium | 2 or SB | 3.85 | 4.26 | 3.67 | 4.6 |
| Silver | SB | <1.07 | <1.14 | <1.31 | <1.27 |
| Sodium | SB | 151 | 148 | 245 | 162 |
| Thallium | SB | <1.07 | <1.14 | <1.31 | <1.27 |
| Vanadium | 150 or SB | 13.7 | 13.6 | 20.7 | 17 |
| Zinc | 20 or SB | 34 | 221 | 56.1 | 48.4 |
| Total Cyanide | Site -specific | <1.07 | <1.14 | <1.31 | <1.27 |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **FC** | **FC** | **FC** | **FD** | **FD** | **FD** |
| **Sample Depth (ft.)** | | **0.5-2.5** | **6-8** | **22-24** | **2-4** | **20-23** | **23-24** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **S** | **U** | **S** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | | | |
| Aluminum | SB | 5510 | 7320 | 7090 | 5140 | 5090 | 4210 |
| Antimony | SB | <6.71 | <7.30 | 10 | <6.71 | <7.20 | <6.98 |
| Arsenic | 7.5 or SB | 1.17 | <1.22 | 3.01 | 1.79 | <1.20 | <1.16 |
| Barium | 300 or SB | 82 | 37.3 | 126 | 40.7 | 36.1 | 14.1 |
| Beryllium | 0.16 or SB | <0.559 | <0.608 | <0.663 | <0.559 | <0.600 | <0.581 |
| Cadmium | 1 or SB | <0.559 | <0.608 | <0.663 | <0.559 | <0.600 | <0.581 |
| Calcium | SB | 84900 | 15100 | 5640 | 11000 | 1950 | 5770 |
| Chromium | 10 or SB | 12.2 | 10.9 | 19.5 | 10.2 | 9.15 | 7.75 |
| Cobalt | 30 or SB | <5.59 | 6.09 | 7.15 | <5.59 | <6.00 | <5.81 |
| Copper | 25 or SB | 17.2 | 13.4 | 40 | 16.9 | 7.66 | 6.34 |
| Iron | 2000 or SB | 12800 | 16400 | 21600 | 12600 | 12500 | 10300 |
| Lead | 500 (Urban) or SB | 24.5 | 21.2 | 122 | 40.3 | 7.48 | 2.72 |
| Magnesium | SB | 33700 | 4150 | 4500 | 6590 | 2730 | 2390 |
| Manganese | SB | 229 | 213 | 240 | 163 | 127 | 117 |
| Mercury | 0.1 | <0.168 | <0.182 | <0.199 | <0.168 | <0.180 | <0.174 |
| Nickel | 13 or SB | 10.8 | 13.9 | 16 | 10.5 | 10.4 | 8.14 |
| Potassium | SB | 851 | 964 | 1290 | 1160 | 829 | 639 |
| Selenium | 2 or SB | 3.9 | 3.75 | 4.89 | 2.79 | 2.56 | 2 |
| Silver | SB | <1.12 | <1.22 | <1.33 | <1.12 | <1.20 | <1.16 |
| Sodium | SB | <112 | -- | 267 | -- | -- | -- |
| Thallium | SB | <1.12 | <1.22 | <1.33 | <1.12 | <1.20 | <1.16 |
| Vanadium | 150 or SB | 17 | 12.3 | 15.9 | 15.6 | 9.24 | 7.63 |
| Zinc | 20 or SB | 39.4 | 44.2 | 145 | 41.8 | 29.4 | 21 |
| Total Cyanide | Site -specific | <1.12 | <1.22 | 2.39 | <1.12 | <1.20 | <1.16 |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **FE** | **FE** | **FE** | **FF** | **FF** | **FF-DUP** |
| **Sample Depth (ft.)** | | **1-3** | **7-9** | **9-11** | **1.5-2.5** | **7-9** | **7-9** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **S** | **U** | **S** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | | | |
| Aluminum | SB | 5830 | 8280 | 6830 | 6520 | 5570 | 6350 |
| Antimony | SB | <6.96 | <7.79 | <7.24 | <6.66 | 10.9 | <6.47 |
| Arsenic | 7.5 or SB | <1.16 | <1.30 | <1.21 | <1.11 | 4.54 | 4.42 |
| Barium | 300 or SB | 56.3 | 17.8 | 21.9 | 79.4 | 938 | 1620 |
| Beryllium | 0.16 or SB | <0.580 | <0.649 | <0.603 | <0.555 | <0.543 | <0.539 |
| Cadmium | 1 or SB | <0.580 | <0.649 | <0.603 | <0.555 | <0.543 | 0.852 |
| Calcium | SB | 9380 | 21300 | 9260 | 5060 | 36000 | 14800 |
| Chromium | 10 or SB | 14.7 | 12.2 | 10.5 | 14.3 | 10.7 | 25.9 |
| Cobalt | 30 or SB | 7.43 | <0.649 | <6.03 | 5.91 | 5.82 | 7.65 |
| Copper | 25 or SB | 13 | 9.89 | 9.66 | 15.3 | 18.2 | 32.5 |
| Iron | 2000 or SB | 11900 | 18000 | 13500 | 13100 | 14600 | 20800 |
| Lead | 500 (Urban) or SB | 2.24 | 5.01 | 4.49 | 42 | 511 | 425 |
| Magnesium | SB | 6820 | 4960 | 4550 | 4230 | 19900 | 8940 |
| Manganese | SB | 186 | 184 | 209 | 173 | 214 | 392 |
| Mercury | 0.1 | <0.174 | <0.195 | <0.181 | <0.166 | <0.163 | <0.162 |
| Nickel | 13 or SB | 10.6 | 15.8 | 13.6 | 12.8 | 9.62 | 13.6 |
| Potassium | SB | 2250 | 1100 | 1120 | 1280 | 1510 | 1440 |
| Selenium | 2 or SB | 2.25 | 3.27 | 2.18 | 2.62 | 2.94 | 3.13 |
| Silver | SB | <1.16 | <1.30 | <1.21 | <1.11 | <1.09 | <1.08 |
| Sodium | SB | 217 | 402 | 296 | 137 | 212 | 309 |
| Thallium | SB | <1.16 | <1.30 | <1.21 | <1.11 | <1.09 | <1.08 |
| Vanadium | 150 or SB | 19.1 | 14.3 | 11 | 13.9 | 27.7 | 21.6 |
| Zinc | 20 or SB | 26 | 42.3 | 33.7 | 115 | 67.9 | 142 |
| Total Cyanide | Site -specific | <1.16 | <1.30 | <1.21 | <1.11 | <1.09 | <1.08 |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **FF** | **FF** | **FG** | **FG** | **FH** | **FI** |
| **Sample Depth (ft.)** | | **9-11** | **19-21** | **0-0.5** | **5-5.5** | **0-0.5** | **9-11** |
| **Saturation (Sat/Unsat)** | | **S** | **S** | **U** | **S** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | | | |
| Aluminum | SB | 9000 | 7890 | 8250 | 6980 | 7620 | 8410 |
| Antimony | SB | 125 | 16.2 | 14.2 | <1.20 | 17.9 | 10.1 |
| Arsenic | 7.5 or SB | 39 | 12.6 | 5.98 | <1.20 | 12.6 | 6.08 |
| Barium | 300 or SB | 7700 | 1590 | 1530 | 82.5 | 1970 | 1210 |
| Beryllium | 0.16 or SB | <0.595 | <0.695 | <0.522 | <0.602 | <0.531 | <0.619 |
| Cadmium | 1 or SB | 25.4 | 3.32 | 4.73 | <0.602 | 22.7 | <0.619 |
| Calcium | SB | 29900 | 5990 | 6840 | 16900 | 16600 | 16700 |
| Chromium | 10 or SB | 154 | 52.1 | 62.4 | 10.5 | 350 | 27 |
| Cobalt | 30 or SB | 8.96 | 10.6 | 8.45 | <6.02 | 6.77 | 7.51 |
| Copper | 25 or SB | 340 | 101 | 85 | 14.2 | 277 | 15.3 |
| Iron | 2000 or SB | 101000 | 25500 | 35900 | 15000 | 37200 | 20200 |
| Lead | 500 (Urban) or SB | 8660 | 2780 | 921 | 34.4 | 2280 | 482 |
| Magnesium | SB | 16200 | 5620 | 5090 | 4090 | 5060 | 5210 |
| Manganese | SB | 705 | 438 | 315 | 167 | 426 | 268 |
| Mercury | 0.1 | 0.32 | 0.38 | 0.269 | <0.181 | 0.485 | <0.186 |
| Nickel | 13 or SB | 75.9 | 22.5 | 46.9 | 13.5 | 33.8 | 16.8 |
| Potassium | SB | 1560 | 1140 | 1300 | 901 | 1770 | 1250 |
| Selenium | 2 or SB | 24.3 | 4.31 | <0.522 | <0.602 | 15.1 | 3.45 |
| Silver | SB | 3.86 | <1.39 | <1.04 | <1.20 | 1.29 | <1.24 |
| Sodium | SB | 921 | 731 | 2790 | 380 | 1440 | 455 |
| Thallium | SB | <1.19 | <1.39 | <1.04 | <1.20 | <1.06 | <1.24 |
| Vanadium | 150 or SB | 30.7 | 20.9 | 28.9 | 10.8 | 31.4 | 17.1 |
| Zinc | 20 or SB | 2740 | 299 | 357 | 36.4 | 1190 | 104 |
| Total Cyanide | Site -specific | 1.8 | <1.39 | 1.63 | <1.20 | 1.3 | <1.24 |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **FI** | **FI** | **FJ** | **FJ** | **FJ** | **FJ** |
| **Sample Depth (ft.)** | | **11-13** | **17-19** | **1-3** | **3-5** | **7-9** | **9-11** |
| **Saturation (Sat/Unsat)** | | **S** | **S** | **U** | **U** | **S** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | | | |
| Aluminum | SB | 5950 | 7840 | 8670 | 7180 | 7740 | 5710 |
| Antimony | SB | 14.2 | <6.80 | <7.39 | <6.30 | <7.28 | <7.83 |
| Arsenic | 7.5 or SB | 5.27 | <1.13 | <1.23 | <1.05 | <1.21 | <1.31 |
| Barium | 300 or SB | 1690 | 113 | 28.7 | 9.85 | 11.2 | 12.7 |
| Beryllium | 0.16 or SB | <0.571 | <0.567 | <0.616 | <0.525 | <0.607 | <0.653 |
| Cadmium | 1 or SB | <0.571 | <0.567 | <0.616 | <0.525 | <0.607 | <0.653 |
| Calcium | SB | 3780 | 2550 | 6160 | 1660 | 1100 | 51600 |
| Chromium | 10 or SB | 40 | 24.8 | 12.7 | 10.5 | 10.8 | 9.59 |
| Cobalt | 30 or SB | 8.39 | 9.08 | 6.92 | 6.44 | 6.14 | <6.53 |
| Copper | 25 or SB | 33.2 | 20.6 | 12.5 | 9.77 | 13.4 | 9.3 |
| Iron | 2000 or SB | 12800 | 15300 | 17400 | 15300 | 16400 | 12700 |
| Lead | 500 (Urban) or SB | 1120 | 118 | 10.5 | 3.99 | 6.5 | 5.14 |
| Magnesium | SB | 4720 | 4380 | 4750 | 4480 | 4430 | 13800 |
| Manganese | SB | 270 | 272 | 228 | 172 | 160 | 247 |
| Mercury | 0.1 | <0.171 | <0.170 | <0.185 | <0.158 | <0.182 | <0.196 |
| Nickel | 13 or SB | 27.1 | 22.1 | 16.3 | 15.5 | 16.9 | 11.2 |
| Potassium | SB | 1700 | 3400 | 1340 | 764 | 819 | 741 |
| Selenium | 2 or SB | 2.45 | 2.57 | 2.88 | 2.58 | 2.79 | 2.68 |
| Silver | SB | <1.14 | <1.13 | <1.23 | <1.05 | <1.21 | <1.31 |
| Sodium | SB | 497 | 632 | 263 | 124 | 330 | 634 |
| Thallium | SB | <1.14 | <1.13 | <1.23 | <1.05 | <1.21 | <1.31 |
| Vanadium | 150 or SB | 17.5 | 24.3 | 15.1 | 11.1 | 11.8 | 9.85 |
| Zinc | 20 or SB | 142 | 36.1 | 46.3 | 37.3 | 45.1 | 30.9 |
| Total Cyanide | Site -specific | <1.14 | <1.13 | <1.23 | <1.05 | <1.21 | <1.31 |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Fill Area Background | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **FK** | **FK** | **FK** | **1FL** | **1FL-DUP** | **1FL** |
| **Sample Depth (ft.)** | | **0.4-2** | **10-12** | **16-18** | **2-4** | **2-4** | **6-8** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **S** | **U** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | | | |
| Aluminum | SB | 7880 | 6360 | 6960 | 8280 | 8050 | 13300 |
| Antimony | SB | <6.92 | <7.40 | <7.43 | <6.70 | <6.75 | <8.01 |
| Arsenic | 7.5 or SB | <1.15 | <1.23 | <1.24 | <1.12 | <1.12 | 5.45 |
| Barium | 300 or SB | 16.9 | 10.5 | 10.9 | 18.4 | 19.8 | 53.3 |
| Beryllium | 0.16 or SB | <0.577 | <0.617 | <0.619 | <0.558 | <0.562 | <0.668 |
| Cadmium | 1 or SB | <0.577 | <0.617 | <0.619 | <0.558 | <0.562 | <0.668 |
| Calcium | SB | 17500 | 40700 | 21700 | 8530 | 5160 | 3910 |
| Chromium | 10 or SB | 10.7 | 8.67 | 9.07 | 11.6 | 11.8 | 21.8 |
| Cobalt | 30 or SB | 6.55 | <6.17 | <6.19 | 6.03 | 5.63 | 8.97 |
| Copper | 25 or SB | 26.6 | 8.56 | 9.05 | 12.3 | 13.2 | 20.9 |
| Iron | 2000 or SB | 17700 | 13700 | 15100 | 18600 | 17700 | 33700 |
| Lead | 500 (Urban) or SB | 5.48 | 3.54 | 3.71 | 5.02 | 8.75 | 56.3 |
| Magnesium | SB | 12500 | 5420 | 4110 | 4690 | 5070 | 5360 |
| Manganese | SB | 214 | 196 | 207 | 201 | 178 | 464 |
| Mercury | 0.1 | <0.173 | <0.185 | <0.186 | <0.167 | <0.169 | <0.200 |
| Nickel | 13 or SB | 14.4 | 12.9 | 13.5 | 14.8 | 14.6 | 20.9 |
| Potassium | SB | 1030 | 682 | 812 | 988 | 1130 | 1590 |
| Selenium | 2 or SB | 3.27 | 2.82 | 3.73 | 2.95 | 2.85 | 7.05 |
| Silver | SB | <1.15 | <1.23 | <1.24 | <1.12 | <1.12 | <1.34 |
| Sodium | SB | 432 | 546 | 276 | 193 | 183 | 313 |
| Thallium | SB | <1.15 | <1.23 | <1.24 | <1.12 | <1.12 | <1.34 |
| Vanadium | 150 or SB | 15.2 | 9.57 | 9.5 | 18.6 | 17.2 | 27.3 |
| Zinc | 20 or SB | 39.5 | 29.3 | 34 | 40.2 | 40.4 | 134 |
| Total Cyanide | Site -specific | <1.15 | <1.23 | <1.24 | <1.12 | <1.12 | <1.34 |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 6**
**Background Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Original Ground Pre-1914 Fill & Soil | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046 (mg/kg)** | **0GA** | **0GA** | **0GB** | **0GB** |
| **Sample Depth (ft.)** | | **0-2** | **6-8** | **.5-2.5** | **10-12** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | | | | | |
| Aluminum | SB | 6620 | 3820 | -- | -- |
| Antimony | SB | <6.73 | <7.10 | -- | -- |
| Arsenic | 7.5 or SB | <1.12 | <1.18 | -- | -- |
| Barium | 300 or SB | 31.5 | 38 | -- | -- |
| Beryllium | 0.16 or SB | <0.561 | <0.592 | -- | -- |
| Cadmium | 1 or SB | <0.561 | <0.592 | -- | -- |
| Calcium | SB | 8190 | 17000 | -- | -- |
| Chromium | 10 or SB | 13.1 | 7.81 | -- | -- |
| Cobalt | 30 or SB | 7.24 | <5.92 | -- | -- |
| Copper | 25 or SB | 17.6 | 13.8 | -- | -- |
| Iron | 2000 or SB | 13300 | 7950 | -- | -- |
| Lead | 500 (Urban) or SB | 8.06 | 5.03 | -- | -- |
| Magnesium | SB | 6320 | 9230 | -- | -- |
| Manganese | SB | 212 | 190 | -- | -- |
| Mercury | 0.1 | <0.168 | <0.178 | -- | -- |
| Nickel | 13 or SB | 11.6 | 8.4 | -- | -- |
| Potassium | SB | 2020 | 1060 | -- | -- |
| Selenium | 2 or SB | 2.88 | 1.61 | -- | -- |
| Silver | SB | <1.12 | <1.18 | -- | -- |
| Sodium | SB | -- | -- | -- | -- |
| Thallium | SB | <1.12 | <1.18 | -- | -- |
| Vanadium | 150 or SB | 20.4 | 10.2 | -- | -- |
| Zinc | 20 or SB | 31.4 | 17.6 | -- | -- |
| Total Cyanide | Site -specific | <1.12 | <1.18 | -- | -- |

Constituents With Levels Above TAGM 4046 Values

SB - Site Background

-- Not Analyzed

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Former Village Dump | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **1D1** | **1D1-DUP** | **1J** | **1J-DUP** | **1J-EXT** |
| **Sample Depth (ft)** | **Screening Value** | **1-3** | **1-3** | **7-9** | **7-9** | **6-8** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **S** | **S** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | | |
| Acetone (1) | 200 | 28 | ND | 600 | 410 | 93 |
| Benzene | 60 | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | 110 | 120 | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | 7.4 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | 1600 | ND | ND |
| Di-n-Butylphthalate | 8100 | 670 | ND | 5300 | 1700 | 3300 |
| Carbazole | 50000 | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | ND | ND | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | ND | ND | ND | ND | ND |
| Fluorene | 50000 | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND | ND | ND |
| Pyrene | 50000 | ND | ND | ND | ND | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | | | |
| **Total Semi-VOCS** | 500000 | 670 | | 6900 | 1700 | 3300 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Former Village Dump** | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **1K** | **1K-EXT** | **1K-EXT** | **1L** | **1M** |
| **Sample Depth (ft)** | **Screening Value** | **5-7** | **0.5-2** | **6-7** | **7-8** | **7-8** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **S** | **U** | **S** | **S** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | | |
| Acetone (1) | 200 | ND | ND | ND | 170 | 170 |
| Benzene | 60 | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | 43 | 43 |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | 22 | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | 1300 | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | 2000 | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | 1600 | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND | 490 |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | ND | 490 |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | ND | 750 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | 920 |
| Di-n-Butylphthalate | 8100 | ND | ND | ND | 1400 | 4300 |
| Carbazole | 50000 | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | ND | ND | ND | 470 |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | ND | ND | ND | ND | 820 |
| Fluorene | 50000 | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | 3600 | ND | ND | ND |
| Pyrene | 50000 | ND | ND | ND | ND | 820 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | | | 2200 |
| **Total Semi-VOCS** | 500000 | | 7200 | | 1400 | 9060 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Former Discarded Drum Pile** | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **2C** | **2C** | **2D** | **2D** |
| **Sample Depth (ft)** | **Screening Value** | **1-3** | **7-9** | **1-3** | **5-7** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **U** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | 35 | 65 | 42 | 84 |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | 18 | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | 10 | 29 | 9.9 | 9.1 |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND |
| Anthracene | 50000 | 460 | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | 2500 | ND | 480 | ND |
| Benzo(a)Pyrene | 61 or MDL | 2600 | ND | 450 | ND |
| Benzo(b)Fluoranthene | 61 or MDL | 4200 | ND | 760 | ND |
| Benzo(g,h,i)Perylene | 50000 | 410 | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | 2000 | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | 860 | ND | 1800 | ND |
| Di-n-Butylphthalate | 8100 | 4600 | 3500 | 3400 | 4600 |
| Carbazole | 50000 | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | 820 | ND | ND | ND |
| Chrysene | 400 | 2700 | ND | 540 | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND |
| Dibenzofuran | 6200 | 410 | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND |
| Fluoranthene | 50000 | 3300 | ND | 740 | 530 |
| Fluorene | 50000 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | 1400 | ND | 990 | 1400 |
| Naphthalene | 13000 | 920 | ND | 680 | 880 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | 550 |
| Phenanthrene | 50000 | 2000 | ND | 800 | 810 |
| Pyrene | 50000 | 3800 | ND | 960 | 630 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 14820 | | 2230 | |
| **Total Semi-VOCS** | 500000 | 32980 | 3500 | 11600 | 9400 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Former Garage Area** | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **3A** | **3A** | **3A** |
| **Sample Depth (ft)** | **Screening Value** | **.75-3** | **3-5** | **7-9** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | |
| Acetone (1) | 200 | ND | 44 | ND |
| Benzene | 60 | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | 21 | ND |
| Carbon Disulfide | 2700 | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND |
| Acenaphthene | 50000 | -- | ND | ND |
| Acenaphthylene | 41000 | -- | ND | ND |
| Anthracene | 50000 | -- | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | -- | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | -- | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | -- | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | -- | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | -- | ND | ND |
| Butyl Benzyl Phthalate | 50000 | -- | ND | ND |
| Di-n-Butylphthalate | 8100 | -- | ND | ND |
| Carbazole | 50000 | -- | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | -- | ND | ND |
| Chrysene | 400 | -- | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | -- | ND | ND |
| Dibenzofuran | 6200 | -- | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | -- | ND | ND |
| Fluoranthene | 50000 | -- | ND | ND |
| Fluorene | 50000 | -- | ND | ND |
| 2-Methylnaphthalene | 36400 | -- | ND | ND |
| Naphthalene | 13000 | -- | ND | ND |
| Di-n-Octyl Phthalate | 50000 | -- | ND | ND |
| Phenanthrene | 50000 | -- | ND | ND |
| Pyrene | 50000 | -- | ND | ND |
| 4,4'-DDE | 2100 | -- | ND | ND |
| 4,4'-DDT | 2100 | -- | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | -- | ND | ND |
| Alpha-BHC | 110 | -- | ND | ND |
| **Total C-PAHs** | 10000 | | | |
| **Total Semi-VOCS** | 500000 | | | |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Former Burn Pit Facility** | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **4A** | **4A** | **4B** | **4B** | **4C** |
| **Sample Depth (ft)** | **Screening Value** | **1-3** | **3-5** | **2-4** | **4-6** | **7-9** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **U** | **S** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | | |
| Acetone (1) | 200 | 69 | 52 | 16 | ND | ND |
| Benzene | 60 | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | 9.6 | ND | 1800 | ND |
| Acenaphthene | 50000 | ND | 1100 | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | 620 | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | 660 | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | 1000 | ND | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | 500 | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | 12000 | ND | ND |
| Di-n-Butylphthalate | 8100 | 7500 | 3800 | 6200 | ND | 620 |
| Carbazole | 50000 | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | 770 | ND | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | 1200 | ND | ND |
| Fluoranthene | 50000 | ND | 1100 | ND | ND | ND |
| Fluorene | 50000 | ND | 730 | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | 2300 |
| Naphthalene | 13000 | ND | 760 | ND | 10000 | 770 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | 1300 | 530 | ND | ND |
| Pyrene | 50000 | ND | 1200 | ND | ND | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | 3550 | | | |
| **Total Semi-VOCS** | 500000 | 7500 | 13540 | 19930 | 10000 | 3690 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Internal Rail Spurs Body Plant** | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **6A** | **6B** | **6B** | **6C** |
| **Sample Depth (ft)** | **Screening Value** | **3.1-5.1** | **1-3** | **3-5** | **0.5-2.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | 16 |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | 560 |
| Acenaphthylene | 41000 | ND | 390 | ND | ND |
| Anthracene | 50000 | 480 | 590 | 420 | 1500 |
| Benzo(a)Anthracene | 224 or MDL | 1500 | 2000 | 1100 | 2700 |
| Benzo(a)Pyrene | 61 or MDL | 1200 | 2100 | 1200 | 2500 |
| Benzo(b)Fluoranthene | 61 or MDL | 2000 | 2700 | 2000 | 3600 |
| Benzo(g,h,i)Perylene | 50000 | 400 | 820 | 500 | 710 |
| Benzo(k)Fluoranthene | 610 or MDL | 840 | 1200 | 850 | 2000 |
| Butyl Benzyl Phthalate | 50000 | 1200 | 3900 | 1600 | 3800 |
| Di-n-Butylphthalate | 8100 | 430 | 420 | ND | 500 |
| Carbazole | 50000 | ND | ND | ND | 730 |
| Indeno(1,2,3,-cd)Pyrene | 3200 | 420 | 770 | 470 | 730 |
| Chrysene | 400 | 1700 | 2100 | 1200 | 3400 |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | 540 |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | 370 | ND |
| Fluoranthene | 50000 | 3500 | 2800 | 2200 | 5900 |
| Fluorene | 50000 | ND | ND | ND | 620 |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | 820 |
| Naphthalene | 13000 | ND | ND | ND | 810 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND |
| Phenanthrene | 50000 | 1900 | 1500 | 1200 | 5100 |
| Pyrene | 50000 | 3200 | 3100 | 2200 | 5600 |
| 4,4'-DDE | 2100 | ND | ND | ND | 21 |
| 4,4'-DDT | 2100 | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 7660 | 10870 | 6820 | 14930 |
| **Total Semi-VOCS** | 500000 | 18770 | 24390 | 15310 | 42120 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Internal Rail Spurs Body Plant** | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **6C** | **6D** | **6D** |
| **Sample Depth (ft)** | **Screening Value** | **6-8** | **1-3** | **3-5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | |
| Acetone (1) | 200 | 18 | 20 | 15 |
| Benzene | 60 | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND |
| Toluene | 1500 | 17 | 11 | 11 |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND |
| Anthracene | 50000 | 500 | ND | 540 |
| Benzo(a)Anthracene | 224 or MDL | 990 | ND | 8100 |
| Benzo(a)Pyrene | 61 or MDL | 670 | ND | 8100 |
| Benzo(b)Fluoranthene | 61 or MDL | 1200 | ND | 11000 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | 2600 |
| Benzo(k)Fluoranthene | 610 or MDL | 890 | ND | 11000 |
| Butyl Benzyl Phthalate | 50000 | ND | 770 | 890 |
| Di-n-Butylphthalate | 8100 | 550 | 360 | 380 |
| Carbazole | 50000 | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | 2700 |
| Chrysene | 400 | 1200 | ND | 9400 |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | 1300 |
| Dibenzofuran | 6200 | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | 390 |
| Fluoranthene | 50000 | 2200 | ND | 6500 |
| Fluorene | 50000 | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | 940 |
| Naphthalene | 13000 | 490 | ND | 650 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND |
| Phenanthrene | 50000 | 2400 | ND | 1800 |
| Pyrene | 50000 | 2200 | ND | 9500 |
| 4,4'-DDE | 2100 | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND |
| **Total C-PAHs** | 10000 | 4950 | | 51600 |
| **Total Semi-VOCS** | 500000 | 13290 | 1130 | 75790 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Basement Welding Area Body Plant** | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **7A** | **7B** | **7B** | **7C** | **7C** |
| **Sample Depth (ft)** | **Screening Value** | **0-0.5** | **0-0.5** | **3-3.5** | **0-0.5** | **1-1.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | 6.4 | ND | 6.3 | 10 |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND |
| Anthracene | 50000 | 470 | ND | ND | 5500 | ND |
| Benzo(a)Anthracene | 224 or MDL | 2800 | ND | ND | 14000 | ND |
| Benzo(a)Pyrene | 61 or MDL | 2700 | ND | ND | 16000 | ND |
| Benzo(b)Fluoranthene | 61 or MDL | 4300 | ND | ND | 26000 | 6900 |
| Benzo(g,h,i)Perylene | 50000 | 1600 | ND | ND | 9300 | ND |
| Benzo(k)Fluoranthene | 610 or MDL | 1600 | ND | ND | 9900 | ND |
| Butyl Benzyl Phthalate | 50000 | 19000 | 3200 | 700 | 83000 | 71000 |
| Di-n-Butylphthalate | 8100 | 1700 | 390 | ND | 5800 | 6800 |
| Carbazole | 50000 | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | 1300 | ND | ND | 8200 | ND |
| Chrysene | 400 | 2900 | ND | ND | 17000 | 4800 |
| Dibenzo(a.h)Anthracene | 14 or MDL | 460 | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | 1100 | 1200 | 990 | 8500 | 5400 |
| Fluoranthene | 50000 | 3800 | ND | ND | 28000 | 8500 |
| Fluorene | 50000 | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | 1700 | ND | ND | 20000 | 4100 |
| Pyrene | 50000 | 4300 | ND | ND | 30000 | 8800 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 16060 | | | 91100 | 11700 |
| **Total Semi-VOCS** | 500000 | 49730 | 4790 | 1690 | 281200 | 116300 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | ELPO Area Wastewater Leak Body Plant | Column E2X Wastewater Leak Body Plant | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **8A** | **9A** | **9A DUP** |
| **Sample Depth (ft)** | **Screening Value** | **0-0.5** | **0-0.5** | **0-0.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | |
| Acetone (1) | 200 | ND | ND | ND |
| Benzene | 60 | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | 6.6 |
| 2-Hexanone | NA | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | 28 |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND |
| Toluene | 1500 | ND | ND | 15 |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | 6.4 |
| Acenaphthene | 50000 | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | 480000 | 490000 |
| Di-n-Butylphthalate | 8100 | ND | ND | ND |
| Carbazole | 50000 | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND |
| Chrysene | 400 | ND | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | 20000 | ND | ND |
| Fluoranthene | 50000 | ND | ND | ND |
| Fluorene | 50000 | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND |
| Pyrene | 50000 | ND | ND | ND |
| 4,4'-DDE | 2100 | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | 67 | 35 |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | |
| **Total Semi-VOCS** | 500000 | 20000 | 480000 | 490000 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Remote Fill Port Location Body Plant | | Basement Conveyor System Body Plant | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **10A** | **10A** | **11A** | **11A** |
| **Sample Depth (ft)** | **Screening Value** | **1-3** | **9-11** | **0-0.5** | **5-5.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **U** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | -- | -- | ND | ND |
| Benzene | 60 | -- | -- | ND | ND |
| 2-Butanone (MEK) | 300 | -- | -- | ND | ND |
| Carbon Disulfide | 2700 | -- | -- | ND | ND |
| Ethylbenzene | 5500 | -- | -- | ND | ND |
| 2-Hexanone | NA | -- | -- | 90 | ND |
| Methylene Chloride | 100 | -- | -- | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | -- | -- | 24 | ND |
| 1,1,2,2-Tetrachloroethane | 600 | -- | -- | ND | ND |
| Toluene | 1500 | -- | -- | ND | ND |
| 1,1,1-Trichloroethane | 800 | -- | -- | ND | ND |
| o-Xylene | 1200 (total xylenes) | -- | -- | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | -- | -- | ND | ND |
| Acenaphthene | 50000 | -- | -- | ND | ND |
| Acenaphthylene | 41000 | -- | -- | ND | ND |
| Anthracene | 50000 | -- | -- | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | -- | -- | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | -- | -- | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | -- | -- | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | -- | -- | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | -- | -- | ND | ND |
| Butyl Benzyl Phthalate | 50000 | -- | -- | ND | ND |
| Di-n-Butylphthalate | 8100 | -- | -- | ND | ND |
| Carbazole | 50000 | -- | -- | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | -- | -- | ND | ND |
| Chrysene | 400 | -- | -- | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | -- | -- | ND | ND |
| Dibenzofuran | 6200 | -- | -- | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | -- | -- | ND | ND |
| Fluoranthene | 50000 | -- | -- | ND | ND |
| Fluorene | 50000 | -- | -- | ND | ND |
| 2-Methylnaphthalene | 36400 | -- | -- | ND | ND |
| Naphthalene | 13000 | -- | -- | ND | ND |
| Di-n-Octyl Phthalate | 50000 | -- | -- | ND | ND |
| Phenanthrene | 50000 | -- | -- | ND | ND |
| Pyrene | 50000 | -- | -- | ND | ND |
| 4,4'-DDE | 2100 | -- | -- | ND | ND |
| 4,4'-DDT | 2100 | -- | -- | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | -- | -- | ND | ND |
| Alpha-BHC | 110 | -- | -- | 240 | ND |
| **Total C-PAHs** | 10000 | | | | |
| **Total Semi-VOCS** | 500000 | | | | |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **North Basement Chassis Plant** | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **12A** | **12A** | **12A** | **12B** |
| **Sample Depth (ft)** | **Screening Value** | **0-0.5** | **3.5-4** | **5.5-6** | **0-0.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **S** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | 57 | ND | 120 | 44 |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | 1400 | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | 760 | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | 32000 |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | 50000 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | 52000 |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | ND | ND | ND | ND |
| Carbazole | 50000 | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | 30000 |
| Chrysene | 400 | ND | ND | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND |
| Fluoranthene | 50000 | 46000 | 38000 | 6000 | 42000 |
| Fluorene | 50000 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND |
| Phenanthrene | 50000 | 88000 | 39000 | 5700 | ND |
| Pyrene | 50000 | 44000 | 38000 | 4900 | 38000 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | | 112000 |
| **Total Semi-VOCS** | 500000 | 178000 | 115000 | 16600 | 244000 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | North Basement Chassis Plant | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **12B** | **12C** | **12C** |
| **Sample Depth (ft)** | **Screening Value** | **2.5-3** | **0-0.5** | **2-2.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **S** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | |
| Acetone (1) | 200 | 33 | ND | 40 |
| Benzene | 60 | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | 7.4 |
| 2-Hexanone | NA | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND |
| Toluene | 1500 | ND | ND | 29 |
| 1,1,1-Trichloroethane | 800 | ND | ND | 22 |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | 6.7 |
| Acenaphthene | 50000 | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | 38000 | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | 38000 | ND |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | ND | ND | ND |
| Carbazole | 50000 | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND |
| Chrysene | 400 | ND | 44000 | 28000 |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND |
| Fluoranthene | 50000 | ND | 100000 | 71000 |
| Fluorene | 50000 | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND |
| Phenanthrene | 50000 | ND | 120000 | 72000 |
| Pyrene | 50000 | ND | 94000 | 69000 |
| 4,4'-DDE | 2100 | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND |
| **Total C-PAHs** | 10000 | | 120000 | 28000 |
| **Total Semi-VOCS** | 500000 | | 434000 | 240000 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **M12 Hydraulic Elevator Chassis Plant** | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **13A** | **13A** | **13B** | **13B** |
| **Sample Depth (ft)** | **Screening Value** | **0-0.5** | **5-5.5** | **0-0.5** | **3-3.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | 770 | ND | ND |
| Acenaphthylene | 41000 | 1800 | 1200 | ND | ND |
| Anthracene | 50000 | 2400 | 2700 | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | 5400 | 4800 | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | 4300 | 3600 | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | 6200 | 4800 | ND | ND |
| Benzo(g,h,i)Perylene | 50000 | 1900 | 1600 | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | 2800 | 1800 | ND | ND |
| Butyl Benzyl Phthalate | 50000 | 750 | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | ND | ND | ND | ND |
| Carbazole | 50000 | 590 | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | 2000 | 1500 | ND | ND |
| Chrysene | 400 | 5700 | 4700 | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | 750 | 620 | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND |
| Fluoranthene | 50000 | 7300 | 7100 | ND | ND |
| Fluorene | 50000 | 690 | 1800 | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | 1100 | ND | ND |
| Naphthalene | 13000 | ND | 730 | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND |
| Phenanthrene | 50000 | 5400 | 6700 | ND | ND |
| Pyrene | 50000 | 7800 | 7300 | ND | ND |
| 4,4'-DDE | 2100 | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 27150 | 21820 | | |
| **Total Semi-VOCS** | 500000 | 55780 | 52820 | | |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Central Rail Spur Chassis Plant | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **15A** | **15A** | **15B** | **15B** | **15C** | **15C** |
| **Sample Depth (ft)** | **Screening Value** | **1-3** | **3-5** | **1.6-3.6** | **3.6-5.6** | **0-2** | **2-4** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** | **U** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | | | |
| Acetone (1) | 200 | ND | 14 | ND | ND | 13 | ND |
| Benzene | 60 | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | 12 | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND | 490 |
| Acenaphthylene | 41000 | ND | ND | ND | ND | 560 | ND |
| Anthracene | 50000 | ND | ND | 370 | ND | 1000 | 460 |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | 540 | ND | 3100 | 690 |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | 350 | ND | 3100 | 610 |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | 710 | ND | 4100 | 1300 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND | 900 | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | 370 | ND | 3400 | 1200 |
| Butyl Benzyl Phthalate | 50000 | 500 | ND | 1100 | ND | 4500 | ND |
| Di-n-Butylphthalate | 8100 | ND | ND | 370 | ND | 340 | ND |
| Carbazole | 50000 | ND | ND | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND | 930 | ND |
| Chrysene | 400 | ND | ND | 680 | ND | 3500 | 920 |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND | 340 | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | 760 |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | 900 | 1300 |
| Fluoranthene | 50000 | 390 | ND | 1800 | ND | 4100 | 2500 |
| Fluorene | 50000 | ND | ND | ND | ND | 350 | 640 |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | 380 |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | 380 | ND | 1400 | ND | 1900 | 3100 |
| Pyrene | 50000 | ND | ND | 2100 | ND | 6200 | 2500 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | 2650 | | 18470 | 4720 |
| **Total Semi-VOCS** | 500000 | 1270 | | 9790 | | 39220 | 16850 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Paint Tote and Central Sludge Chassis Plant** | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **16A** | **16B** | **16B** | **16B** |
| **Sample Depth (ft)** | **Screening Value** | **5-5.5** | **0-.5** | **2-2.5** | **4.1-4.6** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **S** | **U** | **U** | **S** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | 9.3 |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | 21 |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | 20 |
| Acenaphthene | 50000 | ND | -- | -- | -- |
| Acenaphthylene | 41000 | ND | -- | -- | -- |
| Anthracene | 50000 | ND | -- | -- | -- |
| Benzo(a)Anthracene | 224 or MDL | ND | -- | -- | -- |
| Benzo(a)Pyrene | 61 or MDL | ND | -- | -- | -- |
| Benzo(b)Fluoranthene | 61 or MDL | ND | -- | -- | -- |
| Benzo(g,h,i)Perylene | 50000 | ND | -- | -- | -- |
| Benzo(k)Fluoranthene | 610 or MDL | ND | -- | -- | -- |
| Butyl Benzyl Phthalate | 50000 | ND | -- | -- | -- |
| Di-n-Butylphthalate | 8100 | 550 | -- | -- | -- |
| Carbazole | 50000 | ND | -- | -- | -- |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | -- | -- | -- |
| Chrysene | 400 | ND | -- | -- | -- |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | -- | -- | -- |
| Dibenzofuran | 6200 | ND | -- | -- | -- |
| Bis(2-Ethylhexyl)Phthalate | 50000 | 690 | -- | -- | -- |
| Fluoranthene | 50000 | 920 | -- | -- | -- |
| Fluorene | 50000 | ND | -- | -- | -- |
| 2-Methylnaphthalene | 36400 | ND | -- | -- | -- |
| Naphthalene | 13000 | ND | -- | -- | -- |
| Di-n-Octyl Phthalate | 50000 | ND | -- | -- | -- |
| Phenanthrene | 50000 | ND | -- | -- | -- |
| Pyrene | 50000 | 800 | -- | -- | -- |
| 4,4'-DDE | 2100 | ND | -- | -- | -- |
| 4,4'-DDT | 2100 | ND | -- | -- | -- |
| PCB 1254 | 1000 / 10000 (2) | ND | -- | -- | -- |
| Alpha-BHC | 110 | ND | -- | -- | -- |
| **Total C-PAHs** | 10000 | | | | |
| **Total Semi-VOCS** | 500000 | 2960 | | | |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Basement Conveyor System Chassis Plant | | Column Q5 Wastewater Leak Chassis Plant | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **17A** | **17A** | **18A** | **18A-Dup** |
| **Sample Depth (ft)** | **Screening Value** | **0-0.5** | **4-4.5** | **0-0.5** | **0-0.5** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **U** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | ND | 29 | 12 | ND |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | 500 | 1000 |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | 450 | 790 |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | 820 | 1300 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | 690 |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | 380 | 500 |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | ND | 4300B | ND | ND |
| Carbazole | 50000 | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | 560 |
| Chrysene | 400 | ND | ND | 580 | 1100 |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND |
| Fluoranthene | 50000 | ND | ND | 850 | 2000 |
| Fluorene | 50000 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND | 730 |
| Pyrene | 50000 | ND | ND | 730 | 1500 |
| 4,4'-DDE | 2100 | ND | ND | ND | ND |
| 4,4'-DDT | 2100 | ND | ND | ND | ND |
| PCB 1254 | 1000 / 10000 (2) | ND | ND | ND | ND |
| Alpha-BHC | 110 | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | | | 2730 | 5250 |
| **Total Semi-VOCS** | 500000 | | | 4310 | 10170 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 7**
**Phase II Sample Locations**
**Organic Compound Analyses and TAGM Screening Values**
**FormerTarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Column M23 Hydraulic Leak Chassis Plant | | Column T20 Hydraulic Leak Chassis Plant | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **19A** | **19A** | **20A** | **20A** |
| **Sample Depth (ft)** | **Screening Value** | **0-0.5** | **4-4.5** | **0-0.5** | **0.5-1.0** |
| **Saturation (Sat/Unsat)** | **TAGM 4046** | **U** | **S** | **U** | **U** |
| *TCL Organics (ug/kg)* | **(ug/kg)** | | | | |
| Acetone (1) | 200 | ND | ND | ND | ND |
| Benzene | 60 | ND | ND | ND | ND |
| 2-Butanone (MEK) | 300 | ND | ND | ND | ND |
| Carbon Disulfide | 2700 | ND | ND | ND | ND |
| Ethylbenzene | 5500 | ND | ND | ND | ND |
| 2-Hexanone | NA | ND | ND | ND | ND |
| Methylene Chloride | 100 | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone (MIBK) | NA | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 600 | ND | ND | ND | ND |
| Toluene | 1500 | 6.7 | 37 | ND | 7.6 |
| 1,1,1-Trichloroethane | 800 | ND | ND | ND | ND |
| o-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| m+p-Xylene | 1200 (total xylenes) | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | ND |
| Benzo(a)Anthracene | 224 or MDL | ND | ND | ND | ND |
| Benzo(a)Pyrene | 61 or MDL | ND | ND | ND | ND |
| Benzo(b)Fluoranthene | 61 or MDL | ND | ND | ND | 1800 |
| Benzo(g,h,i)Perylene | 50000 | ND | ND | ND | ND |
| Benzo(k)Fluoranthene | 610 or MDL | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND |
| Di-n-Butylphthalate | 8100 | ND | ND | ND | ND |
| Carbazole | 50000 | ND | ND | ND | ND |
| Indeno(1,2,3,-cd)Pyrene | 3200 | ND | ND | ND | ND |
| Chrysene | 400 | ND | ND | ND | ND |
| Dibenzo(a.h)Anthracene | 14 or MDL | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | 14000 | 2600 |
| Fluoranthene | 50000 | ND | ND | ND | 2400 |
| Fluorene | 50000 | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND |
| Di-n-Octyl Phthalate | 50000 | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | ND | ND | 1800 |
| Pyrene | 50000 | ND | ND | ND | 2300 |
| 4,4'-DDE | 2100 | 230 | 20 | -- | -- |
| 4,4'-DDT | 2100 | ND | ND | -- | -- |
| PCB 1254 | 1000 / 10000 (2) | 9900 | 830 | ND | ND |
| Alpha-BHC | 110 | ND | ND | -- | -- |
| **Total C-PAHs** | 10000 | | | | |
| **Total Semi-VOCS** | 500000 | | | 14000 | 10900 |

Constituents With Levels Above TAGM 4046 Values

(1) Acetone attributable to laboratory artifact

(2) Total PCB Values for Surface/Subsurface

-- Not Analyzed

ND - Not Detected

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Former Village Dump | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **1D1** | **1D1-DUP** | **1J** | **1J-DUP** | **1J-EXT** |
| **Sample Depth (ft.)** | | **1-3** | **1-3** | **7-9** | **7-9** | **6-8** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **S** | **S** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | | |
| Aluminum | SB | 8240 | 7960 | 4280 | 4440 | 3760 |
| Antimony | SB | <6.86 | <6.81 | <11.5 | <11.8 | <12.5 |
| Arsenic | 7.5 or SB | <1.14 | <1.14 | 11.5 | 17.7 | 19.4 |
| Barium | 300 or SB | 31 | 16 | 204 | 274 | 137 |
| Beryllium | 0.16 or SB | <0.571 | <0.568 | <0.954 | <0.984 | <1.04 |
| Cadmium | 1 or SB | <0.571 | <0.568 | <0.954 | <0.984 | 2.96 |
| Calcium | SB | 2500 | 1680 | 4890 | 7490 | 13800 |
| Chromium | 10 or SB | 12.5 | 12.6 | 33.5 | 41.6 | 697 |
| Cobalt | 30 or SB | 7.18 | 6.21 | <9.54 | 10.1 | <10.4 |
| Copper | 25 or SB | 18.4 | 12.4 | 148 | 217 | 100 |
| Iron | 2000 or SB | 19500 | 17700 | 163000 | 192000 | 223000 |
| Lead | 500 (Urban) or SB | 8.04 | 6.18 | 43500 | 1270 | 310 |
| Magnesium | SB | 4490 | 4200 | 964 | 995 | 1010 |
| Manganese | SB | 215 | 175 | 545 | 1000 | 1900 |
| Mercury | 0.1 | <0.171 | <0.170 | 0.762 | 0.999 | 0.417 |
| Nickel | 13 or SB | 16.5 | 16.2 | 33.9 | 41.6 | 26.7 |
| Potassium | SB | 1210 | 954 | 451 | 478 | 270 |
| Selenium | 2 or SB | 4.01 | 4.25 | 33.6 | 43.8 | 49.7 |
| Silver | SB | <1.14 | <1.14 | 3.6 | 2.34 | 2.58 |
| Sodium | SB | -- | 117 | 161 | 405 | <1.04 |
| Thallium | SB | <1.14 | <1.14 | <1.91 | <1.97 | <2.09 |
| Vandium | 150 or SB | 25.1 | 12.8 | 24.4 | 28 | 29.9 |
| Zinc | 20 or SB | 47.9 | 43.4 | 374 | 377 | 1000 |
| Total Cyanide | Site -specific | <1.14 | <1.14 | 3.99 | <1.97 | <2.09 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| **Phase II ESI Sampling Area Description** | | **Former Village dump** | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **1K** | **1K-EXT** | **1K-EXT** | **1L** | **1M** |
| **Sample Depth (ft.)** | | **5-7** | **0.5-2** | **6-7** | **7-8** | **7-8** |
| **Saturation (Sat/Unsat)** | | **S** | **U** | **S** | **S** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | | |
| Aluminum | SB | 6780 | 9900 | 7600 | 9380 | 9450 |
| Antimony | SB | <8.50 | <7.80 | <8.45 | <8.36 | <8.36 |
| Arsenic | 7.5 or SB | 4.68 | <1.30 | 4.1 | 6.1 | 15.5 |
| Barium | 300 or SB | 104 | 36.5 | 115 | 226 | 177 |
| Beryllium | 0.16 or SB | <0.708 | <0.650 | <0.704 | <0.696 | <0.696 |
| Cadmium | 1 or SB | <0.708 | <0.650 | <0.704 | <0.696 | <0.696 |
| Calcium | SB | 1970 | 10200 | 2610 | 6640 | 4760 |
| Chromium | 10 or SB | 13.8 | 12.8 | 16.5 | 13.5 | 17.8 |
| Cobalt | 30 or SB | 8.16 | <6.50 | 7.86 | 7.88 | 7.2 |
| Copper | 25 or SB | 37.6 | 11.5 | 71.1 | 44.6 | 44.6 |
| Iron | 2000 or SB | 9270 | 20100 | 14000 | 24200 | 21300 |
| Lead | 500 (Urban) or SB | 138 | 4.85 | 245 | 307 | 300 |
| Magnesium | SB | 1160 | 5800 | 2180 | 1500 | 3590 |
| Manganese | SB | 92.7 | 205 | 153 | 189 | 211 |
| Mercury | 0.1 | <0.212 | <0.195 | 2.12 | 0.466 | 0.28 |
| Nickel | 13 or SB | 15.8 | 17.7 | 17.8 | 20.5 | 16.5 |
| Potassium | SB | 902 | 1320 | 1090 | 1570 | 1330 |
| Selenium | 2 or SB | 3.04 | 4.72 | 3.8 | 7.57 | 5.54 |
| Silver | SB | <1.42 | <1.30 | <1.41 | <1.39 | <1.39 |
| Sodium | SB | 364 | 318 | 431 | 338 | 441 |
| Thallium | SB | <1.42 | <1.30 | <1.41 | <1.39 | <1.39 |
| Vandium | 150 or SB | 24.8 | 13.5 | 27.7 | 39.8 | 25.7 |
| Zinc | 20 or SB | 119 | 45.6 | 136 | 283 | 214 |
| Total Cyanide | Site -specific | <1.42 | <1.30 | <1.41 | 2.06 | <1.39 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Former Discarded Drum Pile | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **2C** | **2C** | **2D** | **2D** |
| **Sample Depth (ft.)** | | **1-3** | **7-9** | **1-3** | **5-7** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 5630 | 3250 | 2290 | 2870 |
| Antimony | SB | <7.04 | <7.67 | <6.87 | <7.50 |
| Arsenic | 7.5 or SB | 2.54 | 7.08 | 3.81 | 6.91 |
| Barium | 300 or SB | 250 | 81.3 | 80.6 | 90.3 |
| Beryllium | 0.16 or SB | <0.587 | <0.639 | <0.573 | <0.625 |
| Cadmium | 1 or SB | 0.588 | <0.639 | <0.573 | <0.625 |
| Calcium | SB | 154000 | 15200 | 91000 | 11000 |
| Chromium | 10 or SB | 24.4 | 11 | 16 | 12.9 |
| Cobalt | 30 or SB | <5.87 | <6.39 | <5.73 | <6.25 |
| Copper | 25 or SB | 19.2 | 16.7 | 18 | 26.9 |
| Iron | 2000 or SB | 9000 | 64100 | 10400 | 18000 |
| Lead | 500 (Urban) or SB | 233 | 43 | 167 | 159 |
| Magnesium | SB | 54100 | 1830 | 46300 | 2450 |
| Manganese | SB | 235 | 320 | 144 | 57.6 |
| Mercury | 0.1 | <0.176 | <0.192 | <0.172 | <0.188 |
| Nickel | 13 or SB | 21.8 | 13.3 | 17.8 | 10.3 |
| Potassium | SB | 1090 | 458 | 522 | 474 |
| Selenium | 2 or SB | 1.27 | 10.3 | 1.99 | 2.93 |
| Silver | SB | <1.17 | <1.28 | <1.15 | <1.25 |
| Sodium | SB | 714 | 584 | 80.3 | 460 |
| Thallium | SB | <1.17 | <1.28 | <1.15 | <1.25 |
| Vandium | 150 or SB | 26.9 | 16.4 | 13.8 | 14.8 |
| Zinc | 20 or SB | 187 | 44.2 | 115 | 108 |
| Total Cyanide | Site -specific | <1.17 | <1.28 | <1.15 | <1.25 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Former Garage Area | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **3A** | **3A** | **3A** |
| **Sample Depth (ft.)** | | **.75-3** | **3-5** | **7-9** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | |
| Aluminum | SB | -- | 4410 | 7030 |
| Antimony | SB | -- | <7.12 | <7.36 |
| Arsenic | 7.5 or SB | -- | 6.51 | <1.23 |
| Barium | 300 or SB | -- | 63.4 | 54.2 |
| Beryllium | 0.16 or SB | -- | <0.593 | <0.613 |
| Cadmium | 1 or SB | -- | <0.593 | <0.613 |
| Calcium | SB | -- | 41600 | 4700 |
| Chromium | 10 or SB | -- | 15.6 | 15.3 |
| Cobalt | 30 or SB | -- | 7.48 | 7.12 |
| Copper | 25 or SB | -- | 27.4 | 14.5 |
| Iron | 2000 or SB | -- | 25700 | 14500 |
| Lead | 500 (Urban) or SB | -- | 68.9 | 6.95 |
| Magnesium | SB | -- | 13400 | 4560 |
| Manganese | SB | -- | 123 | 144 |
| Mercury | 0.1 | -- | <0.178 | <0.184 |
| Nickel | 13 or SB | -- | 14.8 | 12.2 |
| Potassium | SB | -- | 573 | 1830 |
| Selenium | 2 or SB | -- | 4.79 | 2.15 |
| Silver | SB | -- | <1.19 | <1.23 |
| Sodium | SB | -- | 474 | 786 |
| Thallium | SB | -- | <1.19 | <1.23 |
| Vandium | 150 or SB | -- | 19.3 | 18.7 |
| Zinc | 20 or SB | -- | 61 | 29.8 |
| Total Cyanide | Site -specific | -- | <1.19 | <1.23 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Former Burn Pit Facility | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **4A** | **4A** | **4B** | **4B** | **4C** |
| **Sample Depth (ft.)** | | **1-3** | **3-5** | **2-4** | **4-6** | **7-9** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **U** | **S** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | | |
| Aluminum | SB | 4230 | 4240 | 2250 | 8480 | 9600 |
| Antimony | SB | 74.1 | <7.86 | <7.28 | 132 | <11.3 |
| Arsenic | 7.5 or SB | 22.3 | 11.8 | 8.67 | 13 | 9.81 |
| Barium | 300 or SB | 3560 | 377 | 1600 | 2100 | 1350 |
| Beryllium | 0.16 or SB | <0.571 | <0.655 | <0.607 | <.629 | <0.940 |
| Cadmium | 1 or SB | 1.73 | 4.18 | 0.919 | 14.4 | <0.940 |
| Calcium | SB | 67300 | 11500 | 19700 | 17200 | 5830 |
| Chromium | 10 or SB | 159 | 36.9 | 17.4 | 297 | 25.7 |
| Cobalt | 30 or SB | 12.4 | 7.64 | <6.07 | 15.4 | 15 |
| Copper | 25 or SB | 61.7 | 72.8 | 37.7 | 244 | 56.3 |
| Iron | 2000 or SB | 21700 | -- | 9640 | -- | 30700 |
| Lead | 500 (Urban) or SB | 2770 | 206 | 182 | 3640 | 772 |
| Magnesium | SB | 33300 | 2080 | 3220 | 6770 | 4490 |
| Manganese | SB | 198 | 281 | 54.3 | 441 | 211 |
| Mercury | 0.1 | 0.186 | <.197 | 0.228 | <0.189 | <0.282 |
| Nickel | 13 or SB | 24.9 | 17.1 | 18.2 | 49.8 | 24.6 |
| Potassium | SB | 517 | 653 | 224 | 4250 | 1690 |
| Selenium | 2 or SB | 3.5 | 7.14 | 4.12 | 16.7 | 6.4 |
| Silver | SB | 1.25 | <1.31 | <1.21 | 1.6 | <1.88 |
| Sodium | SB | 2030 | -- | -- | -- | -- |
| Thallium | SB | <1.14 | <1.31 | <1.21 | <1.26 | <1.88 |
| Vandium | 150 or SB | 29.6 | 20.3 | 17 | 38 | 26.9 |
| Zinc | 20 or SB | 1130 | 349 | 482 | -- | 366 |
| Total Cyanide | Site -specific | <1.14 | <1.31 | <1.21 | 5.52 | <1.88 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Internal Rail Spurs Body Plant | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **6A** | **6B** | **6B** | **6C** |
| **Sample Depth (ft.)** | | **3.1-5.1** | **1-3** | **3-5** | **0.5-2.5** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 5380 | 5810 | 9280 | 2510 |
| Antimony | SB | <6.43 | <6.57 | <6.24 | <6.76 |
| Arsenic | 7.5 or SB | 2.21 | 2.46 | <1.04 | 8.42 |
| Barium | 300 or SB | 76.3 | 480 | 206 | 55.6 |
| Beryllium | 0.16 or SB | <0.536 | <0.548 | <0.520 | <0.564 |
| Cadmium | 1 or SB | <0.536 | <0.548 | <0.520 | <0.564 |
| Calcium | SB | 5660 | 42700 | 34200 | 109000 |
| Chromium | 10 or SB | 12.2 | 20.3 | 16.7 | 23.6 |
| Cobalt | 30 or SB | 6.2 | 6.45 | 10.6 | <5.64 |
| Copper | 25 or SB | 55.8 | 380 | 107 | 58.6 |
| Iron | 2000 or SB | 16900 | 16600 | -- | 33100 |
| Lead | 500 (Urban) or SB | 72.9 | 279 | 203 | 131 |
| Magnesium | SB | 3010 | 19500 | 16800 | 2270 |
| Manganese | SB | 120 | 205 | 193 | 133 |
| Mercury | 0.1 | <0.161 | <0.164 | <0.156 | 0.204 |
| Nickel | 13 or SB | 7.96 | 17.6 | 17 | 48.7 |
| Potassium | SB | 729 | 938 | 757 | 553 |
| Selenium | 2 or SB | 3.25 | 3.95 | 5.86 | 8.76 |
| Silver | SB | <1.07 | <1.10 | <1.04 | <1.13 |
| Sodium | SB | -- | -- | -- | 276 |
| Thallium | SB | <1.07 | <1.10 | <1.04 | <1.13 |
| Vandium | 150 or SB | 15.6 | 25.7 | 50.7 | 10.8 |
| Zinc | 20 or SB | 92.9 | 249 | 134 | 44.6 |
| Total Cyanide | Site -specific | <1.07 | <1.10 | <1.04 | <1.13 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Internal Rail Spurs Body Plant | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **6C** | **6D** | **6D** |
| **Sample Depth (ft.)** | | **6-8** | **1-3** | **3-5** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | |
| Aluminum | SB | 1610 | 1980 | 1580 |
| Antimony | SB | <7.21 | <6.62 | <6.85 |
| Arsenic | 7.5 or SB | 10.2 | 5.34 | 8.53 |
| Barium | 300 or SB | 181 | 54.2 | 47.2 |
| Beryllium | 0.16 or SB | <0.601 | 0.566 | <0.571 |
| Cadmium | 1 or SB | <0.601 | <0.551 | <0.571 |
| Calcium | SB | 7540 | 15900 | 2150 |
| Chromium | 10 or SB | 8.23 | 9.12 | 6.85 |
| Cobalt | 30 or SB | <6.01 | <5.51 | <5.71 |
| Copper | 25 or SB | 35.6 | 27.5 | 22.9 |
| Iron | 2000 or SB | 17500 | 13400 | 12800 |
| Lead | 500 (Urban) or SB | 138 | 34 | 85.2 |
| Magnesium | SB | 558 | 1220 | 192 |
| Manganese | SB | 32 | 63.9 | 31.7 |
| Mercury | 0.1 | 0.835 | 0.173 | <0.171 |
| Nickel | 13 or SB | 8.6 | 9.35 | 9.49 |
| Potassium | SB | 683 | 466 | 296 |
| Selenium | 2 or SB | 3.34 | 3.87 | 2.31 |
| Silver | SB | <1.20 | <1.10 | <1.14 |
| Sodium | SB | -- | -- | 98.5 |
| Thallium | SB | <1.20 | <1.10 | <1.14 |
| Vandium | 150 or SB | 11 | 11.6 | 10.3 |
| Zinc | 20 or SB | 26.8 | 29.7 | 84.1 |
| Total Cyanide | Site -specific | 1.84 | <1.10 | <1.14 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Basement Welding Area Body Plant | | | | |
|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **7A** | **7B** | **7B** | **7C** | **7C** |
| **Sample Depth (ft.)** | | **0-0.5** | **0-0.5** | **3-3.5** | **0-0.5** | **1-1.5** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | | |
| Aluminum | SB | 7280 | 7640 | 8190 | 8780 | 9020 |
| Antimony | SB | 25.5 | <1.08 | <1.10 | 117 | 166 |
| Arsenic | 7.5 or SB | 11.8 | <1.08 | 2.1 | 36.5 | 49.7 |
| Barium | 300 or SB | 510 | 77.4 | 65.5 | 4390 | 5550 |
| Beryllium | 0.16 or SB | <0.561 | <0.541 | <0.549 | <0.601 | <0.609 |
| Cadmium | 1 or SB | 5.24 | <0.541 | <0.549 | 19.8 | 35.1 |
| Calcium | SB | 8140 | 1620 | 1810 | 32600 | 32200 |
| Chromium | 10 or SB | 91.7 | 24.9 | 17.1 | 398 | 286 |
| Cobalt | 30 or SB | 8.61 | 5.52 | 6.72 | 10.8 | 12.3 |
| Copper | 25 or SB | 225 | 121 | 97.9 | 843 | 10200 |
| Iron | 2000 or SB | 28200 | 24600 | 20300 | 73200 | 137000 |
| Lead | 500 (Urban) or SB | 2760 | 85.1 | 100 | 7100 | 9420 |
| Magnesium | SB | 5830 | 4030 | 4460 | 11100 | 4620 |
| Manganese | SB | 313 | 178 | 216 | 615 | 996 |
| Mercury | 0.1 | 0.653 | <0.162 | <0.165 | 0.901 | 1.47 |
| Nickel | 13 or SB | 111 | 14.9 | 16.9 | 146 | 70.1 |
| Potassium | SB | 841 | 957 | 998 | 1290 | 1250 |
| Selenium | 2 or SB | <0.561 | <0.541 | <0.549 | 8.72 | 11.3 |
| Silver | SB | <1.12 | <1.08 | <1.10 | 1.55 | 3.79 |
| Sodium | SB | <56.1 | 80.4 | 85.7 | 273 | 1080 |
| Thallium | SB | <1.12 | <1.08 | <1.10 | <1.20 | <1.22 |
| Vandium | 150 or SB | 83.6 | 14.1 | 16 | 227 | 60.8 |
| Zinc | 20 or SB | 609 | 335 | 159 | 3040 | 10000 |
| Total Cyanide | Site -specific | <1.12 | <1.08 | <1.10 | 2.81 | <1.22 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | ELPO Area Wastewater Leak Body Plant | Column E2X Wastewater Leak Body Plant | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **8A** | **9A** | **9A DUP** |
| **Sample Depth (ft.)** | | **0-0.5** | **0-0.5** | **0-0.5** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | |
| Aluminum | SB | 5890 | 12100 | 11900 |
| Antimony | SB | 1.87 | 33.4 | 15.3 |
| Arsenic | 7.5 or SB | <1.57 | 9.94 | 4.5 |
| Barium | 300 or SB | 414 | 8640 | 10000 |
| Beryllium | 0.16 or SB | <0.787 | <0.517 | <0.513 |
| Cadmium | 1 or SB | <0.787 | 1.09 | 1.18 |
| Calcium | SB | 2340 | 12100 | 12000 |
| Chromium | 10 or SB | 427 | 552 | 320 |
| Cobalt | 30 or SB | <7.87 | 8.73 | 8.59 |
| Copper | 25 or SB | 125 | 640 | 572 |
| Iron | 2000 or SB | 25400 | 22700 | 30900 |
| Lead | 500 (Urban) or SB | 528 | 5110 | 2090 |
| Magnesium | SB | 2890 | 3330 | 3140 |
| Manganese | SB | 3030 | 212 | 176 |
| Mercury | 0.1 | <0.236 | 0.208 | <0.154 |
| Nickel | 13 or SB | 1870 | 259 | 259 |
| Potassium | SB | 895 | 5210 | 5300 |
| Selenium | 2 or SB | <0.787 | <0.517 | <0.513 |
| Silver | SB | <1.57 | <1.03 | <1.03 |
| Sodium | SB | 876 | 5500 | 6570 |
| Thallium | SB | <1.57 | <1.03 | <1.03 |
| Vandium | 150 or SB | 9.35 | 12.5 | 13.3 |
| Zinc | 20 or SB | 13400 | 4990 | 4320 |
| Total Cyanide | Site -specific | <1.57 | <1.03 | <1.03 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Remote Fill Port Location Body Plant | | Basement Conveyor System Body Plant | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **10A** | **10A** | **11A** | **11A** |
| **Sample Depth (ft.)** | | **1-3** | **9-11** | **0-0.5** | **5-5.5** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 7050 | 6800 | 7550 | 7740 |
| Antimony | SB | <6.57 | <7.29 | 15.3 | <1.16 |
| Arsenic | 7.5 or SB | 2.56 | <1.22 | 2.04 | <1.16 |
| Barium | 300 or SB | 51.7 | 14.9 | 18 | 13.6 |
| Beryllium | 0.16 or SB | <0.548 | <0.608 | <0.503 | <0.578 |
| Cadmium | 1 or SB | <0.548 | <0.608 | <0.503 | <0.578 |
| Calcium | SB | 21400 | 37300 | 1800 | 2440 |
| Chromium | 10 or SB | 13 | 9.87 | 11.7 | 10.9 |
| Cobalt | 30 or SB | 7.53 | <6.08 | 5.31 | <5.78 |
| Copper | 25 or SB | 41.7 | 8.32 | 11.1 | 9.78 |
| Iron | 2000 or SB | 18600 | 14900 | 19300 | 18100 |
| Lead | 500 (Urban) or SB | 31.2 | 3.34 | 213 | <5.78 |
| Magnesium | SB | 8990 | 4010 | 4330 | 4230 |
| Manganese | SB | 255 | 235 | 156 | 139 |
| Mercury | 0.1 | <0.164 | <0.182 | <0.151 | <0.173 |
| Nickel | 13 or SB | 24 | 12.3 | 15.2 | 14.9 |
| Potassium | SB | 1150 | 903 | 996 | 966 |
| Selenium | 2 or SB | 3.72 | 3.4 | <0.503 | <0.578 |
| Silver | SB | <1.10 | <1.22 | <1.01 | <1.16 |
| Sodium | SB | -- | 394 | 58 | 145 |
| Thallium | SB | <1.10 | <1.22 | <1.01 | <1.16 |
| Vandium | 150 or SB | 14.2 | 10.6 | 12.4 | 11.9 |
| Zinc | 20 or SB | 98.9 | 30.5 | 68.4 | 36.9 |
| Total Cyanide | Site -specific | <1.10 | <1.22 | <1.01 | <1.16 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | North Basement Chassis Plant | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **12A** | **12A** | **12A** | **12B** |
| **Sample Depth (ft.)** | | **0-0.5** | **3.5-4** | **5.5-6** | **0-0.5** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **S** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 1980 | 6570 | 6480 | 8450 |
| Antimony | SB | 2.55 | <1.12 | <1.19 | 3.59 |
| Arsenic | 7.5 or SB | 7.68 | <1.12 | <1.19 | 28.6 |
| Barium | 300 or SB | 454 | 45.8 | 48 | 268 |
| Beryllium | 0.16 or SB | <0.509 | <0.560 | <0.597 | <0.564 |
| Cadmium | 1 or SB | 5.5 | <0.560 | <0.597 | 17.2 |
| Calcium | SB | 4700 | 2760 | 1860 | 52200 |
| Chromium | 10 or SB | 40.6 | 15.1 | 14.9 | 189 |
| Cobalt | 30 or SB | 8.68 | 7.22 | 6.73 | 12 |
| Copper | 25 or SB | 110 | 14.6 | 14.2 | 337 |
| Iron | 2000 or SB | 26800 | 14100 | 14400 | 48500 |
| Lead | 500 (Urban) or SB | 809 | 29.2 | 13.4 | 1680 |
| Magnesium | SB | 1290 | 3510 | 3060 | 5330 |
| Manganese | SB | 1120 | 139 | 182 | 578 |
| Mercury | 0.1 | <0.153 | <0.168 | <0.179 | 3.06 |
| Nickel | 13 or SB | 66.4 | 12.7 | 13.2 | 71 |
| Potassium | SB | 957 | 1750 | 1660 | 2280 |
| Selenium | 2 or SB | 2.25 | <0.560 | 2.83 | 10.7 |
| Silver | SB | <1.02 | <1.12 | <1.19 | <1.13 |
| Sodium | SB | 1250 | 159 | 79.2 | 184 |
| Thallium | SB | <1.02 | <1.12 | <1.19 | <1.13 |
| Vandium | 150 or SB | 13.7 | 19.6 | 18.2 | 92.8 |
| Zinc | 20 or SB | 301 | 33.4 | 32.1 | 1240 |
| Total Cyanide | Site -specific | <1.02 | <1.12 | <1.19 | 1.85 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | North Basement Chassis Plant | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **12B** | **12C** | **12C** |
| **Sample Depth (ft.)** | | **2.5-3** | **0-0.5** | **2-2.5** |
| **Saturation (Sat/Unsat)** | | **S** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | |
| Aluminum | SB | 10300 | 5650 | 6140 |
| Antimony | SB | <1.25 | 2.43 | <1.02 |
| Arsenic | 7.5 or SB | <1.25 | 1.79 | <1.02 |
| Barium | 300 or SB | 71 | 683 | 145 |
| Beryllium | 0.16 or SB | <0.623 | <0.512 | <0.511 |
| Cadmium | 1 or SB | <0.623 | 9.58 | 5.23 |
| Calcium | SB | 2180 | 49100 | 11000 |
| Chromium | 10 or SB | 21 | 21.3 | 16.4 |
| Cobalt | 30 or SB | 9.35 | <5.12 | 5.5 |
| Copper | 25 or SB | 23.8 | 220 | 24.7 |
| Iron | 2000 or SB | 19100 | 49100 | 31000 |
| Lead | 500 (Urban) or SB | 18.1 | 11300 | 4210 |
| Magnesium | SB | 4140 | 2800 | 2490 |
| Manganese | SB | 256 | 216 | 156 |
| Mercury | 0.1 | <0.187 | 0.494 | 0.331 |
| Nickel | 13 or SB | 17.3 | 14 | 12.3 |
| Potassium | SB | 2440 | 1810 | 1580 |
| Selenium | 2 or SB | <0.623 | <0.512 | <0.511 |
| Silver | SB | <1.25 | <1.02 | <1.02 |
| Sodium | SB | 133 | 911 | 503 |
| Thallium | SB | <1.25 | <1.02 | <1.02 |
| Vandium | 150 or SB | 26.2 | 13.4 | 16.5 |
| Zinc | 20 or SB | 45.6 | 125 | 68.2 |
| Total Cyanide | Site -specific | <1.25 | <1.02 | <1.02 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | M12 Hydraulic Elevator - Chassis Plant | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **13A** | **13A** | **13B** | **13B** |
| **Sample Depth (ft.)** | | **0-0.5** | **5-5.5** | **0-0.5** | **3-3.5** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 7850 | 6570 | 7310 | 7720 |
| Antimony | SB | <6.66 | <8.21 | <6.49 | <1.10 |
| Arsenic | 7.5 or SB | <1.11 | <1.37 | 2.56 | 2.85 |
| Barium | 300 or SB | 33.4 | 25.9 | 42 | 40.1 |
| Beryllium | 0.16 or SB | <0.555 | <0.684 | <0.541 | <0.548 |
| Cadmium | 1 or SB | <0.555 | <0.684 | <0.541 | <0.548 |
| Calcium | SB | 7290 | 8800 | 6560 | 22700 |
| Chromium | 10 or SB | 14.4 | 15.2 | 18.1 | 21.6 |
| Cobalt | 30 or SB | <5.55 | <6.84 | <5.41 | <5.48 |
| Copper | 25 or SB | 24.7 | 15.6 | 20.9 | 17.6 |
| Iron | 2000 or SB | 17200 | 14300 | 20300 | 17000 |
| Lead | 500 (Urban) or SB | 45 | 21.3 | 23.9 | 61.5 |
| Magnesium | SB | 4410 | 6070 | 4170 | 5470 |
| Manganese | SB | 219 | 123 | 239 | 197 |
| Mercury | 0.1 | <0.166 | <0.205 | <0.162 | <0.164 |
| Nickel | 13 or SB | 16.9 | 13.4 | 16.6 | 14 |
| Potassium | SB | 1170 | 1060 | 1160 | 1210 |
| Selenium | 2 or SB | 6.03 | 5.31 | 6.58 | 3.3 |
| Silver | SB | <1.11 | <1.37 | <1.08 | <1.10 |
| Sodium | SB | 115 | 106 | 89.5 | 145 |
| Thallium | SB | <1.11 | <1.37 | <1.08 | <1.10 |
| Vandium | 150 or SB | 14.1 | 11.7 | 13.6 | 13.7 |
| Zinc | 20 or SB | 88.5 | 45 | 163 | 93.9 |
| Total Cyanide | Site -specific | <1.11 | <1.37 | <1.08 | <1.10 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Central Rail Spur Chassis Plant | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **15A** | **15A** | **15B** |
| **Sample Depth (ft.)** | | **1-3** | **3-5** | **1.6-3.6** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | |
| Aluminum | SB | 9690 | 6510 | 5790 |
| Antimony | SB | <6.52 | <6.98 | <6.35 |
| Arsenic | 7.5 or SB | <1.09 | <1.16 | 1.66 |
| Barium | 300 or SB | 54.5 | 66.4 | 26.1 |
| Beryllium | 0.16 or SB | <0.543 | <0.582 | <0.529 |
| Cadmium | 1 or SB | <0.543 | 0.667 | <0.529 |
| Calcium | SB | 2720 | 14300 | 12000 |
| Chromium | 10 or SB | 23.6 | 19 | 10.5 |
| Cobalt | 30 or SB | 7.67 | 7.29 | <5.29 |
| Copper | 25 or SB | 24.7 | 64.7 | 17.9 |
| Iron | 2000 or SB | 13500 | 16800 | 16000 |
| Lead | 500 (Urban) or SB | 14.1 | 57.3 | 48.2 |
| Magnesium | SB | 4910 | 8460 | 5930 |
| Manganese | SB | 197 | 314 | 180 |
| Mercury | 0.1 | <0.163 | <0.175 | <0.159 |
| Nickel | 13 or SB | 17.3 | 13.2 | 13.5 |
| Potassium | SB | 977 | 2300 | 875 |
| Selenium | 2 or SB | 3.92 | 3.64 | 3.45 |
| Silver | SB | <1.09 | <1.16 | <1.06 |
| Sodium | SB | 139 | -- | 110 |
| Thallium | SB | <1.09 | <1.16 | <1.06 |
| Vandium | 150 or SB | 22.8 | 19.9 | 11.7 |
| Zinc | 20 or SB | 36 | 289 | 48.6 |
| Total Cyanide | Site -specific | <1.09 | <1.16 | <1.06 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Central Rail Spur Chassis Plant | | |
|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **15B** | **15C** | **15C** |
| **Sample Depth (ft.)** | | **3.6-5.6** | **0-2** | **2-4** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | |
| Aluminum | SB | -- | 5860 | 6700 |
| Antimony | SB | -- | <6.18 | <6.55 |
| Arsenic | 7.5 or SB | -- | <1.03 | <1.09 |
| Barium | 300 or SB | -- | 36.2 | 44.3 |
| Beryllium | 0.16 or SB | -- | <0.515 | <0.546 |
| Cadmium | 1 or SB | -- | <0.515 | <0.546 |
| Calcium | SB | -- | -- | 6410 |
| Chromium | 10 or SB | -- | 13.5 | 13.5 |
| Cobalt | 30 or SB | -- | 9.1 | 5.96 |
| Copper | 25 or SB | -- | 105 | 19 |
| Iron | 2000 or SB | -- | -- | 16100 |
| Lead | 500 (Urban) or SB | -- | 67.4 | 46.7 |
| Magnesium | SB | -- | 24000 | 4050 |
| Manganese | SB | -- | 170 | 231 |
| Mercury | 0.1 | -- | <0.154 | <0.164 |
| Nickel | 13 or SB | -- | 9.6 | 13.1 |
| Potassium | SB | -- | 959 | 1400 |
| Selenium | 2 or SB | -- | 5.43 | 4.18 |
| Silver | SB | -- | <1.03 | <1.09 |
| Sodium | SB | -- | -- | 666 |
| Thallium | SB | -- | <1.03 | <1.09 |
| Vandium | 150 or SB | -- | 32.7 | 15.6 |
| Zinc | 20 or SB | -- | 77.6 | 79.7 |
| Total Cyanide | Site -specific | -- | <1.03 | <1.09 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Paint Tote and Central Sludge Chassis Plant | | | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **16A** | **16B** | **16B** | **16B** |
| **Sample Depth (ft.)** | | **5-5.5** | **0-.5** | **2-2.5** | **4.1-4.6** |
| **Saturation (Sat/Unsat)** | | **S** | **U** | **U** | **S** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 8090 | 7730 | 8210 | 5100 |
| Antimony | SB | <7.24 | <6.59 | <6.72 | <6.95 |
| Arsenic | 7.5 or SB | <1.21 | <1.10 | <1.12 | <1.16 |
| Barium | 300 or SB | 15.9 | 85 | 85.8 | 17.5 |
| Beryllium | 0.16 or SB | <0.603 | <0.549 | <0.560 | <0.579 |
| Cadmium | 1 or SB | <0.603 | 4.32 | <0.560 | <0.579 |
| Calcium | SB | 4020 | 11100 | 23500 | 3300 |
| Chromium | 10 or SB | 33.3 | 17 | 19.5 | 7.41 |
| Cobalt | 30 or SB | <6.03 | 6.43 | 7.14 | <5.79 |
| Copper | 25 or SB | 13.1 | 26.5 | 33.1 | 8.56 |
| Iron | 2000 or SB | 17000 | 16100 | 17800 | 11000 |
| Lead | 500 (Urban) or SB | 13.8 | 26.2 | 36.8 | 5.85 |
| Magnesium | SB | 4770 | 5110 | 11900 | 2610 |
| Manganese | SB | 187 | 177 | 200 | 103 |
| Mercury | 0.1 | <0.181 | <0.165 | <0.168 | <0.174 |
| Nickel | 13 or SB | 15.7 | 15.4 | 17.9 | 9.32 |
| Potassium | SB | 1030 | 2470 | 2680 | 1060 |
| Selenium | 2 or SB | 5.87 | 5.74 | 6.92 | 3.59 |
| Silver | SB | <1.21 | <1.10 | <1.12 | <1.16 |
| Sodium | SB | 171 | 169 | 165 | 83.5 |
| Thallium | SB | <1.21 | <1.10 | <1.12 | <1.16 |
| Vandium | 150 or SB | 15.1 | 18.9 | 20.7 | 7.9 |
| Zinc | 20 or SB | 81.6 | 72.8 | 78 | 27.6 |
| Total Cyanide | Site -specific | <1.21 | <1.10 | <1.12 | <1.16 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Basement Conveyor System Chassis Plant | | Column Q5 Wastewater Leak Chassis Plant | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **17A** | **17A** | **18A** | **18A-Dup** |
| **Sample Depth (ft.)** | | **0-0.5** | **4-4.5** | **0-0.5** | **0-0.5** |
| **Saturation (Sat/Unsat)** | | **U** | **U** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 6390 | 6850 | 10200 | 9630 |
| Antimony | SB | <6.42 | <7.85 | <6.56 | <6.56 |
| Arsenic | 7.5 or SB | 2.88 | 1.47 | <1.09 | <1.09 |
| Barium | 300 or SB | 51.7 | 43.2 | 41.7 | 37.6 |
| Beryllium | 0.16 or SB | <0.535 | <0.654 | <0.546 | <0.547 |
| Cadmium | 1 or SB | <0.535 | <0.654 | <0.546 | <0.547 |
| Calcium | SB | 9240 | 2540 | 10100 | 14400 |
| Chromium | 10 or SB | 14.6 | 15.8 | 14.5 | 12.7 |
| Cobalt | 30 or SB | 5.88 | <6.54 | 12.9 | 12.6 |
| Copper | 25 or SB | 77.2 | 20.2 | 77.2 | 71 |
| Iron | 2000 or SB | 31400 | 14500 | 29700 | 24600 |
| Lead | 500 (Urban) or SB | 91.7 | 7.23 | 22.2 | 19.5 |
| Magnesium | SB | 4400 | 3050 | 8550 | 8040 |
| Manganese | SB | 303 | 138 | 273 | 298 |
| Mercury | 0.1 | <0.161 | <0.196 | <0.164 | <0.164 |
| Nickel | 13 or SB | 15.8 | 13.4 | 17.8 | 18 |
| Potassium | SB | 1580 | 1590 | 2170 | 1970 |
| Selenium | 2 or SB | 9.54 | 5.06 | 9.92 | 8.16 |
| Silver | SB | <1.07 | <1.31 | <1.09 | <1.09 |
| Sodium | SB | 135 | 128 | 959 | 755 |
| Thallium | SB | <1.07 | <1.31 | <1.09 | <1.09 |
| Vandium | 150 or SB | 18.6 | 19.6 | 54 | 54.8 |
| Zinc | 20 or SB | 107 | 31 | 218 | 184 |
| Total Cyanide | Site -specific | <1.07 | <1.31 | <1.09 | <1.09 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 8**
**PAOC Sample Locations**
**Inorganic Analyses and TAGM Screening Values**
**Former Tarrytown Assembly Plant**

| Phase II ESI Sampling Area Description | | Column M23 Hydraulic Leak Chassis Plant | | Column S20 Hydraulic Leak Chassis Plant | |
|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use Screening Value TAGM 4046** | **19A** | **19A** | **20A** | **20A** |
| **Sample Depth (ft.)** | | **0-0.5** | **4-4.5** | **0-0.5** | **0.5-1.0** |
| **Saturation (Sat/Unsat)** | | **U** | **S** | **U** | **U** |
| *TAL Inorganics (mg/kg)* | **(mg/kg)** | | | | |
| Aluminum | SB | 6640 | 5860 | 3820 | 7380 |
| Antimony | SB | <6.40 | <6.93 | 4.26 | <1.08 |
| Arsenic | 7.5 or SB | 1.09 | <1.15 | 2.22 | 1.86 |
| Barium | 300 or SB | 43.5 | 11.3 | 216 | 62.6 |
| Beryllium | 0.16 or SB | <0.533 | <0.577 | <0.531 | <0.541 |
| Cadmium | 1 or SB | <0.533 | <0.577 | 5.6 | 0.684 |
| Calcium | SB | 5300 | 1820 | 3530 | 12200 |
| Chromium | 10 or SB | 14.1 | 9.53 | 51.2 | 17 |
| Cobalt | 30 or SB | <5.33 | <5.77 | <5.31 | 5.99 |
| Copper | 25 or SB | 13.9 | 7.42 | 150 | 32.4 |
| Iron | 2000 or SB | 13800 | 11500 | 15100 | 19300 |
| Lead | 500 (Urban) or SB | 16.8 | 5.14 | 315 | 75 |
| Magnesium | SB | 3260 | 3050 | 2410 | 5000 |
| Manganese | SB | 149 | 111 | 111 | 233 |
| Mercury | 0.1 | <0.160 | <0.173 | <0.159 | <0.162 |
| Nickel | 13 or SB | 12.7 | 12.2 | 11.4 | 17.6 |
| Potassium | SB | 1550 | 787 | 764 | 965 |
| Selenium | 2 or SB | 4.85 | 3.81 | <0.531 | <0.541 |
| Silver | SB | <1.07 | <1.15 | 1.53 | <1.08 |
| Sodium | SB | 54.6 | 104 | 194 | 267 |
| Thallium | SB | <1.07 | <1.15 | <1.06 | <1.08 |
| Vandium | 150 or SB | 16.7 | 8.36 | 11 | 14 |
| Zinc | 20 or SB | 296 | 29.9 | 287 | 123 |
| Total Cyanide | Site -specific | <1.07 | <1.15 | <1.06 | <1.08 |

Constituents With Levels Above TAGM 4046 Values, not necessarily greater than site background

SB - Site Background

-- Not Analyzed

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | OW-2 | OW-3 | OW-6 | OW-7 |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | |
| ACETONE | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| BENZENE | UG/L | 1.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMODICHLOROMETHANE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMOFORM | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMOMETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-BUTANONE (MEK) | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| CARBON DISULFIDE | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| CARBON TETRACHLORIDE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROFORM | UG/L | 7.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROMETHANE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIBROMOCHLOROMETHANE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1-DICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CIS-1,2-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRANS-1,2-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROPROPANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CIS-1,3-DICHLOROPROPENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRANS-1,3-DICHLOROPROPENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ETHYLBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-HEXANONE | UG/L | 50.0 | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| METHYLENE CHLORIDE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-METHYL-2-PENTANONE (MIBK) | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| STYRENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,2,2-TETRACHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TETRACHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TOLUENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,1-TRICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,2-TRICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| VINYL CHLORIDE | UG/L | 2.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| O-XYLENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| M+P-XYLENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |

(1) 6 NYCRR Part 703, Class GA Standards and Guidance

Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | OW-2 | OW-3 | OW-6 | OW-7 |
|---|---|---|---|---|---|---|
| **SEMI-VOLATILE ORGANICS/PEST/PCB** | | | | | | |
| ACENAPHTHENE | UG/L | 20.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ACENAPHTHYLENE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALDRIN | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| ANTHRACENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(A)ANTHRACENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(A)PYRENE | UG/L | ND | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(B)FLUORANTHENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(G,H,I)PERYLENE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(K)FLUORANTHENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZYL ALCOHOL | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALPHA-BHC | UG/L | | | 0.05 U | 0.05 U | 0.05 U |
| BETA-BHC | UG/L | | | 0.05 U | 0.05 U | 0.05 U |
| DELTA-BHC | UG/L | | | 0.05 U | 0.05 U | 0.05 U |
| GAMMA-BHC (LINDANE) | UG/L | | | 0.05 U | 0.05 U | 0.05 U |
| BUTYL BENZYL PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 6.10 |
| DI-N-BUTYLPHTHALATE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CARBAZOLE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| INDENO(1,2,3-CD)PYRENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALPHA-CHLORDANE | UG/L | 0.1 | | 0.05 U | 0.05 U | 0.05 U |
| GAMMA-CHLORDANE | UG/L | 0.1 | | 0.05 U | 0.05 U | 0.05 U |
| 4-CHLOROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BIS(-2-CHLOROETHOXY)METHAN | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BIS(2-CHLOROETHYL)ETHER | UG/L | 1.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-CHLORONAPHTHALENE | UG/L | 10.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-CHLOROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHRYSENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4,4'-DDD | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDE | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDT | UG/L | ND | | 0.10 U | 0.10 U | 0.10 U |
| DIBENZO(A,H)ANTHRACENE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIBENZOFURAN | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,3-DICHLOROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROBENZENE | UG/L | 4.7 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,4-DICHLOROBENZENE | UG/L | 4.7 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 3,3'-DICHLOROBENZIDINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,4-DICHLOROPHENOL | UG/L | 1.0 | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| DIELDRIN | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| DIETHYLPHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIMETHYL PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,4-DIMETHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2,4-DINITROPHENOL | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| 2,4-DINITROTOLUENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,6-DINITROTOLUENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALPHA-ENDOSULFAN | UG/L | | | 0.05 U | 0.05 U | 0.05 U |
| BETA-ENDOSULFAN | UG/L | | | 0.10 U | 0.10 U | 0.10 U |
| ENDOSULFAN SULFATE | UG/L | | | 0.10 U | 0.10 U | 0.10 U |
| ENDRIN | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| ENDRIN ALDEHYDE | UG/L | 5.0 | | 0.10 U | 0.10 U | 0.10 U |
| ENDRIN KETONE | UG/L | | | 0.10 U | 0.10 U | 0.10 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |

(1) 6 NYCRR Part 703, Class GA Standards and Guidance

Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | OW-2 | OW-3 | OW-6 | OW-7 |
|---|---|---|---|---|---|---|
| **SEMI-VOLATILE ORGANICS/PEST/PCB (cont)** | | | | | | |
| FLUORENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEPTACHLOR | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| HEPTACHLOR EPOXIDE | UG/L | ND | | 0.05 U | 0.05 U | 0.05 U |
| HEXACHLOROBENZENE | UG/L | 0.25 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEXACHLOROBUTADIENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEXACHLOROCYCLOPENTADIEN | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEXACHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ISOPHORONE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| METHOXYCHLOR | UG/L | 35.0 | | 0.20 U | 0.20 U | 0.20 U |
| 2-METHYLNAPHTHALENE | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4,6-DINITRO-2-METHYLPHENOL | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| 4-CHLORO-3-METHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2-METHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4-METHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| NAPHTHALENE | UG/L | 10.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-NITROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 3-NITROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-NITROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| NITROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-NITROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4-NITROPHENOL | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| N-NITROSODIMETHYLAMINE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| N-NITROSODIPHENYLAMINE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DI-N-OCTYL PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| PCB 1016 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PCB 1221 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PCB 1232 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PCB 1242 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PCB 1248 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PCB 1254 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PCB 1260 | UG/L | 0.1 | | 0.50 U | 0.50 U | 0.50 U |
| PENTACHLOROPHENOL | UG/L | 1.0 | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| PHENANTHRENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| PHENOL | UG/L | 1.0 | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4-BROMOPHENYL-PHENYLETHER | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-CHLOROPHENYL-PHENYLETHE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| N-NITROSO-DI-N-PROPYLAMINE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| PYRENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TOXAPHENE | UG/L | ND | | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-TRICHLOROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,4,6-TRICHLOROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2,4,5-TRICHLOROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U |

(1) 6 NYCRR Part 703, Class GA Standards and Guidance

Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | OW-8 | OW-9 | OW-10 | OW-11 | OW-12 |
|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | |
| ACETONE | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| BENZENE | UG/L | 1.0 | 5.00 U | 5.00 U | 24.00 | 5.00 U | 5.00 U |
| BROMODICHLOROMETHANE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMOFORM | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMOMETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-BUTANONE (MEK) | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| CARBON DISULFIDE | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| CARBON TETRACHLORIDE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROFORM | UG/L | 7.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROMETHANE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIBROMOCHLOROMETHANE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1-DICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CIS-1,2-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRANS-1,2-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROPROPANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CIS-1,3-DICHLOROPROPENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRANS-1,3-DICHLOROPROPENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ETHYLBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 17.00 | 5.00 U | 5.00 U |
| 2-HEXANONE | UG/L | 50.0 | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| METHYLENE CHLORIDE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-METHYL-2-PENTANONE (MIBK) | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| STYRENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,2,2-TETRACHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TETRACHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TOLUENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,1-TRICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,2-TRICHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRICHLOROETHENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| VINYL CHLORIDE | UG/L | 2.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| O-XYLENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| M+P-XYLENE | UG/L | 5.0 | 5.00 U | 5.00 U | 11.00 | 5.00 U | 5.00 U |

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Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | OW-8 | OW-9 | OW-10 | OW-11 | OW-12 |
|---|---|---|---|---|---|---|---|
| **SEMI-VOLATILE ORGANICS/PEST/PCB** | | | | | | | |
| ACENAPHTHENE | UG/L | 20.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ACENAPHTHYLENE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALDRIN | UG/L | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| ANTHRACENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(A)ANTHRACENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(A)PYRENE | UG/L | ND | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(B)FLUORANTHENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(G,H,I)PERYLENE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZO(K)FLUORANTHENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BENZYL ALCOHOL | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALPHA-BHC | UG/L | | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| BETA-BHC | UG/L | | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| DELTA-BHC | UG/L | | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| GAMMA-BHC (LINDANE) | UG/L | | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| BUTYL BENZYL PHTHALATE | UG/L | 50.0 | 5.60 | 7.00 | 5.00 U | 5.00 U | 5.00 U |
| DI-N-BUTYLPHTHALATE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CARBAZOLE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| INDENO(1,2,3-CD)PYRENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALPHA-CHLORDANE | UG/L | 0.1 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| GAMMA-CHLORDANE | UG/L | 0.1 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4-CHLOROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BIS(-2-CHLOROETHOXY)METHAN | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BIS(2-CHLOROETHYL)ETHER | UG/L | 1.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-CHLORONAPHTHALENE | UG/L | 10.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-CHLOROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHRYSENE | UG/L | 0.002 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4,4'-DDD | UG/L | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDE | UG/L | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDT | UG/L | ND | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U |
| DIBENZO(A,H)ANTHRACENE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIBENZOFURAN | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,3-DICHLOROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROBENZENE | UG/L | 4.7 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,4-DICHLOROBENZENE | UG/L | 4.7 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 3,3'-DICHLOROBENZIDINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,4-DICHLOROPHENOL | UG/L | 1.0 | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| DIELDRIN | UG/L | ND | 0.05 U | 0.05 U | 0.11 | 0.05 U | 0.05 U |
| DIETHYLPHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIMETHYL PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,4-DIMETHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2,4-DINITROPHENOL | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| 2,4-DINITROTOLUENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,6-DINITROTOLUENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ALPHA-ENDOSULFAN | UG/L | | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| BETA-ENDOSULFAN | UG/L | | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U |
| ENDOSULFAN SULFATE | UG/L | | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U |
| ENDRIN | UG/L | ND | 0.05 U | 0.05 U | 0.14 | 0.05 U | 0.05 U |
| ENDRIN ALDEHYDE | UG/L | 5.0 | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U |
| ENDRIN KETONE | UG/L | | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 6.50 | 5.00 U |

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Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | OW-8 | OW-9 | OW-10 | OW-11 | OW-12 |
|---|---|---|---|---|---|---|---|
| **SEMI-VOLATILE ORGANICS/PEST/PCB (cont)** | | | | | | | |
| FLUORENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEPTACHLOR | UG/L | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| HEPTACHLOR EPOXIDE | UG/L | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| HEXACHLOROBENZENE | UG/L | 0.25 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEXACHLOROBUTADIENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEXACHLOROCYCLOPENTADIEN | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| HEXACHLOROETHANE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ISOPHORONE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| METHOXYCHLOR | UG/L | 35.0 | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U |
| 2-METHYLNAPHTHALENE | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4,6-DINITRO-2-METHYLPHENOL | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| 4-CHLORO-3-METHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2-METHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4-METHYLPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| NAPHTHALENE | UG/L | 10.0 | 5.00 U | 5.00 U | 11.00 | 5.00 U | 5.00 U |
| 2-NITROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 3-NITROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-NITROANILINE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| NITROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-NITROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4-NITROPHENOL | UG/L | | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| N-NITROSODIMETHYLAMINE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| N-NITROSODIPHENYLAMINE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DI-N-OCTYL PHTHALATE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| PCB 1016 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PCB 1221 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PCB 1232 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PCB 1242 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PCB 1248 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PCB 1254 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PCB 1260 | UG/L | 0.1 | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| PENTACHLOROPHENOL | UG/L | 1.0 | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| PHENANTHRENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| PHENOL | UG/L | 1.0 | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 4-BROMOPHENYL-PHENYLETHER | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-CHLOROPHENYL-PHENYLETHE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| N-NITROSO-DI-N-PROPYLAMINE | UG/L | | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| PYRENE | UG/L | 50.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TOXAPHENE | UG/L | ND | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-TRICHLOROBENZENE | UG/L | 5.0 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2,4,6-TRICHLOROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| 2,4,5-TRICHLOROPHENOL | UG/L | | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |

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Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | FD (12) | OW-13 | OW-14 | OW-15 | OW-16 | OW-17 | OW-18 |
|---|---|---|---|---|---|---|---|---|---|
| **VOLATILE ORGANICS** | | | | | | | | | |
| ACETONE | UG/L | | 20.00 U | 100.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U |
| BENZENE | UG/L | 1.0 | 5.00 U | 92.00 | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMODICHLOROMETHANE | UG/L | 50.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMOFORM | UG/L | 50.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| BROMOMETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-BUTANONE (MEK) | UG/L | | 10.00 U | 50.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| CARBON DISULFIDE | UG/L | | 10.00 U | 50.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| CARBON TETRACHLORIDE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROBENZENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROFORM | UG/L | 7.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CHLOROMETHANE | UG/L | | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| DIBROMOCHLOROMETHANE | UG/L | 50.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1-DICHLOROETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CIS-1,2-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRANS-1,2-DICHLOROETHENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-DICHLOROPROPANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| CIS-1,3-DICHLOROPROPENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRANS-1,3-DICHLOROPROPENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| ETHYLBENZENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 2-HEXANONE | UG/L | 50.0 | 10.00 U | 50.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| METHYLENE CHLORIDE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-METHYL-2-PENTANONE (MIBK) | UG/L | | 10.00 U | 50.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U |
| STYRENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,2,2-TETRACHLOROETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TETRACHLOROETHENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TOLUENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,1-TRICHLOROETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,1,2-TRICHLOROETHANE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| TRICHLOROETHENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| VINYL CHLORIDE | UG/L | 2.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| O-XYLENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| M+P-XYLENE | UG/L | 5.0 | 5.00 U | 25.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |

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Constituents with Levels Above Guidance

**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | Units | NYSDEC Guidance | FD (12) | OW-13 | OW-14 | OW-15 | OW-16 | OW-17 | OW-18 |
|---|---|---|---|---|---|---|---|---|---|
| **SEMI-VOLATILE ORGANICS/PEST/PCB** | | | | | | | | | |
| ACENAPHTHENE | UG/L | 20.0 | 5.30 U | 15.00 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| ACENAPHTHYLENE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| ALDRIN | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| ANTHRACENE | UG/L | 50.0 | 5.30 U | 7.00 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BENZO(A)ANTHRACENE | UG/L | 0.002 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BENZO(A)PYRENE | UG/L | ND | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BENZO(B)FLUORANTHENE | UG/L | 0.002 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BENZO(G,H,I)PERYLENE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BENZO(K)FLUORANTHENE | UG/L | 0.002 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BENZYL ALCOHOL | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| ALPHA-BHC | UG/L | | 0.05 U | | | | | | 0.05 U |
| BETA-BHC | UG/L | | 0.05 U | | | | | | 0.05 U |
| DELTA-BHC | UG/L | | 0.05 U | | | | | | 0.05 U |
| GAMMA-BHC (LINDANE) | UG/L | | 0.05 U | | | | | | 0.05 U |
| BUTYL BENZYL PHTHALATE | UG/L | 50.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 6.40 |
| DI-N-BUTYLPHTHALATE | UG/L | | 5.30 U | 5.20 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| CARBAZOLE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| INDENO(1,2,3-CD)PYRENE | UG/L | 0.002 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| ALPHA-CHLORDANE | UG/L | 0.1 | 0.05 U | | | | | | 0.05 U |
| GAMMA-CHLORDANE | UG/L | 0.1 | 0.05 U | | | | | | 0.05 U |
| 4-CHLOROANILINE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BIS(-2-CHLOROETHOXY)METHAN | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| BIS(2-CHLOROETHYL)ETHER | UG/L | 1.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2-CHLORONAPHTHALENE | UG/L | 10.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2-CHLOROPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| CHRYSENE | UG/L | 0.002 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 4,4'-DDD | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| 4,4'-DDE | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| 4,4'-DDT | UG/L | ND | 0.10 U | | | | | | 0.10 U |
| DIBENZO(A,H)ANTHRACENE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| DIBENZOFURAN | UG/L | | 5.30 U | 6.40 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 1,3-DICHLOROBENZENE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 1,2-DICHLOROBENZENE | UG/L | 4.7 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 1,4-DICHLOROBENZENE | UG/L | 4.7 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 3,3'-DICHLOROBENZIDINE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2,4-DICHLOROPHENOL | UG/L | 1.0 | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| DIELDRIN | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| DIETHYLPHTHALATE | UG/L | 50.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| DIMETHYL PHTHALATE | UG/L | 50.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2,4-DIMETHYLPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 2,4-DINITROPHENOL | UG/L | | 21.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 21.00 U | 20.00 U |
| 2,4-DINITROTOLUENE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2,6-DINITROTOLUENE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| ALPHA-ENDOSULFAN | UG/L | | 0.05 U | | | | | | 0.05 U |
| BETA-ENDOSULFAN | UG/L | | 0.10 U | | | | | | 0.10 U |
| ENDOSULFAN SULFATE | UG/L | | 0.10 U | | | | | | 0.10 U |
| ENDRIN | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| ENDRIN ALDEHYDE | UG/L | 5.0 | 0.10 U | | | | | | 0.10 U |
| ENDRIN KETONE | UG/L | | 0.10 U | | | | | | 0.10 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | UG/L | 50.0 | 5.30 U | 5.00 U | 13.00 | 5.00 U | 5.00 U | 5.30 U | 5.00 U |

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**Table 12**
**Groundwater Organic Compound Analyses and Comparison to TAGM Values**
**Former Tarrytown Assembly Plant**
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| Phase II ESI Parameter | Units | NYSDEC Guidance | FD (12) | OW-13 | OW-14 | OW-15 | OW-16 | OW-17 | OW-18 |
|---|---|---|---|---|---|---|---|---|---|
| **SEMI-VOLATILE ORGANICS/PEST/PCB (cont)** | | | | | | | | | |
| FLUORENE | UG/L | 50.0 | 5.30 U | 17.00 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| HEPTACHLOR | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| HEPTACHLOR EPOXIDE | UG/L | ND | 0.05 U | | | | | | 0.05 U |
| HEXACHLOROBENZENE | UG/L | 0.25 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| HEXACHLOROBUTADIENE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| HEXACHLOROCYCLOPENTADIEN | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| HEXACHLOROETHANE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| ISOPHORONE | UG/L | 50.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| METHOXYCHLOR | UG/L | 35.0 | 0.20 U | | | | | | 0.20 U |
| 2-METHYLNAPHTHALENE | UG/L | | 11.00 U | 24.00 | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 4,6-DINITRO-2-METHYLPHENOL | UG/L | | 21.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 21.00 U | 20.00 U |
| 4-CHLORO-3-METHYLPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 2-METHYLPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 4-METHYLPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| NAPHTHALENE | UG/L | 10.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2-NITROANILINE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 3-NITROANILINE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 4-NITROANILINE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| NITROBENZENE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2-NITROPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 4-NITROPHENOL | UG/L | | 21.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 21.00 U | 20.00 U |
| N-NITROSODIMETHYLAMINE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| N-NITROSODIPHENYLAMINE | UG/L | 50.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| DI-N-OCTYL PHTHALATE | UG/L | 50.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| PCB 1016 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PCB 1221 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PCB 1232 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PCB 1242 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PCB 1248 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PCB 1254 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PCB 1260 | UG/L | 0.1 | 0.50 U | | | | | | 0.50 U |
| PENTACHLOROPHENOL | UG/L | 1.0 | 21.00 U | 20.00 U | 20.00 U | 20.00 U | 20.00 U | 21.00 U | 20.00 U |
| PHENANTHRENE | UG/L | 50.0 | 5.30 U | 27.00 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| PHENOL | UG/L | 1.0 | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 4-BROMOPHENYL-PHENYLETHER | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 4-CHLOROPHENYL-PHENYLETHE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| N-NITROSO-DI-N-PROPYLAMINE | UG/L | | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| PYRENE | UG/L | 50.0 | 5.30 U | 5.70 | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| TOXAPHENE | UG/L | ND | 1.00 U | | | | | | 1.00 U |
| 1,2,4-TRICHLOROBENZENE | UG/L | 5.0 | 5.30 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.30 U | 5.00 U |
| 2,4,6-TRICHLOROPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |
| 2,4,5-TRICHLOROPHENOL | UG/L | | 11.00 U | 10.00 U | 10.00 U | 10.00 U | 10.00 U | 11.00 U | 10.00 U |

(1) 6 NYCRR Part 703, Class GA Standards and Guidance

Constituents with Levels Above Guidance

**Table 13**
**Inorganic Analyses and TAGM Values**
**FormerTarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | | NYSDEC Guidance (1) | OW-2 | | OW-3 | | OW-6 | | OW-7 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dissolved | Total | Dissolved | Total | Dissolved | Total | Dissolved | Total |
| ALUMINUM | MG/L | | 0.806 | 0.100 U | 0.100 U | 1.99 | 0.114 | 78.00 | 0.100 U | 18.30 |
| ANTIMONY | MG/L | 0.003 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| ARSENIC | MG/L | 0.025 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.035 | 0.010 U | 0.010 U |
| BARIUM | MG/L | 1.000 | 0.165 | 0.151 | 0.162 | 0.180 | 0.021 | 0.264 | 0.046 | 0.130 |
| BERYLLIUM | MG/L | 0.003 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U |
| CADMIUM | MG/L | 0.010 | 0.00777 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U |
| CALCIUM | MG/L | | 184.0 | 176.0 | 46.6 | 47.9 | 45.300 | 107.0 | 104.000 | 131.0 |
| CHROMIUM | MG/L | 0.050 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.120 | 0.010 U | 0.030 |
| COBALT | MG/L | | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.058 | 0.050 U | 0.050 U |
| COPPER | MG/L | 0.200 | 0.020 U | 0.020 U | 0.020 U | 0.034 | 0.020 U | 0.154 | 0.020 U | 0.023 |
| IRON | MG/L | 0.300 | 60.4 | 49.6 | 3.440 | 8.650 | 0.267 | 168.0 | 0.547 | 32.200 |
| LEAD | MG/L | 0.025 | 0.005 U | 0.005 U | 0.005 U | 0.071 | 0.005 U | 0.075 | 0.005 U | 0.013 |
| MAGNESIUM | MG/L | 35.000 | 76.0 | 78.9 | 13.8 | 14.600 | 12.700 | 48.5 | 11.100 | 19.000 |
| MANGANESE | MG/L | 0.300 | 1.85 | 1.80 | 0.250 | 0.268 | 0.177 | 2.070 | 0.626 | 1.220 |
| MERCURY | MG/L | 0.002 | 0.0003 U | 0.00030 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.00030 U | 0.0003 U | 0.0003 U |
| NICKEL | MG/L | | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.142 | 0.040 U | 0.040 U |
| POTASSIUM | MG/L | | 33.80 | 32.400 | 6.390 | 7.070 | 22.500 | 35.3 | 12.600 | 15.400 |
| SELENIUM | MG/L | 0.010 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.0087 | 0.005 U | 0.005 U |
| SILVER | MG/L | 0.050 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| SODIUM | MG/L | 20.000 | 646.0 | 623.0 | 63.2 | 63.200 | 249.000 | 244.0 | 17.700 | 17.300 |
| THALLIUM | MG/L | 0.040 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| VANADIUM | MG/L | | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.134 | 0.050 U | 0.050 U |
| ZINC | MG/L | 0.300 | 0.035 | 0.0187 | 0.0109 | 0.112 | 0.014 | 0.412 | 0.013 | 0.091 |
| TOTAL CYANIDE | MG/L | 0.100 | | 0.01 U | | 0.01 U | | 0.01 U | | 0.01 U |

(1) 6 NYCRR Part 703, Class GA Standards and Guidance

Constituents with Levels In Dissolved Phase Above Guidance.

Note: Samples for dissolved metals were filtered through a 0.45 micron filter. Samples were filtered due to turbidity. Samples for total metals were unfiltered.

**Table 13**
**Inorganic Analyses and TAGM Values**
**FormerTarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | | NYSDEC Guidance (1) | OW-8 | | OW-9 | | OW-10 | | OW-11 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dissolved | Total | Dissolved | Total | Dissolved | Total | Dissolved | Total |
| ALUMINUM | MG/L | | 0.912 | 50.90 | 0.170 | 87.700 | 0.100 U | 23.00 | 0.116 | 252.00 |
| ANTIMONY | MG/L | 0.003 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.184 | 0.010 U | 0.039 |
| ARSENIC | MG/L | 0.025 | 0.010 U | 0.033 | 0.010 U | 0.038 | 0.010 U | 0.024 | 0.010 U | 0.112 |
| BARIUM | MG/L | 1.000 | 0.109 | 1.130 | 0.104 | 0.578 | 2.870 | 5.150 | 0.117 | 5.020 |
| BERYLLIUM | MG/L | 0.003 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.010 |
| CADMIUM | MG/L | 0.010 | 0.005 U | 0.007 | 0.005 U | 0.005 U | 0.005 U | 0.022 | 0.005 U | 0.011 |
| CALCIUM | MG/L | | 45.200 | 105.000 | 259.000 | 330.000 | 106.000 | 128.000 | 78.700 | 254.000 |
| CHROMIUM | MG/L | 0.050 | 0.010 U | 0.200 | 0.010 | 0.150 | 0.020 | 3.940 | 0.010 U | 0.758 |
| COBALT | MG/L | | 0.050 U | 0.050 U | 0.050 U | 0.061 | 0.050 U | 0.050 U | 0.050 U | 0.171 |
| COPPER | MG/L | 0.200 | 0.020 U | 0.258 | 0.020 U | 0.170 | 0.020 U | 0.323 | 0.020 U | 1.250 |
| IRON | MG/L | 0.300 | 1.750 | 88.500 | 0.336 | 176.000 | 45.900 | 133.000 | 1.660 | 676.000 |
| LEAD | MG/L | 0.025 | 0.013 | 0.586 | 0.005 U | 0.098 | 0.005 U | 2.880 | 0.005 U | 12.500 |
| MAGNESIUM | MG/L | 35.000 | 23.500 | 53.400 | 77.800 | 116.000 | 21.800 | 28.100 | 11.900 | 103.000 |
| MANGANESE | MG/L | 0.300 | 0.073 | 1.060 | 0.434 | 2.740 | 0.595 | 1.160 | 0.476 | 6.650 |
| MERCURY | MG/L | 0.002 | 0.0003 U | 0.00093 | 0.0003 U | 0.00080 | 0.0003 U | 0.0003 U | 0.00030 U | 0.00127 |
| NICKEL | MG/L | | 0.040 U | 0.084 | 0.040 U | 0.136 | 0.040 U | 0.050 | 0.040 U | 0.502 |
| POTASSIUM | MG/L | | 14.400 | 25.700 | 42.800 | 52.700 | 22.700 | 22.200 | 3.090 | 38.100 |
| SELENIUM | MG/L | 0.010 | 0.005 U | 0.005 U | 0.005 U | 0.008 | 0.005 U | 0.007 | 0.007 | 0.060 |
| SILVER | MG/L | 0.050 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| SODIUM | MG/L | 20.000 | 276.000 | 329.000 | 277.000 | 268.000 | 627.000 | 657.000 | 34.300 | 51.000 |
| THALLIUM | MG/L | 0.040 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| VANADIUM | MG/L | | 0.050 U | 0.115 | 0.050 U | 0.158 | 0.050 U | 0.050 U | 0.050 U | 0.555 |
| ZINC | MG/L | 0.300 | 0.038 | 1.270 | 0.026 | 0.436 | 0.031 | 3.020 | 0.049 | 5.860 |
| TOTAL CYANIDE | MG/L | 0.100 | | 0.01 U | | 0.01 U | | 0.0430 | | 0.021 |

(1) 6 NYCRR Part 703, Class GA Standards and Guidance

Constituents with Levels In Dissolved Phase Above Guidance.

Note: Samples for dissolved metals were filtered through a 0.45 micron filter. Samples were filtered due to turbidity. Samples for total metals were unfiltered.

**Table 13**
**Inorganic Analyses and TAGM Values**
**FormerTarrytown Assembly Plant**
**December 1996**

| Phase II ESI Parameter | | NYSDEC Guidance (1) | OW-12 | | OW-15 | | OW-16 | | OW-17 | | OW-18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dissolved | Total | Dissolved | Total | Dissolved | Total | Dissolved | Total | Dissolved | Total |
| ALUMINUM | MG/L | | 0.100 U | 8.85 | 0.100 U | 39.70 | 0.100 U | 27.00 | 0.100 U | 17.20 | 0.100 U | 44.70 |
| ANTIMONY | MG/L | 0.003 | 0.013 | 0.011 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| ARSENIC | MG/L | 0.025 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.015 |
| BARIUM | MG/L | 1.000 | 0.094 | 0.163 | 0.026 | 0.479 | 0.159 | 0.293 | 0.429 | 0.586 | 0.247 | 0.499 |
| BERYLLIUM | MG/L | 0.003 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U |
| CADMIUM | MG/L | 0.010 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.005 U |
| CALCIUM | MG/L | | 64.200 | 63.800 | 32.500 | 60.000 | 193.000 | 205.000 | 105.000 | 116.000 | 294.000 | 339.000 |
| CHROMIUM | MG/L | 0.050 | 0.010 U | 0.022 | 0.010 U | 0.086 | 0.010 U | 0.045 | 0.010 U | 0.031 | 0.010 U | 0.079 |
| COBALT | MG/L | | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U |
| COPPER | MG/L | 0.200 | 0.020 U | 0.020 U | 0.020 U | 0.168 | 0.020 U | 0.064 | 0.020 U | 0.036 | 0.020 U | 0.124 |
| IRON | MG/L | 0.300 | 0.112 | 16.200 | 0.100 U | 84.800 | 11.800 | 61.500 | 24.300 | 64.900 | 27.900 | 129.000 |
| LEAD | MG/L | 0.025 | 0.005 U | 0.078 | 0.005 U | 0.070 | 0.005 U | 0.032 | 0.005 U | 0.034 | 0.005 U | 0.109 |
| MAGNESIUM | MG/L | 35.000 | 6.670 | 9.500 | 11.000 | 38.300 | 33.900 | 39.200 | 85.000 | 93.600 | 51.600 | 67.800 |
| MANGANESE | MG/L | 0.300 | 0.026 | 0.223 | 0.010 U | 1.680 | 2.110 | 2.540 | 0.756 | 1.140 | 2.910 | 3.950 |
| MERCURY | MG/L | 0.002 | 0.0003 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.0003 U | 0.00069 |
| NICKEL | MG/L | | 0.040 U | 0.040 U | 0.040 U | 0.090 | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.065 |
| POTASSIUM | MG/L | | 14.800 | 15.000 | 1.000 U | 15.200 | 30.000 | 23.800 | 42.500 | 44.000 | 33.400 | 35.900 |
| SELENIUM | MG/L | 0.010 | 0.007 | 0.005 U | 0.005 | 0.005 | 0.005 U | 0.005 U | 0.005 U | 0.005 U | 0.011 | 0.010 |
| SILVER | MG/L | 0.050 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| SODIUM | MG/L | 20.000 | 254.000 | 240.000 | 7.060 | 8.990 | 1440.000 | 1420.000 | 266.000 | 292.000 | 726.000 | 742.000 |
| THALLIUM | MG/L | 0.040 | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| VANADIUM | MG/L | | 0.050 U | 0.050 U | 0.050 U | 0.116 | 0.050 U | 0.060 | 0.050 U | 0.050 U | 0.050 U | 0.094 |
| ZINC | MG/L | 0.300 | 0.025 | 0.088 | 0.020 | 0.224 | 0.020 | 0.121 | 0.018 | 0.087 | 0.024 | 0.423 |
| TOTAL CYANIDE | MG/L | 0.100 | | 0.0130 | | 0.01 U | | 0.01 U | | 0.01 U | | 0.01 U |

(1) 6 NYCRR Part 703, Class GA
Standards and Guidance

Constituents with Levels In Dissolved Phase Above Guidance.

Note: Samples for dissolved metals were filtered through a 0.45 micron filter.
Samples were filtered due to turbidity.
Samples for total metals were unfiltered.

# Appendix A-2

# Phase III Investigation – 1997 (EMCON 2001)

**Table 4**
**Organic Compound Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description | Unrestricted Use Screening Value | PAOC 2 | | | | PAOC 4 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | TAGM 4046 | B-2H | B2G,S-1,2-4 | B2E,S-1,2-4 | B2F,S-1,3-5 | B4D,S-1,1-3 | B4E,S-1,1-3 | B4G,S-1,1-3 | B4F,S-1,1-3 | B4H,S-1,1-3 | B4I,S-1,1-3 |
| Sample Depth (in.) | (ug/kg) | 0-24 | 12-24 | 24-48 | 36-60 | 12-36 | 12-36 | 12-36 | 12-36 | 12-36 | 12-36 |
| ***TCL Organics(ug/kg)*** | | | | | | | | | | | |
| Methylene Chloride | 100 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 1500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylene(M+P) | 1200 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthene | 50000 | ND | 2000 | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | 4100 | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(A)Anthracene | 224 or MDL | ND | 9000 | ND | ND | ND | ND | ND | ND | ND | 2400 |
| Benzo(A)Pyrene | 61 or MDL | ND | 8600 | ND | ND | ND | ND | ND | ND | ND | 2800 |
| Benzo(B)Fluoranthene | 61 or MDL | ND | 13000 | ND | ND | ND | ND | ND | ND | ND | 3700 |
| Benzo(G,H,I)Perylene | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(K)Fluoranthene | 610 or MDL | ND | 4300 | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzyl Alcohol | 50000* | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Di-N-Butylphthalate | 8100 | ND | ND | ND | ND | 4200 | ND | ND | 3700 | 6400 | 5200 |
| Carbazole | 50000* | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Ideno(1,2,3-CD)Pyrene | 3200 | ND | 3600 | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chloroaniline | 220 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | 11000 | ND | ND | ND | ND | ND | 2100 | ND | 3000 |
| Dibenzo(A,H)Anthracene | 14 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Diethylphthalate | 7100 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | 2200 | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | ND | 22000 | ND | ND | 2700 | ND | ND | 3300 | 3000 | 4300 |
| Fluorene | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitroaniline | 430 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-Nitroaniline | 500 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | ND | 17000 | ND | ND | 2500 | ND | ND | 4100 | 2500 | 3300 |
| Pyrene | 50000 | ND | 19000 | ND | ND | 3400 | ND | ND | 3000 | 2800 | 4200 |
| **Total C-PAHs** | 10000 | | 49500 | | | | | | 2100 | | 11900 |
| **Toal Semi-Volatiles** | 500000 | | 113600 | 2200 | | 12800 | | | 16200 | 14700 | 28900 |

NA - Not analyzed
ND - Not detected. Zero value assumed in estimating tota
* Maximum Guidance of 50 ppm (50,000 ug/kg) for non-carcinogenic semi-volatil
** Updated April 10, 2001 Memo from M. O'Toole
Constituents With Levels Above TAGM 4046 Value

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 4**
**Organic Compound Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (ug/kg) | PAOC 7 | | | | | | | | | | PAOC 8 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BP-3-8 4-8 | BP-3-30 24-30 | BP-10-8 4-8 | BP-10-8D 4-8 | BP-10-30 24-30 | BP-13-8 4-8 | BP-13-30 24-30 | BP-14-8 4-8 | BP-14-30 24-30 | FB-01 NA | BP-21-2 0-2 | BP-22-2 0-2 | BP-23-2 0-2 | BP-24-2 0-2 |
| ***TCL Organics(ug/kg)*** | | | | | | | | | | | | | | | |
| Methylene Chloride | 100 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 1500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylene(M+P) | 1200 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthene | 50000 | ND | ND | ND | 2600 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | ND | ND | ND | 2800 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | ND | ND | ND | 5100 | 4000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(A)Anthracene | 224 or MDL | ND | ND | 6100 | 13000 | 11000 | 450 | 2200 | 570 | 5300 | ND | ND | ND | ND | ND |
| Benzo(A)Pyrene | 61 or MDL | ND | ND | 8100 | 15000 | 16000 | 480 | 2200 | 610 | 6100 | ND | ND | ND | ND | ND |
| Benzo(B)Fluoranthene | 61 or MDL | 410 | ND | 13000 | 21000 | 35000 | 630 | 3100 | 790 | 9000 | ND | ND | ND | ND | ND |
| Benzo(G,H,I)Perylene | 50000 | ND | ND | 3800 | 3900 | 7700 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(K)Fluoranthene | 610 or MDL | ND | ND | 6700 | 15000 | 16000 | 420 | ND | 660 | 3600 | ND | ND | ND | ND | ND |
| Benzyl Alcohol | 50000* | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | 6600 | 490 | 5100 | 3200 | 30000 | 3700 | 13000 | 10000 | 110000 | ND | ND | ND | 14000 | ND |
| Di-N-Butylphthalate | 8100 | ND | ND | 2700 | ND | 21000 | ND | ND | ND | 5100 | ND | ND | ND | ND | ND |
| Carbazole | 50000* | ND | ND | ND | ND | 57000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Ideno(1,2,3-CD)Pyrene | 3200 | ND | ND | 3800 | 6500 | 7700 | ND | ND | ND | 2000 | ND | ND | ND | ND | ND |
| 4-Chloroaniline | 220 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 400 | ND | ND | 6600 | 13000 | 13000 | 430 | 2500 | 540 | 6000 | ND | ND | ND | ND | ND |
| Dibenzo(A,H)Anthracene | 14 or MDL | ND | ND | ND | 3200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Diethylphthalate | 7100 | ND | ND | ND | ND | ND | ND | ND | 750 | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | 390 | ND | ND | ND | 11000 | ND | ND | 490 | 11000 | 9.6 | 43000 | 4500 J | ND | 220 J |
| Fluoranthene | 50000 | 600 | 440 | 6700 | 17000 | 22000 | 770 | 4500 | 880 | 8800 | ND | ND | ND | ND | ND |
| Fluorene | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitroaniline | 430 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-Nitroaniline | 500 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | 360 | ND | 2800 | 13000 | 18000 | 380 | 2300 | ND | 3800 | ND | ND | ND | ND | ND |
| Pyrene | 50000 | 490 | ND | 8100 | 18000 | 28000 | 740 | 4200 | 940 | 10000 | ND | ND | ND | ND | ND |
| **Total C-PAHs** | 10000 | 410 | | 44300 | 86700 | 98700 | 2410 | 10000 | 3170 | 32000 | | | | | |
| **Toal Semi-Volatiles** | 500000 | 8850 | 930 | 73500 | 152300 | 297400 | 8000 | 34000 | 16230 | 180700 | 9.6 | 43000 | 4500J | 14000 | 220J |

NA - Not analyzed
ND - Not detected. Zero value assumed in estimating tota
* Maximum Guidance of 50 ppm (50,000 ug/kg) for non-carcinogenic semi-volatil
** Updated April 10, 2001 Memo from M. O'Toole
Constituents With Levels Above TAGM 4046 Value

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 4**
**Organic Compound Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (ug/kg) | PAOC 8 | PAOC 9 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BP-25-2 0-2 | BP-26-6 0-6 | BP-26-16 12-16 | BP-27-6 0-6 | BP-27-16 12-16 | BP-28-6 0-6 | BP-28-6D 0-6 | BP-28-16 12-16 | BP-28-56 50-56 | BP-29-6 0-6 | BP-29-16 12-16 | BP-30-6 0-6 | BP-30-16 12-16 |
| ***TCL Organics(ug/kg)*** | | | | | | | | | | | | | | |
| Methylene Chloride | 100 | NA | 8.7 | 18 | 6 | ND | ND | 6 | ND | ND | 8.7 | 18 | 7.4 | ND |
| Toluene | 1500 | NA | 34 | 70 | 32 | 15 | 10 | 23 | 16 | ND | 34 | 70 | 7.5 | ND |
| Xylene(M+P) | 1200 | NA | 5.8 | 8.9 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 50000 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Acenaphthylene | 41000 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Anthracene | 50000 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Benzo(A)Anthracene | 224 or MDL | ND | ND | NA | ND | NA | 4500 | 4800 | NA | NA | ND | NA | NA | NA |
| Benzo(A)Pyrene | 61 or MDL | ND | ND | NA | ND | NA | 3900 | 4200 | NA | NA | ND | NA | NA | NA |
| Benzo(B)Fluoranthene | 61 or MDL | ND | ND | NA | 1900 | NA | 4200 | 5200 | NA | NA | ND | NA | NA | NA |
| Benzo(G,H,I)Perylene | 50000 | ND | ND | NA | ND | NA | 2100 | 2100 | NA | NA | ND | NA | NA | NA |
| Benzo(K)Fluoranthene | 610 or MDL | ND | ND | NA | ND | NA | 2800 | 3100 | NA | NA | ND | NA | NA | NA |
| Benzyl Alcohol | 50000* | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Butyl Benzyl Phthalate | 50000 | ND | 8700 | NA | ND | NA | ND | ND | NA | NA | 20000 | NA | NA | NA |
| Di-N-Butylphthalate | 8100 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Carbazole | 50000* | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Ideno(1,2,3-CD)Pyrene | 3200 | ND | ND | NA | ND | NA | 1900 | 2000 | NA | NA | ND | NA | NA | NA |
| 4-Chloroaniline | 220 or MDL | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Chrysene | 400 | ND | ND | NA | ND | NA | 3900 | 4100 | NA | NA | ND | NA | NA | NA |
| Dibenzo(A,H)Anthracene | 14 or MDL | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Dibenzofuran | 6200 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Diethylphthalate | 7100 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Bis(2-Ethylhexyl)Phthalate | 50000 | 580 | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Fluoranthene | 50000 | ND | 3600 | NA | 1900 | NA | 7100 | 7500 | NA | NA | ND | NA | NA | NA |
| Fluorene | 50000 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| 2-Methylnaphthalene | 36400 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Naphthalene | 13000 | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| 2-Nitroaniline | 430 or MDL | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| 3-Nitroaniline | 500 or MDL | ND | ND | NA | ND | NA | ND | ND | NA | NA | ND | NA | NA | NA |
| Phenanthrene | 50000 | ND | 2300 J | NA | ND | NA | 2600 | 3000 | NA | NA | ND | NA | NA | NA |
| Pyrene | 50000 | ND | 3700 | NA | 2300 | NA | 8300 | 8400 | NA | NA | ND | NA | NA | NA |
| **Total C-PAHs** | 10000 | | | | 1900 | | 21200 | 23400 | | | | | | |
| **Toal Semi-Volatiles** | 500000 | 580 | 18300 | | 6100 | | 41300 | 44400 | | | 20000 | | | |

NA - Not analyzed
ND - Not detected. Zero value assumed in estimating tota
* Maximum Guidance of 50 ppm (50,000 ug/kg) for non-carcinogenic semi-volatil
** Updated April 10, 2001 Memo from M. O'Toole
Constituents With Levels Above TAGM 4046 Value

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 4**
**Organic Compound Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (ug/kg) | PAOC 12 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NB-4 8-12 | NB-5 8-12 | NB-7-12 8-12 | NB-8-12 8-12 | NB-9-12 8-12 | NB-10-12 8-12 | NB-10-12D 8-12 | NB-11-12 8-2 | NB-14-12 8-12 |
| ***TCL Organics(ug/kg)*** | | | | | | | | | | |
| Methylene Chloride | 100 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 1500 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylene(M+P) | 1200 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acenaphthene | 50000 | 3000 | 8400 | ND | ND | ND | ND | 2900 | ND | ND |
| Acenaphthylene | 41000 | 4700 | ND | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 50000 | 9400 | 8400 | ND | ND | ND | 2400 | 5800 | ND | ND |
| Benzo(A)Anthracene | 224 or MDL | 14000 | 16000 | ND | ND | 22000 | 5900 | 11000 | ND | 860 |
| Benzo(A)Pyrene | 61 or MDL | 11000 | 14000 | ND | ND | ND | 4700 | 8400 | ND | 730 |
| Benzo(B)Fluoranthene | 61 or MDL | 15000 | 19000 | ND | ND | 29000 | 6000 | 12000 | ND | 1200 |
| Benzo(G,H,I)Perylene | 50000 | 3800 | 4900 | ND | ND | ND | ND | 2900 | ND | 390 |
| Benzo(K)Fluoranthene | 610 or MDL | 4800 | 7000 | ND | ND | ND | 2400 | 4700 | ND | 490 |
| Benzyl Alcohol | 50000* | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Di-N-Butylphthalate | 8100 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbazole | 50000* | ND | 5400 | ND | ND | ND | ND | ND | ND | ND |
| Ideno(1,2,3-CD)Pyrene | 3200 | 4100 | 5600 | ND | ND | ND | ND | 3100 | ND | 400 |
| 4-Chloroaniline | 220 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 400 | 14000 | 16000 | ND | ND | 23000 | 6200 | 11000 | ND | 1100 |
| Dibenzo(A,H)Anthracene | 14 or MDL | 2300 | 2800 | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Diethylphthalate | 7100 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | 850 |
| Fluoranthene | 50000 | 25000 | 30000 | ND | ND | 54000 | 12000 | 21000 | ND | 1900 |
| Fluorene | 50000 | 9400 | 5600 | ND | ND | ND | ND | 4000 | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | 6100 | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitroaniline | 430 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-Nitroaniline | 500 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | 32000 | 27000 | ND | ND | 41000 | 10000 | 21000 | ND | 1200 |
| Pyrene | 50000 | 25000 | 28000 | ND | ND | 45000 | 9500 | 16000 | ND | 1900 |
| **Total C-PAHs** | 10000 | 65200 | 80400 | | | 74000 | 25200 | 50200 | | 4780 |
| **Toal Semi-Volatiles** | 500000 | 177500 | 204200 | | | 214000 | 59100 | 123800 | | 11020 |

NA - Not analyzed
ND - Not detected. Zero value assumed in estimating tota
* Maximum Guidance of 50 ppm (50,000 ug/kg) for non-carcinogenic semi-volatil
** Updated April 10, 2001 Memo from M. O'Toole
Constituents With Levels Above TAGM 4046 Value

PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL

**Table 4**
**Organic Compound Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (ug/kg) | PAOC 13 | | | | |
|---|---|---|---|---|---|---|
| | | CP-1-18 12-18 | CP-2-18 12-18 | CP-2-18D 12-18 | CP-3-18 12-18 | CP-4-18 12-18 |
| ***TCL Organics(ug/kg)*** | | | | | | |
| Methylene Chloride | 100 | NA | NA | NA | NA | NA |
| Toluene | 1500 | NA | NA | NA | NA | NA |
| Xylene(M+P) | 1200 | NA | NA | NA | NA | NA |
| Acenaphthene | 50000 | ND | ND | ND | ND | ND |
| Acenaphthylene | 41000 | 3800 | ND | ND | ND | ND |
| Anthracene | 50000 | 3600 | ND | ND | ND | ND |
| Benzo(A)Anthracene | 224 or MDL | 16000 | 2700 | 2200 | 2200 | ND |
| Benzo(A)Pyrene | 61 or MDL | 13000 | 2400 | ND | 2000 | ND |
| Benzo(B)Fluoranthene | 61 or MDL | 18000 | 3200 | 2700 | 2400 | ND |
| Benzo(G,H,I)Perylene | 50000 | 4200 | ND | ND | ND | ND |
| Benzo(K)Fluoranthene | 610 or MDL | 12000 | ND | ND | ND | ND |
| Benzyl Alcohol | 50000* | ND | ND | ND | ND | ND |
| Butyl Benzyl Phthalate | 50000 | 4200 | ND | ND | ND | 5500 |
| Di-N-Butylphthalate | 8100 | ND | ND | ND | ND | ND |
| Carbazole | 50000* | ND | ND | ND | ND | ND |
| Ideno(1,2,3-CD)Pyrene | 3200 | 4800 | ND | ND | ND | ND |
| 4-Chloroaniline | 220 or MDL | ND | ND | ND | ND | ND |
| Chrysene | 400 | 14000 | 2500 | 2100 | 2000 | ND |
| Dibenzo(A,H)Anthracene | 14 or MDL | 2300 | ND | ND | ND | ND |
| Dibenzofuran | 6200 | ND | ND | ND | ND | ND |
| Diethylphthalate | 7100 | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)Phthalate | 50000 | ND | ND | ND | ND | ND |
| Fluoranthene | 50000 | 27000 | 4800 | 3800 | 4100 | ND |
| Fluorene | 50000 | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 36400 | ND | ND | ND | ND | ND |
| Naphthalene | 13000 | ND | ND | ND | ND | ND |
| 2-Nitroaniline | 430 or MDL | ND | ND | ND | ND | ND |
| 3-Nitroaniline | 500 or MDL | ND | ND | ND | ND | ND |
| Phenanthrene | 50000 | 9500 | ND | 2100 | 2200 | ND |
| Pyrene | 50000 | 25000 | 4500 | 3700 | 4000 | ND |
| **Total C-PAHs** | 10000 | 80100 | 10800 | 7000 | 8600 | |
| **Toal Semi-Volatiles** | 500000 | 157400 | 20100 | 16600 | 18900 | 5500 |

NA - Not analyzed
ND - Not detected. Zero value assumed in estimating tota
* Maximum Guidance of 50 ppm (50,000 ug/kg) for non-carcinogenic semi-volatil
** Updated April 10, 2001 Memo from M. O'Toole
Constituents With Levels Above TAGM 4046 Value

**Table 5**
**Inorganic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (mg/kg) | PAOC 8 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | BP-SLD-1 NA | BP-21-2 0-2 | BP-21-8 4-8 | BP-21-16 12-16 | BP-21-60 54-60 | BP-22-2 0-2 | BP-22-8 4-8 | BP-22-16 12-16 | BP-22-61 55-61 |
| ***TAL Inorganics (mg/Kg)*** | | | | | | | | | | |
| Aluminum | SB | 2940 | 5620 | 7320 | 7670 | 8340 | 7180 | 7580 | 8230 | 7960 |
| Antimony | SB | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Arsenic | 7.5 or SB | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Barium | 300 or SB | 1200 | 341 | 13.4 | 9.86 | 22.9 | 220 | 17.7 | 12.9 | 9.39 |
| Cadmium | 1 or SB | 4.24 | 1.77 | ND | ND | ND | ND | ND | ND | ND |
| Calcium | SB | 7480 | 1540 | 1140 | 1510 | 6200 | 3130 | 1350 | 4960 | 2590 |
| Chromium | 10 or SB | 2790 | 978 | 12.6 | 11.1 | 13.1 | 12.4 | 11.2 | 10.5 | 10.3 |
| Cobalt | 30 or SB | ND | ND | 5.46 | 6.47 | 6.32 | 5.43 | 6.09 | 5.71 | ND |
| Copper | 25 or SB | 431 | 137 | 11.5 | 9.99 | 11.9 | 17.1 | 10.9 | 11.5 | 10.6 |
| Iron | 2000 or SB | 119000 | 25800 | 17500 | 16600 | 18100 | 17000 | 18200 | 16800 | 16800 |
| Lead | 500 (Urban) or SB | 16400 | 807 | 6.77 | ND | ND | 81.5 | 10.3 | 6.94 | ND |
| Magnesium | SB | 393 | 2050 | 3810 | 4440 | 4440 | 3990 | 4190 | 4580 | 4570 |
| Manganese | SB | 9500 | 3410 | 468 | 434 | 280 | 196 | 277 | 230 | 155 |
| Mercury | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Nickel | 13 or SB | 3770 | 895 | 249 | 286 | 45 | 31.4 | 22.9 | 17.8 | 15.1 |
| Potassium | SB | 977 | 944 | 683 | 697 | 984 | 879 | 912 | 819 | 844 |
| Selenium | 2 or SB | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Sodium | SB | 3640 | 503 | 99.1 | 116 | 187 | 199 | 113 | 130 | 123 |
| Vanadium | 150 or SB | ND | ND | 12.2 | 10.4 | 12.1 | 14.5 | 13 | 10.1 | 9.9 |
| Zinc | 20 or SB | 76300 | 21400 | 1830 | 507 | 161 | 276 | 433 | 79.4 | 41.6 |

ND - Not detected.

Constituents With Levels Above TAGM 4046, not necessarily greater than site background

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 5**
**Inorganic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (mg/kg) | PAOC 8 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | BP-23-2 0-2 | BP-23-8 4-8 | BP-23-8D 4-8 | BP-23-16 12-16 | BP-24-2 0-2 | BP-24-8 4-8 | BP-24-16 12-16 | BP-24-61 55-61 |
| ***TAL Inorganics (mg/Kg)*** | | | | | | | | | |
| Aluminum | SB | 6760 | 7620 | 6910 | 7260 | 6430 | 7330 | 6460 | 8210 |
| Antimony | SB | ND | ND | ND | ND | ND | ND | ND | ND |
| Arsenic | 7.5 or SB | ND | ND | ND | ND | ND | ND | ND | ND |
| Barium | 300 or SB | 303 | 21.5 | 16 | 42.1 | 44.1 | 12.9 | 10.7 | 9.96 |
| Cadmium | 1 or SB | ND | ND | ND | ND | ND | ND | ND | ND |
| Calcium | SB | 5590 | 3410 | 2300 | 2480 | 1650 | 1880 | 1460 | 3700 |
| Chromium | 10 or SB | 36.7 | 11.3 | 10.6 | 14.3 | 9.68 | 10.2 | 12.2 | 11 |
| Cobalt | 30 or SB | 5.76 | 6.17 | 5.38 | 5.39 | ND | 5.45 | ND | ND |
| Copper | 25 or SB | 24.7 | 13.4 | 11.3 | 14.3 | 10.9 | 10.5 | 10.6 | 10.9 |
| Iron | 2000 or SB | 15200 | 17800 | 16300 | 16300 | 16100 | 16900 | 15500 | 18300 |
| Lead | 500 (Urban) or SB | 114 | 10.7 | 8.72 | 26.6 | 8.75 | ND | ND | ND |
| Magnesium | SB | 3740 | 4250 | 3850 | 4100 | 3580 | 4210 | 4430 | 4590 |
| Manganese | SB | 954 | 402 | 253 | 277 | 182 | 171 | 151 | 172 |
| Mercury | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND |
| Nickel | 13 or SB | 1090 | 113 | 91.4 | 183 | 13.2 | 13.9 | 16.6 | 16 |
| Potassium | SB | 1970 | 959 | 859 | 1330 | 954 | 938 | 777 | 741 |
| Selenium | 2 or SB | ND | ND | ND | ND | ND | ND | ND | ND |
| Sodium | SB | 397 | 129 | 97.4 | 175 | 289 | 136 | 188 | 135 |
| Vanadium | 150 or SB | 9.51 | 12.2 | 10.6 | 11 | 11.2 | 11 | 9.85 | 10.2 |
| Zinc | 20 or SB | 2930 | 78.9 | 67.9 | 330 | 37.6 | 35.6 | 34.8 | 41.3 |

ND - Not detected.

Constituents With Levels Above TAGM 4046, not necessarily greater than site background

**Table 5**
**Inorganic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (mg/kg) | PAOC 8 | | | | PAOC 9 | |
|---|---|---|---|---|---|---|---|
| | | BP-25-2 0-2 | BP-25-8 4-8 | BP-25-16 12-16 | BP-25-61 55-61 | BP-26-6 0-6 | BP-26-16 12-16 |
| ***TAL Inorganics (mg/Kg)*** | | | | | | | |
| Aluminum | SB | 7500 | 8550 | 8110 | 7380 | 7760 | 8770 |
| Antimony | SB | ND | ND | ND | ND | 40.9 | 13 |
| Arsenic | 7.5 or SB | ND | ND | ND | ND | 18 | 5.25 |
| Barium | 300 or SB | 153 | 15 | 11.8 | 10.4 | 3620 | 1730 |
| Cadmium | 1 or SB | ND | ND | ND | ND | 4.22 | 2.19 |
| Calcium | SB | 3730 | 2730 | 2080 | 5490 | 14100 | 15200 |
| Chromium | 10 or SB | 11.1 | 11.7 | 10.7 | 10.4 | 69.5 | 49.1 |
| Cobalt | 30 or SB | 5.91 | 6.11 | 6.09 | ND | 10.1 | 8.6 |
| Copper | 25 or SB | 11.7 | 11.7 | 10.8 | 10.6 | 333 | 128 |
| Iron | 2000 or SB | 18700 | 18300 | 20500 | 18100 | 57900 | 30900 |
| Lead | 500 (Urban) or SB | 22.7 | ND | ND | ND | 3610 | 1580 |
| Magnesium | SB | 5610 | 5010 | 5040 | 4410 | 5550 | 9870 |
| Manganese | SB | 270 | 210 | 174 | 160 | 372 | 453 |
| Mercury | 0.1 | ND | ND | ND | ND | ND | ND |
| Nickel | 13 or SB | 33.1 | 19.5 | 17.2 | 14.7 | 41 | 28.1 |
| Potassium | SB | 938 | 1080 | 783 | 784 | 1710 | 2040 |
| Selenium | 2 or SB | ND | ND | ND | ND | ND | ND |
| Sodium | SB | 1170 | 202 | 85.5 | 169 | 988 | 512 |
| Vanadium | 150 or SB | 11.7 | 12.7 | 11.5 | 9.87 | 25.2 | 24.3 |
| Zinc | 20 or SB | 70.6 | 42.9 | 41.5 | 37.7 | 1490 | 567 |

ND - Not detected.

Constituents With Levels Above TAGM 4046, not necessarily greater than site background

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 5**
**Inorganic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description / Sample Location / Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (mg/kg) | PAOC 9 | | | | | |
|---|---|---|---|---|---|---|---|
| | | BP-27-6 0-6 | BP-27-16 12-16 | BP-28-6 0-6 | BP-28-6D 0-6 | BP-28-16 12-16 | BP-28-56 50-56 |
| ***TAL Inorganics (mg/Kg)*** | | | | | | | |
| Aluminum | SB | 8520 | 9200 | 7560 | 6590 | 6550 | 4990 |
| Antimony | SB | 9.24 | ND | ND | ND | ND | ND |
| Arsenic | 7.5 or SB | 3.37 | 29.6 | 2 | 2.11 | 1.54 | 5.37 |
| Barium | 300 or SB | 824 | 255 | 388 | 476 | 315 | 176 |
| Cadmium | 1 or SB | 1.47 | 1.57 | 0.79 | 0.919 | 0.623 | ND |
| Calcium | SB | 7000 | 12100 | 8000 | 20000 | 5600 | 8580 |
| Chromium | 10 or SB | 31.7 | 75.1 | 17.3 | 15.8 | 17.4 | 31.2 |
| Cobalt | 30 or SB | 8.13 | 13.3 | 6.19 | 5.44 | 5.64 | ND |
| Copper | 25 or SB | 62.9 | 207 | 33 | 34.1 | 30.7 | 68.1 |
| Iron | 2000 or SB | 26600 | 94600 | 20500 | 17000 | 18300 | 17300 |
| Lead | 500 (Urban) or SB | 1500 | 152 | 336 | 276 | 210 | 231 |
| Magnesium | SB | 4650 | 6330 | 4550 | 4040 | 3840 | 4050 |
| Manganese | SB | 260 | 521 | 224 | 193 | 190 | 271 |
| Mercury | 0.1 | ND | 0.23 | ND | 0.222 | ND | ND |
| Nickel | 13 or SB | 20.5 | 127 | 18.3 | 15.1 | 15.8 | 23.9 |
| Potassium | SB | 2410 | 4660 | 1080 | 982 | 907 | 722 |
| Selenium | 2 or SB | ND | ND | ND | 0.667 | 0.551 | ND |
| Sodium | SB | 4060 | 838 | 301 | 371 | 310 | 234 |
| Vanadium | 150 or SB | 21.2 | 203 | 13.4 | 13.1 | 12.2 | 11.5 |
| Zinc | 20 or SB | 286 | 147 | 148 | 184 | 139 | 167 |

ND - Not detected.

Constituents With Levels Above TAGM 4046, not necessarily greater than site background

**Table 5**
**Inorganic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sampling Area Description<br>Sample Location<br>Sample Depth (in.) | Unrestricted Use Screening Value TAGM 4046 (mg/kg) | PAOC 9 | | | |
|---|---|---|---|---|---|
| | | BP-29-6<br>0-6 | BP-29-16<br>12-16 | BP-30-6<br>0-6 | BP-30-16<br>12-16 |
| ***TAL Inorganics (mg/Kg)*** | | | | | |
| Aluminum | SB | 6450 | 8550 | 8990 | 6510 |
| Antimony | SB | ND | ND | 12.4 | ND |
| Arsenic | 7.5 or SB | 5.16 | 4.9 | 4.05 | 4.33 |
| Barium | 300 or SB | 3020 | 3330 | 544 | 183 |
| Cadmium | 1 or SB | 0.62 | 0.713 | 1.62 | 0.82 |
| Calcium | SB | 16600 | 22000 | 8740 | 10800 |
| Chromium | 10 or SB | 26.9 | 36.4 | 34.4 | 21.5 |
| Cobalt | 30 or SB | 6.19 | 9.2 | 9.10 | 6.95 |
| Copper | 25 or SB | 88.5 | 85.8 | 207 | 64.7 |
| Iron | 2000 or SB | 22800 | 27300 | 39700 | 19400 |
| Lead | 500 (Urban) or SB | 427 | 419 | 752 | 345 |
| Magnesium | SB | 4410 | 5290 | 4310 | 6600 |
| Manganese | SB | 231 | 234 | 340 | 230 |
| Mercury | 0.1 | ND | ND | 0.308 | 0.262 |
| Nickel | 13 or SB | 52.5 | 62.6 | 24.4 | 18.3 |
| Potassium | SB | 2120 | 3890 | 2100 | 1480 |
| Selenium | 2 or SB | ND | ND | ND | ND |
| Sodium | SB | 960 | 901 | 448 | 292 |
| Vanadium | 150 or SB | 12 | 19.8 | 21.3 | 17.6 |
| Zinc | 20 or SB | 482 | 512 | 447 | 283 |

ND - Not detected.

Constituents With Levels Above TAGM 4046, not necessarily greater than site background

**Table 6**
**Arsenic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

**Phase III EOC Sample Area Descriptions**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PAOC 2** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **B-2H** | **B2G,S-1,2-4** | **B2E,S-1,2-4** | **B2F,S-1,3-5** | | | |
| **Sample Depth (in.)** | **Screening Value** | 0-24 | 24-48 | 24-48 | 36-60 | | | |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **8.56** | **2.07** | **2.37** | | | |
| **PAOC 4** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **B4D,S-1,1-3** | **B4E,S-1,1-3** | **B4G,S-1,1-3** | **B4F,S-1,1-3** | **B4H,S-1,1-3** | **B4I,S-1,1-3** | |
| **Sample Depth (in.)** | **Screening Value** | 12-36 | 12-36 | 12-36 | 12-36 | 12-36 | 12-36 | |
| **Arsenic (mg/kg)** | **7.5 or SB** | **4.39** | **ND** | **ND** | **18.8** | **27** | **8.8** | |
| **PAOC 7** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-1-2** | **BP-1-8** | **BP-2-2** | **BP-2-8** | **BP-2-16** | **BP-2-30** | **BP-3-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **15** | **6.02** | **14.5** | **13.3** | **13.2** | **20.1** | **1.02** |
| **Sample Location** | **Unrestricted Use** | **BP-3-8** | **BP-4-2** | **BP-4-8** | **BP-4-16** | **BP-4-30** | **BP-5-2** | **BP-5-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **1.07** | **1.07** | **1.22** | **1.15** | **1.01** | **1.01** |
| **Sample Location** | **Unrestricted Use** | **BP-6-2** | **BP-6-8** | **BP-6-16** | **BP-6-30** | **BP-7-2** | **BP-7-8** | **BP-8-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **11.9** |
| **Sample Location** | **Unrestricted Use** | **BP-8-8** | **BP-8-16** | **BP-8-30** | **BP-9-2** | **BP-9-8** | **BP-10-2** | **BP-10-2D** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **6.83** | **ND** | **ND** | **ND** | **3.34** | **12.7** | **10.8** |
| **Sample Location** | **Unrestricted Use** | **BP-10-8** | **BP-10-8D** | **BP-10-16** | **BP-10-16D** | **BP-10-30** | **BP-11-2** | **BP-11-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 4-8 | 12-16 | 12-16 | 24-30 | 0-2 | 4-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **16.2** | **18.6** | **34.6** | **40.6** | **51.9** | **1.46** | **ND** |
| **Sample Location** | **Unrestricted Use** | **BP-12-2** | **BP-12-8** | **BP-12-16** | **BP-12-30** | **BP-13-2** | **BP-13-8** | **BP-14-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **7** | **9.6** | **29.5** | **13.4** | **5.21** | **2.59** | **12.1** |
| **Sample Location** | **Unrestricted Use** | **BP-14-8** | **BP-14-16** | **BP-14-30** | **BP-15-2** | **BP-15-8** | **BP-16-2** | **BP-16-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 | 4-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **1.19** | **2.3** | **9.5** | **ND** | **ND** | **ND** | **ND** |
| **Sample Location** | **Unrestricted Use** | **BP-16-16** | **BP-16-30** | **BP-17-2** | **BP-17-8** | **BP-18-2** | **BP-18-8** | **BP-18-16** |
| **Sample Depth (in.)** | **Screening Value** | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 | 4-8 | 12-16 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **3.13** |
| **Sample Location** | **Unrestricted Use** | **BP-18-30** | **BP-19-2** | **BP-19-8** | **BP-20-2** | **BP-20-8** | **BP-20-16** | **BP-20-30** |
| **Sample Depth (in.)** | **Screening Value** | 24-30 | 0-2 | 4-8 | 0-2 | 4-8 | 12-16 | 24-30 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **4.67** | **2.78** | **4.71** | **5.72** | **4.25** | **45.5** | **84.6** |

Constituents With Levels Above TAGM 4046 Values

**Table 6**
**Arsenic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

**Phase III EOC Sample Area Descriptions**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PAOC 8** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-21-2** | **BP-21-8** | **BP-SLD-1** | **BP-21-16** | **BP-21-60** | **BP-22-2** | **BP-22-8** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | NA | 12-16 | 54-60 | 0-2 | 4-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** |
| **Sample Location** | **Unrestricted Use** | **BP-22-16** | **BP-22-61** | **BP-23-2** | **BP-23-8** | **BP-23-8D** | **BP-23-16** | **BP-24-2** |
| **Sample Depth (in.)** | **Screening Value** | 12-16 | 55-61 | 0-2 | 4-8 | 4-8 | 12-16 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** |
| **Sample Location** | **Unrestricted Use** | **BP-24-8** | **BP-24-16** | **BP-24-61** | **BP-25-2** | **BP-25-8** | **BP-25-16** | **BP-25-61** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 12-16 | 55-61 | 0-2 | 4-8 | 12-16 | 55-61 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** |
| **PAOC 9** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-26-6** | **BP-26-16** | **BP-27-6** | **BP-27-16** | **BP-28-6** | **BP-28-6D** | **BP-28-16** |
| **Sample Depth (in.)** | **Screening Value** | 0-6 | 12-16 | 0-6 | 12-16 | 0-6 | 0-6 | 12-16 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **18** | **5.25** | **3.37** | **29.6** | **2** | **2.11** | **1.54** |
| **Sample Location** | **Unrestricted Use** | **BP-28-56** | **BP-29-6** | **BP-29-16** | **BP-30-16** | | | |
| **Sample Depth (in.)** | **Screening Value** | 50-56 | 0-6 | 12-16 | 12-16 | | | |
| **Arsenic (mg/kg)** | **7.5 or SB** | **5.37** | **5.16** | **4.9** | **4.33** | | | |
| **BODY PLANT BASEMENT** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-31-2** | **BP-31-8** | **BP-32-2** | **BP-32-8** | **BP-33-2** | **BP-33-8** | **BP-34-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **1.74** | **2.79** | **1.72** | **ND** | **62.4** | **2.07** | **1.42** |
| **Sample Location** | **Unrestricted Use** | **BP-34-8** | **BP-35-2** | **BP-35-8** | **BP-36-2** | **BP-36-8** | **BP-37-2** | **BP-37-8** |
| **Sample Depth (in.)** | **Screening Value** | 6-8 | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 | 6-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **6.27** | **6.45** | **ND** | **11.1** | **21.2** | **2.36** | **ND** |
| **Sample Location** | **Unrestricted Use** | **BP-38-2** | **BP-38-8** | **BP-39-2** | **BP-39-8** | **BP-39-20** | **BP-40-2** | **BP-40-8** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 | 0-2 | 6-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** |

Constituents With Levels Above TAGM 4046 Values

**Table 6**
**Arsenic Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

**Phase III EOC Sample Area Descriptions**

| **PAOC 12** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **NB-1-2** | **NB-1-8** | **NB-2-2** | **NB-2-8** | **NB-3-2** | **NB-3-8** | **NB-4-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 0-2 | 4-8 | 0-2 | 4-8 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **3.81** | **ND** | **1.97** | **3.16** | **ND** | **ND** | **4.03** |
| **Sample Location** | **Unrestricted Use** | **NB-4-8** | **NB-4** | **NB-5-8** | **NB-5** | **NB-6-2** | **NB-6-8** | **NB-7-2** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 8-12 | 4-8 | 8-12 | 0-2 | 4-8 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **5.18** | **ND** | **3.43** | **ND** | **ND** | **3.53** |
| **Sample Location** | **Unrestricted Use** | **NB-7-8** | **NB-7-12** | **NB-8-2** | **NB-8-2D** | **NB-8-8** | **NB-8-12** | **NB-9-2** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 8-12 | 0-2 | 0-2 | 6-8 | 8-12 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** |
| **Sample Location** | **Unrestricted Use** | **NB-9-8** | **NB-9-12** | **NB-10-2** | **NB-10-8** | **NB-10-12** | **NB-11-2** | **NB-11-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 8-12 | 0-2 | 4-8 | 8-12 | 0-2 | 4-8 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **ND** | **ND** | **ND** | **4.57** | **ND** |
| **Sample Location** | **Unrestricted Use** | **NB-11-12** | **NB-12-2** | **NB-12-8** | **NB-13-2** | **NB-13-8** | **NB-14-2** | **NB-14-2D** |
| **Sample Depth (in.)** | **Screening Value** | 8-12 | 0-2 | 4-8 | 0-2 | 4-8 | 0-2 | 0-2 |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **11.3** | **ND** | **2.86** | **ND** | **3.36** | **6.2** |
| **Sample Location** | **Unrestricted Use** | **NB-14-8** | **NB-14-12** | **NB-15-2** | **NB-15-8** | **NB-16-2** | **NB-16-8** | |
| **Sample Depth (in.)** | **Screening Value** | 6-8 | 8-12 | 0-2 | 4-8 | 0-2 | 4-8 | |
| **Arsenic (mg/kg)** | **7.5 or SB** | **ND** | **ND** | **2.9** | **ND** | **ND** | **ND** | |

Constituents With Levels Above TAGM 4046 Values

**Table 7**
**Lead Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

**Phase III EOC Sample Area Descriptions**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PAOC 2** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **B-2H** | **B2G,S-1** | **B2E,S-1** | **B2F,S-1** | | | |
| **Sample Depth (in.)** | **Screening Value** | 0-24 | 24-48 | 24-48 | 36-60 | | | |
| **Lead (mg/kg)** | **500 or SB** | **ND** | **247** | **89.2** | **1100** | | | |
| **PAOC 4** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **B4D,S-1** | **B4E,S-1** | **B4G,S-1** | **B4F,S-1** | **B4H,S-1** | **B4I,S-1** | |
| **Sample Depth (in.)** | **Screening Value** | 12-36 | 12-36 | 12-36 | 12-36 | 12-36 | 12-36 | |
| **Lead (mg/kg)** | **500 or SB** | **132** | **26.8** | **34.4** | **1940** | **596** | **34.4** | |
| **PAOC 7** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-1-2** | **BP-1-8** | **BP-2-2** | **BP-2-8** | **BP-2-16** | **BP-2-30** | **BP-3-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **4860** | **1020** | **4260** | **2600** | **4540** | **3780** | **226** |
| **Sample Location** | **Unrestricted Use** | **BP-3-8** | **BP-4-2** | **BP-4-8** | **BP-4-16** | **BP-4-30** | **BP-5-2** | **BP-5-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 |
| **Lead (mg/kg)** | **500 or SB** | **185** | **67.3** | **13.7** | **6.49** | **13.6** | **77** | **18.9** |
| **Sample Location** | **Unrestricted Use** | **BP-6-2** | **BP-6-8** | **BP-6-16** | **BP-6-30** | **BP-7-2** | **BP-7-8** | **BP-8-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **789** | **13** | **20.3** | **21.7** | **202** | **167** | **1850** |
| **Sample Location** | **Unrestricted Use** | **BP-8-8** | **BP-8-16** | **BP-8-30** | **BP-9-2** | **BP-9-8** | **BP-10-2** | **BP-10-2D** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **1350** | **285** | **122** | **82.9** | **1090** | **2130** | **1030** |
| **Sample Location** | **Unrestricted Use** | **BP-10-8** | **BP-10-8D** | **BP-10-16** | **BP-10-16D** | **BP-10-30** | **BP-11-2** | **BP-11-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 4-8 | 12-16 | 12-16 | 24-30 | 0-2 | 4-8 |
| **Lead (mg/kg)** | **500 or SB** | **2520** | **2030** | **6400** | **7320** | **8090** | **510** | **288** |
| **Sample Location** | **Unrestricted Use** | **BP-12-2** | **BP-12-8** | **BP-12-16** | **BP-12-30** | **BP-13-2** | **BP-13-8** | **BP-14-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **1870** | **2320** | **11300** | **2200** | **917** | **677** | **2170** |
| **Sample Location** | **Unrestricted Use** | **BP-14-8** | **BP-14-16** | **BP-14-30** | **BP-15-2** | **BP-15-8** | **BP-16-2** | **BP-16-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 | 4-8 |
| **Lead (mg/kg)** | **500 or SB** | **262** | **630** | **2750** | **17.9** | **63.5** | **6.11** | **5.66** |
| **Sample Location** | **Unrestricted Use** | **BP-16-16** | **BP-16-30** | **BP-17-2** | **BP-17-8** | **BP-18-2** | **BP-18-8** | **BP-18-16** |
| **Sample Depth (in.)** | **Screening Value** | 12-16 | 24-30 | 0-2 | 4-8 | 0-2 | 4-8 | 12-16 |
| **Lead (mg/kg)** | **500 or SB** | **15.3** | **61.5** | **427** | **127** | **12.5** | **3390** | **836** |
| **Sample Location** | **Unrestricted Use** | **BP-18-30** | **BP-19-2** | **BP-19-8** | **BP-20-2** | **BP-20-8** | **BP-20-16** | **BP-20-30** |
| **Sample Depth (in.)** | **Screening Value** | 24-30 | 0-2 | 4-8 | 0-2 | 4-8 | 12-16 | 24-30 |
| **Lead (mg/kg)** | **500 or SB** | **492** | **1170** | **684** | **1280** | **462** | **5490** | **3000** |

Constituents With Levels Above TAGM 4046 Values

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 7**
**Lead Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

**Phase III EOC Sample Area Descriptions**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PAOC 8** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-21-2** | **BP-21-8** | **BP-SLD-1** | **BP-21-16** | **BP-21-60** | **BP-22-2** | **BP-22-8** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | NA | 12-16 | 54-60 | 0-2 | 4-8 |
| **Lead (mg/kg)** | **500 or SB** | **807** | **6.77** | **16400** | **ND** | **ND** | **81.5** | **10.3** |
| **Sample Location** | **Unrestricted Use** | **BP-22-16** | **BP-22-61** | **BP-23-2** | **BP-23-8** | **BP-23-8D** | **BP-23-16** | **BP-24-2** |
| **Sample Depth (in.)** | **Screening Value** | 12-16 | 55-61 | 0-2 | 4-8 | 4-8 | 12-16 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **6.94** | **ND** | **114** | **10.7** | **8.72** | **26.6** | **8.75** |
| **Sample Location** | **Unrestricted Use** | **BP-24-8** | **BP-24-16** | **BP-24-61** | **BP-25-2** | **BP-25-8** | **BP-25-16** | **BP-25-61** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 12-16 | 55-61 | 0-2 | 4-8 | 12-16 | 55-61 |
| **Lead (mg/kg)** | **500 or SB** | **ND** | **ND** | **ND** | **22.7** | **ND** | **ND** | **ND** |
| **PAOC 9** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-26-6** | **BP-26-16** | **BP-27-6** | **BP-27-16** | **BP-28-6** | **BP-28-6D** | **BP-28-16** |
| **Sample Depth (in.)** | **Screening Value** | 0-6 | 12-16 | 0-6 | 12-16 | 0-6 | 0-6 | 12-16 |
| **Lead (mg/kg)** | **500 or SB** | **3610** | **1580** | **1500** | **152** | **336** | **276** | **210** |
| **Sample Location** | **Unrestricted Use** | **BP-28-56** | **BP-29-6** | **BP-29-16** | **BP-30-16** | | | |
| **Sample Depth (in.)** | **Screening Value** | 50-56 | 0-6 | 12-16 | 12-16 | | | |
| **Lead (mg/kg)** | **500 or SB** | **231** | **427** | **419** | **345** | | | |
| **BODY PLANT BASEMENT** | | | | | | | | |
| **Sample Location** | **Unrestricted Use** | **BP-31-2** | **BP-31-8** | **BP-32-2** | **BP-32-8** | **BP-33-2** | **BP-33-8** | **BP-34-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **207** | **128** | **168** | **19.9** | **10500** | **613** | **209** |
| **Sample Location** | **Unrestricted Use** | **BP-34-8** | **BP-35-2** | **BP-35-8** | **BP-36-2** | **BP-36-8** | **BP-37-2** | **BP-37-8** |
| **Sample Depth (in.)** | **Screening Value** | 6-8 | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 | 6-8 |
| **Lead (mg/kg)** | **500 or SB** | **926** | **937** | **8.93** | **2420** | **3670** | **471** | **95.9** |
| **Sample Location** | **Unrestricted Use** | **BP-38-2** | **BP-38-8** | **BP-39-2** | **BP-39-8** | **BP-39-20** | **BP-40-2** | **BP-40-8** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 6-8 | 0-2 | 6-8 | 0-2 | 0-2 | 6-8 |
| **Lead (mg/kg)** | **500 or SB** | **58.2** | **9.61** | **26.8** | **5.51** | **25.4** | **12.2** | **8.49** |

Constituents With Levels Above TAGM 4046 Values

**Table 7**
**Lead Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

**Phase III EOC Sample Area Descriptions**

| **PAOC 12** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Unrestricted Use** | **NB-1-2** | **NB-1-8** | **NB-2-2** | **NB-2-8** | **NB-3-2** | **NB-3-8** | **NB-4** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 6-8 | 0-2 | 4-8 | 0-2 | 4-8 | 8-12 |
| **Lead (mg/kg)** | **500 or SB** | **1330** | **84** | **477** | **277** | **148** | **6570** | **115** |
| **Sample Location** | **Unrestricted Use** | **NB-4-2** | **NB-4-8** | **NB-5-8** | **NB-5** | **NB-6-2** | **NB-6-8** | **NB-7-2** |
| **Sample Depth (in.)** | **Screening Value** | 0-2 | 4-8 | 4-8 | 8-12 | 0-2 | 6-8 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **166** | **174** | **120** | **105** | **225** | **21.8** | **2310** |
| **Sample Location** | **Unrestricted Use** | **NB-7-8** | **NB-7-12** | **NB-8-2** | **NB-8-2D** | **NB-8-8** | **NB-8-12** | **NB-9-2** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 8-12 | 0-2 | 0-2 | 6-8 | 8-12 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **80.7** | **15.5** | **973** | **689** | **18.6** | **75.9** | **95.6** |
| **Sample Location** | **Unrestricted Use** | **NB-9-8** | **NB-9-12** | **NB-10-2** | **NB-10-8** | **NB-10-12** | **NB-11-2** | **NB-11-8** |
| **Sample Depth (in.)** | **Screening Value** | 4-8 | 8-12 | 0-2 | 4-8 | 8-12 | 0-2 | 4-8 |
| **Lead (mg/kg)** | **500 or SB** | **335** | **347** | **204** | **25.3** | **33.7** | **438** | **13.7** |
| **Sample Location** | **Unrestricted Use** | **NB-11-12** | **NB-12-2** | **NB-12-8** | **NB-13-2** | **NB-13-8** | **NB-14-2** | **NB-14-2D** |
| **Sample Depth (in.)** | **Screening Value** | 8-12 | 0-2 | 4-8 | 0-2 | 4-8 | 0-2 | 0-2 |
| **Lead (mg/kg)** | **500 or SB** | **18.9** | **449** | **48.8** | **169** | **15.8** | **535** | **484** |
| **Sample Location** | **Unrestricted Use** | **NB-14-8** | **NB-14-12** | **NB-15-2** | **NB-15-8** | **NB-16-2** | **NB-16-8** | |
| **Sample Depth (in.)** | **Screening Value** | 6-8 | 8-12 | 0-2 | 4-8 | 0-2 | 4-8 | |
| **Lead (mg/kg)** | **500 or SB** | **37.1** | **14.5** | **1330** | **6.35** | **86.7** | **55** | |

Constituents With Levels Above TAGM 4046 Values

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

**Table 10**
**Groundwater Sample Locations**
**Organic Compound Analysis and Criteria**
**Former Tarrytown Assembly Plant**

| Phase III EOC Sample ID No. | NYSDEC Guidance (1) | OW-13 | OW-13D | OW-19 | OW-20 | OW-21 | 0W-22 | OW-23 |
|---|---|---|---|---|---|---|---|---|
| ***TCL Organics (ug/l)*** | | | | | | | | |
| Acetone (2) | 50 | 44 | 59 | ND | 25 | ND | 36 | ND |
| Benzene | 1 | 76 | 81 | ND | ND | ND | 14 | ND |
| 2-Hexanone | 50 | ND | ND | ND | ND | ND | 11 | ND |
| M+P-Xylene | 5 | 7.9 | 9.6 | ND | ND | ND | 5.1 | ND |
| Toluene | 5 | 6.8 | ND | ND | ND | ND | ND | ND |
| Bis(2-Ethylhexyl)phthalate (2) | 5 | ND | ND | ND | ND | 7.8 | ND | ND |
| 2-Methylnaphthalene | NA | 54 | 54 | ND | ND | ND | ND | ND |

Exceeds Guidance Value

(1) NYSDEC (1998), Ambient Water Quality Standards And Guidance Values
(2) Acetone and bis(2-ethylhexyl) phthalate are attributable to laboratory artifact
ND - Not detected
NA - No guidance value applicable to groundwater
OW -13D is a duplicate sample of OW-13.

**Table 11**
**Supplemental Phase II**
**Parsons Borings Area Analysis and TAGM Values**
**Former Tarrytown Assembly Plant**

| Supplemental Phase II ESI Sampling Area Description | Unrestricted Use Screening Value | East Lot | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample Location** | **TAGM 4046** | **B-1, S-1** | **B-2,S-4** | **B-3,S-8** | **B-4,S-8** | **B-5S-4A** | **B-5,S-6** |
| **Sample Depth (ft.)** | **(mg/kg)** | 1-3 | 7-8 | 14-14.9 | 14-16 | 6-7.5 | 10-11 |
| ***RCRA Metals (mg/kg)*** | | | | | | | |
| Arsenic | 7.5 or SB | ND | ND | ND | 8.07 | NA | 2.79 |
| Barium | 300 or SB | 108 | 24 | 25.2 | 638 | NA | 25.8 |
| Cadmium | 1 or SB | ND | ND | ND | 2.8 | NA | ND |
| Chromium | 10 or SB | 31 | 13.5 | 27.5 | 27.1 | NA | 13.3 |
| Lead | 500 or SB | 31.4 | 7.01 | 7.2 | 1090 | NA | 7.44 |
| Mercury | 0.1 | 7.3 | ND | ND | 1.51 | NA | ND |
| Selenium | SB | ND | ND | ND | 2.44 | NA | ND |
| ***TCL Organics (ug/kg)*** | | | | | | | |
| Acetone | 200 | ND | ND | 34 | 130 | ND | ND |
| Methylene Chloride | 100 | ND | ND | 8.1 | ND | ND | ND |

Note: Sample interval from B-4 comprised of black coarse fill, which was not encountered in B-1, 2, 3 or 5

Constituents With Levels Above TAGM 4046 Values

**PRIVILEGED AND CONFIDENTIAL - PREPARED AT THE REQUEST OF GENERAL MOTORS COUNSEL**

# Appendix A-3

# Interim Corrective Measures – 1998 (EMCON 2001)

**Table 1**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 7, 7A, 7B, 7C, 7D, 7E Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | Basement Below Welding Area Body Plant PAOC 7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 7A-01 | 7A-02 | 7A-02A | 7A-03 | 7A-03A | 7A-04 | 7A-05 | 7A-06 | 7A-06A |
| **SAMPLE TYPE** | | | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 1.0 | 1.0 | 1.0 | 1.3 | 1.8 | 1.2 | 1.3 | 1.2 | 1.2 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | 3800 | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | 6100 | 6400 | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | 1300 | 16000 | 12000 | 520 | ND | ND | 3600 | 7400 |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | 1600 | 19000 | 11000 | 900 | ND | ND | 4100 | 10000 |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | 1800 | 22000 | 10000 | 1100 | ND | ND | 4000 | 10000 |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | 1100 | 9000 | 5800 | 790 | ND | ND | ND | 5600 |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | 1300 | 17000 | 13000 | 940 | ND | ND | 5400 | 11000 |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | 1000 | 9100 | 5600 | 640 | ND | ND | ND | 5300 |
| **Chrysene** | 0.04 | 400 | ND | 1500 | 17000 | 12000 | 600 | ND | ND | 4100 | 8500 |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | 470 | 3900 | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | ND | 2500 | 31000 | 27000 | 800 | ND | ND | 8600 | 17000 |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | ND | 880 | 13000 | 21000 | ND | ND | ND | 8400 | 6800 |
| **Pyrene** | 1000 | 50000 | ND | 1900 | 24000 | 18000 | 1100 | ND | ND | 7200 | 12000 |
| **Total C-PAHs** | NA | 10000 | | 8970 | 104000 | 63600 | 4700 | | | 21200 | 52200 |
| **Total Semivolatiles** | NA | 500000 | | 15350 | 187100 | 145600 | 7390 | | | 45400 | 93600 |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 1**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 7, 7A, 7B, 7C, 7D, 7E Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | Basement Below Welding Area Body Plant PAOC 7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 7B-01 | 7B-01A | 7C-01 | 7C-02 | 7C-02A | 7C-03 | 7C-03A | 7D-01 | 7E-01 |
| **SAMPLE TYPE** | | | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 1.0 | 1.0 | 1.2 | 1.2 | 1.7 | 1.2 | 1.2 | 0.3 | 2.5 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | 7300 | 6200 | 650 | 15000 | 6600 | ND | 520 | ND | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | 7500 | 7700 | 750 | 18000 | 8300 | ND | 900 | ND | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | 8600 | 6900 | 860 | 22000 | 9800 | ND | 1100 | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | 4200 | ND | 8900 | 4400 | ND | 790 | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | 8400 | 6800 | 870 | 20000 | 8500 | ND | 940 | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | 4100 | ND | 9100 | ND | ND | 640 | ND | ND |
| **Chrysene** | 0.04 | 400 | 8400 | 6800 | 720 | 18000 | 7800 | ND | 600 | ND | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | 15000 | 12000 | 1300 | 26000 | 13000 | ND | 800 | ND | ND |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 11000 | 7000 | 530 | 6900 | ND | ND | ND | ND | ND |
| **Pyrene** | 1000 | 50000 | 14000 | 9500 | 1200 | 27000 | 11000 | ND | 1100 | ND | ND |
| **Total C-PAHs** | NA | 10000 | 40200 | 38500 | 3850 | 102100 | 41000 | | 4700 | | |
| **Total Semivolatiles** | NA | 500000 | 80200 | 71200 | 6880 | 170900 | 69400 | | 7390 | | |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 2**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 7, 7A, 7B, 7C, 7D, 7E, Semivolatiles by TCLP Extraction**

| ICM Confirmatory Sampling Area Description | | Basement Below Welding Area Body Plant PAOC 7 | | | | |
|---|---|---|---|---|---|---|
| **Sample ID** | | 7A-02A | 7A-03A | 7A-06A | 7B-01A | 7C-02A |
| **SAMPLE TYPE** | | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | 1.7 | 3.3 | 1.8 | 1.6 | 2.6 |
| **SATURATION (SAT/UNSAT)** | | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles by TCLP Extraction (ug/l)** | NYSDEC Guideline(1) | | | | | |
| **Acenaphthene** | 20 | ND | ND | ND | ND | ND |
| **Anthracene** | 50 | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.002 | ND | ND | ND | ND | ND |
| **Benzo(a)Pyrene** | 0.002 | ND | ND | ND | ND | ND |
| **Benzo(b)Fluoranthene** | 0.002 | ND | ND | ND | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.002 | ND | ND | ND | ND | ND |
| **Benzo(k)Fluoranthene** | 0.002 | ND | ND | ND | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.002 | ND | ND | ND | ND | ND |
| **Chrysene** | 0.002 | ND | ND | ND | ND | ND |
| **Dibenzo(a,h)Anthracene** | 50 | ND | ND | ND | ND | ND |
| **Fluoranthene** | 50 | ND | ND | ND | ND | ND |
| **Fluorene** | 50 | ND | ND | ND | ND | ND |
| **Naphthalene** | 10 | ND | ND | ND | ND | ND |
| **Phenanthrene** | 50 | ND | ND | ND | ND | ND |
| **Pyrene** | 50 | ND | ND | ND | ND | ND |

ND - Not Detected

J - Estimated

(1)TCLP extraction guidance value, NYSDEC STARS Memo No. 1, 1992

**Table 3**
**FormerTarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 8 Metals**

| ICM Confirmatory Sampling Area Description | ELPO Area Wastewater Leak Body Plant PAOC 8 | | |
|---|---|---|---|
| **Sample ID** | | 8-01 | 8-02 |
| **SAMPLE TYPE** | **UNRESTRICTED** | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | **USE** | 0.3 | 0.3 |
| **SATURATION (SAT/UNSAT)** | **TAGM 4046** | unsat | unsat |
| **Metals (mg/kg)** | **Guidance(1) (mg/kg)** | | |
| **Lead** | **500** | ND | ND |

(1) NYSDEC TAGM 4046 Guidance, 1994

ND - Not Detected

J - Estimated

**Table 4**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 11A Semivolatiles**

| ICM Confirmatory Sampling Area Description | Basement Conveyor System Body Plant PAOC 11 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** | **NYSDEC Guidelines** | | 11A-01 | 11A-02 | 11A-03 | 11A-04 | 11A-05 | 11A-06 |
| **SAMPLE TYPE** | | | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 1.3 | 1.0 | 3.0 | 2.0 | 2.0 | 2.7 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | ND | ND | ND | ND | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | ND | ND | ND | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | ND | ND | ND | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | ND | ND | ND | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | ND | ND | ND | ND | ND |
| **Chrysene** | 0.04 | 400 | ND | ND | ND | ND | ND | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Pyrene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 5**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 12AC, 12D, 12E Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | North Basement Chassis Plant PAOC 12 | | | | |
|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 12AC-37 | 12AC-38 | 12AC-39 | 12AC-40 | 12AC-41 |
| **SAMPLE TYPE** | | | Sidewall | Sidewall | Sidewall | Bottom | Sidewall |
| **SAMPLE DEPTH (FT.)** | | | 6.0 | 6.5 | 5.0 | 8.0 | 4.5 |
| **SATURATION (SAT/UNSAT)** | | | sat | sat | sat | sat | sat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | ND | ND | ND | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | 410 | ND | ND | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | ND | ND | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | ND | ND | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | ND | ND | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | ND | ND | ND | ND |
| **Chrysene** | 0.04 | 400 | ND | 440 | ND | ND | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | ND | 1200 | ND | ND | ND |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | ND | 900 | ND | ND | ND |
| **Pyrene** | 1000 | 50000 | ND | 600 | ND | ND | ND |
| **Total C-PAHs** | NA | 10000 | | 850 | | | |
| **Total Semivolatiles** | NA | 500000 | | 3550 | | | |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 5**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 12AC, 12D, 12E Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | North Basement Chassis Plant PAOC 12 | | | | |
|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 12AC-42 | 12AC-43 | 12AC-44 | 12D-01 | 12E-01 |
| **SAMPLE TYPE** | | | Sidewall | Bottom | Sidewall | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 6.5 | 8.5 | 6.0 | 3.5 | 1.5 |
| **SATURATION (SAT/UNSAT)** | | | sat | sat | sat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | 680 | 420 | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | ND | 1700 | 1100 | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | ND | 2000 | 930 | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | ND | 1800 | 960 | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | ND | 910 | 390 | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | ND | 1500 | 1300 | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | ND | 1000 | 430 | ND |
| **Chrysene** | 0.04 | 400 | ND | ND | 1800 | 1100 | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND | 600 | ND | ND |
| **Fluoranthene** | 1000 | 50000 | 9500 | ND | 3600 | 2200 | 5100 |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 4700 | 610 | 2500 | 2000 | ND |
| **Pyrene** | 1000 | 50000 | 5100 | ND | 2200 | 1800 | 3600 |
| **Total C-PAHs** | NA | 10000 | | | 10400 | 5820 | |
| **Total Semivolatiles** | NA | 500000 | 19300 | 610 | 20290 | 12630 | 8700 |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STAR

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 6**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 12 Semivolatiles by TCLP Extraction**

| ICM Confirmatory Sampling Area Description | North Basement Chassis Plant PAOC 12 | |
|---|---|---|
| **Sample ID** | | 12AC-44 |
| **SAMPLE TYPE** | | Sidewall |
| **SAMPLE DEPTH (FT.)** | | 6.0 |
| **SATURATION (SAT/UNSAT)** | | sat |
| **STARS List Semivolatiles by TCLP Extraction (ug/l)** | NYSDEC Guideline(1) | |
| **Acenaphthene** | 20 | ND |
| **Anthracene** | 50 | ND |
| **Benzo(a)Anthracene** | 0.002 | ND |
| **Benzo(a)Pyrene** | 0.002 | ND |
| **Benzo(b)Fluoranthene** | 0.002 | ND |
| **Benzo(g,h,i)Perylene** | 0.002 | ND |
| **Benzo(k)Fluoranthene** | 0.002 | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.002 | ND |
| **Chrysene** | 0.002 | ND |
| **Dibenzo(a,h)Anthracene** | 50 | ND |
| **Fluoranthene** | 50 | ND |
| **Fluorene** | 50 | ND |
| **Naphthalene** | 10 | ND |
| **Phenanthrene** | 50 | ND |
| **Pyrene** | 50 | ND |

ND - Not Detected

J - Estimated

(1)TCLP extraction guidance value, NYSDEC STARS Memo No. 1, 1992

**Table 7**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 12 Metals**

| ICM Confirmatory Sampling Area Description | | North Basement Chassis Plant PAOC 12 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | 12-01 | 12-02 | 12-03 | 12-04 | 12-05 | 12-06 | 12-07 | 12-08 | 12-09 | 12-10 |
| **SAMPLE TYPE** | **UNRESTRICTED** | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom |
| **SAMPLE DEPTH (IN.)** | **USE** | 3.0 | 5.0 | 5.0 | 2.0 | 4.0 | 4.0 | 4.0 | 3.0 | 2.0 | 4.0 |
| **SATURATION (SAT/UNSAT)** | **TAGM 4046** | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **Metals** | **Guidance(1)** | | | | | | | | | | |
| **(mg/kg)** | **(mg/kg)** | | | | | | | | | | |
| **Lead** | 500 | 37.4 | 20.7 | 8.5 | 54.5 | 22.6 | 20 | 14.4 | 16.4 | 32.6 | 11 |
| | | | | | | | | | | | |
| **Sample ID** | | 12-21 | 12-22 | 12-23 | 12-24 | 12-25 | 12-26 | 12-27 | 12-28 | 12-29 | 12-30 |
| **SAMPLE TYPE** | **UNRESTRICTED** | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom |
| **SAMPLE DEPTH (IN.)** | **USE** | 5.0 | 3.0 | 3.0 | 4.0 | 4.0 | 4.0 | 3.0 | 3.0 | 4.0 | 4.0 |
| **SATURATION (SAT/UNSAT)** | **TAGM 4046** | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **Metals** | **Guidance(1)** | | | | | | | | | | |
| **(mg/kg)** | **(mg/kg)** | | | | | | | | | | |
| **Lead** | 500 | 37.5 | 34.9 | 49 | 136 | 92.4 | 129 | 1400 | 92.2 | 425 | 959 |

ND - Not Detected

J - Estimated

(1) NYSDEC TAGM 4046 Guidance, 1994

Constituent levels greater than TAGM 4046 value, not necessarily greater than site background

**Table 7**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 12 Metals**

| ICM Confirmatory Sampling Area Description | | North Basement Chassis Plant PAOC 12 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | 12-11 | 12-12 | 12-13 | 12-14 | 12-15 | 12-16 | 12-17 | 12-18 | 12-19 | 12-20 |
| **SAMPLE TYPE** | **UNRESTRICTED** | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom |
| **SAMPLE DEPTH (IN.)** | **USE** | 4.0 | 3.0 | 5.0 | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 3.0 | 3.0 |
| **SATURATION (SAT/UNSAT)** | **TAGM 4046** | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **Metals** | **Guidance(1)** | | | | | | | | | | |
| **(mg/kg)** | **(mg/kg)** | | | | | | | | | | |
| **Lead** | 500 | 14.9 | 245 | 46.3 | 65.1 | 60.8 | 83.6 | 89.8 | 72.5 | 67.7 | 12.8 |
| | | | | | | | | | | | |
| **Sample ID** | | 12-31 | 12-32 | 12-33 | 12-34 | 12-35 | 12-36 | | | | |
| **SAMPLE TYPE** | **UNRESTRICTED** | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | | | | |
| **SAMPLE DEPTH (IN.)** | **USE** | 5.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 | | | | |
| **SATURATION (SAT/UNSAT)** | **TAGM 4046** | unsat | unsat | unsat | unsat | unsat | unsat | | | | |
| **Metals** | **Guidance(1)** | | | | | | | | | | |
| **(mg/kg)** | **(mg/kg)** | | | | | | | | | | |
| **Lead** | 500 | 380 | 190 | 117 | 12 | 87.6 | 26.3 | | | | |

ND - Not Detected

J - Estimated

(1) NYSDEC TAGM 4046 Guidance, 1994

Constituent levels greater than TAGM 4046 value, not necessarily greater than site background

**Table 8**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 13, 13A, 13B Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | M12 Hydraulic Elevator Chassis Plant PAOC 13 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 13A-01 | 13A-02 | 13A-03 | 13A-04 | 13A-05 | 13A-06 | 13A-07 | 13A-08 | 13A-09 | 13A-10 | 13A-11 | 13A-12 |
| **SAMPLE TYPE** | | | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.1 | 1.1 | 1.1 | 1.1 | 0.9 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND | 370 | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | 450 | 470 | ND | ND | ND | ND | 1000 | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | 860 | 1800 | 1100 | 900 | 680 | 1100 | 2400 | 950 | 930 | 460 | 910 | 510 |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | 850 | 2100 | 1200 | 1000 | 700 | 1200 | 2200 | 1000 | 980 | 550 | 900 | 530 |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | 760 | 2400 | 1300 | 1100 | 710 | 1200 | 2100 | 1100 | 1100 | 590 | 800 | 530 |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | 440 | 840 | 510 | ND | ND | 390 | 970 | 440 | 390 | ND | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | 790 | 1500 | 1100 | 990 | 590 | 1200 | 2100 | 810 | 860 | 530 | 1000 | 650 |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | 460 | 960 | 560 | 410 | 380 | 460 | 1000 | 470 | 460 | ND | 360 | ND |
| **Chrysene** | 0.04 | 400 | 850 | 1800 | 1100 | 920 | 730 | 1100 | 2300 | 970 | 950 | 470 | 920 | 550 |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | 410 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | 2000 | 2900 | 2000 | 1700 | 1500 | 2000 | 4600 | 1700 | 1500 | 690 | 1500 | 940 |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND | 460 | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | 380 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 1900 | 1500 | 1100 | 880 | 830 | 1100 | 3600 | 960 | 580 | ND | 670 | 390 |
| **Pyrene** | 1000 | 50000 | 1500 | 2300 | 1800 | 1400 | 1100 | 1900 | 3700 | 1500 | 1300 | 590 | 1400 | 760 |
| **Total C-PAHs** | NA | 10000 | 4570 | 10560 | 6360 | 5320 | 3790 | 6260 | 12100 | 5300 | 5280 | 2600 | 4890 | 2770 |
| **Total Semivolatiles** | NA | 500000 | 10860 | 18980 | 12150 | 9300 | 7220 | 11650 | 26800 | 9900 | 9050 | 3880 | 8460 | 4860 |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 8**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 13, 13A, 13B Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | M12 Hydraulic Elevator Chassis Plant PAOC 13 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 13A-13 | 13B-01 | 13-03 | 13-04 | 13-05 | 13-06 | 13-07 | 13-08 | 13-09 | 13-10 | 13-11 | 13-12 |
| **SAMPLE TYPE** | | | Composite | Composite | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom | Side |
| **SAMPLE DEPTH (FT.)** | | | 1.3 | 1.8 | 4.3 | 4.8 | 4.5 | 5.0 | 9.5 | 4 - 5 | 4 - 5 | 10.0 | 5.0 | 4.5 - 5.5 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | sat | sat | sat | sat | sat | unsat | unsat | sat | sat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND | 1700 J | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | 630 | ND | ND | ND | ND | ND | 970 J | ND | ND | ND | ND | 840 J |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | 2700 | ND | 1400 | 830 | 5700 | ND | 2000 J | ND | 2400 J | 1100 J | 2000 J | 2000 J |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | 2600 | ND | 1500 | 910 | 5100 | ND | 1500 J | ND | 2500 J | 940 J | ND | 1900 J |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | 2900 | ND | 1400 | 910 | 4900 | ND | 1400 J | ND | 1900 J | ND | ND | 1500 J |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | 830 | ND | 690 | 460 | ND | ND | 1200 J | ND | ND | ND | ND | 1200 J |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | 2300 | ND | 1500 | 910 | 4500 | ND | 1400 J | ND | 2100 J | ND | ND | 1700 J |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | 940 | ND | 690 | 400 | ND | ND | 1300 J | ND | 1700 J | ND | ND | 1200 J |
| **Chrysene** | 0.04 | 400 | 2700 | ND | 1500 | 980 | 5300 | ND | 2100 J | ND | 2400 J | 1200 J | 2300 J | 2400 J |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | 420 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | 4400 | ND | 3200 | 1500 | 15000 | 8700 | 4300 J | ND | 3400 J | 2400 J | 3400 J | 4300 |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 1700 | ND | 810 | 670 | 15000 | 12000 | 2100 J | ND | 1400 J | 1900 J | 2800 J | 2700 J |
| **Pyrene** | 1000 | 50000 | 4300 | ND | 2400 | 1700 | 15000 | 8300 | 4100 J | 1500J | 6000 | 2900 J | 6500 J | 4300 |
| **Total C-PAHs** | NA | 10000 | 14140 | 0 | 7990 | 4940 | 25500 | 0 | 9700 J | 0 | 13000 J | 3240 J | 4300 J | 10700 J |
| **Total Semivolatiles** | NA | 500000 | 26420 | | 15090 | 9270 | 70500 | 29000 | 24070 J | 1500J | 23800 J | 10440 J | 17000 J | 24040 J |

ND - Not Detected
J - Estimated
(1)Alternative guidance value for soils without TCLP extraction,
NYSDEC STARS Memo No. 1, 1992
(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 8**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 13, 13A, 13B Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | M12 Hydraulic Elevator Chassis Plant PAOC 13 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 13-13 | 13-14 | 13-15 | 13-16 | 13-17 | 13-18 | 13-19 | 13-20 | 13-21 | 13-22 | A6-01 |
| **SAMPLE TYPE** | | | Side | Side | Side | Side | Side | Side | Side | Side | Side | Side | Core |
| **SAMPLE DEPTH (FT.)** | | | 4.5 - 5.5 | 4.5 - 5.5 | 4 - 5.5 | 4.5 | 2.5 | 3 - 3.5 | 4 - 5 | 2.5 - 3.5 | 3.5 - 4.5 | 3 - 4 | 4 - 5.5 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | unsat | sat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | 2700 J | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | 3900 J | 1100 J | ND | ND | 1500J | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | 900 J | 14000 | 3300 J | 730 | ND | 3300 J | ND | ND | ND | 1500 | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | 12000 | 3200 J | 990 | ND | 2700 J | ND | ND | ND | 1800 | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | 9800 | 2600 J | 1600 | ND | 2100 J | ND | ND | ND | 2200 | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | 6700 | 2000 J | 760 | ND | ND | ND | ND | ND | 910 | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | 11000 | 3300 J | 1100 | ND | 2100 J | ND | ND | ND | 1800 | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | 7300 | 2000 J | 730 | ND | 1000 J | ND | ND | ND | 1000 | ND |
| **Chrysene** | 0.04 | 400 | 1100 J | 15000 | 4100 | 860 | ND | 3500 J | ND | ND | ND | 1700 | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | 2700 | ND | ND | ND | ND | ND | ND | ND | 370 | ND |
| **Fluoranthene** | 1000 | 50000 | 1600 J | 20000 | 6700 | 870 | ND | 4300 | ND | ND | ND | 2400 | ND |
| **Fluorene** | 1000 | 50000 | ND | 2000 J | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 260 | ND |
| **Phenanthrene** | 1000 | 50000 | 900 J | 5100 | 3100 J | 430 | ND | 1400 J | ND | ND | ND | 1100 | ND |
| **Pyrene** | 1000 | 50000 | 2100 J | 40000 | 6700 | 810 | ND | 12000 | ND | ND | ND | 2100 | |
| **Total C-PAHs** | NA | 10000 | 2000 J | 69100 | 18500 J | 6010 | | 14700 J | | | | 10000 | |
| **Total Semivolatiles** | NA | 500000 | 6600 J | 152200 J | 38100 | 8880 | | 32400 | | | | 17140 | |

ND - Not Detected
J - Estimated
(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992
(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 9**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 13, 13A, 13B Semivolatiles by TCLP Extraction**

| ICM Confirmatory Sampling Area Description | | M12 Hydraulic Elevator Chassis Plant PAOC 13 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | 13A-14 | 13A-15 | 13A-16 | 13A-17 | 13A-18 | 13-05 | 13-06 | 13-09 | 13-10 | 13-12 | 13-14 | 13-15 | 13 |
| **SAMPLE TYPE** | | Composite | Composite | Composite | Composite | Composite | Bottom | Bottom | Side | Bottom | Side | Side | Side | S |
| **SAMPLE DEPTH (FT.)** | | 0.9 | 0.9 | 0.9 | 1.1 | 1.2 | 4.5 | 5 | 4.5 | 10 | 4.5 - 5.5 | 4.5 - 5.5 | 4 - 5.5 | 3 |
| **SATURATION (SAT/UNSAT)** | | unsat | unsat | unsat | unsat | unsat | sat | sat | unsat | sat | unsat | unsat | unsat | u |
| **STARS List Semivolatiles by TCLP Extraction (ug/l)** | NYSDEC Guideline(1) | | | | | | | | | | | | | |
| **Acenaphthene** | 20 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Anthracene** | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Benzo(a)Anthracene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Benzo(a)Pyrene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Benzo(b)Fluoranthene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Benzo(g,h,i)Perylene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Benzo(k)Fluoranthene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Indeno(1,2,3-cd)Pyrene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Chrysene** | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Dibenzo(a,h)Anthracene** | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Fluoranthene** | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Fluorene** | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |
| **Naphthalene** | 10 | ND | ND | ND | ND | ND | ND | 5.3 | ND | ND | ND | ND | ND | N |
| **Phenanthrene** | 50 | ND | ND | ND | ND | ND | ND | 5.4 | ND | ND | ND | ND | ND | N |
| **Pyrene** | 50 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | N |

ND - Not Detected
J - Estimated

13A-14 covers 13-01, 13-02
13A-15 covers 13-03, 13-04
13A-16 covers 13-06, 13-07
13A-17 covers 13-08, 13-09
13A-18 covers 13-11, 13-13
(1)TCLP extraction guidance value, NYSDEC STARS Memo No. 1, 1992

**Table 10**
**Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 17, 17A, 17B Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | Basement Conveyor System Chassis Plant PAOC 17 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 17-01 | 17-02 | 17-02A | 17-03 | 17-04 | 17-05 | 17-06 |
| **SAMPLE TYPE** | | | Composite | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 2.4 | 1.1 | 2.5 | 1.5 | 1.8 | 1.5 | 1.5 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND | 520 |
| **Anthracene** | 1000 | 50000 | ND | 900 | ND | ND | ND | ND | 1500 |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | 2400 | ND | 1300 | ND | ND | 3200 |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | 2600 | ND | 1200 | ND | ND | 3100 |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | 2400 | ND | 1200 | ND | ND | 3100 |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | 1300 | ND | 730 | ND | ND | 1200 |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | 2200 | ND | 1400 | ND | ND | 2700 |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | 1300 | ND | 680 | ND | ND | 1300 |
| **Chrysene** | 0.04 | 400 | ND | 2600 | ND | 1300 | ND | ND | 3000 |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | 520 | ND | ND | ND | ND | 540 |
| **Fluoranthene** | 1000 | 50000 | ND | 4700 | ND | 2200 | ND | ND | 6400 |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND | 610 |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND | 240 |
| **Phenanthrene** | 1000 | 50000 | ND | 4300 | ND | 1100 | ND | ND | 5000 |
| **Pyrene** | 1000 | 50000 | ND | 5000 | ND | 2000 | ND | ND | 5700 |
| **Total C-PAHs** | NA | 10000 | | 14020 | | 7080 | | | 16940 |
| **Total Semivolatiles** | NA | 500000 | | 30220 | | 13110 | | | 38110 |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction,
NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 10**
**Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 17, 17A, 17B Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | Basement Conveyor System Chassis Plant PAOC 17 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 17-06A | 17-07 | 17-08 | 17-09 | 17A-01 | 17A-02 | 17B-01 |
| **SAMPLE TYPE** | | | Composite | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | | 2.0 | 1.8 | 1.0 | 1.2 | 3.3 | 2.8 | 1.0 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | | |
| **Acenaphthene** | 400 | 50000 | 630 | ND | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | 1800 | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | 3600 | 370 | ND | ND | ND | ND | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | 4500 | 390 | ND | ND | ND | ND | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | 4500 | 390 | ND | ND | ND | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | 1700 | ND | ND | ND | ND | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | 3400 | 390 | 380 | ND | ND | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | 1700 | ND | ND | ND | ND | ND | ND |
| **Chrysene** | 0.04 | 400 | 3600 | 380 | ND | ND | ND | ND | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | 730 | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | 7000 | 690 | 660 | ND | ND | ND | ND |
| **Fluorene** | 1000 | 50000 | 630 | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | 300 | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 6100 | ND | 550 | ND | ND | ND | ND |
| **Pyrene** | 1000 | 50000 | 6900 | 650 | 590 | ND | ND | ND | ND |
| **Total C-PAHs** | NA | 10000 | 22030 | 1920 | | | | | |
| **Total Semivolatiles** | NA | 500000 | 47090 | 3260 | 2180 | | | | |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction,
NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 10**
**Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 17, 17A, 17B Semivolatiles**

| ICM Confirmatory Sampling Area Description | NYSDEC Guidelines | | Basement Conveyor System Chassis Plant PAOC 17 | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 17B-02 | 17B-04 | 17B-05 | 17B-06 | 17B-07 | 17B-08 |
| **SAMPLE TYPE** | | | Composite | Sidewall | Sidewall | Sidewall | Bottom | Bottom |
| **SAMPLE DEPTH (FT.)** | | | 1.8 | 4.5-6.5 | 4.5-6.5 | 4.5-6.5 | 8.0 | 8.0 |
| **SATURATION (SAT/UNSAT)** | | | unsat | sat | sat | sat | sat | sat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | ND | ND | ND | ND | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | ND | ND | ND | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | ND | ND | ND | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | ND | ND | ND | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | ND | ND | ND | ND | ND |
| **Chrysene** | 0.04 | 400 | ND | ND | ND | ND | ND | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Pyrene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Total C-PAHs** | NA | 10000 | | | | | | |
| **Total Semivolatiles** | NA | 500000 | | | | | | |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction,
NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 11**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 17A, 17B, Semivolatiles by TCLP Extraction**

| ICM Confirmatory Sampling Area Description | Basement Conveyor System Chassis Plant PAOC 17 | | |
|---|---|---|---|
| **Sample ID** | | 17-03A | 17-06B |
| **SAMPLE TYPE** | | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | 2.5 | 2.0 |
| **SATURATION (SAT/UNSAT)** | | unsat | unsat |
| **STARS List Semivolatiles by TCLP Extraction (ug/l)** | NYSDEC Guideline(1) | | |
| **Acenaphthene** | 20 | ND | ND |
| **Anthracene** | 50 | ND | ND |
| **Benzo(a)Anthracene** | 0.002 | ND | ND |
| **Benzo(a)Pyrene** | 0.002 | ND | ND |
| **Benzo(b)Fluoranthene** | 0.002 | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.002 | ND | ND |
| **Benzo(k)Fluoranthene** | 0.002 | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.002 | ND | ND |
| **Chrysene** | 0.002 | ND | ND |
| **Dibenzo(a,h)Anthracene** | 50 | ND | ND |
| **Fluoranthene** | 50 | ND | ND |
| **Fluorene** | 50 | ND | ND |
| **Naphthalene** | 10 | ND | ND |
| **Phenanthrene** | 50 | ND | ND |
| **Pyrene** | 50 | ND | ND |

ND - Not Detected

J - Estimated

(1)TCLP extraction guidance value, NYSDEC STARS Memo No. 1, 1992

**Table 12**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 19 Semivolatiles**

| ICM Confirmatory Sampling Area Description | Column M23 Hydraulic Leak Chassis Plant PAOC 19 | | | |
|---|---|---|---|---|
| **Sample ID** | | | 19-01 | 19-02 |
| **SAMPLE TYPE** | **NYSDEC** | | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | **Guidelines** | | 1.3 | 1.3 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | |
| **Acenaphthene** | 400 | 50000 | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | ND | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | ND | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | ND | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | ND |
| **Chrysene** | 0.04 | 400 | ND | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND |
| **Fluoranthene** | 1000 | 50000 | ND | ND |
| **Fluorene** | 1000 | 50000 | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND |
| **Phenanthrene** | 1000 | 50000 | ND | ND |
| **Pyrene** | 1000 | 50000 | ND | ND |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 13**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 19 PCBs**

| ICM Confirmatory Sampling Area Description | Column M23 Hydraulic Leak Chassis Plant PAOC 19 | | |
|---|---|---|---|
| **Sample ID** | | 19-03 | 19-04 |
| **SAMPLE TYPE** | | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | | 1.3 | 1.3 |
| **SATURATION (SAT/UNSAT)** | | unsat | unsat |
| **PCB's (mg/kg)** | NYSDEC Guideline (1) | | |
| **PCB 1016** | 1.0 | ND | ND |
| **PCB 1221** | 1.0 | ND | ND |
| **PCB 1232** | 1.0 | ND | ND |
| **PCB 1242** | 1.0 | ND | ND |
| **PCB 1248** | 1.0 | ND | ND |
| **PCB 1254** | 1.0 | ND | ND |
| **PCB 1260** | 1.0 | ND | ND |

ND - Not Detected

J - Estimated

(1) NYSDEC TAGM 4046 Guideline for Surface Soils, Unrestricted Use

**Table 14**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 20 Semivolatiles**

| ICM Confirmatory Sampling Area Description | Column T20 Hydraulic Leak Chassis Plant PAOC 20 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** | | | 20-01 | 20-02 | 20-03 | 20-04 | 20-05 | 20-06 |
| **SAMPLE TYPE** | **NYSDEC** | | Composite | Composite | Composite | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | **Guidelines** | | 0.5 | 0.5 | 0.8 | 2 | 1.5 | 1 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | 760 | 580 | ND | 780 | 970 J | 1700 J |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | 830 | 790 | ND | 780 | 960 J | 1600 J |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | 1100 | 940 | ND | 790 | 1200 J | 1800 J |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | 400 | 420 | ND | 440 | ND | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | 850 | 900 | ND | 750 | 800 J | 1600 J |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | 440 | 450 | ND | 430 | ND | ND |
| **Chrysene** | 0.04 | 400 | 820 | 690 | ND | 740 | 1000 J | 1600 J |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | ND | ND | ND | ND | ND |
| **Fluoranthene** | 1000 | 50000 | 1200 | 1200 | 5500 | 1300 | 1600 J | 3300 J |
| **Fluorene** | 1000 | 50000 | ND | ND | ND | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 510 | 670 | ND | 1100 | 830 J | 2200 J |
| **Pyrene** | 1000 | 50000 | 1300 | 1500 | 4600 | 1800 | 1700 J | 3400 J |
| **Total C-PAHs** | NA | 10000 | 4800 | 4350 | | 4270 | 4930 J | 8300 J |
| **Total Semivolatiles** | NA | 500000 | 8210 | 8140 | 10100 | 8910 | 9060 J | 17200 J |

ND - Not Detected

J - Estimated

(1)Alternative guidance value for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 15**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area 20 Semivolatiles by TCLP Extraction**

| ICM Confirmatory Sampling Area Description | Column T20 Hydraulic Leak Chassis Plant PAOC 20 | |
|---|---|---|
| **Sample ID** | | 20-06A |
| **SAMPLE TYPE** | | Composite |
| **SAMPLE DEPTH (FT.)** | | 0.5 |
| **SATURATION (SAT/UNSAT)** | | unsat |
| **STARS List Semivolatiles By TCLP Extraction (ug/l)** | NYSDEC Guideline(1) | |
| **Acenaphthene** | 20 | ND |
| **Anthracene** | 50 | ND |
| **Benzo(a)Anthracene** | 0.002 | ND |
| **Benzo(a)Pyrene** | 0.002 | ND |
| **Benzo(b)Fluoranthene** | 0.002 | ND |
| **Benzo(g,h,i)Perylene** | 0.002 | ND |
| **Benzo(k)Fluoranthene** | 0.002 | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.002 | ND |
| **Chrysene** | 0.002 | ND |
| **Dibenzo(a,h)Anthracene** | 50 | ND |
| **Fluoranthene** | 50 | ND |
| **Fluorene** | 50 | ND |
| **Naphthalene** | 10 | ND |
| **Phenanthrene** | 50 | ND |
| **Pyrene** | 50 | ND |

ND - Not Detected

J - Estimated

(1)TCLP extraction guidance value, NYSDEC STARS Memo No. 1, 1992

**Table 16**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Area PQ20 Semivolatiles**

| ICM Confirmatory Sampling Area Description | Column PQ20 Machine Pit Chassis Plant | | | | |
|---|---|---|---|---|---|
| **Sample ID** | | | PQ20-01 | PQ20-02 | PQ20-03 |
| **SAMPLE TYPE** | **NYSDEC** | | Composite | Composite | Composite |
| **SAMPLE DEPTH (FT.)** | **Guidelines** | | 1 | 1 | 0.8 |
| **SATURATION (SAT/UNSAT)** | | | unsat | unsat | unsat |
| **STARS List Semivolatiles (ug/kg)** | NYSDEC 1992 Guidance(1) | Revised 2001 Guidance(2) | | | |
| **Acenaphthene** | 400 | 50000 | ND | ND | ND |
| **Anthracene** | 1000 | 50000 | ND | 1400 | ND |
| **Benzo(a)Anthracene** | 0.04 | 224 or MDL | ND | 2500 | ND |
| **Benzo(a)Pyrene** | 0.04 | 61 or MDL | 440 | 1900 | ND |
| **Benzo(b)Fluoranthene** | 0.04 | 61 or MDL | 480 | 2600 | ND |
| **Benzo(g,h,i)Perylene** | 0.04 | 50000 | ND | 910 | ND |
| **Benzo(k)Fluoranthene** | 0.04 | 610 or MDL | 430 | 1600 | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.04 | 3200 | ND | 1000 | ND |
| **Chrysene** | 0.04 | 400 | 400 | 2400 | ND |
| **Dibenzo(a,h)Anthracene** | 1000 | 14.3 or MDL | ND | 480 | ND |
| **Fluoranthene** | 1000 | 50000 | 760 | 6000 | ND |
| **Fluorene** | 1000 | 50000 | ND | ND | ND |
| **Naphthalene** | 200 | 13000 | ND | ND | ND |
| **Phenanthrene** | 1000 | 50000 | 360 | 5600 | ND |
| **Pyrene** | 1000 | 50000 | 550 | 3800 | ND |
| **Total C-PAHs** | NA | 10000 | 1750 | 12480 | |
| **Total Semivolatiles** | NA | 500000 | 3420 | 30190 | |

ND - Not Detected

J - Estimated

(1)Alternative guidance for soils without TCLP extraction, NYSDEC STARS Memo No. 1, 1992

(2) Revised guidance, April 10, 2001 memo from M. O'Toole

Value greater than revised 2001 guidance

**Table 17**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**PQ20 Semivolatiles by TCLP Extraction**

| IRM Confirmatory Sampling Area Description | Column PQ20 Machine Pit Chassis Plant | |
|---|---|---|
| **Sample ID** | | PQ20-02A |
| **SAMPLE TYPE** | | Composite |
| **SAMPLE DEPTH (FT.)** | | 2.0 |
| **SATURATION (SAT/UNSAT)** | | unsat |
| **STARS List Semivolatiles by TCLP Extraction (ug/l)** | NYSDEC Guideline(1) | |
| **Acenaphthene** | 20 | ND |
| **Anthracene** | 50 | ND |
| **Benzo(a)Anthracene** | 0.002 | ND |
| **Benzo(a)Pyrene** | 0.002 | ND |
| **Benzo(b)Fluoranthene** | 0.002 | ND |
| **Benzo(g,h,i)Perylene** | 0.002 | ND |
| **Benzo(k)Fluoranthene** | 0.002 | ND |
| **Indeno(1,2,3-cd)Pyrene** | 0.002 | ND |
| **Chrysene** | 0.002 | ND |
| **Dibenzo(a,h)Anthracene** | 50 | ND |
| **Fluoranthene** | 50 | ND |
| **Fluorene** | 50 | ND |
| **Naphthalene** | 10 | ND |
| **Phenanthrene** | 50 | ND |
| **Pyrene** | 50 | ND |

ND - Not Detected

J - Estimated

(1)TCLP extraction guidance value, NYSDEC STARS Memo No. 1, 1992

**Table 18**
**Former Tarrytown Assembly Plant**
**ICM Confirmatory Sample Results and TAGM Values**
**Storm Drain Catch Basins Volatiles and Semivolatiles**

| **ICM Confirmatory Sampling Area Description** | **Catch Basin One** (Infiltration) | **Catch Basin Two** (Infiltration) |
|---|---|---|
| **Sample ID** | GM-CB-01 | GM-CB-02 |
| **STARS List Volatiles (ug/l)** | | |
| **Benzene** | ND | ND |
| **Sec-Butylbenzene** | ND | ND |
| **Tert-Butylbenzene** | ND | ND |
| **N-Butylbenzene** | ND | ND |
| **Methyl-Tert-Butyl Ether (MTBE)** | 7* | ND |
| **Ethylbenzene** | ND | ND |
| **Isopropylbenzene** | ND | ND |
| **P-Isopropyltoluene** | ND | ND |
| **Naphthalene** | ND | ND |
| **N-Propylbenzene** | ND | ND |
| **Toluene** | ND | ND |
| **1, 2, 4-Trimethylbenzene** | ND | ND |
| **1, 3, 5-Trimethylbenzene** | ND | ND |
| **o-Xylene** | ND | ND |
| **m+p-Xylene** | ND | ND |
| **STARS List Semivolatiles (ug/l)** | | |
| **Acenaphthene** | ND | ND |
| **Anthracene** | ND | ND |
| **Benzo(a)Anthracene** | ND | ND |
| **Benzo(a)Pyrene** | ND | ND |
| **Benzo(b)Fluoranthene** | ND | ND |
| **Benzo(g, h, i)Perylene** | ND | ND |
| **Benzo(k)Fluoranthene** | ND | ND |
| **Indeno(1, 2, 3-cd)Pyrene** | ND | ND |
| **Chrysene** | ND | ND |
| **Dibenzo(a, h)Anthracene** | ND | ND |
| **Fluoranthene** | ND | ND |
| **Fluorene** | ND | ND |
| **Naphthalene** | ND | ND |
| **Phenanthrene** | ND | ND |
| **Pyrene** | ND | ND |
| | | |
| **Diesel Range Organics** | ND | ND |

*** TAGM 4046 Guidance Value for Groundwater is 10 ug/l**
ND - Not Detected

# Appendix A-4

# Supplemental Phase II Investigation – 2000 (EMCON 2003)

# Table 1
## Supplimental Phase II Subsurface Investigation Analytical Results
## Former General Motors
## Tarrytown Assembly Plant

### VOCs and SVOCs in TCLP Extracts from Soil Sample

| Sample Description | | Test Borings | | | | | | | | | Test Pit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location<br>Sample Depth (ft.) | NYSDEC Buidance Value (1) | TB-01<br>6-8' | TB-02<br>8-10' | TB-03<br>8-10' | TB-04<br>8-10' | TB-05<br>10-12' | TB-06<br>8-10' | TB-07<br>7-9' | TB-08<br>10-12' | TB-09<br>12-14' | TP-08<br>10-12' |
| **Volatile Organic Compounds (VOCs) ug/l** | | | | | | | | | | | |
| BENZENE | 0.7 | 150 | 23 | 13 | 6.4 | 3 | 0.7 U | 0.7 U | 28 | 0.7 U | 0.7 U |
| SEC-BUTYLBENZENE | 5 | 2.8 | 5.6 | 6 | 3.1 | 2.5 | 1.6 | 1 U | 28 | 1 U | 7.2 |
| TERT-BUTYLBENZENE | 5 | 1 U | 1 U | 1 U | 1.8 | 1 U | 1 U | 1 U | 2.5 U | 1 U | 1 U |
| N-BUTYLBENZENE | 5 | 14 | 10 | 7.4 | 6.4 | 1.3 | 1.7 | 1 U | 50 | 1 U | 28 |
| METHYL-TERT-BUTYLETHER | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2.5 U | 1 U | 1 U |
| ETHYLBENZENE | 5 | 11 | 6.8 | 7.5 | 1 U | 1 U | 1.4 | 1 U | 52 | 1 U | 1 U |
| ISOPROYLBENZENE | 5 | 18 | 29 | 27 | 4 | 5.1 | 1 U | 1 U | 140 | 1 U | 1 U |
| P-ISOPROPYLTOLUENE | 5 | 2.1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 23 | 1 U | 1 U |
| NAPTHALENE | 10 | 3.6 | 2.4 | 4.2 | 5 | 1 U | 1.9 | 1 U | 37 | 1 U | 140 |
| N-PROPYLBENZENE | 5 | 18 | 19 | 17 | 4.4 | 2 | 1 U | 1 U | 100 | 1 U | 1 U |
| TOLUENE | 5 | 34 | 8.7 U | 8.6 | 5.5 | 2.3 | 1 U | 1 U | 55 | 1 U | 1 U |
| 1,2,4-TRIMETHYLEBENZENE | 5 | 7.2 | 3.8 | 3.6 | 2.7 | 1 U | 1 U | 1 U | 14 | 1 U | 7.1 |
| 1,3,5-TRIMETHYLEBENZENE | 5 | 7.8 | 1.2 | 1 U | 1.6 | 1 U | 1 U | 1 U | 5.5 | 1 U | 14 |
| O-XYLENE | 5 | 12 | 3.5 | 2.2 | 2 U | 2 U | 2 U | 2 U | 16 | 2 U | 2 U |
| M+P-XYLENE | 5 | 45 | 23 | 13 | 3.3 | 2.8 | 2 U | 2 U | 57 | 2 U | 2 U |
| **Semi-Volatile Organic Compounds (SVOCs) ug/l** | | | | | | | | | | | |
| ACENAPHTHENE | 20 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 16 |
| ANTHRACENE | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| BENZO(A)ANTHRACENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| BENZO(A)PYRENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| BENZO(B)FLUORANTHENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| BENZO(G,H,I)PERYLENE | 5 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| BENZO(K)FLUORANTHENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| INDENO(1,2,3-CD)PYRENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| CHRYSENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| DIBENZO(A,H)ANTHRACENE | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| FLUORANTHENE | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| FLUORENE | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 17 |
| NAPHTHALENE | 10 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 18 | 10 U | 69 |
| PHENANTHRENE | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 24 |
| PYRENE | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |

Notes:
(1) TCLP Extraction Guidance Value, NYSDEC STARS Memo No. 1, 199
Concentrations above guidance values are shade
Undetected compounds are shown as a practical quantitation limit followed by "
Concentrations above guidance values are highlighte

# Appendix A-5

# Due Diligence Investigation – 2002 (EcolSciences 2002)

Table 1
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-5,14,21,22,23,24

| Sample ID | New York TAGM | AOC-5-1-8 | AOC-14-1A-1 | AOC-14-2-2.5 | AOC-14-3-3 | AOC-21-1-8 | AOC-21-2-5 | AOC-22-1-6 | AOC-22-1-8 | AOC-23-1-7 | AOC-24-1-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368851 | 369406 | 369407 | 369408 | 368439 | 369405 | 367960 | 367961 | 368854 | 367959 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/14/02 | 08/14/02 | 08/09/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/13/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | |
| Chloromethane | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Bromomethane | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| VinylChloride | 0.2 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Chloroethane | 1.9 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| MethyleneChloride | 0.1 | 0.0007 J | 0.0008 J | 0.0007 J | 0.0008 J | 0.0014 J | 0.0017 J | 0.0025 J | 0.0036 U | 0.0010 J | 0.0032 J |
| Acetone | 0.2 | 0.074 | 0.033 | 0.014 | 0.009 | 0.094 | 0.040 | 0.052 | 0.032 | 0.0062 U | 0.045 |
| CarbonDisulfide | 2.7 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.022 | 0.0026 J | 0.0013 J | 0.0028 J |
| 1,1-Dichloroethene | 0.4 | 0.0024 U | 0.0024 U | 0.0022 U | 0.0022 U | 0.0024 U | 0.0023 U | 0.0023 U | 0.0024 U | 0.0025 U | 0.0022 U |
| 1,1-Dichloroethane | 0.2 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| cis-1,2-Dichloroethene | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0009 J | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Chloroform | 0.3 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0009 J |
| 1,2-Dichloroethane | 0.1 | 0.0024 U | 0.0024 U | 0.0022 U | 0.0022 U | 0.0024 U | 0.0023 U | 0.0023 U | 0.0024 U | 0.0025 U | 0.0022 U |
| 2-Butanone | 0.3 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0074 | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| 1,1,1-Trichloroethane | 0.8 | 0.013 | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| CarbonTetrachloride | 0.6 | 0.0024 U | 0.0024 U | 0.0022 U | 0.0022 U | 0.0024 U | 0.0023 U | 0.0023 U | 0.0024 U | 0.0025 U | 0.0022 U |
| Bromodichloromethane | NA | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U |
| 1,2-Dichloropropane | NA | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U |
| cis-1,3-Dichloropropene | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Trichloroethene | 0.7 | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0007 J |
| Dibromochloromethane | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0049 J | 0.006 U | 0.0062 U | 0.0032 J |
| 1,1,2-Trichloroethane | NA | 0.0036 U | 0.0035 U | 0.0034 U | 0.0033 U | 0.0037 U | 0.0034 U | 0.0035 U | 0.0036 U | 0.0037 U | 0.0033 U |
| Benzene | 0.06 | 0.0010 J | 0.0012 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0021 | 0.0012 U | 0.0012 U | 0.0005 J |
| trans-1,3-Dichloropropene | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Bromoform | NA | 0.0008 J | 0.0047 U | 0.0045 U | 0.0044 U | 0.0081 | 0.0045 U | 0.06 | 0.0068 | 0.0050 U | 0.04 |
| 4-Methyl-2-Pentanone | 1 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| 2-Hexanone | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Tetrachloroethene | 1.4 | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0095 | 0.0012 U | 0.0012 U | 0.0011 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U |
| Toluene | 1.5 | 0.014 | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0010 J | 0.0054 U |
| Chlorobenzene | 1.7 | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Ethylbenzene | 5.5 | 0.0048 U | 0.0047 U | 0.0045 U | 0.0044 U | 0.0049 U | 0.0045 U | 0.0047 U | 0.0048 U | 0.0050 U | 0.0044 U |
| Styrene | NA | 0.0061 U | 0.0059 U | 0.0056 U | 0.0055 U | 0.0061 U | 0.0057 U | 0.0059 U | 0.006 U | 0.0062 U | 0.0054 U |
| Xylene(Total) | 1.2 | 0.0061 U | 0.0059 U | 0.0018 J | 0.0014 J | 0.0061 U | 0.0020 J | 0.0052 J | 0.006 U | 0.0062 U | 0.0054 U |
| Total Confident Conc. VOAs (s) | | 0.1 | 0.033 | 0.014 | 0.009 | 0.11 | 0.040 | 0.146 | 0.039 | 0 | 0.085 |
| Total Estimated Conc. VOA TICs (s) | | 0.0 | 0.01 | 0 | 0 | 0 | 0.0062 | 0.889 | 0.0071 | 0 | 0.684 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 1
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-5,14,21,22,23,24

| Sample ID | New York TAGM | AOC-5-1-8 | AOC-14-1A-1 | AOC-14-2-2.5 | AOC-14-3-3 | AOC-21-1-8 | AOC-21-2-5 | AOC-22-1-6 | AOC-22-1-8 | AOC-23-1-7 | AOC-24-1-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368851 | 369406 | 369407 | 369408 | 368439 | 369405 | 367960 | 367961 | 368854 | 367959 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/14/02 | 08/14/02 | 08/09/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/13/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 2.0 | 1.0 | 5.0 | | 5.0 | | | | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | |
| Phenol | **0.030 or MDL** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2-Chlorophenol | **0.8** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2-Methylphenol | **0.100 or MDL** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 4-Methylphenol | **0.9** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.023 J |
| 2-Nitrophenol | **0.330 or MDL** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2,4-Dimethylphenol | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2,4-Dichlorophenol | **0.4** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2,4,6-Trichlorophenol | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2,4,5-Trichlorophenol | **0.1** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | NR | 3.2 U | 1.5 U | 7.8 U | NR | 7.6 U | NR | NR | NR | 1.5 U |
| 4-Nitrophenol | **0.100 or MDL** | NR | 3.2 U | 1.5 U | 7.8 U | NR | 7.6 U | NR | NR | NR | 1.5 U |
| 4,6-Dinitro-2-methylphenol | **NA** | NR | 3.2 U | 1.5 U | 7.8 U | NR | 7.6 U | NR | NR | NR | 1.5 U |
| Pentachlorophenol | **1 or MDL** | NR | 3.2 U | 1.5 U | 7.8 U | NR | 7.6 U | NR | NR | NR | 1.5 U |
| bis(2-Chloroethyl)ether | **NA** | NR | 0.079 U | 0.037 U | 0.19 U | NR | 0.19 U | NR | NR | NR | 0.037 U |
| 1,3-Dichlorobenzene | **1.6** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 1,4-Dichlorobenzene | **8.5** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 1,2-Dichlorobenzene | **7.9** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| bis(2-chloroisopropyl)ether | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| N-Nitroso-di-n-propylamine | **NA** | NR | 0.079 U | 0.037 U | 0.19 U | NR | 0.19 U | NR | NR | NR | 0.037 U |
| Hexachloroethane | **NA** | NR | 0.079 U | 0.037 U | 0.19 U | NR | 0.19 U | NR | NR | NR | 0.037 U |
| Nitrobenzene | **0.200 or MDL** | NR | 0.079 U | 0.037 U | 0.19 U | NR | 0.19 U | NR | NR | NR | 0.037 U |
| Isophorone | **4.4** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| bis(2-Chloroethoxy)methane | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 1,2,4-Trichlorobenzene | **3.4** | NR | 0.079 U | 0.037 U | 0.19 U | NR | 0.19 U | NR | NR | NR | 0.037 U |
| Naphthalene | **13** | NR | 0.79 U | 0.037 J | 0.24 J | NR | 0.96 J | NR | NR | NR | 0.38 |
| 4-Chloroaniline | **0.220 or MDL** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| Hexachlorobutadiene | **NA** | NR | 0.16 U | 0.075 U | 0.39 U | NR | 0.38 U | NR | NR | NR | 0.075 U |
| 2-Methylnaphthalene | **36.400** | NR | 0.79 U | 0.044 J | 0.92 J | NR | 0.68 J | NR | NR | NR | 0.61 |

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B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 1
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-5,14,21,22,23,24

| Sample ID | New York TAGM | AOC-5-1-8 | AOC-14-1A-1 | AOC-14-2-2.5 | AOC-14-3-3 | AOC-21-1-8 | AOC-21-2-5 | AOC-22-1-6 | AOC-22-1-8 | AOC-23-1-7 | AOC-24-1-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368851 | 369406 | 369407 | 369408 | 368439 | 369405 | 367960 | 367961 | 368854 | 367959 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/14/02 | 08/14/02 | 08/09/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/13/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 2.0 | 1.0 | 5.0 | | 1.0 | | | | 1.0 |
| Hexachlorocyclopentadiene | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2-Chloronaphthalene | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 2-Nitroaniline | **0.430 or MDL** | NR | 1.6 U | 0.75 U | 3.9 U | NR | 3.8 U | NR | NR | NR | 0.75 U |
| Dimethylphthalate | **2.0** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| Acenaphthylene | **50** | NR | 0.79 U | 0.021 J | 0.079 J | NR | 0.26 J | NR | NR | NR | 0.019 J |
| 2,6-Dinitrotoluene | **1.0** | NR | 0.16 U | 0.075 U | 0.39 U | NR | 0.38 U | NR | NR | NR | 0.075 U |
| 3-Nitroaniline | **.500 or MDL** | NR | 1.6 U | 0.75 U | 3.9 U | NR | 3.8 U | NR | NR | NR | 0.75 U |
| Acenaphthene | **50** | NR | 0.79 U | 0.16 J | 0.73 J | NR | 0.82 J | NR | NR | NR | 0.013 J |
| Dibenzofuran | **6.2** | NR | 0.79 U | 0.079 J | 0.38 J | NR | 0.76 J | NR | NR | NR | 0.16 J |
| 2,4-Dinitrotoluene | **NA** | NR | 0.16 U | 0.075 U | 0.39 U | NR | 0.38 U | NR | NR | NR | 0.075 U |
| Diethylphthalate | **7.1** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 4-Chlorophenyl-phenylether | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 J | NR | NR | NR | 0.37 U |
| Fluorene | **50** | NR | 0.79 U | 0.16 J | 0.81 J | NR | 0.85 U | NR | NR | NR | 0.37 U |
| 4-Nitroaniline | **NA** | NR | 1.6 U | 0.75 U | 3.9 U | NR | 3.8 U | NR | NR | NR | 0.75 U |
| N-Nitrosodiphenylamine | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| 4-Bromophenyl-phenylether | **NA** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| Hexachlorobenzene | **0.410** | NR | 0.079 U | 0.037 U | 0.19 U | NR | 0.19 | NR | NR | NR | 0.037 U |
| Phenanthrene | **50** | NR | 0.023 J | 0.99 | 6.6 | NR | 8.8 | NR | NR | NR | 0.7 |
| Anthracene | **50** | NR | 0.79 U | 0.3 J | 2 | NR | 2.2 | NR | NR | NR | 0.03 J |
| Carbazole | **NA** | NR | 0.79 U | 0.13 J | 0.64 J | NR | 1.1 J | NR | NR | NR | 0.019 J |
| Di-n-butylphthalate | **8.1** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| Fluoranthene | **50** | NR | 0.049 J | 1 | 7.7 | NR | 8.4 | NR | NR | NR | 0.21 J |
| Pyrene | **50** | NR | 0.055 J | 1 | 8.9 | NR | 9.7 | NR | NR | NR | 0.2 J |
| Butylbenzylphthalate | **50** | NR | 0.79 U | 0.37 U | 0.56 J | NR | 0.38 J | NR | NR | NR | 0.37 U |
| 3,3'-Dichlorobenzidine | **NA** | NR | 1.6 U | 0.75 U | 3.9 U | NR | 3.8 U | NR | NR | NR | 0.75 U |
| Benzo(a)anthracene | **0.224 or MDL** | NR | 0.044 J | 0.48 | 4.1 | NR | 4.8 | NR | NR | NR | 0.13 |
| Chrysene | **0.4** | NR | 0.034 J | 0.52 | 4.8 | NR | 5.2 | NR | NR | NR | 0.28 J |
| bis(2-Ethylhexyl)phthalate | **50** | NR | 1.2 | 0.25 J | 1 J | NR | 0.53 J | NR | NR | NR | 0.37 U |
| Di-n-octylphthalate | **50** | NR | 0.79 U | 0.37 U | 1.9 U | NR | 1.9 U | NR | NR | NR | 0.37 U |
| Benzo(b)fluoranthene | **0.22 or MDL** | NR | 0.061 J | 0.54 | 4.7 | NR | 5.7 | NR | NR | NR | 0.21 |
| Benzo(k)fluoranthene | **0.22 or MDL** | NR | 0.028 J | 0.24 | 1.8 | NR | 2.7 | NR | NR | NR | 0.034 J |
| Benzo(a)pyrene | **0.061 or MDL** | NR | 0.047 J | 0.4 | 3.4 | NR | 4.5 | NR | NR | NR | 0.094 |
| Indeno(1,2,3-cd)pyrene | **3.2** | NR | 0.056 J | 0.16 | 1.7 | NR | 1.6 | NR | NR | NR | 0.028 J |
| Dibenz(a,h)anthracene | **0.014 or MDL** | NR | 0.079 U | 0.063 | 0.58 | NR | 0.8 | NR | NR | NR | 0.037 J |
| Benzo(g,h,i)perylene | **50** | NR | 0.056 J | 0.15 J | 1.6 J | NR | 1.6 J | NR | NR | NR | 0.039 J |
| Total Confident Conc. BNAs (s) | | | 1.2 | 5.393 | 46.28 | | 54.2 | | | | 2.124 |
| Total Estimated Conc. BNA TICs (s) | | | 0 | | 4.9 | | 4.9 | | | | 15.12 |

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NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 1
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-5,14,21,22,23,24

| Sample ID | New York TAGM | AOC-5-1-8 | AOC-14-1A-1 | AOC-14-2-2.5 | AOC-14-3-3 | AOC-21-1-8 | AOC-21-2-5 | AOC-22-1-6 | AOC-22-1-8 | AOC-23-1-7 | AOC-24-1-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368851 | 369406 | 369407 | 369408 | 368439 | 369405 | 367960 | 367961 | 368854 | 367959 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/14/02 | 08/14/02 | 08/09/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/13/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | | | | | | 1.0 |
| **PCBs** | | | | | | | | | | | |
| Aroclor-1016 | # | NR | 0.08 U | 0.075 U | 0.078 U | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1221 | # | NR | 0.08 U | 0.075 U | 0.078 U | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1232 | # | NR | 0.08 U | 0.075 U | 0.078 U | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1242 | # | NR | 0.08 U | 0.075 U | 0.078 U | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1248 | # | NR | 0.08 U | 0.075 U | 0.36 | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1254 | # | NR | 0.08 U | 0.075 U | 0.68 | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1260 | # | NR | 0.08 U | 0.075 U | 0.38 | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1262 | # | NR | 0.08 U | 0.075 U | 0.078 U | NR | NR | NR | NR | NR | 0.075 U |
| Aroclor-1268 | # | NR | 0.08 U | 0.075 U | 0.078 U | NR | NR | NR | NR | NR | 0.075 U |
| **WET CHEMISTRY** | | | | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |

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J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 1
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-5,14,21,22,23,24

| Sample ID | Eastern USA | New York TAGM | AOC-5-1-8 | | AOC-14-1A-1 | | AOC-14-2-2.5 | AOC-14-3-3 | AOC-21-1-8 | AOC-21-2-5 | AOC-22-1-6 | AOC-22-1-8 | AOC-23-1-7 | AOC-24-1-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 368851 | | 369406 | | 369407 | 369408 | 368439 | 369405 | 367960 | 367961 | 368854 | 367959 |
| Sampling Date | | Cleanup Objective | 08/13/02 | | 08/13/02 | | 08/14/02 | 08/14/02 | 08/09/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/13/02 | 08/08/02 |
| Matrix | | Criteria (mg/kg) | SOLID | | SOLID | | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | | mg/kg | | mg/kg | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **METALS** | | | | | | | | | | | | | | |
| Aluminum | **33,000** | **SB** | 5830 | | 5240 | | 4190 | 5580 | NR | 12,400 | NR | NR | NR | 3780 |
| Antimony | **N/A** | **SB** | 1.3 | B | 1.4 | U | 1.2 U | 1.4 U | NR | 1.2 U | NR | NR | NR | 1.0 U |
| Arsenic | **3 - 12** | **7.5 or SB** | 6.7 | | 1.7 | | 0.90 B | 3.7 | NR | 3.1 | NR | NR | NR | 15.5 |
| Barium | **15 - 600** | **300 or SB** | 135 | | 213 | | 39.4 B | 69.7 | NR | 108 | NR | NR | NR | 41.9 B |
| Beryllium | **0 - 1.75** | **0.16 or SB** | 0.40 | B | 0.21 | B | 0.10 B | 0.19 B | NR | 0.54 | NR | NR | NR | 0.66 |
| Cadmium | **0.1 - 1** | **1 or SB** | 1.2 | B | 0.71 | B | 0.19 B | 0.19 B | NR | 0.15 B | NR | NR | NR | 0.090 U |
| Calcium | **130 - 35000** | **SB** | 3220 | | 13300 | | 37800 | 71200 | NR | 110,100 | NR | NR | NR | 2710 |
| Chromium | **1.5 - 40** | **10 or SB** | 42.5 | | 15.6 | | 9.2 | 21.8 | NR | 18.6 | NR | NR | NR | 13.9 |
| Cobalt | **2.6 - 60** | **30 or SB** | 8.9 | B | 5.6 | B | 2.8 B | 4.4 B | NR | 5.2 B | NR | NR | NR | 5.8 B |
| Copper | **1 - 50** | **25 or SB** | 50.0 | | 33.6 | | 7.4 | 37.4 | NR | 14.3 | NR | NR | NR | 122 |
| Iron | **2000 - 550000** | **2000 or SB** | 27700 | | 11100 | | 7250 | 14400 | NR | 15.7 | NR | NR | NR | 31200 |
| Lead | **200 - 500** | **SB** | 293 | | 53.4 | | 12.1 | 52.4 | NR | 50.6 | NR | NR | NR | 48.5 |
| Magnesium | **100 - 5000** | **SB** | 1730 | | 5070 | | 6890 | 11400 | NR | 11700 | NR | NR | NR | 450 B |
| Manganese | **50 - 5000** | **SB** | 174 | | 186 | | 121 | 214 | NR | 501 | NR | NR | NR | 29.6 |
| Mercury | **0.001 - 0.2** | **0.1** | 0.07 | | 0.07 | | 0.02 B | 0.09 | NR | 0.07 | NR | NR | NR | 0.11 |
| Nickel | **0.5 - 25** | **13 or SB** | 49.2 | | 21.5 | | 6.5 B | 14.6 | NR | 14 | NR | NR | NR | 15.4 |
| Potassium | **8500 - 43000** | **SB** | 717 | B | 1500 | | 864 B | 1070 B | NR | 725 B | NR | NR | NR | 400 B |
| Selenium | **0.1 - 3.9** | **2 or SB** | 0.95 | U | 1.00 | U | 0.86 U | 0.98 U | NR | 0.87 U | NR | NR | NR | 1.0 U |
| Silver | **N/A** | **SB** | 0.17 | U | 0.33 | U | 0.29 U | 0.33 U | NR | 0.29 U | NR | NR | NR | 0.25 U |
| Sodium | **6000 - 8000** | **SB** | 132 | B | 222 | B | 207 B | 391 B | NR | 358 B | NR | NR | NR | 79.1 U |
| Thallium | **N/A** | **SB** | 1.1 | U | 1.1 | U | 0.96 U | 1.1 U | NR | 0.97 U | NR | NR | NR | 0.92 U |
| Vanadium | **1 - 300** | **150 or SB** | 22.0 | | 17.7 | | 9.3 B | 11.6 | NR | 16.8 | NR | NR | NR | 14.0 |
| Zinc | **9 - 50** | **20 or SB** | 608 | | 323 | | 105 | 126 | NR | 137 | NR | NR | NR | 22.1 |

U - The compound not detected at the indicated concentration.
J - Approximate Concentration Value
B - Analyte found in the laboratory blank as well as sample.
NR - Not analyzed.
SB - Site Background
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 2
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-25,26

| Sample ID | New York TAGM | AOC-25-1-3 | AOC-25-2-5 | AOC-25-3-7 | AOC-26-1-9 | AOC-26-2-4 | AOC-26-3-7 | AOC-26-4-7 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369400 | 369403 | 369404 | 368438 | 368847 | 368852 | 368853 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/13/02 | 08/09/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | |
| Chloromethane | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Bromomethane | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| VinylChloride | 0.2 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Chloroethane | 1.9 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| MethyleneChloride | 0.1 | 0.0032 U | 0.0033 U | 0.0032 U | 0.0017 J | 0.0017 J | 0.0007 J | 0.0007 J |
| Acetone | 0.2 | 0.0053 U | 0.024 | 0.042 | 0.0062 U | 0.12 | 0.051 | 0.12 |
| CarbonDisulfide | 2.7 | 0.0053 U | 0.0012 J | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0013 J |
| 1,1-Dichloroethene | 0.4 | 0.0021 U | 0.0022 U | 0.0021 U | 0.0025 U | 0.0022 U | 0.0022 U | 0.0023 U |
| 1,1-Dichloroethane | 0.2 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0012 J | 0.0054 U | 0.0057 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| cis-1,2-Dichloroethene | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0008 J | 0.0056 U | 0.0054 U | 0.0057 U |
| Chloroform | 0.3 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| 1,2-Dichloroethane | 0.1 | 0.0021 U | 0.0022 U | 0.0021 U | 0.0025 U | 0.0022 U | 0.0022 U | 0.0023 U |
| 2-Butanone | 0.3 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| 1,1,1-Trichloroethane | 0.8 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| CarbonTetrachloride | 0.6 | 0.0021 U | 0.0022 U | 0.0021 U | 0.0025 U | 0.0022 U | 0.0022 U | 0.0023 U |
| Bromodichloromethane | NA | 0.0011 U | 0.0011 U | 0.001 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U |
| 1,2-Dichloropropane | NA | 0.0011 U | 0.0011 U | 0.001 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U |
| cis-1,3-Dichloropropene | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Trichloroethene | 0.7 | 0.0011 U | 0.0012 | 0.001 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U |
| Dibromochloromethane | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| 1,1,2-Trichloroethane | NA | 0.0032 U | 0.0033 U | 0.0032 U | 0.0037 U | 0.0033 U | 0.0032 U | 0.0034 U |
| Benzene | 0.06 | 0.0011 U | 0.0011 U | 0.001 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U |
| trans-1,3-Dichloropropene | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Bromoform | NA | 0.0023 J | 0.004 J | 0.0012 J | 0.0079 | 0.012 | 0.0027 J | 0.0067 |
| 4-Methyl-2-Pentanone | 1 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| 2-Hexanone | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Tetrachloroethene | 1.4 | 0.0011 U | 0.0011 U | 0.001 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0011 U | 0.0011 U | 0.001 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U |
| Toluene | 1.5 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0020 J | 0.0054 U | 0.0057 U |
| Chlorobenzene | 1.7 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Ethylbenzene | 5.5 | 0.0043 U | 0.0045 U | 0.0042 U | 0.0049 U | 0.0045 U | 0.0043 U | 0.0046 U |
| Styrene | NA | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Xylene(Total) | 1.2 | 0.0053 U | 0.0056 U | 0.0053 U | 0.0062 U | 0.0056 U | 0.0054 U | 0.0057 U |
| Total Confident Conc. VOAs (s) | | 0 | 0.025 | 0.042 | 0.0079 | 0.1 | 0.1 | 0.1 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0.031 | 0 | 0 | 0.0 | 0 | 0 |

U - The compound was not detected at the indicated concentration.
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B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 2
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-25,26

| Sample ID | New York TAGM | AOC-25-1-3 | AOC-25-2-5 | AOC-25-3-7 | AOC-26-1-9 | AOC-26-2-4 | AOC-26-3-7 | AOC-26-4-7 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369400 | 369403 | 369404 | 368438 | 368847 | 368852 | 368853 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/13/02 | 08/09/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | |
| Phenol | **0.030 or MDL** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2-Chlorophenol | **0.8** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2-Methylphenol | **0.100 or MDL** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 4-Methylphenol | **0.9** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2-Nitrophenol | **0.330 or MDL** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,4-Dimethylphenol | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,4-Dichlorophenol | **0.4** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,4,6-Trichlorophenol | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,4,5-Trichlorophenol | **0.1** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,4-Dinitrophenol | **0.200 or MDL** | 1.4 U | 1.5 U | 1.5 U | 1.6 U | NR | 1.5 U | NR |
| 4-Nitrophenol | **0.100 or MDL** | 1.4 U | 1.5 U | 1.5 U | 1.6 U | NR | 1.5 U | NR |
| 4,6-Dinitro-2-methylphenol | **NA** | 1.4 U | 1.5 U | 1.5 U | 1.6 U | NR | 1.5 U | NR |
| Pentachlorophenol | **1 or MDL** | 1.4 U | 1.5 U | 1.5 U | 1.6 U | NR | 1.5 U | NR |
| bis(2-Chloroethyl)ether | **NA** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| 1,3-Dichlorobenzene | **1.6** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 1,4-Dichlorobenzene | **8.5** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 1,2-Dichlorobenzene | **7.9** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| bis(2-chloroisopropyl)ether | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| N-Nitroso-di-n-propylamine | **NA** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Hexachloroethane | **NA** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Nitrobenzene | **0.200 or MDL** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Isophorone | **4.4** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| bis(2-Chloroethoxy)methane | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 1,2,4-Trichlorobenzene | **3.4** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Naphthalene | **13** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 4-Chloroaniline | **0.220 or MDL** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Hexachlorobutadiene | **NA** | 0.072 U | 0.076 U | 0.075 U | 0.083 U | NR | 0.073 U | NR |
| 2-Methylnaphthalene | **36.400** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |

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NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 2
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-25,26

| Sample ID | New York TAGM | AOC-25-1-3 | AOC-25-2-5 | AOC-25-3-7 | AOC-26-1-9 | AOC-26-2-4 | AOC-26-3-7 | AOC-26-4-7 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369400 | 369403 | 369404 | 368438 | 368847 | 368852 | 368853 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/13/02 | 08/09/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | |
| Hexachlorocyclopentadiene | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2-Chloronaphthalene | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2-Nitroaniline | **0.430 or MDL** | 0.72 U | 0.76 U | 0.75 U | 0.83 U | NR | 0.73 U | NR |
| Dimethylphthalate | **2.0** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Acenaphthylene | **50** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,6-Dinitrotoluene | **1.0** | 0.072 U | 0.076 U | 0.075 U | 0.083 U | NR | 0.073 U | NR |
| 3-Nitroaniline | **.500 or MDL** | 0.72 U | 0.76 U | 0.75 U | 0.83 U | NR | 0.73 U | NR |
| Acenaphthene | **50** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Dibenzofuran | **6.2** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 2,4-Dinitrotoluene | **NA** | 0.072 U | 0.076 U | 0.075 U | 0.083 U | NR | 0.073 U | NR |
| Diethylphthalate | **7.1** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 4-Chlorophenyl-phenylether | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Fluorene | **50** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 4-Nitroaniline | **NA** | 0.72 U | 0.76 U | 0.75 U | 0.83 U | NR | 0.73 U | NR |
| N-Nitrosodiphenylamine | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 4-Bromophenyl-phenylether | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Hexachlorobenzene | **0.410** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Phenanthrene | **50** | 0.0094 J | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Anthracene | **50** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Carbazole | **NA** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Di-n-butylphthalate | **8.1** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Fluoranthene | **50** | 0.015 J | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Pyrene | **50** | 0.016 J | 0.38 U | 0.38 U | 0.0093 J | NR | 0.37 U | NR |
| Butylbenzylphthalate | **50** | 0.84 | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| 3,3'-Dichlorobenzidine | **NA** | 0.72 U | 0.76 U | 0.75 U | 0.83 U | NR | 0.73 U | NR |
| Benzo(a)anthracene | **0.224 or MDL** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Chrysene | **0.4** | 0.0094 J | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| bis(2-Ethylhexyl)phthalate | **50** | 0.076 J | 0.092 J | 0.38 U | 0.34 J | NR | 0.37 U | NR |
| Di-n-octylphthalate | **50** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Benzo(b)fluoranthene | **0.22 or MDL** | 0.013 J | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Benzo(k)fluoranthene | **0.22 or MDL** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Benzo(a)pyrene | **0.061 or MDL** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Indeno(1,2,3-cd)pyrene | **3.2** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Dibenz(a,h)anthracene | **0.014 or MDL** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | NR | 0.037 U | NR |
| Benzo(g,h,i)perylene | **50** | 0.36 U | 0.38 U | 0.38 U | 0.41 U | NR | 0.37 U | NR |
| Total Confident Conc. BNAs (s) | | 0.84 | 0 | 0 | 0 | | 0 | |
| Total Estimated Conc. BNA TICs (s) | | 0 | 0 | 0 | 0 | | 0 | |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

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Former General Motors Site
Tarrytown, New York
AOC-25,26

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|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369400 | 369403 | 369404 | 368438 | 368847 | 368852 | 368853 |
| Sampling Date | Cleanup Objective | 08/13/02 | 08/13/02 | 08/13/02 | 08/09/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | |
| **PCBs** | | | | | | | | |
| Aroclor-1016 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1221 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1232 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1242 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1248 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1254 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1260 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1262 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| Aroclor-1268 | # | 0.073 U | 0.076 U | 0.076 U | 0.083 U | NR | 0.074 U | NR |
| **PESTICIDES** | | | | | | | | |
| Aldrin | **0.041** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| alpha-BHC | **0.11** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| beta-BHC | **0.2** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| delta-BHC | **0.3** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| gamma-BHC(Lindane) | **0.06** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Chlordane | **0.54** | NR | NR | NR | 0.083 U | NR | 0.074 U | NR |
| 4,4'-DDD | **2.9** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| 4,4'-DDE | **2.1** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| 4,4'-DDT | **2.1** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Dieldrin | **0.044** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| EndosulfanI | **0.9** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| EndosulfanII | **0.9** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Endosulfansulfate | **1.0** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Endrin | **0.1** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Endrinaldehyde | **N/A** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Endrinketone | **N/A** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Heptachlor | **0.1** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Heptachlorepoxide | **0.02** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Methoxychlor | **Site Specific** | NR | NR | NR | 0.0083 U | NR | 0.0074 U | NR |
| Toxaphene | **N/A** | NR | NR | NR | 0.083 U | NR | 0.074 U | NR |
| **WET CHEMISTRY** | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | NR | NR | 0.5 U | NR | 0.5 U | NR |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 2
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-25,26

| Sample ID | Eastern USA | New York TAGM | AOC-25-1-3 | | AOC-25-2-5 | | AOC-25-3-7 | | AOC-26-1-9 | | AOC-26-2-4 | | AOC-26-3-7 | | AOC-26-4-7 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 369400 | | 369403 | | 369404 | | 368438 | | 368847 | | 368852 | | 368853 | |
| Sampling Date | | Cleanup Objective | 08/13/02 | | 08/13/02 | | 08/13/02 | | 08/09/02 | | 08/12/02 | | 08/13/02 | | 08/13/02 | |
| Matrix | | Criteria (mg/kg) | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Dilution Factor | | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| **METALS** | | | | | | | | | | | | | | | | |
| Aluminum | **33,000** | **SB** | 5170 | | 8830 | | 10700 | | 10800 | | 8470 | | 3480 | | 8880 | |
| Antimony | **N/A** | **SB** | 1.3 | U | 1.3 | U | 1.3 | U | 1.4 | U | 1.2 | U | 0.86 | U | 2.0 | B |
| Arsenic | **3 - 12** | **7.5 or SB** | 0.70 | U | 0.81 | B | 1.5 | | 1.0 | B | 3.6 | | 0.98 | B | 3.5 | |
| Barium | **15 - 600** | **300 or SB** | 52.7 | | 34.2 | B | 42.2 | B | 78.2 | | 368 | | 12.9 | B | 116 | |
| Beryllium | **0 - 1.75** | **0.16 or SB** | 0.13 | B | 0.30 | B | 0.44 | | 0.73 | | 0.38 | B | 0.19 | B | 0.39 | B |
| Cadmium | **0.1 - 1** | **1 or SB** | 0.087 | U | 0.091 | U | 0.090 | U | 0.099 | U | 1.8 | | 0.088 | U | 0.34 | B |
| Calcium | **130 - 35000** | **SB** | 1930 | | 831 | B | 1980 | | 2630 | | 25200 | | 1210 | | 12500 | |
| Chromium | **1.5 - 40** | **10 or SB** | 17.3 | | 15.9 | | 41.4 | | 27.3 | | 21.4 | | 7.9 | | 29.5 | |
| Cobalt | **2.6 - 60** | **30 or SB** | 4.2 | B | 5.9 | B | 9.6 | B | 8.6 | B | 5.5 | B | 4.7 | B | 6.5 | B |
| Copper | **1 - 50** | **25 or SB** | 14.0 | | 53.8 | | 30.4 | | 18.5 | | 27.2 | | 7.9 | | 68.8 | |
| Iron | **2000 - 550000** | **2000 or SB** | 8660 | | 16000 | | 18600 | | 20800 | | 60800 | | 8890 | | 20400 | |
| Lead | **200 - 500** | **SB** | 10.3 | | 21.0 | | 7.6 | | 8.4 | | 1540 | | 4.2 | | 193 | |
| Magnesium | **100 - 5000** | **SB** | 2990 | | 3560 | | 3210 | | 4810 | | 6010 | | 1530 | | 5630 | |
| Manganese | **50 - 5000** | **SB** | 153 | | 210 | | 402 | | 392 | | 443 | | 215 | | 176 | |
| Mercury | **0.001 - 0.2** | **0.1** | 0.018 | U | 0.02 | B | 0.019 | U | 0.021 | U | 0.12 | | 0.02 | B | 0.10 | |
| Nickel | **0.5 - 25** | **13 or SB** | 14.5 | | 15.1 | | 26.0 | | 20.1 | | 15.3 | | 9.7 | | 22.5 | |
| Potassium | **8500 - 43000** | **SB** | 1230 | | 513 | B | 1400 | | 3090 | | 1230 | B | 429 | B | 1340 | |
| Selenium | **0.1 - 3.9** | **2 or SB** | 0.91 | U | 0.95 | U | 0.95 | U | 1.0 | U | 1.2 | U | 0.86 | U | 0.89 | U |
| Silver | **N/A** | **SB** | 0.30 | U | 0.32 | U | 0.32 | U | 0.35 | U | 0.21 | U | 0.15 | U | 0.16 | U |
| Sodium | **6000 - 8000** | **SB** | 131 | B | 431 | B | 273 | B | 98.0 | U | 933 | B | 79.4 | U | 180 | B |
| Thallium | **N/A** | **SB** | 1.0 | U | 1.1 | U | 1.1 | U | 1.2 | U | 1.3 | U | 0.97 | U | 1.0 | U |
| Vanadium | **1 - 300** | **150 or SB** | 13.7 | | 11.9 | | 24.8 | | 25.8 | | 22.9 | | 9.8 | B | 23.0 | |
| Zinc | **9 - 50** | **20 or SB** | 23.1 | | 39.2 | | 339 | | 47.8 | | 419 | | 12.5 | | 215 | |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 3
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-27,28,29

| Sample ID | New York TAGM | AOC-27-1-6 | AOC-27-1-12 | AOC-27-2-8 | AOC-28-1-4 | AOC-28-2-4 | AOC-28-3-8 | AOC-29-1-4 | AOC-29-2-4 | AOC-29-2-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367547 | 367548 | 367549 | 368442 | 368838 | 368839 | 368440 | 368849 | 368850 |
| Sampling Date | Cleanup Objective | 08/06/02 | 08/06/02 | 08/06/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/09/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | | | | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | | | | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | |
| Chloromethane | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Bromomethane | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| VinylChloride | 0.2 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Chloroethane | 1.9 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| MethyleneChloride | 0.1 | 0.0022 J | 0.0018 J | 0.0017 J | NR | NR | NR | 0.0016 J | 0.0037 U | 0.0035 U |
| Acetone | 0.2 | 0.085 | 0.0053 U | 0.0061 U | NR | NR | NR | 0.047 | 0.0061 U | 0.084 |
| CarbonDisulfide | 2.7 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0029 J | 0.0041 J |
| 1,1-Dichloroethene | 0.4 | 0.0021 U | 0.0021 U | 0.0024 U | NR | NR | NR | 0.0024 U | 0.0024 U | 0.0023 U |
| 1,1-Dichloroethane | 0.2 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| cis-1,2-Dichloroethene | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Chloroform | 0.3 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| 1,2-Dichloroethane | 0.1 | 0.0021 U | 0.0021 U | 0.0024 U | NR | NR | NR | 0.0024 U | 0.0024 U | 0.0023 U |
| 2-Butanone | 0.3 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| 1,1,1-Trichloroethane | 0.8 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| CarbonTetrachloride | 0.6 | 0.0021 U | 0.0021 U | 0.0024 U | NR | NR | NR | 0.0024 U | 0.0024 U | 0.0023 U |
| Bromodichloromethane | NA | 0.0011 U | 0.0010 U | 0.0012 U | NR | NR | NR | 0.0012 U | 0.0012 U | 0.0012 U |
| 1,2-Dichloropropane | NA | 0.0011 U | 0.0010 U | 0.0012 U | NR | NR | NR | 0.0012 U | 0.0012 U | 0.0012 U |
| cis-1,3-Dichloropropene | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Trichloroethene | 0.7 | 0.0011 U | 0.0010 U | 0.0012 U | NR | NR | NR | 0.0012 U | 0.0012 U | 0.0012 U |
| Dibromochloromethane | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| 1,1,2-Trichloroethane | NA | 0.0032 U | 0.0032 U | 0.0036 U | NR | NR | NR | 0.0036 U | 0.0037 U | 0.0035 U |
| Benzene | 0.06 | 0.0015 | 0.0010 U | 0.0012 U | NR | NR | NR | 0.0012 U | 0.0012 U | 0.0007 J |
| trans-1,3-Dichloropropene | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Bromoform | NA | 0.012 | 0.0053 | 0.0051 | NR | NR | NR | 0.004 J | 0.0012 J | 0.0018 J |
| 4-Methyl-2-Pentanone | 1 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| 2-Hexanone | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Tetrachloroethene | 1.4 | 0.0011 U | 0.0010 U | 0.0012 U | NR | NR | NR | 0.0012 U | 0.0012 U | 0.0012 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0011 U | 0.0010 U | 0.0012 U | NR | NR | NR | 0.0012 U | 0.0012 U | 0.0012 U |
| Toluene | 1.5 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0011 J |
| Chlorobenzene | 1.7 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.001 J | 0.0061 U | 0.0059 U |
| Ethylbenzene | 5.5 | 0.0043 U | 0.0042 U | 0.0049 U | NR | NR | NR | 0.0049 U | 0.0049 U | 0.0047 U |
| Styrene | NA | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Xylene(Total) | 1.2 | 0.0053 U | 0.0053 U | 0.0061 U | NR | NR | NR | 0.0061 U | 0.0061 U | 0.0059 U |
| Total Confident Conc. VOAs (s) | | 0.1 | 0.0 | 0.0 | | | | 0.047 | 0 | 0.1 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0 | 0 | | | | 0 | 0 | 0.0 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approxamate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 3
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-27,28,29

| Sample ID | New York TAGM | AOC-27-1-6 | AOC-27-1-12 | AOC-27-2-8 | AOC-28-1-4 | AOC-28-2-4 | AOC-28-3-8 | AOC-29-1-4 | AOC-29-2-4 | AOC-29-2-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367547 | 367548 | 367549 | 368442 | 368838 | 368839 | 368440 | 368849 | 368850 |
| Sampling Date | Cleanup Objective | 08/06/02 | 08/06/02 | 08/06/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/09/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | | | | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | |
| Phenol | **0.030 or MDL** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2-Chlorophenol | **0.8** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2-Methylphenol | **0.100 or MDL** | NR | NR | NR | 0.78 U | 0.37 U | 0.033 J | 0.42 U | 0.43 U | 0.46 U |
| 4-Methylphenol | **0.9** | NR | NR | NR | 0.094 J | 0.0098 J | 0.058 J | 0.42 U | 0.019 J | 0.014 J |
| 2-Nitrophenol | **0.330 or MDL** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2,4-Dimethylphenol | **NA** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2,4-Dichlorophenol | **0.4** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2,4,6-Trichlorophenol | **NA** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2,4,5-Trichlorophenol | **0.1** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | NR | NR | NR | 3.1 U | 1.5 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U |
| 4-Nitrophenol | **0.100 or MDL** | NR | NR | NR | 3.1 U | 1.5 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U |
| 4,6-Dinitro-2-methylphenol | **NA** | NR | NR | NR | 3.1 U | 1.5 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U |
| Pentachlorophenol | **1 or MDL** | NR | NR | NR | 3.1 U | 1.5 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U |
| bis(2-Chloroethyl)ether | **NA** | NR | NR | NR | 0.078 U | 0.037 U | 0.042 U | 0.042 U | 0.043 U | 0.046 U |
| 1,3-Dichlorobenzene | **1.6** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 1,4-Dichlorobenzene | **8.5** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 1,2-Dichlorobenzene | **7.9** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| bis(2-chloroisopropyl)ether | **NA** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| N-Nitroso-di-n-propylamine | **NA** | NR | NR | NR | 0.078 U | 0.037 U | 0.042 U | 0.042 U | 0.043 U | 0.046 U |
| Hexachloroethane | **NA** | NR | NR | NR | 0.078 U | 0.037 U | 0.042 U | 0.042 U | 0.043 U | 0.046 U |
| Nitrobenzene | **0.200 or MDL** | NR | NR | NR | 0.078 U | 0.037 U | 0.042 U | 0.042 U | 0.043 U | 0.046 U |
| Isophorone | **4.4** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| bis(2-Chloroethoxy)methane | **NA** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 1,2,4-Trichlorobenzene | **3.4** | NR | NR | NR | 0.078 U | 0.037 U | 0.042 U | 0.042 U | 0.043 U | 0.046 U |
| Naphthalene | **13** | NR | NR | NR | 1 | 0.081 J | 2.3 | 0.035 J | 0.34 J | 0.32 J |
| 4-Chloroaniline | **0.220 or MDL** | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| Hexachlorobutadiene | **NA** | NR | NR | NR | 0.16 U | 0.073 U | 0.085 U | 0.085 U | 0.086 U | 0.092 U |
| 2-Methylnaphthalene | **36.400** | NR | NR | NR | 0.86 | 0.073 J | 3.2 | 0.042 J | 0.49 | 0.49 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approxamate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 3
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-27,28,29

| Sample ID | New York TAGM | AOC-27-1-6 | AOC-27-1-12 | AOC-27-2-8 | AOC-28-1-4 | AOC-28-2-4 | AOC-28-3-8 | AOC-29-1-4 | AOC-29-2-4 | AOC-29-2-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367547 | 367548 | 367549 | 368442 | 368838 | 368839 | 368440 | 368849 | 368850 |
| Sampling Date | Cleanup Objective | 08/06/02 | 08/06/02 | 08/06/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/09/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | | | | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Hexachlorocyclopentadiene | NA | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2-Chloronaphthalene | NA | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 2-Nitroaniline | 0.430 or MDL | NR | NR | NR | 1.6 U | 0.73 U | 0.85 U | 0.85 U | 0.86 U | 0.92 U |
| Dimethylphthalate | 2.0 | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| Acenaphthylene | 50 | NR | NR | NR | 1.4 | 0.14 J | 0.42 U | 0.14 J | 0.080 J | 0.074 J |
| 2,6-Dinitrotoluene | 1.0 | NR | NR | NR | 0.16 U | 0.073 U | 0.085 U | 0.085 U | 0.086 U | 0.092 U |
| 3-Nitroaniline | .500 or MDL | NR | NR | NR | 1.6 U | 0.73 U | 0.85 U | 0.85 U | 0.86 U | 0.92 U |
| Acenaphthene | 50 | NR | NR | NR | 0.077 J | 0.11 J | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| Dibenzofuran | 6.2 | NR | NR | NR | 0.39 J | 0.080 J | 0.77 | 0.032 J | 0.10 J | 0.12 J |
| 2,4-Dinitrotoluene | NA | NR | NR | NR | 0.16 U | 0.073 U | 0.085 U | 0.085 U | 0.086 U | 0.092 U |
| Diethylphthalate | 7.1 | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 4-Chlorophenyl-phenylether | NA | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| Fluorene | 50 | NR | NR | NR | 0.25 J | 0.11 J | 0.42 U | 0.0098 J | 0.43 U | 0.46 U |
| 4-Nitroaniline | NA | NR | NR | NR | 1.6 U | 0.73 U | 0.85 U | 0.85 U | 0.86 U | 0.92 U |
| N-Nitrosodiphenylamine | NA | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| 4-Bromophenyl-phenylether | NA | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| Hexachlorobenzene | 0.410 | NR | NR | NR | 0.078 U | 0.037 U | 0.042 U | 0.042 U | 0.043 U | 0.046 U |
| Phenanthrene | 50 | NR | NR | NR | 2.7 | 1.5 | 1.3 | 0.32 J | 0.40 J | 0.45 J |
| Anthracene | 50 | NR | NR | NR | 1.2 | 0.44 | 0.054 J | 0.2 J | 0.077 J | 0.064 J |
| Carbazole | NA | NR | NR | NR | 0.23 J | 0.14 J | 0.058 J | 0.012 J | 0.026 J | 0.018 J |
| Di-n-butylphthalate | 8.1 | NR | NR | NR | 0.78 U | 0.37 U | 0.72 | 0.42 U | 0.43 U | 0.46 U |
| Fluoranthene | 50 | NR | NR | NR | 7.2 | 2.2 | 0.29 J | 0.81 | 0.45 | 0.31 J |
| Pyrene | 50 | NR | NR | NR | 7.7 | 2.1 | 0.26 J | 0.84 | 0.84 | 0.54 |
| Butylbenzylphthalate | 50 | NR | NR | NR | 0.8 | 0.18 J | 0.42 U | 0.42 U | 0.10 J | 0.46 U |
| 3,3'-Dichlorobenzidine | NA | NR | NR | NR | 1.6 U | 0.73 U | 0.85 U | 0.85 U | 0.86 U | 0.92 U |
| Benzo(a)anthracene | 0.224 or MDL | NR | NR | NR | 4.5 | 1.1 | 0.18 | 0.93 | 0.57 | 0.26 |
| Chrysene | 0.4 | NR | NR | NR | 4.8 | 1.1 | 0.48 | 1.2 | 0.75 | 0.30 J |
| bis(2-Ethylhexyl)phthalate | 50 | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.097 J | 0.43 U | 0.46 U |
| Di-n-octylphthalate | 50 | NR | NR | NR | 0.78 U | 0.37 U | 0.42 U | 0.42 U | 0.43 U | 0.46 U |
| Benzo(b)fluoranthene | 0.22 or MDL | NR | NR | NR | 6.5 | 1.5 | 0.23 | 2 | 0.82 | 0.35 |
| Benzo(k)fluoranthene | 0.22 or MDL | NR | NR | NR | 2.8 | 0.56 | 0.072 | 0.91 | 0.29 | 0.14 |
| Benzo(a)pyrene | 0.061 or MDL | NR | NR | NR | 4.1 | 1.1 | 0.096 | 1.2 | 0.74 | 0.34 |
| Indeno(1,2,3-cd)pyrene | 3.2 | NR | NR | NR | 2.1 | 0.72 | 0.054 | 1.1 | 0.36 | 0.35 |
| Dibenz(a,h)anthracene | 0.014 or MDL | NR | NR | NR | 0.56 | 0.16 | 0.027 J | 0.31 | 0.15 | 0.14 |
| Benzo(g,h,i)perylene | 50 | NR | NR | NR | 1.6 | 0.78 | 0.061 J | 0.95 | 0.42 J | 0.54 |
| Total Confident Conc. BNAs (s) | | | | | 49.82 | 13 | 9.4 | 10.25 | 5.4 | 3.1 |
| Total Estimated Conc. BNA TICs (s) | | | | | 24.72 | 2.2 | 23 | 2.19 | 2.1 | 1.6 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approxamate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 3
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-27,28,29

| Sample ID | New York TAGM | AOC-27-1-6 | AOC-27-1-12 | AOC-27-2-8 | AOC-28-1-4 | AOC-28-2-4 | AOC-28-3-8 | AOC-29-1-4 | AOC-29-2-4 | AOC-29-2-8 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367547 | 367548 | 367549 | 368442 | 368838 | 368839 | 368440 | 368849 | 368850 |
| Sampling Date | Cleanup Objective | 08/06/02 | 08/06/02 | 08/06/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/09/02 | 08/13/02 | 08/13/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | | | | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | | | | | 1.0 | 1.0 | 1.0 |
| **PCBs** | | | | | | | | | | |
| Aroclor-1016 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1221 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1232 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1242 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1248 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1254 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1260 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1262 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| Aroclor-1268 | # | NR | NR | NR | NR | NR | NR | 0.086 U | 0.086 U | 0.093 U |
| **WET CHEMISTRY** | | | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | NR | NR | NR | NR | NR | NR | NR | NR |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approxamate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 3
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-27,28,29

| Sample ID | Eastern USA | New York TAGM | AOC-27-1-6 | AOC-27-1-12 | AOC-27-2-8 | AOC-28-1-4 | AOC-28-2-4 | AOC-28-3-8 | AOC-29-1-4 | AOC-29-2-4 | AOC-29-2-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 367547 | 367548 | 367549 | 368442 | 368838 | 368839 | 368440 | 368849 | 368850 |
| Sampling Date | | Cleanup Objective | 08/06/02 | 08/06/02 | 08/06/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/09/02 | 08/13/02 | 08/13/02 |
| Matrix | | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | | mg/kg | mg/kg | mg/kg | | | | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | | | | 1.0 | 1.0 | 1.0 |
| **METALS** | | | | | | | | | | | |
| Aluminum | **33,000** | **SB** | NR | NR | NR | NR | NR | NR | 12600 | 4350 | 5670 |
| Antimony | **N/A** | **SB** | NR | NR | NR | NR | NR | NR | 7.4 | 128 | 31.5 |
| Arsenic | **3 - 12** | **7.5 or SB** | NR | NR | NR | NR | NR | NR | 5.1 | 13.5 | 16.8 |
| Barium | **15 - 600** | **300 or SB** | NR | NR | NR | NR | NR | NR | 323 | 324 | 195 |
| Beryllium | **0 - 1.75** | **0.16 or SB** | NR | NR | NR | NR | NR | NR | 0.82 | 0.32 B | 0.50 B |
| Cadmium | **0.1 - 1** | **1 or SB** | NR | NR | NR | NR | NR | NR | 1.7 | 1.5 B | 0.76 B |
| Calcium | **130 - 35000** | **SB** | NR | NR | NR | NR | NR | NR | 7850 | 8750 | 7690 |
| Chromium | **1.5 - 40** | **10 or SB** | NR | NR | NR | NR | NR | NR | 37.4 | 28.4 | 21.7 |
| Cobalt | **2.6 - 60** | **30 or SB** | NR | NR | NR | NR | NR | NR | 9.6 B | 6.4 B | 8.2 B |
| Copper | **1 - 50** | **25 or SB** | NR | NR | NR | NR | NR | NR | 72.4 | 176 | 143 |
| Iron | **2000 - 550000** | **2000 or SB** | NR | NR | NR | NR | NR | NR | 28600 | 29300 | 41400 |
| Lead | **200 - 500** | **SB** | NR | NR | NR | NR | NR | NR | 2740 | 50100 | 1940 |
| Magnesium | **100 - 5000** | **SB** | NR | NR | NR | NR | NR | NR | 4690 | 2910 | 1380 |
| Manganese | **50 - 5000** | **SB** | NR | NR | NR | NR | NR | NR | 475 | 185 | 213 |
| Mercury | **0.001 - 0.2** | **0.1** | NR | NR | NR | NR | NR | NR | 0.60 | 0.15 | 0.21 |
| Nickel | **0.5 - 25** | **13 or SB** | NR | NR | NR | NR | NR | NR | 26.9 | 23.8 | 37.4 |
| Potassium | **8500 - 43000** | **SB** | NR | NR | NR | NR | NR | NR | 1260 | 489 B | 380 B |
| Selenium | **0.1 - 3.9** | **2 or SB** | NR | NR | NR | NR | NR | NR | 0.98 U | 1.4 U | 0.98 U |
| Silver | **N/A** | **SB** | NR | NR | NR | NR | NR | NR | 0.33 U | 3.3 B | 0.35 B |
| Sodium | **6000 - 8000** | **SB** | NR | NR | NR | NR | NR | NR | 180 B | 232 B | 319 B |
| Thallium | **N/A** | **SB** | NR | NR | NR | NR | NR | NR | 1.1 U | 1.5 U | 1.1 U |
| Vanadium | **1 - 300** | **150 or SB** | NR | NR | NR | NR | NR | NR | 37.0 | 19.7 | 21.3 |
| Zinc | **9 - 50** | **20 or SB** | NR | NR | NR | NR | NR | NR | 507 | 755 | 3690 |

U - The compound not detected at the indicated concentration.
J - Approximate concentration B - Analyte found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm
SB - Site Background

Table 4
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-30,32,33

| Sample ID | New York TAGM | AOC-30-1-6 | AOC-30-2-1 | AOC-30-2-8 | AOC-30-3-4 | AOC-30-3-6 | AOC-32-1-3 | AOC-32-2-7 | AOC-33-1-5 |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368432 | 368433 | 368434 | 368435 | 368436 | 368841 | 368842 | 368422 |
| Sampling Date | Cleanup Objective | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | |
| Chloromethane | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Bromomethane | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| VinylChloride | **0.2** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Chloroethane | **1.9** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| MethyleneChloride | **0.1** | 0.0016 J | 0.0014 J | 0.002 J | 0.002 J | 0.002 J | 0.0006 J | 0.0010 J | 0.0017 J |
| Acetone | **0.2** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.093 | 0.026 | 0.027 |
| CarbonDisulfide | **2.7** | 0.0027 J | 0.0035 J | 0.0012 J | 0.0051 U | 0.0051 U | 0.0026 J | 0.0008 J | 0.0041 J |
| 1,1-Dichloroethene | **0.4** | 0.0019 U | 0.0021 U | 0.0021 U | 0.002 U | 0.002 U | 0.0021 U | 0.0023 U | 0.0023 U |
| 1,1-Dichloroethane | **0.2** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| trans-1,2-Dichloroethene | **0.3** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| cis-1,2-Dichloroethene | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Chloroform | **0.3** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| 1,2-Dichloroethane | **0.1** | 0.0019 U | 0.0021 U | 0.0021 U | 0.002 U | 0.002 U | 0.0021 U | 0.0023 U | 0.0023 U |
| 2-Butanone | **0.3** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| 1,1,1-Trichloroethane | **0.8** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| CarbonTetrachloride | **0.6** | 0.0019 U | 0.0021 U | 0.0021 U | 0.002 U | 0.002 U | 0.0021 U | 0.0023 U | 0.0023 U |
| Bromodichloromethane | **NA** | 0.0009 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.0010 U | 0.0011 U | 0.0012 U |
| 1,2-Dichloropropane | **NA** | 0.0009 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.0010 U | 0.0011 U | 0.0012 U |
| cis-1,3-Dichloropropene | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Trichloroethene | **0.7** | 0.0009 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.0010 U | 0.0011 U | 0.0012 U |
| Dibromochloromethane | **NA** | 0.0006 J | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| 1,1,2-Trichloroethane | **NA** | 0.0028 U | 0.0032 U | 0.0032 U | 0.0031 U | 0.003 U | 0.0031 U | 0.0034 U | 0.0035 U |
| Benzene | **0.06** | 0.0009 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.0010 U | 0.0011 U | 0.0012 U |
| trans-1,3-Dichloropropene | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Bromoform | **NA** | 0.014 | 0.013 | 0.0095 | 0.0098 | 0.0084 | 0.0032 J | 0.0041 J | 0.0062 |
| 4-Methyl-2-Pentanone | **1** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| 2-Hexanone | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Tetrachloroethene | **1.4** | 0.0009 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.0010 U | 0.0011 U | 0.0012 U |
| 1,1,2,2-Tetrachloroethane | **0.6** | 0.0009 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.0010 U | 0.0011 U | 0.0012 U |
| Toluene | **1.5** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Chlorobenzene | **1.7** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Ethylbenzene | **5.5** | 0.0038 U | 0.0043 U | 0.0042 U | 0.0041 U | 0.004 U | 0.0042 U | 0.0046 U | 0.0047 U |
| Styrene | **NA** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0052 U | 0.0057 U | 0.0058 U |
| Xylene(Total) | **1.2** | 0.0047 U | 0.0053 U | 0.0052 U | 0.0051 U | 0.0051 U | 0.0026 J | 0.0057 U | 0.0058 U |
| Total Confident Conc. VOAs (s) | | 0.014 | 0.013 | 0.0095 | 0.0098 | 0.0084 | 0.1 | 0.0 | 0.033 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0.006 | 0 | 0 | 0 | 0.9 | 0 | 0.023 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 4
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-30,32,33

| Sample ID | New York TAGM | AOC-30-1-6 | AOC-30-2-1 | AOC-30-2-8 | AOC-30-3-4 | AOC-30-3-6 | AOC-32-1-3 | AOC-32-2-7 | AOC-33-1-5 |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368432 | 368433 | 368434 | 368435 | 368436 | 368841 | 368842 | 368422 |
| Sampling Date | Cleanup Objective | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | | | | 1.0 | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | |
| Phenol | **0.030 or MDL** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2-Chlorophenol | **0.8** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2-Methylphenol | **0.100 or MDL** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 4-Methylphenol | **0.9** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2-Nitrophenol | **0.330 or MDL** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2,4-Dimethylphenol | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2,4-Dichlorophenol | **0.4** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2,4,6-Trichlorophenol | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2,4,5-Trichlorophenol | **0.1** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | NR | NR | NR | NR | NR | 7.4 U | 1.5 U | 1.6 U |
| 4-Nitrophenol | **0.100 or MDL** | NR | NR | NR | NR | NR | 7.4 U | 1.5 U | 1.6 U |
| 4,6-Dinitro-2-methylphenol | **NA** | NR | NR | NR | NR | NR | 7.4 U | 1.5 U | 1.6 U |
| Pentachlorophenol | **1 or MDL** | NR | NR | NR | NR | NR | 7.4 U | 1.5 U | 1.6 U |
| bis(2-Chloroethyl)ether | **NA** | NR | NR | NR | NR | NR | 0.18 U | 0.039 U | 0.04 U |
| 1,3-Dichlorobenzene | **1.6** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 1,4-Dichlorobenzene | **8.5** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 1,2-Dichlorobenzene | **7.9** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| bis(2-chloroisopropyl)ether | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| N-Nitroso-di-n-propylamine | **NA** | NR | NR | NR | NR | NR | 0.18 U | 0.039 U | 0.04 U |
| Hexachloroethane | **NA** | NR | NR | NR | NR | NR | 0.18 U | 0.039 U | 0.04 U |
| Nitrobenzene | **0.200 or MDL** | NR | NR | NR | NR | NR | 0.18 U | 0.039 U | 0.04 U |
| Isophorone | **4.4** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| bis(2-Chloroethoxy)methane | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 1,2,4-Trichlorobenzene | **3.4** | NR | NR | NR | NR | NR | 0.18 U | 0.039 U | 0.04 U |
| Naphthalene | **13** | NR | NR | NR | NR | NR | 0.90 J | 0.39 U | 0.026 J |
| 4-Chloroaniline | **0.220 or MDL** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| Hexachlorobutadiene | **NA** | NR | NR | NR | NR | NR | 0.37 U | 0.077 U | 0.08 U |
| 2-Methylnaphthalene | **36.400** | NR | NR | NR | NR | NR | 1.0 J | 0.39 U | 0.021 J |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 4
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-30,32,33

| Sample ID | New York TAGM | AOC-30-1-6 | AOC-30-2-1 | AOC-30-2-8 | AOC-30-3-4 | AOC-30-3-6 | AOC-32-1-3 | AOC-32-2-7 | AOC-33-1-5 |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368432 | 368433 | 368434 | 368435 | 368436 | 368841 | 368842 | 368422 |
| Sampling Date | Cleanup Objective | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | | | | 1.0 | 1.0 | 1.0 |
| Hexachlorocyclopentadiene | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2-Chloronaphthalene | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 2-Nitroaniline | **0.430 or MDL** | NR | NR | NR | NR | NR | 3.7 U | 0.77 U | 0.8 U |
| Dimethylphthalate | **2.0** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| Acenaphthylene | **50** | NR | NR | NR | NR | NR | 0.12 J | 0.39 U | 0.1 J |
| 2,6-Dinitrotoluene | **1.0** | NR | NR | NR | NR | NR | 0.37 U | 0.077 U | 0.08 U |
| 3-Nitroaniline | **.500 or MDL** | NR | NR | NR | NR | NR | 3.7 U | 0.77 U | 0.8 U |
| Acenaphthene | **50** | NR | NR | NR | NR | NR | 2.2 | 0.39 U | 0.11 J |
| Dibenzofuran | **6.2** | NR | NR | NR | NR | NR | 1.8 J | 0.39 U | 0.0099 J |
| 2,4-Dinitrotoluene | **NA** | NR | NR | NR | NR | NR | 0.37 U | 0.077 U | 0.08 U |
| Diethylphthalate | **7.1** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 4-Chlorophenyl-phenylether | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| Fluorene | **50** | NR | NR | NR | NR | NR | 1.8 J | 0.39 U | 0.032 J |
| 4-Nitroaniline | **NA** | NR | NR | NR | NR | NR | 3.7 U | 0.77 U | 0.8 U |
| N-Nitrosodiphenylamine | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| 4-Bromophenyl-phenylether | **NA** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| Hexachlorobenzene | **0.410** | NR | NR | NR | NR | NR | 0.18 U | 0.039 U | 0.04 U |
| Phenanthrene | **50** | NR | NR | NR | NR | NR | 17 | 0.39 U | 0.28 J |
| Anthracene | **50** | NR | NR | NR | NR | NR | 4.3 | 0.39 U | 0.11 J |
| Carbazole | **NA** | NR | NR | NR | NR | NR | 2.4 | 0.011 J | 0.4 U |
| Di-n-butylphthalate | **8.1** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| Fluoranthene | **50** | NR | NR | NR | NR | NR | 17 | 0.39 U | 0.83 |
| Pyrene | **50** | NR | NR | NR | NR | NR | 17 | 0.0083 J | 1 |
| Butylbenzylphthalate | **50** | NR | NR | NR | NR | NR | 0.93 J | 0.39 U | 0.4 U |
| 3,3'-Dichlorobenzidine | **NA** | NR | NR | NR | NR | NR | 3.7 U | 0.77 U | 0.8 U |
| Benzo(a)anthracene | **0.224 or MDL** | NR | NR | NR | NR | NR | 7.9 | 0.039 U | 0.38 |
| Chrysene | **0.4** | NR | NR | NR | NR | NR | 8.3 | 0.39 U | 0.5 |
| bis(2-Ethylhexyl)phthalate | **50** | NR | NR | NR | NR | NR | 2.3 | 0.39 U | 0.4 U |
| Di-n-octylphthalate | **50** | NR | NR | NR | NR | NR | 1.8 U | 0.39 U | 0.4 U |
| Benzo(b)fluoranthene | **0.22 or MDL** | NR | NR | NR | NR | NR | 9.0 | 0.039 U | 0.41 |
| Benzo(k)fluoranthene | **0.22 or MDL** | NR | NR | NR | NR | NR | 3.4 | 0.039 U | 0.17 |
| Benzo(a)pyrene | **0.061 or MDL** | NR | NR | NR | NR | NR | 6.2 | 0.039 U | 0.32 |
| Indeno(1,2,3-cd)pyrene | **3.2** | NR | NR | NR | NR | NR | 3.2 | 0.039 U | 0.25 |
| Dibenz(a,h)anthracene | **0.014 or MDL** | NR | NR | NR | NR | NR | 0.99 | 0.039 U | 0.068 |
| Benzo(g,h,i)perylene | **50** | NR | NR | NR | NR | NR | 3.2 | 0.39 U | 0.28 J |
| Total Confident Conc. BNAs (s) | | | | | | | 104 | 0 | 3.928 |
| Total Estimated Conc. BNA TICs (s) | | | | | | | 36 | 0 | 0.36 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 4
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-30,32,33

| Sample ID | New York TAGM | AOC-30-1-6 | AOC-30-2-1 | AOC-30-2-8 | AOC-30-3-4 | AOC-30-3-6 | AOC-32-1-3 | AOC-32-2-7 | AOC-33-1-5 |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368432 | 368433 | 368434 | 368435 | 368436 | 368841 | 368842 | 368422 |
| Sampling Date | Cleanup Objective | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/09/02 | 08/12/02 | 08/12/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | | | | 1.0 | 1.0 | 1.0 |
| **PCBs** | | | | | | | | | |
| Aroclor-1016 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1221 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1232 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1242 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1248 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1254 | # | NR | NR | NR | NR | NR | **5.3** | 0.078 U | 0.081 U |
| Aroclor-1260 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1262 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| Aroclor-1268 | # | NR | NR | NR | NR | NR | 0.37 U | 0.078 U | 0.081 U |
| **PESTICIDES** | | | | | | | | | |
| Aldrin | **0.041** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| alpha-BHC | **0.11** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| beta-BHC | **0.2** | NR | NR | NR | NR | NR | 0.048 P* | 0.0078 U | 0.0081 U |
| delta-BHC | **0.3** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| gamma-BHC(Lindane) | **0.06** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| Chlordane | **0.54** | NR | NR | NR | NR | NR | 0.15 U | 0.078 U | 0.081 U |
| 4,4'-DDD | **2.9** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| 4,4'-DDE | **2.1** | NR | NR | NR | NR | NR | 0.083 | 0.0078 U | 0.0081 U |
| 4,4'-DDT | **2.1** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| Dieldrin | **0.044** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| EndosulfanI | **0.9** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| EndosulfanII | **0.9** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| Endosulfansulfate | **1.0** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| Endrin | **0.1** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.013 |
| Endrinaldehyde | **N/A** | NR | NR | NR | NR | NR | 0.053 P* | 0.0078 U | 0.0081 U |
| Endrinketone | **N/A** | NR | NR | NR | NR | NR | 0.031 P* | 0.0078 U | 0.0081 P* |
| Heptachlor | **0.1** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| Heptachlorepoxide | **0.02** | NR | NR | NR | NR | NR | 0.015 U | 0.0078 U | 0.0081 U |
| Methoxychlor | **Site Specific** | NR | NR | NR | NR | NR | 0.031 P* | 0.0078 U | 0.018 |
| Toxaphene | **N/A** | NR | NR | NR | NR | NR | 0.15 U | 0.078 U | 0.081 U |
| **WET CHEMISTRY** | | | | | | | | | |
| Hezavalent Chromium | | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | NR | NR | NR |
| TotalCyanide - mg/kg | Site Specific | NR | NR | NR | NR | NR | 0.5 U | 0.5 U | 0.5 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 4
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC-30,32,33

| Sample ID | Eastern USA | New York TAGM | AOC-30-1-6 | | AOC-30-2-1 | | AOC-30-2-8 | | AOC-30-3-4 | | AOC-30-3-6 | | AOC-32-1-3 | | AOC-32-2-7 | | AOC-33-1-5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 368432 | | 368433 | | 368434 | | 368435 | | 368436 | | 368841 | | 368842 | | 368422 | |
| Sampling Date | | Cleanup Objective | 08/09/02 | | 08/09/02 | | 08/09/02 | | 08/09/02 | | 08/09/02 | | 08/12/02 | | 08/12/02 | | 08/08/02 | |
| Matrix | | Criteria (mg/kg) | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Dilution Factor | | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| **METALS** | | | | | | | | | | | | | | | | | | |
| Aluminum | **33,000** | **SB** | 7340 | | 6050 | | 6200 | | 6960 | | 7590 | | 4810 | | 7680 | | 11100 | |
| Antimony | **N/A** | **SB** | 1.2 | U | 1.2 | U | 1.2 | U | 1.1 | U | 1.2 | U | 1.5 | B | 0.82 | U | 1.3 | U |
| Arsenic | **3 - 12** | **7.5 or SB** | 2.1 | | 1.9 | | 1.0 | B | 1.0 | | 0.97 | B | 3.0 | | 1.4 | | 4.0 | |
| Barium | **15 - 600** | **300 or SB** | 12.5 | B | 25.3 | B | 11.9 | B | 12.2 | B | 8.4 | B | 106 | | 13.9 | B | 52.7 | |
| Beryllium | **0 - 1.75** | **0.16 or SB** | 0.28 | B | 0.24 | B | 0.24 | B | 0.30 | B | 0.28 | B | 0.20 | B | 0.24 | B | 0.51 | |
| Cadmium | **0.1 - 1** | **1 or SB** | 0.084 | U | 0.081 | U | 0.085 | U | 0.076 | U | 0.084 | U | 1.3 | | 0.084 | U | 0.088 | U |
| Calcium | **130 - 35000** | **SB** | 1060 | | 38400 | | 11000 | | 16400 | | 2500 | | 102800 | | 8710 | | 5780 | |
| Chromium | **1.5 - 40** | **10 or SB** | 10.0 | | 9.3 | | 8.7 | | 10.0 | | 9.9 | | 20.6 | | 9.5 | | 16.1 | |
| Cobalt | **2.6 - 60** | **30 or SB** | 5.3 | B | 4.4 | B | 5.1 | B | 5.4 | B | 5.5 | B | 4.4 | B | 5.2 | B | 9.3 | B |
| Copper | **1 - 50** | **25 or SB** | 10.0 | | 11.7 | | 7.9 | | 9.7 | | 10.1 | | 61.6 | | 9.5 | | 17.1 | |
| Iron | **2000 - 550000** | **2000 or SB** | 17100 | | 13500 | | 13600 | | 17000 | | 17700 | | 10400 | | 17100 | | 24700 | |
| Lead | **200 - 500** | **SB** | 4.6 | | 22.8 | | 4.4 | | 4.4 | | 3.8 | | 100 | | 5.3 | | 8.1 | |
| Magnesium | **100 - 5000** | **SB** | 4020 | | 4460 | | 4650 | | 4180 | | 4800 | | 27800 | | 4380 | | 5940 | |
| Manganese | **50 - 5000** | **SB** | 203 | | 215 | | 171 | | 178 | | 168 | | 196 | | 185 | | 316 | |
| Mercury | **0.001 - 0.2** | **0.1** | 0.017 | U | 0.03 | B | 0.019 | U | 0.02 | B | 0.017 | U | 0.91 | | 0.019 | U | 0.02 | B |
| Nickel | **0.5 - 25** | **13 or SB** | 14.9 | | 12.0 | | 12.2 | | 14.4 | | 14.9 | | 25.7 | | 15.1 | | 21.7 | |
| Potassium | **8500 - 43000** | **SB** | 871 | B | 835 | B | 846 | B | 692 | B | 726 | B | 987 | B | 828 | B | 1600 | |
| Selenium | **0.1 - 3.9** | **2 or SB** | 0.88 | U | 0.85 | U | 0.89 | U | 0.80 | U | 0.88 | U | 0.86 | U | 0.82 | U | 0.92 | U |
| Silver | **N/A** | **SB** | 0.29 | U | 0.28 | U | 0.30 | U | 0.27 | U | 0.29 | U | 0.33 | B | 0.15 | U | 0.31 | U |
| Sodium | **6000 - 8000** | **SB** | 88.8 | B | 317 | B | 125 | B | 182 | B | 83.0 | U | 482 | B | 217 | B | 586 | B |
| Thallium | **N/A** | **SB** | 0.98 | U | 0.95 | U | 1.00 | U | 0.89 | U | 0.99 | U | 0.97 | U | 0.93 | U | 1.0 | U |
| Vanadium | **1 - 300** | **150 or SB** | 10.8 | | 10.3 | B | 11.1 | | 11.1 | | 10.6 | | 75.9 | | 11.0 | | 17.7 | |
| Zinc | **9 - 50** | **20 or SB** | 55.9 | | 49.2 | | 41.3 | | 37.0 | | 39.9 | | 409 | | 38.6 | | 65.9 | |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
NR - Not analyzed.
SB - Site Background
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 5
Soil Sampling Results
Former Genral Motors Site
Tarrytown, New York
AOC-31

| Sample ID | New York | AOC-31-1 | AOC-31-2 | AOC-31-3 | AOC-31-4 | AOC-31-5 | AOC-31-6 | AOC-31-7 | AOC-31-8 | AOC-31-9 | AOC-31-10 | AOC-31-11 | AOC-31-12 | AOC-31-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369422 | 369423 | 369737 | 369738 | 369739 | 369740 | 369741 | 369742 | 369743 | 369744 | 369746 | 369747 | 369748 |
| Sampling Date | Rec. Soil | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/16/02 | 08/16/02 | 08/16/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | | | |
| Chloromethane | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Bromomethane | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| VinylChloride | 0.2 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Chloroethane | 1.9 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| MethyleneChloride | 0.1 | 0.001 J | 0.0016 J | 0.0009 J | 0.0013 J | 0.0017 J | 0.0021 J | 0.0012 J | 0.0012 J | 0.0009 J | 0.0018 J | 0.0028 J | 0.0024 J | 0.0018 J |
| Acetone | 0.2 | 0.060 | 0.096 | 0.042 | 0.069 | 0.054 | 0.058 | 0.05 | 0.055 | 0.061 | 0.058 | 0.074 | 0.067 | 0.054 |
| CarbonDisulfide | 2.7 | 0.002 J | 0.0071 | 0.0016 J | 0.002 J | 0.001 J | 0.0009 J | 0.0018 J | 0.0012 J | 0.0013 J | 0.0014 J | 0.0013 J | 0.0008 J | 0.0008 J |
| 1,1-Dichloroethene | 0.4 | 0.0022 U | 0.0022 U | 0.0023 U | 0.0024 U | 0.0024 U | 0.0023 U | 0.0024 U | 0.0023 U | 0.0022 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0023 U |
| 1,1-Dichloroethane | 0.2 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| cis-1,2-Dichloroethene | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Chloroform | 0.3 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| 1,2-Dichloroethane | 0.1 | 0.0022 U | 0.0022 U | 0.0023 U | 0.0024 U | 0.0024 U | 0.0023 U | 0.0024 U | 0.0023 U | 0.0022 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0023 U |
| 2-Butanone | 0.3 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.052 | 0.0057 U | 0.0057 U |
| 1,1,1-Trichloroethane | 0.8 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| CarbonTetrachloride | 0.6 | 0.0022 U | 0.0022 U | 0.0023 U | 0.0024 U | 0.0024 U | 0.0023 U | 0.0024 U | 0.0023 U | 0.0022 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0023 U |
| Bromodichloromethane | NA | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0011 U |
| 1,2-Dichloropropane | NA | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0011 U |
| cis-1,3-Dichloropropene | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Trichloroethene | 0.7 | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.002 | 0.0012 U | 0.0011 U | 0.0011 U |
| Dibromochloromethane | NA | 0.0011 J | 0.001 J | 0.0008 J | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| 1,1,2-Trichloroethane | NA | 0.0034 U | 0.0033 U | 0.0034 U | 0.0035 U | 0.0035 U | 0.0035 U | 0.0035 U | 0.0034 U | 0.0034 U | 0.0033 U | 0.0035 U | 0.0034 U | 0.0034 U |
| Benzene | 0.06 | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0011 U |
| trans-1,3-Dichloropropene | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Bromoform | NA | 0.012 | 0.010 | 0.0073 | 0.0032 J | 0.01 | 0.0048 | 0.0028 J | 0.0018 J | 0.0028 J | 0.0027 J | 0.0023 J | 0.003 J | 0.0032 J |
| 4-Methyl-2-Pentanone | 1 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0065 | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| 2-Hexanone | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Tetrachloroethene | 1.4 | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0011 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0011 U |
| Toluene | 1.5 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Chlorobenzene | 1.7 | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Ethylbenzene | 5.5 | 0.0045 U | 0.0044 U | 0.0045 U | 0.0047 U | 0.0047 U | 0.0046 U | 0.0047 U | 0.0045 U | 0.0045 U | 0.0044 U | 0.0047 U | 0.0046 U | 0.0046 U |
| Styrene | NA | 0.0056 U | 0.0054 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0058 U | 0.0059 U | 0.0057 U | 0.0056 U | 0.0055 U | 0.0059 U | 0.0057 U | 0.0057 U |
| Xylene(Total) | 1.2 | 0.002 J | 0.0018 J | 0.0029 J | 0.0059 U | 0.0023 J | 0.0028 J | 0.0059 U | 0.0057 U | 0.0056 U | 0.0031 J | 0.0059 U | 0.0057 U | 0.0057 U |
| Total Confident Conc. VOAs (s) | | 0.072 | 0.113 | 0.049 | 0.069 | 0.071 | 0.063 | 0.05 | 0.055 | 0.061 | 0.06 | 0.126 | 0.067 | 0.054 |
| Total Estimated Conc. VOA TICs (s) | | 0.0087 | 0.063 | 0.017 | 0.013 | 0.017 | 0.0093 | 0.018 | 0.011 | 0.042 | 0.107 | 0.042 | 0.015 | 0.023 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 5
Soil Sampling Results
Former Genral Motors Site
Tarrytown, New York
AOC-31

| Sample ID | New York | AOC-31-1 | AOC-31-2 | AOC-31-3 | AOC-31-4 | AOC-31-5 | AOC-31-6 | AOC-31-7 | AOC-31-8 | AOC-31-9 | AOC-31-10 | AOC-31-11 | AOC-31-12 | AOC-31-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369422 | 369423 | 369737 | 369738 | 369739 | 369740 | 369741 | 369742 | 369743 | 369744 | 369746 | 369747 | 369748 |
| Sampling Date | Rec. Soil | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/16/02 | 08/16/02 | 08/16/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 10 | 25 | 25.0 | 10.0 | 20.0 | 20.0 | 20.0 | 25.0 | 20.0 | 25.0 | 25.0 | 20.0 | 10.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | | | |
| Phenol | **0.030 or MDL** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2-Chlorophenol | **0.8** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2-Methylphenol | **0.100 or MDL** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 4-Methylphenol | **0.9** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2-Nitrophenol | **0.330 or MDL** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2,4-Dimethylphenol | **NA** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2,4-Dichlorophenol | **0.4** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2,4,6-Trichlorophenol | **NA** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2,4,5-Trichlorophenol | **0.1** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | 16 U | 38 U | 38 U | 16 U | 32 U | 31 U | 32 U | 39 U | 31 U | 39 U | 40 U | 31 U | 15 U |
| 4-Nitrophenol | **0.100 or MDL** | 16 U | 38 U | 38 U | 16 U | 32 U | 31 U | 32 U | 39 U | 31 U | 39 U | 40 U | 31 U | 15 U |
| 4,6-Dinitro-2-methylphenol | **NA** | 16 U | 38 U | 38 U | 16 U | 32 U | 31 U | 32 U | 39 U | 31 U | 39 U | 40 U | 31 U | 15 U |
| Pentachlorophenol | **1 or MDL** | 16 U | 38 U | 38 U | 16 U | 32 U | 31 U | 32 U | 39 U | 31 U | 39 U | 40 U | 31 U | 15 U |
| bis(2-Chloroethyl)ether | **NA** | 0.39 U | 0.95 U | 0.96 U | 0.4 U | 0.8 U | 0.77 U | 0.79 U | 0.98 U | 0.79 U | 0.97 U | 0.99 U | 0.78 U | 0.39 U |
| 1,3-Dichlorobenzene | **1.6** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 1,4-Dichlorobenzene | **8.5** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 1,2-Dichlorobenzene | **7.9** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| bis(2-chloroisopropyl)ether | **NA** | 0.39 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| N-Nitroso-di-n-propylamine | **NA** | 0.39 U | 0.95 U | 0.96 U | 0.4 U | 0.8 U | 0.77 U | 0.79 U | 0.98 U | 0.79 U | 0.97 U | 0.99 U | 0.78 U | 0.39 U |
| Hexachloroethane | **NA** | 0.39 U | 0.95 U | 0.96 U | 0.4 U | 0.8 U | 0.77 U | 0.79 U | 0.98 U | 0.79 U | 0.97 U | 0.99 U | 0.78 U | 0.39 U |
| Nitrobenzene | **0.200 or MDL** | 0.39 U | 0.95 U | 0.96 U | 0.4 U | 0.8 U | 0.77 U | 0.79 U | 0.98 U | 0.79 U | 0.97 U | 0.99 U | 0.78 U | 0.39 U |
| Isophorone | **4.4** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| bis(2-Chloroethoxy)methane | **NA** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 1,2,4-Trichlorobenzene | **3.4** | 0.39 U | 0.95 U | 0.96 U | 0.4 U | 0.8 U | 0.77 U | 0.79 U | 0.98 U | 0.79 U | 0.97 U | 0.99 U | 0.78 U | 0.39 U |
| Naphthalene | **13** | 0.78 J | 1 J | 1.3 J | 0.59 J | 0.9 J | 0.78 J | 1.5 J | 4.2 J | 1.5 J | 2.7 J | 1.8 J | 0.5 J | 0.15 J |
| 4-Chloroaniline | **0.220 or MDL** | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| Hexachlorobutadiene | **NA** | 0.79 U | 1.9 U | 1.9 U | 0.8 U | 1.6 U | 1.5 U | 1.6 U | 2 U | 1.6 U | 1.9 U | 2 U | 1.6 U | 0.77 U |
| 2-Methylnaphthalene | **36.400** | 0.82 J | 1.2 J | 1.8 J | 0.65 J | 1.3 J | 1 J | 2.2 J | 4.2 J | 1.8 J | 2 J | 4.2 J | 0.68 J | 0.2 J |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 5
Soil Sampling Results
Former Genral Motors Site
Tarrytown, New York
AOC-31

| Sample ID | New York | AOC-31-1 | AOC-31-2 | AOC-31-3 | AOC-31-4 | AOC-31-5 | AOC-31-6 | AOC-31-7 | AOC-31-8 | AOC-31-9 | AOC-31-10 | AOC-31-11 | AOC-31-12 | AOC-31-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369422 | 369423 | 369737 | 369738 | 369739 | 369740 | 369741 | 369742 | 369743 | 369744 | 369746 | 369747 | 369748 |
| Sampling Date | Rec. Soil | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/16/02 | 08/16/02 | 08/16/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 10 | 25 | 25.0 | 10.0 | 20.0 | 20.0 | 20.0 | 25.0 | 20.0 | 25.0 | 25.0 | 20.0 | 10.0 |
| Hexachlorocyclopentadiene | NA | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2-Chloronaphthalene | NA | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 2-Nitroaniline | 0.430 or MDL | 7.9 U | 19 U | 19 U | 8 U | 16 U | 15 U | 16 U | 20 U | 16 U | 19 U | 20 U | 16 U | 7.7 U |
| Dimethylphthalate | 2.0 | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| Acenaphthylene | 50 | 0.12 J | 0.57 J | 0.44 J | 0.28 J | 1.1 J | 7.7 U | 0.7 J | 0.85 J | 0.84 J | 1.7 J | 0.79 J | 0.48 J | 0.2 J |
| 2,6-Dinitrotoluene | 1.0 | 0.79 U | 1.9 U | 1.9 U | 0.8 U | 1.6 U | 1.5 U | 1.6 U | 2 U | 1.6 U | 1.9 U | 2 U | 1.6 U | 0.77 U |
| 3-Nitroaniline | .500 or MDL | 7.9 U | 19 U | 19 U | 8 U | 16 U | 15 U | 16 U | 20 U | 16 U | 19 U | 20 U | 16 U | 7.7 U |
| Acenaphthene | 50 | 4 | 7.6 J | 7.4 J | 3.4 J | 7.4 J | 5.4 J | 9.9 | 16 | 7.4 J | 9.6 J | 16 | 3.3 J | 1 J |
| Dibenzofuran | 6.2 | 1.8 J | 3 J | 4.1 J | 1.7 J | 3.2 J | 2.5 J | 5.2 J | 8.9 J | 3.7 J | 4.9 J | 9.6 J | 1.5 J | 0.53 J |
| 2,4-Dinitrotoluene | NA | 0.79 U | 1.9 U | 1.9 U | 0.8 U | 1.6 U | 1.5 U | 1.6 U | 2 U | 1.6 U | 1.9 U | 2 U | 1.6 U | 0.77 U |
| Diethylphthalate | 7.1 | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 4-Chlorophenyl-phenylether | NA | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| Fluorene | 50 | 3.6 J | 5.9 J | 7.9 J | 3.7 J | 8.2 | 6.1 J | 12 | 17 | 8.2 | 10 | 20 | 3.4 J | 1.1 J |
| 4-Nitroaniline | NA | 7.9 U | 19 U | 19 U | 8 U | 16 U | 15 U | 16 U | 20 U | 16 U | 19 U | 20 U | 16 U | 7.7 U |
| N-Nitrosodiphenylamine | NA | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| 4-Bromophenyl-phenylether | NA | 3.9 U | 9.5 U | 9.6 U | 4 U | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 9.9 U | 7.8 U | 3.9 U |
| Hexachlorobenzene | 0.410 | 0.39 U | 0.95 U | 0.96 U | 0.4 U | 0.8 U | 0.77 U | 0.79 U | 0.98 U | 0.79 U | 0.97 U | 0.99 U | 0.78 U | 0.39 U |
| Phenanthrene | 50 | 29 | 62 | 74 | 36 | 73 | 47 | 92 | 120 | 88 | 69 | 140 | 30 | 13 |
| Anthracene | 50 | 8.1 | 17 | 26 | 10 | 24 | 15 | 26 | 33 | 24 | 21 | 40 | 10 | 4.5 |
| Carbazole | NA | 4.4 | 7.4 J | 6.4 J | 4.4 | 8 | 5.3 J | 9.8 | 16 | 8.1 | 8.5 J | 13 | 3.8 J | 1.3 J |
| Di-n-butylphthalate | 8.1 | 3.9 U | 9.5 U | 9.6 U | 9.6 | 8 U | 7.7 U | 7.9 U | 9.8 U | 7.9 U | 9.7 U | 3.6 J | 7.8 U | 3.9 U |
| Fluoranthene | 50 | 35 | 80 | 120 | 53 | 130 | 74 | 120 | 140 | 120 | 100 | 150 | 54 | 23 |
| Pyrene | 50 | 29 | 84 | 100 | 55 | 130 | 73 | 120 | 140 | 140 | 99 | 160 | 68 | 23 |
| Butylbenzylphthalate | 50 | 2.6 J | 9.5 U | 9.6 U | 2.2 J | 8.6 | 7.1 J | 11 | 9.5 J | 8.6 | 7.5 J | 13 | 4.4 J | 1.1 J |
| 3,3'-Dichlorobenzidine | NA | 7.9 U | 19 U | 19 U | 8 U | 16 U | 15 U | 16 U | 20 U | 16 U | 19 U | 20 U | 16 U | 7.7 U |
| Benzo(a)anthracene | 0.224 or MDL | 15 | 36 | 49 | 27 | 64 | 41 | 57 | 71 | 70 | 51 | 80 | 33 | 12 |
| Chrysene | 0.4 | 14 | 36 | 53 | 32 | 66 | 41 | 63 | 75 | 76 | 59 | 81 | 35 | 13 |
| bis(2-Ethylhexyl)phthalate | 50 | 78 | 4.1 J | 4.4 J | 8.7 | 7.5 J | 2.3 J | 6.6 J | 7.2 J | 43 | 4.4 J | 11 | 78 | 2 J |
| Di-n-octylphthalate | 50 | 3.9 U | 9.5 U | 9.6 U | 0.87 J | 8 U | 7.7 U | 7.9 U | 9.8 U | 9.2 | 9.7 U | 19 | 51 | 3.9 U |
| Benzo(b)fluoranthene | 0.22 or MDL | 17 | 40 | 50 | 36 | 72 | 46 | 61 | 78 | 78 | 55 | 83 | 36 | 15 |
| Benzo(k)fluoranthene | 0.22 or MDL | 8.2 | 20 | 23 | 16 | 27 | 19 | 27 | 35 | 31 | 24 | 37 | 16 | 6.6 |
| Benzo(a)pyrene | 0.061 or MDL | 14 | 31 | 40 | 26 | 52 | 35 | 45 | 58 | 57 | 42 | 61 | 26 | 11 |
| Indeno(1,2,3-cd)pyrene | 3.2 | 7 | 12 | 23 | 11 | 26 | 18 | 22 | 27 | 24 | 23 | 23 | 11 | 4.8 |
| Dibenz(a,h)anthracene | 0.014 or MDL | 2 | 3.7 | 6.8 | 3.4 | 7.9 | 6.1 | 6.6 | 6.9 | 8.6 | 6.3 | 8.1 | 3.6 | 1.5 |
| Benzo(g,h,i)perylene | 50 | 6.6 | 10 | 22 | 8.8 | 23 | 16 | 16 | 20 | 21 | 18 | 18 | 10 | 4.4 |
| Total Confident Conc. BNAs (s) | | 271.3 | 433.7 | 586.8 | 336.9 | 719.7 | 431.1 | 698.3 | 852.9 | 794.7 | 576.3 | 973.1 | 461.6 | 131.8 |
| Total Estimated Conc. BNA TICs (s) | | 9.7 | 60.9 | 241.4 | 121.5 | 382.8 | 275.5 | 318.6 | 382 | 429.2 | 108.1 | 432 | 281.4 | 25.4 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

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Tarrytown, New York
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369422 | 369423 | 369737 | 369738 | 369739 | 369740 | 369741 | 369742 | 369743 | 369744 | 369746 | 369747 | 369748 |
| Sampling Date | Rec. Soil | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/16/02 | 08/16/02 | 08/16/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **PCBs** | | | | | | | | | | | | | | |
| Aroclor-1016 | # | 0.079 U | 0.077 U | 0.077 U | 0.08 U | 0.08 U | 0.077 U | 0.08 U | 0.079 U | 0.079 U | 0.078 U | 0.079 U | 0.079 U | 0.078 U |
| Aroclor-1221 | # | 0.079 U | 0.077 U | 0.077 U | 0.08 U | 0.08 U | 0.077 U | 0.08 U | 0.079 U | 0.079 U | 0.078 U | 0.079 U | 0.079 U | 0.078 U |
| Aroclor-1232 | # | 0.079 U | 0.077 U | 0.077 U | 0.08 U | 0.08 U | 0.077 U | 0.32 U | 0.079 U | 0.079 U | 0.078 U | 0.079 U | 0.079 U | 0.078 U |
| Aroclor-1242 | # | 0.079 U | 0.49 | 0.2 | 0.3 | 0.33 | 0.082 P* | 0.2 | 0.29 | 0.25 | 0.22 | 0.31 | 0.25 | 0.12 |
| Aroclor-1248 | # | 0.950 | 0.077 U | 0.077 U | 0.08 U | 0.08 U | 0.077 U | 0.08 U | 0.079 U | 0.079 U | 0.078 U | 0.079 U | 0.079 U | 0.078 U |
| Aroclor-1254 | # | 0.079 U | 0.077 U | 0.077 U | 0.08 U | 0.08 U | 0.077 U | 0.08 U | 0.079 U | 0.079 U | 0.078 U | 0.079 U | 0.079 U | 0.078 U |
| Aroclor-1260 | # | 0.260 | 0.26 | 0.19 | 0.32 | 0.08 U | 0.077 U | 0.08 U | 0.079 U | 0.68 | 0.078 U | 0.5 | 0.079 U | 0.33 |
| Aroclor-1262 | # | 0.079 U | 0.077 U | 0.077 U | 0.08 U | 0.88 | 0.35 | 0.32 | 0.44 | 0.079 U | 0.27 | 0.079 U | 0.26 | 0.078 U |
| Aroclor-1268 | # | 0.079 U | 0.077 U | 0.077 U | 0.08 U | 0.08 U | 0.077 U | 0.08 U | 0.079 U | 0.76 | 0.078 U | 0.079 U | 0.079 U | 0.078 U |
| **PESTICIDES** | | | | | | | | | | | | | | |
| Aldrin | 0.041 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| alpha-BHC | 0.11 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| beta-BHC | 0.2 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| delta-BHC | 0.3 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| gamma-BHC(Lindane) | 0.06 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Chlordane | 0.54 | 0.079 U | 0.077 U | 0.077 U | 0.4 U | 0.16 U | 0.077 U | 0.16 U | 0.16 U | 0.4 U | 0.39 U | 0.079 U | 0.39 U | 0.078 U |
| 4,4'-DDD | 2.9 | 0.0079 U | 0.012 P* | 0.01 | 0.04 U | 0.016 U | 0.016 | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| 4,4'-DDE | 2.1 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| 4,4'-DDT | 2.1 | 0.0079 U | 0.0084 P* | 0.0093 P* | 0.04 U | 0.016 U | 0.014 P* | 0.019 P* | 0.026 P* | 0.057 | 0.039 U | 0.023 P* | 0.039 U | 0.0078 U |
| Dieldrin | 0.044 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Endosulfan I | 0.9 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Endosulfan II | 0.9 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.049 | 0.0077 U | 0.016 U | 0.019 P* | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Endosulfansulfate | 1.0 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Endrin | 0.1 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Endrinaldehyde | N/A | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Endrinketone | N/A | 0.022 P* | 0.12 P* | 0.049 P* | 0.041 P* | 0.15 | 0.12 P* | 0.13 | 0.058 P* | 0.14 | 0.096 | 0.058 P* | 0.077 | 0.0078 U |
| Heptachlor | 0.1 | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Heptachlorepoxide | 0.02 | 0.0079 U | 0.017 | 0.0077 U | 0.04 U | 0.016 U | 0.0077 U | 0.016 U | 0.016 U | 0.04 U | 0.039 U | 0.0079 U | 0.039 U | 0.0078 U |
| Methoxychlor | Site Specific | 0.0079 U | 0.0077 U | 0.0077 U | 0.04 U | 0.55 | 0.0077 U | 0.016 U | 0.016 U | 0.51 P* | 0.46 P | 0.0079 U | 0.039 U | 0.078 P* |
| Toxaphene | N/A | 0.079 U | 0.077 U | 0.077 U | 0.4 U | 0.16 U | 0.077 U | 0.16 U | 0.16 U | 0.4 U | 0.39 U | 0.079 U | 0.39 U | 0.078 U |
| **WET CHEMISTRY** | | | | | | | | | | | | | | |
| ChromiumVI - mg/kg | Site Specific | 2.0 U | 2.0 U | 2.0 U | 7.2 | 2.4 | 3.1 | 2.0 U | 5.2 | 2.6 | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| TotalCyanide - mg/kg | Site Specific | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |

P = For duel column analysis the % difference between the quantatated concentrations on the 2 columns is greater than 40%
* = For duel column analysis, the lowest quantitates concentration is being reported due to coeluting interference.

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 5
Soil Sampling Results
Former Genral Motors Site
Tarrytown, New York
AOC-31

| Sample ID | Eastern USA | New York | AOC-31-1 | AOC-31-2 | AOC-31-3 | AOC-31-4 | AOC-31-5 | AOC-31-6 | AOC-31-7 | AOC-31-8 | AOC-31-9 | AOC-31-10 | AOC-31-11 | AOC-31-12 | AOC-31-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | TAGM | 369422 | 369423 | 369737 | 369738 | 369739 | 369740 | 369741 | 369742 | 369743 | 369744 | 369745 | 369747 | 369748 |
| Sampling Date | | Rec. Soil | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/15/02 | 08/16/02 | 08/16/02 | 08/16/02 |
| Matrix | | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **METALS** | | | | | | | | | | | | | | | |
| Aluminum | 33,000 | SB | 6350 | 7490 | 7420 | 6970 | 8500 | 7000 | 7180 | 6770 | 7480 | 6550 | 7310 | 6690 | 6210 |
| Antimony | N/A | SB | 2.0 B | 3.8 | 3.6 | 4.9 | 5.9 | 3.2 | 5.6 | 3.0 | 4.4 | 4.1 | 11.5 | 3.4 | 13.2 |
| Arsenic | 3 - 12 | 7.5 or SB | 4.1 | 6.0 | 4.4 | 6.1 | 4.8 | 5.8 | 6.9 | 7.3 | 5.2 | 5.5 | 6.3 | 6.0 | 4.6 |
| Barium | 15 - 600 | 300 or SB | 96.2 | 159 | 148 | 195 | 282 | 365 | 507 | 437 | 446 | 307 | 1220 | 275 | 251 |
| Beryllium | 0 - 1.75 | 0.16 or SB | 0.27 B | 0.42 B | 0.36 B | 0.47 | 0.32 B | 0.31 B | 0.38 B | 0.40 | 0.35 B | 0.34 B | 0.36 B | 0.29 B | 0.36 B |
| Cadmium | 0.1 - 1 | 1 or SB | 0.48 B | 1.1 | 1.1 B | 2.3 | 7.6 | 1.3 | 2.1 | 2.0 | 2.6 | 2.0 | 2.6 | 1.5 | 2.2 |
| Calcium | 130 - 35000 | SB | 126300 | 112400 | 99100 | 102000 | 75500 | 100000 | 91300 | 65200 | 86100 | 90400 | 88400 | 92700 | 89100 |
| Chromium | 1.5 - 40 | 10 or SB | 15.3 | 28.3 | 26.0 | 43.9 | 27.5 | 32.3 | 33.0 | 25.9 | 31.8 | 29.7 | 67.7 | 22.4 | 30.8 |
| Cobalt | 2.6 - 60 | 30 or SB | 3.8 B | 4.6 B | 5.4 B | 7.6 B | 5.8 B | 6.1 B | 6.1 B | 5.4 B | 5.9 B | 6.0 B | 6.8 B | 4.9 B | 4.5 B |
| Copper | 1 - 50 | 25 or SB | 22.7 | 37.0 | 32.8 | 62.4 | 51.9 | 54.0 | 52.7 | 58.7 | 47.0 | 37.3 | 75.6 | 33.9 | 36.5 |
| Iron | 2000 - 550000 | 2000 or SB | 12200 | 16200 | 13800 | 30200 | 14100 | 18100 | 18500 | 16000 | 16500 | 13600 | 30000 | 15400 | 16600 |
| Lead | 200 - 500 | SB | 99.2 | 184 | 168 | 543 | 244 | 185 | 266 | 226 | 279 | 228 | 357 | 263 | 234 |
| Magnesium | 100 - 5000 | SB | 34600 | 23700 | 14100 | 25400 | 11100 | 23600 | 9710 | 8010 | 11900 | 16400 | 13900 | 10500 | 13000 |
| Manganese | 50 - 5000 | SB | 309 | 349 | 265 | 436 | 255 | 696 | 397 | 447 | 322 | 269 | 365 | 238 | 336 |
| Mercury | 0.001 - 0.2 | 0.1 | 0.08 | 0.03 | 0.019 U | 0.020 U | 0.43 | 0.42 | 0.04 B | 0.38 | 0.05 | 0.22 | 0.31 | 0.28 | 0.21 |
| Nickel | 0.5 - 25 | 13 or SB | 10.2 | 14.9 | 16.1 | 28.1 | 28.7 | 21.2 | 22.2 | 18.7 | 23.8 | 25.0 | 19.7 | 17.9 | 15.6 |
| Potassium | 8500 - 43000 | SB | 1400 | 1520 | 1440 | 1470 | 1240 | 1450 | 1430 | 1160 | 1190 | 1240 | 746 B | 696 B | 894 B |
| Selenium | 0.1 - 3.9 | 2 or SB | 0.99 U | 0.96 U | 0.97 U | 1.0 U | 1.0 U | 0.97 U | 1.0 U | 0.83 U | 0.99 U | 1.0 B | 1.00 U | 0.99 U | 0.97 U |
| Silver | N/A | SB | 0.33 U | 0.32 U | 0.32 U | 0.42 B | 0.34 U | 0.32 U | 0.33 U | 0.30 B | 0.34 B | 0.35 B | 0.39 B | 0.40 B | 0.32 U |
| Sodium | 6000 - 8000 | SB | 1130 B | 1410 | 1250 | 1490 | 1310 | 1130 | 1170 | 881 B | 1090 B | 907 B | 593 B | 478 B | 533 B |
| Thallium | N/A | SB | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 0.93 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| Vanadium | 1 - 300 | 150 or SB | 16.9 | 20.5 | 21.7 | 24.1 | 72.8 | 38.9 | 41.5 | 34.5 | 52.9 | 86.6 | 35.6 | 35.1 | 18.2 |
| Zinc | 9 - 50 | 20 or SB | 148 | 392 | 349 | 693 | 1460 | 510 | 750 | 628 | 773 | 574 | 941 | 551 | 495 |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 6
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC- 34,35,36

| Sample ID | New York | AOC-34-1-6 | AOC-34-1-10 | AOC-34-2-6 | AOC-34-3-6 | AOC-34-4-5 | AOC-35-1-1 | AOC-35-1-5 | AOC-35-2-7 | AOC-36-1-5 | AOC-36-2-5 | Duplicate-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367531 | 367532 | 367533 | 367540 | 367539 | 367541 | 367542 | 367543 | 367544 | 367545 | 367546 |
| Sampling Date | Rec. Soil | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | | | |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | | |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | |
| Chloromethane | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Bromomethane | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| VinylChloride | **0.2** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Chloroethane | **1.9** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| MethyleneChloride | **0.1** | 0.0012 J | 0.0016 J | 0.0014 J | 0.0036 U | 0.0018 J | 0.0025 J | 0.0011 J | 0.0053 | NR | NR | NR |
| Acetone | **0.2** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.056 | 0.0058 U | 0.0065 U | 0.031 | NR | NR | NR |
| CarbonDisulfide | **2.7** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0028 J | 0.0058 U | 0.0065 U | 0.0063 | NR | NR | NR |
| 1,1-Dichloroethene | **0.4** | 0.0022 U | 0.0025 U | 0.0025 U | 0.0024 U | 0.0022 U | 0.0023 U | 0.0026 U | 0.0025 U | NR | NR | NR |
| 1,1-Dichloroethane | **0.2** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| trans-1,2-Dichloroethene | **0.3** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| cis-1,2-Dichloroethene | **NA** | 0.0055 U | 0.0012 J | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Chloroform | **0.3** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| 1,2-Dichloroethane | **0.1** | 0.0022 U | 0.0025 U | 0.0025 U | 0.0024 U | 0.0022 U | 0.0023 U | 0.0026 U | 0.0025 U | NR | NR | NR |
| 2-Butanone | **0.3** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| 1,1,1-Trichloroethane | **0.8** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| CarbonTetrachloride | **0.6** | 0.0022 U | 0.0025 U | 0.0025 U | 0.0024 U | 0.0022 U | 0.0023 U | 0.0026 U | 0.0025 U | NR | NR | NR |
| Bromodichloromethane | **NA** | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.0012 U | NR | NR | NR |
| 1,2-Dichloropropane | **NA** | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.0012 U | NR | NR | NR |
| cis-1,3-Dichloropropene | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Trichloroethene | **0.7** | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.0012 U | NR | NR | NR |
| Dibromochloromethane | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| 1,1,2-Trichloroethane | **NA** | 0.0033 U | 0.0037 U | 0.0037 U | 0.0036 U | 0.0034 U | 0.0035 U | 0.0039 U | 0.0037 U | NR | NR | NR |
| Benzene | **0.06** | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.0012 U | NR | NR | NR |
| trans-1,3-Dichloropropene | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Bromoform | **NA** | 0.0043 J | 0.0039 J | 0.0055 | 0.0078 | 0.0072 | 0.0070 | 0.020 | 0.0016 J | NR | NR | NR |
| 4-Methyl-2-Pentanone | **1** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| 2-Hexanone | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Tetrachloroethene | **1.4** | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.0012 U | NR | NR | NR |
| 1,1,2,2-Tetrachloroethane | **0.6** | 0.0011 U | 0.0012 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.0012 U | NR | NR | NR |
| Toluene | **1.5** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Chlorobenzene | **1.7** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Ethylbenzene | **5.5** | 0.0044 U | 0.0050 U | 0.0049 U | 0.0048 U | 0.0045 U | 0.0046 U | 0.0052 U | 0.0050 U | NR | NR | NR |
| Styrene | **NA** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Xylene(Total) | **1.2** | 0.0055 U | 0.0062 U | 0.0062 U | 0.0060 U | 0.0056 U | 0.0058 U | 0.0065 U | 0.0062 U | NR | NR | NR |
| Total Confident Conc. VOAs (s) | | 0 | 0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | | | |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.4 | | | |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 6
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC- 34,35,36

| Sample ID | New York | AOC-34-1-6 | AOC-34-1-10 | AOC-34-2-6 | AOC-34-3-6 | AOC-34-4-5 | AOC-35-1-1 | AOC-35-1-5 | AOC-35-2-7 | AOC-36-1-5 | AOC-36-2-5 | Duplicate-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367531 | 367532 | 367533 | 367540 | 367539 | 367541 | 367542 | 367543 | 367544 | 367545 | 367546 |
| Sampling Date | Rec. Soil | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | | | |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 | 1.0 | 1.0 | 1.0 | 10.0 | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | 77 |
| Phenol | **0.030 or MDL** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2-Chlorophenol | **0.8** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2-Methylphenol | **0.100 or MDL** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.010 J | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 4-Methylphenol | **0.9** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.021 J | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2-Nitrophenol | **0.330 or MDL** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2,4-Dimethylphenol | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2,4-Dichlorophenol | **0.4** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2,4,6-Trichlorophenol | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2,4,5-Trichlorophenol | **0.1** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 75 U | 1.6 U | 1.8 U | 1.7 U | 17 U | 1.7 U | 1.7 U |
| 4-Nitrophenol | **0.100 or MDL** | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 75 U | 1.6 U | 1.8 U | 1.7 U | 17 U | 1.7 U | 1.7 U |
| 4,6-Dinitro-2-methylphenol | **NA** | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 75 U | 1.6 U | 1.8 U | 1.7 U | 17 U | 1.7 U | 1.7 U |
| Pentachlorophenol | **1 or MDL** | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 75 U | 1.6 U | 1.8 U | 1.7 U | 17 U | 1.7 U | 1.7 U |
| bis(2-Chloroethyl)ether | **NA** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 1.9 U | 0.039 U | 0.044 U | 0.042 U | 0.42 U | 0.044 U | 0.043 U |
| 1,3-Dichlorobenzene | **1.6** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 1,4-Dichlorobenzene | **8.5** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 1,2-Dichlorobenzene | **7.9** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| bis(2-chloroisopropyl)ether | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| N-Nitroso-di-n-propylamine | **NA** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 1.9 U | 0.039 U | 0.044 U | 0.042 U | 0.42 U | 0.044 U | 0.043 U |
| Hexachloroethane | **NA** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 1.9 U | 0.039 U | 0.044 U | 0.042 U | 0.42 U | 0.044 U | 0.043 U |
| Nitrobenzene | **0.200 or MDL** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 1.9 U | 0.039 U | 0.044 U | 0.042 U | 0.42 U | 0.044 U | 0.043 U |
| Isophorone | **4.4** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| bis(2-Chloroethoxy)methane | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 1,2,4-Trichlorobenzene | **3.4** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 1.9 U | 0.039 U | 0.044 U | 0.042 U | 0.42 U | 0.044 U | 0.043 U |
| Naphthalene | **13** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 7.9 J | 0.32 J | 0.44 U | 0.15 J | 7.3 | 0.44 U | 0.43 U |
| 4-Chloroaniline | **0.220 or MDL** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| Hexachlorobutadiene | **NA** | 0.083 U | 0.084 U | 0.082 U | 0.080 U | 3.8 U | 0.078 U | 0.088 U | 0.084 U | 0.84 U | 0.087 U | 0.086 U |
| 2-Methylnaphthalene | **36.400** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 5.2 J | 0.44 | 0.44 U | 0.10 J | 6.8 | 0.44 U | 0.43 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 6
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC- 34,35,36

| Sample ID | New York | AOC-34-1-6 | AOC-34-1-10 | AOC-34-2-6 | AOC-34-3-6 | AOC-34-4-5 | AOC-35-1-1 | AOC-35-1-5 | AOC-35-2-7 | AOC-36-1-5 | AOC-36-2-5 | Duplicate-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367531 | 367532 | 367533 | 367540 | 367539 | 367541 | 367542 | 367543 | 367544 | 367545 | 367546 |
| Sampling Date | Rec. Soil | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | | | |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 | 1.0 | 1.0 | 1.0 | | | |
| Hexachlorocyclopentadiene | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2-Chloronaphthalene | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 2-Nitroaniline | **0.430 or MDL** | 0.83 U | 0.84 U | 0.82 U | 0.80 U | 38 U | 0.78 U | 0.88 U | 0.84 U | 8.4 U | 0.87 U | 0.86 U |
| Dimethylphthalate | **2.0** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| Acenaphthylene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 10 J | 0.35 J | 0.44 U | 0.078 J | 7.3 | 0.44 U | 0.43 U |
| 2,6-Dinitrotoluene | **1.0** | 0.083 U | 0.084 U | 0.082 U | 0.080 U | 3.8 U | 0.078 U | 0.088 U | 0.084 U | 0.84 U | 0.087 U | 0.086 U |
| 3-Nitroaniline | **.500 or MDL** | 0.83 U | 0.84 U | 0.82 U | 0.80 U | 38 U | 0.78 U | 0.88 U | 0.84 U | 8.4 U | 0.87 U | 0.86 U |
| Acenaphthene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 20 | 0.078 J | 0.44 U | 0.064 J | 3.8 J | 0.44 U | 0.43 U |
| Dibenzofuran | **6.2** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 12 J | 0.16 J | 0.44 U | 0.088 J | 5.9 | 0.44 U | 0.43 U |
| 2,4-Dinitrotoluene | **NA** | 0.083 U | 0.084 U | 0.082 U | 0.080 U | 3.8 U | 0.078 U | 0.088 U | 0.084 U | 0.84 U | 0.087 U | 0.086 U |
| Diethylphthalate | **7.1** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 4-Chlorophenyl-phenylether | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| Fluorene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 21 | 0.12 J | 0.44 U | 0.074 J | 16 | 0.44 U | 0.43 U |
| 4-Nitroaniline | **NA** | 0.83 U | 0.84 U | 0.82 U | 0.80 U | 38 U | 0.78 U | 0.88 U | 0.84 U | 8.4 U | 0.87 U | 0.86 U |
| N-Nitrosodiphenylamine | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 4-Bromophenyl-phenylether | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| Hexachlorobenzene | **0.410** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 1.9 U | 0.039 U | 0.044 U | 0.042 U | 0.42 U | 0.044 U | 0.043 U |
| Phenanthrene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 250 | 0.96 | 0.44 U | 0.38 J | 68 | 0.044 J | 0.43 U |
| Anthracene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 58 | 0.32 J | 0.44 U | 0.099 J | 15 | 0.44 U | 0.43 U |
| Carbazole | **NA** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 17 J | 0.049 J | 0.44 U | 0.043 J | 4.1 J | 0.44 U | 0.43 U |
| Di-n-butylphthalate | **8.1** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| Fluoranthene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 260 | 0.74 | 0.44 U | 0.37 J | 35 | 0.024 J | 0.43 U |
| Pyrene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 310 | 1.2 | 0.44 U | 0.43 | 41 | 0.024 J | 0.43 U |
| Butylbenzylphthalate | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| 3,3'-Dichlorobenzidine | **NA** | 0.83 U | 0.84 U | 0.82 U | 0.80 U | 38 U | 0.78 U | 0.88 U | 0.84 U | 8.4 U | 0.87 U | 0.86 U |
| Benzo(a)anthracene | **0.224 or MDL** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 160 | 0.57 | 0.044 U | 0.18 | 15 | 0.044 U | 0.043 U |
| Chrysene | **0.4** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 160 | 0.92 | 0.44 U | 0.25 J | 15 | 0.44 U | 0.43 U |
| bis(2-Ethylhexyl)phthalate | **50** | 0.41 U | 0.14 J | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.10 J | 0.42 U | 4.2 U | 0.44 U | 0.18 J |
| Di-n-octylphthalate | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 19 U | 0.39 U | 0.44 U | 0.42 U | 4.2 U | 0.44 U | 0.43 U |
| Benzo(b)fluoranthene | **0.22 or MDL** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 160 | 0.83 | 0.044 U | 0.20 | 12 | 0.044 U | 0.043 U |
| Benzo(k)fluoranthene | **0.22 or MDL** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 74 | 0.36 | 0.044 U | 0.081 | 4.8 | 0.044 U | 0.043 U |
| Benzo(a)pyrene | **0.061 or MDL** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 130 | 0.45 | 0.044 U | 0.12 | 11 | 0.044 U | 0.043 U |
| Indeno(1,2,3-cd)pyrene | **3.2** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 84 | 0.48 | 0.044 U | 0.11 | 6.4 | 0.044 U | 0.043 U |
| Dibenz(a,h)anthracene | **0.014 or MDL** | 0.041 U | 0.042 U | 0.041 U | 0.040 U | 21 | 0.15 | 0.044 U | 0.038 J | 1.9 | 0.044 U | 0.043 U |
| Benzo(g,h,i)perylene | **50** | 0.41 U | 0.42 U | 0.41 U | 0.40 U | 85 | 0.48 | 0.44 U | 0.12 J | 7.0 | 0.44 U | 0.43 U |
| Total Confident Conc. BNAs (s) | | 0 | 0 | 0 | 0 | 1793 | 7.5 | 0 | 1.1 | 275 | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | 0 | 0 | 0 | 0 | 335 | 12 | 0 | 4.6 | 107 | 0.8 | 0 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 6
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC- 34,35,36

| Sample ID | New York | AOC-34-1-6 | AOC-34-1-10 | AOC-34-2-6 | AOC-34-3-6 | AOC-34-4-5 | AOC-35-1-1 | AOC-35-1-5 | AOC-35-2-7 | AOC-36-1-5 | AOC-36-2-5 | Duplicate-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367531 | 367532 | 367533 | 367540 | 367539 | 367541 | 367542 | 367543 | 367544 | 367545 | 367546 |
| Sampling Date | Rec. Soil | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | | | |
| Dilution Factor | | | | | | | 1.0 | 1.0 | 1.0 | | | |
| **PCBs** | | | | | | | | | | | | |
| Aroclor-1016 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1221 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1232 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1242 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1248 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1254 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1260 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1262 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| Aroclor-1268 | # | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| **PESTICIDES** | | | | | | | | | | | | |
| Aldrin | **0.041** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| alpha-BHC | **0.11** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| beta-BHC | **0.2** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| delta-BHC | **0.3** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| gamma-BHC(Lindane) | **0.06** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Chlordane | **0.54** | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| 4,4'-DDD | **2.9** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| 4,4'-DDE | **2.1** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| 4,4'-DDT | **2.1** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Dieldrin | **0.044** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Endosulfanl | **0.9** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Endosulfanli | **0.9** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Endosulfansulfate | **1.0** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Endrin | **0.1** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Endrinaldehyde | **N/A** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Endrinketone | **N/A** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Heptachlor | **0.1** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Heptachlorepoxide | **0.02** | NR | NR | NR | NR | NR | 0.0079 U | 0.0088 U | 0.0085 U | NR | NR | NR |
| Methoxychlor | **Site Specific** | NR | NR | NR | NR | NR | 0.014 | 0.0088 U | 0.0085 U | NR | NR | NR |
| Toxaphene | **N/A** | NR | NR | NR | NR | NR | 0.079 U | 0.088 U | 0.085 U | NR | NR | NR |
| **WET CHEMISTRY** | | | | | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | NR | NR | NR | NR | 0.5 U | 0.5 U | 0.5 U | NR | NR | NR |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 6
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC- 34,35,36

| Sample ID | Eastern USA | New York | AOC-34-1-6 | | AOC-34-1-10 | | AOC-34-2-6 | | AOC-34-3-6 | | AOC-34-4-5 | | AOC-35-1-1 | | AOC-35-1-5 | | AOC-35-2-7 | | AOC-38-1-5 | | AOC-38-2-5 | | Duplicate-1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | TAGM | 367531 | | 367532 | | 367533 | | 367540 | | 367539 | | 367541 | | 367542 | | 367543 | | 367544 | | 367545 | | 367546 | |
| Sampling Date | | Rec. Soil | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/06/02 | | 08/06/02 | | 08/06/02 | |
| Matrix | | Cleanup Objective | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | |
| Units | | Criteria (mg/kg) | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | | | | | | |
| Dilution Factor | | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | | | | | | |
| **METALS** | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 33,000 | SB | 8280 | | 3270 | | 7290 | | 6240 | | 6230 | | 6210 | | 16700 | | 10300 | | 11200 | | 9970 | | 9060 | |
| Antimony | N/A | SB | 0.97 | U | 0.89 | U | 0.96 | U | 0.93 | U | 0.80 | U | 0.92 | U | 0.93 | U | 0.99 | U | 0.99 | U | 1.0 | U | 1.0 | U |
| Arsenic | 3 - 12 | 7.5 or SB | 1.9 | | 0.77 | U | 1.6 | | 1.4 | | 5.8 | | 4.8 | | 5.1 | | 4.6 | | 3.4 | | 1.7 | | 1.8 | |
| Barium | 15 - 600 | 300 or SB | 63.5 | | 25.1 | B | 52.0 | | 46.9 | B | 629 | | 82.7 | | 126 | | 100 | | 99.5 | | 91.1 | | 84.5 | |
| Beryllium | 0 - 1.75 | 0.16 or SB | 0.22 | B | 0.28 | B | 0.20 | B | 0.21 | B | 0.29 | B | 0.32 | B | 0.72 | | 0.33 | B | 0.42 | B | 0.30 | B | 0.26 | B |
| Cadmium | 0.1 - 1 | 1 or SB | 0.099 | U | 0.091 | U | 0.099 | U | 0.096 | U | 0.56 | B | 0.15 | B | 0.096 | U | 0.10 | U | 0.10 | U | 0.10 | U | 0.10 | U |
| Calcium | 130 - 35000 | SB | 6150 | | 18700 | | 10600 | | 5400 | | 25200 | | 8810 | | 17900 | | 12100 | | 15800 | | 16600 | | 16000 | |
| Chromium | 1.5 - 40 | 10 or SB | 17.3 | | 8.9 | | 16.2 | | 12.5 | | 23.3 | | 13.3 | | 29.4 | | 20.7 | | 28.1 | | 21.0 | | 19.7 | |
| Cobalt | 2.6 - 60 | 30 or SB | 7.5 | B | 4.0 | B | 6.8 | B | 5.4 | B | 5.4 | B | 5.7 | B | 13.7 | | 10.1 | B | 10.4 | B | 8.3 | B | 7.8 | B |
| Copper | 1 - 50 | 25 or SB | 16.0 | | 10.5 | | 18.3 | | 13.5 | | 79.3 | | 34.5 | | 30.4 | | 27.8 | | 26.2 | | 20.8 | | 19.4 | |
| Iron | 2000 - 550000 | 2000 or SB | 17000 | | 8480 | | 16400 | | 13200 | | 22500 | | 16300 | | 33200 | | 41000 | | 25200 | | 20300 | | 18700 | |
| Lead | 200 - 500 | SB | 3.7 | | 4.0 | | 3.5 | | 4.8 | | 528 | | 68.9 | | 11.9 | | 11.3 | | 14.7 | | 4.7 | | 3.9 | |
| Magnesium | 100 - 5000 | SB | 6010 | | 9620 | | 6160 | | 4770 | | 5980 | | 5840 | | 12700 | | 9590 | | 11700 | | 11100 | | 11000 | |
| Manganese | 50 - 5000 | SB | 275 | | 180 | | 242 | | 230 | | 249 | | 207 | | 479 | | 334 | | 298 | | 300 | | 280 | |
| Mercury | 0.001 - 0.2 | 0.1 | 0.021 | U | 0.021 | U | 0.018 | U | 0.020 | U | 0.24 | | 0.08 | | 0.019 | U | 0.021 | U | 0.021 | U | 0.022 | U | 0.022 | U |
| Nickel | 0.5 - 25 | 13 or SB | 14.9 | | 11.3 | | 13.5 | | 11.3 | | 15.6 | | 15.1 | | 30.8 | | 22.5 | | 21.5 | | 17.0 | | 15.7 | |
| Potassium | 8500 - 43000 | SB | 2870 | | 948 | B | 2440 | | 1680 | | 1590 | | 1910 | | 3320 | | 3560 | | 3460 | | 3580 | | 3440 | |
| Selenium | 0.1 - 3.9 | 2 or SB | 0.97 | U | 0.89 | U | 0.96 | U | 0.93 | U | 0.80 | U | 0.92 | U | 0.93 | U | 0.99 | U | 0.99 | U | 1.0 | U | 1.0 | U |
| Silver | N/A | SB | 0.17 | U | 0.16 | U | 0.17 | U | 0.17 | U | 0.14 | U | 0.16 | U | 0.17 | U | 0.18 | U | 0.18 | U | 0.18 | U | 0.18 | U |
| Sodium | 6000 - 8000 | SB | 720 | B | 1150 | B | 175 | B | 125 | B | 284 | B | 183 | B | 189 | B | 198 | B | 219 | B | 158 | B | 164 | B |
| Thallium | N/A | SB | 1.1 | U | 1.0 | U | 1.1 | U | 1.1 | U | 0.90 | U | 1.0 | U | 1.1 | U | 1.1 | U | 1.1 | U | 1.2 | U | 1.1 | U |
| Vanadium | 1 - 300 | 150 or SB | 23.7 | | 11.3 | B | 23.0 | | 17.2 | | 19.9 | | 20.8 | | 34.0 | | 32.4 | | 31.2 | | 29.0 | | 27.7 | |
| Zinc | 9 - 50 | 20 or SB | 38.4 | | 15.7 | | 34.1 | | 27.4 | | 715 | | 103 | | 74.2 | | 52.8 | | 56.5 | | 45.3 | | 42.3 | |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 7
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 37,38,39

| Sample ID | New York TAGM | AOC-37-1-8 | AOC-37-1-10 | AOC-37-2-5 | AOC-38-1-4 | AOC-38-1-5 | AOC-39-1-8 | AOC-39-2-8 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367534 | 367535 | 367538 | 367536 | 367537 | 367550 | 367939 |
| Sampling Date | Cleanup Objective | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 50.0 | 1.0 | 1.0 | 1.0 | 50.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | |
| Chloromethane | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Bromomethane | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| VinylChloride | **0.2** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Chloroethane | **1.9** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| MethyleneChloride | **0.1** | 0.0008 J | 0.34 U | 0.0011 J | 0.0034 U | 0.0013 J | 0.34 U | 0.0012 J |
| Acetone | **0.2** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.093 |
| CarbonDisulfide | **2.7** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0034 J |
| 1,1-Dichloroethene | **0.4** | 0.0022 U | 0.22 U | 0.0023 U | 0.0023 U | 0.0024 U | 0.23 U | 0.0023 U |
| 1,1-Dichloroethane | **0.2** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| trans-1,2-Dichloroethene | **0.3** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| cis-1,2-Dichloroethene | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0013 J | 0.57 U | 0.0057 U |
| Chloroform | **0.3** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| 1,2-Dichloroethane | **0.1** | 0.0022 U | 0.22 U | 0.0023 U | 0.0023 U | 0.0024 U | 0.23 U | 0.0023 U |
| 2-Butanone | **0.3** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.022 |
| 1,1,1-Trichloroethane | **0.8** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0004 J |
| CarbonTetrachloride | **0.6** | 0.0022 U | 0.22 U | 0.0023 U | 0.0023 U | 0.0024 U | 0.23 U | 0.0023 U |
| Bromodichloromethane | **NA** | 0.0011 U | 0.11 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.11 U | 0.0011 U |
| 1,2-Dichloropropane | **NA** | 0.0011 U | 0.11 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.11 U | 0.0011 U |
| cis-1,3-Dichloropropene | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Trichloroethene | **0.7** | 0.0011 U | 0.11 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.11 U | 0.0011 U |
| Dibromochloromethane | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0025 J | 0.57 U | 0.0005 J |
| 1,1,2-Trichloroethane | **NA** | 0.0034 U | 0.34 U | 0.0034 U | 0.0034 U | 0.0036 U | 0.34 U | 0.0034 U |
| Benzene | **0.06** | 0.0011 U | 0.11 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.11 U | 0.0011 U |
| trans-1,3-Dichloropropene | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Bromoform | **NA** | 0.0079 | 0.45 U | 0.013 | 0.0031 J | 0.078 | 0.46 U | 0.0046 |
| 4-Methyl-2-Pentanone | **1** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| 2-Hexanone | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0095 |
| Tetrachloroethene | **1.4** | 0.0011 U | 0.11 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.11 U | 0.0011 U |
| 1,1,2,2-Tetrachloroethane | **0.6** | 0.0011 U | 0.11 U | 0.0011 U | 0.0012 U | 0.0012 U | 0.11 U | 0.0011 U |
| Toluene | **1.5** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Chlorobenzene | **1.7** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Ethylbenzene | **5.5** | 0.0045 U | 0.45 U | 0.0046 U | 0.0046 U | 0.0049 U | 0.46 U | 0.0005 J |
| Styrene | **NA** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0057 U |
| Xylene(Total) | **1.2** | 0.0056 U | 0.56 U | 0.0057 U | 0.0058 U | 0.0061 U | 0.57 U | 0.0035 J |
| Total Confident Conc. VOAs (s) | | 0.0 | 0 | 0.0 | 0 | 0.1 | 0 | 0.129 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 68 | 0 | 0 | 0 | 48 | 0.377 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 7
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 37,38,39

| Sample ID | New York TAGM | AOC-37-1-8 | AOC-37-1-10 | AOC-37-2-5 | AOC-38-1-4 | AOC-38-1-5 | AOC-39-1-8 | AOC-39-2-8 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367534 | 367535 | 367538 | 367536 | 367537 | 367550 | 367939 |
| Sampling Date | Cleanup Objective | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 50.0 | 1.0 | | | 5.0 | 777.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | |
| Phenol | **0.030 or MDL** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2-Chlorophenol | **0.8** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2-Methylphenol | **0.100 or MDL** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 4-Methylphenol | **0.9** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2-Nitrophenol | **0.330 or MDL** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2,4-Dimethylphenol | **NA** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 0.73 J | NR |
| 2,4-Dichlorophenol | **0.4** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2,4,6-Trichlorophenol | **NA** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2,4,5-Trichlorophenol | **0.1** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2,4-Dinitrophenol | **0.200 or MDL** | 1.6 U | 7.6 U | 1.6 U | NR | NR | 7.8 U | NR |
| 4-Nitrophenol | **0.100 or MDL** | 1.6 U | 7.6 U | 1.6 U | NR | NR | 7.8 U | NR |
| 4,6-Dinitro-2-methylphenol | **NA** | 1.6 U | 7.6 U | 1.6 U | NR | NR | 7.8 U | NR |
| Pentachlorophenol | **1 or MDL** | 1.6 U | 7.6 U | 1.6 U | NR | NR | 7.8 U | NR |
| bis(2-Chloroethyl)ether | **NA** | 0.039 U | 0.19 U | 0.040 U | NR | NR | 0.19 U | NR |
| 1,3-Dichlorobenzene | **1.6** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 1,4-Dichlorobenzene | **8.5** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 1,2-Dichlorobenzene | **7.9** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| bis(2-chloroisopropyl)ether | **NA** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| N-Nitroso-di-n-propylamine | **NA** | 0.039 U | 0.19 U | 0.040 U | NR | NR | 0.19 U | NR |
| Hexachloroethane | **NA** | 0.039 U | 0.19 U | 0.040 U | NR | NR | 0.19 U | NR |
| Nitrobenzene | **0.200 or MDL** | 0.039 U | 0.19 U | 0.040 U | NR | NR | 0.19 U | NR |
| Isophorone | **4.4** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| bis(2-Chloroethoxy)methane | **NA** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 1,2,4-Trichlorobenzene | **3.4** | 0.039 U | 0.19 U | 0.040 U | NR | NR | 0.19 U | NR |
| Naphthalene | **13** | 0.051 J | 0.039 J | 0.40 U | NR | NR | 0.55 J | NR |
| 4-Chloroaniline | **0.220 or MDL** | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Hexachlorobutadiene | **NA** | 0.078 U | 0.38 U | 0.081 U | NR | NR | 0.39 U | NR |
| 2-Methylnaphthalene | **36.400** | 0.020 J | 1.9 U | 0.40 U | NR | NR | 0.28 J | NR |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 7
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 37,38,39

| Sample ID | New York TAGM | AOC-37-1-8 | AOC-37-1-10 | AOC-37-2-5 | AOC-38-1-4 | AOC-38-1-5 | AOC-39-1-8 | AOC-39-2-8 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367534 | 367535 | 367538 | 367536 | 367537 | 367550 | 367939 |
| Sampling Date | Cleanup Objective | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 50.0 | 1.0 | | | 5.0 | |
| Hexachlorocyclopentadiene | NA | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2-Chloronaphthalene | NA | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 2-Nitroaniline | 0.430 or MDL | 0.78 U | 3.8 U | 0.81 U | NR | NR | 3.9 U | NR |
| Dimethylphthalate | 2.0 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Acenaphthylene | 50 | 0.093 J | 1.9 U | 0.40 U | NR | NR | 2.5 | NR |
| 2,6-Dinitrotoluene | 1.0 | 0.078 U | 0.38 U | 0.081 U | NR | NR | 0.39 U | NR |
| 3-Nitroaniline | .500 or MDL | 0.78 U | 3.8 U | 0.81 U | NR | NR | 3.9 U | NR |
| Acenaphthene | 50 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.2 J | NR |
| Dibenzofuran | 6.2 | 0.018 J | 1.9 U | 0.40 U | NR | NR | 0.28 J | NR |
| 2,4-Dinitrotoluene | NA | 0.078 U | 0.38 U | 0.081 U | NR | NR | 0.39 U | NR |
| Diethylphthalate | 7.1 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 4-Chlorophenyl-phenylether | NA | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Fluorene | 50 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.2 J | NR |
| 4-Nitroaniline | NA | 0.78 U | 3.8 U | 0.81 U | NR | NR | 3.9 U | NR |
| N-Nitrosodiphenylamine | NA | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 4-Bromophenyl-phenylether | NA | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Hexachlorobenzene | 0.410 | 0.039 U | 0.19 U | 0.040 U | NR | NR | 0.19 U | NR |
| Phenanthrene | 50 | 0.086 J | 1.9 U | 0.40 U | NR | NR | 2.8 | NR |
| Anthracene | 50 | 0.034 J | 0.13 J | 0.40 U | NR | NR | 3.6 | NR |
| Carbazole | NA | 0.0086 J | 1.9 U | 0.40 U | NR | NR | 0.22 J | NR |
| Di-n-butylphthalate | 8.1 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Fluoranthene | 50 | 0.23 J | 0.52 J | 0.40 U | NR | NR | 20 | NR |
| Pyrene | 50 | 0.25 J | 0.62 J | 0.40 U | NR | NR | 23 | NR |
| Butylbenzylphthalate | 50 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| 3,3'-Dichlorobenzidine | NA | 0.78 U | 3.8 U | 0.81 U | NR | NR | 3.9 U | NR |
| Benzo(a)anthracene | 0.224 or MDL | 0.16 | 0.38 | 0.040 U | NR | NR | 10 | NR |
| Chrysene | 0.4 | 0.17 J | 0.36 J | 0.40 U | NR | NR | 10 | NR |
| bis(2-Ethylhexyl)phthalate | 50 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Di-n-octylphthalate | 50 | 0.39 U | 1.9 U | 0.40 U | NR | NR | 1.9 U | NR |
| Benzo(b)fluoranthene | 0.22 or MDL | 0.26 | 0.24 | 0.040 U | NR | NR | 9.8 | NR |
| Benzo(k)fluoranthene | 0.22 or MDL | 0.12 | 0.11 J | 0.040 U | NR | NR | 4.2 | NR |
| Benzo(a)pyrene | 0.061 or MDL | 0.20 | 0.17 J | 0.040 U | NR | NR | 8.3 | NR |
| Indeno(1,2,3-cd)pyrene | 3.2 | 0.16 | 0.084 J | 0.040 U | NR | NR | 4.3 | NR |
| Dibenz(a,h)anthracene | 0.014 or MDL | 0.054 | 0.19 U | 0.040 U | NR | NR | 1.4 | NR |
| Benzo(g,h,i)perylene | 50 | 0.19 J | 0.12 J | 0.40 U | NR | NR | 4.6 | NR |
| Total Confident Conc. BNAs (s) | | 0.9 | 0.6 | 0 | | | 104 | |
| Total Estimated Conc. BNA TICs (s) | | 0 | 60 | 0 | | | 127 | |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 7
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 37,38,39

| Sample ID | New York TAGM | AOC-37-1-8 | AOC-37-1-10 | AOC-37-2-5 | AOC-38-1-4 | AOC-38-1-5 | AOC-39-1-8 | AOC-39-2-8 |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 367534 | 367535 | 367538 | 367536 | 367537 | 367550 | 367939 |
| Sampling Date | Cleanup Objective | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/05/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 50.0 | 1.0 | | 1.0 | 1.0 | 1.0 |
| **PCBs** | | | | | | | | |
| Aroclor-1016 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1221 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1232 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1242 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1248 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1254 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1260 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1262 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| Aroclor-1268 | # | 0.078 U | 0.076 U | 0.081 U | NR | NR | 0.078 U | NR |
| **PESTICIDES** | | | | | | | | |
| Aldrin | **0.041** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| alpha-BHC | **0.11** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| beta-BHC | **0.2** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| delta-BHC | **0.3** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| gamma-BHC(Lindane) | **0.06** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Chlordane | **0.54** | NR | NR | NR | NR | NR | 0.078 U | NR |
| 4,4'-DDD | **2.9** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| 4,4'-DDE | **2.1** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| 4,4'-DDT | **2.1** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Dieldrin | **0.044** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| EndosulfanI | **0.9** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| EndosulfanII | **0.9** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Endosulfansulfate | **1.0** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Endrin | **0.1** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Endrinaldehyde | **N/A** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Endrinketone | **N/A** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Heptachlor | **0.1** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Heptachlorepoxide | **0.02** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Methoxychlor | **Site Specific** | NR | NR | NR | NR | NR | 0.0078 U | NR |
| Toxaphene | **N/A** | NR | NR | NR | NR | NR | 0.078 U | NR |
| **WET CHEMISTRY** | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | NR | NR | NR | NR | 0.5 U | NR |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 7
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 37,38,39

| Sample ID | Eastern USA | New York TAGM | AOC-37-1-8 | | AOC-37-1-10 | | AOC-37-2-5 | | AOC-38-1-4 | AOC-38-1-5 | AOC-39-1-8 | | AOC-39-2-8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 367534 | | 367535 | | 367538 | | 367536 | 367537 | 367550 | | 367939 | |
| Sampling Date | | Cleanup Objective | 08/05/02 | | 08/05/02 | | 08/05/02 | | 08/05/02 | 08/05/02 | 08/06/02 | | 08/06/02 | |
| Matrix | | Criteria (mg/kg) | SOLID | | SOLID | | SOLID | | SOLID | SOLID | SOLID | | SOLID | |
| Dilution Factor | | | 1.0 | | 50.0 | | 1.0 | | 1.0 | 1.0 | 50.0 | | 1.0 | |
| **METALS** | | | | | | | | | | | | | | |
| Aluminum | **33,000** | **SB** | 8190 | | 2140 | | 5760 | | NR | NR | 5190 | | 11700 | |
| Antimony | **N/A** | **SB** | 0.83 | U | 0.81 | U | 0.86 | U | NR | NR | 3.4 | | 4.2 | |
| Arsenic | **3 - 12** | **7.5 or SB** | 3.5 | | 0.70 | U | 1.3 | | NR | NR | 6.4 | | 3.9 | |
| Barium | **15 - 600** | **300 or SB** | 31.4 | B | 20.3 | B | 85.6 | | NR | NR | 1180 | | 841 | |
| Beryllium | **0 - 1.75** | **0.16 or SB** | 0.27 | B | 0.17 | B | 0.44 | B | NR | NR | 0.21 | B | 0.43 | |
| Cadmium | **0.1 - 1** | **1 or SB** | 0.085 | U | 0.09 | B | 0.088 | U | NR | NR | 0.62 | B | 0.80 | B |
| Calcium | **130 - 35000** | **SB** | 22100 | | 15000 | | 21700 | | NR | NR | 3420 | | 102500 | |
| Chromium | **1.5 - 40** | **10 or SB** | 13.8 | | 5.7 | | 14.5 | | NR | NR | 38.6 | | 21.3 | |
| Cobalt | **2.6 - 60** | **30 or SB** | 6.9 | B | 2.6 | B | 5.8 | B | NR | NR | 6.5 | B | 6.6 | B |
| Copper | **1 - 50** | **25 or SB** | 25.1 | | 11.1 | | 14.7 | | NR | NR | 41.8 | | 19.9 | |
| Iron | **2000 - 550000** | **2000 or SB** | 19800 | | 5590 | | 13200 | | NR | NR | 15000 | | 19500 | |
| Lead | **200 - 500** | **SB** | 20.0 | | 3.6 | | 6.2 | | NR | NR | 5180 | | 179 | |
| Magnesium | **100 - 5000** | **SB** | 5560 | | 5960 | | 11400 | | NR | NR | 4120 | | 8320 | |
| Manganese | **50 - 5000** | **SB** | 257 | | 134 | | 276 | | NR | NR | 182 | | 457 | |
| Mercury | **0.001 - 0.2** | **0.1** | 0.02 | B | 0.016 | U | 0.020 | U | NR | NR | 0.18 | | 0.06 | |
| Nickel | **0.5 - 25** | **13 or SB** | 16.4 | | 9.2 | | 14.9 | | NR | NR | 22.0 | | 14.5 | |
| Potassium | **8500 - 43000** | **SB** | 1280 | | 536 | B | 1930 | | NR | NR | 1920 | | 569 | B |
| Selenium | **0.1 - 3.9** | **2 or SB** | 0.83 | U | 0.81 | U | 0.86 | U | NR | NR | 0.91 | U | 0.87 | U |
| Silver | **N/A** | **SB** | 0.15 | U | 0.14 | U | 0.15 | U | NR | NR | 0.16 | U | 0.29 | U |
| Sodium | **6000 - 8000** | **SB** | 320 | B | 108 | B | 270 | B | NR | NR | 200 | B | 418 | B |
| Thallium | **N/A** | **SB** | 0.93 | U | 0.91 | U | 0.97 | U | NR | NR | 1.0 | U | 0.98 | U |
| Vanadium | **1 - 300** | **150 or SB** | 17.1 | | 6.3 | B | 17.2 | | NR | NR | 15.9 | | 15.8 | |
| Zinc | **9 - 50** | **20 or SB** | 52.1 | | 12.3 | | 26.9 | | NR | NR | 360 | | 760 | |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 8
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 40

| Sample ID | New York | AOC-40-1-3.5 | AOC-40-2-5 | AOC-40-3-8 | AOC-40-4-6 | AOC-40-5-7 | AOC-40-6-11 | AOC-40-7-4 | AOC-40-8-4 | AOC-40-9-8 | AOC-40-10-11 | Duplicate-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367946 | 367947 | 367948 | 367949 | 367950 | 367951 | 367952 | 367953 | 367954 | 367955 | 367956 |
| Sampling Date | Rec. Soil | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | |
| Chloromethane | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Bromomethane | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| VinylChloride | 0.2 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Chloroethane | 1.9 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| MethyleneChloride | 0.1 | 0.001 J | 0.0009 J | 0.0011 J | 0.0012 J | 0.0015 J | 0.0027 J | 0.0009 J | 0.0008 J | 0.0007 J | 0.001 J | 0.0018 J |
| Acetone | 0.2 | 0.017 | 0.014 | 0.064 | 0.036 | 0.069 | 0.042 | 0.016 | 0.027 | 0.026 | 0.017 | 0.03 |
| CarbonDisulfide | 2.7 | 0.0016 J | 0.006 U | 0.0048 J | 0.0006 J | 0.012 | 0.0036 J | 0.0007 J | 0.0023 J | 0.002 J | 0.0044 J | 0.0058 J |
| 1,1-Dichloroethene | 0.4 | 0.002 U | 0.0008 J | 0.0024 U | 0.0021 U | 0.0024 U | 0.0029 U | 0.002 U | 0.0021 U | 0.0023 U | 0.0006 J | 0.0023 U |
| 1,1-Dichloroethane | 0.2 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| cis-1,2-Dichloroethene | NA | 0.0051 U | 0.0013 J | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0005 J | 0.0019 J |
| Chloroform | 0.3 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0012 J | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| 1,2-Dichloroethane | 0.1 | 0.002 U | 0.0024 U | 0.0024 U | 0.0021 U | 0.0024 U | 0.0029 U | 0.002 U | 0.0021 U | 0.0023 U | 0.0023 U | 0.0023 U |
| 2-Butanone | 0.3 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| 1,1,1-Trichloroethane | 0.8 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| CarbonTetrachloride | 0.6 | 0.002 U | 0.0024 U | 0.0024 U | 0.0021 U | 0.0024 U | 0.0029 U | 0.002 U | 0.0021 U | 0.0023 U | 0.0023 U | 0.0023 U |
| Bromodichloromethane | NA | 0.001 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0015 U | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0012 U |
| 1,2-Dichloropropane | NA | 0.001 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0015 U | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0012 U |
| cis-1,3-Dichloropropene | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Trichloroethene | 0.7 | 0.001 U | 0.0004 J | 0.0012 U | 0.0011 U | 0.0012 U | 0.0015 U | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0012 U |
| Dibromochloromethane | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| 1,1,2-Trichloroethane | NA | 0.0031 U | 0.0036 U | 0.0035 U | 0.0032 U | 0.0037 U | 0.0044 U | 0.003 U | 0.0032 U | 0.0034 U | 0.0034 U | 0.0035 U |
| Benzene | 0.06 | 0.001 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0012 J | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0012 U |
| trans-1,3-Dichloropropene | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Bromoform | NA | 0.011 | 0.008 | 0.0047 U | 0.011 | 0.007 | 0.016 | 0.011 | 0.0041 J | 0.0072 | 0.0082 | 0.016 |
| 4-Methyl-2-Pentanone | 1 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| 2-Hexanone | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Tetrachloroethene | 1.4 | 0.001 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0015 U | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0012 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.001 U | 0.0012 U | 0.0012 U | 0.0011 U | 0.0012 U | 0.0015 U | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0012 U |
| Toluene | 1.5 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Chlorobenzene | 1.7 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Ethylbenzene | 5.5 | 0.0041 U | 0.0048 U | 0.0047 U | 0.0043 U | 0.0049 U | 0.0058 U | 0.0041 U | 0.0042 U | 0.0045 U | 0.0046 U | 0.0047 U |
| Styrene | NA | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Xylene(Total) | 1.2 | 0.0051 U | 0.006 U | 0.0059 U | 0.0054 U | 0.0061 U | 0.0073 U | 0.0051 U | 0.0053 U | 0.0057 U | 0.0057 U | 0.0059 U |
| Total Confident Conc. VOAs (s) | | 0.028 | 0.02 | 0.064 | 0.047 | 0.088 | 0.058 | 0.027 | 0.0027 | 0.033 | 0.023 | 0.046 |
| Total Estimated Conc. VOA TICs (s) | | 0.134 | 0 | 0 | 0.017 | 0.023 | 0.32 | 0.036 | 0.0053 | 0 | 0.0064 | 0.017 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 8
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 40

| Sample ID | New York | AOC-40-1-3.5 | AOC-40-2-5 | AOC-40-3-8 | AOC-40-4-6 | AOC-40-5-7 | AOC-40-8-11 | AOC-40-7-4 | AOC-40-8-4 | AOC-40-9-8 | AOC-40-10-11 | Duplicate-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367946 | 367947 | 367948 | 367949 | 367950 | 367951 | 367952 | 367953 | 367954 | 367955 | 367956 |
| Sampling Date | Rec. Soil | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | 1.0 | | | | | 1.0 | | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | |
| Phenol | **0.030 or MDL** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2-Chlorophenol | **0.8** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2-Methylphenol | **0.100 or MDL** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 4-Methylphenol | **0.9** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2-Nitrophenol | **0.330 or MDL** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2,4-Dimethylphenol | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2,4-Dichlorophenol | **0.4** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2,4,6-Trichlorophenol | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2,4,5-Trichlorophenol | **0.1** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | NR | NR | 1.6 U | NR | NR | NR | NR | 1.5 U | NR | 1.6 U | 1.6 U |
| 4-Nitrophenol | **0.100 or MDL** | NR | NR | 1.6 U | NR | NR | NR | NR | 1.5 U | NR | 1.6 U | 1.6 U |
| 4,6-Dinitro-2-methylphenol | **NA** | NR | NR | 1.6 U | NR | NR | NR | NR | 1.5 U | NR | 1.6 U | 1.6 U |
| Pentachlorophenol | **1 or MDL** | NR | NR | 1.6 U | NR | NR | NR | NR | 1.5 U | NR | 1.6 U | 1.6 U |
| bis(2-Chloroethyl)ether | **NA** | NR | NR | 0.039 U | NR | NR | NR | NR | 0.037 U | NR | 0.04 U | 0.04 U |
| 1,3-Dichlorobenzene | **1.6** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 1,4-Dichlorobenzene | **8.5** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 1,2-Dichlorobenzene | **7.9** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| bis(2-chloroisopropyl)ether | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| N-Nitroso-di-n-propylamine | **NA** | NR | NR | 0.039 U | NR | NR | NR | NR | 0.037 U | NR | 0.04 U | 0.04 U |
| Hexachloroethane | **NA** | NR | NR | 0.039 U | NR | NR | NR | NR | 0.037 U | NR | 0.04 U | 0.04 U |
| Nitrobenzene | **0.200 or MDL** | NR | NR | 0.039 U | NR | NR | NR | NR | 0.037 U | NR | 0.04 U | 0.04 U |
| Isophorone | **4.4** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| bis(2-Chloroethoxy)methane | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 1,2,4-Trichlorobenzene | **3.4** | NR | NR | 0.039 U | NR | NR | NR | NR | 0.037 U | NR | 0.04 U | 0.04 U |
| Naphthalene | **13** | NR | NR | 0.014 J | NR | NR | NR | NR | 0.08 J | NR | 0.4 U | 0.4 U |
| 4-Chloroaniline | **0.220 or MDL** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| Hexachlorobutadiene | **NA** | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.079 U | 0.079 U |
| 2-Methylnaphthalene | **36.400** | NR | NR | 0.036 J | NR | NR | NR | NR | 0.12 J | NR | 0.4 U | 0.4 U |
| Dilution Factor | | | | 1.0 | | | | | 1.0 | | 1.0 | 1.0 |
| Hexachlorocyclopentadiene | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2-Chloronaphthalene | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 2-Nitroaniline | **0.430 or MDL** | NR | NR | 0.79 U | NR | NR | NR | NR | 0.74 U | NR | 0.79 U | 0.79 U |
| Dimethylphthalate | **2.0** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| Acenaphthylene | **50** | NR | NR | 0.03 J | NR | NR | NR | NR | 0.039 J | NR | 0.4 U | 0.4 U |
| 2,6-Dinitrotoluene | **1.0** | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.079 U | 0.079 U |
| 3-Nitroaniline | **.500 or MDL** | NR | NR | 0.79 U | NR | NR | NR | NR | 0.74 U | NR | 0.79 U | 0.79 U |
| Acenaphthene | **50** | NR | NR | 0.028 J | NR | NR | NR | NR | 0.0087 J | NR | 0.4 U | 0.4 U |
| Dibenzofuran | **6.2** | NR | NR | 0.038 J | NR | NR | NR | NR | 0.025 J | NR | 0.4 U | 0.4 U |
| 2,4-Dinitrotoluene | **NA** | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.079 U | 0.079 U |
| Diethylphthalate | **7.1** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 4-Chlorophenyl-phenylether | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| Fluorene | **50** | NR | NR | 0.025 J | NR | NR | NR | NR | 0.0078 J | NR | 0.4 U | 0.4 U |
| 4-Nitroaniline | **NA** | NR | NR | 0.79 U | NR | NR | NR | NR | 0.74 U | NR | 0.79 U | 0.79 U |
| N-Nitrosodiphenylamine | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| 4-Bromophenyl-phenylether | **NA** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| Hexachlorobenzene | **0.410** | NR | NR | 0.039 U | NR | NR | NR | NR | 0.037 U | NR | 0.04 U | 0.04 U |
| Phenanthrene | **50** | NR | NR | 0.46 | NR | NR | NR | NR | 0.16 J | NR | 0.4 U | 0.4 U |
| Anthracene | **50** | NR | NR | 0.089 J | NR | NR | NR | NR | 0.034 J | NR | 0.4 U | 0.4 U |
| Carbazole | **NA** | NR | NR | 0.032 J | NR | NR | NR | NR | 0.016 J | NR | 0.4 U | 0.4 U |
| Di-n-butylphthalate | **8.1** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| Fluoranthene | **50** | NR | NR | 0.4 | NR | NR | NR | NR | 0.31 J | NR | 0.4 U | 0.4 U |
| Pyrene | **50** | NR | NR | 0.33 J | NR | NR | NR | NR | 0.28 J | NR | 0.4 U | 0.4 U |
| Butylbenzylphthalate | **50** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.62 | NR | 0.4 U | 0.4 U |
| 3,3'-Dichlorobenzidine | **NA** | NR | NR | 0.79 U | NR | NR | NR | NR | 0.74 U | NR | 0.79 U | 0.79 U |
| Benzo(a)anthracene | **0.224 or MDL** | NR | NR | 0.17 | NR | NR | NR | NR | 0.19 | NR | 0.04 U | 0.04 U |
| Chrysene | **0.4** | NR | NR | 0.22 J | NR | NR | NR | NR | 0.25 J | NR | 0.4 U | 0.4 U |
| bis(2-Ethylhexyl)phthalate | **50** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.12 J | NR | 0.4 U | 0.4 U |
| Di-n-octylphthalate | **50** | NR | NR | 0.39 U | NR | NR | NR | NR | 0.37 U | NR | 0.4 U | 0.4 U |
| Benzo(b)fluoranthene | **0.22 or MDL** | NR | NR | 0.22 | NR | NR | NR | NR | 0.3 | NR | 0.04 U | 0.04 U |
| Benzo(k)fluoranthene | **0.22 or MDL** | NR | NR | 0.096 | NR | NR | NR | NR | 0.11 | NR | 0.04 U | 0.04 U |
| Benzo(a)pyrene | **0.061 or MDL** | NR | NR | 0.16 | NR | NR | NR | NR | 0.21 | NR | 0.04 U | 0.04 U |
| Indeno(1,2,3-cd)pyrene | **3.2** | NR | NR | 0.098 | NR | NR | NR | NR | 0.14 | NR | 0.04 U | 0.04 U |
| Dibenz(a,h)anthracene | **0.014 or MDL** | NR | NR | 0.036 J | NR | NR | NR | NR | 0.05 | NR | 0.04 U | 0.04 U |
| Benzo(g,h,i)perylene | **50** | NR | NR | 0.12 J | NR | NR | NR | NR | 0.14 J | NR | 0.4 U | 0.4 U |
| Total Confident Conc. BNAs (s) | | | | 1.604 | | | | | 1.62 | | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | | | 0 | | | | | 0 | | 0 | 0 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367946 | 367947 | 367948 | 367949 | 367950 | 367951 | 367952 | 367953 | 367954 | 367955 | 367956 |
| Sampling Date | Rec. Soil | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | | 1.0 | | | | | 1.0 | | 1.0 | 1.0 |
| **PCBs** | | | | | | | | | | | | |
| Aroclor-1016 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1221 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1232 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1242 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1248 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1254 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1260 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1262 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| Aroclor-1268 | # | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| **PESTICIDES** | | | | | | | | | | | | |
| Aldrin | **0.041** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| alpha-BHC | **0.11** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| beta-BHC | **0.2** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| delta-BHC | **0.3** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| gamma-BHC(Lindane) | **0.06** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Chlordane | **0.54** | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| 4,4'-DDD | **2.9** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| 4,4'-DDE | **2.1** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| 4,4'-DDT | **2.1** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Dieldrin | **0.044** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Endosulfan I | **0.9** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Endosulfan II | **0.9** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Endosulfansulfate | **1.0** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Endrin | **0.1** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Endrinaldehyde | **N/A** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Endrinketone | **N/A** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Heptachlor | **0.1** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Heptachlorepoxide | **0.02** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Methoxychlor | **Site Specific** | NR | NR | 0.0079 U | NR | NR | NR | NR | 0.0074 U | NR | 0.008 U | 0.008 U |
| Toxaphene | **N/A** | NR | NR | 0.079 U | NR | NR | NR | NR | 0.074 U | NR | 0.08 U | 0.08 U |
| **WET CHEMISTRY** | | | | | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | NR | 0.5 U | NR | NR | NR | NR | 0.5 U | NR | 0.5 U | 0.5 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 8
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 40

| Sample ID | Eastern USA | New York | AOC-40-1-3.5 | AOC-40-2-5 | AOC-40-3-8 | AOC-40-4-6 | AOC-40-5-7 | AOC-40-6-11 | AOC-40-7-4 | AOC-40-8-4 | AOC-40-9-8 | AOC-40-10-11 | Duplicate-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | TAGM | 367946 | 367947 | 367948 | 367949 | 367950 | 367951 | 367952 | 367953 | 367954 | 367955 | 367956 |
| Sampling Date | | Rec. Soil | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 | 08/07/02 |
| Matrix | | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **METALS** | | | | | | | | | | | | | |
| Aluminum | 33,000 | SB | 4750 | 3980 | 6990 | 7140 | 7050 | 4420 | 4700 | 5630 | 6150 | 6250 | 6260 |
| Antimony | N/A | SB | 1.1 U | 1.4 U | 1.4 U | 1.2 U | 1.4 U | 1.8 B | 1.2 U | 1.3 U | 1.2 U | 1.4 U | 1.3 U |
| Arsenic | 3 - 12 | 7.5 or SB | 0.99 B | 0.77 U | 2.1 | 2.0 | 2.2 | 18.6 | 0.66 B | 2.0 | 2.3 | 1.4 | 0.69 U |
| Barium | 15 - 600 | 300 or SB | 37.4 B | 10.6 B | 33.7 B | 11.4 B | 72.2 | 49.8 B | 23.0 B | 42.0 B | 18.0 B | 10.6 B | 9.9 B |
| Beryllium | 0 - 1.75 | 0.16 or SB | 0.19 B | 0.11 B | 0.22 B | 0.18 B | 0.26 B | 0.63 | 0.17 B | 0.18 B | 0.20 B | 0.13 B | 0.14 B |
| Cadmium | 0.1 - 1 | 1 or SB | 0.13 B | 0.096 U | 0.14 B | 0.10 B | 0.16 B | 0.32 B | 0.09 B | 0.21 B | 0.17 B | 0.10 B | 0.09 B |
| Calcium | 130 - 35000 | SB | 13500 | 918 B | 10400 | 2820 | 9880 | 1140 B | 19000 | 6860 | 7490 | 3570 | 3680 |
| Chromium | 1.5 - 40 | 10 or SB | 11.1 | 6.3 | 11.1 | 10.6 | 16.9 | 7.8 | 6.9 | 14.0 | 11.3 | 10.2 | 8.9 |
| Cobalt | 2.6 - 60 | 30 or SB | 4.1 B | 2.7 B | 5.7 B | 3.9 B | 6.9 B | 6.8 B | 3.4 B | 5.2 B | 5.3 B | 4.8 B | 4.9 B |
| Copper | 1 - 50 | 25 or SB | 12.2 | 3.7 B | 11.2 | 8.9 | 14.3 | 57.3 | 9.9 | 10.3 | 9.2 | 5.3 B | 5.4 B |
| Iron | 2000 - 550000 | 2000 or SB | 10700 | 8770 | 15700 | 16300 | 17500 | 33600 | 12200 | 13300 | 15300 | 13300 | 13200 |
| Lead | 200 - 500 | SB | 14.2 | 1.9 | 8.5 | 4.2 | 8.7 | 66.2 | 4.0 | 25.6 | 11.3 | 3.8 | 4.3 |
| Magnesium | 100 - 5000 | SB | 5360 | 2040 | 4070 | 3500 | 6900 | 577 B | 11200 | 2910 | 3480 | 3480 | 3630 |
| Manganese | 50 - 5000 | SB | 148 | 74.6 | 218 | 115 | 249 | 61.4 | 202 | 162 | 192 | 119 | 123 |
| Mercury | 0.001 - 0.2 | 0.1 | 0.04 | 0.017 U | 0.02 B | 0.016 U | 0.05 | 0.12 | 0.017 U | 0.03 B | 0.05 | 0.02 B | 0.02 B |
| Nickel | 0.5 - 25 | 13 or SB | 10.9 | 6.5 B | 12.8 | 10.9 | 16.0 | 14.6 | 7.5 B | 12.0 | 12.7 | 12.0 | 12.4 |
| Potassium | 8500 - 43000 | SB | 694 B | 76.0 U | 848 B | 707 B | 1680 | 96.9 U | 462 B | 623 B | 630 B | 376 B | 341 B |
| Selenium | 0.1 - 3.9 | 2 or SB | 0.80 U | 1.0 U | 0.99 U | 1.0 B | 1.0 U | 3.5 | 0.87 U | 0.93 U | 0.88 U | 1.00 U | 0.91 U |
| Silver | N/A | SB | 0.27 U | 0.34 U | 0.33 U | 0.28 U | 0.34 U | 0.43 U | 0.29 U | 0.31 U | 0.29 U | 0.33 U | 0.30 U |
| Sodium | 6000 - 8000 | SB | 188 B | 95.3 U | 120 B | 136 B | 127 B | 137 B | 82.0 U | 155 B | 135 B | 93.9 U | 85.6 U |
| Thallium | N/A | SB | 0.90 U | 1.1 U | 1.1 U | 0.95 U | 1.2 U | 1.4 U | 0.97 U | 1.0 U | 0.98 U | 1.1 U | 1.0 U |
| Vanadium | 1 - 300 | 150 or SB | 12.1 | 11.7 B | 13.8 | 11.7 | 20.3 | 13.7 B | 10.6 | 12.2 | 13.0 | 10.2 B | 9.8 B |
| Zinc | 9 - 50 | 20 or SB | 36.2 | 17.7 | 30.9 | 32.8 | 40.0 | 49.2 | 22.3 | 67.9 | 41.6 | 31.6 | 33.2 |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 9
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
AOC- 40

| Sample ID | New York | AOC-40-11-7 | AOC-40-12-7 | AOC-40-13-8 | AOC-40-14-8 | AOC-40-15-5 | AOC-40-16-6 | AOC-40-17-6 | AOC-40-18-10 | AOC-40-19-7 | AOC-40-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367957 | 367958 | 367962 | 367963 | 367964 | 368427 | 368836 | 368840 | 369402 | 368855 |
| Sampling Date | Rec. Soil | 08/07/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 |
| VOLATILE COMPOUNDS (GC/MS) | | | | | | | | | | | |
| Chloromethane | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Bromomethane | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| VinylChloride | 0.2 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Chloroethane | 1.9 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| MethyleneChloride | 0.1 | 0.0014 J | 0.0036 U | 0.0007 J | 0.0006 J | 0.0033 U | 0.0019 J | 0.0015 J | 0.0014 J | 0.0035 U | 0.0012 J |
| Acetone | 0.2 | 0.024 | 0.21 | 0.033 | 0.033 | 0.015 | 0.066 | 0.0056 U | 0.074 | 0.0058 U | 0.039 |
| CarbonDisulfide | 2.7 | 0.0009 J | 0.0073 | 0.0011 J | 0.001 J | 0.0033 J | 0.0008 J | 0.0074 | 0.0008 J | 0.0058 U | 0.0010 J |
| 1,1-Dichloroethene | 0.4 | 0.0024 U | 0.0024 U | 0.0021 U | 0.0022 U | 0.0022 U | 0.0008 J | 0.0022 U | 0.0023 U | 0.0023 U | 0.0022 U |
| 1,1-Dichloroethane | 0.2 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| trans-1,2-Dichloroethene | 0.3 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| cis-1,2-Dichloroethene | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0009 J | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Chloroform | 0.3 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| 1,2-Dichloroethane | 0.1 | 0.0024 U | 0.0024 U | 0.0021 U | 0.0022 U | 0.0022 U | 0.0022 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0022 U |
| 2-Butanone | 0.3 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| 1,1,1-Trichloroethane | 0.8 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0005 J | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| CarbonTetrachloride | 0.6 | 0.0024 U | 0.0024 U | 0.0021 U | 0.0022 U | 0.0022 U | 0.0022 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0022 U |
| Bromodichloromethane | NA | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U |
| 1,2-Dichloropropane | NA | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U |
| cis-1,3-Dichloropropene | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Trichloroethene | 0.7 | 0.0012 U | 0.0004 J | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.001 J | 0.0011 U |
| Dibromochloromethane | NA | 0.0006 J | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| 1,1,2-Trichloroethane | NA | 0.0036 U | 0.0036 U | 0.0032 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0034 U | 0.0034 U | 0.0035 U | 0.0034 U |
| Benzene | 0.06 | 0.002 | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U |
| trans-1,3-Dichloropropene | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Bromoform | NA | 0.018 | 0.0055 | 0.0085 | 0.0009 J | 0.011 | 0.014 | 0.0034 J | 0.0014 J | 0.0022 J | 0.0053 |
| 4-Methyl-2-Pentanone | 1 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| 2-Hexanone | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Tetrachloroethene | 1.4 | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0012 U | 0.0012 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U |
| Toluene | 1.5 | 0.0037 J | 0.006 U | 0.0007 J | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0008 J |
| Chlorobenzene | 1.7 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Ethylbenzene | 5.5 | 0.0048 U | 0.0048 U | 0.0043 U | 0.0044 U | 0.0044 U | 0.0044 U | 0.0045 U | 0.0046 U | 0.0046 U | 0.0045 U |
| Styrene | NA | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Xylene(Total) | 1.2 | 0.006 U | 0.006 U | 0.0054 U | 0.0056 U | 0.0055 U | 0.0055 U | 0.0056 U | 0.0057 U | 0.0058 U | 0.0056 U |
| Total Confident Conc. VOAs (s) | | 0.044 | 0.223 | 0.042 | 0.033 | 0.026 | 0.08 | 0.0 | 0.1 | 0 | 0.0 |
| Total Estimated Conc. VOA TICs (s) | | 0.05 | 0 | 0 | 0.013 | 0 | 0.019 | 0 | 0.2 | 0 | 0.1 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 9
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
AOC- 40

| Sample ID | New York | AOC-40-11-7 | AOC-40-12-7 | AOC-40-13-8 | AOC-40-14-8 | AOC-40-15-5 | AOC-40-16-6 | AOC-40-17-6 | AOC-40-18-10 | AOC-40-19-7 | AOC-40-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367957 | 367958 | 367962 | 367963 | 367964 | 368427 | 368836 | 368840 | 369402 | 368855 |
| Sampling Date | Rec. Soil | 08/07/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | | | | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | |
| Phenol | **0.030 or MDL** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 0.41 J |
| 2-Chlorophenol | **0.8** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2-Methylphenol | **0.100 or MDL** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 4-Methylphenol | **0.9** | NR | 0.0093 J | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2-Nitrophenol | **0.330 or MDL** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2,4-Dimethylphenol | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2,4-Dichlorophenol | **0.4** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2,4,6-Trichlorophenol | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2,4,5-Trichlorophenol | **0.1** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | NR | 1.6 U | NR | NR | NR | 1.5 U | 1.6 U | 16 U | 1.6 U | 7.8 U |
| 4-Nitrophenol | **0.100 or MDL** | NR | 1.6 U | NR | NR | NR | 1.5 U | 1.6 U | 16 U | 1.6 U | 7.8 U |
| 4,6-Dinitro-2-methylphenol | **NA** | NR | 1.6 U | NR | NR | NR | 1.5 U | 1.6 U | 16 U | 1.6 U | 7.8 U |
| Pentachlorophenol | **1 or MDL** | NR | 1.6 U | NR | NR | NR | 1.5 U | 1.6 U | 16 U | 1.6 U | 7.8 U |
| bis(2-Chloroethyl)ether | **NA** | NR | 0.041 U | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.19 U |
| 1,3-Dichlorobenzene | **1.8** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 1,4-Dichlorobenzene | **8.5** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 1,2-Dichlorobenzene | **7.9** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| bis(2-chloroisopropyl)ether | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| N-Nitroso-di-n-propylamine | **NA** | NR | 0.041 U | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.19 U |
| Hexachloroethane | **NA** | NR | 0.041 U | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.19 U |
| Nitrobenzene | **0.200 or MDL** | NR | 0.041 U | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.19 U |
| Isophorone | **4.4** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| bis(2-Chloroethoxy)methane | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 1,2,4-Trichlorobenzene | **3.4** | NR | 0.041 U | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.19 U |
| Naphthalene | **13** | NR | 0.015 J | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 0.47 J |
| 4-Chloroaniline | **0.220 or MDL** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| Hexachlorobutadiene | **NA** | NR | 0.081 U | NR | NR | NR | 0.074 U | 0.079 U | 0.78 U | 0.079 U | 0.39 U |
| 2-Methylnaphthalene | **36.400** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 0.5 J |
| Dilution Factor | | | 1.0 | | | | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 |
| Hexachlorocyclopentadiene | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2-Chloronaphthalene | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 2-Nitroaniline | **0.430 or MDL** | NR | 0.81 U | NR | NR | NR | 0.74 U | 0.79 U | 7.8 U | 0.79 U | 3.9 U |
| Dimethylphthalate | **2.0** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| Acenaphthylene | **50** | NR | 0.062 J | NR | NR | NR | 0.37 U | 0.012 J | 3.9 U | 0.39 U | 0.14 J |
| 2,6-Dinitrotoluene | **1.0** | NR | 0.081 U | NR | NR | NR | 0.074 U | 0.079 U | 0.78 U | 0.079 U | 0.39 U |
| 3-Nitroaniline | **.500 or MDL** | NR | 0.81 U | NR | NR | NR | 0.74 U | 0.79 U | 7.8 U | 0.79 U | 3.9 U |
| Acenaphthene | **50** | NR | 0.0085 J | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.3 J |
| Dibenzofuran | **6.2** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.0 J |
| 2,4-Dinitrotoluene | **NA** | NR | 0.081 U | NR | NR | NR | 0.074 U | 0.079 U | 0.78 U | 0.079 U | 0.39 U |
| Diethylphthalate | **7.1** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 4-Chlorophenyl-phenylether | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| Fluorene | **50** | NR | 0.014 J | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.0 J |
| 4-Nitroaniline | **NA** | NR | 0.81 U | NR | NR | NR | 0.74 U | 0.79 U | 7.8 U | 0.79 U | 3.9 U |
| N-Nitrosodiphenylamine | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 4-Bromophenyl-phenylether | **NA** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| Hexachlorobenzene | **0.410** | NR | 0.041 U | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.19 U |
| Phenanthrene | **50** | NR | 0.14 J | NR | NR | NR | 0.37 U | 0.039 J | 3.9 U | 0.39 U | 12.0 |
| Anthracene | **50** | NR | 0.04 J | NR | NR | NR | 0.37 U | 0.015 J | 3.9 U | 0.39 U | 2.7 |
| Carbazole | **NA** | NR | 0.011 J | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.1 J |
| Di-n-butylphthalate | **8.1** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| Fluoranthene | **50** | NR | 0.35 J | NR | NR | NR | 0.37 U | 0.081 J | 3.9 U | 0.39 U | 12.0 |
| Pyrene | **50** | NR | 0.34 J | NR | NR | NR | 0.37 U | 0.073 J | 3.9 U | 0.39 U | 9.9 |
| Butylbenzylphthalate | **50** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| 3,3'-Dichlorobenzidine | **NA** | NR | 0.81 U | NR | NR | NR | 0.74 U | 0.79 U | 7.8 U | 0.79 U | 3.9 U |
| Benzo(a)anthracene | **0.224 or MDL** | NR | 0.2 | NR | NR | NR | 0.037 U | 0.047 | 0.39 U | 0.039 U | 4.8 |
| Chrysene | **0.4** | NR | 0.25 J | NR | NR | NR | 0.37 U | 0.044 J | 3.9 U | 0.39 U | 5.4 |
| bis(2-Ethylhexyl)phthalate | **50** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 0.41 J |
| Di-n-octylphthalate | **50** | NR | 0.41 U | NR | NR | NR | 0.37 U | 0.39 U | 3.9 U | 0.39 U | 1.9 U |
| Benzo(b)fluoranthene | **0.22 or MDL** | NR | 0.27 | NR | NR | NR | 0.037 U | 0.057 | 0.39 U | 0.039 U | 4.7 |
| Benzo(k)fluoranthene | **0.22 or MDL** | NR | 0.11 | NR | NR | NR | 0.037 U | 0.018 J | 0.39 U | 0.039 U | 2.2 |
| Benzo(a)pyrene | **0.061 or MDL** | NR | 0.22 | NR | NR | NR | 0.037 U | 0.040 | 0.39 U | 0.039 U | 3.6 |
| Indeno(1,2,3-cd)pyrene | **3.2** | NR | 0.12 | NR | NR | NR | 0.037 U | 0.026 J | 0.39 U | 0.039 U | 2.4 |
| Dibenz(a,h)anthracene | **0.014 or MDL** | NR | 0.042 | NR | NR | NR | 0.037 U | 0.039 U | 0.39 U | 0.039 U | 0.88 |
| Benzo(g,h,i)perylene | **50** | NR | 0.11 J | NR | NR | NR | 0.37 U | 0.028 J | 3.9 U | 0.39 U | 2.3 |
| Total Concentration Cancer SVAs (c) | | | 0.962 | | | | 0 | 0.1 | 0 | 0 | 62.7 |
| Total Estimated Concentration SVA TICs (s) | | | 3.47 | | | | 0 | 0.4 | 71 | 0 | 66.9 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 9
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
AOC- 40

| Sample ID | New York | AOC-40-11-7 | AOC-40-12-7 | AOC-40-13-8 | AOC-40-14-8 | AOC-40-15-5 | AOC-40-16-8 | AOC-40-17-8 | AOC-40-18-10 | AOC-40-19-7 | AOC-40-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 367957 | 367958 | 367962 | 367963 | 367964 | 368427 | 368836 | 368840 | 369402 | 368855 |
| Sampling Date | Rec. Soil | 08/07/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/06/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | | | | | 1.0 | 1.0 | 1.0 | 5.0 |
| **PCBs** | | | | | | | | | | | |
| Aroclor-1016 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| Aroclor-1221 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| Aroclor-1232 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| Aroclor-1242 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.24 |
| Aroclor-1248 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| Aroclor-1254 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.19 |
| Aroclor-1260 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| Aroclor-1262 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| Aroclor-1268 | # | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| **PESTICIDES** | | | | | | | | | | | |
| Aldrin | **0.041** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| alpha-BHC | **0.11** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| beta-BHC | **0.2** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.010 P* |
| delta-BHC | **0.3** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| gamma-BHC(Lindane) | **0.06** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Chlordane | **0.54** | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| 4,4'-DDD | **2.9** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| 4,4'-DDE | **2.1** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.012 |
| 4,4'-DDT | **2.1** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.015 |
| Dieldrin | **0.044** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Endosulfan I | **0.9** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Endosulfan II | **0.9** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Endosulfansulfate | **1.0** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Endrin | **0.1** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Endrinaldehyde | **N/A** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Endrinketone | **N/A** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.027 |
| Heptachlor | **0.1** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Heptachlorepoxide | **0.02** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.0078 U |
| Methoxychlor | **Site Specific** | NR | 0.0082 U | NR | NR | NR | NR | 0.0079 U | 0.0078 U | 0.0079 U | 0.038 P* |
| Toxaphene | **N/A** | NR | 0.082 U | NR | NR | NR | NR | 0.079 U | 0.078 U | 0.079 U | 0.078 U |
| **WET CHEMISTRY** | | | | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | NR | 0.5 U | NR | NR | NR | NR | 0.5 U | 0.5 U | 0.5 U | 0.5 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 9
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
AOC- 40

| Sample ID | Eastern USA | New York | AOC-40-11-7 | AOC-40-12-7 | AOC-40-13-8 | AOC-40-14-6 | AOC-40-15-5 | AOC-40-16-6 | AOC-40-17-6 | AOC-40-18-10 | AOC-40-19-7 | AOC-40-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | TAGM | 367957 | 367958 | 367962 | 367963 | 367964 | 368427 | 368838 | 368840 | 369402 | 368855 |
| Sampling Date | | Rec. Soil | 08/07/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/06/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | Criteria (mg/kg) | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 |
| METALS | | | | | | | | | | | | |
| Aluminum | 33,000 | SB | 7030 | 6790 | 6150 | 4480 | 7390 | NR | 10200 | 6860 | 8320 | 9220 |
| Antimony | N/A | SB | 1.3 U | 1.4 U | 1.00 U | 0.94 U | 1.0 U | NR | 0.92 U | 0.91 U | 1.4 U | 1.8 B |
| Arsenic | 3 - 12 | 7.5 or SB | 2.9 | 3.5 | 4.1 | 5.8 | 1.7 | NR | 2.0 | 2.0 | 0.75 U | 4.4 |
| Barium | 15 - 600 | 300 or SB | 43.8 B | 59.0 | 51.5 | 59.0 | 13.2 B | NR | 54.1 | 40.2 B | 47.9 | 216 |
| Beryllium | 0 - 1.75 | 0.16 or SB | 0.17 B | 0.21 B | 0.31 B | 0.31 B | 0.32 B | NR | 0.43 B | 0.29 B | 0.47 | 0.37 B |
| Cadmium | 0.1 - 1 | 1 or SB | 0.15 B | 0.31 B | 0.089 U | 0.083 U | 0.092 U | NR | 0.085 U | 0.094 U | 0.094 U | 0.20 B |
| Calcium | 130 - 35000 | SB | 2270 | 4630 | 5670 | 4520 | 11700 | NR | 12400 | 2080 | 1850 | 83600 |
| Chromium | 1.5 - 40 | 10 or SB | 16.1 | 15.8 | 13.8 | 10.7 | 9.1 | NR | 16.6 | 9.5 | 17.0 | 15.0 |
| Cobalt | 2.6 - 60 | 30 or SB | 5.1 B | 5.3 B | 5.8 B | 5.7 B | 5.0 B | NR | 8.3 B | 5.4 B | 7.3 B | 3.5 B |
| Copper | 1 - 50 | 25 or SB | 14.5 | 15.5 | 23.0 | 45.1 | 9.1 | NR | 17.7 | 12.4 | 13.9 | 14.3 |
| Iron | 2000 - 550000 | 2000 or SB | 17900 | 20400 | 21400 | 20200 | 17100 | NR | 20900 | 11600 | 15600 | 12200 |
| Lead | 200 - 500 | SB | 33.2 | 104 | 32.3 | 125 | 3.8 | NR | 16.5 | 5.2 | 7.9 | 90.1 |
| Magnesium | 100 - 5000 | SB | 3440 | 3200 | 3770 | 3400 | 4180 | NR | 6200 | 2560 | 3110 | 7580 |
| Manganese | 50 - 5000 | SB | 161 | 267 | 194 | 159 | 189 | NR | 417 | 99.3 | 390 | 246 |
| Mercury | 0.001 - 0.2 | 0.1 | 0.05 | 0.07 | 0.06 | 0.08 | 0.019 U | NR | 0.04 B | 0.02 B | 0.020 U | 0.11 |
| Nickel | 0.5 - 25 | 13 or SB | 12.6 | 12.6 | 13.4 | 13.2 | 13.5 | NR | 16.9 | 10.4 | 16.7 | 9.8 |
| Potassium | 8500 - 43000 | SB | 1060 B | 1020 B | 1210 | 1320 | 704 B | NR | 1520 | 626 B | 1570 | 712 B |
| Selenium | 0.1 - 3.9 | 2 or SB | 0.94 U | 1.0 U | 1.00 U | 0.94 U | 1.0 U | NR | 0.92 U | 0.91 U | 0.99 U | 0.83 U |
| Silver | N/A | SB | 0.31 U | 0.34 U | 0.24 U | 0.25 B | 0.25 U | NR | 0.71 B | 0.16 U | 0.33 U | 0.15 U |
| Sodium | 6000 - 8000 | SB | 88.1 U | 180 B | 184 B | 73.4 U | 148 B | NR | 297 B | 116 B | 854 B | 329 B |
| Thallium | N/A | SB | 1.0 U | 1.1 U | 0.91 U | 0.86 U | 0.95 U | NR | 1.0 U | 1.0 U | 1.1 U | 0.94 U |
| Vanadium | 1 - 300 | 150 or SB | 17.0 | 17.1 | 17.4 | 17.7 | 10.8 B | NR | 18.6 | 14.5 | 18.8 | 19.1 |
| Zinc | 9 - 50 | 20 or SB | 56.9 | 66.5 | 59.7 | 63.8 | 34.5 | NR | 83.3 | 35.2 | 31.4 | 194 |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 10
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 41,42

| Sample ID | New York TAGM | AOC-41-1-3 | AOC-41-2-2 | AOC-41-3-3 | AOC-42-1-3 |
|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369418 | 369420 | 369421 | 368421 |
| Sampling Date | Cleanup Objective | 08/15/02 | 08/15/02 | 08/15/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | | | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | |
| Chloromethane | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| Bromomethane | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| VinylChloride | **0.2** | 0.0053 U | NR | NR | 0.0053 U |
| Chloroethane | **1.9** | 0.0053 U | NR | NR | 0.0053 U |
| MethyleneChloride | **0.1** | 0.0032 U | NR | NR | 0.0014 J |
| Acetone | **0.2** | 0.025 | NR | NR | 0.046 |
| CarbonDisulfide | **2.7** | 0.0007 J | NR | NR | 0.0011 J |
| 1,1-Dichloroethene | **0.4** | 0.0021 U | NR | NR | 0.0021 U |
| 1,1-Dichloroethane | **0.2** | 0.0053 U | NR | NR | 0.0053 U |
| trans-1,2-Dichloroethene | **0.3** | 0.0053 U | NR | NR | 0.0053 U |
| cis-1,2-Dichloroethene | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| Chloroform | **0.3** | 0.0053 U | NR | NR | 0.0053 U |
| 1,2-Dichloroethane | **0.1** | 0.0021 U | NR | NR | 0.0021 U |
| 2-Butanone | **0.3** | 0.0053 U | NR | NR | 0.0053 U |
| 1,1,1-Trichloroethane | **0.8** | 0.0053 U | NR | NR | 0.0053 U |
| CarbonTetrachloride | **0.6** | 0.0021 U | NR | NR | 0.0021 U |
| Bromodichloromethane | **NA** | 0.0011 U | NR | NR | 0.0011 U |
| 1,2-Dichloropropane | **NA** | 0.0011 U | NR | NR | 0.0011 U |
| cis-1,3-Dichloropropene | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| Trichloroethene | **0.7** | 0.0011 U | NR | NR | 0.0011 U |
| Dibromochloromethane | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| 1,1,2-Trichloroethane | **NA** | 0.0032 U | NR | NR | 0.0032 U |
| Benzene | **0.06** | 0.0011 U | NR | NR | 0.0011 U |
| trans-1,3-Dichloropropene | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| Bromoform | **NA** | 0.0034 J | NR | NR | 0.0091 |
| 4-Methyl-2-Pentanone | **1** | 0.0053 U | NR | NR | 0.0053 U |
| 2-Hexanone | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| Tetrachloroethene | **1.4** | 0.0011 U | NR | NR | 0.0011 U |
| 1,1,2,2-Tetrachloroethane | **0.6** | 0.0011 U | NR | NR | 0.0011 U |
| Toluene | **1.5** | 0.0053 U | NR | NR | 0.0053 U |
| Chlorobenzene | **1.7** | 0.0053 U | NR | NR | 0.0053 U |
| Ethylbenzene | **5.5** | 0.0042 U | NR | NR | 0.0042 U |
| Styrene | **NA** | 0.0053 U | NR | NR | 0.0053 U |
| Xylene(Total) | **1.2** | 0.0053 U | NR | NR | 0.0053 U |
| Total Confident Conc. VOAs (s) | | 0.025 | | | 0.055 |
| Total Estimated Conc. VOA TICs (s) | | 0 | | | 0.115 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 10
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 41,42

| Sample ID | New York TAGM | AOC-41-1-3 | AOC-41-2-2 | AOC-41-3-3 | AOC-42-1-3 |
|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369418 | 369420 | 369421 | 368421 |
| Sampling Date | Cleanup Objective | 08/15/02 | 08/15/02 | 08/15/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | |
| Phenol | **0.030 or MDL** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2-Chlorophenol | **0.8** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2-Methylphenol | **0.100 or MDL** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 4-Methylphenol | **0.9** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2-Nitrophenol | **0.330 or MDL** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2,4-Dimethylphenol | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2,4-Dichlorophenol | **0.4** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2,4,6-Trichlorophenol | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2,4,5-Trichlorophenol | **0.1** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | 1.4 U | 1.5 U | 1.4 U | 15 U |
| 4-Nitrophenol | **0.100 or MDL** | 1.4 U | 1.5 U | 1.4 U | 15 U |
| 4,6-Dinitro-2-methylphenol | **NA** | 1.4 U | 1.5 U | 1.4 U | 15 U |
| Pentachlorophenol | **1 or MDL** | 1.4 U | 1.5 U | 1.4 U | 15 U |
| bis(2-Chloroethyl)ether | **NA** | 0.036 U | 0.037 U | 0.035 U | 0.38 U |
| 1,3-Dichlorobenzene | **1.6** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 1,4-Dichlorobenzene | **8.5** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 1,2-Dichlorobenzene | **7.9** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| bis(2-chloroisopropyl)ether | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| N-Nitroso-di-n-propylamine | **NA** | 0.036 U | 0.037 U | 0.035 U | 0.38 U |
| Hexachloroethane | **NA** | 0.036 U | 0.037 U | 0.035 U | 0.38 U |
| Nitrobenzene | **0.200 or MDL** | 0.036 U | 0.037 U | 0.035 U | 0.38 U |
| Isophorone | **4.4** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| bis(2-Chloroethoxy)methane | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 1,2,4-Trichlorobenzene | **3.4** | 0.036 U | 0.037 U | 0.035 U | 0.38 U |
| Naphthalene | **13** | 0.36 U | 0.019 J | 0.012 J | 0.36 J |
| 4-Chloroaniline | **0.220 or MDL** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| Hexachlorobutadiene | **NA** | 0.072 U | 0.073 U | 0.07 U | 0.75 U |
| 2-Methylnaphthalene | **36.400** | 0.36 U | 0.016 J | 0.019 J | 0.35 J |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 10
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 41,42

| Sample ID | New York TAGM | AOC-41-1-3 | AOC-41-2-2 | AOC-41-3-3 | AOC-42-1-3 |
|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369418 | 369420 | 369421 | 368421 |
| Sampling Date | Cleanup Objective | 08/15/02 | 08/15/02 | 08/15/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 |
| Hexachlorocyclopentadiene | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2-Chloronaphthalene | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 2-Nitroaniline | **0.430 or MDL** | 0.72 U | 0.73 U | 0.7 U | 7.5 U |
| Dimethylphthalate | **2.0** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| Acenaphthylene | **50** | 0.36 U | 0.015 J | 0.04 J | 0.25 J |
| 2,6-Dinitrotoluene | **1.0** | 0.072 U | 0.073 U | 0.07 U | 0.75 U |
| 3-Nitroaniline | **.500 or MDL** | 0.72 U | 0.73 U | 0.7 U | 7.5 U |
| Acenaphthene | **50** | 0.36 U | 0.07 J | 0.014 J | 1.6 J |
| Dibenzofuran | **6.2** | 0.36 U | 0.029 J | 0.0086 J | 0.97 J |
| 2,4-Dinitrotoluene | **NA** | 0.072 U | 0.073 U | 0.07 U | 0.75 U |
| Diethylphthalate | **7.1** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 4-Chlorophenyl-phenylether | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| Fluorene | **50** | 0.36 U | 0.041 J | 0.022 J | 1.6 J |
| 4-Nitroaniline | **NA** | 0.72 U | 0.73 U | 0.7 U | 7.5 U |
| N-Nitrosodiphenylamine | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| 4-Bromophenyl-phenylether | **NA** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| Hexachlorobenzene | **0.410** | 0.036 U | 0.037 U | 0.035 U | 0.38 U |
| Phenanthrene | **50** | 0.36 U | 0.29 J | 0.12 J | 21 |
| Anthracene | **50** | 0.36 U | 0.1 J | 0.047 J | 5.6 |
| Carbazole | **NA** | 0.36 U | 0.039 J | 0.011 J | 1.9 J |
| Di-n-butylphthalate | **8.1** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| Fluoranthene | **50** | 0.016 J | 0.42 | 0.2 J | 28 |
| Pyrene | **50** | 0.012 J | 0.48 | 0.23 J | 28 |
| Butylbenzylphthalate | **50** | 0.36 U | 0.12 J | 0.35 U | 3.8 U |
| 3,3'-Dichlorobenzidine | **NA** | 0.72 U | 0.73 U | 0.7 U | 7.5 U |
| Benzo(a)anthracene | **0.224 or MDL** | 0.036 U | 0.21 | 0.1 | 15 |
| Chrysene | **0.4** | 0.36 U | 0.23 J | 0.1 J | 14 |
| bis(2-Ethylhexyl)phthalate | **50** | 0.36 U | 0.37 U | 0.073 J | 0.83 J |
| Di-n-octylphthalate | **50** | 0.36 U | 0.37 U | 0.35 U | 3.8 U |
| Benzo(b)fluoranthene | **0.22 or MDL** | 0.036 U | 0.24 | 0.15 | 13 |
| Benzo(k)fluoranthene | **0.22 or MDL** | 0.036 U | 0.12 | 0.058 | 6.5 |
| Benzo(a)pyrene | **0.061 or MDL** | 0.036 U | 0.2 | 0.095 | 10 |
| Indeno(1,2,3-cd)pyrene | **3.2** | 0.036 U | 0.1 | 0.032 J | 6.3 |
| Dibenz(a,h)anthracene | **0.014 or MDL** | 0.036 U | 0.03 J | 0.035 U | 1.8 |
| Benzo(g,h,i)perylene | **50** | 0.36 U | 0.082 J | 0.029 J | 5.4 |
| Total Confident Conc. BNAs (s) | | 0 | 1.77 | 0.403 | 154.6 |
| Total Estimated Conc. BNA TICs (s) | | 0 | 12.75 | 4.22 | 99.5 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 10
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 41,42

| Sample ID | New York TAGM | AOC-41-1-3 | AOC-41-2-2 | AOC-41-3-3 | AOC-42-1-3 |
|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369418 | 369420 | 369421 | 368421 |
| Sampling Date | Cleanup Objective | 08/15/02 | 08/15/02 | 08/15/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | |
| **PCBs** | | | | | |
| Aroclor-1016 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1221 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1232 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1242 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1248 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1254 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1260 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1262 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| Aroclor-1268 | # | 0.072 U | 0.074 U | 0.07 U | NR |
| **PESTICIDES** | | | | | |
| Aldrin | **0.041** | 0.0072 U | NR | NR | NR |
| alpha-BHC | **0.11** | 0.0072 U | NR | NR | NR |
| beta-BHC | **0.2** | 0.0072 U | NR | NR | NR |
| delta-BHC | **0.3** | 0.0072 U | NR | NR | NR |
| gamma-BHC(Lindane) | **0.06** | 0.0072 U | NR | NR | NR |
| Chlordane | **0.54** | 0.072 U | NR | NR | NR |
| 4,4'-DDD | **2.9** | 0.0072 U | NR | NR | NR |
| 4,4'-DDE | **2.1** | 0.0072 U | NR | NR | NR |
| 4,4'-DDT | **2.1** | 0.0072 U | NR | NR | NR |
| Dieldrin | **0.044** | 0.0072 U | NR | NR | NR |
| EndosulfanI | **0.9** | 0.0072 U | NR | NR | NR |
| EndosulfanII | **0.9** | 0.0072 U | NR | NR | NR |
| Endosulfansulfate | **1.0** | 0.0072 U | NR | NR | NR |
| Endrin | **0.1** | 0.0072 U | NR | NR | NR |
| Endrinaldehyde | **N/A** | 0.0072 U | NR | NR | NR |
| Endrinketone | **N/A** | 0.0072 U | NR | NR | NR |
| Heptachlor | **0.1** | 0.0072 U | NR | NR | NR |
| Heptachlorepoxide | **0.02** | 0.0072 U | NR | NR | NR |
| Methoxychlor | **Site Specific** | 0.0072 U | NR | NR | NR |
| Toxaphene | **N/A** | 0.072 U | NR | NR | NR |
| **WET CHEMISTRY** | | | | | |
| TotalCyanide - mg/kg | Site Specific | 0.5 U | NR | NR | NR |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 10
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 41,42

| Sample ID | Eastern USA | New York TAGM | AOC-41-1-3 | AOC-41-2-2 | AOC-41-3-3 | AOC-42-1-3 |
|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 369418 | 369420 | 369421 | 368421 |
| Sampling Date | | Cleanup Objective | 08/15/02 | 08/15/02 | 08/15/02 | 08/08/02 |
| Matrix | | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID |
| Units | | | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | | | 1.0 |
| **METALS** | | | | | | |
| Aluminum | **33,000** | **SB** | 9160 | 8150 | 7780 | NR |
| Antimony | **N/A** | **SB** | 1.1 U | 1.3 U | 1.2 U | NR |
| Arsenic | **3 - 12** | **7.5 or SB** | 0.63 U | 3.2 | 2.4 | NR |
| Barium | **15 - 600** | **300 or SB** | 68.8 | 33.8 B | 45.7 | NR |
| Beryllium | **0 - 1.75** | **0.16 or SB** | 0.20 B | 0.24 B | 0.19 B | NR |
| Cadmium | **0.1 - 1** | **1 or SB** | 0.078 U | 0.088 U | 0.33 B | NR |
| Calcium | **130 - 35000** | **SB** | 2780 | 3650 | 7060 | NR |
| Chromium | **1.5 - 40** | **10 or SB** | 20.9 | 15.8 | 10.4 | NR |
| Cobalt | **2.6 - 60** | **30 or SB** | 8.4 B | 7.0 B | 10.7 | NR |
| Copper | **1 - 50** | **25 or SB** | 22.2 | 14.8 | 128 | NR |
| Iron | **2000 - 550000** | **2000 or SB** | 16600 | 18400 | 28700 | NR |
| Lead | **200 - 500** | **SB** | 7 | 19.9 | 26.6 | NR |
| Magnesium | **100 - 5000** | **SB** | 5440 | 4140 | 4220 | NR |
| Manganese | **50 - 5000** | **SB** | 255 | 223 | 278 | NR |
| Mercury | **0.001 - 0.2** | **0.1** | 0.20 | 3.7 | 0.39 | NR |
| Nickel | **0.5 - 25** | **13 or SB** | 17.7 | 16.4 | 10.9 | NR |
| Potassium | **8500 - 43000** | **SB** | 1740 | 1070 B | 844 B | NR |
| Selenium | **0.1 - 3.9** | **2 or SB** | 0.82 U | 0.92 U | 1.7 | NR |
| Silver | **N/A** | **SB** | 0.27 U | 0.31 U | 0.29 U | NR |
| Sodium | **6000 - 8000** | **SB** | 163 B | 178 B | 390 B | NR |
| Thallium | **N/A** | **SB** | 0.92 U | 1.0 U | 0.99 U | NR |
| Vanadium | **1 - 300** | **150 or SB** | 24.4 | 17.3 | 42.0 | NR |
| Zinc | **9 - 50** | **20 or SB** | 41.7 | 66.2 | 75.7 | NR |

U - The compound not detected at the indicated concentration.
J - Approximate concentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 11
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 43

| Sample ID | New York | AOC-43-1-4 | AOC-43-2-4 | AOC-43-3-4 | AOC-43-4-4 | AOC-43-5-4 | AOC-43-6-6 | AOC-43-7-6 | AOC-43-8-4 | AOC-43-9-7 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369409 | 369410 | 369411 | 369412 | 369413 | 369414 | 369415 | 369416 | 369417 |
| Sampling Date | Rec. Soil | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | |
| Chloromethane | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Bromomethane | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| VinylChloride | **0.2** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.17 J |
| Chloroethane | **1.9** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| MethyleneChloride | **0.1** | 0.0032 U | 0.0008 J | 0.0016 J | 0.001 J | 0.0014 J | 0.0035 U | 0.0034 U | 0.0008 J | 0.44 U |
| Acetone | **0.2** | 0.026 | 0.017 | 0.027 | 0.027 | 0.033 | 0.092 | 0.055 | 0.014 | 0.73 U |
| CarbonDisulfide | **2.7** | 0.0053 | 0.0053 U | 0.0014 J | 0.0014 J | 0.0014 J | 0.0035 J | 0.0009 J | 0.0006 J | 0.73 U |
| 1,1-Dichloroethene | **0.4** | 0.0021 U | 0.0021 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0023 U | 0.0022 U | 0.0021 U | 0.29 U |
| 1,1-Dichloroethane | **0.2** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| trans-1,2-Dichloroethene | **0.3** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| cis-1,2-Dichloroethene | **NA** | 0.0053 U | 0.0053 U | 0.0004 J | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0006 J | 0.5 J |
| Chloroform | **0.3** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| 1,2-Dichloroethane | **0.1** | 0.0021 U | 0.0021 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0023 U | 0.0022 U | 0.0021 U | 0.29 U |
| 2-Butanone | **0.3** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0072 | 0.0056 U | 0.0052 U | 0.73 U |
| 1,1,1-Trichloroethane | **0.8** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| CarbonTetrachloride | **0.6** | 0.0021 U | 0.0021 U | 0.0022 U | 0.0023 U | 0.0023 U | 0.0023 U | 0.0022 U | 0.0021 U | 0.29 U |
| Bromodichloromethane | **NA** | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.001 U | 0.15 U |
| 1,2-Dichloropropane | **NA** | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.001 U | 0.15 U |
| cis-1,3-Dichloropropene | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Trichloroethene | **0.7** | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.0005 J | 0.56 |
| Dibromochloromethane | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| 1,1,2-Trichloroethane | **NA** | 0.0032 U | 0.0032 U | 0.0033 U | 0.0034 U | 0.0034 U | 0.0035 U | 0.0034 U | 0.0031 U | 0.44 U |
| Benzene | **0.06** | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.001 U | 0.15 U |
| trans-1,3-Dichloropropene | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Bromoform | **NA** | 0.0051 | 0.0042 U | 0.0027 J | 0.0049 | 0.0059 | 0.0046 U | 0.0027 J | 0.013 | 0.58 U |
| 4-Methyl-2-Pentanone | **1** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| 2-Hexanone | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Tetrachloroethene | **1.4** | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.001 U | 0.2 |
| 1,1,2,2-Tetrachloroethane | **0.6** | 0.001 U | 0.001 U | 0.0011 U | 0.0011 U | 0.0011 U | 0.0012 U | 0.0011 U | 0.001 U | 0.15 U |
| Toluene | **1.5** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Chlorobenzene | **1.7** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Ethylbenzene | **5.5** | 0.0042 U | 0.0042 U | 0.0044 U | 0.0046 U | 0.0045 U | 0.0046 U | 0.0045 U | 0.0041 U | 0.58 U |
| Styrene | **NA** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Xylene(Total) | **1.2** | 0.0053 U | 0.0053 U | 0.0055 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0056 U | 0.0052 U | 0.73 U |
| Total Confident Conc. VOAs (s) | | 0.036 | 0.017 | 0.027 | 0.032 | 0.039 | 0.099 | 0.055 | 0.027 | 0.76 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0053 | 0 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 11
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 43

| Sample ID | New York | AOC-43-1-4 | AOC-43-2-4 | AOC-43-3-4 | AOC-43-4-4 | AOC-43-5-4 | AOC-43-6-6 | AOC-43-7-6 | AOC-43-8-4 | AOC-43-9-7 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369409 | 369410 | 369411 | 369412 | 369413 | 369414 | 369415 | 369416 | 369417 |
| Sampling Date | Rec. Soil | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | |
| Phenol | **0.030 or MDL** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2-Chlorophenol | **0.8** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2-Methylphenol | **0.100 or MDL** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 4-Methylphenol | **0.9** | 0.011 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2-Nitrophenol | **0.330 or MDL** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2,4-Dimethylphenol | **NA** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2,4-Dichlorophenol | **0.4** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2,4,6-Trichlorophenol | **NA** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2,4,5-Trichlorophenol | **0.1** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 2 U |
| 4-Nitrophenol | **0.100 or MDL** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 2 U |
| 4,6-Dinitro-2-methylphenol | **NA** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 2 U |
| Pentachlorophenol | **1 or MDL** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 2 U |
| bis(2-Chloroethyl)ether | **NA** | 0.037 U | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.04 U | 0.039 U | 0.036 U | 0.05 U |
| 1,3-Dichlorobenzene | **1.6** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 1,4-Dichlorobenzene | **8.5** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 1,2-Dichlorobenzene | **7.9** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| bis(2-chloroisopropyl)ether | **NA** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| N-Nitroso-di-n-propylamine | **NA** | 0.037 U | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.04 U | 0.039 U | 0.036 U | 0.05 U |
| Hexachloroethane | **NA** | 0.037 U | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.04 U | 0.039 U | 0.036 U | 0.05 U |
| Nitrobenzene | **0.200 or MDL** | 0.037 U | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.04 U | 0.039 U | 0.036 U | 0.05 U |
| Isophorone | **4.4** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| bis(2-Chloroethoxy)methane | **NA** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 1,2,4-Trichlorobenzene | **3.4** | 0.037 U | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.04 U | 0.039 U | 0.036 U | 0.05 U |
| Naphthalene | **13** | 0.089 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 4-Chloroaniline | **0.220 or MDL** | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Hexachlorobutadiene | **NA** | 0.074 U | 0.074 U | 0.075 U | 0.078 U | 0.078 U | 0.081 U | 0.078 U | 0.072 U | 0.099 U |
| 2-Methylnaphthalene | **36.400** | 0.12 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 11
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 43

| Sample ID | New York | AOC-43-1-4 | AOC-43-2-4 | AOC-43-3-4 | AOC-43-4-4 | AOC-43-5-4 | AOC-43-6-6 | AOC-43-7-6 | AOC-43-8-4 | AOC-43-9-7 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369409 | 369410 | 369411 | 369412 | 369413 | 369414 | 369415 | 369416 | 369417 |
| Sampling Date | Rec. Soil | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 |
| Hexachlorocyclopentadiene | NA | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2-Chloronaphthalene | NA | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2-Nitroaniline | 0.430 or MDL | 0.74 U | 0.74 U | 0.75 U | 0.78 U | 0.78 U | 0.81 U | 0.78 U | 0.72 U | 0.99 U |
| Dimethylphthalate | 2.0 | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Acenaphthylene | 50 | 0.025 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.046 J | 0.39 U | 0.36 U | 0.5 U |
| 2,6-Dinitrotoluene | 1.0 | 0.074 U | 0.074 U | 0.075 U | 0.078 U | 0.078 U | 0.081 U | 0.078 U | 0.072 U | 0.099 U |
| 3-Nitroaniline | .500 or MDL | 0.74 U | 0.74 U | 0.75 U | 0.78 U | 0.78 U | 0.81 U | 0.78 U | 0.72 U | 0.99 U |
| Acenaphthene | 50 | 0.032 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.023 J | 0.39 U | 0.36 U | 0.5 U |
| Dibenzofuran | 6.2 | 0.044 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 2,4-Dinitrotoluene | NA | 0.074 U | 0.074 U | 0.075 U | 0.078 U | 0.078 U | 0.081 U | 0.078 U | 0.072 U | 0.099 U |
| Diethylphthalate | 7.1 | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 4-Chlorophenyl-phenylether | NA | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Fluorene | 50 | 0.029 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.025 J | 0.39 U | 0.36 U | 0.5 U |
| 4-Nitroaniline | NA | 0.74 U | 0.74 U | 0.75 U | 0.78 U | 0.78 U | 0.81 U | 0.78 U | 0.72 U | 0.99 U |
| N-Nitrosodiphenylamine | NA | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 4-Bromophenyl-phenylether | NA | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Hexachlorobenzene | 0.410 | 0.037 U | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.04 U | 0.039 U | 0.036 U | 0.05 U |
| Phenanthrene | 50 | 0.16 J | 0.37 U | 0.37 U | 0.019 J | 0.39 U | 0.26 J | 0.39 U | 0.36 U | 0.5 U |
| Anthracene | 50 | 0.04 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.073 J | 0.39 U | 0.36 U | 0.5 U |
| Carbazole | NA | 0.023 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Di-n-butylphthalate | 8.1 | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Fluoranthene | 50 | 0.13 J | 0.37 U | 0.37 U | 0.053 J | 0.39 U | 0.48 | 0.014 J | 0.36 U | 0.5 U |
| Pyrene | 50 | 0.14 J | 0.37 U | 0.37 U | 0.043 J | 0.39 U | 0.51 | 0.013 J | 0.36 U | 0.5 U |
| Butylbenzylphthalate | 50 | 0.21 J | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| 3,3'-Dichlorobenzidine | NA | 0.74 U | 0.74 U | 0.75 U | 0.78 U | 0.78 U | 0.81 U | 0.78 U | 0.72 U | 0.99 U |
| Benzo(a)anthracene | 0.224 or MDL | 0.064 | 0.037 U | 0.037 U | 0.046 | 0.039 U | 0.23 | 0.039 U | 0.036 U | 0.05 U |
| Chrysene | 0.4 | 0.068 J | 0.37 U | 0.37 U | 0.038 J | 0.39 U | 0.24 J | 0.39 U | 0.36 U | 0.5 U |
| bis(2-Ethylhexyl)phthalate | 50 | 2.9 | 0.076 J | 0.087 J | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.1 J |
| Di-n-octylphthalate | 50 | 0.37 U | 0.37 U | 0.37 U | 0.39 U | 0.39 U | 0.4 U | 0.39 U | 0.36 U | 0.5 U |
| Benzo(b)fluoranthene | 0.22 or MDL | 0.14 | 0.037 U | 0.037 U | 0.058 | 0.039 U | 0.34 | 0.039 U | 0.036 U | 0.05 U |
| Benzo(k)fluoranthene | 0.22 or MDL | 0.058 | 0.037 U | 0.037 U | 0.028 J | 0.039 U | 0.17 | 0.039 U | 0.036 U | 0.05 U |
| Benzo(a)pyrene | 0.061 or MDL | 0.088 | 0.037 U | 0.037 U | 0.044 | 0.039 U | 0.26 | 0.039 U | 0.036 U | 0.05 U |
| Indeno(1,2,3-cd)pyrene | 3.2 | 0.15 | 0.037 U | 0.037 U | 0.029 J | 0.039 U | 0.12 | 0.039 U | 0.036 U | 0.05 U |
| Dibenz(a,h)anthracene | 0.014 or MDL | 0.036 | 0.037 U | 0.037 U | 0.039 U | 0.039 U | 0.03 J | 0.039 U | 0.036 U | 0.05 U |
| Benzo(g,h,i)perylene | 50 | 0.15 J | 0.37 U | 0.37 U | 0.026 J | 0.39 U | 0.093 J | 0.39 U | 0.36 U | 0.5 U |
| Total Confident Conc. BNAs (s) | | 3.438 | 0 | 0 | 0.148 | 0 | 2.11 | 0 | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | 0.57 | 0 | 0 | 0 | 0 | 21.36 | 0 | 0 | 0.52 |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 11
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 43

| Sample ID | New York | AOC-43-1-4 | AOC-43-2-4 | AOC-43-3-4 | AOC-43-4-4 | AOC-43-5-4 | AOC-43-6-6 | AOC-43-7-6 | AOC-43-8-4 | AOC-43-9-7 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369409 | 369410 | 369411 | 369412 | 369413 | 369414 | 369415 | 369416 | 369417 |
| Sampling Date | Rec. Soil | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 |
| **PCBs** | | | | | | | | | | |
| Aroclor-1016 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1221 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1232 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1242 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1248 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1254 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1260 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1262 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| Aroclor-1268 | # | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| # 1.0 Surface Soils, 10.0 Subsurface Soils Total PCBs | | | | | | | | | | |
| **PESTICIDES** | | | | | | | | | | |
| Aldrin | **0.041** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| alpha-BHC | **0.11** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| beta-BHC | **0.2** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| delta-BHC | **0.3** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| gamma-BHC(Lindane) | **0.06** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Chlordane | **0.54** | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| 4,4'-DDD | **2.9** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| 4,4'-DDE | **2.1** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| 4,4'-DDT | **2.1** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Dieldrin | **0.044** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| EndosulfanI | **0.9** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| EndosulfanII | **0.9** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Endosulfansulfate | **1.0** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Endrin | **0.1** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Endrinaldehyde | **N/A** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Endrinketone | **N/A** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Heptachlor | **0.1** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Heptachlorepoxide | **0.02** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Methoxychlor | **Site Specific** | 0.0074 U | 0.0075 U | 0.0075 U | 0.0079 U | 0.0078 U | 0.0081 U | 0.0078 U | 0.0073 U | 0.01 U |
| Toxaphene | **N/A** | 0.074 U | 0.075 U | 0.075 U | 0.079 U | 0.078 U | 0.081 U | 0.078 U | 0.073 U | 0.1 U |
| **WET CHEMISTRY** | | | | | | | | | | |
| TotalCyanide - mg/kg | Site Specific | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 11
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 43

| Sample ID | Eastern USA | New York | AOC-43-1-4 | AOC-43-2-4 | AOC-43-3-4 | AOC-43-4-4 | AOC-43-5-4 | AOC-43-6-6 | AOC-43-7-6 | AOC-43-8-4 | AOC-43-9-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | TAGM | 369409 | 369410 | 369411 | 369412 | 369413 | 369414 | 369415 | 369416 | 369417 |
| Sampling Date | | Rec. Soil | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 |
| **METALS** | | | | | | | | | | | |
| Aluminum | **33,000** | **SB** | 5750 | 5600 | 6950 | 6460 | 6760 | 7780 | 6540 | 6330 | 6120 |
| Antimony | **N/A** | **SB** | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 1.2 U | 1.3 U | 18.3 |
| Arsenic | **3 - 12** | **7.5 or SB** | 1.1 B | 0.74 B | 0.82 B | 1.4 | 0.75 U | 2.9 | 16.9 | 1.2 | 16.6 |
| Barium | **15 - 600** | **300 or SB** | 8.2 B | 7.6 B | 8.3 B | 20.7 B | 10.9 B | 25.5 B | 31.5 B | 8.5 B | 261 |
| Beryllium | **0 - 1.75** | **0.16 or SB** | 0.11 B | 0.11 B | 0.16 B | 0.19 B | 0.14 B | 0.27 B | 0.13 B | 0.12 B | 0.70 |
| Cadmium | **0.1 - 1** | **1 or SB** | 0.089 U | 0.089 U | 0.090 U | 0.094 U | 0.093 U | 0.097 U | 0.085 U | 0.087 U | 0.25 B |
| Calcium | **130 - 35000** | **SB** | 50800 | 24700 | 5800 | 8520 | 1760 | 1190 B | 954 B | 10700 | 18300 |
| Chromium | **1.5 - 40** | **10 or SB** | 7.9 | 7.8 | 9.5 | 10.5 | 8.9 | 11.9 | 10.6 | 9.0 | 35.0 |
| Cobalt | **2.6 - 60** | **30 or SB** | 4.4 B | 4.4 B | 5.6 B | 5.4 B | 5.3 B | 6.4 B | 5.3 B | 5.1 B | 8.5 B |
| Copper | **1 - 50** | **25 or SB** | 6.9 | 6.9 | 8.6 | 8.9 | 7.5 | 13.5 | 11.2 | 8.9 | 7560 |
| Iron | **2000 - 550000** | **2000 or SB** | 13200 | 12900 | 15300 | 15400 | 14500 | 15900 | 11600 | 13900 | 67700 |
| Lead | **200 - 500** | **SB** | 2.9 | 2.7 | 3.8 | 4.8 | 3.0 | 11.5 | 5.1 | 5.2 | 1030 |
| Magnesium | **100 - 5000** | **SB** | 3720 | 3510 | 4180 | 3800 | 4020 | 3110 | 2600 | 3860 | 1500 |
| Manganese | **50 - 5000** | **SB** | 281 | 164 | 146 | 216 | 134 | 127 | 155 | 156 | 848 |
| Mercury | **0.001 - 0.2** | **0.1** | 0.019 U | 0.019 U | 0.019 U | 0.02 B | 0.019 U | 0.02 B | 0.02 B | 0.04 | 0.51 |
| Nickel | **0.5 - 25** | **13 or SB** | 12.3 | 12.0 | 15.3 | 13.5 | 14.4 | 14.9 | 10.9 | 14.3 | 45.2 |
| Potassium | **8500 - 43000** | **SB** | 531 B | 533 B | 680 B | 863 B | 619 B | 743 B | 1120 | 562 B | 502 B |
| Selenium | **0.1 - 3.9** | **2 or SB** | 0.93 U | 0.94 U | 0.94 U | 0.99 U | 0.98 U | 1.0 U | 0.89 U | 0.91 U | 1.4 |
| Silver | **N/A** | **SB** | 0.31 U | 0.31 U | 0.31 U | 0.33 U | 0.33 U | 0.34 U | 0.30 U | 0.30 U | 1.6 B |
| Sodium | **6000 - 8000** | **SB** | 449 B | 343 B | 179 B | 307 B | 111 B | 320 B | 806 B | 181 B | 587 B |
| Thallium | **N/A** | **SB** | 1.0 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.00 U | 1.0 U | 1.3 U |
| Vanadium | **1 - 300** | **150 or SB** | 7.6 B | 7.6 B | 9.3 B | 11.3 B | 8.5 B | 14.6 | 14.3 | 9.7 B | 53.9 |
| Zinc | **9 - 50** | **20 or SB** | 31.6 | 31.5 | 38.9 | 42.3 | 37.0 | 49.1 | 26.5 | 36.7 | 1870 |

U - The compound not detected at the indicated concentration.
J - Approximate oncentration
B - Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR - Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 12
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
AOC - 44

| Sample ID | New York | AOC-44-40-7 | AOC-44-40-9 | AOC-44-24-2 | AOC-44-22-1 | AOC-44-44-25 | AOC-44-40-13 | AOC-44-14-1 | AOC-44-40-4 |
|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | TAGM | 369424 | 369425 | 369426 | 369427 | 369428 | 369429 | 369430 | 369431 |
| Sampling Date | Rec. Soil | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | Cleanup Objective | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | Criteria (mg/kg) | | | | | | | | |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| **PCBs** | | | | | | | | | |
| Aroclor-1016 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1221 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1232 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1242 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1248 | # | 0.068 U | 0.15 | 0.067 U | 0.11 | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1254 | # | 0.068 U | 0.26 | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1260 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1262 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |
| Aroclor-1268 | # | 0.068 U | 0.068 U | 0.067 U | 0.069 U | 0.069 U | 0.07 U | 0.07 U | 0.069 U |

U - The compound was not detecged at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.

Table 13
Soil Sampling Results
Formerly General Motors Site
Tarrytown New York
AOC 44

| Sample ID | New York TAGM | Slab-Base-1 | Slab-Base-2 | Slab-Base-3 | AOC-44-5-1 | AOC-44-27-1 | AOC-44-40-16 | AOC-44-40-FG |
|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 369749 | 369750 | 369751 | 369432 | 369433 | 369434 | 369435 |
| Sampling Date | Cleanup Objective | 08/16/02 | 08/16/02 | 08/16/02 | 08/14/02 | 08/14/02 | 08/14/02 | 08/14/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | | | | | | | |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| **PCBs** | | | | | | | | |
| Aroclor-1016 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1221 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1232 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1242 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1248 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1254 | # | 0.099 | U | U | 0.32 | 0.14 | 0.069 U | 0.069 U |
| Aroclor-1260 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1262 | # | U | U | U | 0.25 | 0.068 U | 0.069 U | 0.069 U |
| Aroclor-1268 | # | U | U | U | 0.067 U | 0.068 U | 0.069 U | 0.069 U |

U - The compound was not detected at the indicated concentration.
J - The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample.
NR - Not analyzed.

Table 14
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
SB - 1 Fills

| Sample ID | New York TAGM | SB-1-7 | SB-2-7 | SB-3-3 | SB-4-7 | SB-5-7 | Fill-F-7 | Fill-G-5 | Fill-I-5 | Duplicate-3 | Fill-H-7 | Fill-D-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368843 | 368844 | 368845 | 368846 | 368848 | 368423 | 368424 | 368425 | 368426 | 368428 | 368429 |
| Sampling Date | Cleanup Objective | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | | | |
| Chloromethane | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Bromomethane | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| VinylChloride | 0.2 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Chloroethane | 1.9 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| MethyleneChloride | 0.1 | 0.0015 J | 0.0042 U | 0.0036 U | 0.0006 J | 0.35 U | 0.0014 J | 0.0016 J | 0.0016 J | 0.0017 J | 0.0015 J | 0.0028 J |
| Acetone | 0.2 | 0.22 | 0.15 | 0.0060 U | 0.088 | 0.58 U | 0.054 | 0.0058 U | 0.0053 U | 0.0052 U | 0.087 | 0.11 |
| CarbonDisulfide | 2.7 | 0.0031 J | 0.0013 J | 0.012 | 0.0025 J | 0.58 U | 0.006 | 0.0015 J | 0.0018 J | 0.0017 J | 0.0017 J | 0.0033 J |
| 1,1-Dichloroethene | 0.4 | 0.0024 U | 0.0028 U | 0.0024 U | 0.0022 U | 0.23 U | 0.0021 U | 0.0023 U | 0.0021 U | 0.0021 U | 0.0023 U | 0.0025 |
| 1,1-Dichloroethane | 0.2 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| cis-1,2-Dichloroethene | NA | 0.0060 U | 0.0016 J | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0006 J | 0.0006 J | 0.0008 J | 0.006 U |
| Chloroform | 0.3 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| 1,2-Dichloroethane | 0.1 | 0.0024 U | 0.0028 U | 0.0024 U | 0.0022 U | 0.23 U | 0.0021 U | 0.0023 U | 0.0021 U | 0.0021 U | 0.0023 U | 0.0024 U |
| 2-Butanone | 0.3 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| 1,1,1-Trichloroethane | 0.8 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0006 J | 0.0007 J | 0.0057 U | 0.006 U |
| CarbonTetrachloride | 0.6 | 0.0024 U | 0.0028 U | 0.0024 U | 0.0022 U | 0.23 U | 0.0021 U | 0.0023 U | 0.0021 U | 0.0021 U | 0.0023 U | 0.0024 U |
| Bromodichloromethane | NA | 0.0012 U | 0.0014 U | 0.0012 U | 0.0011 U | 0.12 U | 0.0011 U | 0.0012 U | 0.001 U | 0.001 U | 0.0011 U | 0.0012 U |
| 1,2-Dichloropropane | NA | 0.0012 U | 0.0014 U | 0.0012 U | 0.0011 U | 0.12 U | 0.0011 U | 0.0012 U | 0.001 U | 0.001 U | 0.0011 U | 0.0012 U |
| cis-1,3-Dichloropropene | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Trichloroethene | 0.7 | 0.0012 U | 0.0014 U | 0.0012 U | 0.0011 U | 0.12 U | 0.0011 U | 0.0012 U | 0.001 U | 0.001 U | 0.0011 U | 0.0012 U |
| Dibromochloromethane | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| 1,1,2-Trichloroethane | NA | 0.0036 U | 0.0042 U | 0.0036 U | 0.0033 U | 0.35 U | 0.0032 U | 0.0034 U | 0.0032 U | 0.0031 U | 0.0034 U | 0.0036 U |
| Benzene | 0.06 | 0.0019 | 0.0023 | 0.0012 U | 0.0037 | 0.12 U | 0.0011 U | 0.0012 U | 0.001 U | 0.001 U | 0.0022 | 0.0012 U |
| trans-1,3-Dichloropropene | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Bromoform | NA | 0.0048 U | 0.0023 J | 0.0043 J | 0.0010 J | 0.46 U | 0.0078 | 0.017 | 0.017 | 0.025 | 0.0018 J | 0.017 |
| 4-Methyl-2-Pentanone | 1 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| 2-Hexanone | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Tetrachloroethene | 1.4 | 0.0012 U | 0.0014 U | 0.0012 U | 0.0011 U | 0.12 U | 0.0011 U | 0.0012 U | 0.008 | 0.01 | 0.0011 U | 0.0012 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0012 U | 0.0014 U | 0.0012 U | 0.0011 U | 0.12 U | 0.0011 U | 0.0012 U | 0.001 U | 0.001 U | 0.0011 U | 0.0012 U |
| Toluene | 1.5 | 0.0066 | 0.0026 J | 0.0060 U | 0.0032 J | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0012 J | 0.006 U |
| Chlorobenzene | 1.7 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Ethylbenzene | 5.5 | 0.0048 U | 0.0056 U | 0.0048 U | 0.0044 U | 0.46 U | 0.0043 U | 0.0046 U | 0.0042 U | 0.0041 U | 0.0045 U | 0.0048 U |
| Styrene | NA | 0.0060 U | 0.0070 U | 0.0060 U | 0.0055 U | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Xylene(Total) | 1.2 | 0.0060 U | 0.0070 U | 0.0060 U | 0.0009 J | 0.58 U | 0.0054 U | 0.0058 U | 0.0053 U | 0.0052 U | 0.0057 U | 0.006 U |
| Total Confident Conc. VOAs (s) | | 0.2 | 0.2 | 0.0 | 0.1 | 0 | 0.068 | 0.017 | 0.025 | 0.035 | 0.089 | 0.13 |
| Total Estimated Conc. VOA TICs (s) | | 5.0 | 0.0 | 0 | 0.0 | 435 | 0.013 | 0.018 | 0.023 | 0.046 | 0.0064 | 0.418 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 14
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
SB - 1 Fills

| Sample ID | New York TAGM | SB-1-7 | SB-2-7 | SB-3-3 | SB-4-7 | SB-5-7 | Fill-F-7 | Fill-G-5 | Fill-I-5 | Duplicate-3 | Fill-H-7 | Fill-D-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368843 | 368844 | 368845 | 368846 | 368848 | 368423 | 368424 | 368425 | 368426 | 368428 | 368429 |
| Sampling Date | Cleanup Objective | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 |
| SEMIVOLATILE COMPOUNDS (GC/MS) | | | | | | | | | | | | |
| Phenol | **0.030 or MDL** | 0.4 U | 0.051 J | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2-Chlorophenol | **0.8** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2-Methylphenol | **0.100 or MDL** | 0.4 U | 0.48 U | 0.41 U | 0.026 J | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 4-Methylphenol | **0.9** | 0.71 | 0.48 U | 0.41 U | 0.047 J | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.022 J | 20 U |
| 2-Nitrophenol | **0.330 or MDL** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2,4-Dimethylphenol | **NA** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2,4-Dichlorophenol | **0.4** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 4-Chloro-3-methylphenol | **0.240 or MDL** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2,4,6-Trichlorophenol | **NA** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2,4,5-Trichlorophenol | **0.1** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2,4-Dinitrophenol | **0.200 or MDL** | 1.6 U | 1.9 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 2.8 U | 1.4 U | 1.6 U | 81 U |
| 4-Nitrophenol | **0.100 or MDL** | 1.6 U | 1.9 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 2.8 U | 1.4 U | 1.6 U | 81 U |
| 4,6-Dinitro-2-methylphenol | **NA** | 1.6 U | 1.9 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 2.8 U | 1.4 U | 1.6 U | 81 U |
| Pentachlorophenol | **1 or MDL** | 1.6 U | 1.9 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 2.8 U | 1.4 U | 1.6 U | 81 U |
| bis(2-Chloroethyl)ether | **NA** | 0.04 U | 0.048 U | 0.041 U | 0.038 U | 0.041 U | 0.037 U | 0.04 U | 0.071 U | 0.035 U | 0.04 U | 2 U |
| 1,3-Dichlorobenzene | **1.6** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 1,4-Dichlorobenzene | **8.5** | 0.4 U | 0.48 U | 0.41 U | 0.0094 J | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 1,2-Dichlorobenzene | **7.9** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| bis(2-chloroisopropyl)ether | **NA** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| N-Nitroso-di-n-propylamine | **NA** | 0.04 U | 0.048 U | 0.041 U | 0.038 U | 0.041 U | 0.037 U | 0.04 U | 0.071 U | 0.035 U | 0.04 U | 2 U |
| Hexachloroethane | **NA** | 0.04 U | 0.048 U | 0.041 U | 0.038 U | 0.041 U | 0.037 U | 0.04 U | 0.071 U | 0.035 U | 0.04 U | 2 U |
| Nitrobenzene | **0.200 or MDL** | 0.04 U | 0.048 U | 0.041 U | 0.038 U | 0.041 U | 0.037 U | 0.04 U | 0.071 U | 0.035 U | 0.04 U | 2 U |
| Isophorone | **4.4** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| bis(2-Chloroethoxy)methane | **NA** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 1,2,4-Trichlorobenzene | **3.4** | 0.01 U | 0.048 U | 0.041 U | 0.038 U | 0.041 U | 0.037 U | 0.04 U | 0.071 U | 0.035 U | 0.04 U | 2 U |
| Naphthalene | **13** | 1.1 | 0.026 J | 0.29 J | 2.5 | 0.12 J | 0.23 J | 0.4 U | 0.71 U | 0.35 U | 0.5 | 5.6 J |
| 4-Chloroaniline | **0.220 or MDL** | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| Hexachlorobutadiene | **NA** | 0.08 U | 0.096 U | 0.081 U | 0.076 U | 0.082 U | 0.074 U | 0.08 U | 0.14 U | 0.07 U | 0.079 U | 4 U |
| 2-Methylnaphthalene | **36.400** | 0.88 | 0.023 J | 0.33 J | 0.73 | 0.23 J | 0.15 J | 0.4 U | 0.71 U | 0.35 U | 0.62 | 7.6 J |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 14
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
SB - 1 Fills

| Sample ID | New York TAGM | SB-1-7 | SB-2-7 | SB-3-3 | SB-4-7 | SB-5-7 | Fill-F-7 | Fill-G-5 | Fill-I-5 | Duplicate-3 | Fill-H-7 | Fill-D-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368843 | 368844 | 368845 | 368846 | 368848 | 368423 | 368424 | 368425 | 368426 | 368428 | 368429 |
| Sampling Date | Cleanup Objective | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 50.0 |
| Hexachlorocyclopentadiene | NA | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2-Chloronaphthalene | NA | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 2-Nitroaniline | 0.430 or MDL | 0.8 U | 0.96 U | 0.81 U | 0.76 U | 0.82 U | 0.74 U | 0.8 U | 1.4 U | 0.7 U | 0.79 U | 40 U |
| Dimethylphthalate | 2.0 | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| Acenaphthylene | 50 | 0.19 J | 0.48 U | 0.41 U | 0.11 J | 0.019 J | 0.07 J | 0.4 U | 0.71 U | 0.022 J | 0.43 | 4.5 J |
| 2,6-Dinitrotoluene | 1.0 | 0.08 U | 0.096 U | 0.081 U | 0.076 U | 0.082 U | 0.074 U | 0.08 U | 0.14 U | 0.07 U | 0.079 U | 4 U |
| 3-Nitroaniline | .500 or MDL | 0.8 U | 0.96 U | 0.81 U | 0.76 U | 0.82 U | 0.74 U | 0.8 U | 1.4 U | 0.7 U | 0.79 U | 40 U |
| Acenaphthene | 50 | 0.24 J | 0.48 U | 0.031 J | 0.39 | 0.0096 J | 1.2 | 0.4 U | 0.71 U | 0.35 U | 0.66 | 22 |
| Dibenzofuran | 6.2 | 0.4 J | 0.48 U | 0.088 J | 0.51 | 0.41 U | 0.69 | 0.4 U | 0.71 U | 0.35 U | 0.55 | 12 J |
| 2,4-Dinitrotoluene | NA | 0.08 U | 0.096 U | 0.081 U | 0.076 U | 0.082 U | 0.074 U | 0.08 U | 0.14 U | 0.07 U | 0.079 U | 4 U |
| Diethylphthalate | 7.1 | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 4-Chlorophenyl-phenylether | NA | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| Fluorene | 50 | 0.5 | 0.48 U | 0.41 U | 0.42 | 0.017 J | 1.3 | 0.4 U | 0.71 U | 0.35 U | 0.85 | 28 |
| 4-Nitroaniline | NA | 0.8 U | 0.96 U | 0.81 U | 0.76 U | 0.82 U | 0.74 U | 0.8 U | 1.4 U | 0.7 U | 0.79 U | 40 U |
| N-Nitrosodiphenylamine | NA | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| 4-Bromophenyl-phenylether | NA | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| Hexachlorobenzene | 0.410 | 0.04 U | 0.048 U | 0.041 U | 0.038 U | 0.041 U | 0.037 U | 0.04 U | 0.071 U | 0.035 U | 0.04 U | 2 U |
| Phenanthrene | 50 | 3.7 | 0.033 J | 0.42 | 3.1 | 0.056 J | 3.8 | 0.017 J | 0.71 U | 0.012 J | 4.1 | 160 |
| Anthracene | 50 | 0.61 | 0.48 U | 0.071 J | 0.62 | 0.021 J | 1.9 | 0.4 U | 0.71 U | 0.0098 J | 1.2 | 48 |
| Carbazole | NA | 0.2 J | 0.48 U | 0.038 J | 0.32 J | 0.41 U | 0.33 J | 0.4 U | 0.71 U | 0.35 U | 0.22 J | 18 J |
| Di-n-butylphthalate | 8.1 | 3.7 | 0.48 U | 0.27 J | 0.090 J | 0.41 U | 0.37 U | 0.4 U | 0.41 J | 0.16 J | 0.26 J | 20 U |
| Fluoranthene | 50 | 1.9 | 0.016 J | 0.32 J | 2.6 | 0.072 J | 5.6 | 0.034 J | 0.71 U | 0.03 J | 4.4 | 170 |
| Pyrene | 50 | 1.9 | 0.023 J | 0.36 J | 2.5 | 0.11 J | 5 | 0.031 J | 0.71 U | 0.029 J | 5.4 | 160 |
| Butylbenzylphthalate | 50 | 0.4 U | 0.48 U | 2.6 | 0.10 J | 0.41 U | 0.37 U | 0.4 U | 14 | 4.7 | 0.4 U | 20 U |
| 3,3'-Dichlorobenzidine | NA | 0.8 U | 0.96 U | 0.81 U | 0.76 U | 0.82 U | 0.74 U | 0.8 U | 1.4 U | 0.7 U | 0.79 U | 40 U |
| Benzo(a)anthracene | 0.224 or MDL | 0.98 | 0.048 U | 0.20 | 1.2 | 0.038 J | 2.7 | 0.029 J | 0.071 U | 0.028 J | 2.6 | 85 |
| Chrysene | 0.4 | 1 | 0.48 U | 0.28 J | 1.4 | 0.030 J | 2.6 | 0.02 J | 0.71 U | 0.019 J | 2.8 | 99 |
| bis(2-Ethylhexyl)phthalate | 50 | 0.25 J | 0.48 U | 0.10 J | 0.21 J | 0.41 U | 0.37 U | 0.4 U | 0.29 J | 0.17 J | 0.86 | 20 U |
| Di-n-octylphthalate | 50 | 0.4 U | 0.48 U | 0.41 U | 0.38 U | 0.41 U | 0.37 U | 0.4 U | 0.71 U | 0.35 U | 0.4 U | 20 U |
| Benzo(b)fluoranthene | 0.22 or MDL | 1.1 | 0.012 J | 0.29 | 1.4 | 0.035 J | 2.9 | 0.025 J | 0.071 U | 0.03 J | 3.4 | 98 |
| Benzo(k)fluoranthene | 0.22 or MDL | 0.28 | 0.048 U | 0.096 | 0.59 | 0.012 J | 1.2 | 0.04 U | 0.071 U | 0.012 J | 1.5 | 34 |
| Benzo(a)pyrene | 0.061 or MDL | 0.55 | 0.048 U | 0.18 | 0.94 | 0.025 J | 2.3 | 0.019 J | 0.071 U | 0.02 J | 2.2 | 74 |
| Indeno(1,2,3-cd)pyrene | 3.2 | 0.22 | 0.048 U | 0.11 | 0.46 | 0.014 J | 1.4 | 0.04 U | 0.071 U | 0.024 J | 0.76 | 52 |
| Dibenz(a,h)anthracene | 0.014 or MDL | 0.092 | 0.048 U | 0.047 | 0.15 | 0.041 U | 0.35 | 0.04 U | 0.071 U | 0.035 U | 0.22 | 14 |
| Benzo(g,h,i)perylene | 50 | 0.26 J | 0.48 U | 0.10 J | 0.46 | 0.015 J | 1.2 | 0.4 U | 0.71 U | 0.032 J | 0.64 | 46 |
| Total Confident Conc. BNAs (s) | | | 0 | 3.9 | 19 | 0 | 34.14 | 0 | 14 | 4.7 | 33.69 | 1070 |
| Total Estimated Conc. BNA TICs (s) | | | 9.0 | 4.9 | 12 | 35 | 8.59 | 0.32 | 2.54 | 0.29 | 33.37 | 401 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 14
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
SB - 1 Fills

| Sample ID | New York TAGM | SB-1-7 | SB-2-7 | SB-3-3 | SB-4-7 | SB-5-7 | Fill-F-7 | Fill-G-5 | Fill-I-5 | Duplicate-3 | Fill-H-7 | Fill-D-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368843 | 368844 | 368845 | 368846 | 368848 | 368423 | 368424 | 368425 | 368426 | 368428 | 368429 |
| Sampling Date | Cleanup Objective | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **PCBs** | | | | | | | | | | | | |
| Aroclor-1016 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1221 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1232 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1242 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1248 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1254 | # | 0.13 | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1260 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1262 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| Aroclor-1268 | # | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.081 U |
| # 1.0 Surface Soils, 10.0 Subsurface Soils Total PCBs | | | | | | | | | | | | |
| **PESTICIDES** | | | | | | | | | | | | |
| Aldrin | **0.041** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| alpha-BHC | **0.11** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| beta-BHC | **0.2** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| delta-BHC | **0.3** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| gamma-BHC(Lindane) | **0.06** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Chlordane | **0.54** | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.41 U |
| 4,4'-DDD | **2.9** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| 4,4'-DDE | **2.1** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| 4,4'-DDT | **2.1** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Dieldrin | **0.044** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| EndosulfanI | **0.9** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| EndosulfanII | **0.9** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Endosulfansulfate | **1.0** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Endrin | **0.1** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Endrinaldehyde | **N/A** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Endrinketone | **N/A** | 0.024 | 0.0096 U | 0.0082 U | 0.013 | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.19 P* |
| Heptachlor | **0.1** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Heptachlorepoxide | **0.02** | 0.0080 U | 0.0096 U | 0.0082 U | 0.0076 U | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.041 U |
| Methoxychlor | **Site Specific** | 0.059 | 0.0096 U | 0.0082 U | 0.032 | 0.0082 U | 0.0075 U | 0.0081 U | 0.0071 U | 0.0071 U | 0.008 U | 0.32 P* |
| Toxaphene | **N/A** | 0.080 U | 0.096 U | 0.082 U | 0.076 U | 0.082 U | 0.075 U | 0.081 U | 0.071 U | 0.071 U | 0.08 U | 0.41 U |
| **WET CHEMISTRY** | | | | | | | | | | | | |
| TotalCyanide - mg/kg | **Site Specific** | 1.4 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2.0 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 14
Soil Sampling Results
Former General Motors Site
Tarrytown, New York
SB - 1 Fills

| Sample ID | Eastern USA | New York TAGM | SB-1-7 | | SB-2-7 | | SB-3-3 | | SB-4-7 | | SB-5-7 | | Fill-F-7 | | Fill-G-5 | | Fill-I-5 | | Duplicate-3 | | Fill-H-7 | | Fill-D-7 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 368843 | | 368844 | | 368845 | | 368846 | | 368848 | | 368423 | | 368424 | | 368425 | | 368426 | | 368428 | | 368429 | |
| Sampling Date | | Cleanup Objective | 08/12/02 | | 08/12/02 | | 08/12/02 | | 08/12/02 | | 08/13/02 | | 08/08/02 | | 08/08/02 | | 08/08/02 | | 08/08/02 | | 08/08/02 | | 08/08/02 | |
| Matrix | | Criteria (mg/kg) | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | | SOLID | |
| Dilution Factor | | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 50.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| **METALS** | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 33,000 | SB | 4090 | | 12800 | | 7740 | | 4780 | | 7990 | | 7860 | | 7270 | | 7040 | | 7130 | | 5420 | | 6270 | |
| Antimony | N/A | SB | 230 | | 180 | | 9.3 | | 4.8 | | 0.96 | U | 1.3 | U | 1.3 | U | 1.5 | B | 1.1 | U | 545 | | 11.5 | |
| Arsenic | 3 - 12 | 7.5 or SB | 38.9 | | 28.2 | | 16.8 | | 4.4 | | 4.5 | | 2.2 | | 1.6 | | 2.0 | | 1.5 | | 67.1 | | 5.0 | |
| Barium | 15 - 600 | 300 or SB | 3920 | | 5270 | | 397 | | 174 | | 37.5 | B | 38.8 | B | 59.1 | | 26.9 | B | 27.0 | B | 12800 | | 509 | |
| Beryllium | 0 - 1.75 | 0.16 or SB | 0.65 | B | 0.85 | B | 0.51 | | 0.20 | B | 0.36 | B | 0.32 | B | 0.22 | B | 0.24 | B | 0.24 | B | 0.38 | B | 0.35 | B |
| Cadmium | 0.1 - 1 | 1 or SB | 0.0 | | 19.0 | | 3.4 | | 0.28 | B | 0.098 | U | 0.089 | U | 0.088 | U | 0.077 | U | 0.077 | U | 9.4 | | 7.5 | |
| Calcium | 130 - 35000 | SB | 15400 | | 15300 | | 53600 | | 68100 | | 2740 | | 8280 | | 6010 | | 8030 | | 8530 | | 26600 | | 11400 | |
| Chromium | 1.5 - 40 | 10 or SB | 59.9 | | 104 | | 32.7 | | 13.5 | | 16.4 | | 12.8 | | 12.0 | | 10.5 | | 10.1 | | 96.2 | | 22.2 | |
| Cobalt | 2.8 - 60 | 30 or SB | 12.0 | B | 24.9 | B | 5.5 | B | 15.7 | B | 7.1 | B | 6.0 | B | 5.7 | B | 5.3 | B | 5.2 | B | 10.1 | B | 6.1 | B |
| Copper | 1 - 50 | 25 or SB | 509 | | 413 | | 59.6 | | 29.3 | | 12.3 | | 12.4 | | 19.6 | | 9.9 | | 10.9 | | 321 | | 61.5 | |
| Iron | 2000 - 550000 | 2000 or SB | 54600 | | 180100 | | 23800 | | 11000 | | 20200 | | 16200 | | 16500 | | 16600 | | 16400 | | 128400 | | 20200 | |
| Lead | 200 - 500 | SB | 7580 | | 24600 | | 963 | | 514 | | 32.1 | | 11.6 | | 19.2 | | 74.9 | | 33.3 | | 30900 | | 604 | |
| Magnesium | 100 - 5000 | SB | 1880 | | 3170 | B | 10500 | | 6360 | | 4010 | | 5030 | | 4300 | | 4070 | | 4260 | | 5780 | | 2880 | |
| Manganese | 50 - 5000 | SB | 397 | | 776 | | 323 | | 345 | | 240 | | 256 | | 159 | | 180 | | 168 | | 745 | | 387 | |
| Mercury | 0.001 - 0.2 | 0.1 | 0.89 | | 0.04 | B | 0.18 | | 0.06 | | 0.05 | | 0.04 | | 0.020 | U | 0.02 | B | 0.02 | B | 0.33 | | 0.25 | |
| Nickel | 0.5 - 25 | 13 or SB | 42.1 | | 141 | | 14.5 | | 23.3 | | 15.8 | | 14.9 | | 15.8 | | 14.2 | | 14.3 | | 65.0 | | 21.7 | |
| Potassium | 8500 - 43000 | SB | 299 | B | 402 | B | 978 | B | 1070 | B | 1170 | | 1230 | | 821 | B | 887 | B | 705 | B | 606 | B | 846 | B |
| Selenium | 0.1 - 3.9 | 2 or SB | 4.3 | U | 5.1 | U | 0.86 | U | 1.2 | U | 0.96 | U | 0.94 | U | 0.92 | U | 0.81 | U | 0.81 | U | 2.7 | | 0.93 | U |
| Silver | N/A | SB | 1.8 | B | 2.6 | B | 0.16 | U | 0.22 | U | 0.17 | U | 0.31 | U | 0.31 | U | 0.27 | U | 0.27 | U | 3.4 | | 0.31 | U |
| Sodium | 6000 - 8000 | SB | 3030 | | 473 | U | 179 | B | 913 | B | 431 | B | 140 | B | 88.8 | U | 105 | B | 104 | B | 359 | B | 87.2 | U |
| Thallium | N/A | SB | 1.4 | U | 5.8 | U | 0.98 | U | 1.4 | U | 1.1 | U | 1.1 | U | 1.0 | U | 0.91 | U | 0.90 | U | 2.5 | U | 1.0 | U |
| Vanadium | 1 - 300 | 150 or SB | 21.5 | | 20.6 | B | 23.2 | | 12.9 | B | 20.6 | | 15.2 | | 10.0 | B | 9.9 | B | 10.2 | | 28.8 | | 15.0 | |
| Zinc | 9 - 50 | 20 or SB | 1090 | | 13400 | | 445 | | 176 | | 60.0 | | 47.1 | | 51.7 | | 46.8 | | 41.9 | | 708 | | 566 | |

U-The compound not detected at the indicated concentration.
J-Approximate concentration
B-Analyte found in the laboratory blank as well as the sample.
SB - Site Background
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 15
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
Fills

| ++++++++++++++++++ | New York TAGM | Fill-C-6 | Fill-J-6 | Fill-L-6 | Fill-E | BH-1-6 | BH-2-7 | BH-3-6 | BH-4-5 | BH-5-6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368430 | 368437 | 368419 | 367965 | 367940 | 367941 | 367942 | 367943 | 367944 |
| Sampling Date | Cleanup Objective | 08/08/02 | 08/09/02 | 08/15/02 | 08/08/02 | 08/06/02 | 08/06/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | |
| Chloromethane | NA | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Bromomethane | NA | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| VinylChloride | 0.2 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Chloroethane | 1.9 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| MethyleneChloride | 0.1 | 0.0014 J | 0.0023 J | 0.0031 U | 0.0029 U | 0.001 J | 0.0012 J | 0.0018 J | 0.0009 J | 0.0036 U |
| Acetone | 0.2 | 0.041 | 0.0054 U | 0.03 | 0.015 | 0.016 | 0.016 | 0.065 | 0.018 | 0.006 U |
| CarbonDisulfide | 2.7 | 0.008 | 0.0054 U | 0.0009 J | 0.0047 J | 0.001 J | 0.0007 J | 0.0058 J | 0.0012 J | 0.0033 J |
| 1,1-Dichloroethene | 0.4 | 0.0022 U | 0.0022 U | 0.0021 U | 0.002 U | 0.0006 J | 0.0007 J | 0.0008 J | 0.0021 U | 0.0024 U |
| 1,1-Dichloroethane | 0.2 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| trans-1,2-Dichloroethene | 0.3 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| cis-1,2-Dichloroethene | NA | 0.0056 U | 0.0054 U | 0.0004 J | 0.0049 U | 0.0005 J | 0.0008 J | 0.0014 J | 0.0053 U | 0.006 U |
| Chloroform | 0.3 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| 1,2-Dichloroethane | 0.1 | 0.0022 U | 0.0022 U | 0.0021 U | 0.002 U | 0.0025 U | 0.0025 U | 0.0026 U | 0.0021 U | 0.0024 U |
| 2-Butanone | 0.3 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| 1,1,1-Trichloroethane | 0.8 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| CarbonTetrachloride | 0.6 | 0.0022 U | 0.0022 U | 0.0021 U | 0.002 U | 0.0025 U | 0.0025 U | 0.0026 U | 0.0021 U | 0.0024 U |
| Bromodichloromethane | NA | 0.0011 U | 0.0011 U | 0.001 U | 0.001 U | 0.0013 U | 0.0012 U | 0.0013 U | 0.001 U | 0.0012 U |
| 1,2-Dichloropropane | NA | 0.0011 U | 0.0011 U | 0.001 U | 0.001 U | 0.0013 U | 0.0012 U | 0.0013 U | 0.001 U | 0.0012 U |
| cis-1,3-Dichloropropene | NA | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Trichloroethene | 0.7 | 0.0011 U | 0.0011 U | 0.001 U | 0.001 U | 0.0004 J | 0.0012 U | 0.0004 J | 0.001 U | 0.0012 U |
| Dibromochloromethane | NA | 0.001 J | 0.0054 U | 0.0052 U | 0.0049 U | 0.001 J | 0.0004 J | 0.0004 J | 0.0005 J | 0.006 U |
| 1,1,2-Trichloroethane | NA | 0.0033 U | 0.0032 U | 0.0031 U | 0.0029 U | 0.0038 U | 0.0037 U | 0.0039 U | 0.0032 U | 0.0036 U |
| Benzene | 0.06 | 0.0007 J | 0.0011 U | 0.001 U | 0.001 U | 0.0006 J | 0.0012 U | 0.0013 U | 0.0009 J | 0.0012 U |
| trans-1,3-Dichloropropene | NA | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Bromoform | NA | 0.019 | 0.012 | 0.0042 | 0.0095 | 0.021 | 0.012 | 0.011 | 0.014 | 0.0046 J |
| 4-Methyl-2-Pentanone | 1 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| 2-Hexanone | NA | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Tetrachloroethene | 1.4 | 0.0011 U | 0.0011 U | 0.001 U | 0.001 U | 0.0013 U | 0.0012 U | 0.0013 U | 0.001 U | 0.0012 U |
| 1,1,2,2-Tetrachloroethane | 0.6 | 0.0011 U | 0.0011 U | 0.001 U | 0.001 U | 0.0013 U | 0.0012 U | 0.0013 U | 0.001 U | 0.0012 U |
| Toluene | 1.5 | 0.001 J | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Chlorobenzene | 1.7 | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Ethylbenzene | 5.5 | 0.0045 U | 0.0043 U | 0.0042 U | 0.0039 U | 0.005 U | 0.005 U | 0.0052 U | 0.0042 U | 0.0048 U |
| Styrene | NA | 0.0056 U | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Xylene(Total) | 1.2 | 0.0009 J | 0.0054 U | 0.0052 U | 0.0049 U | 0.0063 U | 0.0062 U | 0.0065 U | 0.0053 U | 0.006 U |
| Total Confident Conc. VOAs (s) | | 0.088 | 0.012 | 0.034 | 0.025 | 0.037 | 0.0028 | 0.076 | 0.032 | 0 |
| Total Estimated Conc. VOA TICs (s) | | 0.103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 15
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
Fills

| ++++++++++++++++++ | New York TAGM | Fill-C-6 | Fill-J-6 | Fill-L-6 | Fill-E | BH-1-6 | BH-2-7 | BH-3-6 | BH-4-5 | BH-5-6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368430 | 368437 | 368419 | 367965 | 367940 | 367941 | 367942 | 367943 | 367944 |
| Sampling Date | Cleanup Objective | 08/08/02 | 08/09/02 | 08/15/02 | 08/08/02 | 08/06/02 | 08/06/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | | | | |
| Phenol | 0.030 or MDL | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2-Chlorophenol | 0.8 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2-Methylphenol | 0.100 or MDL | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 4-Methylphenol | 0.9 | 0.073 J | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2-Nitrophenol | 0.330 or MDL | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2,4-Dimethylphenol | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2,4-Dichlorophenol | 0.4 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 4-Chloro-3-methylphenol | 0.240 or MDL | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2,4,6-Trichlorophenol | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2,4,5-Trichlorophenol | 0.1 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2,4-Dinitrophenol | 0.200 or MDL | 7.4 U | 1.4 U | 1.4 U | 1.4 U | 1.7 U | 1.7 U | 1.8 U | 1.4 U | 1.6 U |
| 4-Nitrophenol | 0.100 or MDL | 7.4 U | 1.4 U | 1.4 U | 1.4 U | 1.7 U | 1.7 U | 1.8 U | 1.4 U | 1.6 U |
| 4,6-Dinitro-2-methylphenol | NA | 7.4 U | 1.4 U | 1.4 U | 1.4 U | 1.7 U | 1.7 U | 1.8 U | 1.4 U | 1.6 U |
| Pentachlorophenol | 1 or MDL | 7.4 U | 1.4 U | 1.4 U | 1.4 U | 1.7 U | 1.7 U | 1.8 U | 1.4 U | 1.6 U |
| bis(2-Chloroethyl)ether | NA | 0.19 U | 0.036 U | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.044 U | 0.036 U | 0.041 U |
| 1,3-Dichlorobenzene | 1.6 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 1,4-Dichlorobenzene | 8.5 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 1,2-Dichlorobenzene | 7.9 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| bis(2-chloroisopropyl)ether | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| N-Nitroso-di-n-propylamine | NA | 0.19 U | 0.036 U | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.044 U | 0.036 U | 0.041 U |
| Hexachloroethane | NA | 0.19 U | 0.036 U | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.044 U | 0.036 U | 0.041 U |
| Nitrobenzene | 0.200 or MDL | 0.19 U | 0.036 U | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.044 U | 0.036 U | 0.041 U |
| Isophorone | 4.4 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| bis(2-Chloroethoxy)methane | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 1,2,4-Trichlorobenzene | 3.4 | 0.19 U | 0.036 U | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.044 U | 0.036 U | 0.041 U |
| Naphthalene | 13 | 0.084 J | 0.02 J | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 4-Chloroaniline | 0.220 or MDL | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Hexachlorobutadiene | NA | 0.37 U | 0.072 U | 0.071 U | 0.068 U | 0.084 U | 0.084 U | 0.088 U | 0.071 U | 0.082 U |
| 2-Methylnaphthalene | 36.400 | 0.16 J | 0.021 J | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 15
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
Fills

| ++++++++++++++++ | New York TAGM | Fill-C-6 | Fill-J-6 | Fill-L-6 | Fill-E | BH-1-6 | BH-2-7 | BH-3-6 | BH-4-5 | BH-5-6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368430 | 368437 | 369419 | 367965 | 367940 | 367941 | 367942 | 367943 | 367944 |
| Sampling Date | Cleanup Objective | 08/08/02 | 08/09/02 | 08/15/02 | 08/08/02 | 08/08/02 | 08/06/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Hexachlorocyclopentadiene | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2-Chloronaphthalene | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2-Nitroaniline | 0.430 or MDL | 3.7 U | 0.72 U | 0.71 U | 0.68 U | 0.84 U | 0.84 U | 0.88 U | 0.71 U | 0.82 U |
| Dimethylphthalate | 2.0 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Acenaphthylene | 50 | 3.4 | 0.012 J | 0.042 J | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.013 J |
| 2,6-Dinitrotoluene | 1.0 | 0.37 U | 0.072 U | 0.071 U | 0.068 U | 0.084 U | 0.084 U | 0.088 U | 0.071 U | 0.082 U |
| 3-Nitroaniline | .500 or MDL | 3.7 U | 0.72 U | 0.71 U | 0.68 U | 0.84 U | 0.84 U | 0.88 U | 0.71 U | 0.82 U |
| Acenaphthene | 50 | 0.44 J | 0.15 J | 0.014 J | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Dibenzofuran | 6.2 | 0.34 J | 0.13 J | 0.035 J | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 2,4-Dinitrotoluene | NA | 0.37 U | 0.072 U | 0.071 U | 0.068 U | 0.084 U | 0.084 U | 0.088 U | 0.071 U | 0.082 U |
| Diethylphthalate | 7.1 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 4-Chlorophenyl-phenylether | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Fluorene | 50 | 1.2 J | 0.2 J | 0.043 J | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 4-Nitroaniline | NA | 3.7 U | 0.72 U | 0.71 U | 0.68 U | 0.84 U | 0.84 U | 0.88 U | 0.71 U | 0.82 U |
| N-Nitrosodiphenylamine | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 4-Bromophenyl-phenylether | NA | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Hexachlorobenzene | 0.410 | 0.19 U | 0.036 U | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.44 U | 0.036 U | 0.041 U |
| Phenanthrene | 50 | 7.2 | 2.7 | 0.36 | 0.34 U | 0.014 J | 0.024 J | 0.012 J | 0.36 U | 0.017 J |
| Anthracene | 50 | 3 | 0.41 | 0.2 J | 0.34 U | 0.42 U | 0.012 J | 0.44 U | 0.36 U | 0.01 J |
| Carbazole | NA | 0.34 J | 0.4 | 0.23 J | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Di-n-butylphthalate | 8.1 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Fluoranthene | 50 | 12 | 3.4 | 1.7 | 0.34 U | 0.039 J | 0.048 J | 0.026 J | 0.36 U | 0.041 J |
| Pyrene | 50 | 12 | 2.9 | 1.6 | 0.34 U | 0.04 J | 0.075 J | 0.032 J | 0.36 U | 0.047 J |
| Butylbenzylphthalate | 50 | 1.9 U | 0.075 J | 0.36 U | 0.34 U | 0.042 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| 3,3'-Dichlorobenzidine | NA | 3.7 U | 0.72 U | 0.71 U | 0.68 U | 0.84 U | 0.84 U | 0.88 U | 0.71 U | 0.82 U |
| Benzo(a)anthracene | 0.224 or MDL | 8.8 | 1.1 | 0.31 | 0.034 U | 0.035 J | 0.044 | 0.021 J | 0.036 U | 0.027 J |
| Chrysene | 0.4 | 9.6 | 1.5 | 0.32 | 0.34 U | 0.024 J | 0.036 J | 0.022 J | 0.36 U | 0.021 J |
| bis(2-Ethylhexyl)phthalate | 50 | 1.9 U | 0.36 U | 0.081 J | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Di-n-octylphthalate | 50 | 1.9 U | 0.36 U | 0.36 U | 0.34 U | 0.42 U | 0.42 U | 0.44 U | 0.36 U | 0.41 U |
| Benzo(b)fluoranthene | 0.22 or MDL | 9.7 | 1.6 | 0.67 | 0.034 U | 0.03 J | 0.052 | 0.044 U | 0.036 U | 0.028 J |
| Benzo(k)fluoranthene | 0.22 or MDL | 4.4 | 0.69 | 0.29 | 0.034 U | 0.017 J | 0.013 J | 0.044 U | 0.036 U | 0.015 J |
| Benzo(a)pyrene | 0.061 or MDL | 7.6 | 0.89 | 0.1 | 0.034 U | 0.028 J | 0.046 | 0.023 J | 0.036 U | 0.03 J |
| Indeno(1,2,3-cd)pyrene | 3.2 | 4.2 | 0.52 | 0.097 | 0.034 U | 0.011 J | 0.042 U | 0.01 J | 0.036 U | 0.041 U |
| Dibenz(a,h)anthracene | 0.014 or MDL | 1.4 | 0.13 | 0.036 U | 0.034 U | 0.042 U | 0.042 U | 0.044 U | 0.036 U | 0.041 U |
| Benzo(g,h,i)perylene | 50 | 3.8 | 0.42 | 0.069 J | 0.34 U | 0.012 J | 0.42 U | 0.0098 J | 0.36 U | 0.41 U |
| Total Confident Conc. BNAs (s) | | 87.1 | 16.56 | 6.047 | 0 | 0 | 0.142 | 0 | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | 32.5 | 3.55 | 0.82 | 0 | 0 | 0.38 | 0 | 0 | 0.35 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 15
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
Fills

| ++++++++++++++++++ | New York TAGM | Fill-C-6 | Fill-J-6 | Fill-L-6 | Fill-E | BH-1-6 | BH-2-7 | BH-3-6 | BH-4-5 | BH-5-6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Rec. Soil | 368430 | 368437 | 369419 | 367965 | 367940 | 367941 | 367942 | 367943 | 367944 |
| Sampling Date | Cleanup Objective | 08/08/02 | 08/09/02 | 08/15/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/08/02 | 08/06/02 | 08/09/02 |
| Matrix | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| PCBs | | | | | | | | | | |
| Aroclor-1016 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1221 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1232 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1242 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1248 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1254 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1260 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1262 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| Aroclor-1268 | # | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| PESTICIDES | | | | | | | | | | |
| Aldrin | 0.041 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| alpha-BHC | 0.11 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| beta-BHC | 0.2 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| delta-BHC | 0.3 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| gamma-BHC(Lindane) | 0.06 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Chlordane | 0.54 | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| 4,4'-DDD | 2.9 | 0.016 | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| 4,4'-DDE | 2.1 | 0.0075 U | 0.0073 U | 0.012 | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| 4,4'-DDT | 2.1 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Dieldrin | 0.044 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Endosulfanl | 0.9 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| EndosulfanII | 0.9 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Endosulfansulfate | 1.0 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Endrin | 0.1 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Endrinaldehyde | N/A | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Endrinketone | N/A | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Heptachlor | 0.1 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Heptachlorepoxide | 0.02 | 0.0075 U | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Methoxychlor | Site Specific | 0.1 | 0.0073 U | 0.0072 U | 0.0069 U | 0.0085 U | 0.0084 U | 0.0088 U | 0.0072 U | 0.0082 U |
| Toxaphene | N/A | 0.075 U | 0.073 U | 0.072 U | 0.069 U | 0.085 U | 0.084 U | 0.088 U | 0.072 U | 0.082 U |
| WET CHEMISTRY | | | | | | | | | | 0 |
| TotalCyanide - mg/kg | Site Specific | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 15
Soil Sampling Results
Formerly General Motors Site
Tarrytown, New York
Fills

| Sample ID | Eastern USA | New York TAGM | Fill-C-6 | Fill-J-6 | Fill-L-6 | Fill-E | BH-1-6 | BH-2-7 | BH-3-6 | BH-4-5 | BH-5-6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample Number | Background (ppm) | Rec. Soil | 368430 | 368437 | 369419 | 367965 | 367940 | 367941 | 367942 | 367943 | 367944 |
| Sampling Date | | Cleanup Objective | 08/08/02 | 08/08/02 | 08/15/02 | 08/08/02 | 08/08/02 | 08/06/02 | 08/06/02 | 08/06/02 | 08/06/02 |
| Matrix | | Criteria (mg/kg) | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID | SOLID |
| Units | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Dilution Factor | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| METALS | | | | | | | | | | | |
| Aluminum | 33,000 | SB | 8090 | 6900 | 9520 | 7490 | 7320 | 7100 | 7340 | 6980 | 6460 |
| Antimony | N/A | SB | 1.3 U | 7.5 | 1.2 U | 0.84 U | 1.5 U | 1.3 U | 1.5 U | 3.3 | 1.4 U |
| Arsenic | 3 - 12 | 7.5 or SB | 3.6 | 2.6 | 1.6 | 2.3 | 3.5 | 2.6 | 5.1 | 1.7 | 2.0 |
| Barium | 15 - 600 | 300 or SB | 74.8 | 15.5 B | 60.0 | 9.8 B | 32.9 B | 28.6 B | 30.8 B | 148 | 15.2 B |
| Beryllium | 0 - 1.75 | 0.16 or SB | 0.35 B | 0.29 B | 0.21 B | 0.32 B | 0.29 B | 0.26 B | 0.30 B | 0.21 B | 0.23 B |
| Cadmium | 0.1 - 1 | 1 or SB | 0.13 B | 0.079 U | 0.086 U | 0.075 U | 0.28 B | 0.19 B | 0.32 B | 0.32 B | 0.21 B |
| Calcium | 130 - 35000 | SB | 13600 | 9610 | 2700 | 4250 | 7830 | 6560 | 4690 | 11700 | 3670 |
| Chromium | 1.5 - 40 | 10 or SB | 13.5 | 10.0 | 20.6 | 9.1 | 13.2 | 14.0 | 17.8 | 11.6 | 11.4 |
| Cobalt | 2.6 - 60 | 30 or SB | 6.7 B | 5.1 B | 8.0 B | 5.5 B | 6.7 B | 6.4 B | 7.1 B | 6.2 B | 5.4 B |
| Copper | 1 - 50 | 25 or SB | 23.6 | 10.2 | 36.2 | 10.7 | 10.8 | 13.6 | 19.0 | 13.0 | 9.1 |
| Iron | 2000 - 550000 | 2000 or SB | 19800 | 15700 | 17300 | 18200 | 19200 | 17300 | 19000 | 18200 | 14900 |
| Lead | 200 - 500 | SB | 41.5 | 159 | 6.0 | 4.9 | 15.3 | 9.3 | 15.0 | 50.3 | 7.7 |
| Magnesium | 100 - 5000 | SB | 5500 | 6510 | 4640 | 4260 | 4290 | 4660 | 5020 | 4340 | 3870 |
| Manganese | 50 - 5000 | SB | 413 | 174 | 282 | 205 | 263 | 467 | 284 | 225 | 240 |
| Mercury | 0.001 - 0.2 | 0.1 | 0.06 | 0.016 U | 0.07 | 0.017 U | 0.08 | 0.15 | 0.17 | 0.03 B | 0.12 |
| Nickel | 0.5 - 25 | 13 or SB | 15.7 | 14.0 | 14.7 | 14.1 | 15.1 | 14.6 | 15.2 | 14.3 | 12.4 |
| Potassium | 8500 - 43000 | SB | 1000 B | 702 B | 1080 | 734 B | 539 B | 901 B | 1120 B | 373 B | 518 B |
| Selenium | 0.1 - 3.9 | 2 or SB | 0.94 U | 0.83 U | 0.90 U | 0.84 U | 1.1 U | 0.96 U | 1.3 | 0.93 B | 1.0 U |
| Silver | N/A | SB | 0.31 U | 0.28 U | 0.30 U | 0.21 U | 0.35 U | 0.32 U | 0.37 U | 0.30 U | 0.34 U |
| Sodium | 6000 - 8000 | SB | 210 B | 78.1 U | 246 B | 132 B | 400 B | 456 B | 396 B | 118 B | 210 B |
| Thallium | N/A | SB | 1.1 U | 0.93 U | 1.0 U | 0.77 U | 1.2 U | 1.1 U | 1.2 U | 1.0 U | 1.2 U |
| Vanadium | 1 - 300 | 150 or SB | 13.9 | 12.1 | 26.8 | 12.3 | 15.8 | 14.4 | 17.9 | 11.0 | 12.3 |
| Zinc | 9 - 50 | 20 or SB | 79.0 | 39.0 | 34.2 | 37.7 | 49.8 | 47.8 | 57.2 | 52.6 | 41.2 |

U-The compound not detected at the indicated concentration.
J-Approximate concentration
B-Analyte found in the laboratory blank as well as the sample.
SB-Site Background
NR-Not analyzed.
# Surface 1.0 ppm
Subsurface 10.0 ppm

Table 16
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | OW-11 | WP-21-1 | FB-081202-1 | Trip_Blank | WP-34-1 | WP-37-1 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368860 | 368861 | 368862 | 368863 | 368864 | 368865 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | |
| Chloromethane | **NA** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Bromomethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| VinylChloride | **2** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Chloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| MethyleneChloride | **5*** | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U |
| Acetone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| CarbonDisulfide | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 0.6 J |
| 1,1-Dichloroethene | **5*** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| 1,1-Dichloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| trans-1,2-Dichloroethene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| cis-1,2-Dichloroethene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Chloroform | **7** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,2-Dichloroethane | **0.6** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| 2-Butanone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,1,1-Trichloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| CarbonTetrachloride | **5** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| Bromodichloromethane | **?** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dichloropropane | **1** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| cis-1,3-Dichloropropene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Trichloroethene | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dibromochloromethane | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,1,2-Trichloroethane | **1** | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U |
| Benzene | **1** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| trans-1,3-Dichloropropene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Bromoform | **?** | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 4-Methyl-2-Pentanone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 2-Hexanone | **?** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Tetrachloroethene | **5** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1,2,2-Tetrachloroethane | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Toluene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Chlorobenzene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Ethylbenzene | **5*** | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Styrene | **5*** | 5.0 U | 0.6 J | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Xylene(Total) | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Total Confident Conc. VOAs (s) | | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 19 | 0 | 0 | 0 | 1470 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 16
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | OW-11 | WP-21-1 | FB-081202-1 | Trip_Blank | WP-34-1 | WP-37-1 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368860 | 368861 | 368862 | 368863 | 368864 | 368865 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | |
| Phenol | **5*** | 10 U | 13 | 10 U | NR | 10 U | 10 U |
| 2-Chlorophenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2-Methylphenol | **5*** | 10 U | 2.8 J | 10 U | NR | 10 U | 10 U |
| 4-Methylphenol | **5*** | 10 U | 3.1 J | 10 U | NR | 10 U | 10 U |
| 2-Nitrophenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2,4-Dimethylphenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2,4-Dichlorophenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 4-Chloro-3-methylphenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2,4,6-Trichlorophenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2,4,5-Trichlorophenol | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2,4-Dinitrophenol | **5*** | 40 U | 40 U | 40 U | NR | 40 U | 40 U |
| 4-Nitrophenol | **5*** | 40 U | 40 U | 40 U | NR | 40 U | 40 U |
| 4,6-Dinitro-2-methylphenol | **5*** | 40 U | 40 U | 40 U | NR | 40 U | 40 U |
| Pentachlorophenol | **5*** | 40 U | 40 U | 40 U | NR | 40 U | 40 U |
| bis(2-Chloroethyl)ether | **1** | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| 1,3-Dichlorobenzene | **3** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 1,4-Dichlorobenzene | **3** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 1,2-Dichlorobenzene | **3** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| bis(2-chloroisopropyl)ether | **?** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| N-Nitroso-di-n-propylamine | **?** | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Hexachloroethane | **5*** | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Nitrobenzene | **5** | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Isophorone | **50** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| bis(2-Chloroethoxy)methane | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 1,2,4-Trichlorobenzene | **5*** | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Naphthalene | **10** | 10 U | 4.4 J | 10 U | NR | 10 U | 10 U |
| 4-Chloroaniline | **5*** | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| Hexachlorobutadiene | **0.5** | 2.0 U | 2.0 U | 2.0 U | NR | 2.0 U | 2.0 U |
| 2-Methylnaphthalene | **50** | 10 U | 0.8 J | 10 U | NR | 10 U | 10 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 16
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | OW-11 | WP-21-1 | FB-081202-1 | Trip_Blank | WP-34-1 | WP-37-1 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368860 | 368861 | 368862 | 368863 | 368864 | 368865 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| Hexachlorocyclopentadiene | 5* | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2-Chloronaphthalene | 10 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2-Nitroaniline | 5* | 20 U | 20 U | 20 U | NR | 20 U | 20 U |
| Dimethylphthalate | 50 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| Acenaphthylene | 20 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 2,6-Dinitrotoluene | 5* | 2.0 U | 2.0 U | 2.0 U | NR | 2.0 U | 2.0 U |
| 3-Nitroaniline | 5* | 20 U | 20 U | 20 U | NR | 20 U | 20 U |
| Acenaphthene | 20 | 10 U | 0.7 J | 10 U | NR | 10 U | 10 U |
| Dibenzofuran | 5 | 10 U | 0.5 J | 10 U | NR | 10 U | 10 U |
| 2,4-Dinitrotoluene | NA | 2.0 U | 2.0 U | 2.0 U | NR | 2.0 U | 2.0 U |
| Diethylphthalate | 50 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 4-Chlorophenyl-phenylether | ? | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| Fluorene | 50 | 10 U | 0.7 J | 10 U | NR | 10 U | 10 U |
| 4-Nitroaniline | 5* | 20 U | 20 U | 20 U | NR | 20 U | 20 U |
| N-Nitrosodiphenylamine | NA | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 4-Bromophenyl-phenylether | ? | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| Hexachlorobenzene | 0.04 | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Phenanthrene | 50 | 10 U | 3.4 J | 10 U | NR | 10 U | 0.2 J |
| Anthracene | 20 | 10 U | 1.9 J | 10 U | NR | 10 U | 1.2 J |
| Carbazole | ? | 10 U | 1.7 J | 10 U | NR | 10 U | 10 U |
| Di-n-butylphthalate | 50 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| Fluoranthene | 50 | 10 U | 3.2 J | 10 U | NR | 10 U | 2.7 J |
| Pyrene | 50 | 10 U | 3.3 J | 10 U | NR | 10 U | 2.2 J |
| Butylbenzylphthalate | 50 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| 3,3'-Dichlorobenzidine | NA | 20 U | 20 U | 20 U | NR | 20 U | 20 U |
| Benzo(a)anthracene | 0.002 | 1.0 U | 1.1 | 1.0 U | NR | 1.0 U | 1.0 J |
| Chrysene | 0.002 | 10 U | 1.6 J | 10 U | NR | 10 U | 1.3 J |
| bis(2-Ethylhexyl)phthalate | 50 | 10 U | 10 U | 8.0 J | NR | 10 U | 10 U |
| Di-n-octylphthalate | 50 | 10 U | 10 U | 10 U | NR | 10 U | 10 U |
| Benzo(b)fluoranthene | 0.002 | 1.0 U | 2.2 | 1.0 U | NR | 1.0 U | 0.7 J |
| Benzo(k)fluoranthene | 0.002 | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Benzo(a)pyrene | 0.002 | 1.0 U | 1.2 | 1.0 U | NR | 1.0 U | 0.8 J |
| Indeno(1,2,3-cd)pyrene | 0.002 | 1.0 U | 0.6 J | 1.0 U | NR | 1.0 U | 0.3 J |
| Dibenz(a,h)anthracene | 20 | 1.0 U | 1.0 U | 1.0 U | NR | 1.0 U | 1.0 U |
| Benzo(g,h,i)perylene | 5 | 10 U | 0.7 J | 10 U | NR | 10 U | 10 U |
| Total Confident Conc. BNAs (s) | | 0 | 18 | 0 | | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | 0 | 472 | 0 | | 0 | 127 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 16
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | OW-11 | WP-21-1 | FB-081202-1 | Trip_Blank | WP-34-1 | WP-37-1 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368860 | 368861 | 368862 | 368863 | 368864 | 368865 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **METALS** | | | | | | | |
| Aluminum | **NA** | 3370 | 137000 | 77.4 U | NR | 238000 | 82000 |
| Antimony | **3** | 6.9 B | 11.9 B | 3.9 U | NR | 7.8 U | 3.9 U |
| Arsenic | **25** | 9.1 | 87.2 | 3.4 U | NR | 73.2 | 22.2 |
| Barium | **1000** | 940 | 4250 | 0.80 U | NR | 3610 | 1130 |
| Beryllium | **11 / 1,000 *** | 0.10 U | 10.2 | 0.10 U | NR | 16.9 | 6.2 |
| Cadmium | **5** | 154 | 17.6 | 0.40 U | NR | 8.9 | 1.2 B |
| Calcium | **NA** | 80700 | 483000 | 74.5 U | NR | 464000 | 301000 |
| Chromium | **50** | 12.1 | 403 | 2.8 U | NR | 734 | 294 |
| Cobalt | **5** | 3.9 B | 139 | 3.5 U | NR | 422 | 107 |
| Copper | **200** | 63.9 | 4160 | 2.1 U | NR | 1130 | 305 |
| Iron | **300** | 15700 | 369000 | 39.7 U | NR | 545000 | 150000 |
| Lead | **25** | 393 | 5420 | 2.2 U | NR | 418 | 155 |
| Magnesium | **35,000** | 18200 | 85600 | 70.0 U | NR | 262000 | 136000 |
| Manganese | **300** | 505 | 5760 | 2.9 U | NR | 15400 | 3910 |
| Mercury | **0.7** | 0.10 U | 22.6 | 0.10 U | NR | 0.32 | 0.10 U |
| Nickel | **100** | 18.9 B | 406 | 3.9 U | NR | 762 | 293 |
| Potassium | **NA** | 7900 | 129000 | 306 B | NR | 77200 | 44600 |
| Selenium | **10** | 3.9 U | 13.3 | 3.9 U | NR | 7.8 U | 3.9 U |
| Silver | **50** | 0.70 U | 44.6 | 0.70 U | NR | 31.9 | 0.70 U |
| Sodium | **20,000** | 56100 | 189000 | 361 U | NR | 947000 | 75100 |
| Thallium | **NA** | 4.4 U | 8.8 U | 4.4 U | NR | 8.8 U | 4.4 U |
| Vanadium | **14** | 8.4 B | 320 | 5.1 U | NR | 560 | 167 |
| Zinc | **NA** | 1250 | 6780 | 5.8 U | NR | 1270 | 350 |

| Sample ID | NYSDEC | OW-11 | WP-21-1 | FB-081202-1 | Trip_Blank | WP-34-1 | WP-37-1 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368877 | 368878 | | 369134 | 368879 | 368880 |
| Sampling Date | Standards | 08/13/02 | 08/13/02 | | 08/13/02 | 08/13/02 | 08/13/02 |
| **METALS (Dissolved)** | | | | | | | |
| Aluminum | **NA** | 77.4 U | 1300 | NR | NR | 77.4 U | 77.4 U |
| Antimony | **3** | 3.9 U | 24.8 | NR | NR | 3.9 U | 3.9 U |
| Arsenic | **25** | 3.4 U | 20.8 | NR | NR | 3.4 U | 3.4 U |
| Barium | **1000** | 782 | 4.9 B | NR | NR | 182 B | 71.9 B |
| Beryllium | **11 / 1,000 *** | 0.1 U | 0.1 U | NR | NR | 0.1 U | 0.1 U |
| Cadmium | **5** | 0.4 U | 0.4 U | NR | NR | 0.4 U | 0.4 U |
| Calcium | **NA** | 71500 | 6510 | NR | NR | 79200 | 107000 |
| Chromium | **50** | 2.8 U | 2.8 U | NR | NR | 2.8 U | 2.8 U |
| Cobalt | **5** | 3.5 U | 3.5 U | NR | NR | 3.5 U | 3.5 U |
| Copper | **200** | 2.1 U | 8.4 B | NR | NR | 2.5 B | 2.1 U |
| Iron | **300** | 5520 | 187 | NR | NR | 39.7 U | 202 |
| Lead | **25** | 2.2 U | 7 | NR | NR | 2.2 U | 2.2 U |
| Magnesium | **35,000** | 15200 | 70 U | NR | NR | 16100 | 42300 |
| Manganese | **300** | 329 | 5.5 B | NR | NR | 169 | 448 |
| Mercury | **0.7** | 0.1 U | 0.14 B | NR | NR | 0.1 U | 0.1 U |
| Nickel | **100** | 3.9 U | 11.1 B | NR | NR | 3.9 U | 3.9 U |
| Potassium | **NA** | 6500 | 60900 | NR | NR | 8240 | 23300 |
| Selenium | **10** | 3.9 U | 3.9 U | NR | NR | 3.9 U | 19.5 U |
| Silver | **50** | 0.7 U | 0.7 U | NR | NR | 0.7 U | 0.7 U |
| Sodium | **20,000** | 49700 | 157000 | NR | NR | 953000 | 70200 |
| Thallium | **NA** | 4.4 U | 4.4 U | NR | NR | 4.4 U | 4.4 U |
| Vanadium | **14** | 5.1 U | 25.5 B | NR | NR | 5.1 U | 5.1 U |
| Zinc | **NA** | 10.6 B | 13.1 B | NR | NR | 6 B | 5.8 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 17
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-28-1A | OW-7 | FB-081302-1 | OW-9 | OW-18 | OW-8 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368866 | 368867 | 368868 | 368869 | 368870 | 368871 |
| Sampling Date | Standards | 08/13/02 | 08/13/02 | 08/13/02 | 08/12/02 | 08/12/02 | 08/12/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | | |
| Chloromethane | **NA** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Bromomethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| VinylChloride | **2** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Chloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| MethyleneChloride | **5*** | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U |
| Acetone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| CarbonDisulfide | **50** | 5.0 U | 1.0 J | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,1-Dichloroethene | **5*** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| 1,1-Dichloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| trans-1,2-Dichloroethene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| cis-1,2-Dichloroethene | **5*** | 5.0 U | 5.0 U | 5.0 U | 3.1 J | 5.0 U | 5.0 U |
| Chloroform | **7** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,2-Dichloroethane | **0.6** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| 2-Butanone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,1,1-Trichloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| CarbonTetrachloride | **5** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| Bromodichloromethane | **?** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,2-Dichloropropane | **1** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| cis-1,3-Dichloropropene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Trichloroethene | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dibromochloromethane | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 1,1,2-Trichloroethane | **1** | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U |
| Benzene | **1** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| trans-1,3-Dichloropropene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Bromoform | **?** | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 4-Methyl-2-Pentanone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 2-Hexanone | **?** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Tetrachloroethene | **5** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,1,2,2-Tetrachloroethane | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Toluene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Chlorobenzene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Ethylbenzene | **5*** | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Styrene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Xylene(Total) | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Total Confident Conc. VOAs (s) | | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0 | 0 | 0 | 0 | 0 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 17
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-28-1A | OW-7 | FB-081302-1 | OW-9 | OW-18 | OW-8 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368866 | 368867 | 368868 | 368869 | 368870 | 368871 |
| Sampling Date | Standards | 08/13/02 | 08/13/02 | 08/13/02 | 08/12/02 | 08/12/02 | 08/12/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | | |
| Phenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Chlorophenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Methylphenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Methylphenol | **5*** | 10 U | 10 U | 10 U | 1.4 J | 7.5 J | 10 U |
| 2-Nitrophenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dimethylphenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dichlorophenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chloro-3-methylphenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,5-Trichlorophenol | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dinitrophenol | **5*** | 40 U | 40 U | 40 U | 42 U | 41 U | 40 U |
| 4-Nitrophenol | **5*** | 40 U | 40 U | 40 U | 42 U | 41 U | 40 U |
| 4,6-Dinitro-2-methylphenol | **5*** | 40 U | 40 U | 40 U | 42 U | 41 U | 40 U |
| Pentachlorophenol | **5*** | 40 U | 40 U | 40 U | 42 U | 41 U | 40 U |
| bis(2-Chloroethyl)ether | **1** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,3-Dichlorobenzene | **3** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,4-Dichlorobenzene | **3** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2-Dichlorobenzene | **3** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-chloroisopropyl)ether | **?** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| N-Nitroso-di-n-propylamine | **?** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Hexachloroethane | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Nitrobenzene | **5** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Isophorone | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-Chloroethoxy)methane | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2,4-Trichlorobenzene | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Naphthalene | **10** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chloroaniline | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobutadiene | **0.5** | 2.0 U | 2.0 U | 2.0 U | 2.1 U | 2.1 U | 2.0 U |
| 2-Methylnaphthalene | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 17
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-28-1A | OW-7 | FB-081302-1 | OW-9 | OW-18 | OW-8 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368866 | 368867 | 368868 | 368869 | 368870 | 368871 |
| Sampling Date | Standards | 08/13/02 | 08/13/02 | 08/13/02 | 08/12/02 | 08/12/02 | 08/12/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| Hexachlorocyclopentadiene | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Chloronaphthalene | 10 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Nitroaniline | 5* | 20 U | 20 U | 20 U | 21 U | 21 U | 20 U |
| Dimethylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Acenaphthylene | 20 | 0.4 J | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,6-Dinitrotoluene | 5* | 2.0 U | 2.0 U | 2.0 U | 2.1 U | 2.1 U | 2.0 U |
| 3-Nitroaniline | 5* | 20 U | 20 U | 20 U | 21 U | 21 U | 20 U |
| Acenaphthene | 20 | 10 U | 10 U | 10 U | 10 U | 2.8 J | 0.4 J |
| Dibenzofuran | 5 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dinitrotoluene | NA | 2.0 U | 2.0 U | 2.0 U | 2.1 U | 2.1 U | 2.0 U |
| Diethylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chlorophenyl-phenylether | ? | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluorene | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Nitroaniline | 5* | 20 U | 20 U | 20 U | 21 U | 21 U | 20 U |
| N-Nitrosodiphenylamine | NA | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Bromophenyl-phenylether | ? | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobenzene | 0.04 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Phenanthrene | 50 | 0.4 J | 10 U | 10 U | 2.0 J | 0.4 J | 10 U |
| Anthracene | 20 | 0.5 J | 10 U | 10 U | 0.8 J | 1.1 J | 10 U |
| Carbazole | ? | 0.3 J | 10 U | 10 U | 0.3 J | 0.2 J | 10 U |
| Di-n-butylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluoranthene | 50 | 0.8 J | 10 U | 10 U | 4.7 J | 1.3 J | 10 U |
| Pyrene | 50 | 0.6 J | 10 U | 10 U | 3.9 J | 1.0 J | 0.6 J |
| Butylbenzylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 3,3'-Dichlorobenzidine | NA | 20 U | 20 U | 20 U | 21 U | 21 U | 20 U |
| Benzo(a)anthracene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 2.2 | 0.4 J | 1.0 U |
| Chrysene | 0.002 | 10 U | 10 U | 10 U | 2.8 J | 0.6 J | 10 U |
| bis(2-Ethylhexyl)phthalate | 50 | 10 U | 10 U | 7.4 J | 3.0 J | 10 U | 10 U |
| Di-n-octylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(b)fluoranthene | 0.002 | 0.6 J | 1.0 U | 1.0 U | 4.2 | 0.8 J | 1.0 U |
| Benzo(k)fluoranthene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 1.2 | 0.4 J | 1.0 U |
| Benzo(a)pyrene | 0.002 | 0.5 J | 1.0 U | 1.0 U | 2.6 | 0.5 J | 1.0 U |
| Indeno(1,2,3-cd)pyrene | 0.002 | 0.4 J | 1.0 U | 1.0 U | 1.8 | 0.2 J | 1.0 U |
| Dibenz(a,h)anthracene | 20 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Benzo(g,h,i)perylene | 5 | 0.4 J | 10 U | 10 U | 1.7 J | 0.3 J | 10 U |
| Total Confident Conc. BNAs (s) | | 0 | 0 | 0 | 12 | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | 0 | 0 | 0 | 18 | 18 | 0 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 17
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-28-1A | OW-7 | FB-081302-1 | OW-9 | OW-18 | OW-8 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368866 | 368867 | 368868 | 368869 | 368870 | 368871 |
| Sampling Date | Standards | 08/13/02 | 08/13/02 | 08/13/02 | 08/12/02 | 08/12/02 | 08/12/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **METALS** | | | | | | | |
| Aluminum | **NA** | 19400 | 698 | 77.4 U | 15300 | 39300 | 344 |
| Antimony | **3** | 4.2 B | 3.9 U | 3.9 U | 8.9 B | 9.2 B | 3.9 U |
| Arsenic | **25** | 12.8 | 6.1 | 3.4 U | 6.4 | 13.3 | 9.1 |
| Barium | **1000** | 562 | 37.1 B | 0.80 U | 536 | 682 | 135 B |
| Beryllium | **11 / 1,000 *** | 0.78 B | 0.11 B | 0.10 U | 0.60 B | 1.4 B | 0.10 U |
| Cadmium | **5** | 2.4 B | 0.40 U | 0.40 U | 7.1 | 6.3 | 3.7 B |
| Calcium | **NA** | 106000 | 133000 | 74.5 U | 156000 | 161000 | 88300 |
| Chromium | **50** | 40.2 | 2.8 U | 2.8 U | 93.4 | 159 | 2.8 U |
| Cobalt | **5** | 14.8 B | 5.2 B | 3.5 U | 13.2 B | 30.4 B | 3.5 U |
| Copper | **200** | 80.6 | 7.5 B | 2.1 U | 183 | 218 | 81.9 |
| Iron | **300** | 36400 | 11200 | 39.7 U | 25600 | 66500 | 11900 |
| Lead | **25** | 277 | 2.2 U | 2.2 U | 672 | 833 | 9.4 |
| Magnesium | **35,000** | 31100 | 7320 | 70.0 U | 51000 | 64300 | 30600 |
| Manganese | **300** | 725 | 3320 | 2.9 U | 857 | 1540 | 688 |
| Mercury | **0.7** | 0.33 | 0.10 U | 0.10 U | 0.34 | 0.30 | 0.10 U |
| Nickel | **100** | 40.4 | 16.7 B | 3.9 U | 47.6 | 102 | 5.4 B |
| Potassium | **NA** | 15000 | 22800 | 106 U | 10200 | 21800 | 24100 |
| Selenium | **10** | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 19.5 U | 3.9 U |
| Silver | **50** | 0.70 U | 0.70 U | 0.70 U | 0.70 U | 0.70 U | 0.70 U |
| Sodium | **20,000** | 59800 | 20400 | 361 U | 28300 | 145000 | 183000 |
| Thallium | **NA** | 4.4 U | 4.4 U | 4.4 U | 4.4 U | 4.4 U | 4.4 U |
| Vanadium | **14** | 70.9 | 5.1 U | 5.1 U | 62.7 | 142 | 5.1 U |
| Zinc | **NA** | 345 | 29.7 B | 6.2 B | 1830 | 2390 | 87.6 |

| Sample ID | NYSDEC | WP-28-1A | OW-7 | FB-081302-1 | OW-9 | OW-18 | OW-8 |
|---|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368881 | 368882 | | 368883 | 368884 | 368885 |
| Sampling Date | Standards | 08/13/02 | 08/13/02 | | 08/13/02 | 08/12/02 | 08/12/02 |
| **METALS (Dissolved)** | | | | | | | |
| Aluminum | **NA** | 62.6 U | 62.6 U | | 62.6 U | 62.6 U | 62.6 U |
| Antimony | **3** | 5.8 U | 5.8 U | | 5.8 U | 5.8 U | 5.8 U |
| Arsenic | **25** | 3.2 U | 3.2 U | | 3.2 U | 3.2 U | 3.2 U |
| Barium | **1000** | 157 B | 13.1 B | | 41.5 B | 161 B | 122 B |
| Beryllium | **11 / 1,000 *** | 0.3 U | 0.3 U | | 0.3 U | 0.3 U | 0.3 U |
| Cadmium | **5** | 0.4 U | 0.4 U | | 0.4 U | 0.4 U | 0.4 U |
| Calcium | **NA** | 73400 | 139000 | | 92200 | 103000 | 88600 |
| Chromium | **50** | 1.6 U | 1.6 U | | 1.6 U | 1.6 U | 1.6 U |
| Cobalt | **5** | 1.7 U | 1.7 U | | 1.7 U | 1.7 U | 1.7 U |
| Copper | **200** | 3.7 U | 3.7 U | | 3.7 U | 3.7 U | 3.7 u |
| Iron | **300** | 205 | 39.2 U | | 922 | 4110 | 1650 |
| Lead | **25** | 2.3 U | 2.3 U | | 2.3 U | 2.3 U | 2.3 U |
| Magnesium | **35,000** | 14100 | 8100 | | 10700 | 19700 | 30400 |
| Manganese | **300** | 174 | 214 | | 537 | 771 | 655 |
| Mercury | **0.7** | 0.1 U | 0.1 U | | 0.1 U | 0.1 U | 0.1 U |
| Nickel | **100** | 1.7 B | 3.6 B | | 2.7 B | 1.9 B | 2.7 B |
| Potassium | **NA** | 14100 | 24600 | | 9570 | 13500 | 25300 |
| Selenium | **10** | 4.2 U | 4.2 U | | 4.2 U | 4.2 U | 4.2 U |
| Silver | **50** | 1.4 U | 1.4 U | | 1.4 U | 1.4 U | 1.4 U |
| Sodium | **20,000** | 63900 | 25600 | | 29700 | 151000 | 173000 |
| Thallium | **NA** | 4.7 U | 4.7 U | | 4.7 U | 4.7 U | 4.7 U |
| Vanadium | **14** | 4.8 B | 1.8 U | | 1.8 U | 2.4 B | 1.8 U |
| Zinc | **NA** | 7.6 B | 16.2 B | | 8.4 B | 8.3 B | 5.8 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 18
Former General Motors Site
Tarrytown, New York
Groundwater Sampling
Results

| | NYSDEC Water Quality Standards Surface Waters and Groundwater (ug/l) | WP-30-2 369128 08/13/02 WATER 1.0 ug/L | WP-26-2 369129 08/13/02 WATER 1.0 ug/L | WP-39-1 369130 08/13/02 WATER 1.0 ug/L | OW-16 369131 08/13/02 WATER 1.0 ug/L | OW-17 369132 08/13/02 WATER 1.0 ug/L | OW-10 368874 08/12/02 WATER 2.0 ug/L |
|---|---|---|---|---|---|---|---|
| Chloromethane | **NA** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Bromomethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| VinylChloride | **2** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Chloroethane | **5*** | 5.0 U | 16 | 5.0 U | 5.0 U | 5.0 U | 10 U |
| MethyleneChloride | **5*** | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 6.0 U |
| Acetone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| CarbonDisulfide | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| 1,1-Dichloroethene | **5*** | 2.0 U | 6.8 | 2.0 U | 2.0 U | 2.0 U | 4.0 U |
| 1,1-Dichloroethane | **5*** | 5.0 U | 10 | 5.0 U | 5.0 U | 5.0 U | 10 U |
| trans-1,2-Dichloroethene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| cis-1,2-Dichloroethene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Chloroform | **7** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| 1,2-Dichloroethane | **0.6** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 4.0 U |
| 2-Butanone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| 1,1,1-Trichloroethane | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| CarbonTetrachloride | **5** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 4.0 U |
| Bromodichloromethane | **?** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 2.0 U |
| 1,2-Dichloropropane | **1** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 2.0 U |
| cis-1,3-Dichloropropene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Trichloroethene | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 2.0 U |
| Dibromochloromethane | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| 1,1,2-Trichloroethane | **1** | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 3.0 U | 6.0 U |
| Benzene | **1** | 1.0 U | 1.0 U | 2.1 | 1.0 U | 1.0 U | 6.2 |
| trans-1,3-Dichloropropene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Bromoform | **?** | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 8.0 U |
| 4-Methyl-2-Pentanone | **50** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| 2-Hexanone | **?** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Tetrachloroethene | **5** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 2.0 U |
| 1,1,2,2-Tetrachloroethane | **5*** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 2.0 U |
| Toluene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Chlorobenzene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 3.3 J |
| Ethylbenzene | **5*** | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 8.0 U |
| Styrene | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| Xylene(Total) | **5*** | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 10 U |
| | | 0 | 33 | 2.1 | 0 | 0 | 6.2 |
| | | 0 | 31 | 236 | 0 | 0 | 747 |

Table 18
Former General Motors Site
Tarrytown, New York
Groundwater Sampling
Results

| | NYSDEC Water Quality Standards Surface Waters and Groundwater (ug/l) | WP-30-2 369128 08/13/02 WATER 1.0 ug/L | WP-26-2 369129 08/13/02 WATER 1.0 ug/L | WP-39-1 369130 08/13/02 WATER 1.0 ug/L | OW-16 369131 08/13/02 WATER 1.0 ug/L | OW-17 369132 08/13/02 WATER 1.0 ug/L | OW-10 368874 08/12/02 WATER 1.0 ug/L |
|---|---|---|---|---|---|---|---|
| Phenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Chlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Methylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Methylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Nitrophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dimethylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dichlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chloro-3-methylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,5-Trichlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dinitrophenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U | 42 U |
| 4-Nitrophenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U | 42 U |
| 4,6-Dinitro-2-methylphenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U | 42 U |
| Pentachlorophenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U | 42 U |
| bis(2-Chloroethyl)ether | 1 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,3-Dichlorobenzene | 3 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,4-Dichlorobenzene | 3 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2-Dichlorobenzene | 3 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-chloroisopropyl)ether | ? | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| N-Nitroso-di-n-propylamine | ? | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Hexachloroethane | 5* | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Nitrobenzene | 5 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Isophorone | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-Chloroethoxy)methane | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2,4-Trichlorobenzene | 5* | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Naphthalene | 10 | 10 U | 10 U | 10 U | 10 U | 10 U | 4.3 J |
| 4-Chloroaniline | 5* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |

Table 18
Former General Motors Site
Tarrytown, New York
Groundwater Sampling
Results

| | NYSDEC Water Quality Standards Surface Waters and Groundwater (ug/l) | WP-30-2 369128 08/13/02 WATER 1.0 ug/L | WP-26-2 369129 08/13/02 WATER 1.0 ug/L | WP-39-1 369130 08/13/02 WATER 1.0 ug/L | OW-16 369131 08/13/02 WATER 1.0 ug/L | OW-17 369132 08/13/02 WATER 1.0 ug/L | OW-10 368874 08/12/02 WATER 1.0 ug/L |
|---|---|---|---|---|---|---|---|
| Hexachlorobutadiene | **0.5** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.1 U |
| 2-Methylnaphthalene | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 2.0 J |
| Hexachlorocyclopentadiene | **5*** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Chloronaphthalene | **10** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Nitroaniline | **5*** | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U |
| Dimethylphthalate | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Acenaphthylene | **20** | 10 U | 10 U | 3.1 J | 10 U | 10 U | 10 U |
| 2,6-Dinitrotoluene | **5*** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.1 U |
| 3-Nitroaniline | **5*** | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U |
| Acenaphthene | **20** | 10 U | 10 U | 1.2 J | 10 U | 10 U | 1.4 J |
| Dibenzofuran | **5** | 10 U | 10 U | 10 U | 10 U | 10 U | 0.5 J |
| 2,4-Dinitrotoluene | **NA** | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.1 U |
| Diethylphthalate | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chlorophenyl-phenylether | **?** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluorene | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 1.0 J |
| 4-Nitroaniline | **5*** | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U |
| N-Nitrosodiphenylamine | **NA** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Bromophenyl-phenylether | **?** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobenzene | **0.04** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Phenanthrene | **50** | 10 U | 10 U | 2.1 J | 10 U | 10 U | 0.5 J |
| Anthracene | **20** | 10 U | 0.4 J | 2.8 J | 10 U | 10 U | 0.5 J |
| Carbazole | **?** | 10 U | 10 U | 0.5 J | 10 U | 10 U | 10 U |
| Di-n-butylphthalate | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluoranthene | **50** | 10 U | 10 U | 5.6 J | 10 U | 10 U | 10 U |
| Pyrene | **50** | 10 U | 3.0 J | 5.6 J | 10 U | 10 U | 10 U |
| Butylbenzylphthalate | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 3,3'-Dichlorobenzidine | **NA** | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U |
| Benzo(a)anthracene | **0.002** | 1.0 U | 1.0 U | 2.3 | 1.0 U | 1.0 U | 1.0 U |
| Chrysene | **0.002** | 10 U | 10 U | 2.7 J | 10 U | 10 U | 10 U |
| bis(2-Ethylhexyl)phthalate | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Di-n-octylphthalate | **50** | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(b)fluoranthene | **0.002** | 1.0 U | 1.0 U | 2.6 | 1.0 U | 1.0 U | 1.0 U |
| Benzo(k)fluoranthene | **0.002** | 1.0 U | 1.0 U | 0.8 J | 1.0 U | 1.0 U | 1.0 U |
| Benzo(a)pyrene | **0.002** | 1.0 U | 1.0 U | 2.3 | 1.0 U | 1.0 U | 1.0 U |
| Indeno(1,2,3-cd)pyrene | **0.002** | 1.0 U | 1.0 U | 1.5 | 1.0 U | 1.0 U | 1.0 U |
| Dibenz(a,h)anthracene | **20** | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Benzo(g,h,i)perylene | **5** | 10 U | 10 U | 1.5 J | 10 U | 10 U | 10 U |
| | | 0 | 0 | 8.7 | 0 | 0 | 0 |
| | | 0 | 412 | 1283 | 0 | 0 | 1067 |

Table 18
Former General Motors Site
Tarrytown, New York
Groundwater Sampling
Results

| | NYSDEC Water Quality Standards Surface Waters and Groundwater (ug/l) | WP-30-2 369128 08/13/02 WATER NA ug/l | | WP-26-2 369129 08/13/02 WATER NA ug/l | | WP-39-1 369130 08/13/02 WATER NA ug/l | | OW-16 369131 08/13/02 WATER NA ug/l | | OW-17 369132 08/13/02 WATER NA ug/l | | OW-10 368874 08/12/02 WATER NA ug/l | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | **NA** | 146000 | | 105000 | | 64500 | | 5160 | | 1210 | | 4960 | |
| Antimony | **3** | 7.8 | U | 7.8 | U | 94.3 | | 3.9 | U | 3.9 | U | 46.8 | |
| Arsenic | **25** | 68.3 | | 34.0 | | 123 | | 35.6 | | 3.4 | U | 13.1 | |
| Barium | **1000** | 297 | B | 1190 | | 15700 | | 27.9 | B | 384 | | 7870 | |
| Beryllium | **11 / 1,000 *** | 7.8 | | 7.7 | | 4.7 | | 0.21 | B | 0.69 | B | 0.17 | B |
| Cadmium | **5** | 0.80 | U | 1.0 | B | 34.3 | | 0.40 | U | 5.5 | | 7.4 | |
| Calcium | **NA** | 245000 | | 217000 | | 85600 | | 56800 | | 91700 | | 76900 | |
| Chromium | **50** | 238 | | 290 | | 634 | | 10.7 | | 2.8 | U | 1390 | |
| Cobalt | **5** | 130 | | 120 | | 98.3 | B | 3.7 | B | 11.5 | B | 7.0 | B |
| Copper | **200** | 298 | | 519 | | 1230 | | 33.2 | | 33.3 | | 102 | |
| Iron | **300** | 338000 | | 251000 | | 279000 | | 12300 | | 21700 | | 49900 | |
| Lead | **25** | 213 | | 237 | | 18000 | | 19.5 | | 5.1 | | 632 | |
| Magnesium | **35,000** | 98600 | | 119000 | | 38400 | | 7570 | | 74400 | | 23600 | |
| Manganese | **300** | 5020 | | 9420 | | 4890 | | 819 | | 994 | | 226 | |
| Mercury | **0.7** | 0.25 | | 0.10 | U | 4.7 | | 0.10 | U | 0.10 | U | 0.10 | U |
| Nickel | **100** | 299 | | 348 | | 313 | | 8.5 | B | 45.7 | | 16.5 | B |
| Potassium | **NA** | 24800 | | 22200 | | 89800 | | 5810 | | 30400 | | 21800 | |
| Selenium | **10** | 7.8 | U | 7.8 | U | 7.8 | U | 3.9 | U | 3.9 | U | 11.7 | U |
| Silver | **50** | 1.4 | B | 1.4 | U | 2.8 | B | 0.70 | U | 0.85 | B | 0.70 | U |
| Sodium | **20,000** | 19600 | | 153000 | | 199000 | | 133000 | | 226000 | | 486000 | |
| Thallium | **NA** | 8.8 | U | 8.8 | U | 8.8 | U | 4.4 | U | 4.4 | U | 4.4 | U |
| Vanadium | **14** | 230 | | 303 | | 265 | | 16.7 | B | 5.1 | U | 13.2 | B |
| Zinc | **NA** | 953 | | 606 | | 14000 | | 42.3 | | 410 | | 775 | |

Table 18
Former General Motors Site
Tarrytown, New York
Groundwater Sampling
Results

| | NYSDEC Water Quality Standards Surface Waters and Groundwater (ug/l) | WP-30-2-Dis 369135 08/13/02 WATER NA ug/l | | WP-26-2-Dis 369136 08/13/02 WATER NA ug/l | | WP-39-1-Dis 369137 08/13/02 WATER NA ug/l | | OW-16-Dis 369138 08/13/02 WATER NA ug/l | | OW-17-Dis 369139 08/13/02 WATER NA ug/l | | OW-10_Diss 368888 08/12/02 WATER NA ug/l | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | **NA** | 77.4 | U | 77.4 | U | 1740 | | 77.4 | U | 132 | B | 62.6 | U |
| Antimony | **3** | 3.9 | U | 3.9 | U | 13.1 | | 3.9 | U | 3.9 | U | 5.8 | U |
| Arsenic | **25** | 7.5 | | 3.4 | U | 10.0 | | 33.9 | | 3.4 | U | 4.2 | |
| Barium | **1000** | 4.5 | B | 95.4 | B | 507 | | 4.4 | B | 327 | | 7060 | |
| Beryllium | **11 / 1,000 *** | 0.10 | U | 0.10 | U | 0.10 | B | 0.10 | U | 0.10 | U | 0.30 | U |
| Cadmium | **5** | 0.40 | U | 0.40 | U | 0.85 | B | 0.40 | U | 0.40 | U | 0.40 | U |
| Calcium | **NA** | 40700 | | 117000 | | 15300 | | 56900 | | 97200 | | 74100 | |
| Chromium | **50** | 2.8 | U | 2.8 | U | 44.0 | | 2.8 | U | 2.8 | U | 14.1 | |
| Cobalt | **5** | 3.5 | U | 3.6 | B | 3.5 | U | 3.5 | U | 8.4 | B | 1.7 | U |
| Copper | **200** | 2.1 | U | 2.1 | U | 61.4 | | 2.1 | U | 2.9 | B | 3.7 | U |
| Iron | **300** | 42.7 | B | 1710 | | 6990 | | 1410 | | 16100 | | 20300 | |
| Lead | **25** | 2.2 | U | 2.2 | U | 446 | | 2.2 | U | 2.2 | U | 2.3 | U |
| Magnesium | **35,000** | 11400 | | 24000 | | 2690 | B | 5930 | | 75500 | | 22200 | |
| Manganese | **300** | 168 | | 2750 | | 203 | | 671 | | 1480 | | 66.0 | |
| Mercury | **0.7** | 0.10 | U | 0.10 | U | 0.10 | U | 0.10 | U | 0.10 | U | 0.10 | U |
| Nickel | **100** | 3.9 | U | 5.7 | B | 14.1 | B | 3.9 | U | 30.5 | B | 2.9 | B |
| Potassium | **NA** | 10700 | | 2970 | B | 76000 | | 5310 | | 30800 | | 22500 | |
| Selenium | **10** | 3.9 | U | 3.9 | U | 3.9 | U | 3.9 | U | 3.9 | U | 4.2 | U |
| Silver | **50** | 0.70 | U | 0.70 | U | 0.90 | B | 0.70 | U | 0.70 | U | 1.4 | U |
| Sodium | **20,000** | 18600 | | 161000 | | 209000 | | 141000 | | 213000 | | 493000 | |
| Thallium | **NA** | 4.4 | U | 4.4 | U | 4.4 | U | 4.4 | U | 4.4 | U | 4.7 | U |
| Vanadium | **14** | 5.1 | U | 5.1 | U | 33.9 | B | 5.1 | B | 5.1 | U | 1.8 | U |
| Zinc | **NA** | 5.8 | B | 8.0 | B | 282 | | 9.1 | B | 43.2 | | 5.8 | U |

The compound was not detected at the indicated concentration.
Reported value is less than the Method Detection Limit but greater than or equal to the Instrument Detection Limit.
The spiked sample recovery is not within control limits.
Not analyzed.

Table 19
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-40-3 | WP-40-8A | Dup | WP-29-1 | FB-081302-2 |
|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368872 | 368873 | 368875 | 368876 | 369133 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L |
| **VOLATILE COMPOUNDS (GC/MS)** | | | | | | |
| Chloromethane | NA | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Bromomethane | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| VinylChloride | 2 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Chloroethane | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| MethyleneChloride | 5* | 3.0 U | 3.0 U | 6.0 U | 3.0 U | 3.0 U |
| Acetone | 50 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| CarbonDisulfide | 50 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| 1,1-Dichloroethene | 5* | 2.0 U | 2.0 U | 4.0 U | 2.0 U | 2.0 U |
| 1,1-Dichloroethane | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| trans-1,2-Dichloroethene | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| cis-1,2-Dichloroethene | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Chloroform | 7 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| 1,2-Dichloroethane | 0.6 | 2.0 U | 2.0 U | 4.0 U | 2.0 U | 2.0 U |
| 2-Butanone | 50 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| 1,1,1-Trichloroethane | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| CarbonTetrachloride | 5 | 2.0 U | 2.0 U | 4.0 U | 2.0 U | 2.0 U |
| Bromodichloromethane | ? | 1.0 U | 1.0 U | 2.0 U | 1.0 U | 1.0 U |
| 1,2-Dichloropropane | 1 | 1.0 U | 1.0 U | 2.0 U | 1.0 U | 1.0 U |
| cis-1,3-Dichloropropene | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Trichloroethene | 5* | 1.0 U | 1.0 U | 2.0 U | 1.0 U | 1.0 U |
| Dibromochloromethane | 50 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| 1,1,2-Trichloroethane | 1 | 3.0 U | 3.0 U | 6.0 U | 3.0 U | 3.0 U |
| Benzene | 1 | 1.0 U | 1.0 U | 5.4 | 1.0 U | 1.0 U |
| trans-1,3-Dichloropropene | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Bromoform | ? | 4.0 U | 4.0 U | 8.0 U | 4.0 U | 4.0 U |
| 4-Methyl-2-Pentanone | 50 | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| 2-Hexanone | ? | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Tetrachloroethene | 5 | 1.0 U | 1.0 U | 2.0 U | 1.0 U | 1.0 U |
| 1,1,2,2-Tetrachloroethane | 5* | 1.0 U | 1.0 U | 2.0 U | 1.0 U | 1.0 U |
| Toluene | 5* | 5.0 U | 5.0 U | 2.8 J | 5.0 U | 5.0 U |
| Chlorobenzene | 5* | 5.0 U | 5.0 U | 3.2 J | 5.0 U | 5.0 U |
| Ethylbenzene | 5* | 4.0 U | 4.0 U | 4.1 J | 4.0 U | 4.0 U |
| Styrene | 5* | 5.0 U | 5.0 U | 10 U | 5.0 U | 5.0 U |
| Xylene(Total) | 5* | 5.0 U | 5.0 U | 20 | 5.0 U | 5.0 U |
| Total Confident Conc. VOAs (s) | | 0 | 0 | 25 | 0 | 0 |
| Total Estimated Conc. VOA TICs (s) | | 0 | 0 | 717 | 0 | 0 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 19
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-40-3 | WP-40-8A | Dup | WP-29-1 | FB-081302-2 |
|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368872 | 368873 | 368875 | 368876 | 369133 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L |
| **SEMIVOLATILE COMPOUNDS (GC/MS)** | | | | | | |
| Phenol | 5* | 1.0 J | 10 U | 10 U | 10 U | 10 U |
| 2-Chlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Methylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Methylphenol | 5* | 0.6 J | 10 U | 10 U | 10 U | 10 U |
| 2-Nitrophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dimethylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dichlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chloro-3-methylphenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,5-Trichlorophenol | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dinitrophenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U |
| 4-Nitrophenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U |
| 4,6-Dinitro-2-methylphenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U |
| Pentachlorophenol | 5* | 40 U | 40 U | 40 U | 40 U | 40 U |
| bis(2-Chloroethyl)ether | 1 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 1,3-Dichlorobenzene | 3 | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,4-Dichlorobenzene | 3 | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2-Dichlorobenzene | 3 | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-chloroisopropyl)ether | ? | 10 U | 10 U | 10 U | 10 U | 10 U |
| N-Nitroso-di-n-propylamine | ? | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Hexachloroethane | 5* | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Nitrobenzene | 5 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Isophorone | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-Chloroethoxy)methane | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2,4-Trichlorobenzene | 5* | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Naphthalene | 10 | 0.6 J | 10 U | 4.3 J | 10 U | 10 U |
| 4-Chloroaniline | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobutadiene | 0.5 | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| 2-Methylnaphthalene | 50 | 0.6 J | 10 U | 2.1 J | 10 U | 10 U |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 19
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-40-3 | WP-40-8A | Dup | WP-29-1 | FB-081302-2 |
|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368872 | 368873 | 368875 | 368876 | 369133 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L |
| Hexachlorocyclopentadiene | 5* | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Chloronaphthalene | 10 | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Nitroaniline | 5* | 20 U | 20 U | 20 U | 20 U | 20 U |
| Dimethylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| Acenaphthylene | 20 | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,6-Dinitrotoluene | 5* | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| 3-Nitroaniline | 5* | 20 U | 20 U | 20 U | 20 U | 20 U |
| Acenaphthene | 20 | 0.4 J | 10 U | 1.2 J | 10 U | 10 U |
| Dibenzofuran | 5 | 0.3 J | 10 U | 0.8 J | 10 U | 10 U |
| 2,4-Dinitrotoluene | NA | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| Diethylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chlorophenyl-phenylether | ? | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluorene | 50 | 0.2 J | 10 U | 0.9 J | 10 U | 10 U |
| 4-Nitroaniline | 5* | 20 U | 20 U | 20 U | 20 U | 20 U |
| N-Nitrosodiphenylamine | NA | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Bromophenyl-phenylether | ? | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobenzene | 0.04 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Phenanthrene | 50 | 1.2 J | 10 U | 0.5 J | 10 U | 10 U |
| Anthracene | 20 | 0.2 J | 10 U | 0.4 J | 10 U | 10 U |
| Carbazole | ? | 0.3 J | 10 U | 10 U | 10 U | 10 U |
| Di-n-butylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluoranthene | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| Pyrene | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| Butylbenzylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| 3,3'-Dichlorobenzidine | NA | 20 U | 20 U | 20 U | 20 U | 20 U |
| Benzo(a)anthracene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chrysene | 0.002 | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-Ethylhexyl)phthalate | 50 | 10 U | 10 U | 10 U | 10 U | 2.3 J |
| Di-n-octylphthalate | 50 | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(b)fluoranthene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Benzo(k)fluoranthene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Benzo(a)pyrene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Indeno(1,2,3-cd)pyrene | 0.002 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dibenz(a,h)anthracene | 20 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Benzo(g,h,i)perylene | 5 | 10 U | 10 U | 10 U | 10 U | 10 U |
| Total Confident Conc. BNAs (s) | | 0 | 0 | 0 | 0 | 0 |
| Total Estimated Conc. BNA TICs (s) | | 8.5 | 0 | 825 | 0 | 0 |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

Table 19
Groundwater Sampling Results
Formerly General Motors Site
Tarrytown, New York

| Sample ID | NYSDEC | WP-40-3 | WP-40-8A | Dup | WP-29-1 | FB-081302-2 |
|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368872 | 368873 | 368875 | 368876 | 369133 |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | 08/13/02 |
| Matrix | Surface Waters | WATER | WATER | WATER | WATER | WATER |
| Dilution Factor | and | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 |
| Units | Groundwater (ug/l) | ug/L | ug/L | ug/L | ug/L | ug/L |
| **METALS** | | | | | | |
| Aluminum | NA | 127000 | 109000 | 4760 | 185000 | 77.4 U |
| Antimony | 3 | 7.8 U | 7.8 U | 44.6 | 89.0 B | 3.9 U |
| Arsenic | 25 | 61.8 | 44.9 | 16.4 | 138 | 3.4 U |
| Barium | 1000 | 581 | 432 | 8050 | 10100 | 0.80 U |
| Beryllium | 11 / 1,000 * | 5.9 | 5.3 | 0.15 B | 11.5 B | 0.10 U |
| Cadmium | 5 | 2.8 B | 2.1 B | 6.1 | 113 | 0.40 U |
| Calcium | NA | 488000 | 456000 | 81000 | 270000 | 74.5 U |
| Chromium | 50 | 267 | 199 | 1330 | 730 | 2.8 U |
| Cobalt | 5 | 123 | 102 | 7.5 B | 184 B | 3.5 U |
| Copper | 200 | 244 | 198 | 112 | 2710 | 2.1 U |
| Iron | 300 | 295000 | 254000 | 49500 | 540000 | 39.7 U |
| Lead | 25 | 238 | 127 | 605 | 106000 | 2.2 U |
| Magnesium | 35,000 | 213000 | 205000 | 24800 | 84700 | 70.0 U |
| Manganese | 300 | 7400 | 5800 | 223 | 9310 | 2.9 U |
| Mercury | 0.7 | 0.50 | 0.52 | 0.10 U | 9.7 | 0.10 U |
| Nickel | 100 | 275 | 212 | 17.5 B | 475 | 3.9 U |
| Potassium | NA | 33400 | 25300 | 22900 | 17600 B | 106 U |
| Selenium | 10 | 7.8 U | 7.8 U | 19.5 U | 39.0 U | 3.9 U |
| Silver | 50 | 1.4 U | 1.4 U | 0.70 U | 24.1 B | 1.7 B |
| Sodium | 20,000 | 132000 | 106000 | 513000 | 42100 B | 361 U |
| Thallium | NA | 8.8 U | 8.8 U | 4.4 U | 44.0 U | 4.4 U |
| Vanadium | 14 | 255 | 187 | 12.7 B | 544 | 5.1 U |
| Zinc | NA | 875 | 646 | 761 | 36200 | 6.3 B |

| Sample ID | NYSDEC | WP-40-3 | WP-40-8A | Dup | WP-29-1 | FB-081302-2 |
|---|---|---|---|---|---|---|
| Lab Sample Number | Water Quality | 368886 | 368887 | 368889 | 368890 | |
| Sampling Date | Standards | 08/12/02 | 08/12/02 | 08/12/02 | 08/12/02 | |
| **METALS (Dissolved)** | | | | | | |
| Aluminum | NA | 62.6 U | 62.6 U | 62.6 U | 62.6 U | |
| Antimony | 3 | 5.8 U | 5.8 U | 6.3 B | 8.4 B | |
| Arsenic | 25 | 6.2 | 3.2 U | 3.8 B | 3.3 B | |
| Barium | 1000 | 48 B | 36.1 B | 7620 | 272 | |
| Beryllium | 11 / 1,000 * | 0.3 U | 0.3 U | 0.3 U | 0.3 U | |
| Cadmium | 5 | 0.4 U | 0.4 U | 0.4 U | 0.4 U | |
| Calcium | NA | 470000 | 337000 | 81100 | 75500 | |
| Chromium | 50 | 1.6 U | 1.6 U | 15.7 | 1.6 U | |
| Cobalt | 5 | 10.7 B | 7.2 B | 1.7 U | 1.7 U | |
| Copper | 200 | 3.7 U | 3.7 U | 3.7 U | 3.7 U | |
| Iron | 300 | 14500 | 165 | 22900 | 92.8 B | |
| Lead | 25 | 2.3 U | 2.3 U | 2.3 U | 15.4 | |
| Magnesium | 35,000 | 163000 | 148000 | 24200 | 10600 | |
| Manganese | 300 | 4330 | 1930 | 70.3 | 380 | |
| Mercury | 0.7 | 0.1 U | 0.1 U | 0.1 U | 0.1 U | |
| Nickel | 100 | 12.6 B | 3.1 B | 4.5 B | 1.6 U | |
| Potassium | NA | 21100 | 16800 | 24100 | 7750 | |
| Selenium | 10 | 4.2 U | 4.2 U | 4.2 U | 4.2 U | |
| Silver | 50 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | |
| Sodium | 20,000 | 140000 | 96600 | 631000 | 42300 | |
| Thallium | NA | 4.7 U | 4.7 U | 4.7 U | 4.7 U | |
| Vanadium | 14 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | |
| Zinc | NA | 5.8 U | 5.8 U | 7 B | 9.6 B | |

U-The compound was not detected at the indicated concentration.
J-The concentration given is an approximate value.
B-The analyte was found in the laboratory blank as well as the sample.
NR-Not analyzed.

# *Appendix B*

# Distribution of Lead in Onsite Soil from Previous Investigations

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# Appendix B

# Distribution of Lead in Pre – and Current Remedial Investigation Soil Samples

**Appendix B -1: Pre-Remedial Investigation Frequency Curve for Lead**

**Appendix B -2: Pre-Remedial Investigation Lead Distribution Maps (Drawings 1 through 5 from Appendix B to Investigation Work Plan)**

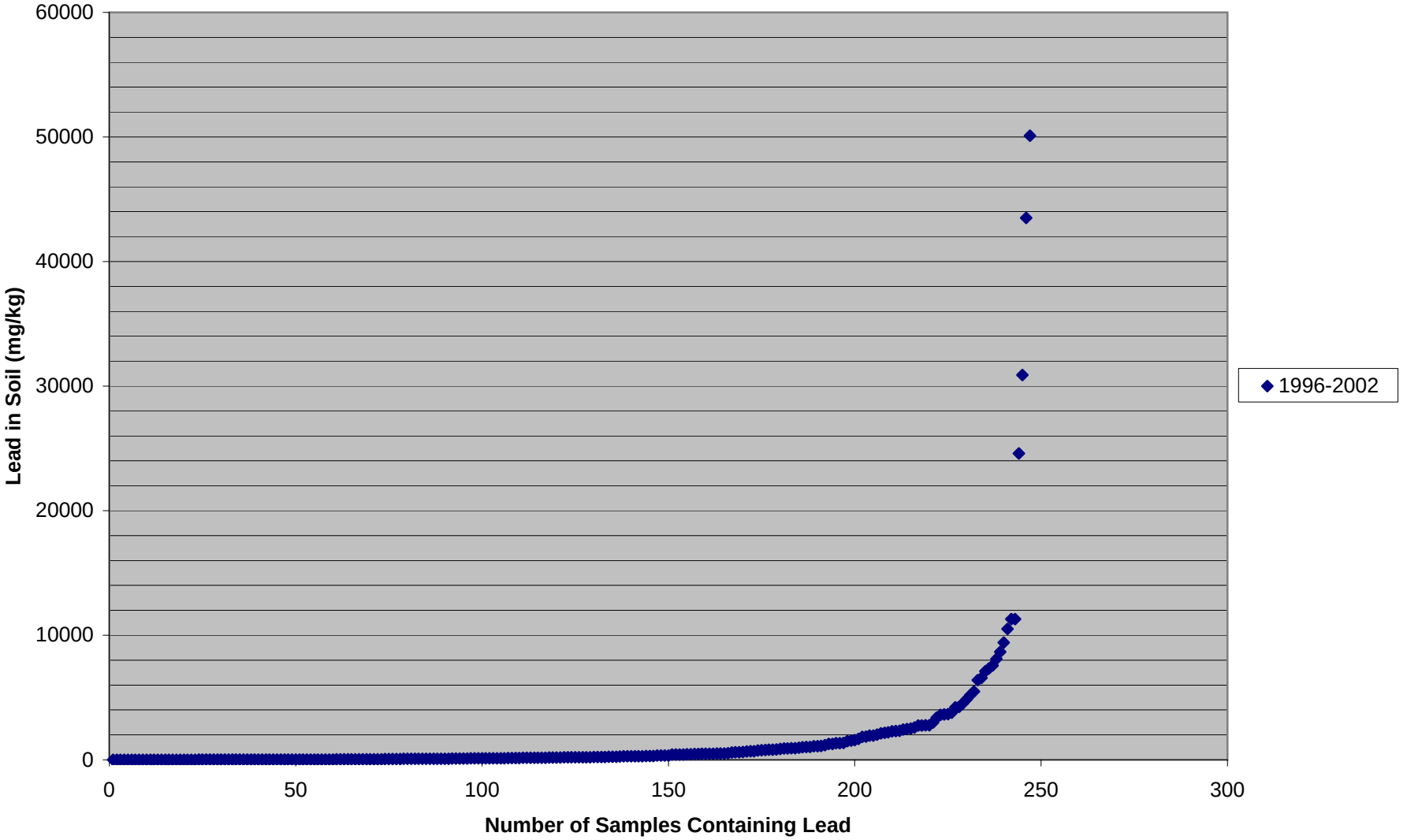
**Appendix B-3: Remedial Investigation Frequency Curves for Lead**

# Appendix B-1

# Pre-Remedial Investigation Frequency Curve for Lead

**Appendix B - 1**
**Former GM North Tarrytown Assembly Plant Site**

## Pre-Remedial Investigation Site-Wide Lead Data



# Appendix B-2

# Pre-Remedial Investigation Lead Distribution Maps (Drawings 1 through 5 from Appendix B to Investigation Work Plan)




## LEGEND

25-1 ▲ EcolSciences soil boring
(all other samples/borings by EMCON)

TOTAL LEAD CONCENTRATION (MG/KG):

- ≥10,000
- ≥5,700 to <10,000
- ≥1,200 to <5,700
- ≥500 to <1,200

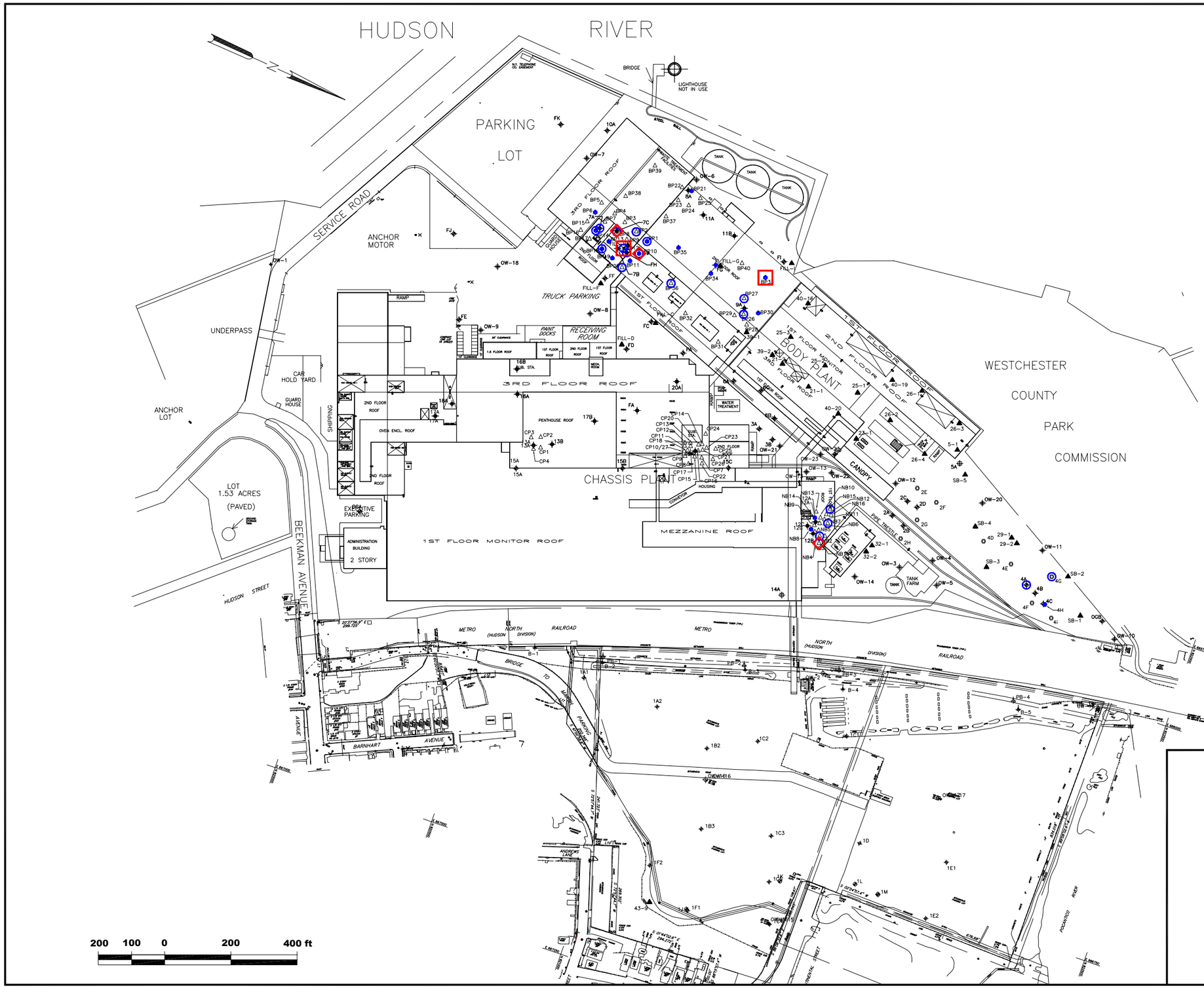
amec Earth & Environmental

**Final SI Work Plan - Appendix B**
**Drawing No. 1**

CLASSED POST MAP OF TOTAL LEAD RESULTS IN SOIL (ALL SAMPLE DEPTHS)

Former General Motors Assembly Plant
Sleepy Hollow, New York

rev. 09/20/03




**LEGEND**

25-1 ▲ EcolSciences soil boring
(all other samples/borings by EMCON)

TOTAL LEAD CONCENTRATION (MG/KG):

- □ ≥10,000
- ◇ ≥5,700 to <10,000
- ○ ≥1,200 to <5,700
- • ≥500 to <1,200

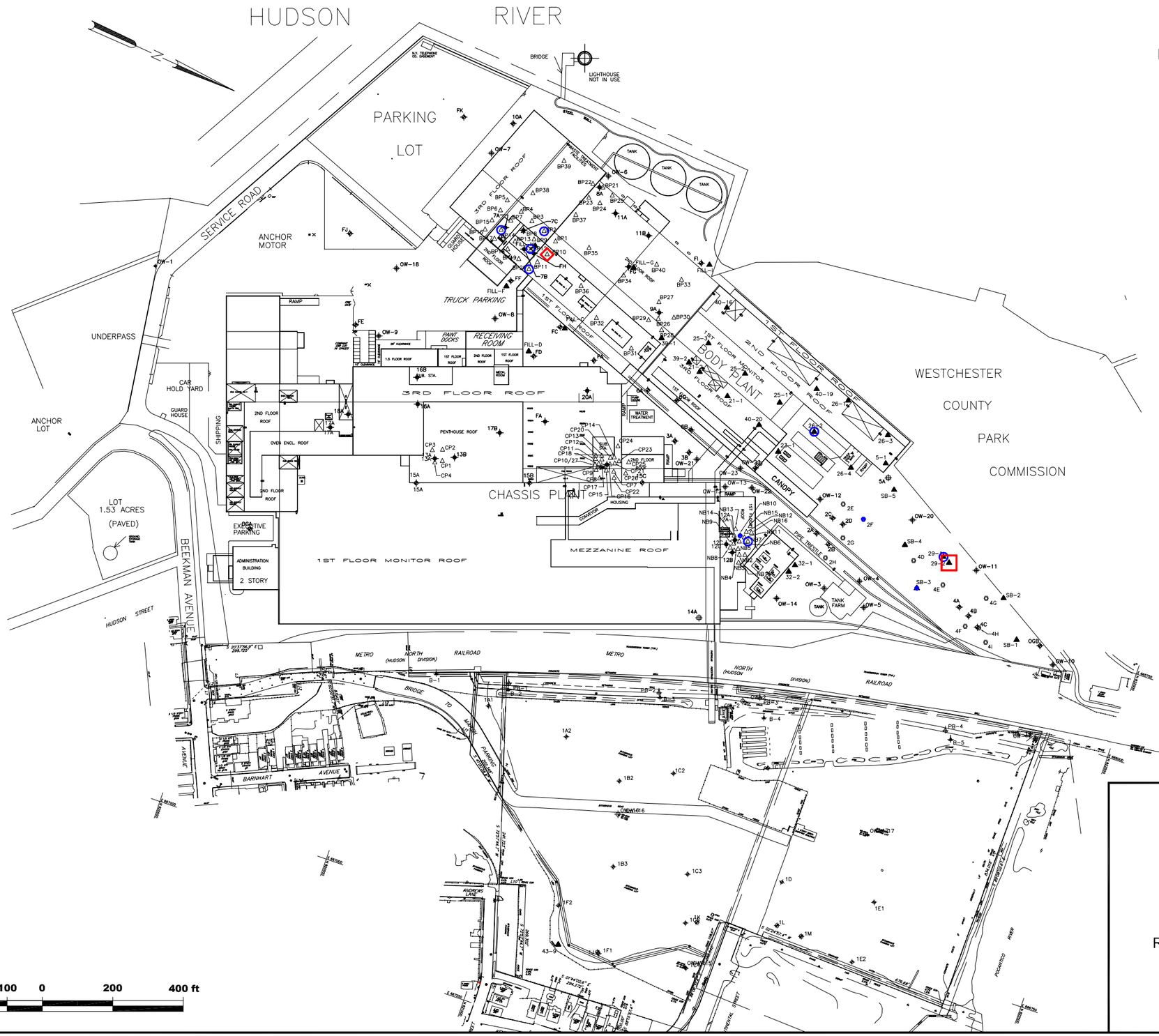
amec Earth & Environmental

**Final SI Work Plan - Appendix B**
**Drawing No. 2**

CLASSED POST MAP OF TOTAL LEAD RESULTS IN SOIL (0-2 FT DEPTH INTERVAL)

Former General Motors Assembly Plant
Sleepy Hollow, New York

rev. 09/20/03




## LEGEND

25-1 ▲ EcolSciences soil boring
(all other samples/borings by EMCON)

TOTAL LEAD CONCENTRATION (MG/KG):

- ≥10,000
- ≥5,700 to <10,000
- ≥1,200 to <5,700
- ≥500 to <1,200

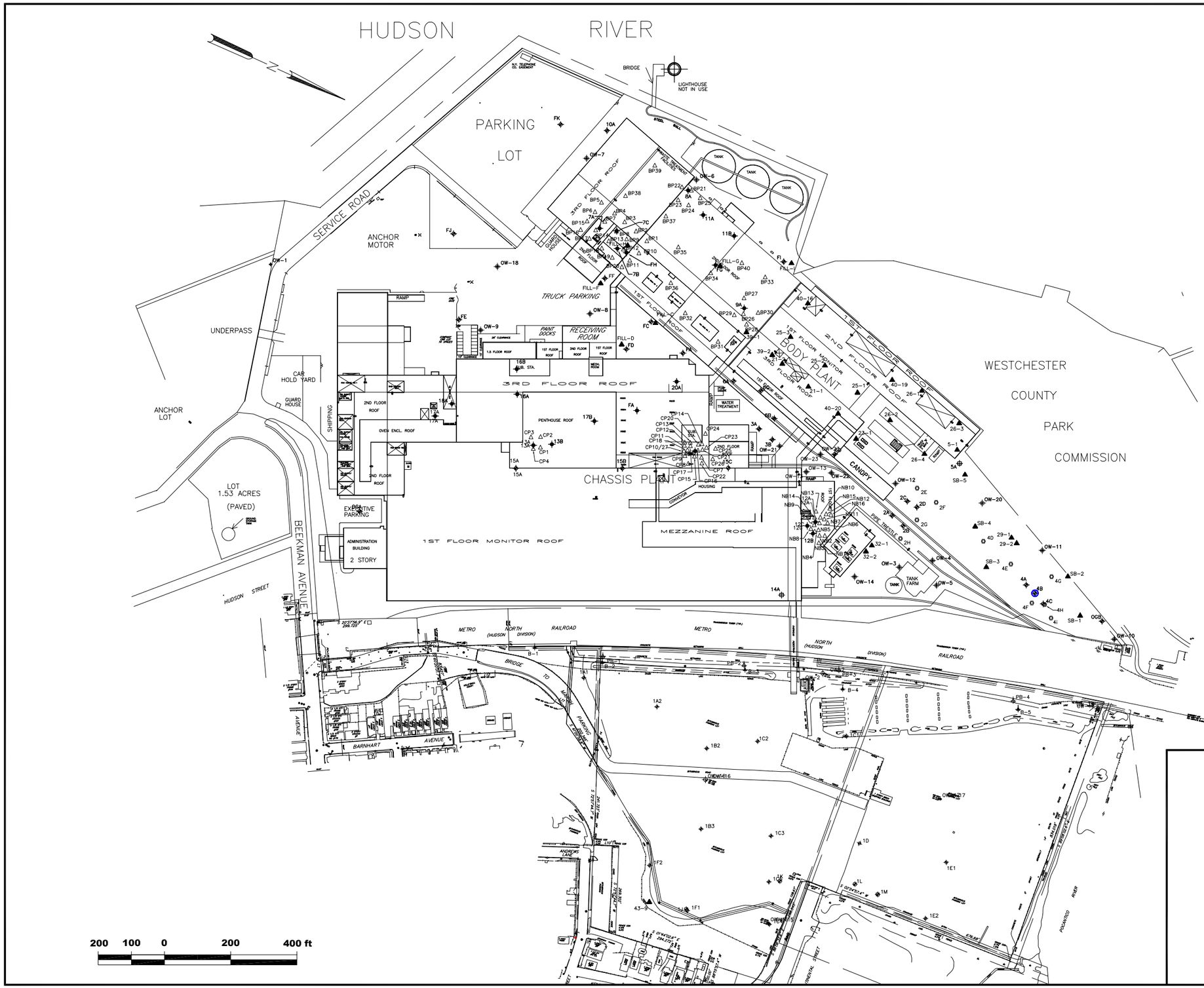
amec Earth & Environmental

**Final SI Work Plan - Appendix B**
**Drawing No. 3**

CLASSED POST MAP OF TOTAL LEAD RESULTS IN SOIL (2-4 FT DEPTH INTERVAL)

Former General Motors Assembly Plant
Sleepy Hollow, New York

rev. 09/20/03




**LEGEND**

25-1 ▲ EcolSciences soil boring
(all other samples/borings by EMCON)

TOTAL LEAD CONCENTRATION (MG/KG):

- □ ≥10,000
- ◇ ≥5,700 to <10,000
- ○ ≥1,200 to <5,700
- • ≥500 to <1,200

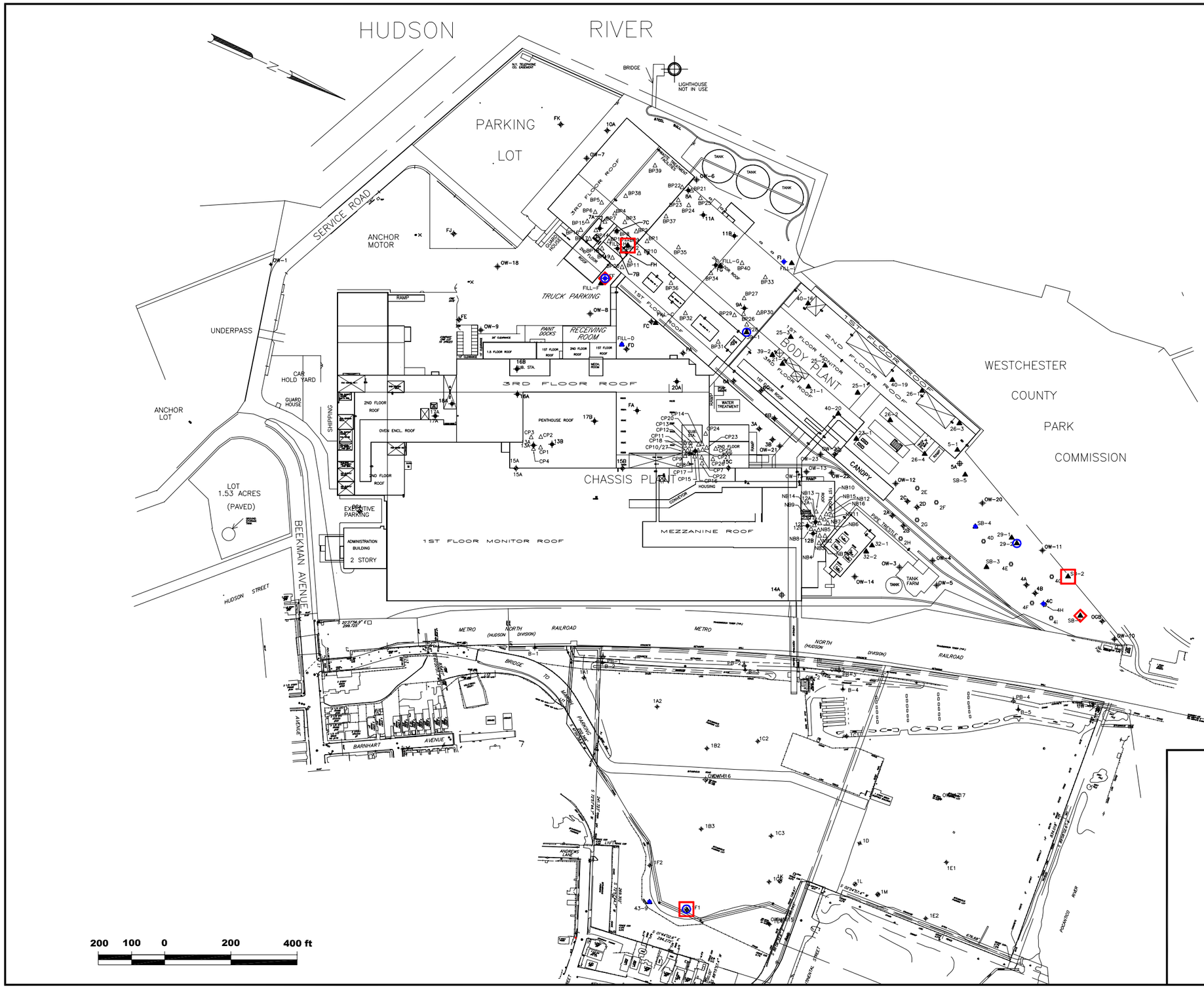
amec Earth & Environmental

**Final SI Work Plan - Appendix B**
**Drawing No. 4**

CLASSED POST MAP OF TOTAL LEAD RESULTS IN SOIL (4-6 FT DEPTH INTERVAL)

Former General Motors Assembly Plant
Sleepy Hollow, New York

rev. 09/20/03




**LEGEND**

25-1 ▲ EcolSciences soil boring
(all other samples/borings by EMCON)

TOTAL LEAD CONCENTRATION (MG/KG):

- □ ≥10,000
- ◇ ≥5,700 to <10,000
- ○ ≥1,200 to <5,700
- • ≥500 to <1,200

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**Final SI Work Plan - Appendix B**
**Drawing No. 5**

CLASSED POST MAP OF TOTAL LEAD RESULTS IN SOIL (>6 FT DEPTH INTERVAL)

Former General Motors Assembly Plant
Sleepy Hollow, New York

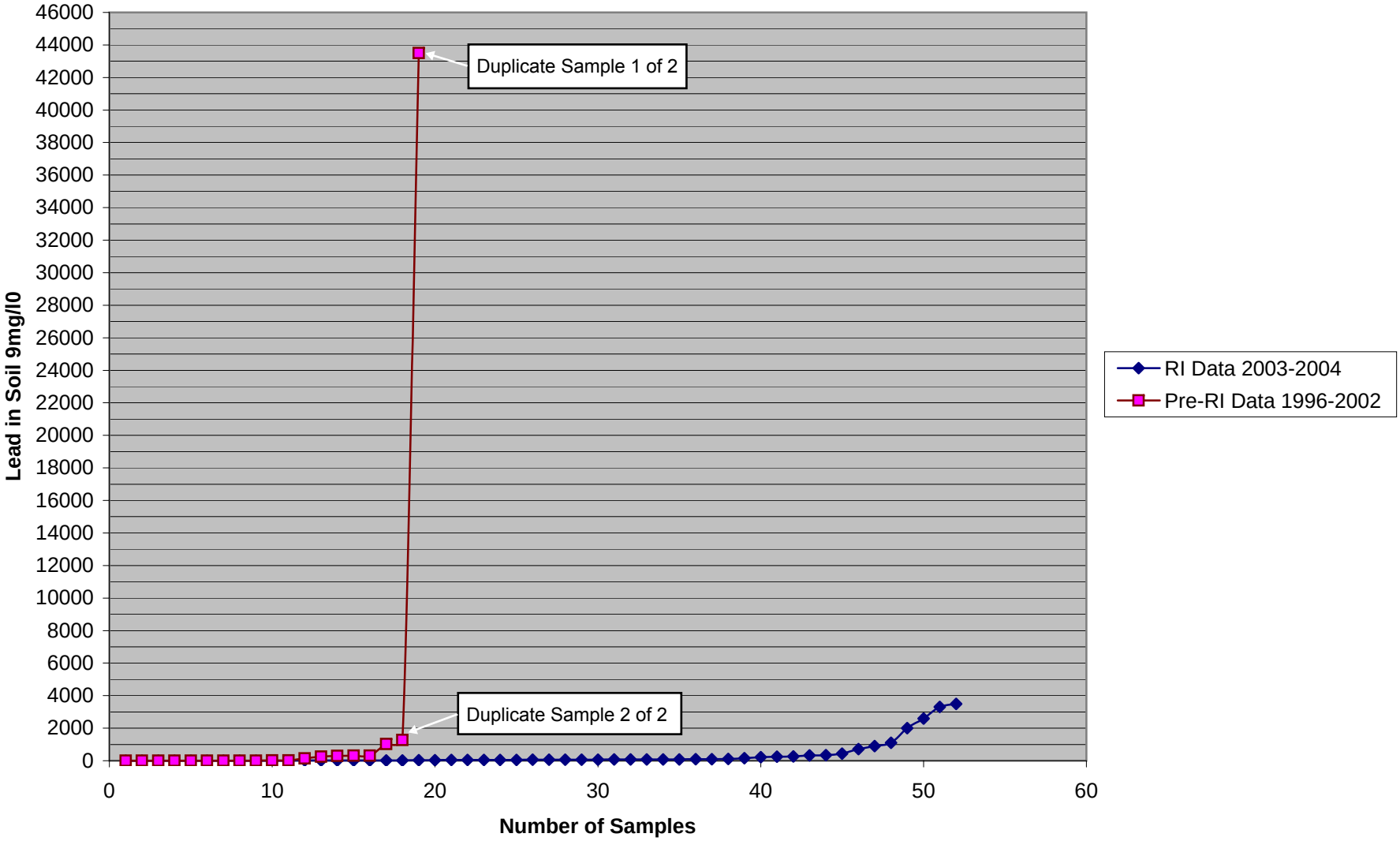
rev. 09/20/03

# Appendix B-3

# Remedial Investigation Frequency Curves for Lead

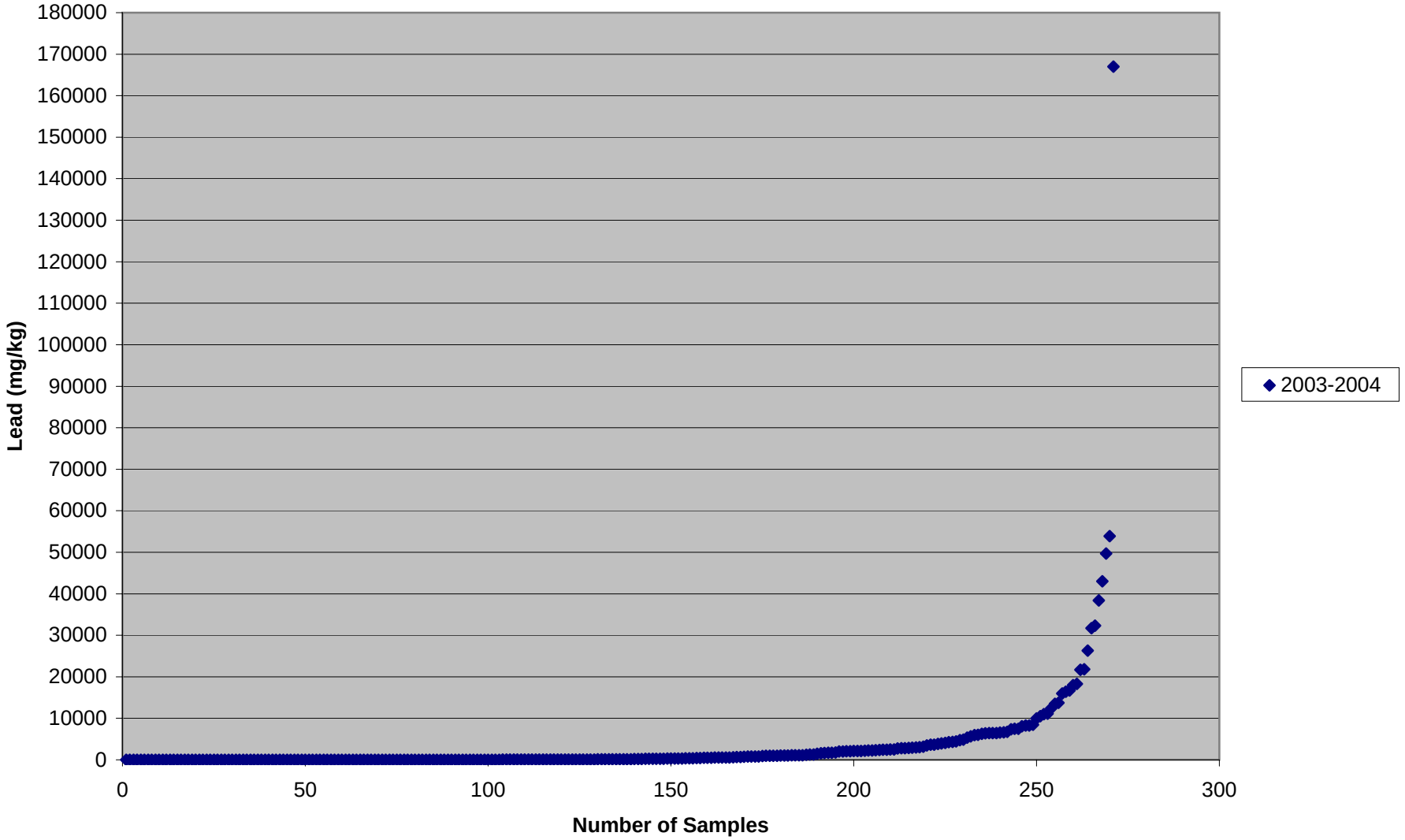
**Appendix B - 3**
**Former GM North Tarrytown Assembly Plant Site**

## PAOC 1 - Previous Investigation Data vs. Remedial Investigation Data for Lead

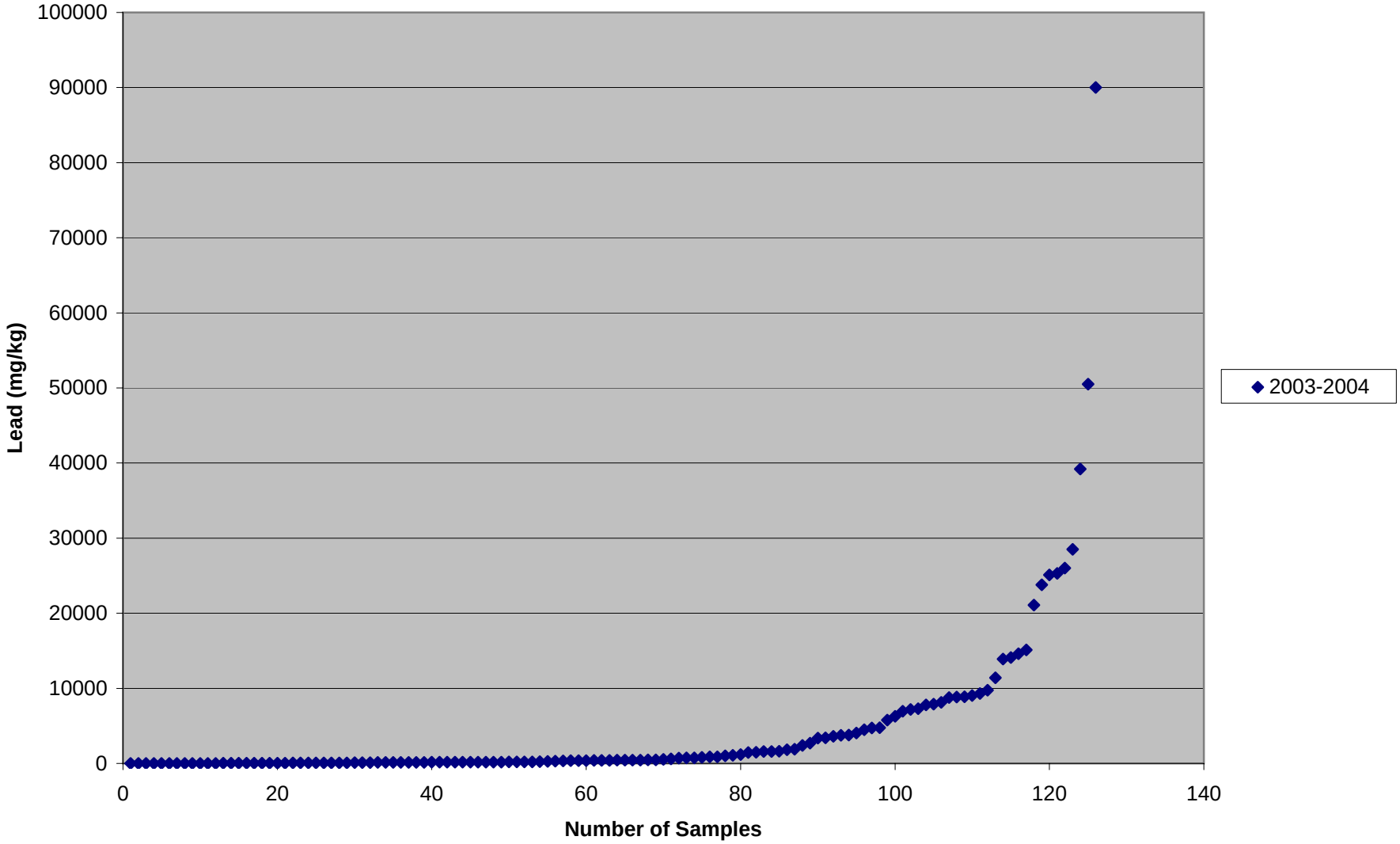


**Appendix B - 3**
**Former GM North Tarrytown Assembly Plant Site**

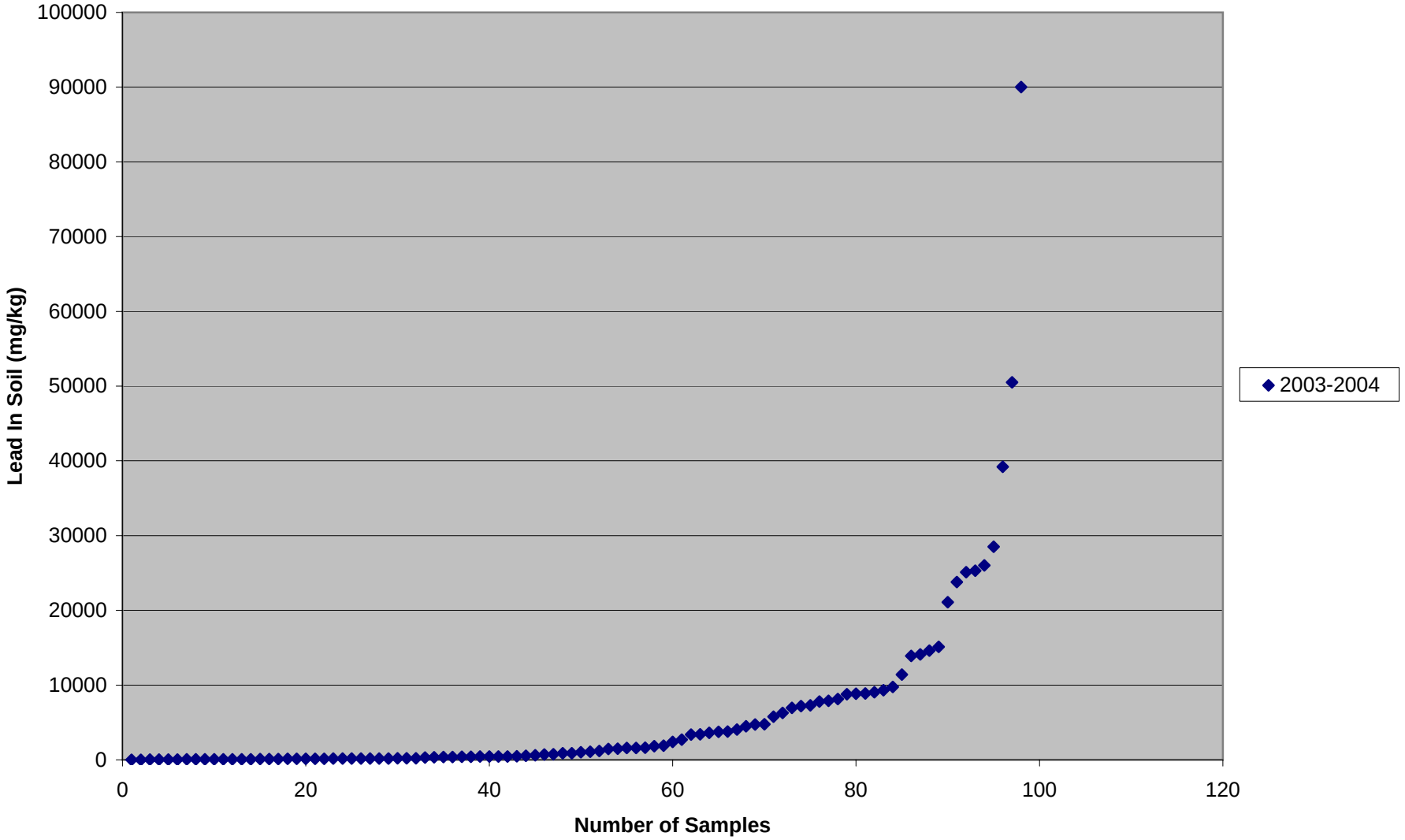
## PAOC 7/Fill Areas H ,F, G Remedial Investigation Lead Data



## PAOC 29 Remedial Investigation Lead Data - All Samples

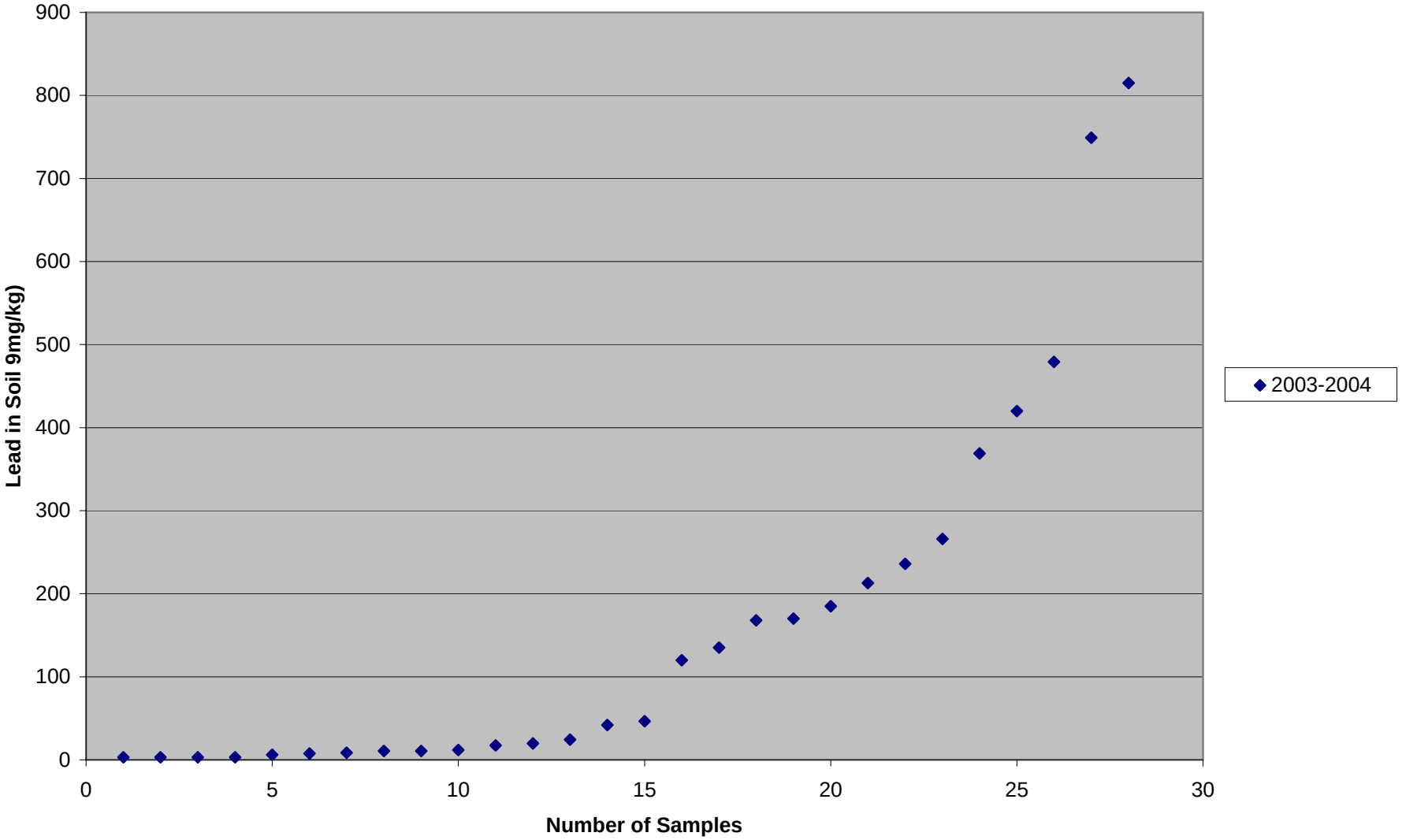


## PAOC 29 Remedial Investigation Lead Data - Onsite Samples



**Appendix B - 3**
**Former GM North Tarrytown Assembly Plant Site**

## PAOC 29 Remedial Investigation Lead Data - Offsite Samples



# *Appendix C*

# Distribution of Volatile Organic Compounds in Soil and Groundwater from Previous Investigations

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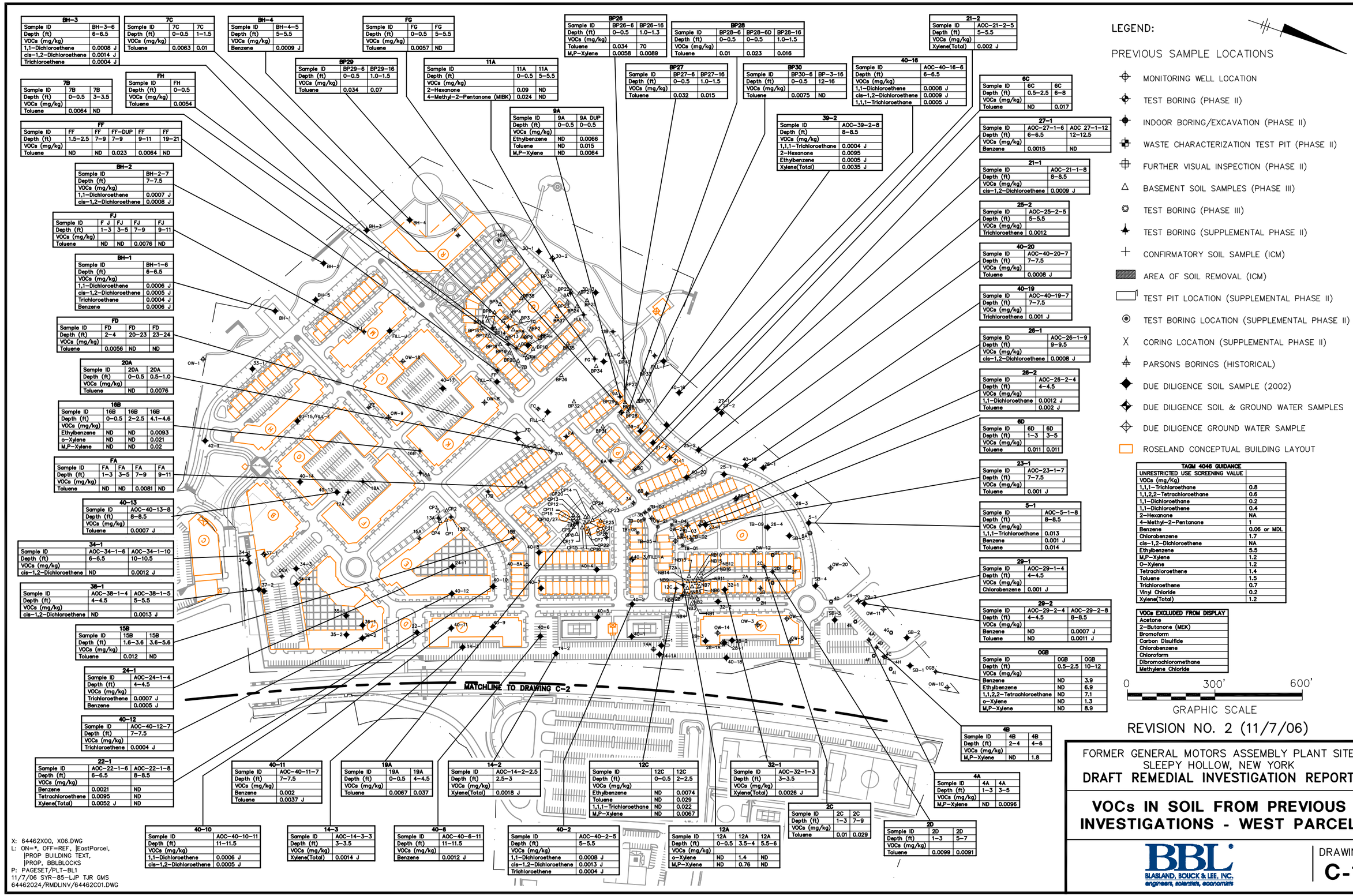
# Appendix C

# Distribution of Volatile Organic Compounds in Soil and Groundwater from Previous Investigations

**Appendix Figure C -1: VOCs in Soil from Previous Investigations – West Parcel**

**Appendix Figure C -2: VOCs in Soil from Previous Investigations – East Parcel**

**Appendix Figure C -3: VOCs in Groundwater from Previous Investigations**




| BH-3 | | |
|---|---|---|
| Sample ID | BH-3-6 | |
| Depth (ft) | 6-6.5 | |
| VOCs (mg/kg) | | |
| 1,1-Dichloroethene | 0.0008 J | |
| cis-1,2-Dichloroethene | 0.0014 J | |
| Trichloroethene | 0.0004 J | |

| 7C | | |
|---|---|---|
| Sample ID | 7C | 7C |
| Depth (ft) | 0-0.5 | 1-1.5 |
| VOCs (mg/kg) | | |
| Toluene | 0.0063 | 0.01 |

| BH-4 | | |
|---|---|---|
| Sample ID | BH-4-5 | |
| Depth (ft) | 5-5.5 | |
| VOCs (mg/kg) | | |
| Benzene | 0.0009 J | |

| FG | | |
|---|---|---|
| Sample ID | FG | FG |
| Depth (ft) | 0-0.5 | 5-5.5 |
| VOCs (mg/kg) | | |
| Toluene | 0.0057 | ND |

| BP26 | | |
|---|---|---|
| Sample ID | BP26-6 | BP26-16 |
| Depth (ft) | 0-0.5 | 1.0-1.3 |
| VOCs (mg/kg) | | |
| Toluene | 0.034 | 70 |
| M,P-Xylene | 0.0058 | 0.0089 |

| BP28 | | | |
|---|---|---|---|
| Sample ID | BP28-6 | BP28-6D | BP28-16 |
| Depth (ft) | 0-0.5 | 0-0.5 | 1.0-1.5 |
| VOCs (mg/kg) | | | |
| Toluene | 0.01 | 0.023 | 0.016 |

| 21-2 | | |
|---|---|---|
| Sample ID | AOC-21-2-5 | |
| Depth (ft) | 5-5.5 | |
| VOCs (mg/kg) | | |
| Xylene(Total) | 0.002 J | |

| 7B | | |
|---|---|---|
| Sample ID | 7B | 7B |
| Depth (ft) | 0-0.5 | 3-3.5 |
| VOCs (mg/kg) | | |
| Toluene | 0.0064 | ND |

| FH | | |
|---|---|---|
| Sample ID | FH | |
| Depth (ft) | 0-0.5 | |
| VOCs (mg/kg) | | |
| Toluene | 0.0054 | |

| BP29 | | |
|---|---|---|
| Sample ID | BP29-6 | BP29-16 |
| Depth (ft) | 0-0.5 | 1.0-1.5 |
| VOCs (mg/kg) | | |
| Toluene | 0.034 | 0.07 |

| 11A | | |
|---|---|---|
| Sample ID | 11A | 11A |
| Depth (ft) | 0-0.5 | 5-5.5 |
| VOCs (mg/kg) | | |
| 2-Hexanone | 0.09 | ND |
| 4-Methyl-2-Pentanone (MIBK) | 0.024 | ND |

| BP27 | | |
|---|---|---|
| Sample ID | BP27-6 | BP27-16 |
| Depth (ft) | 0-0.5 | 1.0-1.5 |
| VOCs (mg/kg) | | |
| Toluene | 0.032 | 0.015 |

| BP30 | | | |
|---|---|---|---|
| Sample ID | BP30-6 | BP-3-16 | |
| Depth (ft) | 0-0.5 | 12-16 | |
| VOCs (mg/kg) | | | |
| Toluene | 0.0075 | ND | |

| 40-16 | | |
|---|---|---|
| Sample ID | AOC-40-16-6 | |
| Depth (ft) | 6-6.5 | |
| VOCs (mg/kg) | | |
| 1,1-Dichloroethene | 0.0008 J | |
| cis-1,2-Dichloroethene | 0.0009 J | |
| 1,1,1-Trichloroethane | 0.0005 J | |

| 6C | | |
|---|---|---|
| Sample ID | 6C | 6C |
| Depth (ft) | 0.5-2.5 | 6-8 |
| VOCs (mg/kg) | | |
| Toluene | ND | 0.017 |

| FF | | | | | |
|---|---|---|---|---|---|
| Sample ID | FF | FF | FF-DUP | FF | FF |
| Depth (ft) | 1.5-2.5 | 7-9 | 7-9 | 9-11 | 19-21 |
| VOCs (mg/kg) | | | | | |
| Toluene | ND | ND | 0.023 | 0.0064 | ND |

| 9A | | |
|---|---|---|
| Sample ID | 9A | 9A DUP |
| Depth (ft) | 0-0.5 | 0-0.5 |
| VOCs (mg/kg) | | |
| Ethylbenzene | ND | 0.0066 |
| Toluene | ND | 0.015 |
| M,P-Xylene | ND | 0.0064 |

| 39-2 | |
|---|---|
| Sample ID | AOC-39-2-8 |
| Depth (ft) | 8-8.5 |
| VOCs (mg/kg) | |
| 1,1,1-Trichloroethane | 0.0004 J |
| 2-Hexanone | 0.0095 |
| Ethylbenzene | 0.0005 J |
| Xylene(Total) | 0.0035 J |

| 27-1 | | |
|---|---|---|
| Sample ID | AOC-27-1-6 | AOC 27-1-12 |
| Depth (ft) | 6-6.5 | 12-12.5 |
| VOCs (mg/kg) | | |
| Benzene | 0.0015 | ND |

| BH-2 | | |
|---|---|---|
| Sample ID | | BH-2-7 |
| Depth (ft) | | 7-7.5 |
| VOCs (mg/kg) | | |
| 1,1-Dichloroethene | | 0.0007 J |
| cis-1,2-Dichloroethene | | 0.0008 J |

| 21-1 | |
|---|---|
| Sample ID | AOC-21-1-8 |
| Depth (ft) | 8-8.5 |
| VOCs (mg/kg) | |
| cis-1,2-Dichloroethene | 0.0009 J |

| FJ | | | | | |
|---|---|---|---|---|---|
| Sample ID | F J | FJ | FJ | FJ | |
| Depth (ft) | 1-3 | 3-5 | 7-9 | 9-11 | |
| VOCs (mg/kg) | | | | | |
| Toluene | ND | ND | 0.0076 | ND | |

| 25-2 | |
|---|---|
| Sample ID | AOC-25-2-5 |
| Depth (ft) | 5-5.5 |
| VOCs (mg/kg) | |
| Trichloroethene | 0.0012 |

| BH-1 | | |
|---|---|---|
| Sample ID | | BH-1-6 |
| Depth (ft) | | 6-6.5 |
| VOCs (mg/kg) | | |
| 1,1-Dichloroethene | | 0.0006 J |
| cis-1,2-Dichloroethene | | 0.0005 J |
| Trichloroethene | | 0.0004 J |
| Benzene | | 0.0006 J |

| 40-20 | |
|---|---|
| Sample ID | AOC-40-20-7 |
| Depth (ft) | 7-7.5 |
| VOCs (mg/kg) | |
| Toluene | 0.0008 J |

| 40-19 | |
|---|---|
| Sample ID | AOC-40-19-7 |
| Depth (ft) | 7-7.5 |
| VOCs (mg/kg) | |
| Trichloroethene | 0.001 J |

| FD | | | | |
|---|---|---|---|---|
| Sample ID | FD | FD | FD | |
| Depth (ft) | 2-4 | 20-23 | 23-24 | |
| VOCs (mg/kg) | | | | |
| Toluene | 0.0056 | ND | ND | |

| 26-1 | |
|---|---|
| Sample ID | AOC-26-1-9 |
| Depth (ft) | 9-9.5 |
| VOCs (mg/kg) | |
| cis-1,2-Dichloroethene | 0.0008 J |

| 20A | | |
|---|---|---|
| Sample ID | 20A | 20A |
| Depth (ft) | 0-0.5 | 0.5-1.0 |
| VOCs (mg/kg) | | |
| Toluene | ND | 0.0076 |

| 26-2 | |
|---|---|
| Sample ID | AOC-26-2-4 |
| Depth (ft) | 4-4.5 |
| VOCs (mg/kg) | |
| 1,1-Dichloroethane | 0.0012 J |
| Toluene | 0.002 J |

| 16B | | | |
|---|---|---|---|
| Sample ID | 16B | 16B | 16B |
| Depth (ft) | 0-0.5 | 2-2.5 | 4.1-4.6 |
| VOCs (mg/kg) | | | |
| Ethylbenzene | ND | ND | 0.0093 |
| o-Xylene | ND | ND | 0.021 |
| M,P-Xylene | ND | ND | 0.02 |

| 6D | | |
|---|---|---|
| Sample ID | 6D | 6D |
| Depth (ft) | 1-3 | 3-5 |
| VOCs (mg/kg) | | |
| Toluene | 0.011 | 0.011 |

| FA | | | | |
|---|---|---|---|---|
| Sample ID | FA | FA | FA | FA |
| Depth (ft) | 1-3 | 3-5 | 7-9 | 9-11 |
| VOCs (mg/kg) | | | | |
| Toluene | ND | ND | 0.0081 | ND |

| 23-1 | |
|---|---|
| Sample ID | AOC-23-1-7 |
| Depth (ft) | 7-7.5 |
| VOCs (mg/kg) | |
| Toluene | 0.001 J |

| 40-13 | |
|---|---|
| Sample ID | AOC-40-13-8 |
| Depth (ft) | 8-8.5 |
| VOCs (mg/kg) | |
| Toluene | 0.0007 J |

| 5-1 | |
|---|---|
| Sample ID | AOC-5-1-8 |
| Depth (ft) | 8-8.5 |
| VOCs (mg/kg) | |
| 1,1,1-Trichloroethane | 0.013 |
| Benzene | 0.001 J |
| Toluene | 0.014 |

| 34-1 | | |
|---|---|---|
| Sample ID | AOC-34-1-6 | AOC-34-1-10 |
| Depth (ft) | 6-6.5 | 10-10.5 |
| VOCs (mg/kg) | | |
| cis-1,2-Dichloroethene | ND | 0.0012 J |

| 29-1 | |
|---|---|
| Sample ID | AOC-29-1-4 |
| Depth (ft) | 4-4.5 |
| VOCs (mg/kg) | |
| Chlorobenzene | 0.001 J |

| 38-1 | | |
|---|---|---|
| Sample ID | AOC-38-1-4 | AOC-38-1-5 |
| Depth (ft) | 4-4.5 | 5-5.5 |
| VOCs (mg/kg) | | |
| cis-1,2-Dichloroethene | ND | 0.0013 J |

| 29-2 | | |
|---|---|---|
| Sample ID | AOC-29-2-4 | AOC-29-2-8 |
| Depth (ft) | 4-4.5 | 8-8.5 |
| VOCs (mg/kg) | | |
| Benzene | ND | 0.0007 J |
| Toluene | ND | 0.0011 J |

| 15B | | |
|---|---|---|
| Sample ID | 15B | 15B |
| Depth (ft) | 1.6-3.6 | 3.6-5.6 |
| VOCs (mg/kg) | | |
| Toluene | 0.012 | ND |

| 0GB | | |
|---|---|---|
| Sample ID | 0GB | 0GB |
| Depth (ft) | 0.5-2.5 | 10-12 |
| VOCs (mg/kg) | | |
| Benzene | ND | 3.9 |
| Ethylbenzene | ND | 6.9 |
| 1,1,2,2-Tetrachloroethane | ND | 7.1 |
| o-Xylene | ND | 1.3 |
| M,P-Xylene | ND | 8.9 |

| 24-1 | |
|---|---|
| Sample ID | AOC-24-1-4 |
| Depth (ft) | 4-4.5 |
| VOCs (mg/kg) | |
| Trichloroethene | 0.0007 J |
| Benzene | 0.0005 J |

| 40-12 | |
|---|---|
| Sample ID | AOC-40-12-7 |
| Depth (ft) | 7-7.5 |
| VOCs (mg/kg) | |
| Trichloroethene | 0.0004 J |

| 4B | | |
|---|---|---|
| Sample ID | 4B | 4B |
| Depth (ft) | 2-4 | 4-6 |
| VOCs (mg/kg) | | |
| M,P-Xylene | ND | 1.8 |

| 22-1 | | |
|---|---|---|
| Sample ID | AOC-22-1-6 | AOC-22-1-8 |
| Depth (ft) | 6-6.5 | 8-8.5 |
| VOCs (mg/kg) | | |
| Benzene | 0.0021 | ND |
| Tetrachloroethene | 0.0095 | ND |
| Xylene(Total) | 0.0052 J | ND |

| 40-11 | |
|---|---|
| Sample ID | AOC-40-11-7 |
| Depth (ft) | 7-7.5 |
| VOCs (mg/kg) | |
| Benzene | 0.002 |
| Toluene | 0.0037 J |

| 19A | | |
|---|---|---|
| Sample ID | 19A | 19A |
| Depth (ft) | 0-0.5 | 4-4.5 |
| VOCs (mg/kg) | | |
| Toluene | 0.0067 | 0.037 |

| 14-2 | | |
|---|---|---|
| Sample ID | AOC-14-2-2.5 | |
| Depth (ft) | 2.5-3 | |
| VOCs (mg/kg) | | |
| Xylene(Total) | 0.0018 J | |

| 12C | | |
|---|---|---|
| Sample ID | 12C | 12C |
| Depth (ft) | 0-0.5 | 2-2.5 |
| VOCs (mg/kg) | | |
| Ethylbenzene | ND | 0.0074 |
| Toluene | ND | 0.029 |
| 1,1,1-Trichloroethane | ND | 0.022 |
| M,P-Xylene | ND | 0.0067 |

| 32-1 | | |
|---|---|---|
| Sample ID | AOC-32-1-3 | |
| Depth (ft) | 3-3.5 | |
| VOCs (mg/kg) | | |
| Xylene(Total) | 0.0026 J | |

| 4A | | |
|---|---|---|
| Sample ID | 4A | 4A |
| Depth (ft) | 1-3 | 3-5 |
| VOCs (mg/kg) | | |
| M,P-Xylene | ND | 0.0096 |

| 2C | | |
|---|---|---|
| Sample ID | 2C | 2C |
| Depth (ft) | 1-3 | 7-9 |
| VOCs (mg/kg) | | |
| Toluene | 0.01 | 0.029 |

| 2D | | |
|---|---|---|
| Sample ID | 2D | 2D |
| Depth (ft) | 1-3 | 5-7 |
| VOCs (mg/kg) | | |
| Toluene | 0.0099 | 0.0091 |

| 40-10 | |
|---|---|
| Sample ID | AOC-40-10-11 |
| Depth (ft) | 11-11.5 |
| VOCs (mg/kg) | |
| 1,1-Dichloroethene | 0.0006 J |
| cis-1,2-Dichloroethene | 0.0005 J |

| 14-3 | |
|---|---|
| Sample ID | AOC-14-3-3 |
| Depth (ft) | 3-3.5 |
| VOCs (mg/kg) | |
| Xylene(Total) | 0.0014 J |

| 40-6 | |
|---|---|
| Sample ID | AOC-40-6-11 |
| Depth (ft) | 11-11.5 |
| VOCs (mg/kg) | |
| Benzene | 0.0012 J |

| 40-2 | | |
|---|---|---|
| Sample ID | AOC-40-2-5 | |
| Depth (ft) | 5-5.5 | |
| VOCs (mg/kg) | | |
| 1,1-Dichloroethene | 0.0008 J | |
| cis-1,2-Dichloroethene | 0.0013 J | |
| Trichloroethene | 0.0004 J | |

| 12A | | | |
|---|---|---|---|
| Sample ID | 12A | 12A | 12A |
| Depth (ft) | 0-0.5 | 3.5-4 | 5.5-6 |
| VOCs (mg/kg) | | | |
| o-Xylene | ND | 1.4 | ND |
| M,P-Xylene | ND | 0.76 | ND |

LEGEND:

PREVIOUS SAMPLE LOCATIONS

- MONITORING WELL LOCATION
- TEST BORING (PHASE II)
- INDOOR BORING/EXCAVATION (PHASE II)
- WASTE CHARACTERIZATION TEST PIT (PHASE II)
- FURTHER VISUAL INSPECTION (PHASE II)
- BASEMENT SOIL SAMPLES (PHASE III)
- TEST BORING (PHASE III)
- TEST BORING (SUPPLEMENTAL PHASE II)
- CONFIRMATORY SOIL SAMPLE (ICM)
- AREA OF SOIL REMOVAL (ICM)
- TEST PIT LOCATION (SUPPLEMENTAL PHASE II)
- TEST BORING LOCATION (SUPPLEMENTAL PHASE II)
- CORING LOCATION (SUPPLEMENTAL PHASE II)
- PARSONS BORINGS (HISTORICAL)
- DUE DILIGENCE SOIL SAMPLE (2002)
- DUE DILIGENCE SOIL & GROUND WATER SAMPLES
- DUE DILIGENCE GROUND WATER SAMPLE
- ROSELAND CONCEPTUAL BUILDING LAYOUT

| TAGM 4046 GUIDANCE | |
|---|---|
| UNRESTRICTED USE SCREENING VALUE | |
| VOCs (mg/Kg) | |
| 1,1,1-Trichloroethane | 0.8 |
| 1,1,2,2-Tetrachloroethane | 0.6 |
| 1,1-Dichloroethane | 0.2 |
| 1,1-Dichloroethene | 0.4 |
| 2-Hexanone | NA |
| 4-Methyl-2-Pentanone | 1 |
| Benzene | 0.06 or MDL |
| Chlorobenzene | 1.7 |
| cis-1,2-Dichloroethene | NA |
| Ethylbenzene | 5.5 |
| M,P-Xylene | 1.2 |
| O-Xylene | 1.2 |
| Tetrachloroethene | 1.4 |
| Toluene | 1.5 |
| Trichloroethene | 0.7 |
| Vinyl Chloride | 0.2 |
| Xylene(Total) | 1.2 |

| VOCs EXCLUDED FROM DISPLAY |
|---|
| Acetone |
| 2-Butanone (MEK) |
| Bromoform |
| Carbon Disulfide |
| Chlorobenzene |
| Chloroform |
| Dibromochloromethane |
| Methylene Chloride |

0 300' 600'

GRAPHIC SCALE

REVISION NO. 2 (11/7/06)

X: 64462X00, X06.DWG
L: ON=*, OFF=REF, |EastParcel, |PROP BUILDING TEXT, |PROP, BBLBLOCKS
P: PAGESET/PLT-BL1
11/7/06 SYR-85-LJP TJR GMS
64462024/RMDLINV/64462C01.DWG

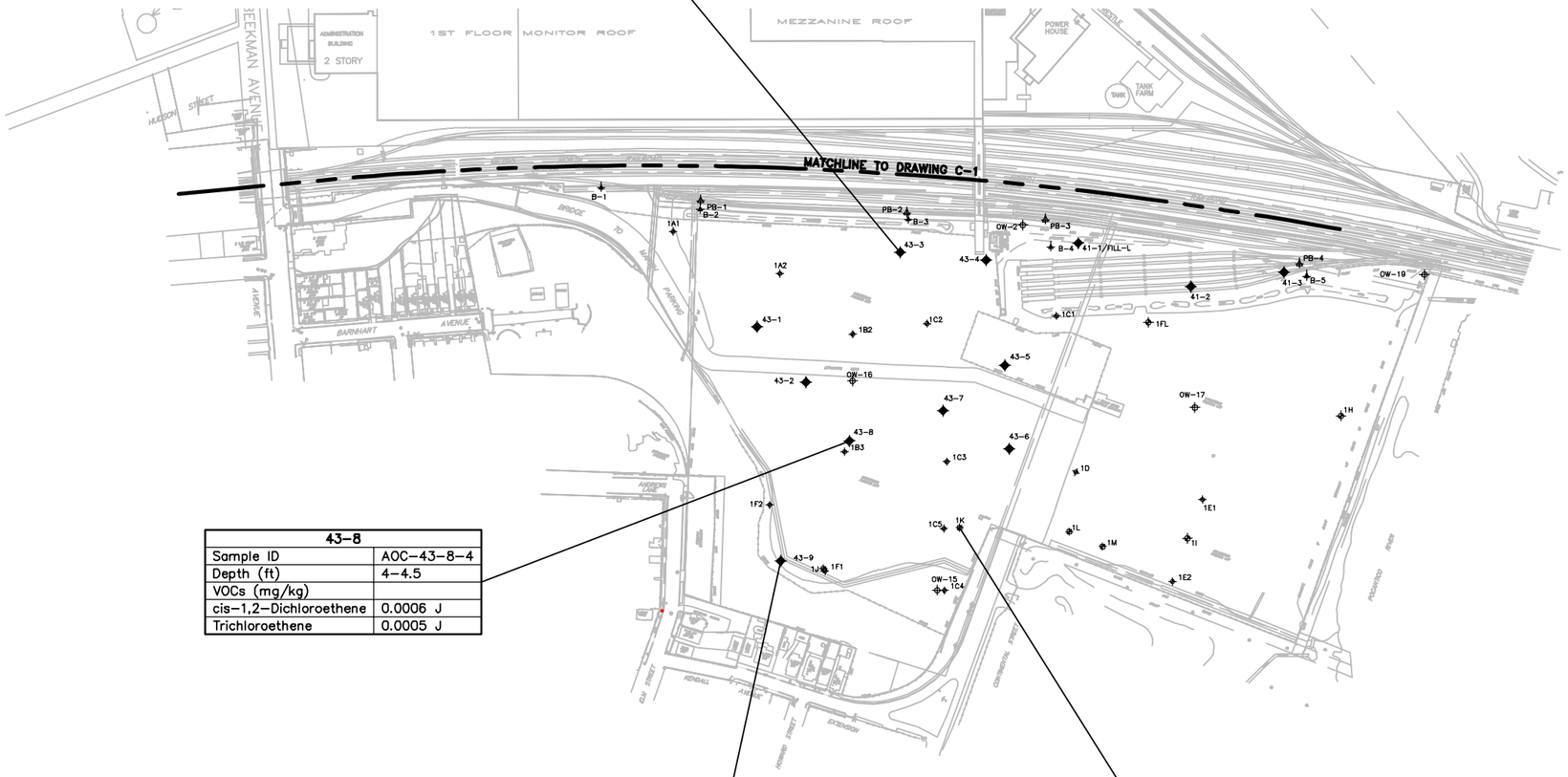
FORMER GENERAL MOTORS ASSEMBLY PLANT SITE
SLEEPY HOLLOW, NEW YORK
DRAFT REMEDIAL INVESTIGATION REPORT

# VOCs IN SOIL FROM PREVIOUS INVESTIGATIONS - WEST PARCEL

BBL BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

DRAWING C-1

| 43–3 | |
|---|---|
| Sample ID | AOC–43–3–4 |
| Depth (ft) | 4–4.5 |
| VOCs (mg/kg) | |
| cis–1,2–Dichloroethene | 0.0004 J |




| 43–8 | |
|---|---|
| Sample ID | AOC–43–8–4 |
| Depth (ft) | 4–4.5 |
| VOCs (mg/kg) | |
| cis–1,2–Dichloroethene | 0.0006 J |
| Trichloroethene | 0.0005 J |

| 43–9 | |
|---|---|
| Sample ID | AOC–43–9–7 |
| Depth (ft) | 7–7.5 |
| VOCs (mg/kg) | |
| Vinyl Chloride | 0.17 |
| cis–1,2–Dichloroethene | 500 J |
| Trichloroethene | 0.56 |
| Tetrachloroethene | 0.2 |

| 1K | | | |
|---|---|---|---|
| Sample ID | 1K | 1K–EXT | 1K–EXT |
| Depth (ft) | 5–7 | 0.5–2 | 6–7 |
| VOCs (mg/kg) | | | |
| 1,1,2,2–Tetrachloroethane | ND | ND | 1.3 |

LEGEND:

PREVIOUS SAMPLE LOCATIONS

- MONITORING WELL LOCATION
- TEST BORING (PHASE II)
- INDOOR BORING/EXCAVATION (PHASE II)
- WASTE CHARACTERIZATION TEST PIT (PHASE II)
- FURTHER VISUAL INSPECTION (PHASE II)
- BASEMENT SOIL SAMPLES (PHASE III)
- TEST BORING (PHASE III)
- TEST BORING (SUPPLEMENTAL PHASE II)
- CONFIRMATORY SOIL SAMPLE (ICM)
- AREA OF SOIL REMOVAL (ICM)
- 1 TEST PIT LOCATION (SUPPLEMENTAL PHASE II)
- TEST BORING LOCATION (SUPPLEMENTAL PHASE II)
- CORING LOCATION (SUPPLEMENTAL PHASE II)
- PARSONS BORINGS (HISTORICAL)
- DUE DILIGENCE SOIL SAMPLE (2002)
- DUE DILIGENCE SOIL & GROUND WATER SAMPLES
- DUE DILIGENCE GROUND WATER SAMPLE

| TAGM 4046 GUIDANCE | |
|---|---|
| UNRESTRICTED USE SCREENING VALUE | |
| VOCs (mg/Kg) | |
| 1,1,1–Trichloroethane | 0.8 |
| 1,1,2,2–Tetrachloroethane | 0.6 |
| 1,1–Dichloroethane | 0.2 |
| 1,1–Dichloroethene | 0.4 |
| 2–Hexanone | NA |
| 4–Methyl–2–Pentanone | 1 |
| Benzene | 0.06 or MDL |
| Chlorobenzene | 1.7 |
| cis–1,2–Dichloroethene | NA |
| Ethylbenzene | 5.5 |
| M,P–Xylene | 1.2 |
| O–Xylene | 1.2 |
| Tetrachloroethene | 1.4 |
| Toluene | 1.5 |
| Trichloroethene | 0.7 |
| Vinyl Chloride | 0.2 |
| Xylene(Total) | 1.2 |

| VOCs EXCLUDED FROM DISPLAY |
|---|
| Acetone |
| 2–Butanone (MEK) |
| Bromoform |
| Carbon Disulfide |
| Chlorobenzene |
| Chloroform |
| Dibromochloromethane |
| Methylene Chloride |

0 300' 600'

GRAPHIC SCALE

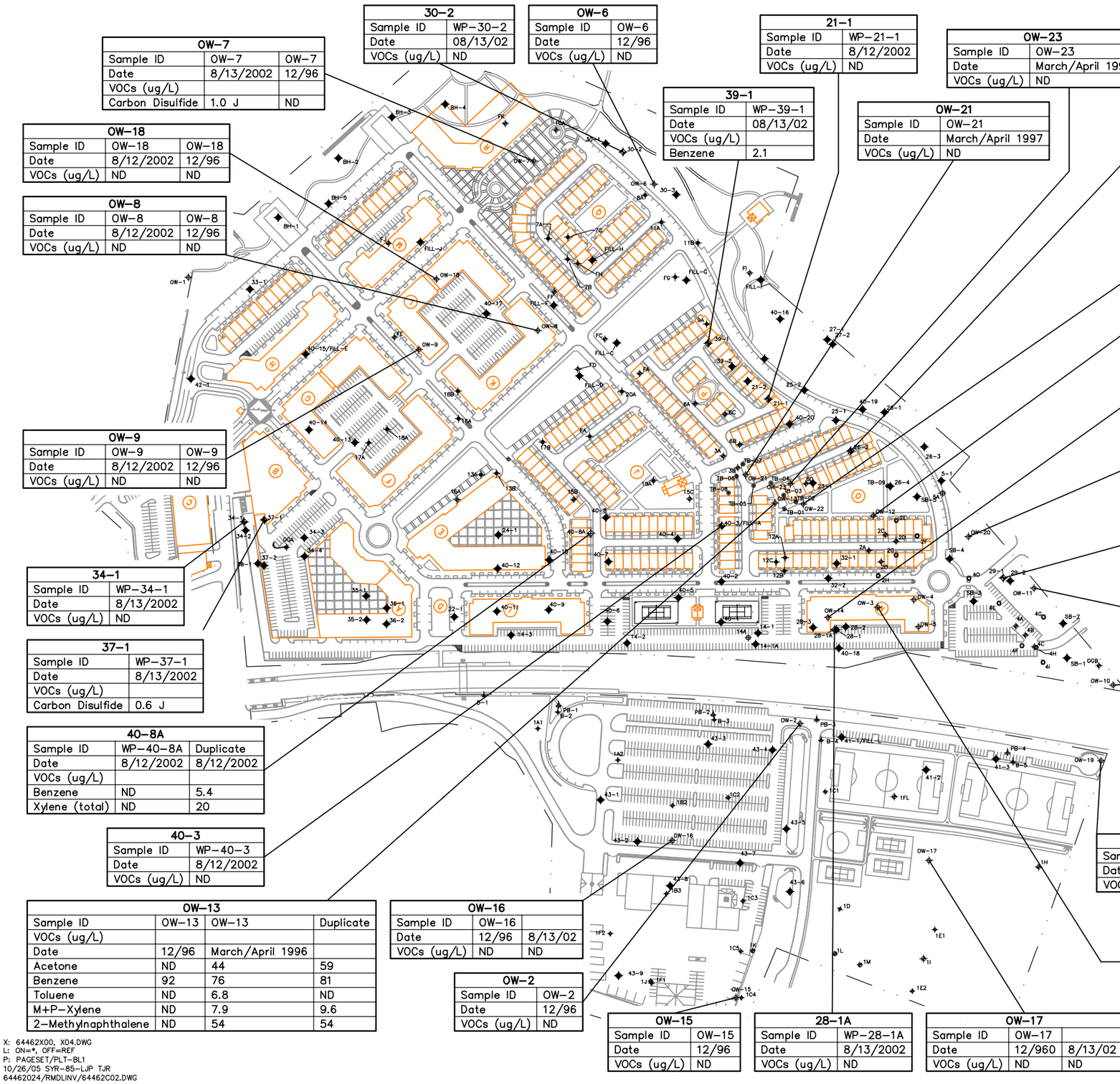
FORMER GENERAL MOTORS ASSEMBLY PLANT SITE
SLEEPY HOLLOW, NEW YORK
**DRAFT REMEDIAL INVESTIGATION REPORT**

# VOCs IN SOIL FROM PREVIOUS INVESTIGATIONS - EAST PARCEL

BBL BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

DRAWING
**C-2**

X: 64462X00, X04.DWG
L: ON=*, OFF=REF
P: PAGESET/PLT-BL1
10/26/05 SYR-85-LJP TJR
64462024/RMDLINV/64462C03.DWG



| OW-7 | | |
|---|---|---|
| Sample ID | OW-7 | OW-7 |
| Date | 8/13/2002 | 12/96 |
| VOCs (ug/L) | | |
| Carbon Disulfide | 1.0 J | ND |

| 30-2 | |
|---|---|
| Sample ID | WP-30-2 |
| Date | 08/13/02 |
| VOCs (ug/L) | ND |

| OW-6 | |
|---|---|
| Sample ID | OW-6 |
| Date | 12/96 |
| VOCs (ug/L) | ND |

| 21-1 | |
|---|---|
| Sample ID | WP-21-1 |
| Date | 8/12/2002 |
| VOCs (ug/L) | ND |

| OW-23 | |
|---|---|
| Sample ID | OW-23 |
| Date | March/April 1997 |
| VOCs (ug/L) | ND |

| 26-2 | |
|---|---|
| Sample ID | WP-26-2 |
| Date | 08/13/02 |
| VOCs (ug/L) | |
| Chloroethane | 16 |
| 1,1-Dichloroethene | 6.8 |
| 1,1-Dichloroethane | 10 |

| 39-1 | |
|---|---|
| Sample ID | WP-39-1 |
| Date | 08/13/02 |
| VOCs (ug/L) | |
| Benzene | 2.1 |

| OW-21 | |
|---|---|
| Sample ID | OW-21 |
| Date | March/April 1997 |
| VOCs (ug/L) | ND |

| OW-18 | | |
|---|---|---|
| Sample ID | OW-18 | OW-18 |
| Date | 8/12/2002 | 12/96 |
| VOCs (ug/L) | ND | ND |

| OW-22 | |
|---|---|
| Sample ID | OW-22 |
| VOCs (ug/L) | |
| Date | March/April 1997 |
| Acetone | 36 |
| Benzene | 14 |
| 2-Hexanone | 11 |
| m,p-Xylene | 5.1 |

| OW-8 | | |
|---|---|---|
| Sample ID | OW-8 | OW-8 |
| Date | 8/12/2002 | 12/96 |
| VOCs (ug/L) | ND | ND |

| OW-12 | |
|---|---|
| Sample ID | OW-12 |
| Date | 12/96 |
| VOCs (ug/L) | ND |

| OW-14 | |
|---|---|
| Sample ID | OW-14 |
| Date | 12/96 |
| VOCs (ug/L) | ND |

| OW-9 | | |
|---|---|---|
| Sample ID | OW-9 | OW-9 |
| Date | 8/12/2002 | 12/96 |
| VOCs (ug/L) | ND | ND |

| OW-20 | |
|---|---|
| Sample ID | OW-20 |
| VOCs (ug/L) | |
| Date | March/April 1997 |
| Acetone | 25 |

| 29-1 | |
|---|---|
| Sample ID | WP-29-1 |
| Date | 8/12/2002 |
| VOCs (ug/L) | ND |

| OW-11 | | |
|---|---|---|
| Sample ID | OW-11 | OW-11 |
| Date | 12/96 | 8/12/2002 |
| VOCs (ug/L) | ND | ND |

| 34-1 | |
|---|---|
| Sample ID | WP-34-1 |
| Date | 8/13/2002 |
| VOCs (ug/L) | ND |

| 37-1 | |
|---|---|
| Sample ID | WP-37-1 |
| Date | 8/13/2002 |
| VOCs (ug/L) | |
| Carbon Disulfide | 0.6 J |

| OW-10 | | |
|---|---|---|
| Sample ID | OW-10 | |
| VOCs (ug/L) | | |
| Date | 12/96 | 8/12/02 |
| Benzene | 24 | 6.2 |
| Chlorobenzene | ND | 3.3 J |
| Ethylbenzene | 17 | ND |
| m+p-Xylene | 11 | ND |

| 40-8A | | |
|---|---|---|
| Sample ID | WP-40-8A | Duplicate |
| Date | 8/12/2002 | 8/12/2002 |
| VOCs (ug/L) | | |
| Benzene | ND | 5.4 |
| Xylene (total) | ND | 20 |

| 40-3 | |
|---|---|
| Sample ID | WP-40-3 |
| Date | 8/12/2002 |
| VOCs (ug/L) | ND |

| OW-19 | |
|---|---|
| Sample ID | OW-19 |
| Date | March/April 1997 |
| VOCs (ug/L) | ND |

| OW-13 | | | |
|---|---|---|---|
| Sample ID | OW-13 | OW-13 | Duplicate |
| VOCs (ug/L) | | | |
| Date | 12/96 | March/April 1996 | |
| Acetone | ND | 44 | 59 |
| Benzene | 92 | 76 | 81 |
| Toluene | ND | 6.8 | ND |
| M+P-Xylene | ND | 7.9 | 9.6 |
| 2-Methylnaphthalene | ND | 54 | 54 |

| OW-16 | | |
|---|---|---|
| Sample ID | OW-16 | |
| Date | 12/96 | 8/13/02 |
| VOCs (ug/L) | ND | ND |

| OW-3 | |
|---|---|
| Sample ID | OW-3 |
| Date | 12/96 |
| VOCs (ug/L) | ND |

| OW-2 | |
|---|---|
| Sample ID | OW-2 |
| Date | 12/96 |
| VOCs (ug/L) | ND |

| OW-15 | |
|---|---|
| Sample ID | OW-15 |
| Date | 12/96 |
| VOCs (ug/L) | ND |

| 28-1A | |
|---|---|
| Sample ID | WP-28-1A |
| Date | 8/13/2002 |
| VOCs (ug/L) | ND |

| OW-17 | | |
|---|---|---|
| Sample ID | OW-17 | |
| Date | 12/960 | 8/13/02 |
| VOCs (ug/L) | ND | ND |

LEGEND:

PREVIOUS SAMPLE LOCATIONS

- MONITORING WELL LOCATION
- TEST BORING (PHASE II)
- INDOOR BORING/EXCAVATION (PHASE II)
- WASTE CHARACTERIZATION TEST PIT (PHASE II)
- FURTHER VISUAL INSPECTION (PHASE II)
- BASEMENT SOIL SAMPLES (PHASE III)
- TEST BORING (PHASE III)
- TEST BORING (SUPPLEMENTAL PHASE II)
- CONFIRMATORY SOIL SAMPLE (ICM)
- AREA OF SOIL REMOVAL (ICM)
- TEST PIT LOCATION (SUPPLEMENTAL PHASE II)
- TEST BORING LOCATION (SUPPLEMENTAL PHASE II)
- CORING LOCATION (SUPPLEMENTAL PHASE II)
- PARSONS BORINGS (HISTORICAL)
- DUE DILIGENCE SOIL SAMPLE (2002)
- DUE DILIGENCE SOIL & GROUND WATER SAMPLES
- DUE DILIGENCE GROUND WATER SAMPLE
- ROSELAND CONCEPTUAL BUILDING LAYOUT

| CLASS GA GROUNDWATER STANDARDS AND GUIDANCE | |
|---|---|
| VOCs (ug/L) | |
| 2-Hexanone | 50 |
| 2-Methylnaphthalene | NA |
| Acetone | 50 |
| Benzene | 1 |
| Ethylbenzene | 5 |
| M,P-Xylene | 5 |
| Xylene (total) | 5 |

0 300' 600'

GRAPHIC SCALE

REVISION NO. 1 (10/26/05)

FORMER GENERAL MOTORS ASSEMBLY PLANT SITE
SLEEPY HOLLOW, NEW YORK
**DRAFT REMEDIAL INVESTIGATION REPORT**

# VOCs IN GROUNDWATER FROM PREVIOUS INVESTIGATIONS

BBL BLASLAND, BOUCK & LEE, INC. engineers, scientists, economists

DRAWING C-3

X: 64462X00, X04.DWG
L: ON=*, OFF=REF
P: PAGESET/PLT-BL1
10/26/05 SYR-85-LJP TJR
64462024/RMDLINV/64462C02.DWG

# *Appendix D*

# Soil Boring Logs – Remedial Investigation

BBL®
an ARCADIS company

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B1 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Black Asphalt - 6" | | | | |
| | | | | | Gray cmf SAND, little silt | | | | 0.0 |
| 1 | | | | | by Pieces of Rock etc | F | | | |
| | | | | | Dark Gray mf SAND, little | | | | |
| | | | | | Silt, trace mf Gravel by | | | | |
| 2 | | | 75 | | Pieces of shell | F | | | 0.0 |
| | | | | | by pieces of Rock | | | | |
| 3 | | | | | | | | | |
| | A | | | | Dark Brown mf SAND & | | | | |
| | | | | | Silt, trace clay by pieces of | F | | | |
| 4 | | | | | Rock | | | | |
| | | | | | Brown cmf SAND, little | | | | 6.2 |
| | | | | | Silt, trace clay by piece | F | | | |
| 5 | | | | | of Rock | | | | |
| | | | | | | | | | |
| 6 | | | 79 | | | | | | |
| | B | | | | Dark Gray & Brown cmf | | | | 0.0 |
| | | | | | SAND, little Silt, trace mf | F | | | |
| 7 | | | | | Gravel | | | | GWL-7.5 |
| | | | | | | | | | |
| 8 | | | | | | | | | |
| | | | | | Brownish yellow mf SAND, | | | | 0.2 |
| | | | | | little Silt, trace clay, trace | SP | | | |
| 9 | C | | | | mf Gravel by pieces of shell | | | | |
| | | | | | | | | | |
| 10 | | | 88 | | | | | | |
| | | | | | Dark Brown cmf SAND, | | | | 0.0 |
| | | | | | little Silt, trace mf Gravel | SP | | | |
| 11 | | | | | by pieces of shell | | | | |
| | | | | | | | | | |
| 12 | D | | | | | | | | 0.3 |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276630000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B-1 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Gray mf SAND, little Silt, trace clay, trace f Gravel | SP | | | |
| | | | | | Dark Gray mf SAND, little Silt, trace f Gravel | | | | 0.3 |
| 14 | | | 83 | | | | | | |
| | | | | | wf pieces of white shell | | | | |
| 15 | | | | | | | | | |
| | | | | | wf pieces of white shell | | | | |
| 16 | | | | | Brownish yellow SILT (Organic) wf decomposed wood | PT | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 100 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276630000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B2 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID CPPMD |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Black Asphalt - 6" | | | | |
| | | | | | Dark Gray cmf SAND, trace Silt & mf Gravel & piece of Rock wood etc | F | | | 0.0 |
| 1 | | | | | | | | | |
| 2 | | | 63 | | | | | | |
| | | | | | Gray cmf SAND, some Gravel, trace clay & piece of Rock, wood cinder etc | F | | | 0.6 |
| 3 | | | | | | | | | |
| A 4 | A | | | | Brown cmf SAND, little Silt, trace f Gravel & piece of Rock, wood etc | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Dark Gray & Brown cmf SAND, little mf Gravel, trace Silt & Pieces of Rock. | F | | | |
| 7 | | | | | | | | | |
| | B | | | | | | | | |
| 8 | | | | | Brownish yellow mf SAND, little Silt, trace clay, trace mf Gravel & shell | SP | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | 80 | | Brown cmf SAND, some Silt, trace mf Gravel & Pieces of Shell | SP | | | 0.0 |
| 11 | C | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276890000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B2 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Gray mf SAND, little Silt trace clay, trace f Gravel | | | | 0.0 PID CPPM? |
| 14 | D | | | | Dark Gray mf SAND, little Silt, trace f Gravel | | | | |
| 15 | E | | | | by Piece of Shell | | | | |
| 16 | | | | | by shell Brownish yellow SILT by decomposed wood | pt | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B3 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 6" Asphalt- Dark Gray & Brown mf SAND, little Silt, trace mf Gravel & piece of shell | | | | 0.0 |
| 2 | | | | | & mf Gravel & shell | | | | |
| 3 | | | | | Dark Brown cmf SAND, little Silt, mf Gravel & piece of rock and shell | | | | 0.0 |
| 4 | A | | | | Gray SILT, little f Sand, Brown cmf SAND, little Silt | | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | Dark Gray & Brown cmf SAND, little Silt, trace clay trace mf Gravel | F | | | 0.0 |
| 8 | B | | | | Dark Gray cmf SAND, | SP | | | |
| 9 | | | | | little Silt, trace clay, trace f Gravel | | | | 0.0 |
| 10 | | | | | | | | | |
| 11 | | | | | Dark Gray mf SAND, little Silt, trace mf Gravel. | SP | | | 0.0 |
| 12 | C | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B3 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, trace silt, trace clay, trace cmf sa. Gravel. | SP | | | 0.0 |
| 14 | D | | | | Dark Gray mf SAND, little silt, trace f Gravel, trace clay | SP | | | 0.0 |
| 15 | E | | | | Dark Gray cmf SAND, little silt, trace f Gravel & clay | SP | | | 0.0 |
| 16 | | | | | Brown Organic SILT of decomposed wood | Pt | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | 6.5 |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B4 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Asphalt - 6" | | | | |
| | | | | | Dark Gray & Brown cmf SAND, little cmf Gravel, trace silt & Pieces of wood rock. cinder etc | F | | | 0.0 |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| | | | | | Dark Brown cmf SAND, little Silt & mf Gravel & Pieces of Rock wood, glass etc | F | | | 0.0 |
| 4 | A | | | | | | | | |
| | | | | | Gray SILT, little F Sand little mf Gravel | | | | |
| 5 | | | | | | | | | |
| | | | | | & Pieces of Rock, wood glass etc | | | | |
| 6 | | | | | | F | | | |
| 7 | | | | | Dark Gray cmf SAND, little mf Gravel, trace silt & clay | | | | 0.0 |
| | B | | | | | | | | |
| 8 | | | | | Dark Gray cmf SAND, trace Silt & mf Gravel | SP | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| | | | | | Dark Gray & Brown mf SAND, some Silt, trace F Gravel | SP | | | 0.0 |
| 11 | C | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-1-B4 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (PPM)) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND little mf Gravel, trace silt- | | | | 0.0 |
| 14 | D | | | | Dark Gray mf SAND, little Silt, trace f Gravel, trace clay | | | | 0.0 |
| 15 | E | | | | Dark Gray cmf SAND, little Silt, trace f Gravel | | | | |
| 16 | | | | | Brown SILT w decom. osed wood | pt | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-1-B5 | COORDINATES: | | DATE: | 10/06/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 6 ft | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:05 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft. asphalt & crushed stone | | 0 | | |
| 1 | | | | | 0.8-2.8 ft. FILL lt brown to olive gray f. SAND, tr. shells, tr. gravel, moist | | 0 | | |
| 2 | | | 2.8 | | | | 0 | | |
| 3 | | | | | 2.8-3.9 ft. FILL dk. gray sandy SILT, moist | | 0 | | |
| 4 | | | | | FILL 3.9-4.0 ft. concrete fragments | | | | |
| | | | | | 4.0-6.0 ft. FILL dk. gray gravelly, f. SAND, tr. coal ash, tr. glass, moist | | 0 | | |
| 5 | X | | | | | | 0 | | Sample SI-1-B5-A-1 & Duplicate at 4.8-6.0 ft. |
| 6 | | | 3.5 | | | | | | |
| | | | | | 6.0-8.0 ft. solid mass of wood, gray, saturated. | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-11.5 ft. dk. gray clayey f. SAND, saturated. | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | ~3.5 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| | | | | | 11.5-12.0 ft. dk brown PEAT, some f-m sand, saturated. | | | | |
| 12 | | | | | | | | | |

NOTES:

Note: hit refusal (wood at 6") at original SI-1-B5 location; This hole offset 8" to SW.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-1-B5 | COORDINATES: | DATE: | 10/06/03 |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 9:05 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | ~3.5 | | 12.0-15.5 ft. dark brown PEAT, stiff, moist, w./ well preserved roots and leaves. | | 0<br>0<br>0 | | |
| 15 | | | | | 15.5-16.0 ft. lt. brown f-m SAND, saturated. | | 0 | | |
| 16 | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-1-B6 | COORDINATES: | | DATE: | 10/06/03 |
| ELEVATION / DATUM: | | GWL: Depth: 6 ft | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. asphalt & crushed stone | | | | |
| 1 | | | | | 0.5-3.0 ft. FILL lt to dk. gray f. SAND, tr.oyster shells, moist | | 0 | | |
| 2 | | | 3.0 | | | | | | Sample SI-1-B6-A at 2.4-2.9 ft. |
| | X | | | | | | 0 | | |
| 3 | | | | ### | 3.0-3.2 ft FILL black coal ash, tr. glass, moist. | | 0 | | |
| | | | | | 3.2-3.8 ft. FILL olive-gray f. silty SAND, moist | | 0 | | |
| | | | | ### | 3.8-4.0 ft. FILL concrete fragments, moist | | | | |
| 4 | | | | | 4.0-6.0 ft. FILL lt. brown to gray f. SAND, some gravel, tr. shells, moist. | | 0 | | |
| 5 | | | | | | | | | |
| | | | 3.0 | ▽ | | | | | |
| 6 | X | | | ### | 6.0-7.7 ft. FILL coal ash, glass, ceramic material, saturated. | | 0 | | Sample SI-I-B6-B at 6.0-6.4 ft. |
| 7 | X | | | ### | | | | | Sample SI-I-B6-C at 7.0-7.4 ft. |
| | X | | | | 7.7-8.0 ft. black, organic muck w./ wood, tr, glass, saturated. | | | | Sample SI-1-B6-D at 7.7-8.0 ft. |
| 8 | | | | | 8.0-10.5 ft. dk. gray f. SAND, saturated | | 0 | | |
| 9 | | | | | | | | | |
| 10 | | | ~3 | | | | 0 | | |
| | | | | | 10.5-11.5 lt. layer of solid wood, dry, fresh. | | | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.5-12.0 ft. dk. brown PEAT, tr. f. sand, saturated. | | 0 | | |

NOTES: **E.O.B. at 12.0 feet (refusal - wood obstruction)**

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-1-B7 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. asphalt & crushed stone | | | | |
| 1 | | | | | 0.5-3.2 ft. FILL lt. brown to gray f. SAND, tr. oyster shells, tr. gravel, moist. | | 0 | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 3.2-3.6 ft. dk brn, silty f. SAND, moist.<br>3.6-4.0 ft. dk brn. f. SAND to silty SAND, moist | | 0 | | |
| 5 | | | | | 4.0-6.0 ft. dk. brown f. SAND, tr. gravel, moist | | | | |
| 6 | | | 3.7 | ▽ | | | 0 | | |
| 7 | ☒ | | | | 6.0-7.5 ft. FILL coal ash, glass, ceramic material, coal, saturated. | | 0 | | Sample SI-1-B7-A at 6.0-6.4 ft. |
| | ☒ | | | | | | 0 | | Sample SI-1-B7-B at 7.0-7.4 ft. |
| 8 | | | | | 7.5-8.0 ft. 1" of PEAT, then dk. gray f. SAND below, saturated. | | | | |
| 9 | | | | | 8.0-12.0 ft. poor recovery 1 piece of wood w./ bark recovered, fresh, (probable running sand). | | | | |
| 10 | | | 0.5 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-1-B7 | COORDINATES: | | DATE: | 10/06/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 6 ft | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0-12.2 ft. dk. brwon f-m SAND, saturated. | | 0 | | |
| 13 | | | | | 12.2-14.4 ft. dk. brown PEAT, saturated. | | 0 | | |
| 14 | | | 4.0 | | | | 0 | | |
| | | | | | 14.4-15.2 ft. m. brown f. SAND, tr. c. sand, saturated. | | 0 | | |
| 15 | | | | | 15.2-15.3 ft. reddish-brown CLAY, moist | | | | |
| | | | | | 15.3-16.0 ft. black to dk. brown, interbedded CLAY and f. SAND, saturated. | | 0 | | |
| 16 | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-1-B8 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION / DATUM: | GWL: Depth: 7.4 ft. Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. asphalt & crushed stone | | 0 | | |
| 1 | | | | | 0.5-2.8 ft. FILL med. gray-brown f. SAND, some oyster shells, tr. gravel, moist. | | 0 | | |
| 2 | ☒ | | 3.3 | | | | | | Sample SI-1-B8-A collected at 2.0-2.4 ft. |
| 3 | | | | | 2.8-4.0 ft. FILL dk brn. silty SAND, tr. gravel, moist. | | 0 | | Sample SI-1-B8-B collected at 3.6-4.0 ft. |
| 4 | ☒ | | | | | | | | |
| | | | | | 4.0-4.6 ft. FILL dk brn. f. SAND, some shells, moist. | | 0 | | |
| 5 | | | | | 4.6-5.5 ft. FILL crushed stone, tr. brick fragments, hollw tile, some f-m sand, moist. | | 0 | | Sample SI-1-B8-C collected at 5.0-5.4 ft. |
| 6 | ☒ | | 3.5 | | 5.5-6.2 ft. FILL dk gray f-m SAND, some gravel, moist | | | | |
| 7 | | | | | 6.2-7.8 ft. FILL black ash, glass, coal, moist (saturated at 7.4 ft.). | | 0 | | Sample SI-1-B8-D collected at 7.0-7.4 ft. |
| 8 | ☒ | | | | | | | | |
| 9 | | | | | 8.0-11.5 ft. dk gray f. SAND, saturated. | | 0 | | Sample SI-1-B8-E collected at 8.0-8.4 ft. |
| 10 | | | ~3 | | | | | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.5-12.0 ft. lt. brown f. silty SAND, saturated. | | | | PEAT in shoe of sampler |

NOTES:

**E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-1-B9 | COORDINATES: | | DATE: | 10/06/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. asphalt & crushed stone | | 0 | | |
| 1 | | | | | 0.5-3.8 ft. FILL m. brn. to lt. gray f. SAND, grades into silty f. SAND w./ depth, tr. c. sand, tr. oyster shells, moist | | 0 | | |
| 2 | ☒ | | 3.8 | | | | | | Sample SI-1-B9-A collected at 2.0-2.4 ft. |
| 3 | | | | | | | 0 | | |
| | | | | | 3.8-4.0 ft. FILL lt. brn. m-SAND, tr. gravel, moist. | | 0 | | |
| 4 | | | | | 4.0-4.6 ft. FILL lt. brn. f-SAND, tr. shells, moist. | | 0 | | Sample SI-1-B9- collected at 4.6-5.0 ft. |
| 5 | ☒ | | | | 4.6-5.0 ft. FILL dk. gray coal ash and glass, moist. | | | | |
| | | | | | 5.0-5.5 ft. FILL dk gray f. SAND, moist. | | 0 | | |
| 6 | ☒ | | 4.0 | | 5.5-7.2 ft. FILL black organic-rich muck w./ coal ash & glass, moist (saturated at 6.0 ft). | | 0 | | Sample SI-1-B9-C collected at 5.6-6.0 ft. |
| 7 | ☒ | | | | | | | | Sample SI-1-B9-D collected at 6.6-7.0 ft. |
| 8 | ☒ | | | | 7.2-8.0 ft. dk. gray f. SAND, saturated. | | 0 | | Sample SI-1-B9-E collected at 7.6-8.0 ft. |
| 9 | | | ~3 | | 8.0-12.0 ft. (same as above) | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES: **E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-1-B10 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. asphalt & crushed stone | | 0 | | |
| 1 | | | | | 0.5-3.5 ft. FILL m. brn. to lt. gray f. SAND, some oyster shells, tr. gravel, moist | | 0 | | |
| 2 | ☒ | | 3.5 | | | | | | Sample SI-1-B10-A collected at 2.0-2.4 ft. |
| 3 | | | | | | | | | |
| | | | | | 3.5-3.7 ft. FILL concrete fragments. | | 0 | | |
| 4 | | | | | 3.7-4.0 ft. FILL dk gray silty f. SAND, moist | | 0 | | |
| | | | | | 4.0-6.0 ft. FILL lt gray f-m SAND, some gravel & crushed stone, moist | | | | |
| 5 | ☒ | | | | | | 0 | | Sample SI-1-B10-B collected at 5.2-5.6 ft. |
| 6 | ☒ | | ~3 | | 6.0-6.5 FILL ft. dark reddish-brown SILT, stiff, saturated. | | 0 | | Sample SI-1-B10-C collected at 6.0-6.4 ft. |
| 7 | | | | | 6.5-8.0 ft. FILL coal ash, coal fragments, glass, saturated. | | 0 | | |
| 8 | ☒ | | | | 8.0-12.0 ft. FILL dk. gray f. SAND, saturated. | | 0 | | Sample SI-1-B10-D collected at 8.0-8.4 ft. |
| 9 | ☒ | | | | | | | | Sample SI-1-B10-E collected at 9.0-9.4 ft. |
| 10 | | | ~3 | | | | 0 | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: **E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-1-B11 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 6 ft. Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. asphalt & crushed stone | | | | |
| 1 | | | 3.7 | | 0.5-4.0 ft. FILL lt. brn. gravelly f. SAND, some crushed stone, moist (layer of crushed coal 1" thick at 3 ft.) | | 0 | | |
| 2 | ☒ | | | | | | 0 | | Sample SI-1-B11-A collected at 2.0-2.4 ft. |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | | | |
| | ☒ | | | | 4.0-5.5 ft. FILL dk.brn. gravelly f. SAND, tr. brick, tr. coal, tr. ash, moist. | | 0 | | Sample SI-1-B11-B collected at 4.6-5.0 ft. |
| 5 | | | | | 5.5-6.0 ft. FILL dk. gray f. SAND, tr. shells, moist. | | 0 | | |
| 6 | | | 3.6 | | 6.0-7.5 ft. FILL dk. gray coal ash, glass, saturated. | | 0 | | |
| 7 | ☒ | | | | | | | | Sample SI-1-B11-C collected at 6.6-7.0 ft. |
| | | | | | 7.5-8.0 ft. FILL black, organic rich refuse layer, w./ coal ash, saturated. | | 0 | | Sample SI-1-B11-D collected at 7.6-8.0 ft. |
| 8 | ☒ | | | | | | | | |
| 9 | | | | | 8.0-10.0 ft. dk. gray f. SAND, saturated. | | 0 | | Sample SI-1-B11-E collected at 8.6-9.0 ft. |
| 10 | | | 4.0 | | | | 0 | | |
| | | | | | 10.0-12.0 ft. lt. brown f. SAND, interlayered w./ PEAT, saturated. | | 0 | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | 0 | | |

NOTES: **E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-2-B1 | COORDINATES: | | DATE: | 10/08/03 |
| ELEVATION / DATUM: | at grade (millings) | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 12:49 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.8 | | 0-2.0 ft. FILL concrete fragments and dk. gray f-m-c SAND, dry. | | 0 | | |
| 2 | | | | | | | | | |
| 3 | | | | | 2.0-4.0 ft. FILL black coal ash, sand-to-gravel sized grains, glassy blebs of clinker material, moist (wet at 3 ft) | | 0 | | |
| 4 | | | | | | | 0 | | h/s = 0.6 ppm |
| 5 | X | | 3.0 | | 4.0-8.0 ft. FILL (same as above) saturated. | | 0 | | Sample SI-2-B1-A at 4.0-5.0 ft. |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 2.7 | | 8.0-12.0 ft. FILL (same as above) saturated. | | | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | 0 | | |

NOTES: **E.O.B. at 12.0 ft**

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-4-B1 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 6.02 | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4" Asphalt / concrete | | | | PID (ppm) |
| 1 | | | | | Dark Gray cmf SAND, little Silt w/ Rock, gravel etc w/ clay | | | | 0.0 |
| 2 | | | | | concrete (1.4 - 2.0') | | | | |
| | | | 50 | | Coal Ash (2.0 - 4.0') | | | | |
| 3 | | | | | ↓ | | | | |
| 4 | | | | | Black cmf SAND, little Silt w/ pieces of Coal Ash | | | | |
| 5 | | | | | ↓ | | | | GWL-5.0' |
| 6 | A | | 67 | | ↓ | | | | 50 |
| 7 | | | | | Black cmf SAND, little Silt & f Gravel, trace clay | | | | |
| 8 | | | | | Dark Gray f SAND and SILT, trace clay | SP | | | 0.0 |
| 9 | | | | | ↓ | | | | |
| | | | | | Brown SILT (organic) w/ decomposed wood | Pt | | | |
| 10 | | | 75 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: End of Boring at 12.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276690000 (3C) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-6-B1 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 10.04 | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Black & Gray cmf SAND. and mf Gravel w pieces of wood, rock, Brick, glass concrete etc | F | | | 0.0 PPM |
| 2 | | | 52 | | White & Gray concrete w mf Sand, little silt & mf Gravel | | | | |
| 3 | | | | | Concrete, mf Gravel | F | | | 0.0 PPM |
| 4 | | | | | Black cmf SAND & Gravel concrete | | | | |
| 5 | | | | | Black & Brown cmf SAND little Silt w pieces of shell | F | | | |
| 6 | | | 75 | | | | | | GWL - 7.0' |
| 7 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel w pieces of Rock etc | | | | |
| 8 | | | | | Black & Dark Gray cmf SAND, little mf Gravel, trace Silt w pieces of wood, Rock | F | | | 0.0 PPM |
| 9 | A | | | | | | | | |
| 10 | | | 73 | | Bricks Gray & Brown SILT & SAND, trace clay | F | | | |
| 11 | | | | | Black cmf SAND and GRAVEL little Silt, trace clay w/ pieces of Rock, wood etc | | | | 0.0 PPM |
| 12 | | | | | | | | | |

NOTES: Refusal at 12.0'

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276890000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B1 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 13.59 | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little cmf Gravel, trace Silt & pieces of Rock wood (1.5 - 1.7') | F | | | 0.0 ppm |
| 2 | | | 63 | | Brown cmf SAND, little silt clay & f Gravel | F | | | |
| 3 | | | | | Black cmf SAND & mf Gravel trace Silt | | | | |
| 4 | | | | | Black & Dark Brown cmf SAND, little Silt & mf Gravel & pieces of glass, concrete wood | F | | | GW. 5.0' |
| 5 | | | | | Dark Gray cmf SAND, little mf Gravel, trace silt & clay & pieces of Rock | | | | |
| 6 | | | 25 | | | | | | |
| 7 | | | | | Black cmf SAND and GRAVEL, little Silt & pieces of Rock, glass etc. | F | | | 1.0 ppm Oily |
| 8 | | | | | wood (9.0 - 9.5') | | | | |
| 9 | A | | | | | | | | |
| 10 | | | 29 | | Black cmf SAND, little Silt, trace clay & pieces of ROCK, wood, glass | F | | | 0.0 ppm |
| 11 | | | | | | P | | | |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0' (Refusal)

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B2 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION / DATUM: soil surface (in crawlspace) | GWL: Depth: 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.0 ft. FILL m. brown f. SAND, tr. c. sand, tr. shels, moist | | 0 | | approximately 8' from top of slab to soil |
| 2 | | | 2.8 | | | | 0 | | |
| 3 | X | | | | | | 0 | | Sample SI-7-B2-A collected at 2.6-3.0 ft. |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-6.0 ft. FILL (same as above) | | 0 | | |
| 6 | X | | 2.1 | | 6.0-8.0 ft. dk gray (gleyed) f. SAND | | 0 | | Sample SI-7-B2-B collected at 5.6-6.0 ft. |
| 7 | | | | | | | 0 | | |
| 8 | X | | | | | | 0 | | Sample SI-7-B2-C collected at 7.6-8.0 ft. |
| 9 | | | | | 8.0-12.0 ft. dk. gray silty f. SAND, tr. metal (steel wire), oily sheen, saturated. | | 0 | | poor recovery |
| 10 | | | 0.5 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | X | | | | | | 0 | | Sample SI-7-B2-D collected at 11.6-12.0 |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B2 | COORDINATES: | | DATE: | 10/06/03 |
| ELEVATION / DATUM: | soil surface (in crawlspace) | GWL: Depth: | 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 0.6 | ### ## ### ## ### ##

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B3 | COORDINATES: | | DATE: | 10/07/03 |
| ELEVATION / DATUM: | soil surface (in crawlspace) | GWL: Depth: | 4 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.0 | | 0-1.0 ft. lt. FILL brown m-c SAND, tr. gravel, moist. | | 0 | | approximately 8' from top of slab to soil |
| 2 | | | | | 1.0-2.6 ft. FILL lt. brown f. SAND. some shells, moist. | | 0 | | |
| 3 | X | | | | 2.6-3.5 ft. FILL reddish-brown, clayey SILT, moist | | 0 | | Sample SI-7-B3-A collected at 2.6-3.0 ft. |
| 4 | | | | | 3.5-4.0 ft. FILL lt. brn. f-m SAND, moist | | 0 | | |
| 5 | | | 2.0 | | 4.0-4.5 ft. FILL lt. brn. gravelly f. SAND, saturated. | | 0 | | |
| 6 | X | | | | 4.5-8.0 ft. FILL lt. gray f-m SAND, some shells, tr. gravel, tr. glass, saturated. | | 0 | | Sample SI-7-B3-B collected at 5.6-6.0 ft. |
| 7 | | | | | | | 0 | | |
| 8 | | | 4.0 | | 8.0-12.0 ft. FILL black, silty organic muck w./ wood, gravel, metals parts, saturated (very slight, intermittent sheen) | | 0 | | |
| 9 | X | | | | | | 0 | | Sample SI-7-B3-C collected at 8.6-9.0 ft. |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | X | | | | | | 0 | | Sample SI-7-B3-D collected at 11.6-12.0 |

NOTES: **E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B4 | COORDINATES: | | DATE: | 10/07/03 |
| ELEVATION / DATUM: | soil surface (in crawlspace) | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:56 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.0 ft. FILL reddish-brown silty f. SAND, some m. sand, tr. gravel, tr. shells (tip of sampler wet) | | 0 | | approximately 8' from top of slab to soil |
| 2 | | | 0.6 | | | | 0 | | poor recoverey |
| 3 | X | | | | | | 0 | | Sample SI-7-B4-A collected at 2.6-3.0 ft. |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-6.0 ft. FILL dk gray f-m-c SAND, little shells, tr. gravel, saturated | | 0 | | |
| 6 | X | | 2.0 | | | | 0 | | Sample SI-7-B4-B collected at 5.6-6.0 ft. |
| 7 | | | | | 6.0-8.0 ft. FILL dk gray silty CLAY, tr. f. sand, tr. shels, tr. wood, saturated. | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | X | | | | 8.0-12.0 ft. FILL black organic muck with metals parts, staples, washers, wire, and rubber pieces, saturated. | | 0 | | Sample SI-7-B4-B collected at 8.6-9.0 ft. |
| 10 | | | 1.0 | | | | 0 | | poor recoverey |
| 11 | | | | | | | 0 | | |
| 12 | X | | | | | | 0 | | Sample SI-7-B4-B collected at 11.6-12.0 |

NOTES: **E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B5 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION / DATUM: soil surface (in crawlspace) | GWL: Depth: Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: 9:45 | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.0 ft. FILL m. brown f-m SAND, little shells, tr. gravel, tr. brick fragments, moist | | 0 | | approximately 8' from top of slab to soil |
| 2 | | | 2.6 | | | | 0 | | poor recoverey |
| 3 | X | | | | | | 0 | | Sample SI-7-B5-A collected at 2.6-3.0 ft. |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-6.0 ft. FILL (same as above) | | 0 | | |
| 6 | X | | 3.0 | | | | 0 | | Sample SI-7-B5-B collected at 5.6-6.0 ft. |
| 7 | | | | | 6.0-8.0 ft. lt to dk. gray f-m SAND, grades into silty SAND, little shells, saturated. | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | X | | | ### | 8.0-12.0 ft. FILL dk. gray silty CLAY, some glass, metals fragments, and shells, saturated | | 0 | | Sample SI-7-B5-B collected at 8.6-9.0 ft. |
| 10 | | | 1.0 | ### | | | 0 | | |
| 11 | | | | ### | | | 0 | | |
| 12 | X | | | ### | | | 0 | | Sample SI-7-B5-B collected at 11.6-12.0 |

NOTES: E.O.B. at 12.0 feet

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276630000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B5 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 13.59 | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little cmf Gravel, trace Silt & pieces of Rock Wood (1.5-1.7') | F | | | 0.0 ppm |
| 2 | | | | | Brown cmf SAND, little Silt Clay & f Gravel | F | | | |
| | | | 63 | | | | | | |
| 3 | | | | | Black cmf SAND & mf Gravel trace Silt | | | | |
| 4 | | | | | Black & Dark Brown cmf SAND, little Silt & mf Gravel & pieces of glass, concrete wood | F | | | 1 GW. 5.0 |
| 5 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & clay & pieces of Rock | | | | |
| 6 | | | | | | | | | |
| | | | 25 | | | | | | |
| 7 | | | | | Black cmf SAND and GRAVEL, little Silt & pieces of Rock, glass etc. | F | | | 1.0 ppm Oily |
| 8 | | | | | | | | | |
| 9 | A | | | | Wood (9.0-9.5') | | | | |
| 10 | | | 29 | | Black cmf SAND, little Silt, trace clay & pieces of Rock, Wood, glass | F | | | 0.0 ppm |
| 11 | | | | | | P | | | |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0' (Refusal)

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276990000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B6 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: 13.48 | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (PPM) |
| | | | | | Dark Brown & Pale green cmf SAND, little Silt, trace clay & pieces of shell | F | | | 0 PPM |
| 1 | | | | | | | | | |
| | | | | | Black mf SAND & shell | | | | |
| 2 | | | 63 | | cmf SAND | | | | 0 PPM |
| | A-1 A-2 | | | | | | | | |
| 3 | | | | | Pale green cmf SAND, little Silt, trace clay | F | | | 0 PPM |
| 4 | | | | | | | | | Grd 4.0' |
| | | | | | | | | | |
| 5 | | | | | Black cmf SAND, little cmf Gravel, trace Silt | F | | | |
| | B | | | | | | | | |
| 6 | | | 13 | | | | | | |
| | | | | | | | | | |
| 7 | | | | | | | | | |
| | | | | | | | | | |
| 8 | | | | | Black cmf SAND & piece of Gravel. | F | | | 2 PPM oily odor |
| | C | | | | | | | | |
| 9 | | | | | Yellow cmf SAND and Gravel & concrete (9.0 - 9.2') | F | | | |
| 10 | | | 50 | | & pieces of glass | | | | |
| | | | | | White pieces of shell | | | | |
| 11 | | | | | | | | | |
| | | | | | Gray mft SAND, little Silt & pieces of shell | F | | | |
| 12 | D | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B6 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 13 | E | | | | Dark Gray m[illegible] SAND, little Silt, trace clay by pieces of shell | F/SP | | | 0 PPM |
| 14 | | | 83 | | by pieces of wood<br>Dark Gray cmf SAND, little Silt, trace clay, trace mf Gravel by pieces of white shell | SP | | | 0 PPM |
| 15 | F | | | | | | | | 0 PPM |
| 16 | | | | | Gray cmf SAND, little Silt by pieces of white shell | | | | |
| 17 | G | | | | Gray cmf SAND, little Silt, trace clay by pieces of shell | SP | | | 0 PPM |
| 18 | | | 87 | | | | | | |
| 19 | H | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B6 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: 13.48 | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown & Pale green cmf SAND, little Silt, trace clay w/ Pieces of shell | F | | | 0 PPM |
| 2 | | | 63 | | Black mf SAND w/ shell<br>cmf SAND | | | | 0 PPM |
| 3 | A-1<br>A-2 | | | | Pale green cmf SAND, little Silt, trace clay | F | | | 0 PPM |
| 4 | | | | | | | | | GWL 4.0' |
| 5 | | | | | Black cmf SAND, little cmf Gravel, trace Silt | F | | | |
| 6 | B | | 13 | | | | | | |
| 7 | | | | | | | | | |
| 8 | C | | | | Black cmf SAND w/ piece of Gravel. | F | | | 2 PPM oily odor |
| 9 | | | | | Yellow cmf SAND and Gravel w/ concrete (9.0 - 9.2') | F | | | |
| 10 | | | 50 | | w/ pieces of glass<br>White pieces of shell | | | | |
| 11 | | | | | Gray mf SAND, little Silt- | F | | | |
| 12 | D | | | | w/ pieces of shell | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B6 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray mf SAND, little Silt, trace clay by Pieces of shell | F/SP | | | 0 PPM |
| 14 | | | 83 | | by pieces of wood<br>Dark Gray cmf SAND, little Silt, trace clay, trace mf Gravel by pieces of white shell | SP | | | 0 PPM |
| 15 | | | | | | | | | |
| 16 | | | | | Gray cmf SAND, little Silt by pieces of white shell | | | | 0 PPM |
| | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B7 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: 13.54 | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Red & Brown cmf SAND, little Silt & clay w gravel, Pieces of Rock Brick etc | F | | | 0.0 PPM |
| 2 | | | 42 | | Red pieces of Brick, glass | | | | |
| 3 | A-1 A-2 | | | | Gray cmf SAND, trace clay, gravel w pieces of Rock | F | | | 0 PPM |
| 4 | | | | | | | | | |
| 5 | | | | | Reddish Brown cmf SAND, trace clay & F gravel w pieces of White Stock, Rock | F | | | 0 PPM |
| 6 | B | | 25 | | | | | | |
| 7 | | | | | | | | | Faint odor |
| 8 | C | | | | Black cmf SAND, little mf Gravel, trace Silt & Brick Wood Rock ela w Brick. | | | | 20 PPM Oily |
| 9 | D | | | | | | | | |
| | | | | | End of the Boring at 9.0' (Refusal) | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B8 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: 13.54 | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (PPM)) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little Silt, little cmf Gravel trace Silt wf Pieces of Rock Brick etc | | | | |
| 2 | | | | | Brick, glass, concrete | | | | |
| | | | 56 | | wf cmf Gravel, trace Silt | | | | |
| 3 | A | | | | Pieces of glass | | | | |
| | | | | | Brown cmf SAND, little Silt trace mf Gravel wf Brick glass etc | | | | |
| 4 | | | | | | | | | Gw-4.0 |
| 5 | | | | | Black cmf SAND, little Silt wf Pieces of rock, Brick, glass etc | | | | |
| 6 | B | | 50 | | Black cmf SAND, little Silt, trace clay + Gravel wf Pieces of rock, Brick glass | | | | 2.0 PPM |
| 7 | | | | | wf Brick, glass | | | | |
| 8 | | | | | | | | | |
| 9 | C | | | | Black cmf SAND, little cf Gravel, trace Silt wf Pieces of Rock (oily | | | | oily 185 PPM |
| 10 | | | 17 | | | | | | |
| 11 | | | | | | | | | |
| 12 | D | | | | Dark Gray mf SAND, little Silt, trace clay | | | | 1 PPM |

NOTES: End of the Boring at 12.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276890000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B9 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: 13.54 | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND, little cmf Gravel w/ pieces of Rock slab (concrete) (0.3 - 0.4) | F | | | 0.0 ppm |
| 1 | | | | | | | | | |
| 2 | | | 38 | | Brownish Red cmf SAND, little Silt w/ pieces of Brick cinder etc | F | | | 0 ppm |
| 3 | A | | | | Black & Gray cmf SAND, trace mf Gravel w/ white shell | F | | | 0 ppm |
| 4 | | | | | Brown cmf SAND, little cmf Gravel, trace Silt | F | | | 0 ppm |
| 5 | | | | | | | | | Gs. 4.0 |
| 6 | B | | 13 | | | | | | |
| 7 | | | | | Brown cmf SAND, little Silt & mf Gravel w/ pc of Rock | F | | | 0.0 ppm |
| 8 | C | | | | Black cmf SAND, little Silt w/ pieces of Gravel, shell wood etc | F | | | |
| 9 | | | | | | | | | |
| 10 | | | 44 | | Black cmf SAND, trace Silt & clay w/ piece of Gravel Shell etc w/ wire | F | | | 1.0 ppm |
| 11 | | | | | Black cmf SAND, little Silt w/ pieces of Rock, Gravel Brick etc | F | | | 1.0 ppm |
| 12 | D | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B9 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/06/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/06/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Gray mf SAND, little Silt, trace clay & pieces of shell | F | | | PID (ppm) 0.0 |
| 14 | | | | | Wood (14.2–14.5) | F | | | |
| 15 | | | | | Gray mf SAND, little mf Gravel, trace silt & pieces of shell | F/SP | | | 0.0 |
| 16 | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B10 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION / DATUM: soil surface (in crawlspace) | GWL: Depth: Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-2.5 ft. FILL dk. brown f. SAND. some gravel & concrete, tr. oyster shells, moist | | 0 | | approximately 8' from top of slab to soil |
| 2 | | | 2.1 | | | | 0 | | |
| 3 | X | | | | 2.5-3.2 ft. FILL reddish-brown f. SAND, tr. gravel, moist | | 0 | | Sample SI-7-B10-A collected at 2.8-3.2 ft. |
| 4 | | | | | 3.2-3.6 ft. FILL brown concrete and f. SAND, moist<br>3.6-4.0 ft. FILL dk. red.-brn. gravelly f. SAND, tr. glass,moist | | 0 | | |
| 5 | | | | | 4.0-8.0 ft. FILL dk. gray gravel & m. SAND, little glass & coal ash, saturated. | | 0 | | |
| 6 | X | | 0.6 | | | | 0 | | Sample SI-7-B10-B collected at 5.6-6.0 ft. |
| 7 | | | | | | | 0 | | poor recovery |
| 8 | | | | | | | | | |
| 9 | X | | | | 8.0-12.0 ft. FILL black f-m-c SAND, w./ glass, brick fragments, gravel, shells, saturated. | | | | Sample SI-7-B10-C collected at 8.6-9.0 ft. |
| 10 | | | 1.0 | | | | 1.5-15 | | oily sheen |
| 11 | | | | | | | | | |
| 12 | X | | | | | | 7.5 | | Sample SI-7-B10-D collected at 11.6-12.0 |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B10 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION / DATUM: soil surface (in crawlspace) | GWL: Depth: Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | ☒ | | | | 12.0-16.0 ft. FILL dk. gray m-c silty SAND, grading into gravelly SAND, some shells, gleyed, saturated | | 0 | | Sample SI-7-B10-E collected at 12.6-13.0 |
| 14 | | | | | | | 0 | | probably hydraulic fill |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| | | | | | E.O.B. at 16.0 feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B11 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION / DATUM: top of soil 8 ft below slab | GWL: Depth: 3.9 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ☒ | | 2.0 | ### | 0-4.0 ft. FILL dk. brown f. SAND and concrete fragments, some gravle, silty horizons, moist. | | 0 | | Sample SI-7-B11-C collected at 0-0.4 ft. |
| 2 | | | | | | | 0 | | |
| 3 | ☒ | | | | | | 0 | | Sample SI-7-B11-A collected at 2.6-3.0 ft. |
| 4 | | | | | | | 0 | | |
| 5 | | | 0.6 over 2 ft | ### | 4.0-6.0 ft. FILL gravellly f-m-c SAND w./ glass, metal fragments, saturated. | | 0 | | |
| 6 | ☒ | | | | | | 0 | | Sample SI-7-B11-B collected at 5.6-6.0 ft. |
| | | | | | **E.O.B. at 6.0 feet (refusal)** | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B12 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: 13.56 | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little Silt, trace clay & pieces of wood, rock, shell etc. | F | | | 0.0 ppm |
| 2 | | | | | cmf Gravel, glass, wood | | | | 0.0 ppm |
| 3 | A | | 38 | | Brown cmf SAND, little Silt, trace f Gravel | F | | | |
| 4 | | | | | Black & Brown cmf SAND, trace silt, trace f Gravel | | | | 0.0 ppm |
| 5 | | | | | Brown & Black cmf SAND, little Silt, trace mf Gravel & piece of Rock | F | | | 0.3 ppm |
| 6 | B | | 35 | | Black cmf SAND, little mf Gravel & piece of Rock wood, glass etc | F | | | |
| 7 | | | | | ↓ | | | | 0.0 ppm |
| 8 | C | | | | Grey cmf SAND, little Silt-trace clay & piece of Rock wood etc | | | | |
| 9 | D | | 13 | | glass, plastic, Brick Black cmf SAND, little Silt trace f Gravel & pcs of Rock | F | | | 0.3 ppm |
| 10 | | | | | End of the Boring at 9.5' (Refusal) | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276990000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B13 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: 13.71 | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little Silt, trace clay & Piece of Rock, wood, Shell etc | F | | | 0.0 ppm |
| 2 | A | | 50 | | Black mf Gravel, cement Brick | | | | |
| 3 | | | | | Dark cmf SAND, little Silt trace mf Gravel, cinderete | F | | | GWL- 4.0' 0.0 ppm |
| 4 | | | | | Brown cmf SAND, little Silt, trace clay | | | | |
| 5 | | | | | | | | | |
| 6 | B | | 38 | | Black cmf SAND, little Silt & mf Gravel | F | | | 0.0 ppm |
| 7 | | | | | Pieces of Brick, glass | F | | | |
| 8 | | | | | Black cmf SAND, little Silt, trace clay & Brick Plastic etc | F | | | 0.0 ppm |
| 9 | C | | | | Whitish Gray CLAY & SILT & Piece of Rock, wood etc | F | | | 0.0 ppm |
| 10 | | | 48 | | Black cmf SAND, little Silt, trace clay & Piece of wood, Rock etc | F | | | 0.0 ppm |
| 11 | | | | | | | | | |
| 12 | D | | | | Black cmf SAND, little Silt trace clay & Rock etc | | | | 2.5 ppm |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SB-17 - B13 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray SILT, little mf Sand, trace clay w/ Pieces of wood, Rock etc | F | | | PID ppm 0.0 ppm |
| 14 | | | | | | | | | |
| 15 | | | | | Dark Gray cmf SAND, little silt, trace clay w/ Pieces of white shell | SP | | | 0.0 ppm |
| 16 | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B14 | COORDINATES: | | DATE: | 10/30/03 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 2.0 ft | Date/Time: | TIME STARTED: | 7:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:10 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-0.5 ft. lt. brn. gravelly m-c SAND, some f. sand, poorly sorted, moist | | 0 | | |
| | | | | | 0.5-2.1 ft. FILL m. brown f. SAND, tr. c. sand, moist (wet at 2 ft) | | 0 | | |
| 2 | | | 3.4 | | | | | | |
| | | | | | 2.1-4.0 ft. FILL lt. gray to m. brown f. SAND, tr. clay, tr. c. sand, compact, saturated. | | 0 | | Sample SI-7-B14-A collected at 2.6-3.0 ft. |
| 3 | | | | | | | | | |
| | | | | | 4.0-4.8 ft. FILL (same as above) saturated | | 0 | | |
| 4 | | | | | 4.8-5.0 ft. dk gray CLAY, tr. plant remains, stiff, moist. | | 0 | | recent marsh deposit? |
| 5 | | | | | 5.0-6.0 ft. FILL dk. gray f. SAND, tr. m. sand, saturated. | | 0 | | |
| 6 | | | 4.0 | | | | | | Sample SI-7-B14-B collected at 5.6-6.0 ft. |
| | | | | | 6.0-8.0 ft. FILL dk gray f. SAND, some oyster shells, saturated (hydraulic fill) | | 0 | | |
| 7 | | | | | | | | | |
| | | | | | | | 0 | | |
| 8 | | | | | 8.0-12.0 ft. dk gray f-m SAND, some m. sand, saturated. | | 0 | | |
| 9 | | | | | | | | | Sample SI-7-B14-C collected at 8.6-9.0 ft. |
| | | | | | | | 0 | | |
| 10 | | | 2.6 | | | | | | |
| | | | | | | | 0 | | |
| 11 | | | | | | | | | |
| | | | | | | | 0 | | Sample SI-7-B14-D collected 11.6-12.0 ft. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B14 | COORDINATES: | | DATE: | 10/30/03 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 2.0 ft | Date/Time: | TIME STARTED: | 7:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:10 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.5 | | 12.0-16.0 ft (same as above) | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B15 | COORDINATES: | DATE: 10/30/03 | |
| ELEVATION / DATUM: top of soil 7.5 ft below slab | GWL: Depth: 5 ft Date/Time: | TIME STARTED: 8:20 | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.0 ft. reddish-brown f. SAND, tr. gravel, uniform, compact, moist. | | 0 | | |
| 2 | | | 1.5 | | | | 0 | | |
| 3 | ☒ | | | | | | 0 | | Sample SI-7-B15-A collected at 2.6-3.0 ft. |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-7.0 ft. m. brown f. SAND, tr. clay, tr. shells, moist, (saturated at 5.0 ft.), (hydraulic fill) | | 0 | | recent marsh deposit? |
| 6 | ☒ | | 2.8 | | | | 0 | | Sample SI-7-B15-B collected at 5.6-6.0 ft. |
| 7 | | | | | 7.0-8.0 ft. dk. gray (gleyed) f-m. SAND, tr. shells, poorly sorted, saturated. | | 0 | | |
| 8 | | | | | 8.0-12.0 ft. (same as above) | | 0 | | |
| 9 | ☒ | | | | | | 0 | | Sample SI-7-B15-C collected at 8.6-9.0 ft. |
| 10 | | | 1.8 | | | | 0 | | |
| 11 | | | | | | | 0 | | Sample SI-7-B15-D collected 11.6-12.0 ft. |
| 12 | ☒ | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B15 | COORDINATES: | DATE: | 10/30/03 |
| ELEVATION / DATUM: top of soil 7.5 ft below slab | GWL: Depth: 5 ft Date/Time: | TIME STARTED: | 8:20 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | ~2 | | 12.0-16.0 ft. dk. gray f. SAND w./ up to 40% oyster shells, saturated | | 0 | | possibly an undisturbed oyster bed. |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| 16 | | | | | E.O.B. at 16.0 feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-16 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Concrete slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 0 A 8 | | | | | Dark Brown & Gray cmf SAND, little Silt, little cmf Gravel by Pieces of Brick wood, glass | F | | | 0.0 ppm |
| 1 9 | | | | | | | | | |
| 2 B 10 | | | 58 | | Dark Gray cmf SAND, little Silt, trace f Gravel by Pieces of Rock, Brick wood, cinder | F | | | 0.0 ppm |
| 3 11 | | | | | | | | | |
| 4 C 12 | | | | | | | | | |

NOTES: A = 0 - 0.5'
B = 2.1 - 2.5
C = 3.5 - 4.0

JAE 2/17/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-16 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt, wy pieces of shell, wood | F | | | 0.0 ppm |
| 14 | | | 63 | | Dark Gray cmf SAND, little cmf Gravel, trace Silt wy pieces of white shell | SP | | | |
| 15 | | | | | wy Piece of wood | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | 67 | | | | | | |
| 19 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt wy pieces of shell | SP | | | 0.0 ppm |
| 20 | | | | | | | | | |
| 21 | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt wy piece of white shell | SP | | | 0.0 ppm |
| 22 | | | 63 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | Dark Gray SILT, some mf Sand, trace clay wy piece of white shell | ML/SP | | | 0.0 ppm |

NOTES: D = 4.5-5.5 E = 6.5-7.5 F = 8.5-9.5 G = 10.5-11.5 H = 12.5-13.5 JAR 2/17/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-17 | **COORDINATES:** | **DATE:** 04/27/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/27/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/27/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Concrete - slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Brown cmf SAND, little mf Gravel, trace Silt & pieces of shell, Rock | F | | | 0.0 ppm |
| 9 | | | | | | | | | |
| 10 | | | 60 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

A
B

NOTES:
4

A = 0-1
B = 2-3
C = 4-5

JAR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-17 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF | |

| | DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 13<br>5 | | | | | Dark Gray cmf SAND, little Silt, little f Gravel, trace clay. 4 piece of shell, Rock | F | | | |
| | 14<br>6 | | | 67 | | 4 mf Gravel | F | | | |
| D | 15<br>7 | | | | | | SP | | | |
| | 16<br>8 | | | | | Dark Gray cmf SAND, Some Silt, trace mf Gravel | SP | | | |
| E | 17<br>9 | | | | | | | | | |
| | 18<br>10 | | | 50 | | | | | | |
| F | 19<br>11 | | | | | SILT / CLAY | mh/CL | | | |
| | 20<br>12 | | | | | Dark Gray SILT, trace clay, little mf Sand 4 Piece of White Shell, wood (decomposed) | mh/CL | | | |
| G | 21<br>13 | | | | | | | | | |
| | 22<br>14 | | | 75 | | | | | | |
| H | 23<br>15 | | | | | Dark Gray cmf SAND, little Silt | SP | | | |
| | 24 | | | | | | | | | |

NOTES: TB

End of the Boring at 24.0'

D= 6-7 F= 10-11 H= 14-15

E= 8-9 G= 12-13

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-18 | **COORDINATES:** | **DATE:** 04/27/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/27/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/27/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | TOPSOIL | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Gray & Brown cmf SAND, little Silt, little mf Gravel & Piece of Rock | F | | | 0.0 PPM |
| 9 | | | | | | | | | |
| 10 | A | | 50 | | Dark Gray cmf SAND, little Silt, trace f Gravel & Piece of white shell | SP | | | 0.0 PPM |
| 11 | | | | | | | | | |
| 12 | B | | | | | | | | |

NOTES: A = 2 - 3
B = 4.0 - 4.5 JA 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-13-18 | **COORDINATES:** | **DATE:** 04/27/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/27/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/27/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| | DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 5 | | | | | Gray cmf SAND, little Silt, trace mf Gravel & pieces of shell | F | | | 0 PPM |
| | 13 | | | | | | | | | |
| | 6 | | | | | | | | | Gw L 13 ft |
| | 14 | | | 67 | | | | | | |
| D | 7 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & pieces of white shell | F | | | 0.2 PPM |
| | 15 | | | | | | | | | |
| | 8 | | | | | | | | | |
| | 16 | | | | | | | | | |
| E | 9 | | | | | | | | | |
| | 17 | | | | | | | | | |
| | 10 | | | | | | | | | |
| | 18 | | | 75 | | Dark Gray cmf SAND, little Silt, trace clay & Pieces of white shell | F | | | 0.0 PPM |
| F | 11 | | | | | | | | | |
| | 19 | | | | | | | | | |
| | 12 | | | | | | | | | |
| | 20 | | | | | | | | | |
| G | 13 | | | | | Dark Gray cmf SAND and SILT, trace f Gravel & pieces of white shell | SP/ ML | | | 0.0 PPM |
| | 21 | | | | | | | | | |
| | 14 | | | | | | | | | |
| | 22 | | | 67 | | | | | | |
| H | 15 | | | | | Dark Gray cmf SAND, little Silt, trace clay & pieces of white shell | SP | | | |
| | 23 | | | | | | | | | |
| | 16 | | | | | | | | | |
| | 24 | | | | | | | | | |

NOTES: End of the Boring at 24.0 feet.

C= 4.5-5.5 D= 6.5-7.5 E= 8.5-9.5 F= 10.5-11.5 G= 12.5-13.5

H= 14.5-15.5 JK 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-19 | **COORDINATES:** | **DATE:** 04/27/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/27/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/27/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | ↑ O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | ↓ | | | | |
| 7 | | | | | | | | | |
| A 8 | | | | | Dark Grey cmf SAND, little Silt, little mf Gravel, trace Silt & piece of shell, Rock, cinder & | F | | | 0.0 PPM |
| 9 | | | | | | | | | |
| 10 | | | 83 | | Black cmf SAND, little Silt, little mf Gravel & Pieces of Rock | | | | |
| B 11 | | | | | | F | | | CCL 11.5' |
| C 12 | | | | | ↓ | | | | |

NOTES: A= 0-1
B= 2-3
C= 4-5

JR 2-18-05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-13-19 | **COORDINATES:** | **DATE:** 04/27/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/27/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/27/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | | | | Dark Gray cmf SAND, little Silt, trace clay & Pieces of whit shell | F | | | |
| 13 | | | | | | | | | |
| 6 | | | | | | | | | 0.0 PPM |
| D 14 | | | 67 | | Dark Gray SILT & CLAY | | | | |
| 7 | | | | | Piece of Wood | | | | |
| 15 | | | | | Dark Gray cmf SAND, little Silt, trace clay | F | | | |
| E 8 | | | | | | | | | |
| 16 | | | | | Orange Brown cmf SAND, little Silt, little f Gravel trace clay | SP | | | |
| 9 | | | | | | | | | |
| 17 | | | | | | | | | |
| T 10 | | | 75 | | | | | | 0.0 PPM |
| 18 | | | | | | | | | |
| 11 | | | | | | | | | |
| 19 | | | | | | | | | |
| 12 | | | | | | | | | |
| 20 | | | | | | | | | |
| 13 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: D=6-7 E=8-9 F=10-11 JR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-19 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 4 8 | | | | | Dark Grey cmf SAND, little Silt, little mf Gravel, trace Silt & piece of shell, Rock, cinder etc | F | | | 0.0 PPM |
| 9 | | | | | | | | | |
| B 10 | | | 83 | | Black cmf SAND, little Silt, little mf Gravel & Pieces of Rock | | | | |
| 11 | | | | | | F | | | 0.0 PPM |
| C 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-19 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (IN) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Grey cmf SAND, little Silt, trace clay & Piece of Wall shell | F | | | 0.0 PPM |
| 14 | | | 67 | | Dark Gray SILT & CLAY | | | | |
| 15 | | | | | Piece of Wood | F | | | |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace clay | | | | |
| 17 | | | | | Orange Brown cmf SAND, little Silt, little F Gravel trace clay | SP | | | 0.0 PPM |
| 18 | | | 75 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | 83 | | | | | | |
| 22 | | | | | End of Boring at 22.0' Refusal due to boulder (bail material caved in) | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: D=6-7 E=8-9 F=10-11 G=12-13 H=14-14.5 JAR 2/24/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B.20 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab. | | | | |
| 2 | | | | | ↑ O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | ↓ | | | | |
| 0 | | | | | | | | | |
| A | | | | | Light Brown & Gray cmf SAND, little mf Gravel, trace Silt & pieces of Rock wood, glass | F | | | 0.0 PPM |
| 8/1 | | | | | | | | | |
| 10/2 | | | 63 | | Gray and Brown cmf SAND, little Silt, trace clay, trace f Gravel & pieces of decomposed wood | F | | | 0.0 PPM |
| B | | | | | | | | | |
| 11/3 | | | | | | | | | |
| 12/4 | | | | | ↓ | | | | |

NOTES:

A = 0-1
B = 2-3
C = 4-5

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7. B-20 | **COORDINATES:** | **DATE:** 04 \| 28 \| 04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04 \| 28 \| 04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04 \| 28 \| 04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| C | | | | | Gray & Brown cmf SAND, little Silt, trace clay, trace f Gravel & pieces of Rock wood | F | | | 0.0 ppm |
| 13 5 | | | | | | | | | |
| 14 6 | | | 63 | | Black and Dark Gray cmf SAND, trace Silt, trace f Gravel & pieces of white shell | F | | | 0.0 ppm |
| D 15 7 | | | | | | | | | |
| 16 8 | | | | | Dark Gray cmf SAND, little Silt, trace clay, trace f Gravel & pieces of white shell | SP | | | 0.0 ppm |
| E 17 9 | | | | | | | | | |
| 18 10 | | | 58 | | | | | | |
| F 19 11 | | | | | | | | | |
| 20 12 | | | | | Black and Gray cmf SAND, little mf Gravel, trace Silt & pieces of white shell | SP | | | 0.0 ppm |
| G 21 13 | | | | | | | | | |
| 22 14 | | | 58 | | | | | | |
| H 23 15 | | | | | Orange & Brown cmf SAND, little mf Gravel, trace silt trace clay | SP | | | 0.0 ppm |
| 24 16 | | | | | | | | | |

NOTES:

End of the Boring at 24.a feet (from slab).

D = 6-7 F = 10-11
E = 8-9 G = 12-13 H = 14-15

MR 2/23/05

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B21 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 7.5 ft below slab | GWL: Depth: | ~4 ft Date/Time: | TIME STARTED: | 7:55 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:02 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | X | | | | 0-1.6 ft. FILL lt. gray f. SAND, tr. m. sand, tr. wood splinters, tr. c. sand, moist (hydraulic fill) | | 0 | | Sample SI-7-B21-A 0-1.0 ft (8:11) |
| | | | | | | | 0 | | |
| 2 | | | 2.9 over 4.5 ft. | | 1.6-3.4 ft. FILL concrete fragments, rusty-brown clayey silt/sand material (coal ash?), moist | | | | |
| 3 | X | | | | | | 0 | | Sample SI-7-B21-B 2.0-3.0 ft (8:15) |
| | | | | | 3.4-4.5 ft. FILL rusty brown to black silty f. sand material (looks like weathered coal ash or fly ash), moist | | 0 | | over-drove to 4.5 feet |
| 4 | | | | | | | | | Sample SI-7-B21-C |
| | X | | | | | | 0 | | 4.0-5.0 ft (8:17) |
| 5 | | | | | 4.5-6.5 ft. FILL dk gray rock fragments, & crushed stone, little f. sand, tr. wire, tr. glass, saturated. | | | | |
| | | | | | | | 0 | | |
| 6 | | | | | | | | | Sample SI-7-B21-D |
| | X | | 1.9 | | | | 0 | | 6.0-7.0 ft (8:28) |
| 7 | | | | | 6.5-8.5 ft. FILL lt gray crushed stone, gravel, some f-m-c sand, saturated | | | | |
| | | | | | | | 0 | | |
| 8 | | | | | | | | | Sample SI-7-B21-E |
| | X | | | | | | 0 | | 8.0-9.0 ft (8:33) |
| 9 | | | | | 8.5-9.0 ft. FILL lt gray f. SAND, little gravel, saturated. | | | | |
| | | | | | 9.0-12.5 ft. FILL dk gray to black f-m-c SAND concrete fragments, possible coal ash, saturated. | | 0 | | PID reading but no sheen or odor |
| 10 | | | | | | | | | Sample SI-7-B21-F |
| | X | | 0.8 | | | | 2.5 | | 10.0-11.0 ft (8:42) |
| 11 | | | | | | | | | |
| | | | | | | | 3.3 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B21 | COORDINATES: | DATE: | 04/28/04 |
| ELEVATION / DATUM: top of soil 7.5 ft below slab | GWL: Depth: ~4 ft Date/Time: | TIME STARTED: | 7:55 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 9:02 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | X | | | ### ### | (see above) | | 0 | | Sample SI-7-B21-G |
| 13 | | | | | 12.5-15.0 ft. lt gray sandy SILT, stiff, little shells (1-2 cm wide), gleyed, saturated (possibly native soil) | | 0 | | 12.0-13.0 ft (8:50) |
| 14 | X | | | | | | 0 | | Sample SI-7-B21-H 14.0-15.0 ft (8:59) |
| 15 | | | | | 15.0-16.5 ft. lt. brown f. SAND, tr. m. sand, tr. gravel, saturated. | | 0 | | |
| 16 | | | | | | | 0 | | |
| 17 | | | | | 16.5-20.5 ft. lt brown f. SAND, tr. m. sand, saturated. | | 0 | | |
| 18 | | | | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | | | 0 | | |
| 21 | | | | | **E.O.B. at 20.5 feet** | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-B-7-B-22 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 0/8 | | | | | | | | | |
| A 1/9 | | | | | Light Brown & Gray cmf SAND, little Silt, trace Gravel & pieces of wood. Rock & pieces of wood (1") | F | | | |
| 2/10 | | | 58 | | | | | | |
| B 3/11 | | | | | Black cmf SAND, some mf Gravel, trace Silt & pieces of Rock | F | | | Faint odor |
| 4/12 | | | | | | | | | |

NOTES: A = 0-1
B = 2-3

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-B-7-B-22 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| C 5 13 | | | 25 | | Gray mf SAND, little Silt, trace clay | F | | | 0.0 ppm |
| 6 14 | | | | | | | | | |
| D 7 15 | | | | | NO Recovery. | F? | | | |
| 8 16 | | | | | | | | | |
| E 9 17 | | | | | No Recovery | | | | |
| 10 18 | | | NR | | | F? | | | |
| F 11 19 | | | | | | | | | |
| 12 20 | | | | | Dark Gray mf SAND Some Silt, trace mf Gravel mf Pieces of wood, shell | F/ SP | | | 0.0 ppm |
| G 13 21 | | | | | | | | | |
| 14 22 | | | 54 | | | | | | |
| H 15 23 | | | | | Orange and Brown mf SAND, little Silt, trace mf Gravel. | SP | | | 0.0 ppm |
| 24 | | | | | | | | | |

NOTES: End of the Boring at 24.0'

C = 4-5 D = 6-7 E = 8-9 F = 10-11 G = 12-13

H = 14-15

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B23 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 7.5 ft below slab | GWL: Depth: | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:55 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.5 ft. FILL lt brown to gray-brown f. SAND, some gravel, tr. m. sand, tr. oyster shells, tr. rock fragments, moist, | | 0 | | Sample SI-7-B23-A 0-1.0 ft (10:05) |
| | | | | | | | 0 | | |
| 2 | | | 3.0 over 4.5 ft | | | | | | Sample SI-7-B23-B 2.0-3.0 ft (10:10) |
| 3 | | | | | | | 0 | | |
| | | | | | | | 0 | | |
| 4 | | | | | over-drove sampler to 4.5 ft. | | | | Sample SI-7-B23-C |
| | | | | | 4.5-7.3 ft. FILL (same as above) saturated at 4.5 feet | | 0 | | 4.0-5.0 ft (10:12) |
| 5 | | | | | | | | | |
| 6 | | | 1.6 | | | | 0 | | Sample SI-7-B23-D 6.0-7.0 ft (10:23) |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.5-12.5 ft. FILL black to dk. gray, concrete fragments crushed stone, silt (ash?), nails, shells, saturated. | | 0 | | Sample SI-7-B23-E 8.0-9.0 ft (10:33) |
| 9 | | | | | | | 0 | | |
| 10 | | | 1.3 | | | | 0 | | Sample SI-7-B23-F 10.0-11.0 ft (10:38) |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B23 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 7.5 ft below slab | GWL: Depth: | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:55 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.5-14.5 ft. FILL dk gray concrete fragments & back coal ash, stiff, saturated. | | 0 | | Sample SI-7-B23-G 12.0-13.0 ft (10:43) |
| 14 | | | 0.8 | | | | 0 | | Sample SI-7-B23-H 14.0-15.0 ft (10:46) |
| 15 | | | | | 14.5-16.5 ft. dk. gray sandy SILT to sand CLAY, some shells, tr. gravel, saturated (could be either fill or native material). | | 0 | | |
| 16 | | | | | | | 0 | | Sample SI-7-B23-I 16.0-17.0 ft (10:49) |
| 17 | | | | | 16.5-20.5 ft. olive-brown f. SAND, loose uniform, well sorted, saturated (native?) | | 0 | | |
| 18 | | | 4.0 | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | | | 0 | | |
| 21 | | | | | E.O.B. at 20.5 feet | | 0 | | |
| 22 | | | | | | | 0 | | |
| 23 | | | | | | | 0 | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-24 | COORDINATES: | DATE: 04/28/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/28/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/28/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 23 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 0 | | | | | | | | | |
| A 1 | | | | | Gray dmf SAND, little Silt, little mf Gravel & Pieces of Rock | F | | | |
| 9 | | | | | | | | | |
| 2 | | | | | | | | | |
| 10 | | | 83 | | Brown CLAY / SILT | | | | |
| B 3 | | | | | w/ Pieces of glass | | | | |
| 11 | | | | | Grey dmf SAND, little silt, trace f Gravel, trace clay & Pieces of shell | F | | | 0.0 PPM |
| 4 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

A = 0-1

B = 2-3

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-24 | COORDINATES: | DATE: 04/28/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/28/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/28/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| C 5/13 | | | | | Brownish Gray cmf SAND, little mf Gravel, trace Silt | F | | | |
| 6/14 | | | 83 | | Dark Gray cmf SAND, little silt, trace mf Gravel w Pieces of Rock, white shell w Pieces of Rubber | F | | | 0.0 ppm |
| D 7/15 | | | | | | | | | |
| 8/16 | | | | | | | | | |
| E 9/17 | | | | | Black cmf SAND, little mf Gravel, trace Silt w Pieces of concrete, wood | | | | 0.0 ppm |
| 10/18 | | | 87 | | w Ash, cinder | F | | | |
| F 11/19 | | | | | w Pieces of white shell | | | | |
| 12/20 | | | | | w Pieces of Brick | | | | |
| G 13/21 | | | | | Gray cmf SAND, little f Gravel, trace clay w Pieces of Rock, decomposed wood. | F/SP | | | 0.0 ppm |
| 14/22 | | | 63 | | Gray SILT, little silty clay w Pieces of shell | | | | |
| H 15/23 | | | | | Dark Gray cmf SAND & GRAVEL, trace silt, trace clay w Pieces of white shell | SP | | | 0.0 ppm |
| 16/24 | | | | | | | | | |

NOTES: C = 4-5, D = 6-7, E = 8-9, F = 10-11, G = 12-13, H = 14-15

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-24 | COORDINATES: | DATE: 04/28/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/28/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/28/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| I | | | | | | | | | |
| 17 | | | | | Light Brown & Red CLAY, little Silt, trace of Sand | CL | | | 0.0 PPM |
| 25 | | | | | (alternate bands of Silt and clay) | | | | |
| 18 | | | | | | | | | |
| 26 | | | 88 | | | | | | |
| 19 | | | | | | | | | |
| 27 | | | | | | | | | |
| 20 | | | | | ↓ by Piece of Rock. | | | | |
| 28 | | | | | End of the Boring at 28.0' (from slab) | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES: I = 16-17 JR 2/18/05

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B25 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 12:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | X | | 2.4 | | 0-4.0 ft. FILL dk brown f-m SAND, grades into silty sand, some gravel, rusty in ,lower 1.5 ft, stiff, moist. | | 0 | | Sample SI-7-B25-A 0-1.0 ft (12:40) |
| 2 | | | | | | | 0 | | |
| 3 | X | | | | | | 0 | | Sample SI-7-B25-B 2.0-3.0 ft (12:42) |
| 4 | | | | ▽ | | | 0 | | |
| 5 | X | | 3.2 | ### | 4.0-5.0 ft. FILL (same as above) saturated | | 0 | | Sample SI-7-B25-C 4.0-5.0 ft (12:50) |
| 6 | | | | ### | 5.0-8.0 ft. FILL dk gray f-m-c SAND, some gravel, tr. shells, tr. brick fragments, (horizons of coal and coal ash from 6.6-8 ft), saturated | | 0 | | |
| 7 | X | | | ### | | | 0 | | Sample SI-7-B25-D 6.0-7.0 ft (12:52) |
| 8 | | | | ### | | | 0 | | |
| 9 | | | 0.1 | ### | 8.0-12.0 ft. FILL (same as above) poor recovery | | | | almost no recovery (sample collected from drive shoe). |
| 10 | X | | | ### | | | 0 | | Sample SI-7-B25-E 10.0-11.0 ft (13:00) |
| 11 | | | | ### | | | | | |
| 12 | | | | ### | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B25 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 12:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | no recovery | | | | no recovery |
| 14 | | | 0.0 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | ### | 16.0-16.1 ft. FILL black organic muck & wood fragments, saturated. | | 0 | | |
| 17 | X | | | | 16.1-17.0 ft. FILL dk. gray c-m-f SAND, little gravel, saturated. | | 0 | | Sample SI-7-B25-H 16.0-17.0 ft (13:04) |
| 18 | X | | | | 17.0-19.0 ft. reddish-brown clayey c-m-f SAND, little silt, tr, gravel, pieces of weathered schist, saturated. (looks like glacial till but may be disturbed) | | 0<br>0 | | Sample SI-7-B25-H 18.0-19.0 ft (13:10) |
| 19 | | | | | 19.0-19.5 ft. m. brown f. sandy SILT, tr. c. sand, laminated, saturated. | | 0 | | Sample SI-7-B25-H |
| 20 | X | | | | 19.5-20.0 ft. reddish-brn. fmc clayey SAND, saturated (till?) | | | | 19.6-20.0 ft (13:20) |
| | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B26 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | ↑ O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | ↓ | | | | |
| A 8 | | | | | Light Brown & Black cmf SAND, little Silt, trace mf Gravel & pieces of Rock Bricks. | F | | | 0.0 PPM |
| 1 | | | | | | | | | |
| 9 | | | | | | | | | |
| 2 | | | 25 | | | | | | |
| B 10 | | | | | | | | | |
| 3 | | | | | Dark Gray cmf SAND, trace mf Gravel, trace Silt, trace clay & piece of Rock | F | | | 0.0 PPM |
| 11 | | | | | | | | | |
| 4 | | | | | | | | | |
| C 12 | | | | | | | | | |

NOTES: A = 0-1
B = 2-3
C = 4-5

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-13-26 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| E | | | | | | | | | |
| -5 | | | | | Pieces of Rock. | | | | |
| 13 | | | | | (Poor Recovery) | F | | | |
| -6 | | | | | | | | | |
| 14 | | | 5 | | | | | | |
| | | | (1CR) | | | | | | |
| D -7 | | | | | | | | | |
| 15 | | | | | Dark Gray cmf SAND, some Gravel | F | | | |
| -8 | | | | | | | | | |
| 16 | | | | | | | | | |
| E -9 | | | | | w/ Pieces of wood metal. | | | | |
| 17 | | | | | | | | | |
| -10 | | | 25 | | | | | | |
| 18 | | | | | Dark Gray cmf SAND, little silt, trace mf Gravel w/ pieces of Rock, shell | F | | | 0.5 ppm |
| F -11 | | | | | | | | | |
| 19 | | | | | | | | | |
| -12 | | | | | w/ Pieces of wood | | | | |
| 20 | | | | | | | | | |
| 13 | | | | | No Recovery | | | | |
| 21 | | | | | | | | | |
| 14 | | | | | Refusal at 21.5 (Rock slab) | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: D = 6.5 - 7.5 F = 10.5 - 11.5
E = 8.5 - 9.5

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B27 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 13:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | X | | 2.0 | | 0-2.0 ft. FILL m. brown c-m-f SAND, little gravel, moist (hydraulic fill) | | 0 | | Sample SI-7-B27-A 0-1.0 ft (13:55) |
| 2 | X | | | ### | 2.0-4.0 ft. FILL black to rusty brown coal ash, glass, metal (springs, sheet metal, bolts), moist | | | | Sample SI-7-B27-B 2.0-3.0 ft (14:00) |
| 4 | X | | 1.3 | ### | 4.0-8.0 ft. FILL dk. gray to black coal ash, concrate fragments, refractory brisk, and gravel in matrix of silty organic muck, saturated. (slight oily sheen and PHC odor) | | 2.2 | | Sample SI-7-B27-C 4.0-5.0 ft (14:10) poor recovery |
| 6 | X | | | | | | 3.3 | | Sample SI-7-B27-D 6.0-7.0 ft (14:15) |
| 7 | | | | | | | 0 | | |
| 8 | X | | 0.8 | ### | 8.0-12.0 ft. FILL rubber, screws, washers, in matrix of black silty muck, saturated. (slight oily sheen) | | 0 | | Sample SI-7-B27-E 8.0-9.0 ft (14:20) |
| 9 | | | | | | | 0 | | poor recovery |
| 10 | X | | | | | | 0 | | Sample SI-7-B27-F 10.0-11.0 ft (14:30) |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B27 | COORDINATES: | | DATE: | 04/28/04 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 13:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | | ### | 12.0-16.0 ft. FILL black & gray coal ash, metal, glass, uniform texture, saturated (incinerator ash?) | | 0 | | Sample SI-7-B27-G 12.0-13.0 ft (14:40) |
| 14 | X | | | ### | | | 0 | | Sample SI-7-B27-H 14.0-15.0 ft (14:50) |
| 15 | | | | ### | | | 0 | | |
| 16 | | | | ### | | | 0 | | |
| 17 | | | | | 16.0-18.0 ft. black f. sandy SILT, some clay, tr. shells, anaerobic odor, saturated. | | 0 | | |
| 18 | X | | | | | | 0 | | |
| 19 | | | | | 18.0-20.0 ft. dk. gray to black silty CLAY, plastic, saturated. | | | | Sample SI-7-B27-I 18.0-19.0 ft (14:55) |
| 20 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-7-B29 | COORDINATES: | DATE: | 04/29/04 |
| ELEVATION / DATUM: top of soil 8 ft below slab | GWL: Depth: 4 ft Date/Time: | TIME STARTED: | 8:15 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 9:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | X | | 1.8 | ### | 0-4.0 ft. FILL black to rusty brown weathered coal ash (coarse grained) w./ nails, gravel, wire, and greenish-blue coating on some grains (possible metal oxide), moist (wet at 4.0 ft) | | 0 | | Sample SI-7-B29-A 0-1.0 ft |
| 2 | | | | | | | 0 | | |
| 3 | X | | | | | | 0 | | Sample SI-7-B29-B 2.0-3.0 ft |
| 4 | | | | | | | 0 | | |
| 5 | X | | 0.8 | | 4.0-8.0 ft. FILL (same as above) saturated. | | 0 | | Sample SI-7-B29-C 4.0-5.0 ft |
| 6 | | | | | | | 0 | | |
| 7 | X | | | | | | 0 | | Sample SI-7-B29-D 6.0-7.0 ft |
| 8 | | | | | | | 0 | | |
| 9 | | | 0.0 | | no recovery | | | | no sample<br>sample probe hit strong resistance with no recovery (wooden barge??) |
| 10 | | | | | | | | | no sample |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-7-B29 | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION / DATUM: | top of soil 8 ft below slab | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 8:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | 2.6 | | 12.0-15.2 ft. dk. gray sandy CLAY, some silt, tr. shells, stiff, saturated. (upper 0.2 ft. is black with slight PID reading). possibly native soil. | | 0.3 | | Sample SI-7-B29-E 12.0-13.0 ft (09:00) |
| 14 | | | | | | | 0 | | |
| 15 | X | | | | | | 0 | | Sample SI-7-B29-F 14.0-15.0 ft (09:05) |
| 16 | | | | | 15.2-16.0 ft. dk. gray f-m-c- SAND, little gravel, tr. silt, saturated | | 0 | | |
| 17 | X | | 1.2 | | 16.0-20.0 ft. (same as above) possibly native soil | | 0 | | Sample SI-7-B29-G 160-17.0 ft (09:20) |
| 18 | | | | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | | | 0 | | |
| 21 | | | | | E.O.B. at 20.0 feet | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-30 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | ↑ | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | ↓ | | | | |
| 7 | | | | | | | | | |
| 0 8 | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt- | | | | |
| A 1 9 | | | | | w/ pieces of wood, Rock. | F | | | 0.0 ppm |
| 2 10 | | | 42 | | w/ pieces of wood. | | | | |
| B 3 11 | | | | | | | | | |
| 4 12 | | | | | Dark Brown cmf SAND, little mf Gravel, trace Silt, trace clay w/ Piece of Rock, wood | F | | | 0.0 ppm |

NOTES:
A = 0-1
B = 2-3 JR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B30 | **COORDINATES:** | **DATE:** 04/28/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/28/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/28/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| C 5/13 | | | | | Dark Brown & Gray cmf SAND, little Silt, trace clay w/ Pieces of Rock, wood | | | | |
| 6/14 | | | 67 | | Black SILT, some mf Sand, trace clay w/ Pieces of Rock, wood. | | | | 12 PPM odor |
| D 7/15 | | | | | ↓ | | | | |
| 8/16 | | | | | Dark Gray mf SAND, little Silt, trace clay w/ Pieces of Brick, wood, cinder | | | | |
| E 9/17 | | | | | ↓ | | | | 10 PPM |
| 10/18 | | | 73 | | | | | | |
| F 11/19 | | | | | w/ Pieces of wood. | | | | |
| 12/20 | | | | | | | | | |
| G 13/21 | | | | | Dark Gray SILT/CLAY, Some f Sand, little f Gravel w/ Pieces of Rock | | | | 0.0 PPM |
| 14/22 | | | 96 | | | | | | |
| H 15/23 | | | | | Dark Gray cmf SAND, Some mf Gravel, trace Silt | | | | 0.0 PPM |
| 16/24 | | | | | | | | | |

NOTES: End of the Boring at 24' (from slab)

C = 4-5 D = 6-7 E = 8-9 F = 10-11 G = 12-13 H = 14-15

LR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-31 | **COORDINATES:** | **DATE:** 04/29/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/29/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/29/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 3 | |

| | DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | | | | Concrete slab | | | | |
| | 2 | | | | | ↑ O P E N ↓ | | | | 0.1 ppm |
| | 3 | | | | | | | | | |
| | 4 | | | | | | | | | |
| | 5 | | | | | | | | | |
| | 6 | | | | | | | | | |
| | 7 | | | | | | | | | |
| A | 8 | | | | | Light Gray cmf SAND, little Silt, trace f Gravel by pieces of leaf, wood shell | F | | | 0.1 ppm |
| | 1 | | | | | | | | | |
| | 2 | | | | | | | | | |
| B | 10 | | | 86 | | Brownish Gray cmf SAND, little Silt, trace f Gravel by pieces of wood, shell | F | | | 0.0 ppm |
| | 3 | | | | | | | | | |
| | 11 | | | | | | | | | |
| | 4 | | | | | | | | | |
| C | 12 | | | | | Brown SILT, little f Sand Gray f SAND, little silt/clay | F | | | 0.0 ppm |

NOTES:

A = 0-1 C = 4-5

B = 2-3

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-31 | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 5 13 4 14 D 7 15 8 16 E 9 17 10 18 F 11 19 12 20 G 13 21 14 22 H 15 23 24 | | | 83 | | Dark Gray mf SAND, little Silt, trace mf Gravel, trace clay & piece of shell class) | F | | | |
| | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & pieces of White shell | | | | 0.0 ppm |
| | | | 37 | | Dark Gray cmf SAND, trace Silt, trace f Gravel & Pieces of White shell | F | | | 0.0 ppm |
| | | | | | Dark Gray mf-f SAND, trace Silt, trace clay | | | | |
| | | | 83 | | Dark Gray cmf SAND, little Silt, trace clay & Pieces of shell | F | | | |
| | | | | | Brownish Gray SILT/CLAY, little mf Sand | Cl/Inc | | | 0.3 ppm |

NOTES: D = 6.5 - 7.5 F = 10.5 - 11.5 H = 14.5 - 15.5
E = 8.5 - 9.5 G = 12.5 - 13.5

HP 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-31 | **COORDINATES:** | **DATE:** 04/29/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/29/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/29/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 16.5 | | | | | | | | | |
| I | | | | | Dark Gray and Black CLAY, trace Silt | CL/ML | | | 588 ppm |
| 17.5 | | | | | | | | | |
| 25 | | | | | | | | | |
| 26 | | | 96 | | | | | | |
| 27 | | | | | Dark Gray & Brown CLAY/ SILT, trace f Sand | CL/ML | | | 0.0 ppm |
| 28 | | | | | | | | | 0. |
| | | | | | End of the Boring at 28.0' (from slab) | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES: I = 16.5 - 17.5 JR 2/18/05

# SOIL BORING LOG

amec

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-32 | **COORDINATES:** | **DATE:** 05/05/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/05/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/05/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 **OF** 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab (6") | | | | |
| 1 | | | | | ↑ 0 | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | ↓ | | | | |
| 7 | | | | | | | | | |
| 0 8 | | | | | | | | | |
| A 1 9 | | | | | Brown and Pale green cmf SAND, trace Silt, little clay & F Gravel by Pieces of Rock, glass, concrete | F | | | 0.1 PPM |
| 2 10 | | | 42 | | by Pieces of Concrete. | | | | |
| B 3 11 | | | | | Dark Gray cmf SAND, little Silt, trace F Gravel trace Silt by Pieces of Rock wood | F | | | |
| 4 12 | | | | | | | | | |

NOTES: A = 0-1
B = 2-3

JL 2/18/05

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-32 | **COORDINATES:** | **DATE:** 05/05/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/05/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/05/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 3 | |

| | DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 5 | | | | | Black cmf SAND, little cmf Gravel, trace Silt & Pieces of Rock, metal. | F | | | 0.1 ppm |
| | 13 | | | | | | | | | |
| | 6 | | | | | & Pieces of Rock | | | | |
| | 14 | | | 67 | | | | | | |
| D | 7 | | | | | & Pieces of metal. | F | | | |
| | 15 | | | | | | | | | |
| | 8 | | | | | & Pieces of Brick | | | | |
| | 16 | | | | | | | | | |
| | | | | | | Brownish Black cmf SAND, little mf Gravel, trace Silt, trace clay & Pieces of cinder, ash | F | | | |
| E | 9 | | | | | | | | | |
| | 17 | | | | | | | | | |
| | 10 | | | | | | | | | 0.0 ppm |
| | 18 | | | 73 | | | | | | |
| F | 11 | | | | | | | | | |
| | 19 | | | | | | | | | |
| | 12 | | | | | & Pieces of Wood. | | | | |
| | 20 | | | | | | | | | |
| G | | | | | | Black SILT/CLAY, trace f Gravel and Sand | | | | |
| | 13 | | | | | | F | | | |
| | 21 | | | | | & Pieces of Wood. | | | | |
| | 14 | | | | | | | | | |
| | 22 | | | 75 | | | | | | |
| H | 15 | | | | | Dark Grey cmf SAND, little Silt, trace clay & Pieces of shell, Wood. | | | | 0.0 ppm |
| | 23 | | | | | | | | | |
| | 16 | | | | | | | | | |
| | 24 | | | | | & Pieces of Rubber | F | | | |

NOTES: C = 4-5 D = 6-7 E = 8-9 F = 10-11 G = 12-13 H = 14-15

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B32 | **COORDINATES:** | **DATE:** 05/05/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/05/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/05/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 17 25 | | | | | Gray cmf SAND, some clay, little Silt & pieces of wood. | CL/SM | | | 0.0 PPM |
| 18 26 | | | 73 | | ↓ | | | | |
| 19 27 | | | | | & Pieces of decomposed wood | | | | |
| 20 28 | | | | | & wood | | | | |
| 22 29 | | | | | End of the Boring at 28.0' (Rock slab) | | | | |
| 23 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-33 | **COORDINATES:** | **DATE:** 05/11/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/11/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/11/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | ↑ | | | | |
| 3 | | | | | O | | | | |
| 4 | | | | | P | | | | |
| 5 | | | | | E | | | | |
| 6 | | | | | N | | | | |
| 7 | | | | | ↓ | | | | |
| 8 | A 1 | 8 | | | Pale Green cmf SAND, little Silt, trace f Gravel by Pieces of Brick, wood, | F | | | 0.0 PPM |
| 9 | | 2 | 63 | | by Pieces of glass, Roots. | | | | |
| 10 | B 3 | 10 | | | Brown cmf SAND, little Silt, little cmf Gravel, trace clay by Piece of Rock, cinder wood. | F | | | |
| 11 | | 4 | | | Brown cmf SAND, little Silt trace mf Gravel, trace Clay by Rock | F | | | 0.0 PPM |
| 12 | C 5 | 12 | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-33 | **COORDINATES:** | **DATE:** 05/11/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/11/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/11/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 3 | |

| | DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | 6 13 | | | | | w/ Pieces of Wood, Plastic | | | | 0.0 PPM |
| D | 7 14 | | | 67 | | White & Gray mf SAND, little clay w Pieces of Wood. Rock | | | | |
| | 8 15 | | | | | Dark Gray c/mf SAND, little Silt | | | | 29 PPM |
| E | 9 16 | | | | | Brown CLAY | | | | |
| | 10 17 | | | | | Dark Gray mf SAND | | | | 13 PPM sheen |
| F | 11 18 | | | 75 | | Brown CLAY | | | | |
| | 12 19 | | | | | Dark Gray mf SAND, little Silt, trace clay | | | | 5 PPM |
| G | 13 20 | | | | | Dark Gray c/mf SAND, little Silt, trace clay, trace mf Gravel | | | | 9 PPM |
| | 14 21 | | | | | | | | | |
| | 15 22 | | | 52 | | Dark Gray c/mf SAND, little Silt, trace clay | | | | |
| H | 16 23 | | | | | Dark Gray c/mf SAND, little Silt, trace clay, trace f Gravel w Pieces of Shell | | | | 0.0 PPM |
| | 17 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-13-33 | **COORDINATES:** | **DATE:** 05/11/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/11/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/11/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 18 25 | | | 50 | | Dark Gray cmf SAND, little Silt, trace clay, trace f Gravel by pieces of shell | | | | 0.0 PPM |
| 19 26 | | | | | | | | | |
| 20 27 | | | | | End of the Boring at 27.0' (from slab) | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-34 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| A-1,2 1 | | | | | Dark Brown cmf SAND, little Silt, trace f Gravel w/ pieces of Rock | | | | |
| 2 | | | | | w/ pieces of Concrete. | F | | | 0.0 ppm |
| B 3 | | | 63 | | Dark Brown cmf SAND, little cmf Gravel, trace Silt w/ pieces of Rock | | | | |
| 4 | | | | | Brownish Gray cmf SAND, little Silt, trace cmf Gravel, | F | | | |
| C 5 | | | | | w/ pieces of Brick, shell | | | | 0.0 ppm |
| 6 | | | 67 | | w/ cmf Gravel | | | | |
| D 7 | | | | | w/ pieces of concrete Rock | | | | Ref. T.O' |
| 8 | | | | | Black cmf SAND, little Silt trace clay | F | | | |
| E 9 | | | | | | | | | |
| 10 | | | 71 | | Black cmf SAND, little mf Gravel, trace Silt w/ | F | | | 0.0 ppm |
| F 11 | | | | | Pieces of Rock, Bricks. Cinders | | | | |
| 12 | | | | | ↓ | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-34 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| G 13 | | | | | Black cmf SAND, little cmf Gravel, trace Silt trace clay & Piece of Rock | F | | | |
| 14 | | | 67 | | | | | | |
| H 15 | | | | | | | | | 1 ppm 15-16' Sheen |
| 16 | | | | | Piece of Wood (16-18') | F | | | |
| 17 | | | | | | | | | 0.0 ppm |
| 18 | | | 63 | | Brownish Gray CLAY, little Silt | CL | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-35 | **COORDINATES:** | **DATE:** 07/19/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/19/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete / slab | | | | |
| 1 | | | | | Gray & Brown cmf SAND, little Silt, trace mf Gravel & Rock, concrete | F | | | |
| 2 | | | | | | | | | 0.0 |
| 3 | | | 76 | | Yellowish Brown cmf SAND, little Silt, trace mf Gravel trace clay & pieces of Rock, wood. | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Brownish yellow cmf SAND, little Silt, trace clay & pieces of shell Rock, gravel | F | | | 0.0 |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | 70 | | Gray & Brownish yellow cmf SAND, some Silt, trace mf Gravel, trace clay & pieces of shell | F | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | | | Gray cmf SAND, little mf Gravel, trace Silt trace clay & pieces of Shell | F | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

A- B C D E F

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-35 | COORDINATES: | DATE: 07/19/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/19/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID CB04 |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 77 | | Gray cmf SAND, little Silt, trace mf Gravel by Pieces of shell | f | | | Hydrate Gel 0.0 |
| 14 | | | | | | | | | |
| 15 | | | | | Gray cmf SAND, little Silt, trace clay by Pieces of shell | f | | | Hydrate Gel 0.0 |
| 16 | | | | | | | | | |
| 17 | | | 70 | | | | | | |
| 18 | | | | | Gray cmf SAND, little Silt, trace clay by Pieces of shell | f | | | Hydrate Gel |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | 68 | | Gray cmf SAND, little Silt trace clay | sm | | | 0.0 |
| 22 | | | | | | | | | |
| 23 | | | | | Gray SILT, little mf Sand, trace clay | ml sm | | | 0.2 |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-35 | **COORDINATES:** | **DATE:** 07/19/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/19/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/19/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Gray SILT, little of Sand trace clay | | | | Piezometer 0-2 |
| 25 | | | | | End of the Boring at 25.0' | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-36 | COORDINATES: | DATE: 07/19/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/19/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/19/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete/ slab | | | | |
| 1 | | | | | | | | | |
| A-1 A-2 2 | | | | | Gray & Brown mf SAND, little mf Gravel, trace Silt & Pieces of Rock, wood, cement. | F | | | 0.0 |
| 3 | | | 60 | | | | | | |
| B 4 | | | | | Gray cmf SAND, little Silt, trace mf Gravel | F | | | 0.0 |
| 5 | | | | | | | | | |
| C 6 | | | | | Gray and Black cmf SAND, some GRAVEL, little Silt, trace clay & Pieces of Rock. | F | | | 0.0 |
| 7 | | | | | | | | | |
| D 8 | | | 77 | | Brown | | | | |
| 9 | | | | | Greyish Brown cmf SAND, little mf Gravel, trace Silt, trace clay & Pieces of Rock | F | | | 0.0 |
| E 10 | | | | | | | | | BSL- 10.0' |
| 11 | | | 72 | | Grey cmf SAND, little mf Gravel, little Silt & Pieces of Rock, wood chaby | F | | | 0.0 |
| F 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-36 | COORDINATES: | DATE: 07/19/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/19/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/19/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS ppm |
|---|---|---|---|---|---|---|---|---|---|
| 13 | G | | | | Black and Gray cmf SAND, little Silt, trace mf Gravel by Pieces of wood, clothes concrete | F | | | 0.0 |
| 14 | | | | | ↓ | | | | |
| 15 | | | | | Black mf SAND, some Silt, trace clay by Pieces of Paper, wood | F | | | |
| 16 | H | | 77 | | | | | | 0.0 |
| 17 | | | | | Black cmf SAND, little Silt, trace mf Gravels, trace clay by Pieces of Brick, cinder | | | | |
| 18 | I | | | | ↓ | | | | 0.0 |
| 19 | | | | | by Pieces of Brick, wood | | | | sheen |
| 20 | | | | | Gray SILT, little mf Sand | F | | | |
| 21 | | | | | Dark Gray cmf SAND, little Silt, trace clay | | | | |
| 22 | J-1 | | 65 | | Gray cmf SAND and GRAVEL little Silt, trace clay by Pieces Brick, cinder Rock | | | | 0.0 |
| 23 | | | | | Gray SILT, little mf Sand trace clay | ML | | | |
| 24 | | | | | ↓ | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-36 | **COORDINATES:** | **DATE:** 07/19/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/19/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/19/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Gray SILT, little mf Sand trace Clay | ML | | | PID 0.0 |
| 25 | | | | | End of the Boring at 25.0 feet | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-37 | COORDINATES: | DATE: 07/19/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/19/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/19/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID Ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete / Asphalt | | | | |
| 2 | | | | | Asphalt / concrete | | | | |
| A 3 | | | 33 | | Brown cmf SAND, little mf Gravel, trace Silt & pieces of Brick, Rock, concrete | F | | | 0.0 |
| 4 | | | | | | | | | |
| B 5 | | | | | Dark Brown cmf SAND, little clay, little mf Gravel trace Silt & pieces of Rock | F | | | |
| 6 | | | | | | | | | 0.0 |
| C 7 | | | | | ↓ | | | | |
| 8 | | | 33 | | & pieces of Rock, Brick | | | | |
| D 9 | | | | | Black mf SAND, little Silt, trace mf Gravel & pieces of Rock, Brick. | F | | | 0.0 |
| 10 | | | | | | | | | |
| E 11 | | | | | Black/Grey mf SAND, little clay, trace mf Gravel & pieces of Rock, Wood, Brick | F | | | 0.0 |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-7-B-37 | COORDINATES: | DATE: 07/19/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/19/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/19/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS ppm |
|---|---|---|---|---|---|---|---|---|---|
| F | | | | | Gray cmf SAND and GRAVEL, little silt, trace clay & Piece of Rock, w. | F | | | 0.0 |
| 13 | | | 81 | | | | | | |
| 14 | | | | | Pieces of wood | F | | | sheen |
| G 15 | | | | | Black cmf SAND, little mf Gravel, trace silt, & Pieces of cinder, Rock | | | | 0.0 |
| 16 | | | | | | | | | |
| 17 | | | 77 | | Black cmf SAND, little cmf GRAVEL, trace silt & Piece of Rock, Black Brown & Gray cmf SAND, little mf Gravel, trace silt & Piece of Rock. | F | | | 0.0 |
| 18 | | | | | | | | | |
| H 19 | | | | | | F | | | |
| 20 | | | | | | | | | |
| 21 | | | NR | | No Recovery | F/CL | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** S1-7-B-37 | **COORDINATES:** | **DATE:** 07/19/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/19/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/19/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Gray CLAY | CL | | | |
| 26 | | | | | Gray cmf SAND, little Silt, trace clay & Pieces of shell | SP | | | 0.0 ppm |
| 27 | | | 58 | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | End of the Boring at 30.0' | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-38 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (PID (PPM)) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8" concrete slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| A-1 A-2 1 | | | | | Gray cmf SAND, little Silt, trace clay & Rodc | F | | | 0.0 PPM |
| 8 | | | | | | | | | |
| 2 | | | | | White concrete and mf Sand & Rodc, gravel. | F | | | |
| 10 | | | 70 | | | | | | |
| B- 3 | | | | | White concrete/ mf sand & gravel, Rodc | P | | | 0.0 PPM |
| 11 | | | | | | | | | |
| 12 | | | | | Black cmf SAND, little Silt trace mf Gravel & cinder, concrete | F | | | 0.0 PPM |

NOTES:

A, $A_2$ = 0-1

B = 2-3

JR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-38 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 4 | | | | | | | | | |
| C 5 13 | | | 40 | | Black and Dark Gray cmf SAND and GRAVEL, trace Silt w Pieces of Rock, wood cinders, coal ash | F | | | 0.0 PPM |
| 6 14 | | | | | | | | | |
| D 7 15 | | | | | | | | | |
| 8 16 | | | | | | | | | |
| E 9 17 | | | 67 | | Black and Gray cmf SAND little cmf Gravel, trace Silt- trace clay, Rock, Brick w Pieces of concrete, wood, | F | | | 0.0 PPM |
| 10 18 | | | | | | | | | |
| F 11 19 | | | | | w Pieces of concrete | | | | |
| 12 20 | | | | | Black and Brown cmf SAND, Some GRAVEL, little Silt- trace clay w Pieces of Rock Brick. | F | | | 0.0 PPM |
| 13 21 | | | | | | | | | |
| 14 22 | | | 30 | | | F | | | 0.0 PPM |
| 15 23 | | | | | | | | | |
| G 16 24 | | | | | | | | | |

NOTES: C = 4-5 D = 6-7 E = 8-9 F = 10-11 JR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-38 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 16 | | | | | Gray cmf SAND, little mf Gravel, trace clay | SP | | | |
| 17 25 | | | | | | | | | 0.0 |
| 18 26 | | | 60 | | Gray cmf SAND, little Silt, little mf Gravel trace clay | SP/CL | | | 0.0 |
| H 19 27 | | | | | Gray SILT/CLAY, trace f Sand & decomposed wood | CL | | | 0.0 |
| 20 28 | | | | | End of the Boring at 28.0' | | | | |
| 21 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES: H = 18-19 dk 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** S2-7-B-30 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8" Concrete slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | A | 1 | | | Gray and Black cmf SAND, little silt, trace clay & Pieces of Rock, wood, cinder | F | | | 0.0 ppm |
| 10 | | 2 | 60 | | concrete / rocks shells Brick | F | | | 0.0 ppm |
| 11 | B | 3 | | | | | | | |
| 12 | | 4 | | | Black cmf SAND, little silt & Piece of Brick & Piece of wood | F | | | 0.0 ppm |

NOTES: A = 0-1
B = 2-3

JR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-B-39 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 **OF** 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| C 13 | 5 | | | | Brownish Gray cmf SAND, little Silt, trace clay & Pieces of Rock, wood, Silt | F | | | 0.0 ppm |
| 14 | 6 | | 58 | | | | | | |
| D 15 | 7 | | | | Black & Gray cmf SAND, little Silt & Pieces of wood Rock | F | | | |
| 16 | 8 | | | | | | | | 0.0 ppm |
| E 17 | 9 | | 20 | | Black & Gray cmf SAND, little mf Gravel, trace Silt & Pieces of wood rock | F | | | |
| 18 | 10 | | | | | | | | |
| F 19 | 11 | | | | | | | | 1.0 ppm |
| 20 | 12 | | | | | | | | |
| G 21 | 13 | | | | Brownish Gray cmf SAND, little Silt, trace mf Gravel & Piece of wood. Brick. | F | | | |
| 22 | 14 | | 20 | | | | | | |
| 23 | 15 | | | | | F | | | 0.0 ppm |
| 24 | 16 | | | | | | | | |

NOTES: C = 4-5 D = 6-7 E = 8-9 F = 10-11 G = 12-13

JR 2/18/05

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-7-13-39 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Black cmf SAND, little Silt, trace clay & Piece of Rock | F | | | 0.0 ppm |
| 26 | | | 43 | | Red SILT, little F Sand & Piece of Rock (glacial till) | Till | | | 0.0 ppm |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | End of the Boring at 28.0' feet | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 27683000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-17-B1 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 13.42 | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brownish yellow cmf SAND, little Silt, trace mf Gravel | F | | | 0.0 PPM |
| 2 | | | 25 | | Brown cmf SAND, little Silt, trace F Gravel & Pieces of Rock | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | F | | | |
| 5 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel & Piece of glass, steel etc. | F | | | 0.0 PPM GBL: 5.0 |
| 6 | | | 42 | | & Piece of Plastic | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | A | | | | Dark Gray mf SAND, little Silt & mf Gravel & Pieces of White shell & clg. | SP | | | 2 PPM Paint odor |
| 10 | | | 75 | | & CLAY & silt | cl SP | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

End of the Boring at 12.0'

0-8" - Slab
8" - 7.0' - open (?)

Depth from ground surface. under the Slab

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-B1 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: 11.72 | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Gray cmf SAND, little silt trace f Gravel w concrete Rock etc | F | | | 0.0 ppm |
| | | | | | ↓ Brick | | | | |
| 2 | | | 79 | | ↓ Dark Gray cmf SAND, little Silt w Pieces of Rock wood etc | F | | | 0.0 ppm |
| 3 | | | | | Pieces of concrete, Brick etc | F | | | 0.0 ppm |
| 4 | | | | | ↓ | | | | |
| | | | | | Dark Gray & White cmf SAND w gravel, Brick etc | F | | | 0.0 ppm |
| 5 | | | | | | | | | |
| 6 | | | 67 | | Concrete Pieces of Rock, wood, Paper Plastic | | | | 0.0 ppm GWL. 7.0 |
| 7 | A | | | | End of the Boring at 7.0 | | Refusal. | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ shake Test. Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276090000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-B2 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: 11.48 | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little cmf Gravel & Brick Concrete, Rock etc. & wood | F | | | |
| 2 | | | 67 | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & pieces of Concrete wood, Brick etc | F | | | 0.0 PPM |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & pieces of Brick, concrete | F | | | 0.0 PPM |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Dark Gray cmf SAND, little Silt & mf Gravel & pieces of wood, Brick etc | F | | | 0.0 PPM |
| 7 | | | | | | | | | 9@ 8.5' |
| 8 | A | | | | pieces of Concrete (7 to 8.0') Dark Gray cmf SAND & Gravel & clay, Brick etc | F | | | 98 PPM odor. |
| 9 | | | | | End of the Boring at 8.5 | (Refusal) | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil / H2O Shake Test. Performed.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-B3 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: 10.19 | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | A | | 38 | | Dark Gray cmf SAND, little mf Gravel, trace Silt & pieces of Brick | F | | | PID (ppm) 0.0 ppm |
| 2 | | | | | Dark Gray cmf SAND, little Sat. & cement Rock etc<br>Dark Gray mf SAND, & Rock concrete etc | F | | | |
| 3 | | | | | End of the Boring at 2.0' (Refusal) | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ shake Test - Performed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-B4 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: 10.39 | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND little Silt, cmf Gravel by Piece of Concrete, Brick Wood, wire, metal cloth | F | | | 0.0 PPM |
| 2 | | | 83 | | Dark Gray cmf SAND, little Silt, trace clay by Pieces of Rock, Brick Wood. | F | | | 0.0 PPM |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | 63 | | Dark Gray cmf SAND, little cmf Gravels, little Silt by Brick, Plastic. Glass | F | | | 0.0 PPM |
| 6 | | | | | Brick | F | | | |
| 7 | A | | | | by concrete End of the Boring at 7.0' | | | | (Refusal) |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ Shake Test - Performed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-21-B10 | COORDINATES: | DATE: | 11/04/03 |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: 7.8 ft Date/Time: | TIME STARTED: | 12:40 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.2 | | 0-4.0 ft FILL dk. brown to reddish-brown crushed stone, brick fragments, and concrete, in f. sand matrix, tr. coal ash, moist. | | 0 | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | | | |
| 5 | | | 3.9 | | 4.0-8.0 ft. FILL (same as above) saturated at 7.8 ft | | 0 | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | | | |
| 9 | | | 2.0 | | 8.0-12.0 ft FILL dk. brown to reddish-brown concrete and brick fragments, little f. sand, saturated. | | 0 | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES: **E.O.B. at 12.0 ft (refusal)**

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-1311 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: ~~Geoprob Rig~~ Hollow Stem Auger. Split spoon Sampling | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | fill Material | F | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Ly concrete / wood | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | concrete slab | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/H2O Shake Test. Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-B11 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | S-1 | 12-14 | | | Grayish Green mf SAND, Some Silt, trace clay | F | | | PID 0.0 |
| 13 | | 8 | | | | | | | |
| | | 10 | 80 | | | | | | |
| | | 10 | | | | | | | |
| 14 | | 8 | | | | | | | |
| | S-2 | 14-16 | | | | | | | |
| | | 3 | | | | | | | |
| 15 | | 5 | | | | | | | 10 oily |
| | | 4 | 75 | | Black cmf SAND, little mf Gravel, trace Silt | F | | | faint odor |
| | | 3 | | | | | | | |
| 16 | | 16-18 | | | Dark Gray cmf SAND and GRAVEL, little silt & piece of Rock | F | | | 15 |
| | S-3 | 8 | | | | | | | |
| 17 | | 6 | | | | | | | sheen |
| | | 7 | 60 | | Dark Gray cmf SAND, little Silt, trace mf Gravel | | | | |
| | | 3 | | | | | | | |
| 18 | S-4 | 8 | | | | F | | | |
| | | 3 | | | Gray cmf SAND, little Silt, trace mf Sand | | | | |
| 19 | | 5 | 65 | | | | | | |
| | | 2 | | | Organic SILT, & Pieces of decomposed wood. | Pt. | | | |
| 20 | | | | | | | | | 0.0 |
| | | | | | (Rest) | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| | | | | | | Pt | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276080000 31 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-21-B11 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 25 | S-5 | 25-27 | | | Dark Gray CLAY & Peat & decomposed wood | OH/Pt | | | 0.0 |
| | S-5 | 5 | | | | | | | |
| | | 3 | 75 | | | | | | |
| 26 | | 2 | | | | | | | |
| | | 2 | | | | | | | |
| 27 | | 2 | | | End of the Boring at 27.0 | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-29-B1 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION / DATUM: top of soil (2 ft below slab) | GWL: Depth: ~2 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | ☒ | | 1.4 | ### | 0-4.0 ft. FILL coarse-grained coal ash (~90%) w./ gravel, saturated | | 0 | | Sample SI-29-B1-A 0-0.4 ft |
| 1 | | | | ### | | | | | |
| 2 | | | | ### | | | 0 | | |
| 3 | | | | ### | | | | | |
| 4 | ☒ | | | ### | | | | | Sample SI-29-B1-B 3.6-4.0 ft |
| 5 | | | | ### | 4.0-5.0 ft. FILL dk brown coal ash, nails, gravel, some silt & clay, saturated. | | 0 | | |
| 6 | ☒ | | 1.3 | | 5.0-8.0 ft. dk gray silty CLAY, some plant remains (marsh deposits), saturated. | | 0 | | Sample SI-29-B1-C 5.6-6.0 ft |
| 7 | | | | | | | 0 | | |
| 8 | ☒ | | | | 8.0-12.0 ft. (same as above) | | | | Sample SI-29-B1-D 7.6-8.0 ft |
| 9 | | | | | | | 0 | | |
| 10 | | | 2.4 | | | | | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

**E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| **PROJECT NUMBER:** | 276360000-0008 | **PROJECT NAME:** | *Former General Motors Assembly Plant Site, Sleepy Hollow, NY* | | |
| **BORING NUMBER:** | SI-29-B2 | **COORDINATES:** | | **DATE:** | 10/06/03 |
| **ELEVATION / DATUM:** | top of soil (1 ft below slab) | **GWL:** Depth: ~2 ft | Date/Time: | **TIME STARTED:** | |
| **ENGINEER/GEOLOGIST:** | D. Mackie | Depth: | Date/Time: | **TIME COMPLETED:** | 13:55 |
| **DRILLING METHODS:** | Geoprobe® / 4-foot Macrocore® sampler | | | **PAGE:** | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.0 ft. FILL lt orange brown crushed stone, concrete fragments, and silty f. sand, moist (saturated at 2.0 ft.). | | 0 | | |
| 2 | ☒ | | 1.2 | | | | | | Sample SI-29-B2-A 1.6-2.0 ft |
| 3 | | | | | | | 0 | | |
| 4 | ☒ | | | | | | | | Sample SI-29-B2-B 3.6-4.0 ft |
| 5 | | | | | 4.0-8.0 ft. FILL dk black organic rish muck mixed w./ coal ash and crushed stone, saturated. | | 0 | | |
| 6 | ☒ | | 1.5 | | | | 0 | | Sample SI-29-B2-C 5.6-6.0 ft |
| 7 | | | | | | | | | |
| 8 | ☒ | | | | 8.0-12.0 ft. dk. gray CLAY w./ plant remains (marsh deposits), saturated. | | 0 | | Sample SI-29-B2-D 8.0-8.4 ft |
| 9 | | | | | | | | | |
| 10 | | | 2.8 | | | | 0 | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | 0 | | |

NOTES:

**E.O.B. at 12.0 feet**

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-29-B3 | COORDINATES: | | DATE: | 10/07/03 |
| ELEVATION / DATUM: | top of soil (2 ft below slab) | GWL: Depth: | ~2 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:12 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-4.0 ft. FILL black coal ash, concrete fragments, and gravel, saturated throughout. | | 0 | | |
| 2 | ☒ | | 1.2 | | | | | | Sample SI-29-B3-A 1.6-2.0 ft |
| 3 | | | | | | | 0 | | |
| 4 | ☒ | | | | | | | | Sample SI-29-B3-B 3.6-4.0 ft |
| 5 | | | | | 4.0-5.0 ft. FILL black coal ash, concrete fragments, gravel, and clasts of gray clay, saturated. | | 0 | | |
| 6 | ☒ | | 1.5 | | 5.0-8.0 ft. gray CLAY, w./ peat material (marsh deposits), moist | | 0 | | Sample SI-29-B3-C 5.6-6.0 ft |
| 7 | | | | | | | | | |
| 8 | ☒ | | | | | | 0 | | Sample SI-29-B3-D 7.8-8.0 ft |
| 9 | | | | | **E.O.B. at 8.0 feet** | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| **PROJECT NUMBER:** | 276360000-0008 | **PROJECT NAME:** | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| **BORING NUMBER:** | SI-29-B4 | **COORDINATES:** | | **DATE:** | 10/07/03 |
| **ELEVATION / DATUM:** | top of soil (~1.5 ft below slab) | **GWL:** Depth: | ~2 ft Date/Time: | **TIME STARTED:** | |
| **ENGINEER/GEOLOGIST:** | D. Mackie | Depth: | Date/Time: | **TIME COMPLETED:** | 14:58 |
| **DRILLING METHODS:** | Geoprobe® / 4-foot Macrocore® sampler | | | **PAGE:** | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ☒ | | 1.2 | ### | 0-4.0 ft. FILL black coal ash, glass, and gravel, saturated throughout | | 0 | | Sample SI-29-B4-A 0-0.4 ft |
| 2 | ☒ | | | ### | | | | | Sample SI-29-B4-B 1.6-2.0 ft |
| 3 | | | | ### | | | 0 | | |
| 4 | ☒ | | | ### | 4.0-5.0 ft. FILL (same as above) | | 10-38 | | Sample SI-29-B4-C 4.0-4.8 ft |
| 5 | | | 1.6 | --- | 5.0-8.0 ft. dk gray CLAY, some plant remains (marsh deposits), saturated. | | 0 | | |
| 6 | ☒ | | | --- | | | | | Sample SI-29-B4-D 6.0-6.4 ft |
| 7 | | | | --- | | | 0 | | |
| 8 | | | | | **E.O.B. at 8.0 feet** | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276090000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B5 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4" Asphalt<br>10" Concrete | | | | |
| 1 | | | | | Black cmf SAND, some cmf Gravel, trace Silt lg pieces of Gravel, concrete wood, coal Ash | F | | | 0.0 ppm |
| 2 | | | 38 | | | | | | Coal Ash 2.0 to 4.0' |
| 3 | A | | | | | | | | |
| 4 | B | | | | Brown cmf SAND, little Silt, glass, coal Ash | F | | | 0.0 - 4.0' |
| 5 | | | | | Brown cmf SAND, little Silt, trace clay lg pieces of wood, Rock, Brick | F | | | 0.0 ppm |
| 6 | C | | 13 | | | | | | |
| 7 | | | | | | | | | |
| 8 | D | | | | Brown cmf SAND, little Silt, trace clay | | | | |
| 9 | | | | | Brown SILT (organic) lg decomposed wood | Pt | | | 0.0 ppm |
| 10 | | | 75 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | End of the Boring at 12.0' | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B6 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4" Asphalt<br>10" concrete | | | | |
| 1 | | | | | Black coal Ash w/ mf Sand, trace Silt, cinder | F | | | 0.5 ppm |
| 2 | | | 46 | | | | | | |
| 3 | A | | | | Dark Gray & Black, cmf SAND, little silt w/ coal Ash w/ pieces of Rock | F | | | 0.0 ppm |
| 4 | B | | | | | | | | Foot odor |
| 5 | | | | | Black & Brown cmf SAND, little Silt, trace clay w/ Pieces of Brick | F | | | 0.5 ppm |
| 6 | C | | 21 | | Brown cmf SAND, little Silt | SP SM | | | 6 ppm |
| | D | | | | | | | | |
| 7 | | | | | Brown SILT (Organic) w/ decomposed wood | Pt | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | 100 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0'

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276990000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29 B7 | COORDINATES: | DATE: 10/07/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 4" Asphalt- 10" slab concrete. | | | | |
| 2 | A | | 46 | | Coal Ash w/ sand, gravel, glass | F | | | 0.7 ppm |
| 3 | | | | | Pieces of glass | | | | |
| 4 | B | | | | Black & Brown c/f SAND, some m/f Gravel, trace Silt w/ pieces of Rock, Brick. | F | | | |
| 5 | C | | | | Dark Gray c/f SAND & m/f Gravel, trace Silt w/ Piece of Rock Brick | F | | | 0.0 ppm |
| 6 | D | | 17 | | Brown SILT (organic) w/ decomposed wood | ML/CL / Pt | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | 79 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B8 | COORDINATES: | DATE: 10/07/08 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/07/08 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/07/08 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID CRAW |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 4" Asphalt<br>10" Concrete slab | | | | 0.0 |
| 1 | | | | | Coal Ash w/ Sand Gravel. Rock etc | F | | | |
| 2 | A | | 67 | | | | | | Coal Ash 1.8 - 3.5' 0.2 PPM |
| 3 | | | | | Brownish yellow m/ SAND, Some Silt & clay w/ piece of concrete Coal Ash | F | | | |
| 4 | B | | | | | | | | |
| 5 | C | | | | Brown cm/ SAND, little m/ Gravel. trace Silt | F | | | |
| 6 | D | | 38 | | | F | | | |
| 7 | | | | | Brown SILT (organic) w/ decomposed wood | pt | | | |
| 8 | | | | | | | | | |
| 9 | | | | | End of the Boring at 6.5' | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

Fill material up to 6.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SL-29-B-9 | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6" Asphalt | | | | |
| | | | | | 6" concrete. | | | | |
| 1 | | | | | Dark Gray and Black cmf SAND, little f Gravel, trace Silt & Pieces of Brick | | | | |
| A 2 | | | 75 | | Coal Ash. cinder | F | | | 0.5 PPM |
| 3 | | | | | Black mf SAND, little Silt & pieces of Coal Ash. Cinder | | | | |
| B 4 | | | | | Dark Brown cmf SAND, | F | | | |
| | | | | | little mf Gravel, trace Silt & piece of Rock | | | | |
| 5 | | | | | Dark Gray CLAY | CL | | | 0.0 PPM |
| C 6 | | | | | Dark Brown SILT, trace clay & decomposed wood. (Peat) | Pt | | | |
| 7 | | | | | | | | | |
| D 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| E 10 | | | | | | Pt | | | 70 PPM |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-13+D | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4" Asphalt- | | | | |
| | | | | | 8" Concrete | | | | |
| 1 | | | | | Black cmf SAND, little Silt, trace mf Gravel, trace Silt/clay w Pieces of Rock Brick, glass etc | F | | | 0.2 PPM |
| A 2 | | | 62 | | | | | | |
| 3 | | | | | w Coal Ash | | | | |
| B 4 | | | | | Brown cmf SAND, little Silt/clay w Pieces of Rock | F | | | |
| 5 | | | | | Dark Gray CLAY | CL | | | 0.2 PPM |
| C 6 | | | 75 | | Brown SILT, little clay w Pieces of decomposed wood. (Peat) | Pt | | | |
| 7 | | | | | | | | | |
| D 8 | | | | | | | | | |
| 9 | | | | | | | | | 1 PPM |
| E 10 | | | 88 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-10 | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, trace clay w/ pieces of decomposed wood. | Pt | | | |
| 14 | | | 75 | | light Green cmf SAND, little Silt, trace clay, trace f Gravels w/ piece of wood (2-i.) | SP | | | 0.0 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0' feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-11 | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 3" Asphalt<br>Brown cmf SAND, little mf Gravel, trace Silt & Pieces of Brick, grass | F | | | 0.0 PPM |
| 2 | | | 63 | | Black cmf SAND, little mf Gravel, trace Silt & Coal Ash | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Green cmf SAND, little f Gravel, trace Silt & Pieces of metal, wood. | F | | | 0.0 PPM |
| 5 | | | | | & Pieces of metal, wood. | | | | |
| 6 | | | 38 | | Blackish Brown mf SAND, little Silt, trace f Gravel & Pieces of Rock, metal. | F | | | 1 PPM |
| 7 | | | | | | | | | |
| 8 | | | | | Gray cmf SAND, little Silt, trace clay | SP | | | |
| 9 | | | | | | | | | |
| 10 | | | 75 | | Gray CLAY | CL | | | 0.0 PPM |
| 11 | | | | | Brown SILT, trace clay & Pieces of decomposed wood | Pt | | | |
| 12 | | | | | | | | | |

A B C D E F

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-11 | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, little clay & pieces of decomposed wood. | Pt | | | 50 PPM |
| 14 | | | 88 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | 0.1 PPM |
| 18 | | | 96 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Brown and Gray SILT, little clay & pieces of decomposed wood. | Pt | | | |
| 21 | | | | | | | | | 2 PPM |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-11 | COORDINATES: | DATE: 04/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/29/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/29/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Brown SILT, trace clay w pieces of decomposed wood | PT | | | |
| 26 | | | 96 | | Gray cmf SAND, little Silt, trace clay w pieces of decomposed wood | SP | | | 0.0 PPM |
| 27 | | | | | | | | | |
| 28 | | | | | End of the Boring at 28.0' feet | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-12 | COORDINATES: | DATE: 04/30/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/30/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/30/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3" Asphalt | | | | |
| | | | | | 6" Concrete | | | | |
| 1 | | | | | Black cmf SAND, little Silt, trace mf Gravel by Pieces of Rock, coal ash wood | F | | | |
| 2 | | | 75 | | | | | | 1 ppm |
| | | | | | Coal Ash | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Brown mf SAND by Pieces of wood, coal Ash | | | | |
| 5 | | | | | Brownish yellow mf SAND, little Silt, trace clay by Pieces of Rock | | | | |
| 6 | | | 38 | | Brownish yellow mf SAND | | | | |
| | | | | | Dark Gray CLAY | CL | | | 0.0 ppm |
| 7 | | | | | Brown SILT, trace Pieces of decomposed wood | Pt | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | 15 ppm |
| 10 | | | 88 | | | | | | |
| 11 | | | | | | | | | 20 ppm |
| 12 | | | | | | | | | |

A B C D E F

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-12 | COORDINATES: | DATE: 04/30/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/30/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/30/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Brown SILT, trace clay by Pieces of decom- posed Wood | Pt | | | |
| 14 | | | 88 | | by Fine clay | | | | 15 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Brown SILT, some clay by pieces of decom- posed Wood | Pt | | | |
| 17 | | | | | | | | | 10 ppm |
| 18 | | | 85 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Dark Brown SILT and CLAY by Pieces of decomposed Wood | Pt CL | | | |
| 21 | | | | | | | | | |
| 22 | | | 90 | | Gray mf SAND, Fine Silt, trace clay by Pieces of Wood | SM | | | |
| 23 | | | | | | | | | 5 ppm |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-13 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Asphalt | | | | |
| 1 | | | | | Concrete | | | | |
| 2 | | | | | Black cmf SAND, little Silt, trace mf Gravel | F | | | |
| A 3 | | | 100 | | trace Silt w/ pieces of Coal Ash, cinder, Rock | | | | 0.0 PPM |
| 4 | | | | | Dark Gray and Brown CLAY, little Silt, trace | | | | |
| B 5 | | | | | mf Gravel. | | | | 0.0 PPM |
| 6 | | | 88 | | Brown SILT, trace clay w/ pieces of | F | | | |
| C 7 | | | | | decomposed wood. | PT | | | |
| 8 | | | | | | | | | |
| D 9 | | | | | | | | | 2 PPM |
| 10 | | | 81 | | | | | | |
| E 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-13 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| F | | | | | Brown SILT, little clay w/ pieces of decomposed wood | ML | | | |
| 13 | | | | | | | | | 0.0 ppm |
| 14 | | | 50 | | | | | | |
| G | | | | | Light Green & SAND, little silt, trace clay, trace f gravel w/ pieces of wood (2-1") | SP | | | 0.0 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| H | | | | | Pale green & SAND, little silt, trace clay | | | | 0.0 ppm |
| 17 | | | | | | | | | |
| | | | 70 | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | Green CLAY, little silt, trace f sand | | | | 0.0 ppm |
| 20 | | | | | End of the Boring at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-14 | COORDINATES: | DATE: 05/12/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/12/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/12/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Asphalt w/ sand, silt- w/ piece of Rock. | | | | |
| 2 | | | | | Concrete | | | | |
| A 3 | | | 75 | | Black cmf SAND, little Silt w/ coal ash, cinder | F | | | 18 PPM |
| 4 | | | | | Black SILT, trace f Sand w/ pieces of coal ash | | | | 79 PPM |
| B 5 | | | | | Black cmf SAND, little Silt, trace clay w/ pieces of Cal ash, rock. | F | | | |
| 6 | | | 38 | | No Recovery | | | | |
| C 7 | | | | | Gray cmf SAND, little cy Gravel, trace silt/clay | | | | 0.0 PPM |
| 8 | | | | | Dark Gray CLAY, trace Silt | CL | | | |
| D 9 | | | | | Brown SILT w/ pieces of decomposed wood. trace clay | Pt | | | |
| 10 | | | 83 | | | | | | 0.0 PPM |
| E 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-14 | COORDINATES: | DATE: 05/12/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/12/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/12/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, trace clay w/ pieces of decomposed wood | Pt | | | 3 ppm |
| 14 | | | 75 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Brown & Gray CLAY, some Silt w/ pieces of decomposed wood | CL/Pt | | | |
| 17 | | | | | | | | | 0.0 ppm |
| 18 | | | 67 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | 83 | | Dark Gray CLAY w/ pieces of decomposed wood | CL | | | |
| 23 | | | | | Pale green cmf SAND, little Silt, trace clay | SM | | | 0.0 ppm |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-15 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt | | | | |
| 1 | | | | | Concrete | | | | |
| A 2 | | | | | Black cmf SAND, little Silt, trace clay, trace mf Gravel w/ pieces of glass, plastic | | | | 0.0 ppm |
| 3 | | | 75 | | | | | | |
| B 4 | | | | | Brownish Gray cmf SAND, little Silt, trace clay, trace mf Gravel w/ pieces of Rock | | | | |
| 5 | | | | | ↓ | | | | |
| C 6 | | | 67 | | Dark Gray CLAY, trace Silt, trace f Sand | | CL | | |
| 7 | | | | | ↓ | | | | 0.0 ppm |
| D 8 | | | | | Brown SILT w/ pieces of decomposed wood. | | Pt | | |
| 9 | | | | | Brown SILT, trace clay w/ pieces of decomposed wood | | | | |
| 10 | | | 75 | | ↓ | | | | |
| 11 | | | | | | | Pt | | 0.0 ppm |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-15 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, trace clay w pieces of decomposed wood | Pt | | | 0.0 ppm |
| 14 | | | 54 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | Pale green cmf SAND, little Silt, trace clay | SM | | | |
| 18 | | | 75 | | | | | | 0.0 ppm |
| 19 | | | | | Green CLAY, little Silt trace f Sand | CL | | | 0.0 ppm |
| 20 | | | | | End of the Boring at 20.0 feet. | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-16 | COORDINATES: | DATE: 05/11/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/11/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/11/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt | | | | |
| | | | | | Concrete | | | | |
| 1 | | | | | Black and Dark Gray cmf SAND, little mf Gravel, trace Silt by Piece of Rock, coal ash, cinder glass | F | | | 0.0 PPM |
| 2 | | | 54 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Black and Dark Brown mf SAND, little Silt, little mf Gravel by coal ash, cinder, Brick | F | | | |
| 5 | | | | | | | | | |
| 6 | | | 67 | | | | | | |
| 7 | | | | | Dark Gray and Brown cmf SAND, little Silt, trace clay | F | | | 0.0 PPM |
| 8 | | | | | Dark Gray CLAY, trace Silt | CL | | | |
| 9 | | | | | Brown SILT, trace clay by Piece of decomposed wood. | PT | | | |
| 10 | | | 75 | | | | | | |
| 11 | | | | | | PT | | | |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0 Feet

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-13-17 | COORDINATES: | DATE: 05/12/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/12/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/12/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Asphalt- | | | | |
| 2 | | | | | Concrete | | | | |
| A 3 | | | 54 | | Black cmf SAND, little clay, trace cmf Gravel w/ piece of Rock, metal coal Ash | | | | |
| 4 | | | | | Dark Gray SILT, little f Sand | | | | 3.5 - 4.0' |
| B 5 | | | | | Black cmf SAND, little cmf Gravel, trace SILT & Pieces of Rock, Wood Brick. | | | | 150 ppm |
| 6 | | | 38 | | | | | | 80 ppm |
| C 7 | | | | | | | | | 0.0 ppm |
| 8 | | | | | | | | | |
| D 9 | | | | | | | | | |
| 10 | | | NR | | No Recovery | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-17 | COORDINATES: | | DATE: 05/12/04 |
| ELEVATION: | GWL: Depth: Date/Time: | | DATE STARTED: 05/12/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | | DATE COMPLETED: 05/12/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, trace clay w/ Pieces of wood | Pt | | | |
| 14 | | | 100 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-18 | COORDINATES: | | DATE: 05/12/04 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 05/12/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 05/12/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6" Asphat | | | | |
| | | | | | 6" Concrete | | | | |
| 1 | | | | | Black cmf SAND, little cmf Gravel, trace Silt by Pieces of Coal ash | F | | | 0.0 PPM |
| 2 | | | | | | | | | |
| | | | 38 | | | | | | |
| 3 | | | | | | | | | 415 PPM |
| 4 | | | | | Black and Gray cmf SAND, little Silt, trace clay & Pieces of Rock, asphalt glass. | F | | | 0.0 PPM |
| 5 | | | | | | | | | |
| 6 | | | 31 | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Gray CLAY, trace Silt | CL | | | |
| 9 | | | | | | | | | |
| 10 | | | NR | | NO Recovery | | | | |
| 11 | | | | | Peat ? | | | | |
| 12 | | | | | | | | | |

A B C D E

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-18 | COORDINATES: | | DATE: 05/12/04 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 05/12/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 05/12/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, trace clay w/ pieces of decomposed wood. | | | | 0.0 ppm |
| 14 | | | 83 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray CLAY w/ pieces of decomposed wood | | | | |
| | | | | | End of the Boring at 16.0' feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-19 | COORDINATES: | DATE: 05/12/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/12/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/12/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt | | | | |
| | | | | | Concrete | | | | |
| 1 | | | | | Black cmf SAND, little clay, trace Silt & coal ash. Rock. cinders | F | | | |
| A 2 | | | | | | | | | 0.0 PPM |
| | | | 54 | | | | | | |
| 3 | | | | | Black cmf SAND, little Silt, little f Gravel, trace clay & coal ash. cinder | F | | | |
| B 4 | | | | | | | | | |
| 5 | | | | | Dark Gray cmf SAND, little Silt, little f Gravel, trace clay & pieces of metal, plastic | F | | | |
| C 6 | | | 75 | | | | | | 1.5 PPM |
| 7 | | | | | | | | | |
| D 8 | | | | | Dark Gray & Brown cmf SAND and GRAVEL, little Silt & pieces of Rock, wood. | F | | | |
| 9 | | | | | | | | | 0.0 PPM |
| E 10 | | | 83 | | Black cmf SAND, little Silt, trace clay, trace f Gravel & pieces of Brick, metal | F | | | |
| 11 | | | | | Dark Gray CLAY | CL | | | |
| 12 | | | | | Brown SILT & wood. | ML | | | 0.0 PPM |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-19 | COORDINATES: | DATE: 05/12/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/12/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/12/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown SILT, trace clay w/ pieces of decomposed wood. | | | | |
| 14 | | | 100 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0' feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-20 | COORDINATES: | DATE: 05/13/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/13/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/13/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt w sand, silt- | | | | |
| | | | | | Concrete | | | | |
| 1 | | | | | Black and Brown cmf SAND, and mf Gravel trace Silt w pieces of | | | | 0.0 ppm |
| A 2 | | | 75 | | coal ash, cinder, Rock | | | | |
| 3 | | | | | | | | | |
| B 4 | | | | | Black cmf SAND, little mf Gravel, trace Silt w pieces of Rock, coal | | | | 0.0 PPM |
| 5 | | | | | ash, cinder | | | | |
| C 6 | | | 88 | | | | | | |
| | | | | | Dark Gray and Brown mf SAND, little Silt, | | | | 42 ppm |
| 7 | | | | | trace f Gravel w piece | | | | |
| D | | | | | of Brick, metal | | | | |
| 8 | | | | | Dark Gray cmf SAND, | | | | |
| 9 | | | | | little Silt, trace mf Gravel w pieces of Rock | | | | |
| E | | | | | Brick | | | | |
| 10 | | | 75 | | trace clay | | | | 0.2 ppm |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-20 | COORDINATES: | DATE: 05/13/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/13/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/13/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown and Dark Gray SILT, little clay & pieces of decomposed wood (Peat) | Pt | | | |
| 14 | | | 100 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0 feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-29-B-21 | **COORDINATES:** | **DATE:** 05/13/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/13/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/13/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Asphalt / concrete, lt brn Sand, Silt clay & Rock | | | | |
| A 2 | | | | | Black cmf SAND, little cmf Gravel, trace Silt trace clay & pieces of cinders, coal ash, roots concrete | F | | | 0.0 ppm |
| 3 | | | 46 | | | | | | |
| B 4 | | | | | Dark Gray CLAY, trace Silt | CL | | | |
| 5 | | | | | Brown SILT, trace clay & pieces of | pt | | | |
| C 6 | | | 75 | | decomposed wood | | | | 0.0 ppm |
| 7 | | | | | Peat | | | | |
| D 8 | | | | | Brown SILT, trace clay & pieces of decompo- sed wood | pt | | | |
| 9 | | | | | | | | | |
| 10 | | | 100 | | | | | | |
| 11 | | | | | | | | | 0.3 ppm |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SJ-29-B-22 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Asphalt / concrete. | | | | |
| 2 | A | | | | Gray and Brown cmf SAND, little Silt, trace clay, little cmf Gravel & Pieces of Rock, Brick | F | | | 0.0 |
| 3 | | | 30 | | | | | | |
| 4 | B | | | | Black cmf SAND, little mf Gravel, trace Silt & Bricks | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | C | | | | Black cmf SAND, little Silt, trace clay & Rock | | | | 0.0 |
| 7 | | | | | No Recovery | | | | |
| 8 | | | 70 | | | | | | |
| 9 | | | | | Coal Ash | F | | | 0.0 ppm |
| 10 | | | | | | | | | |
| 11 | D | | 87 | | Gray cmf SAND, little Silt trace clay & Wood (decom) | | | | 0.0 ppm |
| 12 | | | | | Brown Gray & CLAY, some Silt & Pieces decom. Wood (less) | CL | | | 0.0 ppm |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-22 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (PPM) |
| 13 | | | | | Gray SILT & CLAY | | | | 0.0 PPM |
| 14 | | | | | | | | | |
| 15 | | | | | End of the Boring at 15.0 feet | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-23 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt / concrete | | | | |
| 1 | | | | | | | | | |
| A 2 | | | | | Gray cmf SAND, little mf Gravel, trace silt & Pieces of Rock, cinders, Brick | F | | | 0.0 |
| 3 | | | 58 | | | | | | |
| B 4 | | | | | Black cmf SAND, little mf Gravel, trace silt & Pieces of wood, Brick etc | F | | | 0.0 |
| 5 | | | | | | | | | |
| C 6 | | | | | Black & Gray cmf SAND, little silt & clay, trace cmf Gravel & Piece of Rock, wood | F | | | 0.0 |
| 7 | | | | | | | | | |
| | | | 20 | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| | | | | | Black and Gray cmf SAND, little silt | F | | | 0.0 |
| 10 | | | | | | | | | |
| D | | | | | Black & Gray cmf SAND little silt trace clay & wood | SM | | | |
| 11 | | | | | Gray CLAY & decomposed Clear | CL | | | 0.0 |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-29-B-23 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (7/21/04) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 80 | | Gray SILT & CLAY | | | | 0.0 |
| 14 | | | | | | | | | |
| 15 | | | | | End of the Boring at 15.00 feet | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

**Date Start/Finish:** 10/4/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B24
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| | | | | | | ASPHALT. |
| | | | | 6.0 | | Brown medium to coarse SAND, trace Silt. |
| | 1 | 0-4 | 2.42 | 4.4 | | Black Sand lens 3" thick with little Coal, moist. |
| | | | | 4.9 | | Brown medium to coarse SAND, trace Silt, saturated |
| 5 -5 | | | | | | Brown fine SAND and SILT. (NATIVE) |
| | | | | 4.2 | | |
| | 2 | 4-8 | 4.0 | 4.0 | | |
| | | | | | | End of boring at 8.0' bgs. |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-1.0' bgs.
Sample B taken from 1.0'-2.5' bgs.
Sample C taken from 4.0'-5.0' bgs.
Sample D taken from 6.0'-8.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/4/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B25
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|---|
| | | 1 | 0-4 | 2.0 | 3.6<br>5.6 | | ASPHALT.<br>Black fine to coarse SAND, trace Rock, trace Coal.<br>Wet at 1.5' bgs. |
| | | | | | | | Black coarse SAND, some fine to medium Sand, saturated. |
| 5 | -5 | 2 | 4-8 | 4.0 | 4.6<br>6.1 | | Brown medium to coarse SAND, saturated.<br>Brown medium SAND, some Silt, saturated.<br>Brown SILTY CLAY, saturated. |
| | | | | | | | End of boring at 8.0' bgs. |
| 10 | -10 | | | | | | |
| 15 | -15 | | | | | | |

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BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Sample D taken from 6.0'-8.0' bgs.
Boring was backfilled with soil and patched

| | | |
|---|---|---|
| **Date Start/Finish:** 10/4/04 | **Borehole Depth:** 12.0' bgs | **Well/Boring ID:** SI-29-B26 |
| **Drilling Company:** B&B Drilling | **Surface Elevation:** | **Client:** General Motors |
| **Driller's Name:** Gordon Blewett | **Geologist:** J. Robertson | **Location:** Former General Motors Assembly Plant Site, Sleepy Hollow, NY |
| **Drilling Method:** Geoprobe, 4-foot Macrocore sampler | | |

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| 0 | 1 | 0-4 | 2.08 | 4.2<br>5.7<br>6.2 | | ASPHALT.<br>Black-brown fine to coarse SAND, trace Brick, trace Coal, trace Glass, trace Rock. |
| | | | | | | Gray medium to coarse subrounded SAND, saturated. |
| 5 -5 | 2 | 4-8 | 3.08 | 6.0<br>5.5 | | Black fine SILTY SAND, organic material, saturated.<br>Black PEAT, saturated. |
| 10 -10 | 3 | 8-12 | 3.42 | | | Gray fine to medium SAND and SILT, saturated.<br>Gray SILTY CLAY, saturated. |
| | | | | | | End of boring at 12.0' bgs. |
| 15 -15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Sample D taken from 6.0'-8.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/4/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B27
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| | | | | | | ASPHALT. |
| | | | | | | Black-brown fine to coarse SAND, trace Rock, trace Coal. |
| | | | | | | Gray-black organic rich CLAY. |
| | 1 | 0-4 | 2.17 | | | Gray fine to medium SAND, some SILT, trace Clay, trace fine to medium Gravel. |
| | | | | | | Gray fine to coarse SAND, some fine to medium Gravel, trace Clay, moist becoming saturated at 4.3' bgs. |
| 5 -5 | 2 | 4-8 | 0.33 | | | |
| | | | | | | End of boring at 8.0' bgs. |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/4/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 4.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B28
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| | | | | 5.5 | | ASPHALT. |
| | | | | | | Black-brown fine to coarse SAND, trace Rock. |
| | 1 | 0-4 | 2.58 | 4.3 | | Brown fine to coarse subrounded SAND, wet. |
| | | | | | | End of boring line at 4.0' bgs. |
| 5 -5 | | | | | | |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample B taken from 2.0'-4.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/4/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 4.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B29
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| | | | | | | ASPHALT. |
| | | | | 6.1 | | Black-brown fine to coarse SAND, trace Rock. |
| | | | | | | Brown fine to coarse subrounded SAND. Rock from 1.08' to 1.17' bgs, wet. |
| | 1 | 0-4 | 2.08 | 5.5 | | Brown SILTY CLAY, wet. |
| | | | | | | End of boring at 4.0' bgs. |
| 5 -5 | | | | | | |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-1.0' bgs.
Sample B taken from 1.0'-2.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/4/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B30
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| | | | | | | ASPHALT. |
| | | | | 1.8 | | Black-brown fine to coarse SAND, some Silt, trace Rock, trace fine to medium Gravel, trace Glass, wet. |
| | 1 | 0-4 | 2.08 | 1.9 | | Brown fine to coarse SAND, trace Gravel, trace Clay, trace Silt. |
| | | | | 1.1 | | Brown fine to coarse SAND, little Silt. |
| 5 -5 | | | | | | Brown SILTY SAND, little Clay, trace Glass, wet. |
| | 2 | 4-8 | 2.42 | | | |
| | | | | | | End of boring at 8.0' bgs. |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/5/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B31
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|---|
| | | | | | | | ASPHALT. |
| | | | | | 1.8 | | Black-brown fine to coarse SAND, trace fine to medium Gravel, trace Brick, moist. |
| | | 1 | 0-4 | 2.75 | | | Gray fine SAND, some Silt, little fine to medium Gravel. |
| | | | | | 1.9 | | Gray fine to coarse SAND, little Silt, little fine to medium Gravel, saturated. |
| | | | | | 1.1 | | Gray fine to coarse SAND, little Silt. |
| 5 | -5 | | | | | | |
| | | | | | 1.2 | | Black PEAT with Glass. |
| | | 2 | 4-8 | 2.0 | | | Gray fine to coarse SILTY SAND, Roots, and Organic material. |
| | | | | | | | End of boring at 8.0' bgs. |
| 10 | -10 | | | | | | |
| 15 | -15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/5/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B32
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| 0 | | | | 2.3 | | ASPHALT. |
| | | | | | | Black fine to coarse SAND, trace Brick, trace Rock, trace fine to medium Gravel, trace Ash, trace Glass. |
| | 1 | 0-4 | 3.0 | 2.2 | | Gray fine to coarse SAND, some Silt, saturated. |
| | | | | 1.3 | | Gray fine to coarse SAND and fine to medium GRAVEL, saturated. |
| 5 -5 | 2 | 4-8 | 1.33 | | | |
| | | | | | | End of boring at 8.0' bgs. |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Boring was backfilled with siol and patched.

**Date Start/Finish:** 10/5/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B33
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | | ASPHALT. |
| | | | | 9.9 | | Black fine to coarse SAND, trace Wood, trace Rock, trace Gravel, trace Ash, saturated. |
| | 1 | 0-4 | 2.66 | | | Gray SILT and GRAVEL, trace Glass. |
| | | | | 2.2 | | Gray fine to coarse SAND, little Silt, saturated. |
| | | | | 1.6 | | |
| 5 -5 | | | | | | |
| | 2 | 4-8 | 1.0 | | | |
| | | | | | | End of boring at 8.0' bgs. |
| 10 -10 | | | | | | |
| 15 -15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-2.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Boring was backfilled with siol and patched.

**Date Start/Finish:** 10/5/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 8.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B34
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | | ASPHALT. |
| | | | | 1.7 | | Black-brown fine to coarse SAND, some Rock. |
| | | | | | | PEAT. |
| | 1 | 0-4 | 2.17 | 2.1 | | Brown fine to coarse SAND, some Silt, Roots, saturated. |
| | | | | | | Brown fine to coarse SAND, some Silt, saturated. |
| 5 -5 | | | | | | Brown fine SILTY SAND, saturated. |
| | 2 | 4-8 | 1.17 | | | |
| | | | | | | End of boring at 8.0' bgs. |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-1.0' bgs.
Sample C taken from 4.0'-6.0' bgs.
Boring was backfilled with soil and patched.

**Date Start/Finish:** 10/5/04
**Drilling Company:** B&B Drilling
**Driller's Name:** Gordon Blewett
**Drilling Method:** Geoprobe
4-foot Macrocore sampler

**Borehole Depth:** 4.0' bgs
**Surface Elevation:**
**Geologist:** J. Robertson

**Well/Boring ID:** SI-29-B35
**Client:** General Motors
**Location:** Former General Motors Assembly Plant Site
Sleepy Hollow, NY

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | | ASPHALT. |
| | | | | 1.2 | | Brown-black fine to coarse SAND and ROCK. |
| | | | | | | Brown fine to coarse SAND, little Silt, wet. |
| | 1 | 0-4 | 2.17 | 1.6 | | |
| | | | | | | End of boring at 4.0' bgs. |
| 5 -5 | | | | | | |
| 10-10 | | | | | | |
| 15-15 | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm.
Sample A taken from 0.0'-1.0' bgs.
Sample B taken from 1.0'-2.0' bgs.
Boring was backfilled with siol and patched.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 27693000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-34-B1 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ashall- 6" | | | | |
| 1 | | | | | Brownish yellow mf SAND, little silt | | | | 0.0 PPM |
| 2 | | | 83 | | Brown & yellow mf SAND, some silt | F | | | 0.0 PPM |
| 3 | | | | | Coal Ash w/ silt | | | | |
| 4 | | | | | Dark Gray SILT, little mf Sand | | | | |
| 5 | A | | | | Brownish yellow mf SAND, little mf Gravel, trace clay | | | | 0.0 PPM |
| 6 | | | 92 | | Brick Red mf SAND, little Silt, trace clay | F | | | 0.0 PPM |
| 7 | | | | | Dark Gray F SAND, some Silt, trace clay, trace cmf Gravels w/ pieces of Rock | | | | 0.0 PPM |
| 8 | B | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & clay w/ pieces of wood | F | | | 0.0 PPM |
| 9 | | | | | wood | | | | |
| 10 | | | 85 | | | | | | |
| 11 | | | | | concrete, wood | F | | | |
| 12 | | | | | | | | | |

NOTES: End of the Boring at 12.0' (Refusal)

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 27632 30000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-34-B2 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Asphalt - 6" | | | | |
| | | | | | Brown & Black cmf SAND, little Silt, trace f Gravel & Rock | F | | | 0.0 ppm |
| 2 | | | 73 | | Brown & Yellow mf SAND, little Silt, trace mf Gravel and clay | F | | | 0 ppm |
| 3 | | | | | Pieces of Concrete | | | | |
| 4 | | | | | Dark Gray & Brownish Yellow mf SAND, little Silt & Coal Ash | F | | | 0 ppm |
| 5 | A | | | | Brown cmf SAND, little Silt, trace clay | | | | Gut. 5.0' |
| | | | | | Red & Gray mf SAND, little Silt, trace clay & cf Gravel | F | | | |
| 6 | | | 83 | | Pieces of Rock | | | | 0 ppm |
| 7 | | | | | | | | | |
| 8 | | | | | Black CLAY | | | | |
| | B | | | | Red & Dark Gray cmf SAND little Silt, trace clay, little cmf Gravel & Pieces of Concrete | F | | | 0 ppm |
| 9 | | | 50 | | & Pieces of Concrete. | | | | |
| 10 | | | | | End of the Boring, at 10.0' | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-34-B3 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt - 6" | | | | |
| 1 | | | | | Brown cmf SAND, little Silt & Piece of Gravel, Brick etc | F | | | 0 PPM |
| 2 | | | 54 | | Dark Brown cmf SAND, little Silt, trace mf Gravel Pieces of Concrete - 3" | F | | | 0 PPM |
| 3 | | | | | Coal Ash - 2" | | | | |
| 4 | | | | | Yellowish Brown cmf SAND, little Silt, trace clay & f Gravel | F | | | 0 PPM |
| 5 | A | | | | cmf Gravel & clay | | | | Ovl. 5.0 |
| 6 | | | 67 | | | | | | |
| 7 | | | | | Gray cmf SAND, little Silt, trace clay & Piece of Rock | F | | | 0. PPM |
| 8 | B | | | | Dark Gray & Red cmf SAND, little Silt, trace clay, little cmf Gravel | F | | | 0 PPM |
| 9 | | | | | | | | | |
| 10 | | | 25 | | | | | | |
| 11 | | | | | Rocks, Concrete | F | | | |
| 12 | | | | | Concrete & Rocks. | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-34-B4 | COORDINATES: | DATE: 10/09/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/09/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/09/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little cmf Gravel, little Silt & pieces of Rock Brick roots etc | F | | | 0.0 PPM |
| 2 | | | 75 | | Dark Gray cmf SAND, little Silt, trace clay | F | | | 0.0 PPM |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray mf SAND, little Silt, trace clay, trace mf Gravel & Brick | F | | | Grab 5.0' |
| 5 | A | | | | Red cmf SAND, little Silt, trace clay (4-6') | | | | 0.0 PPM |
| 6 | | | | | Dark Gray cmf SAND, | F | | | |
| 7 | | | 67 | | little cmf Gravel, trace Silt & clay & pieces of Rock | | | | |
| 8 | B | | | | Dark Gray cmf SAND, | F | | | 0.0 PPM |
| 9 | | | 50 | | little Silt, little mf Gravel trace clay & concrete, cobbles | | | | |
| 10 | | | | | End of the Boring at 9.0 | (Refusal) | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-1 | COORDINATES: | E 666124.11, N 819886.12 | DATE: | 10/09/03 |
| ELEVATION: | 13.45 ft | GWL: Depth: 7.0 ft | Date/Time: | TIME STARTED: | 7:35 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.9 | | 0.0-4.0 ft FILL: med. brown f. SAND, some oyster shells, tr. gravel, moist | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | 2.7 | | 4.0-7.5 ft FILL (same as above) groundwater at approx. 7 ft. | | | | PID = 0 ppm |
| 6 | | | | | | | | | PID = 0 ppm |
| 7 | | | | | | | | | PID = 0 ppm |
| 8 | | | | | 7.5-8.0 ft m. brown sandy SILT, moist, tr. coal (FILL) | | | | |
| 9 | | | 3.1 | | 8.0-10.0 ft dark brown sandy SILT, saturated, strong petroleum odor, (possible semi-confining layer). | | | | PID = 1.5 ppm<br>PID = 120 ppm |
| 10 | | | | | | | | | PID = 288 ppm |
| 11 | | | | | 10.0-12.0 ft dk grey (stained) to reddish brown m-c SAND, little gravel, strong fuel oil odor. Oily soil from10.0 ft to about 11 feet. Oil/water shake test shows light oily sheen w./ light colored blebs of oil. E.O.B. at 12.0 ft. | | | | PID = 75 ppm<br>PID = 1.7 ppm |
| 12 | | | | | | | | | PID = 0 ppm |

NOTES: No samples collected; oily horizon from 10 to 11 feet (odor and color suggestive of light fuel oil).

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-2 | COORDINATES: | E 666134.29, N 819904.73 | DATE: | 10/09/03 |
| ELEVATION: | 13.19 ft (base of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.1 | | 0.0-4.0 ft FILL: med. brown f. SAND, tr. oyster shells, moist | | | | PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 4 | | | | | 4.0-5.5 ft FILL (same as above) | | | | PID = 0 ppm<br>PID = 0 ppm |
| 6 | | | 3.9 | | 5.5-8.0 ft FILL; med. brown to reddish brown f. SAND, tr. oyster shells, tr. coal ash, tr. asphalt fragments (groundwater at about 7 ft) | | | | PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 8 | | | | ### # ## ### | 8.0-8.5 ft FILL: crushed stone, asphalt, and m. brown. f. SAND | | | | PID = 11ppm |
| 9 | | | 2.4 | | 8.5-12.0 ft reddish brown to dark grey or black (where oil stained) f. SAND, grades into m-c SAND with depth, saturated. Strong petroleum odor (dark grey oil staining from 8.5 to about 11.5 ft.) | | | | PID = >300 ppm<br>PID = >400 ppm<br>PID = 500-600 ppm<br>PID = 500+ ppm<br>PID = 10-20 ppm |

NOTES: No samples collected; oily horizon from 8.5 to 11.5 feet (odor and color suggestive of light fuel oil).

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-2 | COORDINATES: | E 666134.29, N 819904.73 | DATE: | 10/09/03 |
| ELEVATION: | 13.19 ft (base of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.6 | | 8.0-12.0 ft reddish brown arkosic f-m-c SAND, saturated. (no staining or petroleum odor noted) | | | | PID = 0 ppm |
| 14 | | | | | | | | | PID = 0 ppm |
| 15 | | | | | | | | | PID = 0 ppm |
| 16 | | | | | | | | | PID = 0 ppm |
| 16 | | | | | E.O.B. at 16.0 ft | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-3 | COORDINATES: | E 666152.39, N 819894.49 | DATE: | 10/09/03 |
| ELEVATION: | 13.13 ft (base of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.8 | | 0-4.0 ft FILL: med. brown f. SAND, some oyster shells, moist, tr. gravel, tr. c. sand. | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | 3.1 | | 4.0-8.0 FILL: same as above, wet at 7 feet. | | | | PID = 0 ppm |
| 6 | X | | | | Sample SI-37-B3B collected at 6.0 to 6.5 ft | | | | PID = 0 ppm |
| 7 | | | | ▽ | | | | | PID = 0 ppm |
| 8 | X | | 3.2 | | 8.0-12.0 ft dk. brown f. SAND grading into f-m SAND with depth, saturated. Sample SI-37-B3A collected at 8.0 to 8.5 ft. | | | | PID = 0 ppm; head space & O/W tests both negative |
| 9 | | | | | | | | | PID = 0 ppm |
| 10 | | | | | | | | | PID = 0 ppm |
| 11 | | | | | | | | | PID = 0 ppm |
| 12 | | | | | | | | | |

NOTES: No evidence of oil; o/w shake test, head space, and PID all negative; no sheen or staining observed. Confirmation soil samples colected from saturated and unsaturated zone. Sample order reversed (sample A collected below sample B)

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-3 | COORDINATES: | E 666152.39, N 819894.49 | DATE: | 10/09/03 |
| ELEVATION: | 13.13 ft (base of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.9 | | 12.0-16.0 ft reddish brown m-c SAND, saturated. | | | | PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 16 | | | | | E.O.B. at 16.0 ft | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
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# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-4 | COORDINATES: | E 666143.38, N 819876.31 | DATE: | 10/09/03 |
| ELEVATION: | 12.62 ft (base of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 8:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.8 | | 0.5-4.0 ft FILL: med. brown silty f. SAND, brick fragments, tr. coal ash, tr. crushed stone, tr. concrete, moist | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | X | | 3.2 | | 0-4.0 ft FILL: med. brown silty f. SAND w./ up to 25% coal ash by volume, moist. Sample **SI-37-B4B** collected at 5.0 to 5.5 ft | | | | PID = 0 ppm |
| 6 | | | | | | | | | PID = 0 ppm |
| 7 | | | | ▽ | | | | | |
| 8 | X | | | | 7.5-8.0 ft dk. brown f. SAND, saturated. Sample **SI-37-B4A** collected at 7.5 to 8.0 ft. | | | | PID = 0 ppm |
| 9 | | | 3.2 | | 8.0-11.0 ft dark reddish-brown silty f. SAND, saturated. | | | | PID = 0 ppm |
| 10 | | | | | | | | | PID = 0 ppm |
| 11 | | | | | 11.0-12.0 ft dark reddish-brown arkosic m-c SAND, saturated. | | | | PID = 0 ppm |
| 12 | | | | | | | | | |

NOTES: No petroleum odor, staining, or elevated PID readings obtained (including head-space analysis). Very slight sheen observed in o/w shake test at 7-10 ft interval. Confirmation soil samples collected from saturated and unsaturated zone. Sample order reversed (sample A collected below sample B).

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-4 | COORDINATES: | E 666143.38, N 819876.31 | DATE: | 10/09/03 |
| ELEVATION: | 12.62 ft (base of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 8:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.9 | | 12.0-16.0 ft dark reddish-brown arkosic m-c SAND, saturated. | | | | PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 16 | | | | | E.O.B. at 16.0 ft | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
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# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-5 | COORDINATES: | E 666110.03, N 819880.97 | DATE: | 10/09/03 |
| ELEVATION: | 13.67 ft (top of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | 3.0 | | 0.5-4.0 ft FILL: med. brown f. SAND, tr. oyster shells, moist. | | | | PID = 0 ppm |
| | | | | | | | | | PID = 0 ppm |
| 2 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | |
| | | | 3.0 | | 4.0-8.0 ft. FILL: (same as above) wet at about 7 ft | | | | PID = 0 ppm |
| 5 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 6 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 7 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 8 | | | | | 8.0-8.5 ft reddish-brown SILT, saturated | | | | PID = 200-300 ppm |
| 9 | | | | | 8.5-12.0 ft. Dark grey oil-stained m-c SAND, strong petroleum odor | | | | PID = 300-400 ppm |
| | | | | | | | | | |
| 10 | | | | | | | | | PID = 400-900 ppm |
| | | | | | | | | | |
| 11 | | | | | | | | | PID = 200-300 ppm |
| 12 | | | | | | | | | |

NOTES: Evidence of petroleum from 8.0 ft to about 13 ft.

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-37-5 | COORDINATES: E 666110.03, N 819880.97 | DATE: 10/09/03 | |
| ELEVATION: 13.67 ft (top of slab) | GWL: Depth: 7.0 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.9 | | 12.0-16.0 ft reddish-brown arkosic m-c SAND, saturated. (no staining or odor) | | | | PID = 2.0 ppm<br>PID = 1.5 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 16 | | | | | E.O.B. at 16.0 ft | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
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# SOIL BORING LOG

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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-6b | COORDINATES: | E 666115.56, N 819864.32 | DATE: | 10/09/03 |
| ELEVATION: | 13.54 (grade) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 11:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | ### ### ### | 0-0.5 ft FILL: med. brown f. SAND, tr. coal ash, tr. gravel, moist | | | | PID = 0 ppm |
| 1 | | | | ^ < > < ^ > | 0.5-1.0 ft Concrete slab | | | | |
| 2 | | | 2.6 | ### ### ### ### ### ### ### ### ### ### ### ### ### ### ### ### | 1.0-4.0 ft FILL: m. brown f. SAND and crushed stone up to 1.5 inches, moist. | | | | PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 3 | | | | | | | | | |
| 4 | | | | ^ < > < ^ > | 4.0-4.5 ft Concrete slab | | | | |
| 5 | | | 3.3 | ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: | 4.5-7.8 ft FILL: med. brown f. SAND, tr. c. sand, tr. coal, tr. crushed stone. Wet at 7 feet. | | | | PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | 3.0 | ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: | 7.8-8.0 ft Reddish-brown to dark grey (where stained)m-c SAND, saturated, oil staining and strong petroleum odor from 9-12 feet. | | | | PID = 0 ppm<br>PID = 200-500 ppm<br>PID = 200-400 ppm<br>PID = 150 ppm |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Second attempt after refusal at location SI-37-B6a

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-7 | COORDINATES: | E 666144.44, N 819923.50 | DATE: | 10/09/03 |
| ELEVATION: | 13.58 (top of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 12:25 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | 2.0 | | 0.5-4.0 ft FILL: med. brown f. SAND, tr. oyster shells, tr. c. sand, moist. | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | | | 4.0-6.0 ft FILL: med. brown f. SAND, tr. oyster shells, tr. gravel, moist. | | | | PID = 0 ppm |
| 6 | X | | 3.2 | | 6.0-8.0 ft reddish-brown f. silty SAND, moist (wet at about 7 feet). Sample **SI-37-B7A** collected at 6.0-6.5 ft. | | | | PID = 0 ppm |
| 7 | | | | | | | | | PID = 0 ppm |
| 8 | | | | | 8.0-9.0 ft reddish-brown SILT, stiff, saturated | | | | PID = 0 ppm |
| 9 | X | | 2.8 | | 9.0-12.0 ft reddish-brown f. SAND, tr. m. sand, saturated. Sample **SI-37-B7B** collected at 9.0-9.5 ft. | | | | PID = 0 ppm |
| 10 | | | | | | | | | PID = 0 ppm |
| 11 | | | | | | | | | PID = 0 ppm; o/w shake & headspace tests negative |
| 12 | | | | | | | | | |

NOTES: No evidence of petroleum (all test results negative).

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-7 | COORDINATES: | E 666144.44, N 819923.50 | DATE: | 10/09/03 |
| ELEVATION: | 13.58 (top of slab) | GWL: Depth: 7.0 ft | Date/Time: | TIME STARTED: | 12:25 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.9 | | 12.0-16.0 ft reddish brown arkosic f-m SAND coarsening with depth, saturated. | | | | PID = 0 ppm |
| 14 | | | | | | | | | PID = 0 ppm |
| 15 | | | | | | | | | PID = 0 ppm |
| 16 | | | | | | | | | PID = 0 ppm |
| | | | | | E.O.B. at 16.0 ft | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
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# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-8 | COORDINATES: | E 666117.26, N 819910.28 | DATE: | 10/09/03 |
| ELEVATION: | 13.65 (top of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 14:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | 2.0 | | 0.5-4.0 ft FILL: med. brown f. SAND, tr. oyster shells, tr. coal, moist. | | | | PID = 0 ppm |
| | | | | | | | | | PID = 0 ppm |
| 2 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | |
| | | | | | 4.0-8.0 ft FILL: med. brown to reddish-brown f. SAND, tr. oyster shells, tr. coal, moist fro 6.0 to 7.0; wet at 7.0 | | | | PID = 0 ppm |
| 5 | X | | | | Sample **SI-37-B8A** collected at 5.0 to 5.5 ft. | | | | PID = 0 ppm |
| 6 | | | 3.4 | | | | | | PID = 0 ppm |
| 7 | | | | ▽ | | | | | PID = 0 ppm |
| 8 | | | | | 8.0-10.0 ft dk brown to reddish-brown stratified SILT, stiff, moist (native soil) | | | | PID = 0 ppm |
| 9 | | | | | | | | | PID = 0 ppm |
| 10 | | | 3.1 | | 10.0-12.0 ft reddish-brown f. silty SAND, saturated. Sample SI-37-B8B collected at 11.0 to 11.5 ft. | | | | PID = 0 ppm |
| 11 | X | | | | | | | | PID = 0 ppm; o/w shake & headspace tests negative |
| 12 | | | | | | | | | |

NOTES: No evidence of petroleum (all test results negative).

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-8 | COORDINATES: | E 666117.26, N 819910.28 | DATE: | 10/09/03 |
| ELEVATION: | 13.65 (top of slab) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 14:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.2 | | 12.0-14.0 ft dark brown SILT, massive, stiff, saturated. | | | | PID = 0 ppm<br>PID = 0 ppm |
| 14 | | | | | 12.0-16.0 ft reddish brown arkosic f-m SAND, saturated. | | | | PID = 0 ppm<br>PID = 0 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | E.O.B. at 16.0 ft | | | | |
| 17 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-9 | COORDINATES: | E 666101.60, N 819860.45 | DATE: | 10/10/03 |
| ELEVATION: | 12.85 (on grade) | GWL: Depth: | 6.5 ft Date/Time: | TIME STARTED: | 7:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:10 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.0-4.0 ft FILL: med. brown f. SAND, tr. oyster shells, tr. concrete fragments, tr. coal, tr. gravel, moist. | | | | PID = 0 ppm |
| | | | | | | | | | PID = 0 ppm |
| 2 | | | 3.3 | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 4 | | | | | 4.0-7.0 ft FILL: (same as above) wet at 6.5 feet | | | | |
| | | | | | | | | | PID = 0 ppm |
| 5 | | | | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 6 | | | 3.1 | | | | | | |
| | | | | | | | | | PID = 0 ppm |
| 7 | | | | | 7.0-7.3 ft Asphalt layer | | | | |
| | | | | | 7.3-7.8 ft med. brown. f. SAND, tr. coal (FILL) | | | | PID = 0 ppm |
| 8 | | | | | 7.8-8.0 ft reddish-brown. f-m-c SAND, saturated | | | | PID = 50-100 ppm |
| | | | | | 8.0-12.0 ft reddish-brown. m-c SAND, saturated, oil stained (grey) from 8.2 to 11.0 ft, strong petroleum odor | | | | PID = 600-700 ppm |
| 9 | | | | | | | | | PID = 300-400 ppm |
| 10 | | | 2.9 | | | | | | PID = 100-200 ppm |
| 11 | | | | | | | | | PID = 20-30 ppm |
| 12 | | | | | E.O.B. at 12.0 ft | | | | PID = <25 ppm |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-10 | COORDINATES: | E 666086.24, N 819859.58 | DATE: | 10/10/03 |
| ELEVATION: | 12.33 (on grade) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 8:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.9 | | 0.0-4.0 ft FILL: med. brown f. SAND, w./ 2-inch crushed stone, tr. oyster shells, tr. coal, moist. | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | 2.4 | | 4.0-8.0 ft FILL: (same as above) wet at 6.5 ft. | | | | PID = 0 ppm |
| 6 | | | | | | | | | PID = 0 ppm |
| 7 | | | | | | | | | PID = 0 ppm |
| 8 | | | | | | | | | PID = 0 ppm |
| 9 | | | 1.6 | | 8.0-12.0 ft reddish-brown to grey (where stained) m-c SAND, saturated, petroleum odor and staining. | | | | PID = 50-100 ppm |
| 10 | | | | | | | | | PID = 300-400 ppm |
| 11 | | | | | | | | | PID = 100-200 ppm |
| 12 | | | | | | | | | PID = 10-20 ppm |
| | | | | | | | | | PID = 0 ppm |

NOTES: E.O.B. at 12.0 ft

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-11 | COORDINATES: | E 666057.85, N 819850.03 | DATE: | 10/10/03 |
| ELEVATION: | 12.19 (on grade) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 8:45 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.9 | | 0.0-4.0 ft FILL: med. brown f. SAND, some crushed stone, tr. coal, moist. | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | 3.1 | | 4.0-7.5 ft FILL: (same as above) wet at about 7 ft. | | | | PID = 0 ppm |
| 6 | | | | | | | | | PID = 0 ppm |
| 7 | | | | | | | | | PID = 0 ppm |
| 8 | | | | | 7.5-8.0 ft reddish-brown f-m-c gravelly SAND, saturated (disturbed) | | | | PID = 0 ppm |
| 9 | | | 2.5 | | 8.0-12.0 ft FILL: m. brown to grey (where stained) f-m SAND, tr. gravel, saturated. Oil staining and petroleum odor at 9.0 to 10.5 ft. | | | | PID = 20-50 ppm |
| 10 | | | | | | | | | PID = 100-200 ppm |
| 11 | | | | | | | | | PID = 50-100 ppm |
| 12 | | | | | E.O.B. at 12.0 ft | | | | PID = 0 ppm |

NOTES:

# SOIL BORING LOG

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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-12 | COORDINATES: | E 666043.51, N 819845.29 | DATE: | 10/10/03 |
| ELEVATION: | 12.21 ((on grade) | GWL: Depth: | 7.0 ft Date/Time: | TIME STARTED: | 9:35 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 0.0-1.0 ft FILL: dk. brown gravelly silt, wood (roots), crushed stone, dry. | | | | PID = 0 ppm |
| 1 | | | | | 1.0-4.0 ft. FILL: med. brown f. SAND, concrete fragments, tr. coal, tr. oyster shells, moist. | | | | PID = 0 ppm |
| 2 | | | 3.2 | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | 4.0-8.0 ft FILL: (same as above) but dark grey in color from 7.0-8.0 ft. | | | | PID = 0 ppm |
| 5 | | | | | Note: Dark grey interval resembles oil-stained horizon observed elsewhere, but no sheen or other evidence of oil was found. | | | | PID = 0 ppm |
| 6 | | | 3.2 | | | | | | PID = 0 ppm |
| 7 | X | | | | Samples **SI-37-B12A** and **SI-37-B12B** collected at 6.6-7.0 ft and 7.6-8.0 ft respectively. | | | | PID = 0 ppm; o/w shake & headspace tests negative |
| 8 | X | | | | | | | | |
| 9 | | | | | 8.0-12.0 ft reddish-brown f-m-c- SAND, saturated. (no evidence of oil observed) | | | | PID = 0 ppm |
| 10 | | | 1.2 | | | | | | PID = 0 ppm |
| 11 | | | | | Refusal at 11.0 ft (cobble of weathered granite pegmatitie in drive shoe) | | | | PID = 0 ppm |
| 12 | | | | | | | | | |

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# SOIL BORING LOG

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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-13 | COORDINATES: | E 666049.90, N 819873.75 | DATE: | 10/28/03 |
| ELEVATION: | 10.86 (top of sunken slab) | GWL: Depth: | 6.5 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | 3.0 | | 0.6-4.0 ft FILL: lt. greenish grey m. SAND, tr. c. SAND, tr. oyster shells, moist. | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | | | 4.0-6.0 ft FILL: (same as above) | | | | PID = 0 ppm |
| 6 | X | | | | Sample **SI-37-B13A** at 5.5-6.0 ft | | | | PID = 0 ppm |
| 7 | | | 3.5 | | 6.0-7.3 ft FILL: reddish-brown to med. brown f. SAND mixed w/ crushed stone to 1.5 inches wide, saturated at 6.5 ft. | | | | PID = 0 ppm |
| 8 | X | | | | 6.0-7.3 ft FILL: reddish-brown m SAND, some c. sand, tr. f. sand, saturated. very slight petroleum odor (but o/w test negative) Sample **SI-37-B13B** at 7.5-8.0 ft. | | | | PID = 0 ppm<br>head-space = 0.5 ppm |
| 9 | | | | | 8.0-10.0 ft FILL:reddish-brown f-m SAND, saturated. | | | | PID = 0 ppm |
| 10 | | | 2.6 | | | | | | PID = 0 ppm |
| 11 | | | | | 10.0-11.0 ft FILL:reddish-brown f-m SAND, little c. sand, tr. crushed stone, saturated. | | | | PID = 0 ppm |
| 12 | | | | | 11.0-12.0 ft greyish brown f. SAND, little silt, tr. clay, fragments of weathered amphibolite rock. | | | | PID = 0 ppm |

NOTES: Refusal at 12.0 ft.

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-14 | COORDINATES: | E 666102.70, N 819846.81 | DATE: | 10/28/03 |
| ELEVATION: | 12.12 (top of slab) | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 9:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | | | 0.5-1.7 ft FILL: crushed stone and med. brown f. silty sand, moist. | | | | PID = 0 ppm |
| 2 | | | 2.3 | | 1.7-4.0 ft. reddish brown to med. brown f. SAND, well sorted, stratified, compact, moist (note: could be native soil). | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | 4.0-4.5 ft. (same as above) saturated at 4.5 ft. | | | | PID = 0 ppm |
| 5 | | | | | 4.5-6.0 ft. brown to reddish-brown f. SAND, tr. c. sand, saturated, compact, poorly sorted. | | | | PID = 0 ppm |
| 6 | | | 2.7 | | | | | | PID = 0 ppm |
| 7 | | | | | 6.0-7.5 ft reddish-brown f. SAND, well sorted, saturated. | | | | PID = 0 ppm |
| 8 | | | | | 7.5-8.0 ft Black gravelly c. SAND (possible septic septic odor ?) | | | | PID = 0 ppm |
| 9 | | | | | 8.0-12.0 ft. dk grey oil-stained m. SAND, some f. sand, poorly sorted, saturated. Strong petroleum odor. | | | | PID = 10-20 ppm |
| 10 | | | 3.2 | | | | | | PID = 200-450 ppm |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | PID = 35-45 ppm |

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# SOIL BORING LOG

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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-14 | COORDINATES: | E 666102.70, N 819846.81 | DATE: | 10/28/03 |
| ELEVATION: | 12.12 (top of slab) | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 9:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | | | 12.0-13.0 ft. reddish-brown gravelly m-c SAND, saturated, arkosic, poorly sorted. Collected archive sample for reference at 12.0-13.0 ft. | | | | PID = 5-10 ppm |
| 14 | | | 3.0 | | 13.0-16.0 ft. reddish-brown f-m SAND, little c. sand, saturated. | | | | PID = 1-5 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 16 | | | | | E.O.B. at 16.0 ft. | | | | |
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| 18 | | | | | | | | | |
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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-15 | COORDINATES: | E 666101.39, N 819837.99 | DATE: | 10/28/03 |
| ELEVATION: | 11.95 ft (top of slab) | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 10:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 11:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | | | 0.5-1.5 ft FILL: crushed stone and med. brown silty f. SAND, moist. | | | | PID = 0 ppm |
| 2 | | | 2.4 | | 1.5-3.4 ft. m. brown to reddish brown SILT, stratified, stiff, micaceous, moist. | | | | PID = 0 ppm |
| 3 | | | | | | | | | PID = 0 ppm |
| 4 | | | | | 3.4-4.0 ft. reddish brown f. SAND, well sorted, compact, moist. | | | | PID = 0 ppm |
| 5 | | | | | 4.0-6.2 ft. same as above, saturated at 5.0 ft. | | | | PID = 0 ppm<br>PID = 0 ppm |
| 6 | | | 3.0 | | | | | | PID = 0 ppm |
| 7 | | | | | 6.2-7.0 ft. reddish-brown silty gravelly f-m-c SAND, saturated (possibley disturbed). | | | | PID = 0 ppm |
| 8 | X | | | | 7.0-8.0 ft. Black stained gravel grading into gravelly fmc SAND, saturated. Anaerobic (septic-like) odor. Archive sample colected at 7.0-8.0 ft. | | | | PID = 1.5-2.0 ppm |
| 9 | | | | | 8.0-12.0 ft. grey fmc SAND, poorly sorted, saturated, strong petroleum odor. | | | | PID = 500-600 ppm |
| 10 | | | 2.5 | | | | | | PID = 150-250 ppm |
| 11 | | | | | | | | | PID = 150-200 ppm |
| 12 | | | | | | | | | PID = 50-60 ppm |

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# SOIL BORING LOG

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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-15 | COORDINATES: | E 666101.39, N 819837.99 | DATE: | 10/28/03 |
| ELEVATION: | 11.95 ft (top of slab) | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 10:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 11:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.9 | | 12.0-15.0 ft. reddish-brown f-m SAND, coarsening with depth to m-c SAND, tr. gravel, saturated. | | | | PID = 0.5-1.0 ppm<br>PID = 0.5 ppm |
| 15 | | | | | 15.0-16.0 ft. lt. brownish grey f. SAND, well sorted, compact, saturated. | | | | PID = 0.5 ppm |
| 16 | | | | | E.O.B. at 16.0 ft. | | | | |
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| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-16 | COORDINATES: | E 666109.14, N 819827.78 | DATE: | 10/28/03 |
| ELEVATION: | 11.85 | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 11:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | | | 0.5-2.0 ft. FILL: m. brown f. SAND and crushed stone, tr. coal. | | | | PID = 0 ppm |
| 2 | | | | | | | | | PID = 0 ppm |
| 3 | | | 2.0 | | 2.0-4.0 ft. FILL: m. brown f. SAND, tr. c. sand, moist | | | | PID = 0 ppm |
| 4 | | | | | | | | | PID = 0 ppm |
| 5 | | | | | 4.0-7.5 ft. FILL: m. brown silty f. SAND, tr. clay, tr. terra cotta fragments, saturated. | | | | PID = 0 ppm |
| 6 | | | 1.8 | | | | | | PID = 0 ppm |
| 7 | | | | | | | | | PID = 0 ppm |
| 8 | | | | | 7.5-8.0 ft. dk. grey f-m SAND, tr. silt, stained w./ anaerobic odor. | | | | PID = 1-2 ppm |
| 9 | | | | | 8.0-12.0 ft. lt grey f-m SAND, little c. sand, saturated. Lt. grey stain, sheen and strong petroleum odor. | | | | PID = 50-100 ppm |
| 10 | | | 2.5 | | | | | | PID = 400-500 ppm |
| 11 | | | | | | | | | PID = 100-200 ppm |
| 12 | | | | | | | | | PID = 50-75 ppm |
| | | | | | | | | | PID = 5-8 ppm |

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# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-16 | COORDINATES: | E 666109.14, N 819827.78 | DATE: | 10/28/03 |
| ELEVATION: | 11.85 | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 11:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.2 | | 12.0-16.0 ft. reddish-brown f-m SAND, arkosic, saturated. | | | | PID = 0.5 ppm<br>PID = 0 ppm<br>PID = 0 ppm<br>PID = 0 ppm |
| 16 | | | | | E.O.B. at 16.0 ft. | | | | |
| 17 | | | | | | | | | |
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| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-37-17 | COORDINATES: E 666113.01, N 819816.19 | DATE: 10/28/03 | |
| ELEVATION: 12.10 (slab on grade) | GWL: Depth: 5.0 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | 1.5 | | 0.5 - 3.0 ft. FILL crushed stone + m. brown f. sand and concrete fragments. | | | | PID = 0 ppm |
| 2 | | | | | | | | | 0 ppm |
| 3 | | | | | | | | | 0 ppm |
| | | | | | 3.0-4.0 ft. m. brown f. SAND (disturbed), plant rootlets, mottled, moist (note: possible former surface-soil horizon). | | | | 0 ppm |
| 4 | | | 2.8 | | 4.0-4.5 ft. (same as above) | | | | |
| 5 | | | | | 4.5-6.0 ft. reddish-brown f. SAND, well sorted, moits (saturated at 5.0 ft). | | | | 0 ppm |
| 6 | | | | | 6.0-8.0 ft. reddish-brown f. SAND, tr. gravel, saturated (no staining or odor noted). | | | | 0 ppm |
| 7 | | | | | | | | | 0 ppm |
| 8 | | | | | | | | | 0 ppm |
| 9 | | | 2.8 | | 8.0-120. ft. light gray (oil stained) f-m SAND, little gravel, saturated, poorly sorted (strong petroleum odor) | | | | 400-500 ppm |
| 10 | | | | | | | | | 150-200 ppm |
| 11 | | | | | | | | | 100-200 ppm |
| 12 | | | | | | | | | 10-15 ppm |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-17 | COORDINATES: | E 666113.01, N 819816.19 | DATE: | 10/28/03 |
| ELEVATION: | 12.10 (slab on grade) | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. reddish-brown arkosic f-m SAND, saturated (no stain or odor) | | | | PID = 0 ppm |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | PID = 0 ppm |
| 16 | | | | | | | | | |
| | | | | | **E.O.B. at 16.0 ft.** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
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| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-17A | COORDINATES: | E 666112.45, N 819816.53 | DATE: | 10/28/03 |
| ELEVATION: | 12.0922 | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 13:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | 1.5 | | 0.5 - 3.0 ft. [same as boring SI-37-B17] FILL crushed stone + m. brown f. sand and concrete fragments. | | | | PID = 0 ppm |
| 2 | | | | | | | | | 0 ppm |
| 3 | | | | | | | | | 0 ppm |
| | | | | | 3.0-4.0 ft. [same as boring SI-37-B17] m. brown f. SAND (disturbed), plant rootlets, mottled, moist (note: possible former surface-soil horizon). | | | | 0 ppm |
| 4 | | | 2.8 | | 4.0-4.5 ft. (same as above) | | | | |
| 5 | | | | | 4.5-6.0 ft. [same as boring SI-37-B17] reddish-brown f. SAND, well sorted, moits (saturated at 5.0 ft). | | | | 0 ppm |
| 6 | | | | | 6.0-8.0 ft. [same as boring SI-37-B17] reddish-brown f. SAND, tr. gravel, saturated (no staining or odor noted). | | | | 0 ppm |
| 7 | | | | | | | | | 0 ppm |
| 8 | | | | | | | | | 0 ppm |
| 9 | X | | 2.8 | | 8.0-120. ft. [same as boring SI-37-B17] light gray (oil stained) f-m SAND, little gravel, saturated, poorly sorted (*strong petroleum odor*). **Sample SI-37-B17A-A** collected at 8.5 to 9.0 feet [13:30] | | | | 200-300 ppm |
| 10 | | | | | | | | | 300-400 ppm |
| 11 | | | | | | | | | 50-75 ppm |
| 12 | | | | | | | | | 10-20 ppm |

NOTES: **E.O.B. at 12.0 feet**

note: Boring located about 1 foot from S-37-B17 (for collecting soil sample).

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-37-18 | COORDINATES: | E 666060.85, N 819802.83 | DATE: | 10/28/03 |
| ELEVATION: | 11.58 | GWL: Depth: | 5.0 ft Date/Time: | TIME STARTED: | 12:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | | | 0.5 - 4.0 ft. FILL crushed stone, concrete fragments, gravel, f-m-c SAND, moist. | | | | PID = 0 ppm |
| 2 | | | | | | | | | 0 ppm |
| 3 | | | | | | | | | 0 ppm |
| 4 | | | | | | | | | 0 ppm |
| 5 | | | | | 4.0-8.0 ft. reddish-brown f-m-c- SAND, poorly sorted, tr. gravel, saturated at 5.0 feet. (no oil staining or odor observed.) | | | | 0 ppm |
| 6 | | | | | | | | | 0 ppm |
| 7 | | | | | | | | | 0 ppm |
| 8 | | | | | | | | | 0 ppm |
| 9 | | | | | 8.0-10.0 ft. lt. gray to lt. brown f. SAND, tr. gravel, saturated, (no sheen or odor). Refusal at 10.0 feet | | | | 0 ppm |
| 10 | | | | | | | | | head-space and o/w shake tests negative |
| 11 | | | | | **E.O.B. at 10.0 feet (refusal)** | | | | |
| 12 | | | | | | | | | |

NOTES:

Note: no evidence of oil - apparenlty "clean" hole.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-37-B-21 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID |
| | | | | | 6" Asphalt | | | | |
| 1 | | | | | Black cmf GRAVEL, little cmf SAND, trace Silt & Piece of Coal ash, Rock | F | | | 0.0 PPM |
| 2 | | | 58 | | Reddish Brown SILT & mf SAND, little trace clay | | | | |
| 3 | | | | | | F | | | GWL- 4.0' |
| | | | | | Red mf SAND, little silt- trace clay | | | | |
| 4 | | | | | Red cmf SAND, little | SP | | | 0.0 PPM |
| 5 | | | | | Silt, trace mf Gravel clay | | | | |
| | | | 75 | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Red cmf SAND, little Silt, trace f Gravel | SP | | | 0.0 PPM |
| 9 | | | | | | | | | |
| | | | 96 | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | Grayish Brown SILT, little mf Sand, little clay | ML | | | 0.0 PPM |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-37-B-21 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID |
| 13 | | | | | Brownish Gray mf SAND, SP little silt, trace clay, trace f Gravel | | | | 0.0 ppm |
| 14 | | | 58 | | | | | | |
| 15 | | | | | ↓ w/ white material & Rocks | | | | 0.0 ppm |
| 16 | | | | | Refusal at 15.0' due to Rocks | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276690000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B-1 | COORDINATES: | | DATE: 10/10/03 |
| ELEVATION: 13.61' | GWL: Depth: | Date/Time: | DATE STARTED: 10/10/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/10/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray & Black cmf SAND, little cmf Gravel & Pieces of Brick, Rock, wood Pieces of Rock | F | | | 0.0 |
| 2 | | | | | trace clay & Pieces of Brick, Rock | | | | 0.0 |
| 3 | | | 83 | | Bricks | | | | |
| 4 | A | | 80 | | Black & Brown cmf SAND, little mf Gravel, trace clay and Silt & Pieces of Rock | | | | 0.0 GWL-4.0 |
| | | | | | Dark & Gray cmf SAND, little Silt, trace clay & coal ash, concrete etc. | F | | | 0.3 faint odor sheen |
| 5 | | | | | Refusal at 4.5' due to concrete. | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | Note:- Drilling depth(s) from Ground surface | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil and water Test - (sheen) - Performed

0-1' - concrete slab

1-8' - open

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276980000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B2 | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: 13.79 | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND, little Silt, little mf Gravel & pieces of wood, rock etc | F | | | 0.0 |
| 1 | | | | | Dark Gray & Brown cmf SAND, little Silt, trace f Gravel | F | | | |
| 2 | | | 54 | | Dark Gray cmf SAND, little Silt and clay & pieces of rock, asphalt, wood etc | F | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray & Brown cmf SAND, little mf Gravel, trace clay | F | | | GWL- 4.0' |
| 5 | | | | | Dark Gray and Black cmf SAND, little Silt & pieces of rock, wood, concrete | | | | |
| 6 | | | 29 | | Black & Gray cmf SAND, little cmf Gravel, trace Silt & pieces of Rock, Concrete wood. | F | | | 670 oily |
| 7 | | | | | | | | | |
| 8 | A | | | | Greenish Gray mf SAND, little Silt, trace clay & mf Gravel | F | | | 5.0 |
| 9 | | | | | & pieces of Rock, Brick, wood etc | | | | 0.0 |
| 10 | | | 67 | | | | | | |
| 11 | | | | | Light Brown cmf SAND, little mf Gravel, trace clay & Silt | F | | | 0.0 |
| 12 | | | | | | | | | |

NOTES: Oil/Water Test - (Oil/sheen) performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 26 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B2 | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown cmf SAND, little Silt, little mf Gravel w/ pieces of Rock | F | | | 0.0 |
| 14 | | | 42 | | Dark Brown cmf SAND, little mf Gravel, trace silt, trace clay | SP | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | Note:- Drilling depth(s) from Ground surface | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B3 | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: 13.75 | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Black cmf SAND, little cmf Gravel, trace Silt & pieces of Rock, wood, concr. etc | F | | | 0.0 |
| 2 | | | 52 | | | | | | |
| 3 | | | | | Dark Brown cmf SAND, little mf Gravel trace Silt & pieces of Rock | F | | | 0.0 |
| 4 | | | | | | | | | Oil: 4.5' |
| 5 | | | | | Black cmf SAND, little mf Gravel, trace Silt & Brick wood, rock etc | | | | |
| 6 | | | 73 | | | | | | |
| 7 | | | | | Black cmf SAND and cmf Gravel, trace silt & Brick rock, wood | F | | | 3752 oily |
| 8 | A | | | | Black cmf SAND, little mf Silt, little mf Gravel & pieces of Rock | F | | | 3200 oily/ sleek |
| 9 | | | | | | | | | |
| 10 | | | 75 | | Dark Gray mf SAND, little mf Gravel, trace Silt & clay & pieces of white shell | SP | | | |
| 11 | | | | | | | | | |
| 12 | | | | | Dark Gray mf SAND, little Silt trace clay | SM | | | 0.0 |

NOTES: oil/H2O Shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B3 | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little Silt, trace clay, trace f Gravel w/ piece of white Shell | SP | | | 0.0 |
| | | | | | | SP | | | |
| 14 | | | 67 | | Brown Organic SILT w/ decomposed wood. | Pt | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| | | | | | Note:- Drilling depth (0') from Ground Surface | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
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| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39B4W | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: 13-68 | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Ground Surface | | | | |
| | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt w/ pieces of wood, Rock | F | | | 0.0 |
| 9 | | | | | | | | | 44 |
| 10 | | | 83 | | Dark Gray cmf SAND, trace Silt trace clay & f Gravel w/ clay w/ Pieces of Rock | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | Gray & Brown cmf SAND, little silt & clay w/ Pieces of Rock | F | | | 9999 |

NOTES: 0-1' - concrete slab
1-4' - open

Screen - #10.5 - 15.5' - 1" sch 40 PVC Slotted
0-10.5' - SCH 40 PVC Riser

Oil/H2O Shake Test - Performed.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39 B4 W | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID CRAM |
| 13 | | | | | Gray & Yellow cmf SAND, little Silt & clay w/ Pieces of Rock, Gravel wood | F | | | 0.0 |
| 14 | | | 50 | | w/ cmf Gravel, trace Silt and clay | F | | | |
| 15 | | | | | Greyish Brown cmf SAND little Silt, trace mf Gravel w/ Pieces of white shell | SM/SP | | | 300 Sheen |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace clay w/ Pieces of Rock | SM | | | |
| 17 | | | | | | | | | |
| 18 | | | 75 | | Dark Gray cmf SAND, little Silt, trace f Gravel trace clay | SP | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-30-B5 | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: 13.91 | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Black cmf SAND, little cmf Gravel, trace Silt w/ Pieces of Rock | F | | | |
| 1 | | | | | Yellowish Brown cmf SAND little Silt, trace mf Gravel w/ Pieces of rock, wood etc | F | | | |
| 2 | | | 58 | | Dark Gray & Green SILT & CLAY w/ Pieces of asphalt Rock | | | | 00 |
| 3 | | | | | Black cmf SAND, little Silt trace mf Gravel. w/ plastic wood | F | | | |
| 4 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel w/ Pieces of Rock, concrete | F | | | |
| 5 | | | | | w/ mf Gravel | | | | 00 |
| 6 | | | 67 | | w/ Pieces of Brick | | | | |
| 7 | | | | | Black / Gray cmf SAND, little Silt, trace clay w/ Pieces of Rock | F | | | |
| 8 | A | | | | Black mf SAND, little Silt trace clay & mf Gravel | F | | | |
| 9 | | | 33 | | Dark Gray mf SAND, little Silt, trace clay | | | | 9999 |
| 10 | | | | | w/ Pieces of wood, concrete Refusal at 10.0' | F | | | 98 |
| 11 | | | | | Note: Drilling depth (0') from Ground Surface. | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B-6 | COORDINATES: | DATE: 10/10/03 | |
| ELEVATION: 13.56 | GWL: Depth: Date/Time: | DATE STARTED: 10/10/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/10/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND, little Silt, trace clay | | | 0.0 | |
| 1 | | | | | w/ Pieces of Rock, Brick & | F | | | |
| | | | | | Dark Gray & Brown cmf SAND, little Silt | | | | |
| 2 | | | 63 | | | | | | |
| | | | | | w/ Pieces of Rock | F | | 0.0 | |
| 3 | | | | | cmf Gravel & Brick | | | | |
| | | | | | Dark Brown cmf SAND, little | F | | | |
| 4 | | | | | Silt, trace mf Gravel w/ Pieces of Rock | | | 0.0 | GWL-4.5' |
| 5 | | | | | Brown cmf SAND, little mf Gravel, trace Silt, trace clay w/ wood, Brick | F | | 0.0 | |
| 6 | | | 50 | | w/ Pieces of wood | F | | 0.0 | |
| 7 | | | | | Black & Gray cmf SAND, little Silt, trace mf Gravel w/ Pieces of Rock, wood & | F | | 0.0 | |
| 8 | | | | | Refusal at 8.0' | | | | |
| 9 | | | | | Note: Drilling depth(s) from Grand surface | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | |
| **BORING NUMBER:** SB-39-B7 | | **COORDINATES:** | **DATE:** 10/13/03 |
| **ELEVATION:** 10.94 | | **GWL:** Depth: Date/Time: | **DATE STARTED:** 10/13/03 |
| **ENGINEER/GEOLOGIST:** Madhu Patel | | Depth: Date/Time: | **DATE COMPLETED:** 10/13/03 |
| **DRILLING METHODS:** Geoprob Rig | | | **PAGE:** 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Gray cmf SAND, little cmf Gravel, trace silt & pieces of Brick, concrete etc | F | | | 0.0 |
| 2 | | | 75 | | Dark Gray mf SAND, little Silt, trace cmf Gravel, trace clay & pieces of wood, concrete & pieces of Concrete | F | | | 6.6 |
| 3 | | | | | Dark Gray & Black cmf SAND, little Silt, trace clay & pieces of wood, Brick etc | F | | | 0.0 |
| 4 | | | | | Dark Gray cmf SAND, little Silt, trace cmf Gravel, trace clay & pieces of wood, rock | F | | | 0.0 |
| 5 | | | 42 | | & concrete | | | | |
| 6 | | | | | cmf SAND, little silt & clay | F | | | 0.0 |
| 7 | | | | | Refusal at 6.0' due to concrete | | | | |
| 8 | | | | | Note: Drilling depth (0') from Ground surface. | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276932000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-39-B8 | COORDINATES: | DATE: 10/13/03 | |
| ELEVATION: 12.80 | GWL: Depth: Date/Time: | DATE STARTED: 10/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND and cmf GRAVEL, trace silt w pieces of wood, concrete, Brick plastic | F | | | 0.0 |
| 2 | | | 63 | | Dark Gray cmf SAND, little silt & clay w pieces of Rock | F | | | 0.0 |
| 3 | | | | | w Pieces of Rock | | | | |
| 4 | | | | | Dark Gray cmf SAND and GRAVEL, little silt w pieces wood, Brick, Rock | F | | | 0.0 |
| 5 | | | | | Dark Grey cmf SAND, little silt and cmf Gravel, trace silt w pieces of Rock, concrete | F | | | 0.0 |
| 6 | | | 75 | | Dark Gray cmf SAND, little cmf Gravel, trace silt w pieces of rock, wood | F | | | |
| 7 | | | | | w pieces of concrete | | | | 0.0 |
| 8 | | | | | Refusal at 8.0' | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | Note: Drilling depth (0') from Ground surface. | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B1 | COORDINATES: | | DATE: | 10/10/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: | 6.5 ft Date/Time: | TIME STARTED: | 13:45 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0-4 | | | 2.3 | ### | 0-4.0 ft. FILL reddish-brown to m. brown f. SAND and crushed stone (50%), concrete fragments, tr. coal, dry to moist. | | 0<br>0<br>0<br>0 | | |
| 4-6.5 | | | 2.0 | ### | 4.0-6.5 ft. FILL m. brown f-m SAND and crushed stone, tr. oyster shells, moist. | | 0<br>0<br>0 | | |
| 6.5-8 | X | | | ### | 6.5-8.0 ft. FILL concrete fragments, wood, crushed stone, and oil-stained f. sand, saturated. (oil staining and strong PHC odor) | | 0 | | Sample SI-43-B1-A 7.0-8.0 ft. |
| 8-12 | | | 1.4 | ### | 8.0-12.0 ft. FILL black fill (crushed stone, wood, sand), saturated. (heavy oil staining). | | 50-90<br>100-150 | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B1 | COORDINATES: | | DATE: | 10/10/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: 6.5 ft | Date/Time: | TIME STARTED: | 13:45 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | | | | | |
| 14 | | | 0.0 | no recovery | | | | | |
| 15 | | | | | | | | | |
| 16 | X | | | | 16.0-20.0 ft. dk olive-gray sandy SILT, tr. plant remains, saturated | | 0 | | Sample SI-43-B1-B 16.0-17.0 ft. |
| 17 | | | | | | | 0 | | no oil residue observed |
| 18 | | | ~2 | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | E.O.B. at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276930000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B2 | COORDINATES: | DATE: 10/13/02 | |
| ELEVATION: 6.98' | GWL: Depth: Date/Time: | DATE STARTED: 10/13/02 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/02 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| | | | | | Dark Gray mf SAND, little cmf Gravel, trace silt & Pcs of Rock, wood | F | | | 0.0 |
| 1 | | | | | Yellowish Brown cmf SAND, little Silt, trace f Gravel & Pieces of Rock, wood, gte. | | | | |
| 2 | | | 69 | | Brownish Yellow cmf SAND, little Silt, trace clay | F | | | 6.0 |
| 3 | | | | | Black cmf SAND, little silt Gravel & coal Ash, concrete, wood Rocks | F | | | |
| 4 | | | | | Black cmf SAND, little mf Gravel, trace Silt & clay & Brick, wood. | F | | | |
| 5 | | | | | | | | | 0.0 |
| 6 | | | 73 | | Black & Gray cmf SAND little Silt & pieces of Rock wood coal Ash | F | | | |
| 7 | | | | | ↓ | | | | |
| | A | | | | Black & Gray cmf SAND, little Silt, trace clay & pieces of Rock, coal Ash | F | | | GWL - 7.0' |
| 8 | | | | | ↓ | | | | |
| 9 | | | | | Black cmf GRAVEL, some Silt & pieces of Rock, Brick, Coal Ash | F | | | |
| 10 | | | 25 | | | | | | 0.0 |
| 11 | | | | | Black cmf GRAVEL, little mf Sand, trace Silt & Pieces of Rock, Coal Ash | F | | | 11-13' - 0.1 |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276630000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI43-B2 | COORDINATES: | | DATE: 10/13/02 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 10/13/02 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/13/02 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little mf Gravel, trace Silt & clay | SP | | | PID (ppm) 0.0 H-18' - silty |
| 14 | | | 25 | | Dark Gray cmf SAND, little Silt, trace clay & pieces of wood. | SP | | | 0.0 |
| 15 | B | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B3 | COORDINATES: | DATE: 10/13/03 | |
| ELEVATION: 7.58' | GWL: Depth: Date/Time: | DATE STARTED: 10/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | White & Gray Pieces of Concrete, Sand, Gravel, wood Rock. Black Coal Ash (1.0-1.2') | F | | | 0.0 |
| 2 | | | 25 | | Brown cmf SAND, little Silt, trace cmf Gravel | F | | | 0.0 |
| 3 | | | | | Dark Gray SILT, trace clay trace cmf Gravel w Pieces of wood, plastic. | F | | | 0.0 |
| 4 | | | | | Black cmf SAND, little mf Gravel, trace silt & clay w Pieces of Rock, wood Coal Ash | F | | | 0.0 |
| 5 | | | | | ↓ | | | | |
| 6 | | | 29 | | Dark Gray cmf SAND, trace cmf Gravel, trace Silt and clay | F | | | 0.0 |
| 7 | A | | | | | | | | GWL-7.5' |
| 8 | | | | | Dark Gray & Black cmf SAND, little cmf Gravel trace Silt & clay | F | | | 0.0 |
| 9 | | | | | Dark Gry & Brown cmf SAND, little Silt, trace clay w Piece of Rock | F | | | 0.0 |
| 10 | | | 75 | | White & Gray cmf SAND, little Silt, trace clay | F | | | 0.0 |
| 11 | | | | | ↓ | | | | |
| 12 | | | | | Black cmf SAND & F GRAVEL little Silt & clay w Piec of Rock, wood etc. | F | | | 0.0 11-12' Silty |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276090000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B3 | COORDINATES: | DATE: 10/13/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | B | | | | Dark Grey cmf SAND. and f GRAVEL, trace Silt and clay w pieces of Brick Rock etc. | F | | | 0.0 Oily |
| | | | | | w pieces of White shell. | SP | | | |
| 14 | | | 75 | | Dark Gray CLAY, little silt trace f sand w pieces of White shell | CL | | | 0.0 |
| 15 | | | | | trace f Gravel | SP | | | |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B4 | COORDINATES: | DATE: 10/13/03 | |
| ELEVATION: 7-48' | GWL: Depth: Date/Time: | DATE STARTED: 10/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark cmf SAND, little Silt, little mf Gravel of pieces of Rock, concrete. | F | | | 0.0 |
| 2 | | | 38 | | of pieces of cement/concrete | | | | 0.0 |
| 3 | | | | | Dark Gray & Brown cmf SAND, trace Silt & f Gravel of pieces of Rock. | F | | | 0.0 |
| 4 | | | | | | | | | |
| 5 | | | | | Dark Gray cmf SAND, little Silt, trace cmf Gravel trace Silt & clay of pieces of Concrete, Brick | F | | | 0.0 |
| 6 | | | 50 | | | | | | |
| 7 | A | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt of Rick Cinder, cement | F | | | 0.0 |
| 8 | | | | | Dark Gray & Brown cmf SAND, little cmf Gravel, trace Silt & clay | F | | | 0.0 |
| 9 | | | | | Black cmf SAND & GRAVEL, little Silt of Rock | F | | | |
| 10 | | | 25 | | Black & Brown cmf SAND & GRAVEL, little mf Sand, trace clay | F | | | 0.0 sheen |
| 11 | | | | | of cmf Gravel | | | | 0.0 strong odor |
| 12 | | | | | of Brick, Rocks | F | | | 11-12' - oily |

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# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B4 | COORDINATES: | DATE: 10/13/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | B1 | | | | Black cmf SAND and GRAVEL, little silt & clay w pieces of Rock, wet. | F | | | 11-13' : oily PID 0.0 |
| 14 | | | | | Dark Gray CLAY, little silt trace mf Sand, trace f Gravel | CL | | | |
| | | | | | Black & Gray cmf SAND | | | | PID 0.0 |
| 15 | | | | | Black & Dark Gray cmf SAND, little f Gravel, trace silt & clay | SP | | | |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SS-43-B5 | COORDINATES: | DATE: 10/13/03 | |
| ELEVATION: 6.10' | GWL: Depth: Date/Time: | DATE STARTED: 10/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/13/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND and GRAVEL, little Silt, trace clay w/ Pieces of Rock, wood | F | | | PID 0.0 |
| 1 | | | | | Dark Gray & Pale Green mf SAND, little Silt, trace mf Gravel | | | | 0.0 |
| 2 | | | 63 | | w/ Pieces of Rock, wood etc | F | | | 0.0 |
| 3 | | | | | Black COAL ASH w/ Sand Silt, Gravel, Wood, Brick | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Yellowish Brown mf SAND, little Silt, trace f Gravel | F | | | 0.0 |
| 6 | | | 75 | | Black & Dark Gray cmf SAND, Brownish Yellow cmf SAND, little cmf Gravel, wood | | | | 0.0 |
| 7 | | | | | 6.6 to 7.0' Piece of wood | F | | | |
| 8 | | | | | Black cmf GRAVEL & Sand Coal Ash w/ Piece of Rock, cinder Asphalt | | | | |
| 9 | | | | | Dark Gray mf SAND, little Silt, trace clay w/ Pieces of Rock | F | | | 0.0 |
| 10 | | | 67 | | Black cmf GRAVEL and SAND, little Silt w/ Pieces of Rock, wood etc | F | | | 0.0 |
| 11 | | | | | w/ Piece of Rock | F | | | |
| 12 | | | | | w/ Piece of Wood | | | | |
| NOTES: 13 | | | 10 | | Coal Ash & mf Gravel Refusal at 13.0' | F | | | |

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B6 | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: 8.71' | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (PPM) |
| 1 | | | | | Brown cmf SAND, little Silt, little cmf Gravel of Pieces of Rock | F | | | 0.0 |
| 2 | | | 67 | | Dark Brown cmf SAND, little Silt and Gravel of Pc of Rock | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Brown & Dark Gray cmf SAND, little Silt & mf Gravel of Brick, Rock | F | | | 0.0 |
| 5 | | | | | Black Coal Ash | | | | |
| 6 | | | 90 | | | | | | |
| 7 | | | | | Black Coal Ash, cinder, wood | F | | | |
| 8 | A | | | | Brown cmf SAND, trace mf Gravel of Silt, clay, Rock concrete | F | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | 54 | | of Piece of Brick & wood | F | | | |
| 11 | | | | | Pale Green cmf SAND little mf Gravel, trace Silt & clay of pieces of Rock | F | | | 0.0 11.0 to 13.0 Oily. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 (32) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: S1-43-B6 | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray CLAY w/ piece of wood. Rock | F | | | 11-14' - 01/4 |
| 14 | | | | | Gray w/ SAND, little silt- trace clay | | | | |
| 15 | | | | | clay/silt bands | SM | | | |
| 16 | B | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B7 (36) | COORDINATES: | DATE: 10/22/03 | |
| ELEVATION: 7.74' | GWL: Depth: Date/Time: | DATE STARTED: 10/22/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/22/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt 6" | | | | PID (ppm) |
| 1 | | | | | ↓ Pieces of Rock, concrete wood, gravel | F | | | 0.0 |
| 2 | | | | | Brown cmf SAND, little Silt | | | | |
| | | | 63 | | trace mf Gravel & Pieces of | F | | | 0.0 |
| 3 | | | | | Rock | | | | |
| | | | | | Black Coal Ash, cinders & | | | | |
| 4 | | | | | Pieces of Rock, Brick and | F | | | 0.0 |
| | | | | | ↓ | | | | |
| | | | 13 | | | | | | |
| 5 | | | | | Refusal at 5.0' | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B7 | COORDINATES: | | DATE: | 10/24/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: | Date/Time: | TIME STARTED: | 12:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.2 | | 0-0.2 ft asphalt pavement<br>0.2-3.4 ft. FILL m. brown gravelly f-m-c SAND mixed w./ crushed stone, compact, moist. | | 0<br>0<br>0 | | |
| 4 | | | 3.1 | | 3.4-4.0 ft. FILL black coal ash, wood fragments, compact, moist (oily at 3.8-3.9 ft)<br>4.0-7.0 ft. FILL black to dk. brown coal ash, f-m-c SAND, and crushed stone, moist (wet at 6.5 ft) | | 1.3<br>1-6<br>0<br>0 | | |
| 7 | | | | | 7.0-7.4 ft. *concrete (possible slab) dry* | | | | |
| 8 | X | | | | 7.4-8.0 ft. FILL black oil saturated f-m-c- SAND & crushed stone, saturated. (viscous tar-like oil) | | 2-4.5 | | archive sample 7.6-8.0 ft |
| 10 | | | 0.2 | | 8.0-12.0 ft. FILL black, oily f-m-c SAND, some glass and wood fragments, oily sheen, fuel oil odor, liquid, saturated. | | 1.0-1.2 | | archive sample 7.5-8.0 ft.<br>poor recovery |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B7 | COORDINATES: | | DATE: | 10/24/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 6.5 ft. | Date/Time: | TIME STARTED: | 12:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-13.0 ft. dk gray f-m-c SAND grading into sandy GRAVEL w./ depth, saturated. (slight sheen in upper 0.3 ft of core) | | 0.8 | | possibly native material |
| 14 | | | 3.6 | | 13.0-16.0 ft. dk gray to black f. SAND, grading into silty f. SAND w./ depth, tr. shells, saturated. | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
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NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B8 | COORDINATES: | DATE: | 10/24/03 |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 5.5 ft Date/Time: | TIME STARTED: | 14:20 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 15:45 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft. Asphalt and crushed stone. | | | | |
| 1 | | | | | 0.6-1.5 ft. FILL crushed stone, and dk. gray f. SAND, piece piece of white sandstone, moist | | 0 | | |
| 2 | | | | | 1.5-3.0 ft. FILL dk. gray f-m SAND, tr. shells, moist. | | 0 | | |
| 3 | | | | | 3.0-3.4 ft. concrete slab. | | | | |
| 4 | | | | | 3.4-4.0 ft. FILL black coal ash, moist | | 0 | | |
| 5 | | | | | 4.0-5.0 ft. FILL (same as above) | | 0 | | |
| | | | | | 5.0-5.6 ft. FILL olive-gray f. SAND, saturated. | | 0 | | |
| 6 | | | | | 5.6-6.1 ft. concrete slab | | | | |
| 7 | | | | | 6.1-8.0 ft. FILL dk gray to black f-m SAND mixed with wood, coincrete fragments, aturated. | | 0 0 | | 1.5" layer of tar at 8.8 ft. |
| 8 | | | | | | | | | |
| 9 | | | | | 8.0-12.0 ft. FILL black to dk. brown coal ash & f. SAND, tr., silt, saturated. | | 0 0 | | |
| 10 | | | 2.2 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B8 | COORDINATES: | | DATE: | 10/24/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 5.5 ft | Date/Time: | TIME STARTED: | 14:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:45 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-13.0 ft. FILL black coal ash mixed w./ oil-stained m-c SAND, saturated. | | 2-3 | | oil staining, PHC odor, and light sheen |
| 14 | | | 3.0 | | 13.0-16.0 ft. dk gray f-m SAND grading into silty SAND at 15.8 ft, saturated (oil staining from 13.0-13.5 ft.) | | 0-0.5<br>0<br>0 | | |
| 16 | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B9 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: 13.65' | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8" Concrete Slab | | | | PID (ppm) |
| 1 | | | | | 0 | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | E | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | N | | | | |
| 8 | | | | | Dark Gray mf SAND, little Silt, trace mf Gravel, trace clay w/ Rock, wood | F | | | 0.0 |
| 9 | | | | | w/ Piece of Rock | | | | GWL. 10.0' |
| 10 | | | 88 | | Brownish yellow mf SAND, little Silt, trace of Gravel trace clay | F | | | 0.0 |
| 11 | | | | | Dark Gray mf SAND, little silt, trace clay w/ piece of Rock | F | | | 0.0 |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B9 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | w/ pieces of shell | | | | 0.0 |
| 13 | | | | | Gray cmf SAND, little f Gravel, trace silt w/ pieces of shell | SP | | | 0.0 |
| 14 | | | 75 | | Dark Gray cmf SAND, little f Gravel, trace silt w/ pcs of decomposed wood | | | | 0.0 |
| 15 | | | | | Black & Gray cmf SAND, little clay, trace silt | ml/CL | | | |
| 16 | | | | | alternate layers of Sand/clay Silt w/ pieces of shell | SP | | | 0.0 |
| 17 | | | | | w/ decomposed wood | ml/CL | | | |
| 18 | | | 58 | | | S | | | |
| 19 | | | | | Black & Dark Gray mf SAND, little Silt, trace clay | SP | | | 0.0 |
| 20 | | | | | | | | | |
| 21 | | | | | Black & Dark Gray cmf SAND, little Silt, trace clay, trace f Gravel w/ pieces of decomposed wood | SP | | | 0.0 |
| 22 | | | 85 | | | | | | |
| 23 | | | | | Dark Gray mf SAND, some clay and Silt decomposed wood | | | | 0.0 |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B9 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & Clay & piece of White shell | SP | | | 0.0 |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & piece of white shell | SP | | | 0.0 |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | Dark Gray CLAY | CL | | | 0.0 |
| | | | | | End of Boring at 32.0' | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B10 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: 13.70' | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6" concrete slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | 0 | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Brownish yellow f-m SAND, little m-f Gravel, trace Silt | F | | | 0.0 |
| 9 | | | | | Black & Gray m-f SAND, little Silt & pieces of Rock | F | | | 0.0 |
| 10 | | | 63 | | Yellowish Brown f-m SAND, little Silt, trace clay & Pieces of Rock | F | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | Pieces of Brick, concrete | F | | | 0.0 |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B10 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Red and yellowish Brown cmf SAND, trace mf Gravel trace clay w/ pieces of Brick, rock etc. | F | | | 0.0 |
| 14 | | | 88 | | Gray CLAY, little Silt w/ pieces of shell, clay | | | | |
| 15 | | | | | Dark Gray cmf SAND, little clay, trace Silt, trace f Gravel w/ decomposed wood | SP | | | 0.0 |
| 16 | | | | | | | | | |
| 17 | | | | | w/ pieces of shell | | | | |
| 18 | | | 88 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Dark Gray CLAY and SILT, little mf Sand Silt/clay lenses | CL | | | 0.0 |
| 21 | | | | | Black and Dark Gray mf SAND, little Silt trace clay Gray mf SAND, little Silt and clay w/ pieces of shell trace mf Gravel | SP CL | | | 0.0 |
| 22 | | | 83 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | w/ f Gravel | | | | 0.0 |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B10 | COORDINATES: | | DATE: 10/28/03 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 10/28/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/28/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 3 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Dark Gray mf SAND, little Silt & clay, trace mf Gravel | | | | PID (ppm) 0.0 |
| 26 | | | 83 | | | | | | |
| 27 | | | | | | | | | 0.0 |
| 28 | | | | | End of the Boring at 28.0' | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 (32) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B11 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: 13.36' | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8". Concrete slab | | | | |
| 1 | | | | | ↑ | | | | |
| | | | | | 0 | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | E | | | | |
| 6 | | | | | | | | | |
| | | | | | N | | | | |
| 7 | | | | | ↓ | | | | |
| 8 | | | | | Black & White cmf SAND, little Silt, little cmf Gravel trace Silt. | F | | | 0.0 |
| 9 | | | | | Coal Ash - 3" by Brick | F | | | 0.0 |
| 10 | | | 75 | | Pieces of Rock | | | | |
| | | | | | Dark Brown cmf SAND, little mf Gravel, trace Silt- | F | | | 0.0 |
| 11 | | | | | by pieces of Brick, cinder etc | | | | |
| 12 | | | | | ↓ | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B11 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 13 | | | | | Brownish Yellow cmf SAND, and Gravel, trace Silt w pieces of Rock, cinder | F | | | 0.0 |
| 14 | | | 88 | | w Pieces of Rock | | | | 0.0 |
| 15 | | | | | Coal Ash/cinder | F | | | |
| 16 | | | | | Pieces of Concrete/Rock | | | | 0.0 |
| 17 | | | | | Black cmf SAND, little cmf Gravel w Coal Ash, cinder | F | | | 16 to 18.0' Oily |
| 18 | | | 96 | | Gray & BROWN w Pieces of Wood | | | | 0.0 |
| 19 | | | | | cmf SAND, little mf Gravel, trace Silt & clay w Pieces of wood/Rock | F | | | |
| 20 | | | | | Refusal at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276630000 3C | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B12 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: 7.18' | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 4" Asphalt<br>Pale Green & Gray cmf SAND little cmf Gravel, trace silt w/ pieces of Rock | F | | | 0.0 |
| 2 | | | 79 | | | | | | |
| 3 | | | | | w/ pieces of Concrete | | | | 6.0 |
| 4 | | | | | Black Coal Ash / cinder<br>Gray cmf SAND, little mf Gravel w/ Rock | F | | | 0.0 |
| 5 | | | | | 3" - Coal Ash<br>w/ pieces of wood | F | | | |
| 6 | | | 67 | | w/ cmf Gravel, roots, silt | | | | 6.0 |
| 7 | | | | | pieces of Rock oily | F | | | 6.6 |
| 8 | | | | | | | | | oily from 7.0' to 13.0' |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | black oily |
| 11 | | | | | | | | | |
| 12 | | | | | Black Gray cmf SAND & GRAVEL, trace clay w/ Rock. | F | | | 0.0 |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 27683000 3C | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SJ-43-B12 | COORDINATES: | DATE: 10/28/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/28/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/28/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little mf Gravel, trace Silt | | | | 0.0 oil ↓ 13.0' |
| | | | | | Dark Gray cmf SAND, trace F Gravel, trace Silt | | | | 0.0 |
| 14 | | | 63 | | Dark Gray mf SAND, little Silt, trace clay & Pieces of shell & decomp sed wood | | | | 0.0 |
| 15 | | | | | ↓ | | | | |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: oily material. 7-13.0'

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B13 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: 7.19' | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray & Black cmf SAND, little mf Gravel, trace Silt w Pieces of Rock | F | | | 0.0 |
| 2 | | | 38 | | Pale green cmf SAND, little Silt, trace clay w Piece of Rock cinder. | F | | | 0.0 |
| 3 | | | | | ↓ | | | | |
| 4 | | | | | w Coal Ash / cinder. | F | | | 0.0 |
| 5 | | | | | ↓ | | | | |
| 6 | | | 67 | | ↓ | | | | |
| 7 | | | | | Coal Ash | F | | | |
| 8 | | | | | Dark Gray cmf SAND, little Silt, trace clay w Pieces of Rock, wood, concrete | F | | | 0.0 |
| 9 | | | | | ↓ | | | | S @ 14.5' oily |
| 10 | | | 42 | | ↓ | | | | |
| 11 | | | | | ↓ | F | | | |
| 12 | | | | | w Red Brick | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B13 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | | | | | 0.0 oily. |
| 14 | | | 38 | | Black & Gray cmf SAND, little cmf Gravel, trace Silt & piece of Rock | | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | Gray CLAY, trace mf Sand | | | | 0.0 |
| | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276690000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B14 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: 7.17' | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Black & Dark Gray cmf SAND, little Silt, trace of wood & Pieces of Rock, wood & | F | | | 6.0 |
| 1 | | | | | Yellow cmf SAND w/ Piece of Rock, Gravel, Silt | | | | 0.0 |
| 2 | | | 67 | | | | | | |
| 3 | | | | | Pale green SAND w/ Piece & White shell | F | | | 0.0 |
| 4 | | | | | Pale green cmf SAND, little Silt, trace mf Gravel w/ Rock, Brick etc | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 75 | | w/ Coal Ash & Cinder | F | | | |
| 7 | A | | | | | | | | |
| 8 | | | | | Pieces of concrete Dark Gray cmf SAND, trace cmf Gravel, trace Silt | F | | | 0.0 |
| 9 | | | | | w/ Piece of Rock | F | | | |
| 10 | | | 25 | | w/ Pieces of Rock | F | | | |
| 11 | | | | | | | | | |
| 12 | | | | | Red cmf SAND, some mf Gravel | F | | | 0.0 |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 27682000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B15 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: 7.94' | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Asphalt<br>Pieces of Concrete | | | | 0.0 |
| 1 | | | | | Yellow and Green cmf SAND, little cmf Gravel trace Silt | SP | | | |
| 2 | | | 60 | | ↓ | | | | |
| 3 | | | | | Lg Pieces of Concrete<br>Black Coal Ash | | | | |
| 4 | | | | | Yellowish Brown CLAY Lg Silt, trace f Gravel | f | | | 0.0 |
| 5 | | | | | Lg Pieces of Brick, f Gravel | | | | |
| 6 | | | 67 | | ↓<br>Dark Gray cmf SAND, little Silt, dry Lg Pieces of shell | | | | 0.0 |
| 7 | | | | | Yellowish Gray cmf SAND, little Silt, trace f Gravel | P | | | 0.0 |
| 8 | | | | | Dark Gray CLAY Lg sand, Brick | | | | |
| 9 | | | | | ↓<br>Gray cmf SAND, little cmf Gravel, trace Silt Lg Pieces of Rock shell | SP | | | 0.0 |
| 10 | | | 85 | | Gray CLAY | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt/dry w/shell | P | | | 0.0 |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI 43 B15 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 13 | | | | | Dark Gray cmf SAND & Gravel, trace silt & decay wood | SP/ pt | | | 0.0 |
| 14 | | | 65 | | Dark Gray cmf SAND, little silt, trace f Gravel & trace of shell | SP | | | 0.0 Alternate layer Peat/clay/sand |
| 15 | | | | | Dark Gray CLAY, little silt | CL | | | 0.0 |
| 16 | | | | | Black mf SAND, little silt, trace clay | SM/SP | | | |
| | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B16 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID |
| 1 | | | | | Brown cmf SAND, little cmf Gravel | F | | | 0.0 PPM |
| | | | | | piece of concrete | | | | |
| | | | | | ly pieces of coal | | | | |
| 2 | | | 75 | | Brownish Gray cmf SAND | F | | | |
| 3 | | | | | little Silt, trace cmf Gravel | | | | 0.0 PPM |
| | | | | | ly pieces of Brick | | | | |
| | | | | | Pale green mf SAND | | | | |
| 4 | | | | | Brown cmf SAND, little Silt ly pieces of Rock | F | | | |
| 5 | | | | | ly coal Ash | | | | |
| | | | 79 | | | | | | 0.0 PPM |
| 6 | | | | | ly concrete & Brick. | F | | | |
| 7 | | | | | ly pieces of wood Rock. | | | | |
| 8 | | | --- | | | | | | |
| | | | | | No Recovery | F | | | |
| 9 | | | NR | | | | | | |
| 10 | | | | | | | | | Sheen |
| | | | ---: | | Brownish yellow cmf SAND. | F | | | 0.0 PPM |
| 11 | | | 25 | | little cmf Gravel, little Silt, trace clay | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-16 | COORDINATES: | DATE: 10/29/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | NR | | NO Recovery | | | | |
| 14 | | | | | Brownish Yellow Cmf SAND, little cmf Gravel, trace Silt in pieces of Rock | F | | | 13'-14' oily. |
| 15 | | | 55 | | in Bricks. Wood | | | | 17 ppm |
| 16 | | | | | Gray cmf SAND, little Silt, little clay in pieces of wood (decomposed) | SM/CL | | | |
| 17 | | | | | | | | | |
| 18 | | | 73 | | | SM CL | | | 0.0 ppm |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-17 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Brown cmf SAND, little cmf Gravel, trace Silt & Pieces of Roots & Rocks | F | | | 0.0 ppm |
| 1 | | | | | | | | | |
| 2 | | | 63 | | Dark Gray mf SAND, little Silt, trace mf Gravel | F | | | 0.0 ppm |
| 3 | | | | | & coal ash, cinder | | | | |
| 4 | | | | | Dark Gray mf SAND, little Silt, trace mf Gravel | F | | | 0.0 ppm |
| 5 | | | | | & coal ash, cinder | | | | |
| 6 | | | 67 | | Brown and yellow cmf SAND, little cmf Gravel, trace Silt & Pieces of Rock | F | | | 0.0 ppm |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | Gwl. 8.5' |
| 9 | | | HR | | No Recovery | F | | | |
| 10 | | | --- | | Black cmf SAND, little cmf Gravel, trace Silt & clay & piece of Rock. | F | | | 0.0 ppm |
| 11 | | | 25 | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-17 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID |
| 13 | | | | | Black cmf SAND, little cmf Gravel, trace Silt & clay in pieces of Rock Brick | F | | | 52 ppm |
| 14 | | | 37 | | | | | | |
| 15 | | | | | | F | | | Oily at 15.5 |
| 16 | | | | | Gray CLAY (?) | CL | | | |
| 17 | | | | | No Recovery | | | | |
| 18 | | | | | | | | | Oily at 17.0' |
| 19 | | | 42 | | Gray CLAY, little mf Silt, trace f Sand (alternate bands of silt/clay) | CL | | | |
| 20 | | | | | | | | | 0.0 ppm |
| 21 | | | | | | | | | |
| 22 | | | 67 | | Gray CLAY, little mf SAND trace Silt | CL | | | 0.0 ppm |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: End of the Boring at 24.0' Feet

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B16 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: 8.33' | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brown cmf SAND, little cmf Gravel, trace silt & Piece of Rock | F | | | 0.0 |
| 2 | | | 75 | | & Piece of Concrete & cmf Sand & Coal Ash & Silt, & Brick. | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Pale Green mf SAND & Pc Rock | F | | | |
| 5 | | | | | Brown cmf SAND, little Silt & Piece of Rock | F | | | 0.0 |
| 6 | | | 79 | | & Coal Ash & Coal Ash / cinder & Brick | | | | 0.0 |
| 7 | | | | | & Piece of wood, Rock etc | F | | | 0.0 |
| 8 | | | | | No Recov | | | | |
| 9 | | | | | | | | | |
| 10 | | | 25 | | Dark Gray cmf SAND, little Silt, trace clay & Piece of Rock, wood | F | | | 0.0 sheen |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276990000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B16 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | No Recov<br>Dark Gray cmf SAND, little mf Gravel, trace Silt & Rock | TF | | | 13.0' silty<br>100 |
| 14 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel. trace Silt | | | | |
| 15 | | | | | Yellow cm SAND, little silt & Rock, Brick, cord of | | | | |
| 16 | | | | | Gray cmf SAND | SM/CL | | | 0.0 |
| 17 | | | | | Gray cmf SAND, little Silt little clay & piece of cord | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | SM/CL | | | 0.0 |
| 20 | | | | | End of Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 3c | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B19 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: 8.49' | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little clay, trace cmf Gravel trace silt cy Piece of Rock cy Pieces of Rock. | F | | | 0.0 |
| 2 | | | 63 | | Dark Gray mf SAND, little Silt, trace mf Gravel | F | | | 0.0 |
| 3 | | | | | Coal Ash / cinder | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | 67 | | Brown & yellow cmf SAND, little clay, little cy Gravel trace silt cy Pieces of Rock | F | | | 0.0 |
| 7 | | | | | | | | | |
| 8 | | | | | No Recovery | | | | |
| 9 | | | | | | | | | |
| 10 | | | 25 | | | | | | |
| 11 | | | | | Black cmf SAND, little cmf Gravel. trace silt/ clay cy Pieces of Rock | F | | | 0.0 |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B19 | COORDINATES: | DATE: 10/29/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/29/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little cmf Gravel, trace silt/clay w/ Pieces of Rock, Brick | F | | | PID (ppm) 0.0 |
| 14 | | | 38 | | Dark Gray mf SAND, trace cmf Gravel, trace silt & Root, Brick | F | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | No Recovery | | | | 15.5' Oily |
| 17 | | | | | | | | | |
| 18 | | | 21 | | | F | | | Oily |
| 19 | | | | | | | | | |
| 20 | | | | | Dark Gray CLAY, trace Silt trace f Sand | CL | | | 0.0 |
| 21 | | | | | Black & Gray CLAY, little Silt, trace mf Gravel Cobbles & silt/clay) | CL | | | 0.0 |
| 22 | | | 67 | | | | | | |
| 23 | | | | | Gray CLAY / sand | | | | |
| 24 | | | | | | | | | |

NOTES: End of the Boring at 24.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B18 | COORDINATES: | DATE: | 10/20/03 |
| ELEVATION / DATUM: top of soil 7.5 ft below slab | GWL: Depth: 4 ft Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 10:20 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-1.5 ft. FILL m. brown f. SAND, tr. clay, w./ 50% crushed stone, moist (wet immediate below surface) | | 0 | | |
| 2 | | | 2.8 | | 1.5-3.0 ft. FILL black coal ash, f. sand, and crushed stone, moist. | | 0 | | |
| 3 | | | | | 3.0-4.0 ft. FILL rusty brown brick fragments, concrete, gravel, & f. sand, moist. | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-7.8 ft. FILL (same as above) saturated | | 0 | | |
| 6 | | | 1.2 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.8-8.0 ft. FILL dk gray f-m SAND w./ 50% rock fragments, saturated. | | 0 | | |
| 9 | | | | | 8.0-12.0 ft. FILL lt gray to black silty CLAY muck mixed with concrete fragments & crushed stone, saturated (anaerobic odor) | | 0 | | |
| 10 | | | 2.0 | | | | 0 | | |
| 11 | | | | | | | 0 | | piece of sheet metal on drive shoe |
| 12 | | | | | | | | | |

NOTES: **E.O.B. at 12.0 ft. (refusal)**

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B18A | COORDINATES: | DATE: | 10/31/03 |
| ELEVATION / DATUM: *top of soil 8.0 ft below slab* | GWL: Depth: 3.5 ft. Date/Time: | TIME STARTED: | 7:10 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 7:47 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-1.5 ft. FILL m. to lt. brown f-m-c SAND and with concrete & crushed stone, tr. clay, moist. | | 0 | | |
| 2 | | | 3.3 | | 1.5-3.0 ft. FILL black coal ashmixed with f-m-c SAND and gravel, moist. | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 3.0-4.0 ft. FILL lt. gray f-m-c SAND w./ concrete & crushed stone, moist (saturated at 3.5 ft.), | | 0 | | |
| 5 | | | 1.4 | | 4.0-8.0 ft. FILL lt. gray f-m SAND mixed w./ concrete and brick fragments, tr. clay, loose, saturated. | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 1.8 | | 8.0-11.0 ft. FILL black silty muck with concrete fragments and f. sand, saturated (sheet metal in tip of sampler). | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | E.O.B. at 11.0 feet (refusal) | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B18B | COORDINATES: | DATE: 10/31/03 | |
| ELEVATION / DATUM: top of soil 8.0 ft below slab | GWL: Depth: 4.5 ft Date/Time: | TIME STARTED: 8:05 | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: 9:25 | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 1.5 | | 0-4.0 ft. FILL brwon to black f-m-c SAND, crushed stone and coal ash, moist | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 2.4 | | 4.0-8.0 ft. FILL FILL (same as above) saturated at 4.5 ft. | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 2.0 | | 8.0-12.0 ft. FILL black silty organic muck with concrete, gravel, saturated. (straw-like upholsery material in tip of sampler). | | 0 | | h/s = 1.3 ppm |
| 10 | | | | | | | 0 | | oily sheen but no PHC odor |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B18B | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | top of soil 8.0 ft below slab | GWL: Depth: 4.5 ft | Date/Time: | TIME STARTED: | 8:05 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:25 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. FILL black silty organic muck with concrete, metal fragments, saturated. (slight oily sheen but no appreciable odor). | | 0.3 | | h/s test = 8 ppm |
| 14 | X | | 1.3 | | | | 0.4 | | poor recovery<br>Sample SI-43-B18B-A 13.4-14.0 ft. (8:50) |
| 15 | | | | | | | 3-4 | | |
| 16 | | | | | | | 3-4 | | |
| 17 | | | | | 16.0-20.0 ft. dk gray to black silty f. SAND, tr. shells, saturated (hydraulic fill) | | | | h/s test = 8 ppm |
| 18 | X | | 1.5 | | | | 2-3 | | Sample SI-43-B18B-B 17.0-18.0 ft. (9:15)<br>no sheen or other evidence of oil. |
| 19 | | | | | | | | | |
| 20 | | | | | | | 0 | | |
| 21 | | | | | **E.O.B. at 20.0 feet (obstruction)** | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B19 | COORDINATES: | DATE: 10/30/03 | |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: 4 ft. Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 11:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.0 | ### | 0-3.0 ft. FILL m. brow f. SAND w./ 50% crushed stone, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| | | | | | 3.0-4.0 ft. FILL m. brown f. SAND, tr. shells, moist. | | 0 | | |
| 4 | | | 2.9 | ### | 4.0-6.0 ft. FILL m. brown f. SAND & crushed stone, saturated. | | 0 | | |
| 5 | | | | | | | 0 | | |
| 6 | | | | | 6.0-6.4 ft. concrete (dry) | | 0 | | |
| | | | | ### | 6.4-8.0 ft. FILL black coal ash & rusty brown gravelly f. SAND, tr. wood, saturated. | | | | |
| 7 | | | | | | | 0 | | |
| 8 | | | 2.1 | ### | 16.0-20.0 ft. FILL crushed stone & concrete w./ some gravel and f. sand, lose, saturated. | | 0 | | no sheen on water in sampler |
| 9 | | | | | | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B19 | COORDINATES: | DATE: 10/30/03 | |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: 4 ft. Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 11:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | 2.0 | ### | 12.0-16.0 ft. FILL >75% wood, concrete fragments & gravel, plus f-m-c SAND, saturated. | | 0 | | h/s = 1.5 ppm |
| | | | | | | | 0 | | Sample SI-43-B19-A1 & Dup. at 12.0-13.0 ft |
| 14 | | | | | | | 0 | | wood blocks from possible former floor. |
| 15 | | | | | | | 0 | | slight creosote odor to wood |
| 16 | | | | | | | 0 | | |
| 17 | | | 2.0 | | 16.0-20.0 ft. FILL black f. silty SAND w./ ~50% concrete fragments, and gravel, saturated. | | 0 | | |
| 18 | | | | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | ~2 | | 20.0-23.0 ft. FILL lt. brownish-gray clayey SILT, loose, w./ ~50% concrete fragments, saturated. | | 0 | | |
| 21 | | | | | | | 0 | | |
| 22 | | | | | | | 0 | | |
| 23 | | | | | E.O.B. at 23.0 feet (refusal) | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B20 | COORDINATES: | DATE: | 10/30/03 |
| ELEVATION / DATUM: slab on grade | GWL: Depth: 5 ft Date/Time: | TIME STARTED: | 11:45 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 12:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 concrete slab | | 0 | | |
| 1 | | | | | 0.6-4.0 ft. FILL crushed stone, concrete fragments, w./ some f-m-c sand, tr. coal ash, moist | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | 0 | | |
| 6 | | | 3.1 | | 6.0-8.0 ft. FILL black to rusty brown coal ash and concrete fragements, tr. f-m-c sand, mopist (saturated at 5.0 ft.) | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-9.0 ft. FILL dk gray f-m-c SAND and 50% concrete & gravel, satutated | | 0 | | |
| 9 | | | | | 9.0-12.0 ft. FILL crushed brick throughout, saturated. | | 0 | | |
| 10 | | | 1.9 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B20 | COORDINATES: | | DATE: | 10/30/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 5 ft | Date/Time: | TIME STARTED: | 11:45 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 12:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | ~2 | ### | 12.0-16.0 ft. FILL black silty f. SAND, some clay, little gravel, coal ash, and pieces of cloth, saturated. | | 5-10 | | h/s = 50-70 ppm<br>Sample SI-43-B20-A at 12.0-13.0 ft<br>faint solvent or PHC odor, but atypical of site (no sheen) |
| 16 | | | ~2 | ### | 16.0-20.0 ft. FILL crushed brick, gravel, crushed stone, and black f-m-c SAND, loose, saturated | | 0<br>0<br>0<br>0 | | |
| 20 | | | | | **E.O.B. at 00.0 feet (refusal)** | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B21 | COORDINATES: | DATE: | 10/30/03 |
| ELEVATION / DATUM: slab on grade | GWL: Depth: 7 ft Date/Time: | TIME STARTED: | 12:45 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 concrete slab | | | | |
| 1 | | | 3.2 | | 0.6-4.0 ft. FILL m. brown to dk. gray crushed stone and f-m-c SAND, compact, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 3.0 | | 4.0-6.0 ft. FILL (same as above) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | 6.2-8.0 ft. FILL coal ash, concrete, & crushed stone, w./ f-m-c sand, moist (saturated at 7.0 ft). | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 2.3 | | 8.0-10.0 ft. FILL brown to dk. gray silty f-m-c SAND, tr. clay, w./ concrete fragments, saturated | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | 10.0-12.0 ft. FILL black silty f. SAND, massive pieces of wood (pilings?), saturated | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B21 | COORDINATES: | DATE: | 10/30/03 |
| ELEVATION / DATUM: slab on grade | GWL: Depth: 7 ft Date/Time: | TIME STARTED: | 12:45 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.0 | ### | 12.0-15.5 ft. FILL black crushed stone, silty clay, and f. sand, saturated. | | 5-15 | | faint solvent or PHC odor |
| 14 | | | | | | | | | |
| 15 | | | | | | | 5-8 | | |
| | X | | | ### | 15.5-16.0 ft. FILL blackmuck w./ layers of safety glass, plastic, & cloth, saturated. | | 0 | | Archive sample 15.4-16.0 ft |
| 16 | | | | ### | 16.0-17.5 ft. FILL dk. gray f. SAND & concrete fragmnents, saturated. | | 0 | | |
| 17 | | | | | | | 0 | | |
| 18 | | | 3.0 | ::: | 17.5-19.5 ft. FILL dk gray f. SAND, tr. shells, saturated. (rock fragments in drive shoe) | | 0 | | |
| 19 | | | | | | | 0 | | |
| | | | | ≡ | 19.5-20.0 ft. FILL dk. gray CLAY, plastic, saturated. | | 0 | | |
| 20 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B22A | COORDINATES: | DATE: | 10/30/03 |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 5 ft Date/Time: | TIME STARTED: | 14:10 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. Asphalt & crushed stone | | | | |
| 1 | | | | | 0.5-3.5 ft. FILL m. brown f. SAND, tr. shells, (hydraulic fill), moist | | 0 | | |
| 2 | | | 3.0 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| | | | | | 3.5-3.7 ft concrete | | 0 | | |
| 4 | | | | | 3.7-4.0 ft. FILL m. brown f. SAND, compact, moist. | | 0 | | |
| 5 | | | | | 4.0-5.0 ft. FILL (same as above) saturated<br>5.0-6.5 ft. FILL black gravelly textured coal ash, saturated. | | 0 | | |
| 6 | | | 3.2 | | | | 0 | | |
| | | | | | 6.5-7.0 ft. FILL m. brown silty f. SAND, tr. clay, compact, saturated | | | | |
| 7 | | | | | 7.0-7.5 ft. wood block (end grain), saturated. | | 0 | | |
| 8 | | | | | 7.5-8.0 ft. FILLblack coal ash and brick fragments, sat. | | | | |
| 9 | | | | | 8.0-12.0 ft. FILL black f. SAND, bricks, concrete, gravel, loose, saturated. | | 0 | | |
| 10 | | | 2.6 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

Refusal in B22 at 10'; this is a new hole.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B22A | COORDINATES: | DATE: 10/30/03 | |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 5 ft Date/Time: | TIME STARTED: 14:10 | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | 2.0 | ### | 12.0-16.0 ft. FILL black silty muck w./ concrete fragments & crushed stone, saturated. | | 0 | | Sample SI-43-B22A-A 12.0-13.0 ft. |
| 14 | | | | ### | | | 0 | | very slight sheen (may not by PHC related) |
| 15 | | | | ### | | | 0 | | |
| 16 | | | | ### | | | 0 | | |
| 17 | | | | | dk. gray silty CLAY, plastic, saturated. | | 0 | | |
| 18 | | | 3.7 | | 17.5-20.0 ft. dk. gray f. SAND, tr. gravel, saturated (anaerobic odor) | | 1 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | | | 0 | | |
| 21 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-43-B23 | COORDINATES: | DATE: | 10/31/03 |
| ELEVATION / DATUM: *top of soil 7.5 ft below slab* | GWL: Depth: 4 ft Date/Time: | TIME STARTED: | 9:20 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 10:06 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. lt brown f. SAND, tr. gravel, moist. | | | | |
| 1 | | | 2.2 | | 0.5-2.0 ft. FILL black coal ash, moist. | | 0 | | |
| 2 | | | | | 2.0-4.0 ft. FILL concrete fragments and brick, tr. lt brown sand, moist. | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-4.5 ft. (same as above) saturated | | 0 | | |
| 5 | | | 3.0 | | 4.5-6.8 ft. lt. brown to gray f-m SAND, little shells, saturated (hydraulic fill) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | 6.8-8.0 ft. dk gray sandy CLAY, stiff, saturated. | | 0 | | |
| 8 | | | 3.3 | | 8.0-12.0 ft. lt. gray clayey SAND interlayered w./ sandy CLAY, tr. shells, tr. plant remains, plastic, saturated. | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-43-B23 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | top of soil 7.5 ft below slab | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 9:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:06 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-13.0 ft. (same as above) | | 0 | | |
| 14 | X | | 2.8 | | 13.0-14.0 ft. black f. SAND, tr. clay, saturated (anaerobic odor but no sheen; o/w & h/s negative) | | 0 | | Sample SI-43-B23-A 13.0-14.0 ft. |
| 15 | | | | | 14.0-16.0 ft dk gray sandy CLAY, stiff, saturated, compact. | | 0 | | |
| 16 | | | | | | | 0 | | |
| | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

"Clean " hole with no evidence of petroleum

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-24 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Black cmf SAND, little clay, trace cmf Gravel by pieces of Rock, wood. | F | | | 0.0 PPM |
| 2 | | | 41 | | Black & Brown cmf SAND, trace mf Gravel. trace silt by pieces of Rock wood, cinder. | F | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Black cmf SAND, little silt. trace clay, trace mf Gravel by pieces of Rock. | F | | | 0.0 PPM |
| 5 | | | | | | | | | |
| 6 | | | 41 | | Black & Orange cmf SAND, little mf Gravel. trace silt. by pieces of Rock | F | | | 0.5 PPM |
| 7 | | | | | | | | | |
| 8 | | | | | Gray CLAY, little cmf Sand, trace mf Gravel by pieces of Rock. | F | | | |
| 9 | | | | | | | | | |
| 10 | | | 58 | | | | | | |
| 11 | | | | | by pieces of glass, Rock. | F | | | Sheen. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-24 | COORDINATES: | DATE: 04/23/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/23/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/23/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2. | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Gray cmf SAND, little Silt, trace mf Gravel by pieces of shell (white) | SP | | | 0.0 PPM |
| 14 | | | 33 | | w/ Silt and clay | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Pieces of decomposed wood<br>Dark Gray cmf SAND, trace Silt, trace clay by pieces of white shell | | | | |
| 17 | | | | | | | | | 0.0 PPM |
| 18 | | | 89 | | Silt- | | | | |
| 19 | | | | | Silty SAND | | | | |
| 20 | | | | | Gray mf SAND and SILT, little mf Gravel, trace clay. | SP / SM | | | |
| 21 | | | | | | | | | 0.0 PPM |
| 22 | | | 87 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: End of the Boring at 24.0' feet

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-25 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Light Brown cmf SAND, little Silt, little f Gravel. w/ pieces of Rock | F | | | 0.0 ppm |
| 2 | | | 50 | | | | | | |
| 3 | | | | | w/ Coal ash, cinder asphalt | | | | |
| 4 | | | | | Black and light Brown cmf SAND, little mf | F | | | |
| 5 | | | | | Gravel, little Silt, trace clay w/ pieces of wood Rock | | | | 1 ppm |
| 6 | | | 75 | | | | | | |
| | | | | | ↳ Woody Rock | | | | Sheen |
| 7 | | | | | Dark Gray cmf SAND, little Silt, trace clay trace f Gravel | | | | |
| 8 | | | | | light Brown cmf SAND, little mf Gravel, trace | F | | | |
| 9 | | | | | Silt w/ pieces of Rock wood, coal ash | | | | |
| 10 | | | 62 | | | | | | 0.8 ppm |
| 11 | | | | | | | | | Sheen |
| 12 | | | | | ↳ pieces of wood | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-25 | COORDINATES: | DATE: 04/27/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/27/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/27/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little Silt, trace clay w pieces of decomposed wood. | SM | | | |
| 14 | | | 83 | | | | | | 0.6 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0 feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: S1-43-B-26 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel by pieces of Rock, Wood glass | F | | | 0.0 PPM |
| 2 | | | | | | | | | |
| 3 | | | 75 | | Black pieces of Coal ash | | | | |
| 4 | | | | | Green cmf SAND, little Silt, trace clay by pieces of Rock | F | | | 0.0 PPM |
| 5 | | | | | Black cmf SAND and GRAVEL, little Silt by pieces of Rock, cinder | | | | |
| 6 | | | 73 | | | | | | |
| 7 | | | | | light Green cmf SAND, little Silt and clay, trace cmf Gravel by pieces of Wood, Brick | F | | | 2 PPM |
| 8 | | | | | | | | | |
| 9 | | | | | Black and Gray cmf SAND and GRAVEL, little Silt- trace clay | | | | 9-12' - oily |
| 10 | | | 83 | | by pieces of Rock, wood Brick | F | | | 2 PPM |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-26 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black and Gray cmf SAND, little cmf Gravel trace Silt & Pieces of Rock F glass, wood | | | | |
| 14 | | | 65 | | Gray mf SAND, little Silt, trace clay & pieces of white shell | SP | | | to ppby |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0 | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-27 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Black and Gray cmf SAND, little cmf Gravel trace Silt w/ piece of Rock, wood, cinder coal ash | F | | | 0.0 PPM |
| 2 | | | 50 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | light Green cmf SAND, little mf Gravel, trace Silt w/ pieces of Rock | F | | | 0.0 PPM |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Brown cmf SAND, little cmf Gravel, trace Silt w/ cinder, Rock | F | | | 0.0 PPM |
| 7 | | | | | | | | | |
| 8 | | | | | Black cmf SAND, little Silt, trace f Gravel w/ Pieces of Rock | F | | | 0.0 PPM |
| 9 | | | | | | | | | |
| 10 | | | 63 | | Brown cmf SAND, little Silt, trace clay w/ Pieces of Rock | F | | | 2.0 PPM |
| 11 | | | | | piece of Rock | | | | 11.5 - 12.0' oil |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: S1-43-B27 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black and Gray cmf GRAVEL/ SAND, trace silt trace clay by piece of white shell, Rock, Brick | F | | | |
| 14 | | | 38 | | | | | | 0.0 PPM |
| 15 | | | | | | | | | |
| 16 | | | | | Light Brown SILT, little cmf Sand, trace clay | F | | | |
| 17 | | | | | Black cmf SAND, little Silt by piece of Rock metal | | | | 0.0 PPM |
| 18 | | | 21 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Refusal at 20.0' feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-28 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brown and Gray cmf SAND, little cmf Gravel, trace Silt by Pieces of wood Rock, shell, glass | F | | | 0.0 PPM |
| 2 | | | 54 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Light Green cmf SAND, little Silt, trace clay by Pieces of Rock, shell | F | | | 0.0 PPM |
| 6 | | | 67 | | | | | | |
| 7 | | | | | Black cmf SAND, little Silt, w/ Pieces of Rock | F | | | |
| 8 | | | | | Pieces of Wood (8-9') | | | | 0.0 PPM |
| 9 | | | | | Brown SILT, some f Sand, trace clay | | | | |
| 10 | | | 56 | | Light Brown cmf SAND, trace silt/clay w/ Pieces of Rock | F | | | |
| 11 | | | | | Black and Gray cmf SAND, little clay, little cmf Gravel by Pieces of Rock | | | | 1 PPM |
| 12 | | | | | | | | | oily |

NOTES: Hole moved two times

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-43-B-28 | COORDINATES: | DATE: 04/26/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/26/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/26/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brown cmf SAND, little Silt, trace clay by Piece of Rock, wood. | F | | | 8 PPM Oily |
| 14 | | | 8 | | by Piece of wood. | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Black and Brown cmf GRAVEL and SAND, little Silt by piece of wood, Rock, Bricks | F | | | 0.0 PPM |
| 17 | | | | | | | | | |
| 18 | | | 21 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Gray cmf SAND/GRAVEL little Silt/clay by piece of Rock | F/SP | | | 0.0 PPM |
| 21 | | | | | | | | | |
| 22 | | | 37 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: Refusal at 24.0 feet

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 SC | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-45-B-1 | **COORDINATES:** | **DATE:** 10/08/03 | |
| **ELEVATION:** 11.09' | **GWL:** Depth: Date/Time: | **DATE STARTED:** 10/08/03 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 10/08/03 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8" concrete slab | | | | 0.0 |
| 1 | | | | | Gravel. | | | | |
| | | | | | Dark Gray SILT & CLAY, | F | | | |
| | | | | | some cmf Sand & Pieces | | | | 0.0 |
| 2 | | | 54 | | of Rock, wood, concrete | | | | |
| | | | | | | | | | |
| 3 | | | | | Dark Gray SILT, some f | F | | | 0.0 |
| | | | | | Sand & Pieces of Rock | | | | |
| 4 | | | | | grass, wood, glass, Brick | | | | |
| | | | | | | | | | |
| 5 | | | | | Gray cmf SAND, little | F | | | |
| | | | | | Silt, trace clay & Pieces | | | | |
| 6 | | | 100 | | of Brick. | | | | 0.0 |
| | | | | | Dark Gray SILT & f | F | | | |
| 7 | | | | | Sand, trace mf Gravel | | | | |
| | | | | | & Pieces of Rock. | | | | |
| 8 | | | | | Coal ash, concrete | | | | GWL 8.0 |
| | A | | | | cinder | | | | |
| 9 | | | | | Dark Gray mf SAND, | F | | | 0.0 |
| | | | | | little Silt, trace clay & | | | | |
| 10 | | | | | Pieces of wood, Rock | | | | |
| | | | 67 | | | | | | |
| 11 | | | | | Dark Gray mf SAND, | F | | | |
| | | | | | little Silt, trace clay & | | | | 0.0 |
| 12 | | | | | Pieces of wood, Rock. | | | | |

NOTES: Oil/$H_2O$ Shake Test. Performed

Temporary well Installed.

5-15' - PVC screen 0.010 slot
0.5 - PVC Sch 40 Riser
16-3 - Sand pack
0.3 - Bentonite

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-45-131 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little Silt, trace clay, trace mf Gravel & Pieces of wood | | | | 0.0 |
| 14 | | | 63 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | End of Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-45-B2 | COORDINATES: | | DATE: | 10/08/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: 10 ft | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.2 | | 0-4.0 ft. FILL dk brown to reddish-brown sandy SILT, tr. crushed stone, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 4.0 | | 4.0-7.8 ft. FILL reddish-brown sandy SILT, moist. | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.8-8.0 ft. FILL reddish-brown f. SAND, tr. m. sand, moist. | | 0 | | |
| 9 | | | | | 8.0-9.5 ft. FILL (same as above) | | 0 | | |
| 10 | | | ~3 | | 9.5-10.0 ft. FILL dk. brown sandy SILT, moist | | | | groundwater at 10 ft. |
| 11 | X | | | | 10.0-12.0 ft. lt brown to gray m-c SAND, saturated. | | 0 | | Sample SI-45-B2-A at 10.0-10.4 ft. |
| 12 | | | | | | | 0 | | h/s & o/w tests negative |

NOTES:

**E.O.B. at 12.0 ft**

No evidence of petroleum observed.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-46-B1 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION / DATUM: | GWL: Depth: ~6 ft Date/Time: | TIME STARTED: 9:40 | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: 10:00 | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | | |
| 1 | | | | ### | 0-4.0 ft. FILL 1-inch crushed stone and brown silty sand, moist. | | 0 | | |
| 2 | | | 1.7 | ### | | | | | |
| 3 | | | | ### | | | 0 | | |
| 4 | | | | ### | | | | | |
| 5 | | | | ### | 4.0-6.0 ft. FILL (same as above) | | 0 | | Sample SI-46-B1-A 5.6-6.0 ft |
| 6 | X | | 1.6 | ### | | | | | |
| 7 | | | | ::: | 6.0-8.0 ft. FILL m. brown f-m SAND, tr. shells, saturated (hydraulic fill). | | 0 | | |
| 8 | | | | ::: | 8.0-12.0 ft. (same as above) | | 0 | | |
| 9 | | | | ::: | | | 0 | | |
| 10 | | | 2.0 | ::: | | | 0 | | |
| 11 | | | | ::: | | | 0 | | |
| 12 | | | | ::: | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-46-B1 | COORDINATES: | | DATE: | 10/08/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: ~6 ft | Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.5 | | 12.0-16.0 ft. FILL dk gray (gleyed0 f. SAND, tr. shells, tr. brick fragments, saturated. | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | bricks |
| 16 | | | | | | | 0 | | |
| 17 | | | | | E.O.B. at 16.0 feet | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-46-B2 | COORDINATES: | | DATE: | 10/08/03 |
| ELEVATION / DATUM: | | GWL: Depth: | Date/Time: | TIME STARTED: | 10:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:35 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 0.6 | | 0-4.0 ft. FILL crushed stone and m. brown f-m SAND, moist. | | 0 | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | | | |
| 5 | | | 0.5 over 2' | | 4.0-6.0 ft. FILL (same as above) | | 0 | | Sample SI-46-B2-A 5.6-6.0 ft |
| 6 | ☒ | | | | concrete slab at 6.0 ft. | | | | |
| | | | | | **E.O.B. at 6.0 feet** | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-46-B3 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 13.47' | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID CPPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray and yellowish Brown cmf SAND, trace Silt, trace cmf Gravel | F | | | 0.0 |
| 2 | | | 25 | | Brownish yellow cmf SAND, trace mf Gravel & Pieces of Brick, wood, Rock | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Brown cmf SAND, little mf Gravel, trace Silt & Pieces of Brick cinder | F | | | 0.0 |
| 5 | | | 50 | | & Pieces of wood (5-5.5') | | | | GSL-6.0 |
| 6 | A | | | | Dark Brown & Gray cmf SAND little Silt, Rock cinder | F | | | 0.0 |
| 7 | | | | | End of the Boring at (Refusal) 6.5' | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 SE | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-46-B-4 | COORDINATES: | DATE: 10/08/03 | |
| ELEVATION: 13.50' | GWL: Depth: Date/Time: | DATE STARTED: 10/08/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/08/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 1 | | | | | Dark Gray cmf SAND, little Silt, little mf Gravel w/ pieces of Rock, wood Concrete | | | | 0.0 |
| 2 | | | 58 | | w/ wood | | | | |
| | | | | | w/ Rock | | | | |
| 3 | | | | | Brown cmf SAND, little Silt, trace f Gravel | | | | 0.0 |
| 4 | | | | | | | | | |
| | | | | | Dark Gray and Brown cmf SAND, little cmf Gravel | | | | |
| 5 | | | | | ↓ | | | | 0.0 |
| | | | 42 | | | | | | |
| 6 | A | | | | w/ pieces of concrete, metal Rods | | | | |
| 7 | | | | | Refusal at 6.5' | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-46-B5 | COORDINATES: | DATE: 10/06/03 | |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 9:05 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft. asphalt & crushed stone | | 0 | | |
| 1 | | | | | 0.8-2.8 ft. FILL lt brown to olive gray f. SAND, tr. shells, tr. gravel, moist | | 0 | | |
| 2 | | | 2.8 | | | | 0 | | |
| 3 | | | | | 2.8-3.9 ft. FILL dk. gray sandy SILT, moist | | 0 | | |
| 4 | | | | | FILL 3.9-4.0 ft. concrete fragments | | | | |
| | | | | | 4.0-6.0 ft. FILL dk. gray gravelly, f. SAND, tr. coal ash, tr. glass, moist | | 0 | | |
| 5 | X | | | | | | 0 | | Sample SI-1-B5-A-1 & Duplicate at 4.8-6.0 ft. |
| 6 | X | | 3.5 | | | | | | |
| | | | | | 6.0-8.0 ft. solid mass of wood, gray, saturated. | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-11.5 ft. dk. gray clayey f. SAND, saturated. | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | ~3.5 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| | | | | | 11.5-12.0 ft. dk brown PEAT, some f-m sand, saturated. | | | | |
| 12 | | | | | | | | | |

NOTES:

Note: hit refusal (wood at 6") at original SI-1-B5 location; This hole offset 8" to SW.

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-46-B5 | COORDINATES: | DATE: | 10/06/03 |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 6 ft Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 9:05 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | ~3.5 | | 12.0-15.5 ft. dark brown PEAT, stiff, moist, w./ well preserved roots and leaves. | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | 15.5-16.0 ft. lt. brown f-m SAND, saturated. | | 0 | | |
| 17 | | | | | E.O.B. at 16.0 feet | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-46-B-5 | COORDINATES: | | DATE: 05/06/04 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 05/06/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 05/06/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab - 1' | | | | |
| 1 | | | | | Grayish Brown cmf SAND, little Silt, trace clay, trace mf Gravel w/ Pieces of Rock | F | | | 0.0 PPM |
| 2 | | | 42 | | w/ Pieces of Rock | | | | |
| 3 | | | | | Grayish Brown cmf SAND, little Silt, trace clay and mf Gravel w/ Pieces of Rock. | F | | | 0.0 PPM |
| 4 | | | | | | | | | |
| 5 | | | 71 | | Grayish Brown cmf SAND, little Silt, trace clay and f Gravel w/ Pieces of Rock | | | | 0.0 PPM |
| A 6 | | | | | Refusal at 6.0' | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-46-B-6 | **COORDINATES:** | **DATE:** 05/06/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/06/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/06/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete Slab - 10" | | | | |
| 1 | | | | | ↑ | | | | |
| 2 | | | 46 | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| A | | | 83 | | Brown cmf SAND, little Silt, trace clay, trace f Gravel w Pieces of Rock. | | | | 0.0 PPM |
| 18 | | | | | Refusal at 6.0' | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Sample A 0'-1' – JAR 2/18/05

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-46-B-7 | COORDINATES: | | DATE: 05/07/04 |
| ELEVATION: | GWL: Depth: Date/Time: | | DATE STARTED: 05/07/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | | DATE COMPLETED: 05/07/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | Dark Brown cmf SAND, little Silt, trace mf Gravel mf Pieces of Rock, Bricks | | | | 0.0 PPM |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Brown cmf SAND, little Silt, trace mf Gravel mf Pieces of Rock | | | | 0.0 PPM |
| 5 | | | | | trace clay | | | | |
| 6 | | | | | Refusal at 6.0' | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

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NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-46-B-8 | **COORDINATES:** | **DATE:** 05/07/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/07/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/07/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | Brownish Gray cmf SAND, little Silt, trace clay trace f Gravel & Pieces of Rock | | | | 0.0 PPM |
| 3 | | | | | | | | | |
| 4 | | | 38 | | Brownish Gray cmf SAND, trace Silt, trace clay & Pieces of Rocks | | | | 0.0 PPM |
| A 5 | | | | | ↓ | | | | |
| 6 | | | | | Refusal at 6.0' | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-46-B-9 | **COORDINATES:** | **DATE:** 05/07/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/07/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/07/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete Slab (8") | | | | |
| 1 | | | | | Brown cmf SAND, little mf Gravel, trace Silt, trace Clay w/ Piece of Brick, Rock Concrete. | F | | | 0.0 PPM |
| 2 | | | | | | | | | |
| 3 | | | 63 | | | | | | |
| | | | | | w/ Pieces of Concrete. | | | | |
| 4 | | | | | Brown cmf SAND, trace Silt, trace f Gravel w/ Pieces of Rock, concrete. | F | | | 0.0 PPM |
| A 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-46-B-10 | **COORDINATES:** | **DATE:** 05/07/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/07/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/07/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete Slab 1' | | | | |
| 2 | | | 50 | | Brown cmf SAND, Tittle Silt, Tittle mf Gravel & Pieces of Rock, Brick, concrete | F | F | | 0.0 PPM |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| A 5 | | | 83 | | Brown cmf SAND, Tittle mf Gravel, Tittle Silt & Pieces of Rock, concrete brick | F | | | 0.0 PPM |
| 6 | | | | | Refusal at 5.0 feet. | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-46-B-11 | **COORDINATES:** | **DATE:** 05/07/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/07/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | Brown cmf SAND, little Silt, trace mf Gravel by Pieces of Rock, Brick Concrete | F | | | 0.0 PPM |
| 3 | | | 33 | | | | | | |
| 4 | | | | | Brown cmf SAND, trace Silt, trace mf Gravel by Pieces of Rok concrete | | | | 0.0 PPM |
| A 5 | | | 67 | | Refusal at 5.0' feet | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B1 | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~5 ft | Date/Time: | TIME STARTED: | 12:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | 2.2 | | 0.6-2.0 ft FILL concrete & brick fragments in matrix of dk. brown cmf SAND, stiff, moist (no staining or visual evidence of discharge) | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | X | | | | | | 0 | | Sample SI-47-B1-A1 & SI-47-B1-A2 (12:40) Total Cr |
| 4 | | | | | 4.0-4.5 ft FILL (same as above) | | 0 | | Headspace = 0 ppm |
| 5 | | ▽ | 3.3 | | | | 0 | | wet at ~5 ft Headspace = 0 ppm |
| 6 | | | | | 5.5-6.0 ft m. brown silty CLAY, stiff, compact, moist | | 0 | | |
| 7 | X | | | | 6.0-8.0 ft dk. brown sandy CLAY, tr. gravel, pieces of weathered schist at 6.5 and 8.0 feet (till). | | 0 | | Sample SI-47-B1-B1 Total Cr & VOCs (12:55) |
| 8 | | | | | | | 0 | | |
| 9 | | | | | 8.0-10.0 ft dk. brown silty CLAY, stratified, stiff, compact, moist (till) | | 0 | | |
| 10 | | | 3.5 | | 10.0-12.0 ft reddish brown to m. brown inter-bedded silty CLAY and sandy CLAY, tr, gravel (till). | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES: 1-inch-dia. well-point installed, screened from 3 to 18 ft bgs. (15 ft screen).

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B1 | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~5 ft | Date/Time: | TIME STARTED: | 12:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.4 | | 12.0-16.0 ft. reddish-brown silty f. SAND, tr. cobbles, tr. gravel (weathered schist), compact, stiff, saturated, (till?) | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| 17 | | | 1.2 over 2 ft | | 16.0-18.0 ft. m. brown f. SAND, tr. cobbles, saturated. | | 0 | | Headspace = 0 ppm |
| 18 | | | | | REFUSAL @ 18.0 ft E.O.B (13:00) | | 0 | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B2(A) | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | Date/Time: | TIME STARTED: | 13:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:25 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | 2.2 | | 0.6-4.0 ft FILL m. brown f. SAND, brick, concrete, & rock fragments, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-6.5 ft FILL m. brown f. SAND, coal ash, brick and concrete fragments. | | 0 | | |
| 6 | | | 1.8 over 3' | | | | 0 | | |
| 7 | X | | | | 6.4-7.0 ft Concrete slab w. green staining | | | | SI-47-B2-A1 (13:15) |
| 8 | | | | | REFUSAL @ 7.0 ft E.O.B (13:25) | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B2(B) | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~5 | Date/Time: | TIME STARTED: | 13:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:35 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft Concrete slab | | | | |
| 1 | | | | | 0.5 -4.0 ft FILL concrete fragments, coal ash, brick fragments, moist, compact. | | 0 | | |
| 2 | | | 2.2 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-5.5 (same as above) perched water ~5 ft | | 0 | | |
| 5 | | ▽ | 2.6 | | | | 0 | | Headspace = 0 ppm<br>Sample SI-47-B2-A-1 |
| | | | | | 5.0-6.0 ft concrete slab 8" thick w./ green staining | | 0 | | |
| 6 | | | | | 6.0-8.0 ft m. brown to redish brown silty CLAY, stiff, very compact, micaceous, moist | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-11.5 ft. brown silty CLAY, tr. gravel, stiff, compact, saturated (till) | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | 3.6 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.5-12.0 ft reddish-brown clayey f. SAND, tr. gravel | | 0 | | weathered schist fragme |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B2(B) | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~5 | Date/Time: | TIME STARTED: | 13:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:35 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | X | | | | 12.0-16.0 ft. reddish brown f. SAND, tr. rock fragments, (weathered schist) saturated. | | 0<br>0<br>0<br>0 | | Sample SI-47-B2-B1 |
| 16 | | | | | E.O.B. @ 16.0 (14:35) | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

Installed well point to 17 feet bgs (pushed to 17'), with screen from 2-17 feet.

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B3 | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~6 ft | Date/Time: | TIME STARTED: | 15:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | 2.5 | | 0.6-4.0 ft FILL dk. brown cmf silty SAND, some crushed stone, concrete fragments, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | X | | | | | | 0 | | |
| 5 | X | | | | 4.0-5.0 ft FILL (same as above), compact | | 0 | | Headspace = 0 ppm<br>Sample SI-47-B3-A-1<br>4.0-4.5 ft (15:15) |
| | | ▽ | 3.6 | | 5.0-6.0 ft dk. brown silty CLAY, stiff, moist (till) | | 0 | | |
| 6 | | | | | 6.0-8.0 ft. reddish-brown sandy CLAY, tr. rock fragments (schist); saturated but no apparent yield (till) | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-9.0 ft till (same as above) | | 0 | | |
| 9 | X | | | | | | 0 | | |
| | X | | | | 9.0-9.6 ft. dk brown silty f. SAND, saturated, (1st water bearing zone) | | 0 | | Headspace = 0 ppm<br>Sample SI-47-B3-B-1<br>9.0-9.5 ft (15:20) |
| 10 | | | 3.2 | | 9.6-12.0 ft. reddish-brown sandy SILT, saturated, rock (schist) fragments (till) | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B3 | COORDINATES: | | DATE: | 04/29/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | ~6 ft Date/Time: | TIME STARTED: | 15:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.4 | | 12.0-16.0 ft. dark brown to reddish-brown silty SAND, tr. rock (schist) fragments, saturated, very compact, stiff (till) | | 0<br>0<br>0<br>0<br>0 | | |
| 16 | | | 3.2 | | 16.0-20.0 ft. dk. brown f-m SAND, tr. c. sand, tr. silt, saturated. | | 0<br>0<br>0<br>0<br>0 | | |
| 20 | | | | | **E.O.B. @20.0 ft 15:45** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

1"-dia. PVC well point installed, screended from 15-20 feet bgs.

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B4 | COORDINATES: | | DATE: | 04/30/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~5 ft | Date/Time: | TIME STARTED: | 11:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 12:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | 1.5 | | 0.6-4.0 ft. FILL crushed stone, concrete fragments in matrix of lt. grey silty f. SAND, moist (brick in shoe) | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | Headspace = 0 ppm |
| 5 | X | ▽ | | | 4.0-6.0 ft FILL rusty brown coal ash, crushed stone, brick fragments in reddish-brown sandy matrix, moist [perched water at 4-5 ft] | | 0 | | Sample SI-47-B4-A-1 4.5-5.0 ft (11:50) |
| 6 | | | 3.0 | | 6.0-8.0 ft reddish-brown sandy CLAY, rock fragments, (till), very stiff, compact moist | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | X | | | | 8.0-12.0 ft dark brown to redish-brown f. SAND, tr. gravel and rock fragments, saturated (water bearing zone) | | 0 | | Headspace = 0 ppm |
| 9 | | | | | | | 0 | | Sample SI-47-B4-B-1 8.0-8.5 ft (11:55) MS/MSD |
| 10 | | | 2.6 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | E.O.B. @ 12.0 ft | | | | |

NOTES:

Refusal (obstruction) at 12.0 feet ; 1-inch-dia. PVC well-point screened at 2-12 ft bgs.

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B5 | COORDINATES: | | DATE: | 04/30/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | ~11 ft Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | | | 0.6-1.5 ft. FILL concrete fragments, coal ash, brick fragments, in matrix of dk. brown f. SAND, moist. | | 0 | | |
| | | | | | | | 0 | | |
| 2 | | | | | 1.5-4.0 ft. reddish brown f. SAND, compact, moist | | 0 | | |
| | | | 2.4 | | | | 0 | | |
| 3 | | | | | | | | | |
| | | | | | | | 0 | | Headspace = 0.3 ppm |
| 4 | X | | | | 4.0-4.6 ft. (same as above) | | 0 | | Sample SI-47-B5-A-1 4.0-4.6 ft (09:20) |
| 5 | | | | | 4.6-5.8 ft. dk. brown mottled CLAY, stiff, compact, moist | | 0 | | |
| | | | | | | | 0 | | |
| 6 | | | 3.5 | | 5.8-8.0 ft. reddish-brown sandy CLAY, some rock fragments, moist (till) | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-11.2 ft (same as above) | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | 3.2 | | | | 0 | | |
| 11 | | ▽ | | | | | 0 | | Headspace = 0 ppm |
| 12 | X | | | | 11.2-12.0 ft. dk. brown f. SAND, tr. silts, tr. clay, saturated. | | 0 | | Sample SI-47-B5-B-1 11.2-12.0 ft (09:50) |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-47-B5 | COORDINATES: | DATE: | 04/30/04 |
| ELEVATION: SLAB ON GRADE | GWL: Depth: ~11 ft Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 10:00 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 12 | | | | | 12.0-16.0 ft. (same as above) | | 0 | | |
| 13 | | | | | | | 0 | | |
| 14 | | | 2.4 | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | rock fragments |
| | | | | | **E.O.B. @ 16.0 ft (refusal)** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000 | PROJECT NAME: *Former* General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-47-B6 | COORDINATES: | DATE: 04/30/04 | |
| ELEVATION: SLAB ON GRADE | GWL: Depth: ~9.0 Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | 2.5 | | 0.6-1.5 ft. FILL: concrete fragments, + crushed stone | | 0 | | |
| | | | | | 1.5-2.2 ft. FILL: coal ash, coal, brick fragments, moist | | 0 | | |
| 2 | | | | | 2.2 - 4.-0 ft. FILL: orange-brown f. SAND, compact moist | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0 - 6.2 ft. (same as above) **Sample SI-47-B6-A-1** collected at 5.4 to 6.0 feet (10:35) | | 0 | | |
| 5 | | | | | | | 0 | | |
| 6 | X | | 3.4 | | | | 0 | | |
| | | | | | 6.2-8.0 ft. dk. brown CLAY, mottled, stiff, very compact, moist (glacial till) | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| | | | | | 8.0 - 9.0 ft. (same as above) | | 0 | | |
| 9 | X | | 4.0 | | 9.0 - 12.0 ft. reddish-brown clayey SAND, some silt, little gravel, interbedded with silty SAND, saturated. Sample SI-47-B6-B-1 collected at 9.0 to 9.6 feet (10:40). | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B6 | COORDINATES: | | DATE: | 04/30/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | ~9.0 Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.5' over 3.0 feet | | 12.0-15.0 feet redish-brown f. SAND, tr. clay, saturated (water bearing zone) | | 0<br>0<br>0<br>0 | | |
| 15 | | | | | **E.O.B. at 15.0 ft. (refusal, bedrock)** | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: Temporary well installed, 1-inch dia. PVC screened from 5-16' b.g.s.

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-47-B7 | COORDINATES: | DATE: | 04/30/04 |
| ELEVATION: SLAB ON GRADE | GWL: Depth: ~12.4 Date/Time: | TIME STARTED: | 8:00 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 8:55 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | | | 0.6-1.2 ft. FILL dk. brn. silty c-m-f- SAND, moist | | 0 | | |
| | | | | | 1.2-1.5 ft. FILL concrete fragments | | 0 | | |
| 2 | | | 2.5 | | 1.5-4.0 ft. reddish-brown to m. brown silty f. SAND, tr. clay, moist, tr. rock fragments, moist (uncertain whether fill or native material) | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0-6.5 ft. same as above, grading into c-m-f- SAND with depth. **Sample SI-47-B7-A1** collected at 6.0-6.5 feet (08:40) | | 0 | | |
| 5 | | | | | | | 0 | | |
| | | | | | | | 0 | | |
| 6 | X | | 3.3 | | | | 0 | | h/s = 0 ppm |
| 7 | | | | | 6.5-8.0 ft. dk. brown CLAY, stiff, mottled, very compact, moist. | | 0 | | |
| | | | | | | | 0 | | |
| 8 | | | | | 8.0-12.0 ft. redish-brown f. sandy CLAY, stiff, very compact, moist. (till) | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | 4.0 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B7 | COORDINATES: | | DATE: | 04/30/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~12.4 | Date/Time: | TIME STARTED: | 8:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:55 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0-12.4 ft. same as above, moist | | | 0 | |
| 13 | X | | | | 12.4 - 15.0 ft. reddish-brownto dk. brn. silty f. SAND, tr. clay, tr. rock fragments, saturated. **Sample SI-47-B7-B1** collected at 12.4-13.0 feet (08:50). Note: Stratum appears to be hydraulically confined | | | 0 | h/s = 0 ppm |
| | | | | | | | | 0 | |
| 14 | | | | | | | | 0 | |
| 15 | | | | | | | | 0 | |
| | | | | | 15.0-16.0 ft. dk. brown f-m SAND, tr. weathered schist, saturated | | | 0 | |
| 16 | | | | | 16.0-19.0 ft. same as above (saturated) | | | 0 | |
| 17 | | | | | | | | 0 | |
| 18 | | | | | | | | 0 | |
| 19 | | | | | | | | 0 | |
| | | | | | **E.O.B. 19.0 feet; refusal (bedrock)** | | | | |
| 20 | | | | | No VOC sample | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: Temporary well installed, 1-inch dia PVC, screened from 4-19 feet b.g.s.

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B8 | COORDINATES: | | DATE: | 04/30/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~8.0 | Date/Time: | TIME STARTED: | 12:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:10 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 ft Concrete slab | | | | |
| 1 | | | | | 0.6-1.1 ft. FILL black coal ash, rusty, moist | | 0 | | |
| | | | | | 1.1-2.0 ft. FILL lt. gray rock (quartzite) fragments and concrete fragments, moist | | 0 | | |
| 2 | | | 2.7 | | 2.0-4.0 ft. m. brown silty f. SAND, tr. clay, tr. gravel, stiff, compact, moist. | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0-5.5 ft. same as above. **Sample SI-47-B8-A1** collected at 5.0-5.5 feet bgs. (12:35) | | 0 | | |
| 5 | X | | | | | | 0 | | h/s = 0 ppm |
| 6 | | | 3.0 | | 5.5-8.0 ft. reddish-brown to brown sandy SILT, tr. gravel, stif moist. | | 0 | | |
| 7 | | | | | | | 0 | | |
| | | | | | | | 0 | | |
| 8 | | | | | 8.0-8.8 ft. dk. brown silty CLAY, plastic, stiff, (saturated) | | 0 | | |
| 9 | | | | | 8.8-10.0 ft. reddish-brown to brown sandy CLAY, stiff, compact, saturated | | 0 | | |
| 10 | X | | 2.8 | | 10.0-12.0 ft. dk. brown to reddish-brown f. SAND, *interbedded w./* clayey SAND, compact, saturated. **Sample SI-47-B8-B1** collected at 10.0-10.5 ft. (12:50) | | 0 | | sandy horizon at 10.0-10.5 ft. |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B8 | COORDINATES: | | DATE: | 04/30/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~8.0 | Date/Time: | TIME STARTED: | 12:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:10 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. med. brown clayey f-m SAND, some gravel, loose saturated. | | 0<br>0<br>0<br>0<br>0<br>0<br>0 | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | 16.0-18.0 ft. (same as above) | | | | |
| 18 | | | | | 18.0-19.0 ft. brownish-gray clayey f-m-c- SAND, some gravel, saturated (till) | | 0<br>0 | | |
| 19 | | | | | **E.O.B. 19.0 feet; refusal (bedrock)** | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B9 | COORDINATES: | | DATE: | 05/17/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: NA | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:55 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-1.0 ft Concrete slab | | | | |
| 2 | | | | | 1.0-2.0 ft. FILL dk. brown to black f. SAND, little coal ash, moist | | 0<br>0 | | |
| 3 | | | 3.0 | | 2.0-4.0 ft. FILL dk brown to orange-brown f. SAND, tr. clay, moist | | 0<br>0<br>0 | | |
| 4 | | | | | 4.0-6.0 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | **Sample SI-47-B9-A1** collected at 6.0-6.5 ft. (13:50) | | 0<br>0 | | |
| 6 | ☒ | | 3.4 | | | | 0 | | h/s = 0 ppm |
| 7 | | | | | 6.0-8.0 ft. reddish-brown sandy CLAY, tr. gravel, stiff, compact, moist. (TILL) | | 0<br>0 | | |
| 8 | | | | | **E.O.B. at 8.0 feet** | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

Note: Groundwater not encountered.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-47-B10 | COORDINATES: | DATE: 05/17/04 | |
| ELEVATION: SLAB ON GRADE | GWL: Depth: NA Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 14:25 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | ^ < > < ^ > ^ < > ### ^ < > | 0-1.0 ft Concrete slab | | | | |
| 2 | | | 3.2 | ### # ## ### # ## ### # ## ### # ## ### # ## ### # ## ### | 1.0-4.0 ft FILL reddish-brown to greenish-gray sandy CLAY, some gravel, moist (appears to be disturbed till). **Sample SI-47-B10-A1** collected at 3.5-4.0 feet (14:20) | | 0<br>0<br>0<br>0<br>0 | | |
| 4 | X | | | | **E.O.B. at 4.0 feet (refusal)** | | | | concrete slab at 4.0 feet (no staining observed) |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

Refusal at 4.0 feet (concrete slab) staining not observed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-47-B11 | COORDINATES: | DATE: 05/17/04 | |
| ELEVATION: SLAB ON GRADE | GWL: Depth: NA Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 14:45 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-1.0 ft Concrete slab | | | | |
| 2 | | | 3.2 | | 1.0-4.0 ft. FILL dk. brown to black clayey SAND, coal ash, brick fragments, moist. | | 0<br>0<br>0<br>0 | | |
| 4 | X | | | | 4.0-4.8 ft Concrete slab (green staining) Archive sample collected at 3.5-4.0 feet bgs. | | 0 | | |
| 5 | | | 3.3 | | 4.8-7.5 ft. FILL reddish-brown sandy CLAY, tr. rock fragments, w./ sandy horizons, stiff, compact, moist (disturbed TILL) | | 0<br>0<br>0<br>0 | | |
| 8 | | | | | 7.5-8.0 ft Concrete slab (no staining observed) | | | | |
| | | | | | **E.O.B. at 8.0 feet (refusal)** | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B12 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~9.0 | Date/Time: | TIME STARTED: | 7:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft Concrete slab | | | | |
| 1 | | | | | 0.8-1.0 ft. FILL Black coal ash and f-m SAND. moist | | 0 | | |
| 2 | | | 2.8 | | 1.0-4.0 ft. FILL dk. brown f. SAND, tr. coal ash, tr. gravel, moist. | | 0 | | |
| | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0-5.0 ft. (same as above) perched water at 4.5-5.0 ft. | | 0 | | PID affected by high humidity - results may not be reliable. |
| 5 | X | | | | Sample SI-47-B12-A1 collected at 4.5-5.0 ft. (08:00) | | ~1 ppm | | |
| | | | | | 5.0-9.0 ft. reddish-brown sandy CLAY, stiff, compact, (TILL) moist | | 0 | | |
| 6 | | | 2.3 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| | | | 1.5 over 2' | | | | 0 | | |
| 9 | | | | | 9.0-10.0 ft. dk. brown f. SAND, tr. gravel, rock fragments, saturated (confined unit). | | 0 | | |
| 10 | | | | | **E.O.B. at 10.0 feet (refusal) bedrock** | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

Temporary well installed (1-inch dia. PVC) screen from 0-10 feet, upper 2 feet of screen protected with a Macrocore sleeve.

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B13 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~5.0 | Date/Time: | TIME STARTED: | 8:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft Concrete slab | | | | |
| 1 | | | 2.2 | | 0.8 - 4.0 ft. FILL dk. brown f. SAND, tr. coal ash, some concrete & rock fragments, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0-5.0 ft. (same as above) | | 0 | | |
| 5 | | | 2.6 | | 5.0-7.5 ft. dk. brown f. SAND, tr. gravel, wet (perched water at 5.0 ft.). **Sample SI-47-B13-A1** collected at 7.0-7.5 feet for Cr only (08:40) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | X | | | | | | 0 | | |
| | | | | | 7.5-8.0 ft. redish-brown sandy CLAY, stiff, very compact, slightly moist (TILL). | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | | | 8.0-12.0 ft. reddish-brown andy CLAY, some gravel & rock fragments (large gneiss cobble at 10 ft), stiff, compact, moist. | | 0 | | Note: PID is giving erratic results (false readings),due to high humidity and condensation on the bulb. |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

Temporary constructed of 1-inch dia. PVC, screened from 2.5-17.5 feet bgs.

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B13 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | ~5.0 Date/Time: | TIME STARTED: | 8:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.4 | | 12.0-15.5 ft. reddish-brown to greenish-brown mottled SILT, tr. f. sand, uniform, thinly laminated, stiff, compact (Loess?), moist. | | 0<br>0<br>0<br>0 | | |
| 16 | | | | | 15.5-17.5 ft reddish-brwon to dk. brown f. SAND, tr. m. sand (silty in upper 0.5 ft.), saturated (sem-confined unit). | | 0<br>0<br>0 | | |
| 17 | | | 1.2' over 1.5' | | | | | | |
| 18 | | | | | **E.O.B. at 17.5 feet (refusal) bedrock** | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-47-B14 | COORDINATES: | DATE: 05/18/04 | |
| ELEVATION: SLAB ON GRADE | GWL: Depth: ~10.5' Date/Time: | TIME STARTED: 9:30 | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: 9:55 | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft Concrete slab | | | | |
| 1 | | | 2.6 | | 0.8-3.0 ft. FILL dk. gray to black coal ash plus crushed stone, and f. sand, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| | | | | | 3.0-4.0 ft. orange brown to dk. brown f. SAND, tr. clay, moist. | | 0 | | |
| 4 | | | 2.9 | | 4.0-8.0 ft. orange brown to dk. brown f. SAND, little gravel, tr. cobbles, unstratified, moist | | 0 | | uncertain whether native soil or fill. |
| 5 | | | | | | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | 2.4 | | 8.0-11.0 ft m. brown c-m-f- SAND, cobbles in lower 0.5', moist, (saturated at 10.5 feet) | | 0 | | uncertain whether native soil or fill. |
| 9 | | | | | | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| | | | | | 11.0-11.2 ft. dk. reddish-brn. sandy CLAY, stiff, saturated (TILL). | | 0 | | |
| 12 | | | | | 11.2-12.0 ft. reddish-brown c-m-f- SAND, saturated | | 0 | | |

NOTES:

No perched water observed; no soil samples collected; temporary well screened from 3-13 ft bgs.

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B14 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~10.5' | Date/Time: | TIME STARTED: | 9:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:55 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | 0.8'/1' | | 12.0-12.6 ft. same as above. | | 0 | | |
| 13 | | | | | 12.6-13.0 ft reddish-brown sandy clay, some cobbles (till). | | 0 | | |
| | | | | | **E.O.B. at 13.0 feet (refusal)** | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B15 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~11.5' | Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 11:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft Concrete slab | | | | |
| 1 | | | 2.3 | | 0.8-4.0 ft. FILL coal ash, brick fragments, concrete plus dk. brown f. SAND, moist. | | 10-15 ppm | | Note: PID readings are probably not reliable, due to moisture effects |
| 4 | | | | | 4.0-5.0 ft. black to rusty brown coal ash, glass, mixed with dk. brn. f. sand, moist (perched water at 5.7-5.0 ft.) | | 10-15 ppm | | **Sample SI-47-B15-A1** collected from 4.6-5.0 ft. (10:55) |
| 5 | | | | | 5-5.8 ft Concrete slab (green staining) **Sample SI-47-B15-B1** collected at 5.0-5.6 ft (11:00) | | 0 | | |
| 6 | | | 3.3 | | 5.8-6.0 ft. reddish-brn. c-m-f- SAND, moist. | | 0 | | |
| 7 | | | | | 6.0-8.0 ft. reddish-brown mottled silty CLAY, stratified, stiff, compact, slightly moist (till). | | 0<br>0<br>0 | | |
| 8 | | | | | 8.0-11.5 ft. reddish-brown sandy CLAY, some cobbles (weathered gneiss), most stiff, very compact (till). | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | 3.8 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.5-12.0 ft. reddish-brn. clayey SILT, tr. f. sand, saturated. | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B15 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | ~11.5' Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 11:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0 - 12.4 same as above | | 0 | | |
| 13 | | | 3.5 | | 12.4-15.5 ft. reddish-brown gravelly f. SAND, tr. clay, tr. rock fragments, saturated. | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | 15.5-16.0 ft.. weathered gneiss. | | 0 | | |
| 17 | | | | | **E.O.B. at 16.0 feet (refusal)** | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

Temporary well screened from 11-16 feet, annular space around riser sealed with bentonite to grade.

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B15 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: | ~11.5' Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 11:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.8 ft Concrete slab | | | | |
| 1 | | | | | 0.8-4.0 ft. FILL coal ash, brick fragments, concrete plus dk. brown f. SAND, moist. | | 10-15 ppm | | Note: PID readings are probably not reliable, due to moisture effects |
| 2 | | | 2.3 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | 4.0-5.0 ft. black to rusty brown coal ash, glass, mixed with dk. brn. f. sand, moist (perched water at 5.7-5.0 ft.) | | 10-15 ppm | | **Sample SI-47-B15-A1** collected from 4.6-5.0 ft. (10:55) |
| 5 | | | | | 5-5.8 ft Concrete slab (green staining) **Sample SI-47-B15-B1** collected at 5.0-5.6 ft (11:00) | | 0 | | |
| 6 | | | | | 5.8-6.0 ft. reddish-brn. c-m-f- SAND, moist. | | 0 | | |
| | | | 3.3 | | 6.0-8.0 ft. reddish-brown mottled silty CLAY, stratified, stiff, compact, slightly moist (till). | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| | | | | | 8.0-11.5 ft. reddish-brown sandy CLAY, some cobbles (weathered gneiss), most stiff, very compact (till). | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | 3.8 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.5-12.0 ft. reddish-brn. clayey SILT, tr. f. sand, saturated. | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-47-B15 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION: | SLAB ON GRADE | GWL: Depth: ~11.5' | Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 11:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0 - 12.4 same as above | | 0 | | |
| 13 | | | 3.5 | | 12.4-15.5 ft. reddish-brown gravelly f. SAND, tr. clay, tr. rock fragments, saturated. | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | + + +++ + + | 15.5-16.0 ft.. weathered gneiss. | | 0 | | |
| 17 | | | | | **E.O.B. at 16.0 feet (refusal)** | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

Temporary well screened from 11-16 feet, annular space around riser sealed with bentonite to grade.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-47-B-16 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID |
| 1 | | | | | Concrete | | | | |
| | | | | | Asphalt | | | | |
| 2 | | | | | Concrete | | | | |
| | | | | | Yellowish Red cmf SAND, little Silt, trace mf Gravel trace clay & Piece of Rock | F | | | 0.0 ppm |
| 3 | | | 83 | | | | | | |
| 4 | | | | | w/ mf Gravel | | | | |
| 5 | | | | | Yellowish Brown and Red cmf SAND, little Silt & clay & Piece of Rock, gravel | F | | | 0.0 ppm |
| 6 | | | | | | | | | |
| 7 | | | 83 | | | | | | |
| 8 | | | | | Red and Dark Brown cmf SAND, trace Silt, trace clay, trace f Gravel | Till | | | GWL 8.0' ± |
| 9 | | | | | ↓ | | | | |
| 10 | | | | | Yellowish Brown SILT/CLAY, little mf Sand, trace f Gravel & Piece of Rock | Till | | | 0.0 ppm |
| 11 | | | | | alternat bands of Silt/clay | | | | |
| 12 | | | | | | | | | |

NOTES:

Temporary Well

Screen: 5-15' - 1" PVC screen
0.5 - 1" PVC Riser
2-15' - Sand pack
1-2 - Bentonite

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-16 | **COORDINATES:** | **DATE:** 07/21/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/21/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/21/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 80 | | Grayish Brown cmf SAND, little Silt, trace clay, trace f Gravel | | | | 0.0 ppm |
| 14 | | | | | Black cmf GRAVEL and SAND, trace Silt & clay | GP/SP (Till) | | | 0.0 ppm |
| 15 | | | | | Grayish Brown cmf SAND, little Silt, trace clay | SP (Till) | | | |
| 16 | | | | | End of the Boring at 15.0 feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** 52-47-B-17 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (PID ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | Brownish yellow cmf SAND, and Silt, little clay & | F | | | |
| 2 | | | | | Piece of Gravel, Rock & Piece of Concrete | | | | 0.0 |
| 3 | | | 75 | | | | | | |
| 4 | | | | | Yellowish Brown cmf SAND, little Silt, trace mf Grav. & Piece of Rock, gravel etc | F Till | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | Yellowish Brown cmf SAND, little Silt (glacial Till) | Till | | | |
| 8 | | | 80 | | Yellow Brown SILT and CLAY, trace f Sand, trace mf Gravel & Piece of Rock | | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | | | Gray and Yellowish Brown cmf SAND, little Silt trace clay | Till | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-17 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 75 | | Gray and yellowish Brown cmg SAND, little Silt, trace clay | Till | | | 0.0 |
| 14 | | | | | Gray and Black cmg SAND, little Silt, little mf Gravel, trace clay | | | | |
| 15 | | | | | End of the Boring at 15.00 feet | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-18 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | PID CBRN |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | NR | | No Recovery | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Multi color cmf GRAVEL, little cmf Sand, trace silt- | | | | 0.0 |
| 6 | | | | | | Till | | | |
| 7 | | | 60 | | Grayish Green and Reddish Brown CLAY & SILT, trace f sand & mf Gravel | | | | |
| 8 | | | | | Reddish Brown cmf SAND little Silt, trace clay | | | | 0.0 |
| 9 | | | | | Reddish Brown SILT, little f sand, trace clay, f Gravel & Pieces of Rock | Till | | | |
| 10 | | | | | | | | | |
| 11 | | | 40 | | Reddish Brown Cmf SAND, little Silt, trace mf Gravel trace clay & Piece of Rock | Till | | | 0.0 |
| 12 | | | | | ↓ | | | | |

NOTES: Temporary well

Screen - 2-12' - 1" PVC 0.010"
Riser - 0-2 - 1" PVC
Sand pack - 1-12'
Bentonite 0.5-1 -
0-0.5 - Grout

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-19 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (BGN) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | Black cmf SAND, little Silt, little f Gravel, trace clay & piece of Rock | | | | 0.0 |
| 3 | | | 46 | | Brown cmf SAND, little cmf Gravel, trace clay & pieces of Concrete | f | | | 0.0 |
| 4 | | | | | Brwn cmf SAND | F | | | |
| 5 | | | | | Reddish Brown CLAY/SILT little mf Sand, trace mf Gravel | | | | 0.0 |
| 6 | | | | | w/ Pieces of Rock | Fill | | | |
| 7 | | | | | | | | | |
| 8 | | | 58 | | Reddish Brown cmf SAND, little Silt, trace clay, trace f Gravel | Till | | | 0.0 |
| 9 | | | | | | | | | est. to 5 |
| 10 | | | | | | | | | |
| 11 | | | 83 | | | | | | 0.0 |
| 12 | | | | | Refusal at 11.0' | | | | |

NOTES: Temp well

Screen - 3-11' - 1" PVC 0.010"
Riser - 0-3 - 1" PVC.
Sand pack - 1-11' feet
Bentnil - 0.5-1.0 -

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-20 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete Slab | | | | PID (ppm) |
| 1 | | | | | Brown cmf SAND, little Silt, trace clay, trace f Gravel w/ Piece of Rock | F | | | 0.0 |
| 2 | | | | | | | | | |
| 3 | | | 75 | | Dark Brown cmf SAND, little Silt, little mf Gravel trace clay w/ Piece of Rock | F | | | 0.0 |
| 4 | | | | | | | | | |
| A-1 | | | | | ↓ | | | | |
| 5 | | | | | Concrete Slab | | | | |
| | | | | | End of H20 at 5.0' (Refusal) | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-21 | **COORDINATES:** | **DATE:** 07/20/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/20/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/20/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (PID (PPM)) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete Slab | | | | |
| 2 | | | | | Gray and Reddish Brown cmf SAND, little silt, trace clay & Piece of Rock gravel, Brick | F | | | 0.0 |
| 3 | | | 63 | | ↓ Piece of Brick | | | | |
| 4 | | | | | Reddish Brown cmf SAND, little mf Gravel | F | | | 0.0 |
| 5 | | | | | Green mf SAND, little silt, trace f Gravel & Pieces of Concrete | Till | | | |
| 6 | | | | | Red cmf SAND, little silt, trace f Gravel | | | | 0.0 |
| 7 | | | | | Reddish Brown SILT & CLAY, little f Gravel | | | | |
| 8 | | | 63 | | trace cmf Sand & Piece of Rock | Till | | | 0.0 |
| 9 | | | | | ↓ | | | | |
| 10 | | | | | End of the Boring at 10.0' | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-22 | **COORDINATES:** | **DATE:** 07/21/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/21/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/21/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (PID CPPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete Slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | NIL | | No Recovery | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Brown cmf SAND, little Silt, trace mf Gravel & Piec of Rock | F | | | 0.0 |
| 4.5' ft A-5.0 | | | 50 | | & Pieces of Brick | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | Brownish Gray cmf SAND, little Silt, little mf Gravel trace clay & Piece of Rock | F | | | 0.0 |
| | | | | | End of the Boring at 6.0' (Refusal - Slab) | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: S2-47-13-23 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (PID CBLW) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | Bricks | | | | |
| 2 | | | | | Dark Brown cmf SAND, little Silt, trace clay, trace mf Gravel & pieces of | F | | | 0.0 |
| 3 | | | 83 | | Rock, wood | P | | | |
| 4 | | | | | Black Piece of Asphalt | | | | |
| | | | | | Yellowish Brown SILT/ | | | | 0.0 |
| 5 | | | | | CLAY, little f Gravel & Pieces of Rock | | | | |
| 6 | | | | | Yellowish Brown cmf SAND, Some Silt & clay, trace mf Gravel & Pieces of Rock | Till | | | |
| 7 | | | 80 | | | | | | |
| | | | | | mf Sand | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | Brownish Gray SILT/CLAY little mf Gravel & Piece of Rock | Till | | | 0.0 |
| 10 | | | | | End of the Boring at 10.0 feet | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-47-B-24 | COORDINATES: | DATE: 07/21/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 07/21/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 07/21/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (BBW) |
| | | | | | Concrete slab | | | | |
| 1 | | | | | | | | | |
| | | | | | Gray & White Brown cmf SAND, little mf Gravel trace Silt & piece of Rock, concrete | P | | | 0.0 |
| 2 | | | | | | | | | |
| 3 | | | 67 | | | | | | |
| | | | | | | | | | |
| 4 | | | | | in Broken | F | | | |
| | | | | | | | | | |
| 5 | | | | | Refusal at 4.0' feet (Concrete slab) | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-47-B-25 | **COORDINATES:** | **DATE:** 07/21/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 07/21/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 07/21/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

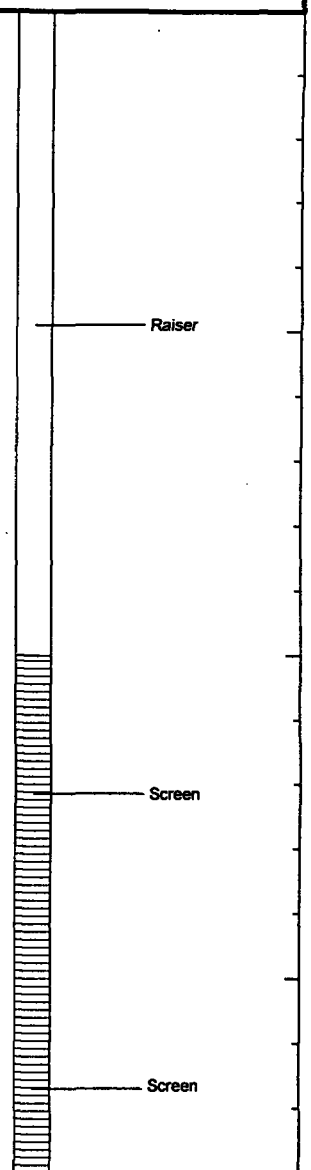
| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete Slab | | | | |
| 2 | | | | | Brownish yellow cmf SAND, little Silt, trace clay & Piece of Rock | F | | | 0.0 |
| 3 | | | 55 | | | | | | |
| 4 | | | | | Brownish yellow mf SAND, little Silt, trace clay & Piece of Rock | F | | | 0.0 |
| 5 | | | | | Green cmf SAND, little silt | Till | | | |
| 6 | | | | | Yellowish Brown SILT & CLAY, little mf Sand, trace mf Gravel & Piece of Rock | | | | 0.0 |
| 7 | | | 77 | | | Till | | | |
| 8 | | | | | Red mf SAND, and clay, little Silt, trace f Gravel | | | | 0.0 |
| 9 | | | | | | Till | | | |
| 10 | | | | | End of the Boring at 10.0' feet | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

5.0'-5.5'

NOTES: No slab at 6.0'

| | | | |
|---|---|---|---|
| **Date Start/Finish:** 10/4/04 | **Borehole Depth:** 20.0' bgs | **Well/Boring ID:** SI-47-B27 |
| **Drilling Company:** B&B Drilling | **Surface Elevation:** | **Client:** General Motors |
| **Driller's Name:** Gordon Blewett | **Geologist:** J. Robertson | **Location:** Former General Motors Assembly Plant Site, Sleepy Hollow, NY |
| **Drilling Method:** Geoprobe, 4-foot Macrocore sampler | | |

| DEPTH / ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|
| 0 | 1 | 0-4 | 3.0 | 2.7<br>2.5<br>3.2 | | Dark brown SILTY SANDY SOIL.<br>Brown-red fine to coarse SAND, little Rock, moist. |
| 5 -5 | 2 | 4-8 | 3.75 | 5.3<br>5.7<br>5.9 | | Brown fine to medium SAND, trace Clay, moist.<br>Brown SILTY SAND, some fine Sand, trace Rock, moist. |
| 10-10 | 3 | 8-12 | 3.25 | 2.2<br>3.2<br>2.7 | | Brown fine to coarse SAND, saturated at 8.0' bgs.<br>Brown fine to medium SAND, trace Silt, trace Clay. |
| 15-15 | 4 | 12-16 | 2.25 | 4.8<br>2.5 | | Brown fine to coarse SAND, little Silt.<br>Brown fine to medium SAND, some Silt.<br>Black fine Sand lens 13' thick, no odor at 14.0' bgs. |
| | 5 | 16-20 | 3.0 | 7.9<br>3.3<br>2.5 | | Brown fine to medium SAND, some coarse Sand, trace Silt, trace Rock. Hard packed at 18.0' bgs.<br>End of boring at 19.0' bgs. |




Well/Boring Construction

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm. Temperary well installed 8-18', 2" PVC well/ 10' raiser 10' screen. Sample taken from 0.0'-0.5' bgs.

| | | | |
|---|---|---|---|
| **Date Start/Finish:** 10/4/04 | **Borehole Depth:** 20.0' bgs | **Well/Boring ID:** SI-47-B28 |
| **Drilling Company:** B&B Drilling | **Surface Elevation:** | **Client:** General Motors |
| **Driller's Name:** Gordon Blewett | **Geologist:** J. Robertson | **Location:** Former General Motors Assembly Plant Site Sleepy Hollow, NY |
| **Drilling Method:** Geoprobe 4-foot Macrocore sampler | | |

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | PID Headspace (ppm) | Geologic Column | Stratigraphic Description | Well/Boring Construction |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 0-4 | 3.17 | 0.0 | | Dark brown SILTY SOIL. | |
| | | | | | 0.0 | | Brown fine to medium SAND, little Silt, moist. | |
| | | | | | 0.0 | | | |
| | | | | | | | Brown CLAY, trace Silt, dry. | |
| | | | | | | | Red-brown CLAY, little Silt, dry. | |
| 5 | -5 | 2 | 4-8 | 4.0 | 0.0 | | Red-brown Silt, some very fine Sand, little fine Gravel, trace Gravel, moist. | Raiser |
| | | | | | 0.0 | | | |
| | | | | | 0.0 | | | |
| | | | | | | | Red-brown fine to medium SAND, wet. | |
| | | 3 | 8-12 | 3.42 | | | Red-brown very fine SAND, some Silt, wet. | |
| | | | | | 1.7 | | Red-brown fine SAND, saturated. | |
| | | | | | | | Brown medium to coarse SAND, little Rock, saturated. | |
| 10 | -10 | | | | 0.7 | | Brown very fine SAND, little Clay, little Silt. | |
| | | 4 | 12-16 | 3.58 | 2.5 | | Brown fine to coarse SAND, little Silt, saturated. | Screen |
| | | | | | 2.7 | | | |
| | | | | | 2.5 | | | |
| 15 | -15 | | | | | | Brown medium to coarse SAND, little Silt, satruated. | |
| | | 5 | 16-20 | 2.42 | 2.5 | | Brown medium to coarse SAND. | |
| | | | | | | | Brown fine to medium SAND. | Screen |
| | | | | | 3.1 | | Brown medium to coarse SAND. | |
| | | | | | | | Brown fine to coarse SAND, little weathered Rock. | |
| | | | | | | | End of boring at 18.5' bgs. | |

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.
PID readings collected using ziplock bags. PID readings of Ziplock bag was 3.4ppm. Temperary well installed 8-18', 2" PVC well/ 10' raiser 10' screen. Sample taken from 0.0'-0.5' bgs.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B1 | COORDINATES: | DATE: | 10/20/03 |
| ELEVATION / DATUM: Conc. Slab | GWL: Depth: 6.0 Date/Time: | TIME STARTED: | 13:15 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 ft. Concrete slab | | | | |
| 1 | | | 2.7 | | 0.5-1.0 ft. FILL Crushed stone.<br>1.0-4.0 ft. FILL dk. Gray to black coal ash, f. SAND, crushed stone, and coal, moist. (tip of probe wet) | | 0<br>0<br>0<br>0 | | |
| 4 | | | 2.0 | | 4.0-8.0 ft FILL black coal ash, f. sand, crushed stone, w./ rusty brown horizons, moist to 6.0 ft. (saturated at 6 ft.) | | 0<br>0<br>0<br>0<br>0 | | |
| 8 | | | 2.4 | | 8.0-12.0 ft. FILL crushed stone, brick fragments, f-m-c sand, saturated, black oil staining throughout. | | 10-20<br>10-20<br>10-20 | | Globules of oil present on outside of sampler. |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B1 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | Conc. Slab | GWL: Depth: 6.0 | Date/Time: | TIME STARTED: | 13:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-15.5 ft. FILL Black oily crushed stone, wood, coal ash, w./ rusty horizons, saturated, oil staining and strong petroleum odor. | | 150-300 | | |
| 14 | | | 2.7 | | | | 10-20 | | |
| 15 | | | | | | | 5-10 | | |
| 16 | | | | | 15.5-16.0 ft. Black fine SAND, oil stained w./ odor. | | 0.5-3.0 | | |
| 17 | | | | | 16.0-20.0 ft. lt. gray f-m-c- SAND, tr. Gravel, saturated (no staining). | | 0 | | |
| 18 | | | 4.0 | | | | 0 | | |
| 19 | | | | | | | 0 | | Possible contact with peat layer at 20 ft. (roots & clay in tip of sampler). |
| 20 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY |
| BORING NUMBER: | SI-UST-B2 | COORDINATES: | DATE: 10/20/03 |
| ELEVATION / DATUM: | Grade (millings) | GWL: Depth: 7.5 Date/Time: | TIME STARTED: 8:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: Date/Time: | TIME COMPLETED: 10:19 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 1.9 | | 0-3.5 ft. FILL 1" crushed stone mixed w./ m. brown to dk. brown sandy silt, asphalt fragments, and millings, n\moist. | | 0<br>0<br>0<br>0 | | |
| 4 | | | | | 3.5-4.0 ft. FILL black f-m-c SAND w./ 50% crushed stone. moist | | 2-5 | | |
| 5 | | | 3.2 | | 4.0-8.0 ft. FILL dk. gray to black f-m-c SAND and crushed stone, oily sheen and strong petroleum odor, wet. | | 50-80 | | Heaviest staining and PID at 7.5-8.0 ft. |
| 8 | | | 2.5 | | 8.0-12.0 ft. FILL black crushed stone and f-m-c SAND, oily, saturated. | | 250-400<br>200-450 | | Driller forgot to place macrocore liner in sampler - sample collected from unlined tube. |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B2 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | Grade (millings) | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 8:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:19 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. FILL black to dk. gray crushed stone and f-m-c silty SAND, some clay, tr. wood, saturated, oily with odor. | | 150-200 | | |
| 14 | | | 2.4 | | | | 10-15 | | |
| 15 | | | | | | | 10-15 | | wood in lower 0.5 feet - possible buried structure |
| 16 | | | | | 16.0-20.0 ft. light gray f-m-c gravelly SAND, saturated, poorly graded, uniform color, gravel well rounded to subangular. | | 5-10 | | possibly native soil; no stratification |
| 17 | | | | | | | 0-2 | | |
| 18 | X | | | | | | 0-0.5 | | Archive sample of sand collected |
| 19 | | | | | | | 0 | | |
| 20 | | | | | 20.0-23.4 ft. same as above w./ tr. gravel to 1" wide, saturated | | 0 | | |
| 21 | | | | | | | 0 | | |
| 22 | | | | | | | 0 | | |
| 23 | | | | | 23.4-24.0 ft. Peat w./ some clay, dk. brown, visible plant remains, stiff, moist, strong $H_2S$ odor | | | | |
| 24 | | | | | | | 0 | | |

NOTES:

**E.O.B. at 24.0 feet.**

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B3 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: 7.36' | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6" Asphalt | | | | |
| | | | | | Concrete slab (2.5') | F | | | 0.0 |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | 15 | | Dark Gray & Black cmf SAND, little Silt, trace cmf Gravel w/ pcs of Rock, concrete Brick | F | | | 0.0 |
| 4 | | | | | Brownish yellow cmf SAND, little Silt, trace f Gravel | F | | | 0.0 |
| 5 | | | | | green | | | | GWL-5.0' |
| 6 | | | 75 | | Black cmf SAND, little Silt, trace clay, little mf Gravel w/ Pieces of Rock concrete, Brick | F | | | 9000 — 6.0' oily |
| 7 | | | | | w/ pieces of concrete, Brick Rock etc | F | | | |
| 8 | | | | | w/ pieces of Wood | | | | oily |
| 9 | | | | | Black cmf SAND, little Silt trace clay w/ Pieces of Rock Brick, concrete etc. | F | | | 9000 |
| 10 | | | 80 | | | | | | Oily |
| 11 | | | | | Pieces of Concrete | | | | 9000 oily |
| 12 | | | | | Black & Gray cmf SAND, little Silt w/ Rock Brick | F | | | |

NOTES: Oil/Water Shake Test - performed.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B3 | COORDINATES: | | DATE: 10/15/03 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 10/15/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/15/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray to Brownish yellow cmf SAND, little mf Gravel & Pieces of Rock, Coal, Coal etc | F | | | 0.0 |
| 14 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel, trace clay | F/SP | | | 0.0 |
| | | | 85 | | Dark Gray cmf SAND, little mf Gravel, trace Silt | SP | | | 0.0 |
| 15 | | | | | Brown Organic SILT & Pieces of decomposed wood | SP | | | 0.0 |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B4 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: 8.31' | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray to Brown cmf SAND, little cmf Gravel, trace Silt, trace clay w/ Pieces of Concrete, Brick, metal, Rock | | | | 0.0 |
| 1 | | | | | | | | | |
| 2 | | | 75 | | | | | | |
| 3 | | | | | Pieces of wood - 3" | | | | |
| 4 | | | | | Pieces of wood - 2" | | | | |
| 5 | | | | | Green to Brown cmf SAND, little cmf Gravel, trace Silt & clay w/ Pieces of Rock | | | | 0.0 |
| 6 | | | 54 | | wood | | | | |
| 7 | | | | | Black cmf SAND, little Silt and mf Gravel, trace clay w/ Pieces of Rock | | | | GWL: 7.0' strong odor 9999 Oily |
| 8 | | | | | | | | | |
| 9 | | | | | w/ Pieces of Rock, wood, | | | | |
| 10 | | | 58 | | Black cmf SAND, little mf Gravel, trace Silt, w/ Pieces of wood, Brick etc | | | | |
| 11 | | | | | w/ Pieces of Brick. | | | | 9999 |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B4 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little cmf Gravel, trace silt & clay w/ Pieces of Rock, Brick, Wood | F | | | Oily |
| 14 | | | 54 | | w/ Pieces of Wood - 2" | | | | 9999 |
| 15 | | | | | w/ Pieces of wood, Brick Rock etc | F | | | Oily |
| 16 | | | | | Pieces of Brick - 3" w/ Pieces of wood, Brick, Rock | | | | |
| 17 | | | | | w/ Pieces of Wood - 1" | F | | | Oily |
| 18 | | | 73 | | | | | | |
| 19 | | | | | Black cmf SAND & GRAVEL trace Silt & Clay w/ Pieces of concrete, Rock, Wood etc | F | | | 9999 Oily |
| 20 | | | | | w/ concrete | F | | | 500 |
| 21 | | | | | Brown Organic SILT, with clay & decomposed Wood | pt | | | 0.0 |
| 22 | | | 75 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: 21.24' & 28.0' Sample collected for Inspection

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276080000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST. B4 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Dark Gray silty CLAY w/ Pieces of decomposed wood | CL | | | |
| 26 | | | 83 | | | CL | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | CL | | | |
| | | | | | End of the Boring at 28.0' | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: 276030000 | | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | | |
| BORING NUMBER: SI-UST-B5 | | COORDINATES: | | DATE: 10/14/03 | |
| ELEVATION: 9.12' | | GWL: Depth: | Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | | Depth: | Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS: PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & Pieces of Rock | | | | 0.0 |
| 1 | | | | | Dark Brwn cmf SAND & Gravel, trace silty clay & Pieces of concrete, Brick | F | | | |
| 2 | | | 63 | | | | | | 0.0 |
| 3 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & Pieces of Rock, concrete | F | | | 0.0 |
| 4 | | | | | | | | | GWL- 4.5' |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Dark Gray & Green mf SAND, little Silt, trace mf Gravel | F | | | 0.0 |
| 7 | | | | | Black mf SAND, little Silt, trace clay | F | | | 429 oily |
| 8 | | | | | | | | | oily |
| 9 | | | | | Black cmf SAND and GRAVEL, trace Silt & clay & Pieces of Rock, wood etc | F | | | 0.0 |
| 10 | | | 75 | | | | | | oily |
| 11 | | | | | Black cmf SAND & GRAVEL, little Silt, trace clay & Pieces of wood, cinder etc | F | | | 10000 oily |
| 12 | | | | | | | | | |

NOTES: Refusal at 12.0'

Oil/H2O shake Test - performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B6 | COORDINATES: | DATE: 10/14/03 | |
| ELEVATION: 13.64' | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Concrete slab | | | | 0.0 |
| 1 | | | | | ↑ O P E N ↓ | | | | |
| 2 | | | 25 | | | | | | |
| 3 | | | | | Brown cmf SAND, little cmf Gravel, trace Silt w Pieces of Rock, wood etc | F | | | 0.0 |
| 4 | | | | | | | | | |
| 5 | | | | | Dark Brown cmf SAND, Some cmf Gravel, trace Silt & clay w Pieces of Rock, Asphalt, wood | F | | | 0.0 |
| 6 | | | 38 | | | | | | |
| 7 | | | | | w Wood, cinder, asphalt | F | | | 0.0 |
| 8 | | | | | | | | | |
| 9 | | | | | Brown cmf SAND, little cmf Gravel, trace Silt & clay w Pieces of Rock | F | | | 0.0 |
| 10 | | | 40 | | | | | | |
| 11 | | | | | Black & Brown cmf GRAVEL, little cmf Sand, trace Silt & clay w Pieces of Rock Concrete | F | | | 0.0 GW2-10.0' Petroleum odor 10-12' - sheen |
| 12 | | | | | | | | | |

NOTES: 0-0.8' - slab  Oil/$H_2O$ Shake Test - performed
1-3 - open

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-136 | COORDINATES: | DATE: 10/14/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little mf Gravel, trace silt & clay w/ Coal Ash, Rock, Brick. | F | | | 500 Oily |
| 14 | | | 75 | | Gray & Black cmf SAND, little mf Gravel & Silt w/ fiber. concrete | F | | | 3100 Oily |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray & Black cmf SAND, some silt & clay trace mf Gravel | F | | | 3700 Oily |
| 17 | | | | | w/ Wood | | | | 200 Oily |
| 18 | | | 69 | | Black cmf SAND, little mf Gravel, trace Silt w/ Wood, Rock | F | | | 600 Oily |
| 19 | | | | | | | | | Oily |
| 20 | | | | | Dark Gray cmf SAND, little mf Gravel, trace silt & clay w/ pieces of Rock, Wood | F | | | |
| 21 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & clay | F/SP | | | |
| 22 | | | 71 | | Dark Gray mf SILT and CLAY, trace mf Sand | CL/ML | | | |
| 23 | | | | | Brown Organic SILT w/ decomposed wood. | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | |
| BORING NUMBER: SI-UST-B6 | | COORDINATES: | DATE: 10/14/03 |
| ELEVATION: | | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | | Depth: Date/Time: | DATE COMPLETED: 10/14/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 3 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Brown Organic SILT w/ pieces of decomposed wood | pt | | | PID (ppm) 0.0 |
| 26 | | | 67 | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | Dark Gray CLAY w/ Pieces of decomposed wood (trace) | CL pt | | | 0.0 |
| 29 | | | | | | | | | |
| 30 | | | 67 | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | End of the Boring at 32.0' | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B6A | COORDINATES: | DATE: 10/14/03 | |
| ELEVATION: 13.59' | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0.8' - concrete slab | | | | |
| 1 | | | | | open | | | | |
| 2 | | | 25 | | Brownish Yellow cmf SAND, little Silt, trace cmf Gravel & Pieces of Rock | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Brown cmf SAND, little Silt, trace cmf Gravel | F | | | 0.0 |
| 5 | | | | | & Pieces of Rock | | | | |
| 6 | | | 79 | | | | | | |
| | | | | | Dark Brown cmf SAND, some Silt, trace clay & f mf Gravel & Pieces of Rock | F | | | 0.0 |
| 7 | | | | | | | | | |
| 8 | | | | | Yellowish Brown cmf SAND, little Silt, trace clay, trace f Gravel | F | | | 0.0 |
| 9 | | | | | | | | | GWL-9.0 |
| 10 | | | 33 | | | | | | |
| | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel trace clay | F | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/$H_2O$ shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B6A | COORDINATES: | DATE: 10/14/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black & Dark Gray cmf SAND, little Silt, trace f Gravel, little clay & Pieces of Rock, wood | F | | | oily |
| 14 | | | 48 | | Black cmf GRAVEL, little Silt, trace cmf Sand & Pieces of wood, coal not rock | F | | | 238 oily |
| 15 | | | | | | | | | 750 oily |
| 16 | | | | | | | | | |
| 17 | | | | | Black cmf SAND, little Silt, trace clay, trace mf Gravel | F | | | |
| 18 | | | 32 | | | | | | |
| 19 | | | | | Black cmf SAND and GRAVEL, trace Silt & Pieces of Coal | F | | | 70 oily |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-7 | COORDINATES: | DATE: 10 \| 14 \| 03 | |
| ELEVATION: 13.70 | GWL: Depth: Date/Time: | DATE STARTED: 10 \| 14 \| 03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10 \| 14 \| 03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little Silt, trace mf Gravel w pieces of Brick, rock etc | F | | | 0.0 |
| 2 | | | 54 | | Dark Gray SILT, little mf Sand, trace clay w pieces of rock, Brick, coal Ash | F | | | 0.0 |
| 3 | | | | | Dark Gray mf SAND, some Silt, trace clay w pieces of Brick, wood, Rock, shell | F | | | 0.0 |
| 4 | | | | | w pieces of Concrete Dark Gray | | | | |
| 5 | | | 100 | | Brownish Yellow cmf SAND, little Silt, trace clay w pieces of Rock | F | | | 0.0 |
| 6 | | | | | Brown cmf SAND and GRAVEL | | | | |
| 7 | | | | | Refusal at 5.5' | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/$H_2O$ Shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276032000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B7A | COORDINATES: | DATE: 10/14/03 | |
| ELEVATION: 13.59 | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brown cmf SAND, little Silt, trace clay & mf Gravel & pieces of Rock, wood etc | | | | 0.0 |
| 2 | | | 65 | | Dark Gray SILT, little mf Sand, trace f Gravel & Pieces of Wood, shell | | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Brown cmf SAND, little Silt & pieces of concrete, gravel | | | | 0.0 |
| | | | 100 | | | | | | |
| 5 | | | | | Refusal at 5.5' | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/$H_2O$ Shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276032000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B7B | COORDINATES: | DATE: 10/14/03 | |
| ELEVATION: 13.66 | GWL: Depth: Date/Time: | DATE STARTED: 10/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 1 | | | | | Dark Brown cmf SAND, little mf Gravel, trace clay & Pieces of Brick, Coal Ash wood. | F | | | 0.0 |
| 2 | | | | | Dark Gray mf SAND and SILT, trace cmf Gravel & Pieces of Brick, wood, Rock | F | | | 0.0 |
| | | | 54 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Brown cmf SAND, little mf Gravel & Pieces of Rock, Brick wood, concrete | F | | | 0.0 |
| 5 | | | 80 | | White & Brown cmf SAND & GRAVEL & Pieces of Rock, concr. | F | | | 0.0 |
| 6 | | | | | Refusal at 5.3' | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/$H_2O$ Shake Test. Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B9 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: 9.40 | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND & GRAVEL, little Silt w/ Pieces of Rock, Brick, concrete metal | F | | | 0.0 |
| 1 | | | | | w/ Pieces of Concrete | | | | |
| 2 | | | | | | | | | |
| | | | 75 | | | | | | |
| 3 | | | | | w/ Pieces of Rock | | | | |
| 4 | | | | | Brown & Green cmf SAND, little cmf Gravel, trace Silt w/ Pieces of Rock, Wood Concrete | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 67 | | Dark Gray cmf SAND, little Silt, trace mf Gravel w/ Pieces of shell | F | | | 0.0 GWL-6.5' |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel | SP | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | Sheen |
| 11 | | | | | Dark Gray SILT and CLAY, little cmf Sand, trace f Gravel | SP | | | 0.0 |
| 12 | | | | | | | | | |

NOTES: Oil / H2O shake Test - Performed.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B9 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dark Gray cmf SILT & CLAY, trace mf Sand | SP | | | PID (ppm) 0.0 |
| 13 | | | | | Varved clay (alternat bands of Silt and clay | CL | | | 0.0 |
| 14 | | | 63 | | | | | | sheen |
| 15 | | | | | Dark Gray mf SAND, trace clay & silt (alternat bands) | SM | | | 0.0 |
| 16 | | | | | | | | | |
| 17 | | | | | Brown Organic SILT w pieces of decomposed wood. | Pt | Pt | | 0.0 |
| 18 | | | 79 | | | | | | |
| 19 | | | | | | Pt/CL | Pt/CL | | |
| 20 | | | | | Dark Gray CLAY | CL | CL | | |
| | | | | | End of Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276090000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B10 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: 8.82' | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND & GRAVEL, trace Silt & clay w/ Pieces of Concrete, wood etc. | F | | | 0.0 |
| 2 | | | 52 | | w/ Pieces of Brick - 2" | | | | 0.0 |
| 3 | | | | | Dark Gray & Brown cmf SAND, little Silt, trace f Gravel w/ Pieces of Rock | F | | | 0.0 |
| 4 | | | | | | | | | |
| 5 | | | | | Dark Gray & Brown cmf SAND, little Silt, trace clay w/ Pieces of Rock, gravel, Brick. | F | | | 0.0 |
| 6 | | | 69 | | Black cmf SAND, little Silt, trace clay | P | | | GWL - 6.5' 0.0 |
| 7 | | | | | Dark Grey to Grey cmf SAND, little f Gravel, trace clay | SP | | | Sheen at 7.0' 0.0 |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | 75 | | | | | | |
| 11 | | | | | Grey CLAY & SILT, trace f Sand w/ Pieces of shell fr. | ML/CL | | | |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ Shake Test. Performed.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 27662000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B10 | COORDINATES: | DATE: 10/15/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/15/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/15/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (PPM)) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray SILT & CLAY, trace f Sand | ML/CL | | | 0.0 |
| 14 | | | | | alternate bands of silt/clay | | | | |
| 15 | | | | | Black | | | | |
| 16 | | | | | Dark Gray SILT & CLAY, trace f Sand | ML/CL | | | 0.0 |
| 17 | | | | | Gray CLAY & SILT trace f Sand | | | | 0.0 |
| 18 | | | | | Brown Organic SILT, w/ Pieces of decomposed wood. | Pt | | | 0.0 |
| 19 | | | | | Dark Gray cmf Sand, little silt with wood decomp | CL | | | 0.0 |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-11 | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: 8.80' | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little Silt, trace clay & mf Gravel & pieces of concrete | F | | | 0.0 |
| 2 | | | 67 | | Dark Gray cmf SAND, little Silt and mf Gravel & pieces of Rock, wood, Brick | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray cmf SAND and GRAVEL, trace Silt & clay & piece of Rock, wood | F | | | 0.0 |
| 5 | | | | | Dark Gray cmf SAND, little Silt, trace clay & pieces of Rock, wood etc | F | | | 0.0 |
| 6 | | | 69 | | Brown to Dark Gray cmf SAND, little Silt, trace clay | F | | | GSL-6.6' 0.0 |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel | F | | | 0.0 |
| 9 | | | | | Dark Gray cmf SAND, little Silt & clay, trace f Gravel | ML | | | |
| 10 | | | 88 | | Dark Gray CLAY & SILT alternate layers of silt/clay/sand. | | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/H2O shake Test. Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276080000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B11 | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray Silty CLAY, trace f Sand (alternat bands of silt/clay) | CL | | | 0.0 |
| 14 | | | 79 | | Dark Gray Silty CLAY, trace f Sand | ML | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray Silty CLAY & decomposed wood | CL | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 88 | | | CL | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of H2O Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276090000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-12 | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: 8.18' | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID ppm |
| 0 | | | | | Dark Brown cmf SAND, little Silt, trace clay & pieces of wood, Rock & concrete | F | | | 0.0 |
| 1 | | | | | & Rock | | | | |
| 2 | | | 69 | | wood & Brick | | | | |
| 3 | | | | | Dark Gray & Brown cmf SAND, little cmf Gravel, trace Silt & clay | F | | | 0.0 |
| 4 | | | | | Dark Brown & Gray cmf SAND, little cmf Gravel, trace clay & Silt & pieces of Rock, wood | F | | | 0.0 GWL-4.5' |
| 5 | | | | | | | | | |
| 6 | | | 63 | | Dark Gray cmf SAND, little Silt, trace clay & pieces of Rock | F | | | 9999 C7.0' oily |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Gray & Black cmf SAND and GRAVEL, trace Silt & clay & pieces of Rock wood etc | F | | | 432 oily |
| 9 | | | | | | | | | |
| 10 | | | 67 | | | | | | |
| 11 | | | | | Black cmf SAND, some mf Gravel, trace Silt & clay & pieces of Rock, wood | F | | | 600 oily |
| 12 | | | | | | | | | |

12.5'

NOTES: Refusal at 12.5'

Oil/$H_2O$ Shake Test - Performed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 36 13 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-~~14~~ | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: 7.6593' | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little mf Gravel & pieces of Rock, cinder & pieces of concrete & pieces of Rock | F | | | 0.0 |
| 2 | | | 50 | | Black cmf SAND & GRAVEL trace Silt & clay & pieces of wood, Rock. | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray cmf SAND & GRAVEL, trace Silt & clay & pieces of wood | F | | | 0.0 |
| 5 | | | | | | | | | GWL. 5.5' |
| 6 | | | 42 | | w/ pieces of Rock, concrete cmf Gravel cmf Sand | F | | | 0.0 |
| 7 | | | | | | | | | |
| 8 | | | | | Pieces of wood | F | | | 8.0 to 9.0' Oily |
| 9 | | | 38 | | Pieces of Brick, Rock | F | | | 1000 |
| 10 | | | | | Gray & Brown cmf SAND, little Silt, trace clay | F | | | |
| 11 | | | | | Refusal at 10.5' | | | | |
| 12 | | | | | | | | | |

NOTES: Oil/$H_2O$ Shake Test - Performed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-14 | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: 7.65' | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Brown cmf SAND, little Silt, trace clay w/ Pieces of Rock, wood | F | | | 0.0 |
| 2 | | | | | w/ Pieces of Rock | | | | |
| 3 | | | 50 | | Dark Gray & Brown cmf SAND, little silt, trace clay w/ Pieces of Rock. | F | | | 0.0 |
| 4 | | | | | w/ Piece of concrete / Rock | | | | |
| 5 | | | | | Dark Gray cmf SAND, some mf Gravel, trace silt w/ Pieces of Rock, wood Coal Ash. | F | | | 0.0 GWL. 4.5 |
| 6 | | | 69 | | Gray cmf SAND, some clay, trace silt+clay w/ Piece of Rock, wood concrete | F | | | 0.0 |
| 7 | | | | | Dark Gray to Black cmf SAND, little silt, trace clay w/ Piece of wood. Coal ash. | F | | | 0.0 |
| 8 | | | | | Dark Gray cmf SAND, little f Gravel, trace silt | | | | |
| 9 | | | | | Gray mf SAND, little silt- w/ Pieces of Rock | F | | | 0.0 |
| 10 | | | 40 | | Dark Gray ↓ w/ Piece of Rock. | | | | |
| 11 | | | | | green mf SAND, little silty Rock, wood | F | | | 0.0 |
| 12 | | | | | | | | | |

NOTES: Oil/H2O Shake Test. Performed

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-14 (36) | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black & Dark Gray cmf SAND, little mf Gravel, trace clay w/ piece of wood, Black el. | F | | | 0.0 |
| 14 | | | 25 | | Dark Gray & Black cmf SAND, little mf Gravel, trace Silt & clay | F | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace cmf Gravel w/ Piece of wood | F | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 67 | | | SP | | | |
| 19 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & clay | | | | 0.0 |
| 20 | | | | | Gray cmf SAND and GRAVEL trace Silt & clay | SP | | | |
| 21 | | | | | decrease w/ Piece of wood. | SP | | | |
| 22 | | | 63 | | | | | | |
| 23 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & clay | SP | | | 0.0 |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B14 | COORDINATES: | DATE: 10/16/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/16/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/16/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS: PID CRAW |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | | SP | | | |
| | | | | | Brown Organic SILT, little clay clay pieces of decomposed wood. | | | | 0.0 |
| 26 | | | 51 | | | pt | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | 88 | | | pt | | | |
| 31 | | | | | | | | | |
| 32 | | | | | End of the Boring at 32.0 | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-15 | COORDINATES: | DATE: 10/17/03 | |
| ELEVATION: 8-17' | GWL: Depth: Date/Time: | DATE STARTED: 10/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Brown cmf SAND, little cmf Gravel, trace Silt Asphalt | F | | | 0.0 |
| 1 | | | | | ↓ Yellow & Brown cmf SAND, little cmf Gravel & pieces of Rock | F | | | 0.0 |
| 2 | | | 52 | | of concrete & Rock | | | | |
| 3 | | | | | ↓ Black cmf SAND, little cmf Gravel, trace silt & clay of Coal Ash | F | | | 0.0 |
| 4 | | | | | Brown & Green cmf SAND, little Silt, trace f Gravel | | | | 0.0 |
| 5 | | | | | Black & Red cmf SAND, little cmf Gravel, trace silt clay & pieces of Rock, wood. | F | | | 0.0 |
| 6 | | | 63 | | Brick, white shell | | | | GW2-6-0' |
| 7 | | | | | & pieces of wood | | | | |
| 8 | | | | | Black cmf SAND, little silt & Gra | F | | | 0.0 |
| 9 | | | | | Black cmf SAND & GRAVEL little silt & clay & pieces of Rock, wood. | F | | | 8.6 - 18.6' 925 0.14 |
| 10 | | | 67 | | ↓ | | | | 1500 |
| 11 | | | | | Pale green cmf SAND, little Silt & clay, trace f Gravel | F | | | 84 |
| 12 | | | | | | | | | |

NOTES: Oil / H2O Shake Test. Performed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-UST-B-15 | **COORDINATES:** | **DATE:** 10/17/03 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 10/17/03 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 10/17/03 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND little Silt, trace cmf Gravel w/ Piece of Rock, Brick | | | | oily |
| 14 | | | 52 | | | | | | 300 |
| 15 | | | | | Pale green cmf SAND, little Silt, trace clay, trace f Gravel | | | | oily |
| 16 | | | | | Brown Organic SILT with clay & decomp wood | PT/CL | | | |
| 17 | | | | | | | | | |
| 18 | | | 50 | | | | | | |
| 19 | | | | | CLAY & decomposed wood | CL/PT | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | 67 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: End of Boring at 24.0'

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SJ-UST-B16 | COORDINATES: | DATE: 10/17/03 | |
| ELEVATION: 7.42' | GWL: Depth: Date/Time: | DATE STARTED: 10/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Data/Time: | DATE COMPLETED: 10/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray & Black cmf SAND, little cmf Gravel & Piece of Rock, Coal etc | F | | | 0.0 |
| 1 | | | | | & Piece of concrete, Rock | | | | 0.0 |
| 2 | | | 63 | | Brown | | | | |
| 3 | | | | | Black & coal Ash | | | | 0.0 |
| 4 | | | | | Dark Gray cmf SAND | F | | | |
| 5 | | | | | | | | | |
| 6 | | | 73 | | Brown cmf SAND, little Silt, trace clay, trace of Gravel | F | | | 0.0 |
| 7 | | | | | Dark Gray & pale green cmf SAND, little & Gravel trace Silt & wood | | | | 0.0 |
| 8 | | | | | Brown cmf SAND, some Silt & Pieces of Rock | F | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | 67 | | Gray cmf SAND, little Silt trace clay & piece of Rock & Piece of wood 4" | F | | | 0.0 10-11.5' oily |
| 11 | | | | | | | | | |
| 12 | | | | | | CL | | | |

NOTES: Oil / H2O shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276830000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-UST-B-16 | **COORDINATES:** | **DATE:** 10/17/03 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 10/17/03 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 10/17/03 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray CLAY | CL | | | 0.0 |
| 14 | | | 79 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | Black cmf SAND, trace f Gravel, trace Silt | CL | | | 0.0 |
| 18 | | | 83 | | clay CLAY | | | | |
| 19 | | | | | w/ piece of Rock, Gravel. | CL | | | |
| 20 | | | | | w/ my sand / CLAY | | | | 0.0 |
| 21 | | | | | | | | | |
| 22 | | | 67 | | | CL | | | |
| 23 | | | | | Brown Organic SILT w/ Piece of decomposed wood | Pt | | | 0.0 |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-17 | COORDINATES: | DATE: 10 / 17 / 03 | |
| ELEVATION: 7.65' | GWL: Depth: Date/Time: | DATE STARTED: 10 / 17 / 03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10 / 17 / 03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Gray & Brown cmf SAND, little mf Gravel & piece of Rock | F | | | 0.0 |
| 2 | | | | | Orange cmf SAND, little mf Gravel | | | | 0.0 |
| 3 | | | 83 | | Yellow & Brown cmf SAND, little silt & clay & piece of Rock | F | | | |
| 4 | | | | | Black & White cmf SAND, little mf Gravel, trace silt & Brick, wood | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 73 | | Black cmf SAND, little cmf Gravel, trace silt & clay & piece of Rock Brick | F | | | 0.0 |
| 7 | | | | | Dark Brown cmf SAND | | | | |
| 8 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace silt | F | | | 0.0 |
| 9 | | | | | ↓ | | | | 7.5' - 9.5' Oily |
| 10 | | | 79 | | Dark Gray CLAY Collateral bonds of silt / clay | CL | | | |
| 11 | | | | | ↓ | | | | 0.0 |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ shake Test - Performed

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-17 | COORDINATES: | DATE: 10/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray CLAY SAND w/ decomposed wood | SP/Pt | | | 0.0 |
| | | | | | Dark Gray clay SAND, little Silt, trace clay Gravel | | | | 0.0 |
| 14 | | | 83 | | w/ decomposed wood | | | | |
| 15 | | | | | Dark Gray CLAY, trace f. Sand w/ decomposed wood | CL/Pt | | | 0.0 |
| 16 | | | | | | | | | |
| 17 | | | | | Dark Gray CLAY w/ Brown Silt & decomposed wood | CL/Pt | | | 0.0 |
| 18 | | | 79 | | | | | | |
| 19 | | | | | | CL/Pt | | | |
| 20 | | | | | End of Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-18 | COORDINATES: | DATE: 10/17/13 | |
| ELEVATION: 7-81' | GWL: Depth: Date/Time: | DATE STARTED: 10/17/13 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/17/13 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little mf Gravel, trace clay & Silt & piece of Rock, wood Concrete | F | | | 0.0 |
| 2 | | | 54 | | Yellowish Brown cmf SAND, little cmf Gravel. trace Silt & piece of concrete wood | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Brownish Yellow cmf SAND, little Silt, trace clay & Piece of Rock, concrete | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 60 | | Black coal Ash & Rock, gravel. | F | | | GWL-5.5' |
| 7 | | | | | | | | | |
| 8 | | | | | & cinder, coal ash Pale greey & Brown cmf SAND, little Silt, trace clay Rock, wood | F | | | 0.0 |
| 9 | | | | | | | | | |
| 10 | | | 85 | | coal Ash Pale greey cmf SAND, little Silt, trace clay | F | | | 0.0 |
| 11 | | | | | coal Ash | | | | |
| 12 | | | | | Pale greey Silty Sand, trace clay & Pc of Rock wood | F | | | 0.0 |

NOTES: Oil / H2O shake Test. Performed

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-18 | COORDINATES: | DATE: 10/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, some mf Gravel, trace Silt w/ Pieces of Rock Wood | F | | | 0.0 |
| 14 | | | 25 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray CLAY, little Silt | | | | 0.0 |
| 17 | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt | SP/Pt | | | 0.0 |
| 18 | | | 81 | | w/ Pieces of decomposed Wood | SP/Pt | | | Organic odor |
| 19 | | | | | Gray & Brown cmf SAND, trace Silt w/ Pieces of decay Wood | | | | 0.0 |
| 20 | | | | | CLAY | Pt | | | |
| 21 | | | | | | | | | Organic odor |
| 22 | | | 88 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-18 | COORDINATES: | DATE: 10/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Brown Organic SILT w/ Pieces of decomposed wood | PT | | | PID (ppm) 0.0 |
| 26 | | | 100 | | | | | | |
| 27 | | | | | | PT | | | |
| 28 | | | | | Dark Gray CLAY w/ Pieces of decomposed wood | CL | | | 0.0 |
| 29 | | | | | | | | | |
| 30 | | | 100 | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | CL | | | |
| 34 | | | 88 | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES: End of the Boring at 36.0'

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B19 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | grade | GWL: Depth: 6.0 | Date/Time: | TIME STARTED: | 10:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.2 ft. millings | | | | |
| | | | | | 0.2-1.0 ft. asphalt | | | | |
| 1 | | | | | | | | | |
| 2 | | | 2.3 | | 1.0-4.0 ft. FILL crushed stone up to 1 1/2" mixed w./ dk. brown to black f-m-c gravelly sand, moist | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0-4.8 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | 4.8-8.0 ft. FILL coal ash, black, saturated at 6.0 ft. | | 0 | | |
| 6 | | | 2.2 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | ☒ | | | | | | | | Archive sample at 7.5-8.0 ft. |
| 9 | | | | | 8.0-10.0 ft. FILL (same as above), saturated, no odor. | | | | |
| 10 | | | 3.0 | | | | | | o/w and shake test negative |
| 11 | | | | | 10.0-12.0 FILL med. brown to lt. gray or black f. SAND, tr. m. sand, saturated. | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B19 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | grade | GWL: Depth: 6.0 | Date/Time: | TIME STARTED: | 10:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.6 | ### | 12.0-16.0 ft. FILL lt. gray to black f. SAND, mixed w./ wood, glass, rubber, gravel, saturated, anaerobic odor (but no petroleum odor or sheen). | | 0<br>0<br>0<br>0<br>0 | | o/w shake test and headspace negative |
| 16 | | | 3.5 | ::: | 16.0-20.0 ft. lt. gray f-m-c SAND, little gravel, (subangular to rounded; dominatly quartz with tr. garnet), saturated. | | 0<br>0<br>0<br>0<br>0<br>0 | | |
| 20 | | | 3.1 | ::: | 20.0-23.0 ft. same as above. | | 0<br>0<br>0<br>0 | | |
| 23 | | | | | 23.0-24.0 ft. PEAT, tr. clay (~90% organic matter), moist. | | 0-19 | | Sulfide odor when freshly broken. |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B19 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | grade | GWL: Depth: 6.0 | Date/Time: | TIME STARTED: | 10:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 3 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | 24.0-28.0 ft. PEAT, tr. clay, stiff (~90% organic matter), moist, | | 5-10 | | Strong sulfide odor and high PID readings when freshly broken |
| 26 | | | | | | | 130+ | | |
| 27 | | | | | | | 130+ | | |
| 28 | | | | | 28.0-32.0 ft. dk. gray CLAY, tr. organic matter (leaves & grass), stiff, moist | | 30-90 | | sulfide odor when broken |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | 32.0-36.0 ft. same as above | | | | |
| 33 | | | | | | | 25-30 | | |
| 34 | | | | | | | 25-30 | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

**E.O.B. at 36.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-20 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | Slab on Grade | GWL: Depth: ~7 ft | Date/Time: | TIME STARTED: | 14:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-1.0 ft concrete slab | | | | |
| 2 | | | 1.3 | | 1.0-3.0 ft. FILL m.brown to black crushed stone & f-m-c SAND, moist. | | 0 | | poor recovery |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 3.0-4.0 ft. FILL Black coal and coal ash w./f-m-c sand & crushed stone, dry | | 0 | | |
| 5 | | | 0.0 | | 4.0-8.0 ft. (no recovery) groundwater at ~ 7-8 ft. | | | | lower part of sampler wet |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | 2.0 | | 8.0-11.5 ft. FILL brownish-gray f. SAND, tr. silt, tr. clay, tr. shells, liquid, saturated. | | 0 | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.5-12.0 ft FILL black f-m-c SAND & gravel, saturated | | 100-1100 | | oil staining & strong odor at 11.5 feet |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-20 | COORDINATES: | | DATE: | 10/20/03 |
| ELEVATION / DATUM: | Slab on Grade | GWL: Depth: | ~7 ft Date/Time: | TIME STARTED: | 14:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-13.5 ft. FILL black (oil stained) coal ash, crushed stone, f-m-c sand, saturated. | | | 100-200 | oil staining & strong petroleum odor |
| 14 | | | 3.0 | | 13.5-16.0 ft. lt. gray to brown f. sand, uniform, well sorted, stiff, saturated. | | | 500-900 | no visible staining or sheen but high PID readings |
| 15 | | | | | | | | 300-600 | |
| 16 | | | | | 16.0-19.0 ft dk. gray to black f. SAND, grading into sandy SILT locally, saturated | | 0 | | No oil staining, but black horizons that may indicate former presence of oil |
| 17 | | | | | | | 0 | | |
| 18 | | | 2.6 | | | | 0 | | |
| 19 | | | | | 19.0-20.0 ft. dk. gray f-m SAND, saturated, anaerobic odor (but no evidence of petroleum) | | 5-10 | | |
| 20 | | | | | **E.O.B at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B21 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | at grade (millings) | GWL: Depth: 8.0 | Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.6 | | 0-4.0ft. FILL crushed stone and concrete fragments mixed with m. to dk. brown silty sand, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 3.2 | | 4.0-4.5 ft. FILL (same as above)<br>4.5-8.0 ft. FILL black coal ash, tr. crushed stone, moist, saturated at 8.0 feet. | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 2.5 | | 8.0-12.0 ft. FILL coal ash and partially burned coal, saturated. | | 0 | | o/w test negative and and h/s analysis = 0 |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | | | |
| BORING NUMBER: SI-UST-B21 | COORDINATES: | | | DATE: | 10/21/03 |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: 8.0 | Date/Time: | | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: | Date/Time: | | TIME COMPLETED: | 10:20 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.0 | | 12.0-14.0 ft. FILL coal ash (similar to above), heavily oil stained w./ strong petroleum odor and sheen. | | 50-150<br>50-150 | | |
| 14 | | | | | 14.0-16.0 ft. rusty brown to gray f. SAND, saturated | | 20-30 | | layers of oil staining observed |
| 15 | | | | | | | 1-3 | | |
| 16 | | | ~2 | | 16.0-20.0 ft. dk. gray to black f. SAND, stiff, saturated | | 20-30 | | |
| 17 | | | | | | | 20-30 | | |
| 18 | | | | | | | 20-30 | | |
| 19 | | | | | | | | | |
| 20 | | | 3.5 | | 20.0-24.0 ft dk. gray f-m-c SAND, tr. gravel, saturated. | | 0 | | slight anaerobic odor (probably <u>not</u> oil related); roots in tip of sampler |
| 21 | | | | | | | 0 | | Macrocore liner split and removed in pieces (sample recovery estimated). |
| 22 | | | | | | | 0 | | |
| 23 | | | | | | | 0 | | |
| 24 | | | | | | | | | |

NOTES:

**E.O.B. at 24.0 feet**

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-22 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | on grade | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 12:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | 2.9 | ### | 0-4.0 ft. FILL crushed stone & concrete fragments in matrix of brown silty f-m sand, moist | | 0 | | |
| 1 | | | | | | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 3.0 | ::: | 4.0-5.0 ft. FILL (same as above) dry. | | 0 | | |
| 6 | | | | | 5.0-7.0 ft. FILL med. brown f-m SAND, tr. shells, moist. | | 0 | | |
| 7 | | | | | | | 0 | | groundwater at 7.5 feet |
| 8 | | | 3.2 | ### | 7.0-8.0 ft. FILL black coal ash, granular, tr. gravel, tr. shells, wet at 7.5 ft. | | 0 | | slight oily sheen in localized horizons, |
| 9 | | | | | 8.0-12.0 ft. FILL black coal ash, saturated | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-22 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | on grade | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 12:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-14.0 ft. FILL black coal ash, compact, moist. | | 0 | | no sheen or odor |
| | | | | | | | 0 | | |
| 14 | | | 2.2 | | 14.0-16.0 ft. FILL dk. gray f. SAND, saturated (wood fragments in tip of sampler) | | 0 | | o/w shake test and head-space negative |
| 15 | | | | | | | 0 | | |
| 16 | | | | | 16.0-18.5 ft. FILL black coal ash, wood fragments, tr. steel wire, saturated. | | 5-13 | | black oil staining and sheen from 16.0 to 18.5 ft.; h/s=13 ppm max.; slight odor |
| 17 | | | | | | | 0 | | |
| 18 | | | 2.1 | | | | 0 | | |
| 19 | | | | | 18.5-20.0 ft. FILL dk. gray f-m SAND, tr. wood fragments, saturated | | 0 | | peat in last 1" of core |
| 20 | | | | | 20.0-24.0 ft. dk. brown PEAT, tr. clay, w./ macroscopic plant rootlets, moist | | 0 | | storng sulfide odor when freshly broken |
| 21 | | | | | | | 0 | | |
| 22 | | | 4.0 | | | | 0 | | |
| 23 | | | | | | | 12-30 | | PID reading from marsh gases |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-22 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | on grade | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 10:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 12:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 3 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | 4.0 | | 24.0-26.0 ft. dk. brown PEAT, tr, clay (clay content inmcreasing w./ depth), moist | | 20-30<br>10-20 | | sulfide odor |
| 26 | | | | | 26.0-28.0 ft. dk. gray CLAY, little organic material (roots & grass), (grades into nearly pure clay at 28 feet ),moist. | | 1-2 | | |
| 28 | | | | | **E.O.B. at 28.0 feet** | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B23 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | on grade | GWL: Depth: 7.0 | Date/Time: | TIME STARTED: | 13:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.0 | | 0-3.5 ft. FILL crushed stone & concrete fragments mixed w./m brown silty f. sand, moist | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 3.5-4.0 ft. FILL black coal ash, moist | | 0 | | |
| 5 | | | 2.4 | | 4.0-8.0 ft. FILL black coal ash, granular, some crushed stone, moist (saturated at 7.0 feet) | | 0 | | groundwater at 7.0 feet |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 2.7 | | 8.0-12.0 ft. FILL black coal ash, brick fragments, gravel, and m-c sand, saturated. | | 0 | | no petroleum sheen or odor noted. |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B23 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | on grade | GWL: Depth: 7.0 | Date/Time: | TIME STARTED: | 13:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:50 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. FILL black oil-stained coal ash mixed w./ crushed stone, saturated | | 50-60 | | oily sheen and light oil staining, weak petroleum odor; wood in drive shoe w./ piece of brick |
| 14 | | | 2.4 | | | | 40-50 | | |
| 15 | | | | | | | | | |
| 16 | | | | | 16.0-20.0 ft. dk. gray to black f. SAND, stiff, saturated. | | 0 | | no evidence of petroleum observed |
| 17 | | | | | | | 0 | | |
| 18 | | | 2.5 | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | E.O.B. at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B24 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 14:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.2 | | 0-4.0 ft. FILL crushed stone & concrete fragments, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 2.0 | | 4.0-6.0 ft. FILL (same as above). | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | 6.0-7.5 ft. FILL med. brown f. SAND, little m. sand, tr. oyster shells, moist. | | 0 | | groundwater at 7.5 feet |
| 8 | | | | | 7.5-8.0 ft. FILL black coal ash, granular, saturated. | | | | |
| 9 | | | 2.8 | | 8.0-12.0 ft. FILL black coal ash, granular, saturated. | | 0 | | no petroleum sheen or odor |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

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| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B24 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 14:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | ### ### ### ### ### | 12.0-13.0 ft. I11 (same as above) | | 0 | | o/w test negative |
| 14 | | | 2.6 | | 13.0-16.0 ft. dk. gray to black very f. SAND, stiff, saturated. | | 0<br>0<br>0 | | |
| 16 | | | | | 16.0-20.0 ft. dk. gray very f. SAND, saturated. | | 0 | | o/w shake test and h/s negative |
| 18 | | | 3.2 | | | | 0<br>0<br>0 | | |
| 20 | | | | | 20.0-23.0 ft. (same as above) | | 0 | | |
| 22 | | | 4.0 | | | | 0<br>0 | | |
| 23 | | | | | 23.0-24.0 ft. dk. gray sandy SILT, some clay, stiff, saturated. | | 0 | | slight anaerobic odor |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B24 | COORDINATES: | | DATE: | 10/21/03 |
| ELEVATION / DATUM: | | GWL: Depth: 7.5 | Date/Time: | TIME STARTED: | 14:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 3 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | 4.0 | | 24.0-26.0 ft. dk. gray f-m SAND. tr. c. sand, tr. gravel, saturated | | 0<br>0 | | |
| 26 | | | | | 26.0-28.0 ft. dk. brown PEAT, moist | | 20-30 | | strong sulfide odor when broken |
| 27 | | | | | | | 5-10 | | |
| 28 | | | | | 28.0-30.0 ft. dk. brown PEAT, some clay, moist. | | 25-50 | | |
| 29 | | | 4.0 | | | | | | |
| 30 | | | | | 30.0-32.0 ft. dk. gray CLAY, tr, organic matter, moist. | | 25-50 | | gradational contact between peat and clay units |
| 31 | | | | | | | | | |
| 32 | | | | | **E.O.B. at 32.0 feet** | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B25 | COORDINATES: | DATE: | 10/22/03 |
| ELEVATION / DATUM: at grade | GWL: Depth: 6.5 ft. Date/Time: | TIME STARTED: | 7:32 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 8:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 0-4.0 ft. FILL m. brown to black crushed stone and gravekly f-m-c sand, tr. coal ash, moist | | 0 | | |
| 1 | | | | | | | 0 | | |
| 2 | | | 2.7 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-4.5 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | 4.5-7.5 ft. FILL m. brown f-m SAND, tr. oyster shells, tr. c. sand, moist to 6.5 ft. (saturated below) | | 0 | | |
| 6 | | | 3.4 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.5-8.0 ft. FILL dk. gray to black f. SAND & coal ash | | 0 | | |
| 9 | | | | | 8.0-10.5 ft. FILL black coarse-grained coal ash, saturated. | | 100-150<br>200-350 | | oily sheen and strong petroleum odor. |
| 10 | | | 3.1 | | | | 20-30 | | |
| 11 | | | | | 10.5-12.0 ft. dk. gray to black f. SAND, stiff, saturated. | | 2-5 | | black oil staining to 11.5 ft. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B25 | COORDINATES: | | DATE: | 10/22/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: 6.5 ft. | Date/Time: | TIME STARTED: | 7:32 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. dk. gray to olive gray f. SAND, stiff, uniform, saturated. | | 0 | | |
| 14 | | | 3.2 | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | black oil staining at tip of sampler. |
| | | | | | 16.0-16.3 ft. black f. sand, saturated | | 0 | | oil stain & sheen 16.0-16.3 ft |
| 17 | | | | | 16.3-18.5 ft. dk. gray f. SAND, grading into f-m-c SAND, tr. gravel, saturated. | | 0 | | |
| 18 | | | 4.0 | | | | 0 | | |
| 19 | | | | | 18.5-20.0 ft. dk. brown PEAT,moist | | 20-70 | | sulfide odor when broken. |
| 20 | | | | | | | 20-30 | | |
| | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B26 | COORDINATES: | | DATE: | 10/22/03 |
| ELEVATION / DATUM: | | GWL: Depth: 6.0 ft. | Date/Time: | TIME STARTED: | 8:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.3 | | 0-4.0 ft. FILL dk. brown to black f-m-c SAND, some crushed stone, tr. coal ash, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-5.6 ft. FILL (same as above) | | 0 | | |
| 6 | | | 2.7 | | 5.6-7.5 ft. FILL m. to orange brown f-m SAND, tr. c. sand, tr. brick fragmnents, saturated at 6.0 feet | | 0 | | groundwater at 6.0 feet |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.5-8.0 ft. FILL dk gray-brown CLAY, stiff, moist. | | 0 | | |
| 9 | | | 2.5 | | 8.0-12.0 ft. FILL dk. gray to black coal ash, some silt & clay, saturated. | | 10-15 | | |
| 10 | | | | | | | 500-1,800 | | oily sheen at 10-11 ft. with petroleum odor; max. PID at 10-11 ft. |
| 11 | | | | | | | 20-40 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B26 | COORDINATES: | | DATE: | 10/22/03 |
| ELEVATION / DATUM: | | GWL: Depth: 6.0 ft. | Date/Time: | TIME STARTED: | 8:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:40 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | <1 over 2' | | 12.0-14.0 ft. black clayey SILT, liquid, slight sheen. | | 0<br>0 | | poor recovery |
| 14 | | | | | **E.O.B. at 14.0 feet (refusal)** | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-27 | COORDINATES: | DATE: 10/22/03 | |
| ELEVATION: 8.90' | GWL: Depth: Date/Time: | DATE STARTED: 10/22/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/22/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND and cmf Gravel, trace Silt & clay w/ Pieces of Rock wood. | F | | | PID (ppm) 0.0 |
| 1 | | | | | | | | | |
| 2 | | | 58 | | w/ Pieces of Rock | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray cmf SAND | F | | | |
| 5 | | | | | Brown cmf SAND, some Silt, trace clay, trace f Gravel w/ Pieces of Rock | F | | | 0.6 0.0 |
| 6 | | | 65 | | | | | | |
| 7 | | | | | Gray CLAY, little Silt/gravel | F | | | |
| 8 | | | | | w/ Pieces of wood | | | | |
| 9 | | | | | Dark Gray CLAY, trace Silt | F | | | |
| 10 | | | 73 | | | | | | 9-12' silty |
| 11 | | | | | Coal Ash / cinder | F | | | SOD silty |
| 12 | | | | | | | | | 0.1 |

NOTES: Oil / $H_2O$ - Shake Test - Performed.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-27 | COORDINATES: | DATE: 10/22/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/22/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/22/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little Silt, trace clay & Piecing Rock, wood. | F | | | 10 silty |
| 14 | | | 79 | | Dark Gray CLAY, some cmf Sand, little Silt | CL SP | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, trace clay, trace of Gravel trace Silt | | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 88 | | Gray SILT & CLAY, little mf Sand & Piecing wood Shell | | | | 0.0 |
| 19 | | | | | Organic Silty CLAY & decayed wood | PT | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B28 | COORDINATES: | | DATE: | 10/22/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: | 6.0 ft. Date/Time: | TIME STARTED: | 11:50 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2.0 | | 0-3.5 ft. FILL m. brown silty SAND, some crushed stone & concrete fragments, moist | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| | | | | | 4.0-4.3 ft. FILL (same as above) | | 0 | | |
| 5 | | | 3.1 | | 4.3-7.0 ft. FILL m. brown f. SAND, tr. shells, moist to 6 ft. (saturated below) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | 7.0-7.6 ft. dk. Gray CLAY, stiff, plastic wet. | | 0 | | |
| 8 | | | 3.7 | | 7.6-8.0 ft. dk. gray f-m SAND, tr. shells, saturated | | 0 | | shells are <1 cm wide (bivalves); could be former bay deposits. |
| 9 | | | | | 8.0-10.7 ft. dk. gray f-m SAND, tr. shells, coarsening with depth (then f. sand at base). | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | 10.7-11.8 ft. dk. gray clayey SILT, stiff, uniform, wet | | 0 | | |
| 12 | | | | | 11.8-12.0 ft. dk. gray f-m SAND, tr. shells, saturated | | 0 | | 1-8 mm bivalve shells |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B28 | COORDINATES: | DATE: | 10/22/03 |
| ELEVATION / DATUM: at grade | GWL: Depth: 6.0 ft. Date/Time: | TIME STARTED: | 11:50 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0-12.5 ft. dk. gray f-m SAND, tr. shells, saturated | | 0 | | |
| 13 | | | | | 12.5-13.5 ft. dk. gray, silty CLAY, laminated, stiff, plastic, wet. | | 0 | | |
| | | | 4.0 | | 13.5-14.0 ft. dk gray f-m SAND, tr. shells, saturated | | | | |
| 14 | | | | | 14.0-15.2 ft. dk. gray to black clayey SILT, stiff, plastic, laminated, wet. | | 0 | | barely noticable sheen with o/w test (probably not petroleum related) |
| 15 | | | | | | | | | |
| | | | | | 15.2-16.1 ft. dk. gray f-m SAND, saturated | | 0 | | |
| 16 | | | | | 16.1-18.0 ft. dk. gray sandy SILT, tr, clay, saturated | | 0 | | |
| 17 | | | | | | | 0 | | |
| | | | 3.3 | | | | | | |
| 18 | | | | | 18.0-19.0 ft. dk. gray silty f. SAND, tr. clay, stiff. | | 0 | | |
| 19 | | | | | 19.0-20.0 ft. dk. gray CLAY, tr. f. sand, tr. plant remains, moist. | | 0 | | |
| 20 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: Note: Jim Moras of NYSDEC observed the soil cores from 0-16 ft and agreed that the results can be used to delineate the limit of oil (witnessed o/w shake test).

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B29 | COORDINATES: | DATE: | 10/22/03 |
| ELEVATION / DATUM: at grade | GWL: Depth: ~8 ft Date/Time: | TIME STARTED: | 12:55 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 14:00 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 0-3.0 ft. FILL dk. brown f-m-c SAND & crushed stone, tr. coal ash, moist | | 0 | | |
| 1 | | | | | | | | | |
| 2 | | | 2.1 | | | | 0 | | |
| 3 | | | | | 3.0-4.0 ft. FILL black coal ash (m-c sand texture), moist | | 0 | | |
| 4 | | | | | 4.0-5.0 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | 5.0-7.7 ft. FILL med. brown clayey f-m-c SAND, some gravel, moist | | 0 | | |
| 6 | | | 3.2 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.7-8.0 ft. black CLAY, moist | | 100-300 | | *oil staining & odor* |
| 9 | | | | | 8.0-10.0 ft. dk. gray f. SAND, liquid, saturated | | 0-5 | | |
| 10 | | | 3.2 | | | | | | |
| 11 | | | | | 10.0-12.0 ft. dk. gray silty CLAY, little f. sand, saturated | | 10-45 | | |
| 12 | | | | | | | 5-10 | | |
| | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B29 | COORDINATES: | | DATE: | 10/22/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: ~8 ft | Date/Time: | TIME STARTED: | 12:55 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.0 | | 12.0-15.7 ft. dk. gray f. silty SAND (grades into sandy SILT w./ depth), stiff, saturated. | | 0<br>0<br>0<br>0 | | |
| 16 | | | | | 15.7-16.0 ft. black f. SAND, saturated | | | | anaerobic odor |
| 17 | | | 3.5 | | 16.0-19.5 ft. dk. gray silty CLAY, stiff. | | 0<br>0<br>0<br>0 | | |
| 20 | | | | | 19.5-20.0 ft. dk. gray CLAY w. organic matter, moist | | | | |
| | | | | | **E.O.B. at 20.0 feet** | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B30 | COORDINATES: | | DATE: | 10/23/03 |
| ELEVATION / DATUM: | raised slab | GWL: Depth: 9 ft | Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1 | | | | VOID | 0.6-1.6 ft. (void) | | | | |
| 2 | | | 1.5 | | 1.6-4.0 ft. FILL m. brown gravely SAND, moist | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-4.5 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | 4.5-5.4 ft. FILL m. brn. SILT, tr. m. sand, moist | | 0 | | |
| 6 | | | 3.2 | | 5.4-7.9 ft. FILL lt. brown f-m SAND, tr. c. sand, tr. shells, moist. | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.9-8.0 ft. FILL m. brn. silty CLAY, stiff compact moist | | 0 | | |
| 9 | | | | | 8.0-11.0 ft. FILL m. brown clayey f-m SAND, tr. gravel, tr. oyster shells, moist (wet at 9 ft) | | 0 | | groundwater at 9 feet |
| 10 | | | 2.6 | | | | 0 | | |
| 11 | | | | | 11.0-11.9 ft. dk. gray to brwn.-gray clayey SILT, stiff compact. | | 0 | | |
| 12 | | | | | 11.9-12.0 ft. dk. gray f. SAND, tr. clay | | 0.5 | | slight petroleum odor |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B30 | COORDINATES: | | DATE: | 10/23/03 |
| ELEVATION / DATUM: | raised slab | GWL: Depth: 9 ft | Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.0 | | 12.0-14.0 ft. dk. gray f-m SAND, some clay, saturated. | | 0.2-3 | | sheen detected using o/w shake test; h/s = 5 ppm |
| 14 | | | | | 14.0-15.2 ft. dk. gray silty CLAY, stiff, compact. | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | 15.2-16.0 ft. dk. gray SILT, tr. f. sand, saturated. | | 0-0.2 | | |
| 17 | | | | | 16.0-17.5 ft. black clayey SILT, laminated, saturated | | 5-10<br>5-10 | | oil-staining |
| 18 | | | 2.8 | | 17.5-18.0 ft. FILL black f. SAND, tr, clay, tr. silt, saturated | | 0 | | |
| | | | | | 18.0-18.6 ft. FILL black silty CLAY, stiff, compact, saturated. | | 10-20 | | oil staining & odor |
| 19 | | | | | 18.6-20.0 ft.black coal ash, some gravel, saturated. (oil stained with odor) | | 40-50 | | black globules of oil present in water in sampler. |
| 20 | | | | | | | | | |
| 21 | | | | | 20.0-22.0 ft. FILL black coal ash w./ crushed stone & metal wire, saturated. | | | | oil staining & strong petroleum odor |
| 22 | | | 1.4 | | | | 7-9 | | poor recovery |
| 23 | | | | | 22.0-24.0 FILL dk gray clayey SILT, tr. gravel, tr. f. sand, tr. crushed stone, stiff, saturated | | 7-9<br>7-9 | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B30 | COORDINATES: | | DATE: | 10/23/03 |
| ELEVATION / DATUM: | raised slab | GWL: Depth: 9 ft | Date/Time: | TIME STARTED: | 9:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 3 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | 0.3 | | 24.0-28.0 ft. dk gray CLAY, tr. plant matter, moist. | | 0<br>0<br>0<br>0 | | no evidence of petroleum<br>poor recovery |
| 28 | | | | | E.O.B. at 28.0 feet | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B31 | COORDINATES: | DATE: | 10/23/03 |
| ELEVATION / DATUM: top of slab (depth to soil is 21") | GWL: Depth: 8.2 ft. Date/Time: | TIME STARTED: | 11:05 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 12:05 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1 | | | | VOID | 0.6-1.6 ft. (void) | | | | |
| 2 | | | 1.4 over 2.2 | ### | 1.6-4.0 ft. FILL m. brown gravelly f. SAND, some crushes stone, tr. coal ash, moist. | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-7.5 ft. FILL m. brown f-m SAND, crushed stone, concrete fragments, tr. oyster shells, moist | | 0 | | |
| 6 | | | 2.8 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| | | | | | 7.5-8.0 ft. FILL inter-layered m. brown f. SAND and dk. gray CLAY, tr. oyster shells, moist. | | 0 | | |
| 8 | | | | | 8.0-12.0 ft. FILL dk. brown clayey f-m-c SAND, tr. gravel, tr. oyster shells, clay ricj horizons 1-2 cm. thick, saturated. | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | 2.0 | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B31 | COORDINATES: | | DATE: | 10/23/03 |
| ELEVATION / DATUM: | top of slab (depth to soil is 21") | GWL: Depth: 8.2 ft. | Date/Time: | TIME STARTED: | 11:05 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 12:05 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | dk. gray clayey SILT, some f. SAND, sat'd | | | | brown oily film |
| 13 | | | 2.9 | | 12.2-16.0 ft. dk. gray f-m-c- SAND, some shels, tr. gravel, saturated | | 7.8 | | light oily sheen from 12.2 to 13.2 ft. |
| 14 | | | | | | | | | |
| 15 | | | | | | | 4.5 | | |
| 16 | | | | | | | 2 | | |
| 17 | | | 3.4 | | 16.0-19.0 ft. dk. gray to black SILT, grading into silty CLAY, stiff, compact, moist | | 0 | | |
| 18 | | | | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | 19.0-21.4 ft. dk. gray f-m SAND, some shels, gleyed, | | 0.2 | | no evidence of petroleum; shells <1 cm. wide. |
| 21 | | | | | 20.0-21.4 ft. dk. gray clayey SILT, stiff, compact, moist. | | 0 | | |
| 22 | | | 3.5 | | 21.4-22.0 ft. dk. gray sandy SILT, some gravel, moist | | 0 | | |
| 23 | | | | | 22.0-24.0 ft. dk. brown peaty CLAY, grading into Clay w./ trace of organic matter, stiff. moist. | | 0 | | |
| 24 | | | | | | | 0 | | |

NOTES: **E.O.B. at 24.0 ft**

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B32A | COORDINATES: | | DATE: | 10/23/03 |
| ELEVATION / DATUM: | top of slab (depth to soil is 1 ft) | GWL: Depth: | 8.0 ft Date/Time: | TIME STARTED: | 12:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:10 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| | | | | | 0.6-1.0 ft. (void) | | | | |
| 1 | | | | | 1.0-4.0 ft. FILL m. brown f-m-c SAND & crushed stone, tr. oyster shells, moist | | 0 | | |
| 2 | | | 1.7 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-5.5 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | | | 0 | | |
| 6 | | | 3.0 | | 5.5-8.0 ft. FILL lt. gray to rusty brown f-m SAND, tr. oyster shells, tr. gravel, moist | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-10.0 ft. FILL (same as above). saturated at 8 ft. | | 0 | | |
| 9 | | | 1 over 2' | | | | 0 | | |
| 10 | | | | | 10-6.0+ ft. concrete slab. | | | | |
| 11 | | | | | **E.O.B. at 10.5 feet (refusal)** | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B32B | COORDINATES: | DATE: 10/27/03 | |
| ELEVATION: 13.66' | GWL: Depth: Date/Time: | DATE STARTED: 10/27/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/27/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6" - concrete slab | | | | |
| 1 | | | | | Dark Gray & Brown cmf SAND, little silt, trace clay w/ pieces of Rock | F | | | 0.0 |
| 2 | | | 69 | | Brownish Yellow cmf SAND, little cmf Gravel, trace silt w/ piece of Rock | | | | 0.0 |
| 3 | | | | | ↓ | | | | |
| 4 | | | | | Dark Gray & Brown cmf SAND, little silt w/ piece of Rock | F | | | 0.0 |
| 5 | | | | | ↓ | | | | |
| 6 | | | 63 | | Dark Gray cmf SAND little Silt, trace f Gravel | F | | | 0.0 |
| 7 | | | | | ↓ | | | | |
| 8 | | | | | Light Brown CLAY, some mf Sand, little cm Grav. trace Silt. w/ Rock | F | | | 0.0 |
| 9 | | | | | ↓ | | | | |
| 10 | | | 58 | | ↓ | | | | |
| 11 | | | | | Gray cmf SAND, little Silt, trace clay w/ Rock | F | | | 0.0 |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ Shake Test - Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B32B | COORDINATES: | DATE: 10/27/13 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/27/13 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/27/13 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little mf Gravel w/ piece of white shell | SP | | | |
| 14 | | | 88 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Gray CLAY | CL | | | |
| 17 | | | | | | | | | |
| 18 | | | 52 | | Dark Gray cmf SAND, little Silt, trace clay w/ Pieces of shell | SP | | | |
| 19 | | | | | Gray CLAY | | | | |
| 20 | | | | | Dark Gray CLAY, little Silt | | | | |
| 21 | | | | | | CL | | | |
| 22 | | | 75 | | | | | | |
| 23 | | | | | f Gravel | | | | |
| 24 | | | | | Dark Gray CLAY w/ Piece of decomposed wood | CH/PT | | | |

NOTES: End of the Boring at 24'

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B33A | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: 6.0 ft | Date/Time: | TIME STARTED: | 7:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:05 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 0-4.0 ft. FILL m. brown f. SAND grading into silty f. SAND, tr. shells, tr. gravel, moist | | 0 | | hydraulic fill |
| 1 | | | | | | | 0 | | |
| 2 | | | 1.5 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-6.0 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | | | 0 | | |
| 6 | | | 3.9 | | 6.0-7.0 ft. dk. gray CLAY, tr. silt, plastic, saturated. | | 0 | | |
| 7 | | | | | 7.0-8.0 ft. dk. gray f-m SAND, little gravel, saturated | | 0 | | |
| 8 | | | | | 8.0-9.0 ft. dk. gray f-m SAND inter-layered w./ SILT, saturated. | | 0 | | |
| 9 | | | | | 9.0-11.0 ft. dk. gray CLAY, tr. silt, saturated | | 0 | | |
| 10 | | | 3.4 | | | | 0 | | |
| 11 | | | | | 1.0-11.2 ft. dk. gray f-m SAND, little shells. | | | | |
| 12 | | | | | 11.2-12.0 ft. dk. gray CLAY, saturated. | | 0 | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B33A | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: 6.0 ft | Date/Time: | TIME STARTED: | 7:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:05 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.8 | | 12.0-16.0 ft. dk. gray inter-bedded silty CLAY, CLAY, and clayey SILT, local stringers of f. sand, poorly compacted, saturated | | 0<br>0<br>0<br>0 | | |
| 16 | | | 1.0 | | 16.0-20.0 ft. dk. gray f. SAND, little shells (snails & clams <1 cm), gleyed, saturated. | | 0<br>0<br>0<br>0 | | |
| 20 | | | 4.0 | | 20.0-24.0 ft. dk. gray CLAY, tr. silt, tr. organic matter, stiff, moist. | | 0<br>0<br>0<br>0 | | |
| 24 | | | | | | | | | |

NOTES: **E.O.B. at 24.0 feet.**

Depths are measured relative to top of soil (depth from top of slab to soil surface is ~6 feet).

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B33B | COORDINATES: | DATE: 10/23/03 | |
| ELEVATION / DATUM: top of slab (depth to soil 4.5') | GWL: Depth: 8.0 ft. Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | ^ < > < ^ > ^ < > | 0-0.6 ft. elevated concrete slab. | | | | |
| 1 2 3 4 | | | | VOID | **soil surface** | | | | |
| 5 6 7 8 | | | 2.2 over 3.5' | ### # ## ### # ## ### # ## ### # ## ### # ## ### # ## ### # ## ### # ## ### # ## | 4.5-8.0 ft. FILL m. brown f-m SAND, tr. gravel, tr. shells, moist. | | 0<br>0<br>0 | | 1st drive to 8.0 feet |
| 8 9 10 11 12 | | | ~3 | ..... ..... .....

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-34 | COORDINATES: | | DATE: 10/27/03 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 10/27/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/27/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID ppmv |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brownish Yellow cmf SAND, little cmf Gravel, trace Silt & Piece of Rock, wood | | | | 0.0 |
| 2 | | | 25 | | | F | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Brown cmf SAND, little Silt & Piece of Rock wood, concrete shell | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 63 | | | | | | |
| 7 | | | | | & Piece of Rock | | | | |
| 8 | | | | | Dark Brown cmf SAND, | | | | |
| 9 | | | | | little clay, & mf Gravel trace silt & Piece of Rock | F | | | 0.0 |
| 10 | | | 67 | | CLAY - 6" | F | | | |
| 11 | | | | | & Piece of Rock | | | | 0.0 |
| 12 | | | | | Dark Gray cmf SAND, little Silt | SP | | | |

NOTES: Oil / $H_2O$ shake Test. Performed

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276090000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-34 | COORDINATES: | DATE: 10 / 27 / 03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10 / 27 / 03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10 / 27 / 03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Gray CLAY, some Silt, trace f Sand | | | | 0.0 |
| | | | | | Dark Gray mf+ SAND, little Silt, trace clay & shell | | | | 0.0 |
| 14 | | | 75 | | Gray CLAY, little Silt trace f Sand & shell | | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | Gray CLAY, trace Silt | | | | |
| 17 | | | | | | | | | |
| 18 | | | 69 | | Dark Gray mf+ SAND little Silt, trace clay | | | | 0.0 |
| 19 | | | | | Dark Gray CLAY | CL | | | 0.0 |
| 20 | | | | | Black cmf SAND, little Silt, trace f Gravel | SP | | | Oily odor |
| 21 | | | | | Gray CLAY, some Silt, trace mf Gravel/sand & piece of Rock | CL/SP | | | 0.0 |
| 22 | | | 42 | | Dark Gry CLAY, some Silt & piece of shell | CL/PT | | | |
| 23 | | | | | ↓ | | | | 0.0 |
| 24 | | | | | & decomposed | PT | | | |

NOTES: End of the Boring at 24.0'

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B35 | COORDINATES: | DATE: | 10/29/03 |
| ELEVATION / DATUM: slab on grade | GWL: Depth: 4.5 ft. Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 10:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1 | | | | | 0.6-4.0 ft. FILL m. brown to dk. brown silty f. SAND, some crushed stone & concrete fragments, tr. coal and coal ash, moist. | | 0 | | |
| 2 | | | 2.4 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-6.5 ft. FILL (same as above) | | 0 | | saturated at 4.5 ft. |
| 6 | | | 2.6 | | | | 0 | | |
| 7 | | | | | 6.5-8.0 ft. FILL m. to dk. gray f-m SAND, poorly sorted, saturated. | | 0 | | |
| 8 | | | | | 8.0-12.0 ft. FILL black oil-stained coal ash & silt, saturated | | 30-40 | | PHC staining and strong odor |
| 9 | | | | | | | | | |
| 10 | | | 1.7 | | | | 20-30 | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B35 | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 4.5 ft. | Date/Time: | TIME STARTED: | 9:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. dk. gray f. SAND, saturated. | | 10-15 | | concrete in drive shoe; oily sheen |
| 14 | | | 0.2 | | | | | | poor recovery (running sand) |
| 15 | | | | | | | 0 | | |
| 16 | | | | | 16.0-19.8 ft. no recovery (running sand) | | | | |
| 17 | | | | | | | 0 | | |
| 18 | | | 0.2 | | | | | | poor recovery (running sand); upper contact of clay unit in bottom of drive shoe. |
| 19 | | | | | | | 0 | | |
| | | | | | 19.-20.0 ft. dk. gray CLAY, stiff, moist | | | | |
| 20 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B36A | COORDINATES: | DATE: 10-29003 | |
| ELEVATION / DATUM: slab on grade | GWL: Depth: 6 ft. Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1 | | | | | 0.6-6.0 ft. FILL m. brown f. SAND, tr. oyster shells. moist. | | 0 | | Drove point to 6.0 feet, past concrete slab; No sample from 0.6-6.0; lithology to 6' based on boring B36 |
| 2 | | | NA | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | NA | | | | 0 | | |
| 5 | | | | | | | 0 | | |
| 6 | | | | | | | | | |
| 7 | | | 1.8 over 2' | | 6.0-8.0 ft. FILL dk. gray to black silty f. SAND, saturated (PHC odor) | | 5-10 | | drove first sampler from 6-8 ft. |
| 8 | | | | | 8.0-10.5 ft. FILL dk. gray to black silty f. SAND, loose, saturated, oily sheen, loose, PHC odor. | | 15-20 | | |
| 9 | | | | | | | | | |
| 10 | | | 2.5 | | | | | | |
| 11 | | | | | 10.5-12.0 ft. FILL black silty f. SAND, some coal ash, gravel & wood, saturated. | | 15-20 | | oily sheen and PHC odor |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B36A | COORDINATES: | | DATE: | 10-29003 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 6 ft. | Date/Time: | TIME STARTED: | |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft FILL blackto dk. gray loose silty MUCK, some, gravel, wood & coal ash, saturated. | | 10 | | pHC sheen and odor |
| 14 | | | 1.8 | | | | 2-5 | | |
| 15 | | | | | | | 2-3 | | |
| 16 | | | | | 16.0-19.5 ft. interbedded dk. gray SILT, f. SAND, and silty CLAY, stiff, compact, saturated. | | 2-5 | | PHC staining and sheen from 16.0-16.5 ft. |
| 17 | | | | | | | 0 | | |
| 18 | | | ~3 | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | 19.5-20.0 ft. dk. brown PEAT, little clay, moist. | | 0 | | |
| 21 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: Hit refusal in SI-UST-B36 at 6' (abandoned hole). Drove point to 0-6 ft. in B36A and logged interval based on B36. Jim Moras of NYSDEC observed work.

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B37 | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 5 ft. | Date/Time: | TIME STARTED: | 12:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1 | | | | | 0.6-3.0 ft. FILL m. brown f. SAND, some crushed stone & concrete fragments, tr. oyster shells, moist | | 0 | | |
| 2 | | | 2.6 | | | | | | |
| 3 | | | | | 3.0-4.0 ft. FILL black coal ash, gravelly texture, moist. | | 0 | | |
| 4 | | | | | | | | | |
| 5 | | | | | 4.0-6.0 ft. FILL black coal ash, some f. sand, moist. | | 5 | | viscous oily coating w./ sheen and PHC odor; groundwater at about 5 feet. |
| 6 | | | 3.5 | | | | 10 | | |
| 7 | | | | | 6.0-8.0 ft. FILL dk. gray f. silty SAND, stiff saturated. | | 10 | | |
| 8 | | | | | | | 10 | | |
| 9 | | | | | 8.0-10.0 ft. FILL dk. gray f. silty SAND, tr. cobbles, tr. brick fragments, saturated. | | 10 | | |
| 10 | | | 2.3 | | | | 10 | | |
| 11 | | | | | 10.0-12.0 ft. FILL black coal ash, saturated. | | 30-40 | | oil staining, sheen, and strong PHC odor on soil; viscous, black oily coating on drill rod. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B37 | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 5 ft. | Date/Time: | TIME STARTED: | 12:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 3.5 | | 12.0-16.0 ft. black to dk. gray f. SAND, uniform, compact, saturated. | | <1 | | slight oily sheen |
| 14 | | | | | | | | | |
| 15 | | | | | | | <1 | | |
| 16 | | | | | 16.0-16.5 ft. dk. gray to black SILT, plastic saturated. | | 0 | | |
| 17 | | | 3.5 | | 16.5-18.0 ft. dk. gray f. SAND, tr. m. sand, poorly sorted, saturated | | 0 | | |
| 18 | | | | | 18.0-20.0 ft. dk. gray SILT, stiff micaceous, compact, saturated. | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | E.O.B. at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B38 | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 4.0 ft. | Date/Time: | TIME STARTED: | 13:45 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:26 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1-4 | | | 2.2 | | 0.6-4.0 ft. FILL m. brown f. SAND, crushed stone, concrete, coal ash, slightly moist. | | 0<br>0<br>0 | | |
| 4-5.5 | | | 2.7 | | 4.0-5.5 ft. FILL m. brown f. SAND, tr. shells, poorly sorted, saturated | | 0<br>0 | | hydraulic fill |
| 5.5-8 | | | | | 5.5-8.0 ft. FILL dk. gray to black mottled, clayey f. SAND and crushed stone. | | 0<br>5-10 | | black oil staining at 7 to 8 ft. |
| 8-11.8 | | | 1.7 | | 8.0-11.8 ft. FILL black clayey f. SAND, some gravel, saturated | | 100-150 | | heavy, viscouis oil staining with strong PHC odor. |
| 11.8-12 | | | | | 11.8-12.0 ft. dk. gray f. silty SAND, saturated stiff. | | 50-100 | | |

NOTES: **E.O.B. at 12.0 feet (obstruction)**

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B39 | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 4.0 ft | Date/Time: | TIME STARTED: | 14:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-6.0 ft. concrete slab. | | | | |
| 1 | | | 2.5 | | 0.6-4.0 ft. FILL m. brown f. SAND, tr. crushed stone, tr. coal, moist.. | | 0 | | hydraulic fill |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | | | |
| 5 | | | 4.0 | | 4.0-6.0 ft. FILL (same as above) | | 0 | | |
| 6 | | | | | 6.0-7.7 ft. dk. gray f. SAND, saturated | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 7.7-8.0 ft. dk. gray SILT, stiff, compact, saturated. | | | | |
| 9 | | | 3.4 | | 8.0-12.0 ft. dk. gray SILT, tr. shells, stratified, saturated. | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 0 | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B39 | COORDINATES: | | DATE: | 10/29/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: 4.0 ft | Date/Time: | TIME STARTED: | 14:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 15:00 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0-12.8 ft. (same as above) | | 0 | | |
| 13 | | | | | 12.8-14.0 ft. black f-m SAND, little gravel. | | | | anaerobic odor; ow/water test shows sheen; h/s = 0 ppm |
| 14 | | | 3.3 | | | | 0 | | |
| | | | | | 14.0-16.0 ft. dk. gray sandy SILT, tr. wood fragments, stiff, saturated. | | 0 | | |
| 15 | | | | | | | | | |
| | | | | | | | 0 | | |
| 16 | | | | | **E.O.B. at 16.0 feet** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-40 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | millings covering slab | GWL: Depth: | 5 ft Date/Time: | TIME STARTED: | 10:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 feet concrete millings | | | | |
| | | | | | 0.5-1.0 ft. concrete slab. | | | | |
| 1 | | | | | 1.0-4.0 ft. FILL lt. brownish-gray f. SAND w./ ~50% crushed stone. | | 0 | | |
| 2 | | | 2.7 | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 4.0-5.2 ft. FILL (same as above) wet at 5.0 ft. | | 0 | | |
| 5 | | | | | | | | | |
| 6 | | | 3.2 | | 5.2-6.0 ft. concrete slab. | | | | |
| | | | | | 6.0-8.0 ft. FILL lt. brown to lt. gray f. SAND w/. 50% crushed stone, saturated | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | 8.0-12.0 ft. black coal ash, saturated, loose. | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | ~3 | | | | 0 | | |
| 11 | | | | | | | 150+ | | oily soil w./ fuel oil odor at 11.5 feet. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-40 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | millings covering slab | GWL: Depth: | 5 ft Date/Time: | TIME STARTED: | 10:10 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-14.5 ft. FILL black to dk. gray f. SAND, w./ demolition debris (concrete, stone, wood, cloth), saturated. | | 1000 | | black and oily to 12.3 ft; gray below w./ strong PHC odor and high PID to 14.0 ft. |
| 14 | | | 2.4 | | | | 200-300 | | |
| 15 | | | | | 14.5-16.0 ft. black silty clay & muck, some wood, saturated, liquid. | | 0-5 | | slight sheen |
| 16 | | | 1.0' over 1 | | 16.0-17.0 ft. (same as above)] | | | | |
| 17 | | | | | **E.O.B. at 17.0 feet (refusal)** | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B41 | COORDINATES: | DATE: | 10/31/03 |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: 6.5 ft. Date/Time: | TIME STARTED: | 11:00 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.0 | | 0-4.0 ft. FILL (millings) consisting of variable proportions of concrete fragments, gravel, crushed stone, and f. sand, moist. | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 3.8 | | 4.0-6.0 ft. FILL FILL (same as above) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | 6.0-8.0 ft. FILL black coal ash, compact, saturated | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | 2.5 | | 8.0-12.0 ft. FILL black coal ash, little glass, little f. sand, saturated. | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | 5-10 | | oil staining at 11.5-12.0 ft. |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B41 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | at grade (millings) | GWL: Depth: | 6.5 ft. Date/Time: | TIME STARTED: | 11:00 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.6 | ### | 12.0-16.0 ft. FILL black coal ash, saturated | | 1000-1200 | | strong PHC odor; light oil sheen; high PID readings |
| 14 | | | | | | | 500-600 | | |
| 15 | | | | | | | 400-500 | | |
| 16 | | | | ### | 16.0-17.0 ft. FILL dark gray to black coal ash, saturated. | | 10-20 | | |
| 17 | | | 3.8 | ::: | 17.0-20.0 ft. dk. gray to black f. SAND, stratified, saturated | | 0 | | |
| 18 | | | | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | **E.O.B. at 20.0 feet** | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

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# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B42 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | millings | GWL: Depth: | 6.0 ft Date/Time: | TIME STARTED: | 12:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-2.0 ft. FILL concrete millings mixed w./ f. sand and crushed stone, moist. | | 0 | | |
| 2 | | | 2.2 | | | | 0 | | |
| 3 | | | | | 2.0-4.0 ft. FILL dk. brown to black coal ash, some fmc sand, moist, compact | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-8.0 ft. FILL (same as above) wet at 6.0 ft. | | 0 | | |
| 6 | | | 2.0 | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | | | | | 0 | | |
| 9 | | | | | 8.0-12.0 ft. FILL black coal ash, compact, saturated. | | 2-3 | | |
| 10 | | | 2.2 | | | | 10-15 | | |
| 11 | | | | | | | 115-140 | | oil staining at 11.5 to 12.0 ft. |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B42 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | millings | GWL: Depth: 6.0 ft | Date/Time: | TIME STARTED: | 12:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 2 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-15.8 ft. FILL black coal ash, wood, saturated. | | 80-100 | | |
| 14 | | | | | | | 80-115 | | very light sheen at 14 to15 ft.; o/w test negative; but petroleum odor at same interval. |
| 15 | | | | | | | 70-100 | | |
| 16 | | | | | 15.8-16.0 ft. dk. olive-gray f. SAND, saturated | | 0 | | |
| 17 | | | | | 16.0-20.0 ft. (same as above) | | 0 | | |
| 18 | | | | | | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | 20.0-21.5 ft. (same as above) | | 0 | | |
| 21 | | | | | | | 0 | | |
| 22 | | | | | 21.5-23.8 ft. dk. gray silty CLAY, tr, organic matter, stiff, compact, moist. | | 0 | | |
| 23 | | | | | | | 0 | | |
| 24 | | | | | 23.8-24.0 ft. dk. brown PEAT, tr. clay, moist | | 0 | | sulfide odor |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B42 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | millings | GWL: Depth: 6.0 ft | Date/Time: | TIME STARTED: | 12:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 3 | OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | 24.0-28.0 ft. dk gray to brown peaty CLAY (~20% organic material overall), stiff, moist. | | 0-10 | | sulfide odor |
| 26 | | | | | | | | | |
| 27 | | | | | | | 0-10 | | |
| 28 | | | | | E.O.B. at 28.0 feet | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B43 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: | Date/Time: | TIME STARTED: | 14:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: 6.0 ft. | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-5.0 ft. concrete slab. | | 0 | | |
| 1 | | | 2.6 | | 0.5-4.0 ft. FILL dk. brown to black crushed stone, coal, coal ash, in f. sand matrix, moist | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | 2.2 | | 4.0-5.0 ft. FILL (same as above) | | 0 | | |
| 5 | | | | | 5.0-8.0 ft. FILL black coal ash, loose, moist (saturated at 6.0 ft.) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | 2.3 | | 8.0-12. 0 ft. FILL coal ashmixted w./ gray sand clay, loose saturated. | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B43 | COORDINATES: | | DATE: | 10/31/03 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: | Date/Time: | TIME STARTED: | 14:20 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: 6.0 ft. | Date/Time: | TIME COMPLETED: | |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | ### ### ### ### ### ### | 12.0-13.2 ft. FILL black coal, ash, loose saturated. | | 0 | | |
| 14 | | | 2.7 | | 13.2-15.0 ft. dk. olive gray f. sand, poorly sorted, tr. gravel, saturated. | | 0<br>0 | | |
| 15 | | | | ==== ==== ==== ==== | 15.0-16.0 ft. dk. gray SILT, tr. clay, stiff, compact, saturated micaceous. | | 0 | | |
| 16 | | | | | 16.0-18.0 ft. dk. gray f-m SAND, saturated, tr. clay. | | 0 | | |
| 17 | | | 2.8 | | | | 0 | | |
| 18 | | | | | 18.0-20.0 ft. dk. gray f-m SAND, tr. clay, saturated. | | 0 | | |
| 19 | | | | | | | 0 | | |
| 20 | | | | | 20.0-24.0 ft. gray CLAY, tr. plant remains, stiff. | | 0 | | |
| 21 | | | | | | | 0 | | |
| 22 | | | 3.9 | | | | 0 | | |
| 23 | | | | | | | 0 | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B44 | COORDINATES: | DATE: | 11/03/03 |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: 3 ft Date/Time: | TIME STARTED: | 8:00 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 8:10 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.0 | | 0-1.0 ft. FILL crushed stone & reddish-brown to lt. gray f m sand, moist | | 0 | | |
| 2 | | | | | 1.0-3.0 ft. FILL lt brown to white f. SAND, tr. rock fragments (sandstone), moist | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | 3.0-4.0 ft. FILL dk gray crushed stone and f-m SAND, tr. clay, saturated | | 0 | | |
| 5 | | | 2.8 | | 4.0-5.0 ft. FILL lt. brown to dk. gray f-m SAND, saturated. | | 0 | | |
| 6 | | | | | 5.0-6.0 ft. FILL dk. gray to black coal ash, tr. clay, saturated. | | 0 | | |
| | | | | | 6.0-6.5 ft. concrete slab | | | | |
| 7 | | | | | 6.5-8.0 ft. FILL dk. gray crushed stone and f-m sand, saturated. | | 0.2 | | slight PHC odor but no sheen |
| 8 | | | | | **E.O.B. at 8.0 feet (concrete slab - refusal)** | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B44A | COORDINATES: | | DATE: | 11/03/03 |
| ELEVATION / DATUM: | at grade | GWL: Depth: 4 ft | Date/Time: | TIME STARTED: | 8:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 8:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0-1.0 ft. FILL dk. gray crushed stone & concrate millings, moist | | 0 | | |
| 2 | | | 2.4 | | 1.0-4.0 ft. FILL lt brown to white f. SAND, tr. rock fragments (sandstone), moist | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 4.0-5.0 ft. FILL (same as above) saturated. | | 0 | | slight greyish oil staining |
| 6 | | | 2.4 | | 5.0-8.0 ft. FILL crushed stone, concrete, coal ash, brick fragments, saturated. | | 0.2 | | slight oily stain and odor |
| 7 | | | | | | | 0.2 | | |
| 8 | | | | | | | | | |
| 9 | | | | | E.O.B. at 8.0 feet (concrete slab - refusal) | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B44B | COORDINATES: | | DATE: | 11/03/03 |
| ELEVATION / DATUM: | at grade (millings) | GWL: Depth: | Date/Time: | TIME STARTED: | 8:30 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 9:30 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: | 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | ### | 0-1.0 ft. FILL millings, moist | | 0 | | |
| 1 | | | | ### | 1.0-3.0 ft. FILL lt. orange brown f. SAND, tr. crushed stone, moist | | 0 | | |
| 2 | | | 3.1 | ### | | | 0 | | |
| 3 | | | | ### | 3.0-4.0 ft. FILL dk. gray to black crushed stone and f-m SAND, tr. clay, saturated at 3 ft. | | 0 | | |
| 4 | | | | ### | 4.0-6.0 ft. FILL black coal ash, crushed stone, and f. sand, saturatd. | | 0 | | |
| 5 | | | | ### | | | 0 | | |
| 6 | | | 2.0 | ### | | | | | |
| | | | | ^<> | 6.0-6.5 ft. concrete slab | | | | |
| 7 | | | | ### | 6.5-8.0 ft. FILL dk. gray crushed stone, coal ash, f-m sand, moist. | | 0 | | |
| 8 | | | | ### | | | | | |
| | | | | ::: | 8.0-9.5. ft. dk. gray f. SAND, saturated. | | 0 | | very slight PHC odor, h/s=2.4 ppm; o/w test negative (slight film noted on sides of jar). |
| 9 | | | | ::: | | | 0 | | |
| 10 | | | 0** | ═══ | 9.5-12.0 ft. dk. gray CLAY, tr. silt, plastic, saturated. | | 0 | | dk. gray sand in tip of sampler. |
| 11 | | | | ═══ | | | 0 | | |
| 12 | | | | ═══ | | | | | |

NOTES: ** note: No sample recovery in initial drive from 8-12 ft due to obstruction; drove point to same interval at a location 1.5 ft. away from the original boring, and recovered core from 8-12 ft. (lithology shown above is based on that core).

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B44B | COORDINATES: | DATE: | 11/03/03 |
| ELEVATION / DATUM: at grade (millings) | GWL: Depth: Date/Time: | TIME STARTED: | 8:30 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 9:30 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-13.5 ft. dk. gray f-m SAND compact, saturated. | | 0 | | no PID reading, odor, or sheen. |
| 14 | | | 3.0 | | 13.5-16.0 ft. dk. gray silty CLAY, tr. f. sand, micaceous, stiff, compact, moist. | | 0 | | fragment of rotten wood encountered at 15-16 ft. |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| | | | | | E.O.B. at 16.0 feet | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: SI-UST-B45 | COORDINATES: | DATE: | 11/03/03 |
| ELEVATION / DATUM: asphalt on grade | GWL: Depth: 3.5 ft Date/Time: | TIME STARTED: | 9:45 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 10:15 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0.0.3 ft. Asphalt & crushed stone. | | | | |
| 1 | | | 2.7 | | 0.3-2.0 ft. FILL crushed stone, gravel, and dk grayish-brown f-m sand, moist | | 0 | | |
| 2 | | | | | 2.0-4.0 ft. FILL black coal ash. saturated at 3.5 ft. | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | 3.2 | | 4.0-7.0 ft. FILL (same as above) | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | | | | | 0 | | |
| 8 | | | 3.5 | | 7.0-8.0 ft. lt gray f-m-c SAND, tr. gravel, poorly sorted, loose saturated. | | 0 | | |
| 9 | | | | | 8.0-11.0 ft. lt. to dk. gray f-m SAND, tr. c. sand, compact, saturated. | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | 11.0-12.0 ft. dk. gray SILT, compact, stiff,, moist. | | 0 | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | SI-UST-B45 | COORDINATES: | | DATE: | 11/03/03 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 3.5 ft | Date/Time: | TIME STARTED: | 9:45 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 10:15 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. dk. gray clayey SILT, (grades into silty CLAY w. depth), tr. f. sand locally in thin laminae, stiff, compact, stratified, saturated. | | 0 | | |
| 14 | | | ~3 | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| 16 | | | | | | | 0 | | |
| | | | | | **E.O.B. at 16.0 feet (refusal)** | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B46 | COORDINATES: | DATE: 11 \| 17 \| 03 | |
| ELEVATION: 9.86' | GWL: Depth: Date/Time: | DATE STARTED: 11 \| 17 \| 03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11 \| 17 \| 03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Fill material | F | | | 0.0 |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | F | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | F | | | |
| 9 | | | | | | | | | |
| 10 | S-1 | 10 12 | | | Black & Dark Gray emf Sand & Gravel & coal Ash Cinder | F | | | 0.0 |
| 11 | | 3 4 | | | | | | | |
| 12 | | 4 6 | | | Brown SILT, little mf Sand | | | | |

NOTES: Oil / $H_2O$ Shake Test - Performed

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276080000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B46 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | S-2 | 12-14 | | | Dark Gray mf SAND, little Silt | SM | | | 0.0 |
| | | 4 | | | | | | | |
| | | 6 | | | | | | | |
| | | 8 | | | | | | | |
| 14 | | 11 | | | | | | | |
| | S-3 | 14-16 | | | Dark Gray mf SAND, Some Silt, trace clay layers silt & clay | SM | | | 0.0 |
| | | 2 | | | | | | | |
| 15 | | 2 | | | | | | | |
| | | 2 | | | | | | | |
| | | 3 | | | | | | | |
| 16 | S-4 | 16-18 | | | Grey mf SAND, Some Silt, trace clay | SM | | | 0.0 |
| | | 2 | | | | | | | |
| 17 | | 2 | | | | | | | |
| | | 1 | | | | | | | |
| | | 2 | | | | | | | |
| 18 | S-5 | 18-20 | | | Dark Gray cmf SAND, trace Silt & clay | | | | 0.0 |
| | | 4 | | | | | | | |
| | | 3 | | | | | | | |
| 19 | | | | | CLAY & mf Sand | CL | | | |
| | | 5 | | | | | | | |
| | | 4 | | | Dark Gray mf SAND, little Silt, trace clay | SM | | | 0.0 |
| 20 | S-6 | 20-22 | | | | | | | |
| | | 3 | | | Dark Gray cmf SAND, little Silt, trace f Gravel | SP | | | |
| | | 5 | | | | | | | |
| 21 | | | | | | | | | |
| | | 5 | | | | | | | |
| | | 6 | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-1346 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | S-7 | 25-27 | | | Dark Gray CLAY w Pieces of decomposed wood. | Cly Pt | | | |
| | | 2 | | | | | | | |
| 26 | | 3 | | | | | | | |
| | | 2 | | | | | | | |
| 27 | | 2 | | | | | | | |
| | | | | | End of the Boring at 27.0 | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-47 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | White & Gray cmf SAND, little Silt, trace clay, & concrete, wood & Pieces of Rock / Brick | F | | | 0.0 PPM |
| 2 | | | 86 | | | | | | |
| 3 | | | | | Black cmf SAND, little mf Gravel, trace silt/clay & Pieces of Rock/Brick. | F | | | 10 PPM |
| 4 | | | | | | | | | |
| 5 | | | | | Brown & Black SILT, little mf Sand, trace clay, trace F Gravel | | | | 83 PPM GWL 6.5' |
| 6 | | | 87 | | Brown and Black cmf SAND, little Silt, trace mf Gravel & Pieces of wood / Rock | F | | | 634 PPM |
| 7 | | | | | Brownish Gray cmf SAND, little Silt, trace mf Gravel & Rock, | | | | |
| 8 | | | | | Dark Gray cmf SAND, little Silt, trace clay, trace F Gravel & Pieces of Rock, wood | F | | | |
| 9 | | | | | | | | | |
| 10 | | | 73 | | | | | | 1500 PPM 7-11.5' oily. |
| 11 | | | | | | | | | |
| 12 | | | | | Dark Gray mf+ SAND, little Silt, trace clay & decom Rock | F | | | |

A-1
A-2

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# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B47 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black CLAY and SILT, trace f Sand by Piecing wood | FT | | | |
| | | | | | Black cmf SAND, trace Silt, trace clay, trace f Gravel by Pieces of Brick rock, shell | F | | | 6 PPM |
| 14 | | | 67 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace clay | | | | |
| | | | | | Dark Gray cmf SAND, little cmf Gravel | SP | | | |
| 17 | | | | | ↓ | | | | |
| | | | | | some Gravel | | | | 0 PPM |
| 18 | | | 75 | | Dark Gray cmf SAND, little Silt, trace f Gravel | SP | | | |
| 19 | | | | | Brown SILT by decomposed wood (Peat) | PT | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-48 | COORDINATES: | DATE: 04/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (0 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Pieces of Concrete, little mf Gravel, trace Silt & Pieces of Rock. | F | | | |
| 2 | | | 67 | | | | | | |
| 3 | | | | | Pale green cmf SAND, little Silt, trace mf Gravel & wood, Brick, Rock | F | | | 0.0 PPM |
| 4 | | | | | | | | | |
| 5 | | | | | Pale green and Brownish Gray mf SAND, little Silt, trace clay & piece | F | | | |
| 6 | | | 83 | | of Rock | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | Dark Gray mf+ SAND, little Silt, trace clay & Pieces of Rock | F | | | 20 PPM<br>66 PPM |
| 10 | | | 67 | | | | | | |
| 11 | | | | | Black cmf SAND, and f Gravel, little Silt, trace clay & Pieces of Rock. | F | | | 778 PPM |
| 12 | | | | | | | | | |

A-1

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-48 | COORDINATES: | DATE: 04/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black & Brown cmf SAND, little mf Gravel, little silt & pieces of Rock, wood | | | | |
| 14 | | | 79 | | Dark Gray mf SAND, little Silt, trace clay, little mf Gravel & pieces of wood | SP | | | 15 PPM |
| 15 | | | | | Root & pieces of wood. | | | | |
| 16 | | | | | & clay & pieces of wood. | CL | | | |
| 17 | | | | | Dark Gray mft SAND, little Silt, trace clay & | | | | |
| 18 | | | 83 | | Pieces of wood | | | | |
| 19 | | | | | Brown SILT & decom-posed wood. (Peat) | PT | | | 0.0 PPM. |
| 20 | | | | | End of the Boring at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B40 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Gray cmf SAND, little Silt, little clay, F Gravel trace Silt & Pieces of shell rock, wood | F | | | 50 PPM |
| 2 | | | 63 | | Black cmf SAND, little Silt, little cmf Gravel, trace clay & Pieces of Rock | F | | | |
| 3 | | | | | Brick, cinder, shell & Bricks. | | | | |
| 4 | | | | | Dark Gray cmf SAND, little Silt, trace clay, trace mf Gravel & Pieces of Rock, wood, cinder | F | | | GWL 6.5' |
| 5 | | | | | | | | | |
| 6 | | | 63 | | | | | | |
| 7 | | | | | Dark Gray cmf SAND, little mf Gravel & Pieces of Rock | | | | |
| 8 | | | | | Black cmf SAND, little Silt, trace F Gravel & Pieces of Rock, concrete. | F | | | 593 PPM |
| 9 | | | | | | | | | 9-11' - Oily |
| 10 | | | 79 | | Black cmf SAND, little cmf Gravel, little Silt, trace clay & Pieces of Rock | F | | | 1000 PPM |
| 11 | | | | | & Pieces of Rock/concrete | | | | |
| 12 | | | | | | | | | |

A1

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-49 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray mf SAND, little Silt, trace clay | SP | | | 2 PPM |
| 14 | | | 83 | | Dark Gray cmf SAND, little Silt, trace clay | SM | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, trace Silt, trace f Gravel trace clay | SP | | | 0.0 PPM |
| 17 | | | | | | | | | |
| 18 | | | 88 | | | | | | |
| 19 | | | | | Gray CLAY/SILT w/ pieces of decomposed wood | CL | | | |
| | | | | | Dark Gray mf SAND, little f Gravel, trace Silt | PT | | | |
| 20 | | | | | | SP | | | |
| | | | | | End of the Boring at 20.00 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-50 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete | | | | |
| 1 | | | | | Dark Gray & Black cmf SAND, little mf Gravel & | F | | | |
| 2 | | | | | Pieces of Rock, Ash, cinders | | | | |
| | | | 67 | | Black mf SAND, little silt- | | | | |
| 3 | | | | | & Pieces of Rock, wood & Bricks | | | | |
| 4 | | | | | Dark Gray & Black cmf SAND, little mf Gravel | | | | |
| 5 | | | | | trace Silt, trace clay | F | | | |
| | | | | | & Pieces of Rock, wood | | | | |
| 6 | | | 75 | | cinders, Brick | | | | GWL-6.0' |
| 7 | | | | | | | | | 9 to 11.0 oily |
| 8 | | | | | Black cmf SAND, little | | | | |
| | | | | | mf Gravel, trace Silt & | F | | | |
| 9 | | | | | Pieces of Rock, Brick etc | | | | |
| | | | 79 | | | | | | |
| A-1 10 | | | | | Greenish yellow mf SAND, | | | | 64 PPM |
| | | | | | little Silt, trace clay | | | | |
| 11 | | | | | | F | | | |
| | | | | | Dark Gray SILT, little f | | | | |
| 12 | | | | | Sand, trace clay & Brick | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B50 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little mf Gravel, trace Silt, trace clay, & Brick, wood | F | | | 6 PPM |
| 14 | | | 75 | | ↓ | | | | |
| 15 | | | | | Pieces of wood (14'-15.5') | F | | | |
| 16 | | | | | Gray cmf SAND, little mf Gravel, trace silt, trace clay | SP | | | |
| 17 | | | | | Gray mf GRAVEL and SAND, little silt & Pieces of shell | | | | 0.0 PPM |
| 18 | | | 67 | | ↓ | | | | |
| 19 | | | | | Gray cmf SAND, little mf Gravel, trace silt | SP | | | 0.0 PPM |
| 20 | | | | | End of the Boring at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B5 | COORDINATES: | DATE: 05/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 7" - Concrete slab | | | | PID |
| 1 | | | | | Brownish yellow cmf SAND, little cmf Gravel | F | | | 0.0 PPM |
| 2 | | | 42 | | little silt, trace clay & Pieces of Rock | | | | |
| 3 | | | | | Gray CLAY layer (3") | | | | |
| 4 | | | | | Pieces of Concrete | | | | |
| 5 | | | | | Brown cmf SAND, little Silt, trace mf Gravel & Pieces of Rock | F | | | 0.0 PPM |
| 6 | | | 75 | | Some Gray CLAY | | | | |
| 7 | | | | | Brown cmf SAND, little mf Gravel, trace silt & Pieces of Rock, shell | F | | | |
| 8 | | | | | light Brown cmf SAND, | | | | GSL 9.0' |
| 9 | | | | | little f Gravel, trace silt & clay & Pieces of shell | F | | | |
| 10 | | | 67 | | | | | | 0.0 PPM |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B5 | COORDINATES: | DATE: 05/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | A-1 | | | | Dark Gray cmf SAND, little f Gravel, trace silt trace clay & pieces of white shell | F | | | 0.0 PPM |
| 14 | | | 83 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Brownish Gray mf SILT/ clay & pieces of shell | | | | |
| 17 | | | | | Gray mf SAND, little clay & silt | SP/ CL | | | 0.0 PPM |
| 18 | | | 85 | | (alternate bands of Silt/CLAY/sand | ML | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Dark Gray mf SAND, little silt | | | | |
| 21 | | | | | Dark Gray mf SAND, little silt, trace clay | | | | |
| 22 | | | 90 | | Brown CLAY | CL | | | 0.0 PPM |
| 23 | | | | | Black cmf SAND | | | | |
| 24 | | | | | Dark Gray mf SAND, little Silt, trace clay | SP/ CL | | | |
| | | | | | Brown SILT & decomposed wood | Pt | | | |

NOTES: End of the Boring at 24.0'

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-52 | COORDINATES: | DATE: 04/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete (slab) | | | | |
| 1 | | | | | Black cmf SAND, little Silt, trace mf Gravel, trace Silt by pieces of cinder ash, Rock, Brick | F | | | |
| 2 | | | | | | | | | 0.0 PPM |
| 3 | | | 67 | | | | | | |
| 4 | | | | | Brown cmf SAND, little Silt, trace mf Gravel, trace clay by pieces of Rock, cinders | F | | | |
| 5 | | | | | | | | | |
| 6 | | | 83 | | Gray cmf SAND, little Silt, trace mf Gravel | F | | | GOL-6.0 |
| 7 | | | | | Pale green mf SAND, little Silt, trace clay, trace f Gravel | | | | 0.0 PPM |
| 8 | | | | | Black cmf SAND, little mf Gravel | F | | | |
| 9 | | | | | by Pieces of Rock (1") | | | | |
| 10 A-1 A-2 | | | 88 | | by Pieces of Wood. (2") | | | | 316 PPM |
| 11 | | | | | Black mf GRAVEL, trace mf Sand, trace clay by Pieces of Brick, Wood | F | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-52 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black & Dark Gray cmf SAND, trace mf Gravel, trace clay (silty sand) | F | | | |
| 14 | | | 83 | | Gray mf SAND, little Silt | SM | | | 3 PPM |
| 15 | | | | | ↓ | | | | |
| 16 | | | | | Dark Gray mf SAND, little Silt, trace clay | SM | | | |
| 17 | | | | | | | | | |
| 18 | | | 88 | | W/ Pieces of wood | | | | |
| 19 | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt | | | | 0.0 PPM |
| 20 | | | | | Brown SILT w/ pieces of decomposed wood (Peat | Pt | | | |
| 21 | | | | | End of the Boring at 20.0 Feet | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-53 | COORDINATES: | DATE: 05/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID |
| 0 | | | | | Black & Brown cmf SAND, little mf Gravel, trace Silt & pieces of concrete, Brick, wood etc. | F | | | |
| 1 | | | | | | | | | 0.0 PPM |
| 2 | | | 50 | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | Black cmf SAND, little mf Gravel, little Silt & Pieces of Rock, wood, cinder | F | | | 0.0 PPM |
| 5 | | | | | | | | | |
| 6 | | | 88 | | | | | | |
| 7 | | | | | Brown mf SAND, little Silt & Pieces of glass, Wood. | F | | | 54 PPM |
| 8 | | | | | Black cmf SAND, little Silt, trace mf Gravel & Pieces of Rock, Brick | F | | | |
| 9 | | | | | | | | | 853 PPM |
| A-1 10 | | | 83 | | Dark Gray cmf SAND, little Silt, trace clay, trace f Gravel. | SP | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST. B-53 | COORDINATES: | DATE: 05/05/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/05/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/05/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little Silt, trace clay, trace f Gravel | SP | | | |
| 14 | | | 67 | | Dark Gray SAND, trace f Gravel, trace silt & clay | SP | | | 2 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0 | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-54 | COORDINATES: | | DATE: 05/06/04 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 05/06/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 05/06/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Pieces of concrete | | | | |
| 2 | | | 63 | | Brownish yellow cmf SAND Tittle Silt, trace f Gravel w/ Pieces of Rock | F | | | 0.0 PPM |
| 3 | | | | | Black cmf SAND, Tittle Silt, trace cmf Gravel w/ Brick, cinder | F | | | |
| 4 | | | | | Black cmf SAND, Tittle Silt, Tittle mf Gravel w/ Pieces of Brick, shell concrete, cinder | F | | | 70 PPM |
| 5 | | | | | | | | | |
| 6 | | | 67 | | w/ Pieces of Rock. | | | | Gwl 6.0' |
| 7 | | | | | Dark Gray cmf SAND, Tittle Silt w/ Pieces of Rock, Brick | F | | | |
| 8 | | | | | | | | | |
| 9 | | | | | Dark Gray cmf SAND, Tittle clay w/ Pieces of Rock. shell | F | | | oily 9-9.5' |
| A-1 10 | | | 67 | | w/ Pieces of Brick (1") | | | | 28 PPM |
| 11 | | | | | Dark Gray & Black cmf SAND, Some Silt, trace f Gravel, trace clay | F | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-54 | COORDINATES: | DATE: 05/06/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/06/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/06/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black & Dark Gray CLAY, little cmf Gravel, little Silt | | | | |
| | | | | | Black CLAY/SILT & Rock | F | | | |
| 14 | | | 33 | | ↓ | | | | 0.2 ppm |
| 15 | | | | | & lg Pieces of Brick | F | | | |
| | | | | | & lg Pieces of Rock | | | | |
| 16 | | | | | Grayish Brown CLAY/SILT | CL | | | |
| 17 | | | | | ↓ | | | | |
| 18 | | | 83 | | | | | | 0.0 ppm |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-55 | COORDINATES: | DATE: 05/06/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/06/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/06/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Black & Brown cmf SAND, little mf Gravel. Pieces of concrete. | F | | | |
| 2 | | | 63 | | | | | | |
| 3 | | | | | Dark Gray & Black cmf SAND, little cmf Gravel trace silt & pieces of Rock. | F | | | 0.0 PPM |
| 4 | | | | | | | | | |
| 5 | | | | | Black cmf Gravel & SAND little silt & Pieces of Rock Shell, Brick, cinder | F | | | |
| 6 | | | 79 | | | | | | |
| 7 | | | | | Dark Gray cmf SAND, little silt, trace clay & Pieces of shell | F | | | 0.0 PPM |
| 8 | | | | | Gray cmf SAND, little silt trace clay | | | | |
| 9 | | | | | Dark Gray cmf SAND, little silt, trace clay | F | | | |
| 10 | | | 88 | | & Brownish Gray CLAY | CL | | | 0.0 PPM |
| 11 | | | | | Dark Gry mf SAND & SILT trace clay | SP/SM | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-UST-B-55 | **COORDINATES:** | **DATE:** 05/06/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 05/06/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 05/06/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Brownish Gray CLAY, little Silt | CL | | | |
| 14 | | | 75 | | | | | | 0.0 ppm |
| 15 | | | | | | | | | |
| 16 | | | | | Grayish Brown CLAY, little Silt | | | | |
| 17 | | | | | | | | | |
| 18 | | | 73 | | Black mf GRAVEL, trace cmf Sand | SP/GP | | | |
| 19 | | | | | Grayish Brown CLAY, little Silt | CL | | | |
| 20 | | | | | End of the Boring at 20.0 feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SL-UST-B-56 | COORDINATES: | DATE: 05/06/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/06/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/06/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brown cmf SAND, little mf Gravel, trace silt & Pieces of Brick, rock | F | | | |
| 2 | | | 67 | | | | | | |
| 3 | | | | | 2.5 to 3.5 - Pieces of Rock | | | | 0.0 ppm |
| 4 | | | | | Gray & Brown cmf SAND, little silt, trace mf Gravel trace clay | F | | | |
| 5 | | | | | Dark Gray cmf SAND, little silt, trace mf Gravel trace clay | | | | |
| 6 | | | 83 | | | | | | |
| 7 | | | | | Dark Gray cmf SAND, little mf Gravel, trace silt trace clay & Rocks | F | | | |
| 8 | | | | | | | | | 0.0 ppm |
| 9 | | | | | Gray cmf SAND, little silt, trace clay, trace mf Gravel | | | | |
| 10 | | | 88 | | | | | | |
| A-1 | | | | | Black cmf GRAVEL, little mf Sand, trace silt | F | | | 10.5 - 11.0 Sheen |
| 11 | | | | | Gray CLAY, some silt | CL | | | 8 ppm |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-56 | COORDINATES: | DATE: 05/06/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/06/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/06/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Gray CLAY / SILT | CL | | | |
| 13 | | | | | | | | | 0.0 PPM |
| 14 | | | 88 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Black mf SAND, some Silt & pieces of wood | SP | | | |
| 17 | | | | | | | | | |
| 18 | | | 83 | | Clay/silt & pieces of wood | CL | | | 0.0 PPM |
| 19 | | | | | Gray mf SAND, little silt trace clay | SP | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-57 | COORDINATES: | | DATE: 05/13/04 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 05/13/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 05/13/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | White & Brown cmf SAND, little mf Gravel, trace silt | F | | | |
| 1 | | | | | by Pieces of Rock. | | | | 0 PPM |
| 2 | | | 75 | | Brown & Black cmf SAND, little Silt, trace mf clay | F | | | |
| 3 | | | | | by Pieces of Brick, cinder ash | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Dark Brown cmf SAND, little Silt, little cmf Gravel by Pieces of Brick Rock, cinder | F | | | 8 PPM |
| 6 | | | 88 | | trace clay | | | | |
| 7 | | | | | by Pieces of Rock | | | | |
| 8 | | | | | Black cmf SAND and GRAVEL, little Silt, | F | | | |
| 9 | | | | | trace clay by Pieces of Rock, cinder | | | | 1000 PPM |
| 10 | | | 96 | | by Pieces of Rock. | | | | 9.0-9.5' oily |
| 11 | | | | | Pale green cmf SAND | F | | | |
| 12 | | | | | Black cmf SAND, gravel, by Pieces of Rock, wood | | | | |

A-1

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-57 | COORDINATES: | DATE: 05\|13\|04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05\|13\|04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05\|13\|04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND, little Silt, little cmf Gravel trace clay & Pieces of Rock, cinder | F | | | |
| 14 | | | 73 | | Pieces of Wood | | | | |
| 15 | | | | | Black cmf SAND & GRAVEL trace silt/clay & Pieces of Wood | F | | | sheen, 15.0 - 15.5 |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace f Gravel, trace clay | SP | | | |
| 17 | | | | | Gray SILT, little mf Sand | ML | | | |
| 18 | | | 88 | | Gray cmf SAND, little Silt, trace mf Gravel, trace clay | SP | | | 0.0 PPM |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-58 | COORDINATES: | | DATE: 05/13/04 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 05/13/04 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 05/13/04 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brown mf SAND, little Silt, trace mf Gravel, Rock Pieces of concrete | F | | | |
| 2 | | | 83 | | Dark Gray cmf SAND, little mf Gravel, trace Silt & Pieces of Rock | F | | | 0.0 PPM |
| 3 | | | | | Black/Brown cmf SAND, little cmf Gravel, trace Silt & Pieces of Rock, Brick Shell | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Gray cmf SAND, little Silt, trace clay, trace f Gravel & Pieces of | F | | | |
| 6 | | | 79 | | Shell | | | | 0.0 PPM |
| 7 | | | | | | | | | |
| 8 | | | | | Gray cmf SAND, little Silt, trace clay & Pieces of Shell (loose sand) | F | | | |
| 9 | | | | | | | | | |
| 10 | | | 67 | | | | | | |
| A-1 11 | | | | | Black cmf SAND & GRAVEL little Silt, trace clay & Pieces cinder, wood | F/SP | | | Sheen/oily 11 - 11.5 |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-UST-B-58 | COORDINATES: | DATE: 05/13/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/13/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/13/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND & GRAVEL, little silt, trace clay & Piece of Rock | F | | | |
| 14 | | | 75 | | & Piece of wood / Rock (3") | | | | 5 ppm |
| 15 | | | | | & Piece of Rock | F | | | |
| 16 | | | | | Black mf SAND, little silt & piece of wood | | | | |
| 17 | | | | | Dark Gray mf SAND, little silt, trace clay | SM | | | |
| 18 | | | 83 | | Dark Gray cmf SAND, little silt, trace clay | SM | | | |
| 19 | | | | | Dark Gray SILT, little clay trace mf Sand | ML | | | 0.0 ppm |
| 20 | | | | | Dark Gray cmf SAND, little silt, trace clay | SM | | | |
| 21 | | | | | End of the Boring at 20.0' | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | PZ-35 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 7 ft | Date/Time: | TIME STARTED: | 13:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:00 |
| DRILLING METHODS: | Geoprobe® / 5-foot Double-Tube Macrocore® sampler | | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.5 asphalt & crushed stone | | 0 | | |
| 1 | | | 3.5 over 5' | | 0.5-5.0 FILL ft. dk brown f-m SAND, tr. shells, moist (hydraulic fill) | | 0 | | |
| 2 | | | | | | | 0 | | |
| 3 | | | | | | | 0 | | |
| 4 | | | | | | | 0 | | |
| 5 | | | | | 5.0-8.0 ft. FILL (same as above) saturated at ~7ft | | 0 | | |
| 6 | | | | | | | 0 | | |
| 7 | | | 3.1 over 5' | ▽ | | | 0 | | |
| 8 | | | | | 8.0-10.0 ft lt gray f-m SAND, some oyster shells, saturated (hydraulic fill) | | 0 | | |
| 9 | | | | | | | 0 | | |
| 10 | | | | | | | 0 | | |
| 11 | | | | | | | 0 | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | PZ-35 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION / DATUM: | asphalt on grade | GWL: Depth: 7 ft | Date/Time: | TIME STARTED: | 13:40 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 14:00 |
| DRILLING METHODS: | Geoprobe® / 5-foot Double-Tube Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | 2.2 over 5' | | 10.0-15.0 ft. FILL (same as above) | | 0 | | |
| 14 | | | | | | | 0 | | |
| 15 | | | | | | | 0 | | |
| | | | | | **E.O.B. at 15.0 ft** | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

One-inch dia. permament piezometer (PZ-35) installed, screened from 5-15 feet bgs, w. 4-in. sand pack (installed using double-tube sampler.) Includes 5-inch dia. flush-mount protective casing.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276360000-0008 | PROJECT NAME: Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: MS-01 | COORDINATES: | DATE: | 05/18/04 |
| ELEVATION / DATUM: slab on grade | GWL: Depth: ~4 ft Date/Time: | TIME STARTED: | 12:15 |
| ENGINEER/GEOLOGIST: D. Mackie | Depth: Date/Time: | TIME COMPLETED: | 13:20 |
| DRILLING METHODS: Geoprobe® / 4-foot Macrocore® sampler | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0-0.6 concrete slab | | | | |
| 1 2 3 | | | | NO SAMPLE | No sample - existing hole from methane survey sample MS-01 (open to 3.0 feet.) | | | | |
| 4 | | | 0.8 over 1.0 ft | | 3.0-4.0 ft. FILL black coal ash and c-m-f- SAND, moist. | | 0-1 | | PID reading may be due to humidity |
| 5 6 7 8 | | | 0.0 | | 4.0-8.0 ft. (no recovery, possible running sand??) | | | | |
| 9 10 11 12 | | | 0.5 | | 8.0-12.0 ft. black, f. SAND and muck, loose, saturated. (peat in tip of sampler) | | 5 | | poor recovery<br>oily sheen and slight petroeum odor<br>peat in tip of sampler |

NOTES:

Purpose of boring is to log lithology at site of methane survey sample MS-01

# SOIL BORING LOG

amec

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NUMBER: | 276360000-0008 | PROJECT NAME: | Former General Motors Assembly Plant Site, Sleepy Hollow, NY | | |
| BORING NUMBER: | MS-01 | COORDINATES: | | DATE: | 05/18/04 |
| ELEVATION / DATUM: | slab on grade | GWL: Depth: | −4 ft Date/Time: | TIME STARTED: | 12:15 |
| ENGINEER/GEOLOGIST: | D. Mackie | Depth: | Date/Time: | TIME COMPLETED: | 13:20 |
| DRILLING METHODS: | Geoprobe® / 4-foot Macrocore® sampler | | | PAGE: 2 | OF 2 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (ft) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | PID (ppm) | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | 12.0-16.0 ft. dk. gray CLAY, little organic material (~25% macroscopic plant remains in upper 6", then <10% below), plastic, stiff, saturated. (native marsh deposits) | | 0-1 | | |
| 14 | | | 2.5 | | | | | | |
| 15 | | | | | | | 0-1 | | |
| 16 | | | | | 16.0-20.0 ft. dk. gray to black CLAY, tr. silt, plastic, stiff, saturated, slight anaerobic odor | | 0-1 | | |
| 17 | | | | | | | | | |
| 18 | | | 3.5 | | | | | | |
| 19 | | | | | | | 0-1 | | |
| 20 | | | | | 20.0-24.0 ft. (same as above) | | | | |
| 21 | | | | | | | <1 | | |
| 22 | | | 3.6 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES: **E.O.B. at 24.0 ft**

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276050000 36 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-24 | COORDINATES: | DATE: 10/24/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/24/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/24/03 | |
| DRILLING METHODS: Geoprob Rig (Auger) | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 6" Concrete slab | 6" | | | |
| 1 | | | | | Brown cmf SAND, little Silt, trace cmf Gravel & clay w/ Pieces of wood, Rock Concrete | | | | 0.0 |
| 2 | | | 50 | | | | | | → Grout |
| 3 | | | | | Dark Brown cmf SAND, little f Gravel, trace Silt & clay w/ Pieces of Rock | | | | 0.0 |
| 4 | | | | | Yellowish Brown cmf SAND, little f Gravel, trace Silt & clay | | | | 0.0 |
| 5 | | | | | | | | | ← Bentonite |
| 6 | | | 67 | | Yellowish Brown CLAY & SILT, little f Gravel w/ Piece of Rock | Till | | | 0.0 |
| 7 | | | | | | | | | |
| 8 | | | | | Brown & Yellow cmf SAND, and Silt and Clay, little cmf Gravel | Till | | | 0.0 |
| 9 | | | | | | | | | ← Sand Pack |
| 10 | | | 69 | | Red and yellowish Brown mf SAND, little Silt & clay trace f Gravel w/ Pieces of Rock | Till | | | 0.0 |
| 11 | | | | | | | | | ← Screen |
| 12 | | | | | | | | | |

NOTES:

Screen - 9-19' - 2" sch 40 PVC - 0.010 "slot"
0-2' - 2" sch 40 PVC Riser
6-20' - Sand pack
4-6' - Bentonite 0-4' - Grout

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-24 | COORDINATES: | DATE: 10/24/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/24/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/24/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Red and Brownish yellow cmf SAND, little cmf Gravel trace Silt and clay w Pieces of Rock | Till | | | 0.0 |
| 14 | | | 83 | | Black, Pieces of Rock (14.0-14.8) (Gneiss) | | | | |
| 15 | | | | | Brown cmf SAND & SILT, trace cmf Gravel w Rock cmf Gravel | Till | | | 0.0 |
| 16 | | | | | Dark Gray and Brownish yellow cmf SAND, little Silt trace cmf Gravel w Rock | Till | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 88 | | Dark Gray mf SAND, little Silt, trace f Gravel and clay w Pieces of Rock | Till | | | 0.0 |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at | 20.0' | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-25 | COORDINATES: | DATE: 10/23/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/23/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/23/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 6" Concrete Slab | | | | |
| 1 | | | | | Brown cmf SAND, little Silt, trace clay w/ pieces of Rock, wood | F | | | |
| 2 | | | | | Black & Brown cmf SAND, little Silt, trace clay & mf Gravel w/ Rock, wood, pieces of concrete | F | | | |
| 3 | | | 67 | | w/ mf Gravel, Pieces of Rock | | | | |
| 4 | | | | | Brown and Yellow SILT, little mf Sand, trace clay trace f Gravel | F | | | |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Gray | F | | | |
| 7 | | | | | Brownish yellow SAND and SILT, trace clay | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | Yellowish Brown SILT, some mf Sand, little clay, trace mf Gravel | ML SM | | | |
| 10 | | | 67 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES:

Screen - 9-19'. Sch 40 (2") PVC 0.010" Slot
Riser 0-9'. Sch 40 (2") PVC
Sand pack. 6-25'
Bentonite. 4-6'
Grout. 0-4'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-25 | COORDINATES: | DATE: 10/23/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/23/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/23/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| | | | | | Reddish Brown SILT, little mf Sand, trace mf Gravel | ML SM | | | 0.0 |
| 13 | | | | | | | | | |
| 14 | | | 80 | | Yellowish Brown and Black cmf SAND, trace silt, trace mf Gravel | SP | | | 0.0 |
| 15 | | | | | (14.8-15.0') SILT & CLAY Reddish Brown and Gray cmf SAND, little silt, trace clay | SM | | | 0.0 |
| 16 | | | | | Dark Gray mf SAND, little Silt, trace f Gravel | SM | | | |
| 17 | | | | | | | | | |
| 18 | | | 85 | | Dark Gray cmf SAND, Some cmf Gravel, trace Silt | SP | | | 0.0 |
| 19 | | | | | Yellowish Brown SILT, little mf Sand, little clay & Roots | ML/CL | | | 0.0 |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-26T | COORDINATES: | DATE: 10/27/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/29/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/27/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dark Gray and white cmf Gravel, trace silt & clay w/ Pieces of Rock | F | | | PID (ppm) 0.0 |
| 1 | | | | | White pieces of Rock | | | | |
| 2 | | | 63 | | Brownish Yellow cmf SAND little silt, trace mf Gravel w/ cinder, coal Ash | F | | | 0.0 Qst-2.3' |
| 3 | | | | | | | | | |
| 4 | | | | | Black & Dark Gray cmf SAND & GRAVEL w/ coal Ash, cinder | F | | | 0.0 |
| 5 | | | | | | | | | |
| | | | 67 | | | | | | |
| 6 | | | | | Black & Dark Gray cmf SAND, little Silt, trace cmf Gravel, trace silt/clay | F | | | 57 ppm odor |
| 7 | | | | | Dark Gray & Black cmf SAND | | | | |
| 8 | | | | | Gray cmf SAND, little silt- trace clay and cmf Gravel trace brick (pieces) w/ Shell | SP | | | |
| 9 | | | | | | | | | 0.0 |
| 10 | | | 100 | | | | | | |
| 11 | | | | | | | | | 0.0 |
| 12 | | | | | Dark Gray CLAY, little silt | CL | | | |

NOTES:

Screen - 1.5-11.5'. 2" SCL 40 PVC screen 0.010
Riser - 0-1.5' 2" SCL 40 PVC
Sand pad 1-12'.
Bentnite 1-0-0.5'. Grout - 0-0.5'

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-26T | COORDINATES: | DATE: 10/27/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/27/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/27/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID (ppm)) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Gray CLAY (silty clay) | CL | | | 0.0 |
| 14 | | | 88 | | Dark Gray mpt SAND and SILT, little clay & piece of decomposed wood | CL pt | | | 0.0 |
| 15 | | | | | organic SILT Decomposed wood | | | | |
| 16 | | | | | End of the Boring at 16.0' | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|---|---|
| **PROJECT NUMBER:** | 276030000 | **PROJECT NAME:** | Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** | OW-27 | **COORDINATES:** | | **DATE:** | 05/03/04 |
| **ELEVATION:** | | **GWL:** Depth: | Date/Time: | **DATE STARTED:** | 05/03/04 |
| **ENGINEER/GEOLOGIST:** | Madhu Patel | Depth: | Date/Time: | **DATE COMPLETED:** | 05/03/04 |
| **DRILLING METHODS:** | Geoprob Rig | | | **PAGE:** | 1 OF 1 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | Brown and Gray cmf SAND, little Silt, trace clay lg Pieces of Rock | | | | |
| 3 | | | 67 | | Dark Gray cmf SAND, little Silt, trace clay lg Pieces of Rock, shell | F | | | |
| 4 | | | | | Red and Brown mf SAND, trace mf Gravel, trace Silt trace clay lg Pieces of shell | F | | | |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Dark Gray cmf SAND, little mf Gravel, trace Silt lg Pieces of Rock, Brick, | | | | |
| 7 | | | | | ↓ | | | | |
| 8 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel, lg Pieces of shell, Rock | F | | | |
| 9 | | | | | ↓ | | | | |
| 10 | | | 46 | | lg Piece of shell | F | | | |
| 11 | | | | | Refusal at 11.0' | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-28 | COORDINATES: | DATE: 05/03/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/03/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/03/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Gray cmf SAND, little Silt, trace mf Gravel, trace clay w/ Pieces of Rock | F | | | 0.1 PPM |
| 2 | | | 88 | | w/ Pieces of shell | | | | |
| 3 | | | | | w/ Pieces of shell | F | | | |
| 4 | | | | | Gray cmf SAND, little Silt, trace mf Gravel w/ | | | | |
| 5 | | | | | Pieces of Rock, shell | | | | |
| 6 | | | 83 | | Dark Gray cmf SAND, | F | | | |
| 7 | | | | | little Silt, trace cmf Gravel w/ Pieces of shell | | | | 0.0 PPM |
| 8 | | | | | w/ Pieces of shell | | | | |
| 9 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt | F | | | |
| 10 | | | 88 | | Brown clay (2" layer) w/ Pieces of shell | | | | 0.0 PPM |
| 11 | | | | | w/ Pieces of wood | F | | | |
| 12 | | | | | w/ Pieces of shell | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-28 | COORDINATES: | DATE: 05/03/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/03/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/03/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Reddish Brown CLAY, little Silt, trace mf Sand, trace mf Gravel w/ pieces of Rock | F | | | |
| 14 | | | 96 | | Brown mf SAND, little Silt, trace f Gravel | Till | | | 0.0 PPM |
| 15 | | | | | Gray mf Sand w/ pieces of Rock, coal | | | | |
| 16 | | | | | Dark Brown cmf SAND, little Silt, trace mf Gravel | | | | |
| 17 | | | | | Brown mf SAND, little | Till | | | |
| 18 | | | 96 | | Silt, trace clay Yellowish Brown CLAY, little Silt, trace mf Gravel w/ pieces of Rock | | | | 0.0 PPM |
| 19 | | | | | ↓ | | | | |
| 20 | | | | | End of the Boring at 20.0 | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-29 | COORDINATES: | DATE: 05/03/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/03/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/03/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt by Pieces of Rock, Shell Brick, cinder | F | | | 0.0 PPM |
| 2 | | | 83 | | Dark Brown cmf SAND, little mf Gravel, trace Silt by Pieces of Rock | | | | |
| 3 | | | | | Black cmf SAND, some Silt, trace clay | | | | |
| 4 | | | | | | | | | 0.0 PPM |
| 5 | | | | | Dark Gray and Black mf SAND, some Silt, trace clay by Pieces of Rock | F | | | |
| 6 | | | 54 | | Brown mf SAND | | | | |
| 7 | | | | | by Piece of Wood by Piece of Concrete by Pieces of Wood, Brick | F | | | 0.0 PPM |
| 8 | | | | | | | | | |
| 9 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt by Pieces of Rock | F | | | |
| 10 | | | 46 | | | | | | |
| 11 | | | | | Black Piece of Wood | | | | 0.0 PPM |
| 12 | | | | | Dark Gray mf SAND, little Silt, trace clay by Piece of Shell | F | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-29 | COORDINATES: | DATE: 05/03/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/03/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/03/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray SILT, trace clay, trace f Sand | | | | |
| | | | | | Red piece of wood, shell | | | | 0.0 PPM |
| 14 | | | 88 | | Dark Gray cmf SAND, little Silt, trace clay | | | | |
| 15 | | | | | light green cmf SAND, little Silt, trace clay | | | | |
| 16 | | | | | light Green mf SAND, little Silt, trace clay | | | | |
| 17 | | | | | light Green mf SAND, little Silt, trace clay | | | | 0.0 PPM |
| 18 | | | 83 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0 feet. | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** OW-30 | **COORDINATES:** | **DATE:** 04/30/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/30/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/30/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete - slab | | | | |
| 2 | | | | | ↑ O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N ↓ Dark Gray cmf SAND, little Silt, little mf Gravel by pieces of wood, rock Piece of Concrete | | | | G.0 PPM |
| 6 | | | 75 | | Black and Brown cmf SAND, little mf Gravel, trace Silt, trace clay by coal ash, cinder, Brick | | | | |
| 7 | | | | | | | | | G.0 PPM |
| 8 | | | | | Brown cmf SAND, little cmf Gravel, trace Silt | | | | |
| 9 | | | | | trace clay by Piece of Brick rock | | | | |
| 10 | | | 54 | | Dark Brown cmf SAND, and GRAVEL, trace Silt | | | | G.0 PPM |
| 11 | | | | | trace clay by Piece of Rock | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-30 | COORDINATES: | DATE: 04/30/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/30/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/30/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray CLAY and SILT, little mf Gravel & Piece of Rock | F | | | 2 PPM |
| 14 | | | 38 | | Black cmf SAND, little Silt, trace clay & piece of Rock, gravel. | | | | |
| 15 | | | | | Piece of Concrete | | | | |
| 16 | | | | | Dark Gray mf SAND & wood | F | | | |
| 17 | | | NR | | No Recovery. | F | | | |
| 18 | | | | | Dark Gray mf SAND, little Silt, trace clay | SM | | | |
| 19 | | | 42 | | Brownish Green cmf SAND, little Silt, trace clay | SP | | | 0.0 PPM |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | clay | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-31 | COORDINATES: | DATE: 05/03/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/03/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/03/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | ↑ O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | ↓ | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | Dark Gray and Brown cmf SAND, little silt trace cmf Gravel, trace clay & piece of shell | F | | | 0.0 PPM |
| 10 | | | 83 | | ↓ trace clay | | | | |
| 11 | | | | | ↓ Black and Brown mf SAND, little silt, trace clay & Rocks | F | | | |
| 12 | | | | | | | | | 0.0 PPM |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW - 31 | COORDINATES: | DATE: 05/03/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/03/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/03/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little Silt, trace clay by piece of wood, rock etc. | F | | | |
| 14 | | | 21 | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, trace Silt by piece of Rock | F | | | 0.3 ppm sheen |
| 17 | | | | | | | | | |
| 18 | | | 54 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Dark Gray cmf SAND, little Silt, trace f Gravel by piece of Rock | F | | | |
| 21 | | | | | Dark Gray mf SAND, little Silt, trace clay | SP | | | 0.0 ppm |
| 22 | | | 96 | | Dark Gray mf SAND, little Silt, trace clay | | | | |
| 23 | | | | | by pieces of wood | | | | |
| 24 | | | | | Dark Gray mf SAND, little Silt, trace clay | | | | |

NOTES: End of the Boring at 24.0'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-32 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brownish Gray cmf SAND, little Silt, little cmf Gravel w/ piece of Asphalt, Concrete cinder, roots | F | | | 0.1 PPM |
| 2 | | | 63 | | | | | | |
| 3 | | | | | some Silt | | | | |
| 4 | | | | | Brownish Gray cmf SAND, little Silt, trace clay, trace f Gravel. | F | | | |
| 5 | | | | | | | | | |
| 6 | | | 75 | | Dark Brown mf SAND, little Silt, trace clay | F | | | 0.2 PPM |
| 7 | | | | | w/ piece of shell | | | | GWL 7.0' |
| 8 | | | | | w/ piece of wood | | | | |
| 9 | | | | | Dark Gray cmf SAND, little Silt, trace cmf Gravel, trace clay | SP | | | 0.0 PPM |
| 10 | | | 66 | | | | | | |
| 11 | | | | | trace Silt/clay | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-32 | COORDINATES: | DATE: 05/04/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 05/04/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 05/04/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little Silt, trace clay | SP | | | 0.2 ppm |
| | | | | | Dark Gray SILT/CLAY | | | | |
| 14 | | | | | mf Sand | | | | |
| | | | 83 | | SILT/CLAY | CL | | | 0.0 ppm |
| 15 | | | | | mf Sand, trace Silt | | | | |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace clay | SP | | | |
| 17 | | | | | SILT, little mf Sand, trace clay | | | | 0.0 ppm |
| 18 | | | 100 | | w/ Pieces of wood | | | | |
| 19 | | | | | Whitish Gray cmf SAND, little Silt, trace clay | SP | | | 0.01 ppm |
| 20 | | | | | End of the Boring at 20.0 feet. | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** OIN-33 | **COORDINATES:** | **DATE:** 04/30/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/30/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/30/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 8" Pieces of Concrete. | | | | |
| 1 | | | | | Brown cmf SAND, little Silt, trace clay, trace mf Gravel w Pieces of concrete | F | | | 0.0 PPM |
| 2 | | | 42 | | | | | | |
| 3 | | | | | Brown cmf SAND, little Silt, trace mf Gravel w Pieces of concrete, Rock grass | F | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Black cmf SAND and GRAVEL, little Silt, trace clay w Pieces of Rock, cinder, Coal ash. | F | | | 0.0 PPM |
| 6 | | | 46 | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Black cmf GRAVEL and SAND, trace Silt, trace mf clay w Pieces of Cinder, Rock, metal, Brick | F | | | |
| 9 | | | | | | | | | 0.0 PPM |
| 10 | | | 83 | | | | | | |
| 11 | | | | | | F | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: OW-33 | COORDINATES: | DATE: 04/30/04 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 04/30/04 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 04/30/04 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Black cmf SAND and GRAVEL, little silt & Piece of Brick, cinder, Rock. | F | | | 7 PPM sheen |
| 14 | | | 36 | | | | | | |
| 15 | | | | | | F | | | |
| 16 | | | | | Black cmf GRAVEL and SAND, little Silt & Piece of Rock, cinder | F | | | |
| 17 | | | | | | | | | |
| 18 | | | 88 | | Black SILT, little clay, little mf Gravel & Piecing Rock | ML | | | .2 PPM |
| 19 | | | | | | | | | |
| 20 | | | | | End of Boring at 20.0' feet | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** OW-34 | **COORDINATES:** | **DATE:** 04/30/04 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 04/30/04 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 04/30/04 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, Some cmf Gravel, little Silt w/ Pieces of Rock | F | | | |
| 2 | | | 42 | | w/ metal, wood | F | | | 0.0 PPM |
| 3 | | | | | w/ Bricks, wood. | | | | |
| 4 | | | | | w/ wood. | | | | |
| 5 | | | | | Dark Gray cmf SAND, little Silt and clay, little cmf Gravel w/ Pieces of concrete, Brick | F | | | 0.0 PPM |
| 6 | | | 54 | | | | | | |
| 7 | | | | | w/ Piece of Brick | F | | | |
| 8 | | | | | w/ Bricks | | | | 0.0 PPM |
| 9 | | | 21 | | Dark Gray cmf SAND, little Silt, little cmf Gravel w/ Pieces of Rock, Brick, concrete, wood, metal | F | | | |
| 10 | | | | | ↓ | | | | |
| 11 | | | | | Refusal at 10.5' (feet) | | | | |
| 12 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-01 | COORDINATES: | DATE: 11/13/03 | |
| ELEVATION: 9.03' | GWL: Depth: Date/Time: | DATE STARTED: 11/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/13/03 | |
| DRILLING METHODS: ~~Geoprob~~ Rig Hollow stem Augers - split spoon Sample | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Brown and Green mf SAND, little Silt & Pieces of Rock, concrete, Gravel | F | | | 0.0 |
| 5 | S-1 | 5-7' 6 5 6 6 | 90 | | Brown and Green mf SAND, some Silt, little clay & Pieces of Rock and concrete | F | | | 0.0 |
| 10 | S-2 | 10-12 4 3 4 5 | 75 | | Dark Gray clayf SAND, little Silt, trace clay & Pieces of shell | SM | | | 0.0 |

NOTES: Shelby Tube. 2" diameter. 2.00 feet length.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | |
| BORING NUMBER: GT-01 | | COORDINATES: | DATE: 11/13/03 |
| ELEVATION: | | GWL: Depth: Date/Time: | DATE STARTED: 11/13/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | | Depth: Date/Time: | DATE COMPLETED: 11/13/03 |
| DRILLING METHODS: Geoprob-Rig Hollow stem Auger. Split spoon Sample | | | PAGE: 2 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | ST 1 | P U S H | 100 | | Dark Gray SILT/SAND/ CLAY | SM/ SP | | | 0.0 |
| 14 | | | | | | | | | |
| 15 | ST 2 | P U S H | 100 | | Dark Gray SILT/SAND/ CLAY | SM | | | 0.0 |
| 16 | | | | | CLAY | | | | |
| 17 | | 1 1 2 3 | 90 | | Dark Gray mf SAND, some Silt, trace clay w Pieces of shell | SM | | | 0.0 |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | S-4 | WOR WOR | | | Dark Gray & Brown CLAY with decomposed wood | CL/ PT | | | 0.0 |
| 21 | | 2 | 95 | | | | | | |
| 22 | S-5 | 2 WOR | | | Dark Gray CLAY w | CL | | | |
| 23 | | WOR | | | Pieces of decomposed wood | CL/ PT | | | 0.0 |
| 24 | | 2 2 | 65 | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276980000 76 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-01 | COORDINATES: | DATE: 11/13/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/13/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/13/03 | |
| DRILLING METHODS: ~~Geoprob Rig~~ Hollow stem Auger. split spoon Sample | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 25 | S-6 | WOR | | | Dark Gray CLAY, little f sand w/ piece of decom. | | | | 0.0 |
| | | WOR | 100 | | Dark Gray CLAY | CL | | | |
| | | 2 | | | | | | | |
| 26 | | 2 | | | | | | | |
| | ST-3 | P | | | Dark Gray CLAY | | | | 0.0 |
| | | U | 95 | | | CL | | | |
| 27 | | S | | | | | | | |
| | | H | | | | | | | |
| 28 | | | | | End of the Boring at 28.0 | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276630000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-02 | COORDINATES: | | DATE: 11/13/03 |
| ELEVATION: 10.19' | GWL: Depth: Date/Time: | | DATE STARTED: 11/13/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | | DATE COMPLETED: 11/13/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF 4 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Fill material. | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | S-1 | 5-7' 2 2 3 4 | 25 | | Dark Gray & Brown cmf SAND, little silt, trace clay, mf Gravel & piece of Rock, wood etc | F | | | 0.0 |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | S-2 | 10-12' 2 " 4/10 | 28 | | Gray mf SAND, little cmf Gravel & coal Ash, Cinder, Rock | F | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: 10-12' - Very hard material

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | |
| BORING NUMBER: GT-02 | | COORDINATES: | DATE: 11/13/03 |
| ELEVATION: | | GWL: Depth: Date/Time: | DATE STARTED: 11/13/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | | Depth: Date/Time: | DATE COMPLETED: 11/13/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 2 OF 4 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | | | | | 0.0 |
| 14 | | | | | | | | | |
| 15 | S-3 | 15-17<br>17 | | | Dark Gray & Greey cmf SAND, little Silt, trace clay | SM | | | 0.0 |
| 16 | | 10 | 50 | | | | | | |
| | | 9 | | | | | | | |
| | | 8 | | | | | | | |
| 17 | S-4 | 17-19'<br>3 | | | Dark Gray cmf SAND, little silt, trace clay & piece of wood | SP/SM | | | 0.0 |
| 18 | | 4 | 75 | | Gray mf SAND, some Silt, trace clay | | | | |
| | | 2 | | | | | | | |
| 19 | | 2 | | | | | | | |
| | ST | P | | | | | | | |
| | | U | | | Shelby Tube failed. | | | | 0.0 |
| 20 | | | HR | | | | | | |
| | | S | | | | | | | |
| | | H | | | | | | | |
| 21 | ST-1 | P | | | Gray mf SAND, some Silt | SM | | | 0.0 |
| | | U | | | | | | | |
| 22 | | S | 95 | | | | | | |
| | | H | | | | | | | |
| 23 | ST | P | | | Shelby Tube failed. | | | | 0.0 |
| | | 0 | NR | | | | | | |
| 24 | | S<br>H | | | | | | | |

NOTES: 19-21'. Shelby Failed.

# SOIL BORING LOG

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|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-02 | COORDINATES: | DATE: 11/14/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 4 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | ST 2 | P U S H | 100 | | Dark Gray SILT with Sand (silty sand). | | | | |
| 27 | S-5 | 27-29 WOR WOR | | | Dark Gray mf SAND, little Silt | | | | 0.0 |
| 28 | | 4 4 | | | Dark Gray mf SAND little SAT of decomposed wood | SM | | | 0.0 |
| 29 | | | | | | SM/PT | | | |
| 30 | S-6 | WOR WOR | | | Organic SILT, trace clay & pieces of decomposed wood | PT CL | | | 0.0 |
| 31 | | 2 2 | | | | | | | |
| 32 | S-7 | W O H | | | Dark Gray CLAY & pieces of decomposed wood. | CL/PT | | | 0.0 |
| 34 | S-8 | WOH WOH | | | | | | | |
| 35 | | 2 | | | | | | | |
| 36 | | 2 | | | CLAY, trace decomposed wood | CL | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276830000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-02 | COORDINATES: | DATE: 11/14/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/14/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/14/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 4 OF 4 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 37 | ST G | P U S H | 100 | | Dark Gray CLAY | CL | | | |
| 38 | | | | | End of the Boring at 38.0' | | | | |
| 39 | | | | | | | | | |
| 40 | | | | | | | | | |
| 41 | | | | | | | | | |
| 42 | | | | | | | | | |
| 43 | | | | | | | | | |
| 44 | | | | | | | | | |
| 45 | | | | | | | | | |
| 46 | | | | | | | | | |
| 47 | | | | | | | | | |
| 48 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276980000 | | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | |
| BORING NUMBER: GT-03 | | COORDINATES: | DATE: 11/14/03 |
| ELEVATION: 8.12' | | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | | Depth: Date/Time: | DATE COMPLETED: 11/17/03 |
| DRILLING METHODS: Geoprob Rig Hollow stem Auger. split spon Sampling | | | PAGE: 1 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Fill Material | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | S-1 | 5-7 | | | Black & Dark Gray cmf SAND, little clay, trace mf Gravel of coal Ash, cinder | F | | | 0.0 |
| 6 | | 2 | 50 | | | | | | |
| | | 2 | | | | | | | |
| | | 9 | | | | | | | |
| 7 | | 3 | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | S-2 | 10-12 | | | Dark Gray cmf SAND, and cmf Gravel of Pieces of Rock | F | | | 0.0 |
| | | 2 | | | | | | | |
| 11 | | 2 | 25 | | | | | | |
| | | 2 | | | | | | | |
| 12 | | 1 | | | | | | | |

NOTES: Shelby Tube - 2" Diameter. 2 Feet length.

# SOIL BORING LOG

amec

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|---|---|---|---|
| PROJECT NUMBER: 276080000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-03 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: Geoprob Rig Hollow Stem Auger. split spoon Sampler | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS (PID CROW) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | S-3 | 12-14<br>WOH<br>1<br>WOR | 45 | | Dark Gray & Brown cmf SAND, some cmf Gravel & coal Ash, cinder | F | | | 0.0 |
| 14 | S-4 | 14-16<br>WOH | | | | | | | |
| 15 | | 2 | | | No Recovery. | | | | |
| 16 | | 1<br>1 | | | | | | | |
| 17 | ST-1 | P<br>U<br>S<br>H | 100 | | Dark Gray cmf SAND little Silt. | SP | | | 0.0 |
| 18 | | | | | | | | | |
| 19 | ST-2 | P<br>U<br>S<br>H | 100 | | Dark Gray cmf SAND, little Silt & Pieces of shell | SP | | | 0.0 |
| 20 | S-5 | WOR<br>WOH | | | Dark Gray cmf SAND, little Silt, trace clay | | | | |
| 21 | | 3<br>5 | | | | | | | 0.0 |
| 22 | | | | | Brown Organic SILT, trace clay & Pieces of decomposed wood. | PT | | | 0.0 |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: GT-03 | COORDINATES: | DATE: 11/17/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 11/17/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 11/17/03 | |
| DRILLING METHODS: Geoprobe Rig Hollow stem Auger. split spoon Sampling | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 25 | S-6 | WOH | | | Brown / Gray Organic silt w/ clay & Pieces of decomposed wood | | | | 0.0 |
| | | WOH | | | | | | | |
| | | 2 | 90 | | | | | | |
| | | 3 | | | | | | | |
| 26 | S-7 | 1 | | | Dark Gray CLAY w/ Pieces of decomposed wood | CL/PT | | | 0.0 |
| | | 2 | | | | | | | |
| 27 | | 2 | 100 | | | | | | |
| | | 1 | | | | | | | |
| 28 | S-8 | WOH | | | Dark Gray CLAY, trace decomposed wood. | CL | | | 0.0 |
| | | 1 | | | | | | | |
| 29 | | 1 | 100 | | | | | | |
| | | 1 | | | | | | | |
| 30 | ST | P | | | | | | | |
| | 3 | U | | | CLAY, trace - Pieces of decomposed wood | CL | | | 0.0 |
| 31 | | 90 | | | | | | | |
| | | 5 | | | | | | | |
| | | H | | | | | | | |
| 32 | | | | | End of the Boring at 32.0' | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

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| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-1W (36) | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: 8.65' | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 1 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | F | | | PID ppm<br>0.0 |
| 1 | | | | | Dark Gray cmf SAND, trace Silt, trace cmf Gravel w Pieces of concrete | | | | Bentonite<br>Riser |
| 2 | | | 75 | | | | | | |
| | | | | | concrete slab (2-3') | F | | | |
| 3 | | | | | Coal Ash / Cinders | | | | 0.0 |
| 4 | | | | | Black and Brown cmf SAND, little Silt, trace mf Gravel | | | | |
| 5 | | | | | Black cmf SAND, little cmf Gravel, trace Silt w Pieces of Rock. | SP | | | |
| 6 | | | 79 | | Dark Gray CLAY, little Silt trace mf Sand | CL<br>SP | | | GWL-6.0' |
| 7 | | | | | Dark Gray cmf SAND, little Silt, trace clay | SM | | | 0.0 |
| 8 | | | | | | | | | Sand pack |
| 9 | | | | | Dark Gray mf SAND, little Silt, trace mf Gravel, trace clay | SP | | | Screen |
| 10 | | | 38 | | | | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | Dark Gray CLAY and Silt trace mf Sand | CL | | | |

NOTES:

Screen- 2-12' - 1.5ct 40 PVC 0.010" slott
0-2' - sch 40 PVC Riser
1-12' - Sand pack
0.5-1.0 - Bentonite

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-20 | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: 9.89' | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray and white cmf SAND, little Silt, trace clay w/ Pieces of Rock, wood, brick etc | F | | | 0.0 Bentonite Riser |
| 2 | | | 83 | | Whitish Gray cmf SAND little cmf Gravel, trace Silt w/ Pieces of Rock | | | | 0.0 |
| 3 | | | | | | F | | | |
| 4 | | | | | Dark Brown cmf SAND, little cmf Gravel, trace silt & clay w/ Pieces of Rock, wood, Brick etc | | | | |
| 5 | | | | | | I | | | |
| 6 | | | 79 | | w/ Pieces of Brick | | | | 0.0 |
| 7 | | | | | w/ Pieces of Concrete | F | | | GWL- 7.0' |
| 8 | | | | | w/ Coal Ash | | | | |
| 9 | | | | | w/ Concrete | | | | |
| 10 | | | 79 | | Brown and Yellow mf SAND, little Silt, trace f Gravel w/ Pieces of Rock | F | | | 0.0 Sand pack |
| 11 | | | | | Black & Dark Gray cmf SAND, little Silt, trace f Gravel | F | | | Screen |
| 12 | | | | | w/ Pieces of Wood | | | | |

NOTES:

Screen, 2-16'-2 sch 40 PVC, 0.010 slot
Riser, 0-2', 2' sch 40 PVC.
Sand pack - 1.0 - 16
Bentonite - 0.5 - 1.0

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-2W | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & clay w/ Pieces of Rock | F | | | PID (ppm) 0.0 |
| 14 | | | | | Dark Gray & Black cmf SAND, little Silt, trace mf Gravel w/ Pieces of Rock & wood | | | | 14.5' to 16.5' |
| 15 | | | | | Black cmf SAND, little cmf Gravel, trace silt w/ Pieces of Rock, cinder | F | | | Oily |
| 16 | | | | | | | | | 6.3 |
| 17 | | | | | Brown Organic SILT w/ Pieces of decomposed wood (Peat) | Pt | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | End of the Boring at 20.0 | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-3W | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: 7.37' | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | | F | | | Bentonite 0.0 |
| | | | | | Dark Gray and Brown cmf SAND, little Silt, trace clay trace mf Gravel w Pieces of Rock, wood | | | | Riser |
| 2 | | | 40 | | | | | | |
| 3 | | | | | Black cmf SAND, little Silt, trace clay w Pieces of Rock | | | | |
| 4 | | | | | | | | | GSL-4.0 |
| 5 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt w Pieces of shell, wood Rock. | F | | | 0.0 |
| 6 | | | 67 | | | | | | |
| 7 | | | | | Black Coal Ash / Cinder | | | | faint odor |
| 8 | | | | | Dark Gray & Brown cmf SAND, little Silt & clay w Rock Gravel | | | | Screen |
| 9 | | | | | Black and Dark Gray mf SAND, little Silt, trace clay | F | | | Sand pack |
| 10 | | | 75 | | | | | | 0.0 |
| | | | | | Gray mf SAND, little Silt, trace clay | | | | |
| 11 | | | | | Black and Dark Gray cmf SAND, little mf Gravel Brick Cockest. Cinder | | | | |
| 12 | | | | | | | | | |

NOTES:

Screen - 2.12' - Sch 40 PVC Slot
Riser - 0.2' - 1" sch 40 PVC.
Sand pack - 1-12' -
Bentonite - 0.5 - 1.0

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| **PROJECT NUMBER:** 276030000 | **PROJECT NAME:** Former General Motors, Sleepy Hollow, New York | | |
| **BORING NUMBER:** SI-GWI-3W | **COORDINATES:** | **DATE:** 10/20/03 | |
| **ELEVATION:** | **GWL:** Depth: Date/Time: | **DATE STARTED:** 10/20/03 | |
| **ENGINEER/GEOLOGIST:** Madhu Patel | Depth: Date/Time: | **DATE COMPLETED:** 10/20/03 | |
| **DRILLING METHODS:** Geoprob Rig | | **PAGE:** 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray mf+ SAND little Silt, trace clay | SM | | | PID 0.0 ppm |
| 14 | | | 83 | | Dark Gray mf+ SAND, Some Silt, trace clay by decomposed leaves. | SM | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | End of the Boring at 16.0 | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-4W | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: 9.79 | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray cmf SAND, little cmf Gravel & Pieces of Rock, wood. Concrete cinder | F | | Bentonite / Riser | 0.0 |
| 2 | | | 42 | | Dark Brown & Yellowish cmf SAND, little Silt, trace mf Gravel, trace wood. Rock | F | | | 0.0 |
| 3 | | | | | | | | | |
| 4 | | | | | Brownish Yellow cmf SAND, little clay, trace Silt & Pieces of Rock | F | | | 0.0 |
| 5 | | | | | | | | | |
| 6 | | | 63 | | | | | | |
| 7 | | | | | Dark Gray cmf SAND, little Silt, little cmf Gravel trace clay & Pieces of Rock | F | | | Faint odor |
| 8 | | | | | Dark Gray cmf SAND, Some Silt, trace clay & Pieces of whit shell | SP | | | 0.0 |
| 9 | | | | | | | | Sand pack / Screen | |
| 10 | | | 67 | | Dark Gray SILT, little clay little mf Sand, trace f Gravel | ML | | | 0.0 |
| 11 | | | | | | | | | |
| 12 | | | | | Dark Gray CLAY & SILT | CL/ML | | | |

NOTES:

Screen: 2-12' - 1" sch 40 PVC 0.010" s/o
Riser: 0-2' 1" sch 40 PVC
Sandpack - 1-12'
Bentonite - 0.5-1.0

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 16 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-4W | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 13 | | | | | Dark Gray mf SAND, little Silt, trace clay | | | | 0.0 |
| | | | | | Dark Gray CLAY, little. F Sand | | | | |
| 14 | | | | | Dark Gray CLAY, little Silt, trace F Sand | ML CL | | | |
| 15 | | | | | | | | | |
| | | | | | Black mf SAND, little Silt | SM | | | |
| 16 | | | | | End of the Boring at 16.0 | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI.5W | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: 8.94' | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | Dark Gray cmf SAND, little Silt, trace clay & Pieces of concrete, Rock concrete | | | 0 | |
| 1 | | | | | | | | | |
| 2 | | | 75 | | Dark Brown and Gray cmf SAND, some mf Gravel, trace Silt & Pieces of Rock wood | | | Bentonite | 0.0 |
| 3 | | | | | | | | Sand Pack | |
| 4 | | | | | Black and Dark Gray cmf SAND, little cmf Gravel, trace Silt & clay & concrete, wood | | | | |
| 5 | | | | | | | | Riser | 0.0 |
| 6 | | | 79 | | Brown cmf SAND, little f Gravel, trace Silt & clay & Rock | | | | GWL 7.0' |
| 7 | | | | | | | | | |
| 8 | | | | | Dark Gray cmf SAND, little f Gravel, trace Silt/clay | | | | |
| 9 | | | | | Dark Gray & Brown cmf SAND, little f Gravel, trace Silt/clay | | | | 0.0 |
| 10 | | | 65 | | Dark Gray mf SAND, little Silt, trace clay | | | Screen | |
| 11 | | | | | Dark Gray CLAY & SILT, trace f Sand | | | | |
| 12 | | | | | Dark Gray cmf SAND, little Silt, trace clay | | | | |

NOTES: Oil/H2O shake Test - Performed

2-15' - Sand Pack
1-2' - Bentonite

Screen - 5-15'. 1" sch 40 PVC. 0.010" slot
Riser - 0-5' - Riser

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-5W | COORDINATES: | DATE: 10/20/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/20/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/20/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dark Gray cmf SAND, little Silt and clay | SM | | | PID (ppm) |
| 13 | | | | | Dark Gray f SAND, little Silt, trace clay | SM | | | 0.0 |
| 14 | | | 67 | | | SM/CL | | | |
| 15 | | | | | Dark Gray CLAY and SILT, trace mf Sand | CL | | | |
| 16 | | | | | End of the Boring at 16.0 | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276930000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-6W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: 10.08' | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Dark Gray and Brown cmf SAND, little cmf Gravel trace Silt cy Pieces of Rock Brick, wood etc | | | | 0.0 |
| 2 | | | 42 | | White & Black cmf SAND little mf Gravel, trace Silt cy Pieces of Rock, wood | | | | Bentonite |
| 3 | | | | | | | | | |
| 4 | | | | | Dark Gray & Yellow cy SAND, little mf Gravel, trace Silt cy Piece of Rock, wood | | | | 0.0 |
| 5 | | | | | wood<br>Red Brick | | | | |
| 6 | | | 67 | | Black cmf SAND, little mf Gravel, little silt/clay cy Pieces of Rock, cinder, Brick | | | | |
| 7 | | | | | | | | | GWL 7.0' |
| 8 | | | | | | | | | Sandpack |
| 9 | | | | | | | | | Screen |
| 10 | | | 38 | | Black cmf SAND, little cmf Gravel, trace Silt cy Pieces of Rock, wood cinders. | | | | |
| 11 | | | | | | | | | 0.0 |
| 12 | | | | | | | | | |

NOTES:

Screen - 1" scl 40 PVC : 0.010" slott, 5-15'
Riser - 1" scl 40 PVC 0-5'
Sandpack - 3-15'
Bentonite - 2-3'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-6W (36) | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID CPBW2 |
| 13 | | | | | Dark Gray cmf SAND, little cmf Gravel & clay. cinder, Rock | F | | | 10.20.12.12 oily |
| 14 | | | 42 | | Dark Gray mf SAND, Some Silt, trace clay | SM | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, little Silt, trace clay | SM | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 75 | | Black cmf SAND, trace Silt & pieces of decomposed Wood | SP/PT | | | |
| 19 | | | | | Black cmf SAND | | | | 0.0 |
| 20 | | | | | End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276090000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-7W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: 14.24' | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 6". Concrete slab | | | | |
| 1 | | | | | light yellow cmf SAND, little cmf Gravel, trace Silt | F | | | 00 |
| 2 | | | 52 | | | | | | |
| 3 | | | | | Brownish yellow cmf SAND, little Silt, trace clay, trace f Gravel | F | | | 00 |
| 4 | | | | | Yellowish Brown SILT & CLAY, trace f Sand w/ Pieces of Rock, wood. | F | | | 00 |
| 5 | | | | | | | | | |
| 6 | | | 67 | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | w/ Pieces of concrete. Red and yellowish Brown cmf SAND, & SILT, trace clay w/ Pieces of Rock. | F | | | 00 |
| 9 | | | | | | | | | |
| 10 | | | 75 | | Red and yellowish Brown cmf SAND, little silt, trace clay layers of silt/clay/sand | | | | 00 GW-10.0 |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

NOTES: Oil / $H_2O$ Shake Test - Performed.

Sandpack - 5-18'

Bentonite - 0-3'

Screen - 8-18' a 1" sch 40 PVC - 0.010"

Riser - 0-8' - sch 40 PVC Riser.

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-7W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Reddish Brown cmf SAND, little cmf Gravel, trace Silt | | | | 0.0 |
| 14 | | | 76 | | Red and Dark Gray cmf SAND, and mf Gravel trace Silt | | | | 0.0 |
| 15 | | | | | | | | | |
| 16 | | | | | Multi colored cmf GRAVEL little cmf Sand, trace silt trace clay | | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | 73 | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | Pieces of Weathered Rock. End of the Boring at 20.0' | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 32 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-8W | COORDINATES: | | DATE: 10/21/03 |
| ELEVATION: 13.58' | GWL: Depth: | Date/Time: | DATE STARTED: 10/21/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/21/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 1 OF |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | E | | | | |
| 5 | | | | | N | | | | |
| 6 | | | | | Ground level | | | | |
| 7 | | | | | Multi colored mf GRAVEL, some cmf Sand & Pieces of shell | F | | | BGL 0.0 |
| 8 | | | | | | | | | |
| 9 | | | 67 | | Dark Gray cmf SAND, little cmf Gravel, trace Silt & Piece of Rock, Shell etc. | F | | | |
| 10 | | | | | | | | | Bentonite |
| 11 | | | | | | | | | Riser Sandpack |
| 12 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt & Pieces of White shell | F | | | 0.0 |

NOTES: Oil/H2O Shake Test - Performed
0-7'- Open hole.

Screen: 12-22' - 1" scl 40 PVC 0.010"
Riser: 0-12' - 1" scl 40 PVC
Sandpack - 10-22'
Bentonite - 9-10

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-8W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | | | | | PID (ppm) |
| | | | 75 | | Dark Gray cmf SAND, little cmf Gravel, trace Silt w Pieces of White shell | SP | | | 00 |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | Dark Gray cmf SAND, little mf Gravel, trace Silt w Pieces of White shell | SP | | | 00 |
| 17 | | | | | Dark Gray mf SAND, little Silt, trace f Gravel, trace clay w Pieces of shell | | | | |
| 18 | | | 75 | | Yellowish Brown cmf SAND, little Silt, trace clay | SM | | | screen |
| 19 | | | | | | | | | |
| 20 | | | | | Brownish Yellow cmf SAND, little Silt, trace cmf Gravel trace clay | SP | | | 00 |
| 21 | | | 46 | | | | | | |
| 22 | | | | | End of the Boring at 22.0' | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-9W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: 13.55 | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 2 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Concrete slab | | | | PID (ppm) |
| 1 | | | | | | | | | |
| 2 | | | | | O | | | | |
| 3 | | | | | P | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | E | | | | |
| 6 | | | | | N | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | Black and Dark Gray cmf SAND, little cmf Gravel, trace Silt w/ Pieces of Rock | F | | | Ground surface 0.0 0.0 |
| 9 | | | | | | | | | |
| 10 | | | 67 | | w/ pieces of Concrete Black cmf SAND, little cmf Gravel, trace Silt & clay w/ Pieces of whit shell etc | F | | | Bentonite Riser 0.0 |
| 11 | | | | | | | | | Sandpack |
| 12 | | | | | | | | | |

NOTES: Oil) $H_2O$ shake Test. Performed

Sand pack - 10-22'
Bentonite - 9-10'
Screen - 12-22' - 1" sch 40 PVC - 0.010"
Riser - 0-12' - 1" sch 40 PVC

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 (36) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-9W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PID (ppm) |
| 13 | | | | | Black cmf SAND, little cmf Gravel, little Silt, trace clay w/ Pieces of Rock, wood, cinder w/ Pieces of Rock | | | | 00 |
| 14 | | | 75 | | | | | | |
| 15 | | | | | | | | | GOL-1.0 |
| 16 | | | | | | | | | Screen |
| 17 | | | | | No Recovery | | | | Sheen |
| 18 | | | 60 | | | | | | |
| 19 | | | | | Dark Gray cmf SAND, little Silt, trace mf Gravel trace clay | | | | 00 |
| 20 | | | | | Gray cmf SAND, little Silt, trace clay | | | | |
| 21 | | | | | | | | | |
| 22 | | | 65 | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-9W | COORDINATES: | DATE: 10/21/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/21/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/21/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 3 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | light gray mf SAND, little Silt, trace f Gravel | | | | PID (ppm) 0.0 |
| 26 | | | 75 | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | End of Boring at 28.0' | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 (26) | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-10D | COORDINATES: | DATE: 10/22/03 | |
| ELEVATION: 13.52' | GWL: Depth: Date/Time: | DATE STARTED: 10/22/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/22/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 1 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | Concrete slab | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | Ground Surface |
| 8 | | | | | Dark Gray mf SAND, little Silt, trace cm Gravel & Pieces of coal ash, cinder Rock | | | | 0.0 |
| 9 | | | | | | | | | Riser |
| 10 | | | 13 | | Brown cmf SAND, little cmf Gravel, trace Silt- Black | | | | Bentonite 0.0 |
| 11 | | | | | | | | | Sandpack |
| 12 | | | | | & Pieces of Concrete | | | | |

NOTES:

Screen: 11.5 - 21.5'. 1" sch 40 PVC 0.010"
Riser: 0 - 11.5'; 1" sch 40 PVC Riser
Sandpack: 10 - 22'
Bentonite: 9 - 10'

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-10W | COORDINATES: | DATE: 10/22/03 | |
| ELEVATION: | GWL: Depth: Date/Time: | DATE STARTED: 10/22/03 | |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: Date/Time: | DATE COMPLETED: 10/22/03 | |
| DRILLING METHODS: Geoprob Rig | | PAGE: 2 OF 3 | |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSTRUCTION | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 13 | | | | | Dark Gray & Brown cmf SAND, little silt/clay w/ Pieces of Rock, concrete. | | | | 0.0 G.W.L. 13.0 |
| 14 | | | 18 | | w/ Pieces of concrete, Rock | | | | |
| 15 | | | | | | | | | screen |
| 16 | | | | | Dark Gray cmf SAND, little clay, little cmf Gravel trace Silt w/ Pieces of Rock | | | | 0.0 |
| 17 | | | | | | | | | |
| 18 | | | NR | | No Recovery | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | No Recovery | | | | |
| 22 | | | NR | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

NOTES:

# SOIL BORING LOG

amec

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 276030000 | PROJECT NAME: Former General Motors, Sleepy Hollow, New York | | |
| BORING NUMBER: SI-GWI-10.N | COORDINATES: | | DATE: 10/22/03 |
| ELEVATION: | GWL: Depth: | Date/Time: | DATE STARTED: 10/22/03 |
| ENGINEER/GEOLOGIST: Madhu Patel | Depth: | Date/Time: | DATE COMPLETED: 10/22/03 |
| DRILLING METHODS: Geoprob Rig | | | PAGE: 3 OF 3 |

| DEPTH (FT.) | SAMPLE | BLOWS ON SAMPLER (6 IN.) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | USCS SYMBOL | MEASURED CONSISTENCY | WELL CONSRUCTION | REMARKS PID (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | Brown Organic silt & Pieces of decomposed wood. | | | | 0.0 |
| 26 | | | 77 | | Peat | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | End of Boring at 28.0' | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |

NOTES:

# *Appendix E*

# Monitoring Well Construction Diagrams – Remedial Investigation

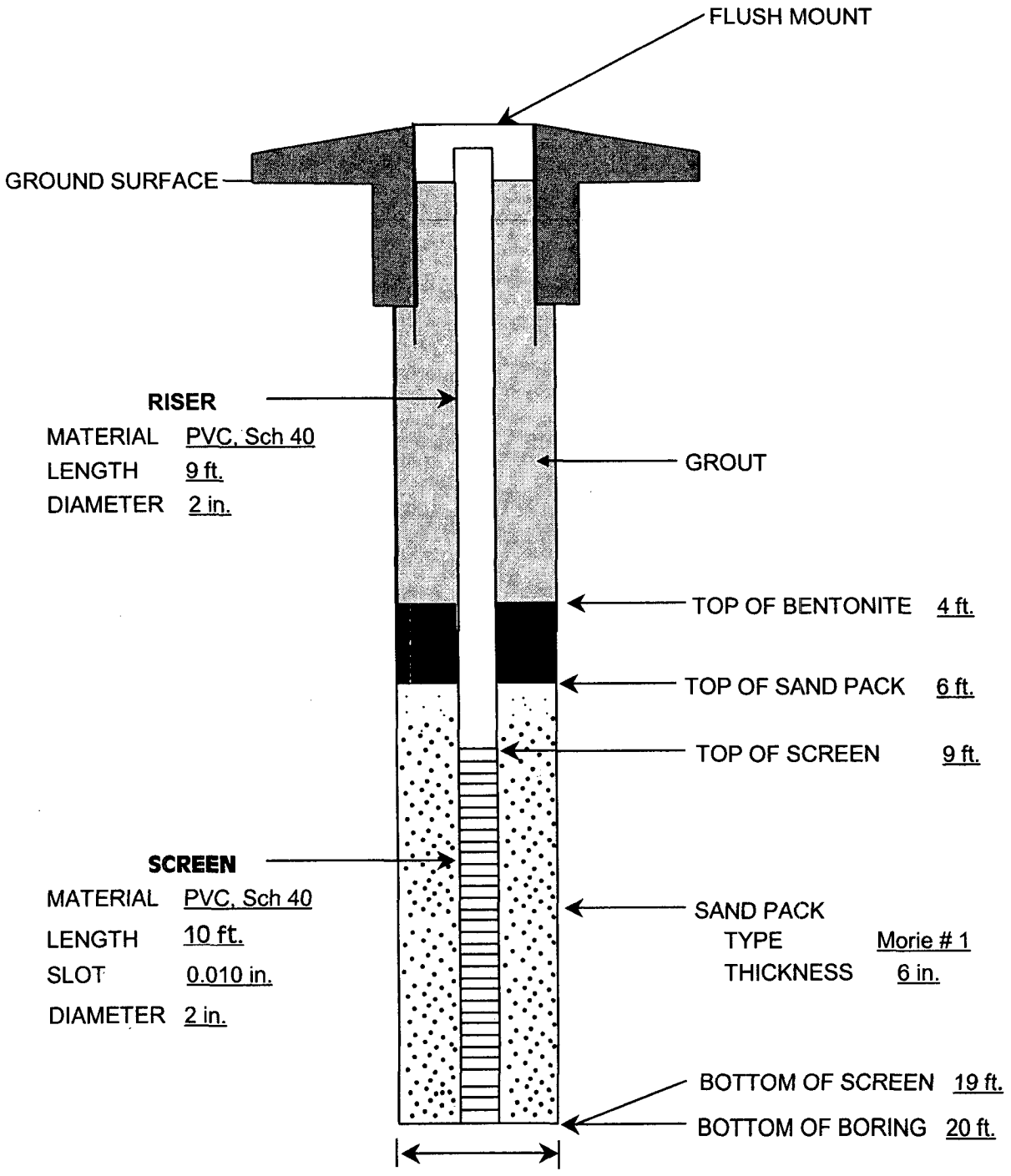
BBL®
an ARCADIS company

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 10/24/03 WELL NUMBER: OW-24

PROJECT NUMBER: 276360000 DRILLING COMPANY: B&B, Inc. METHOD: H. S. Auger

REMARKS: Geoprobe Hollow Stem Rig INSPECTOR: M. Patel



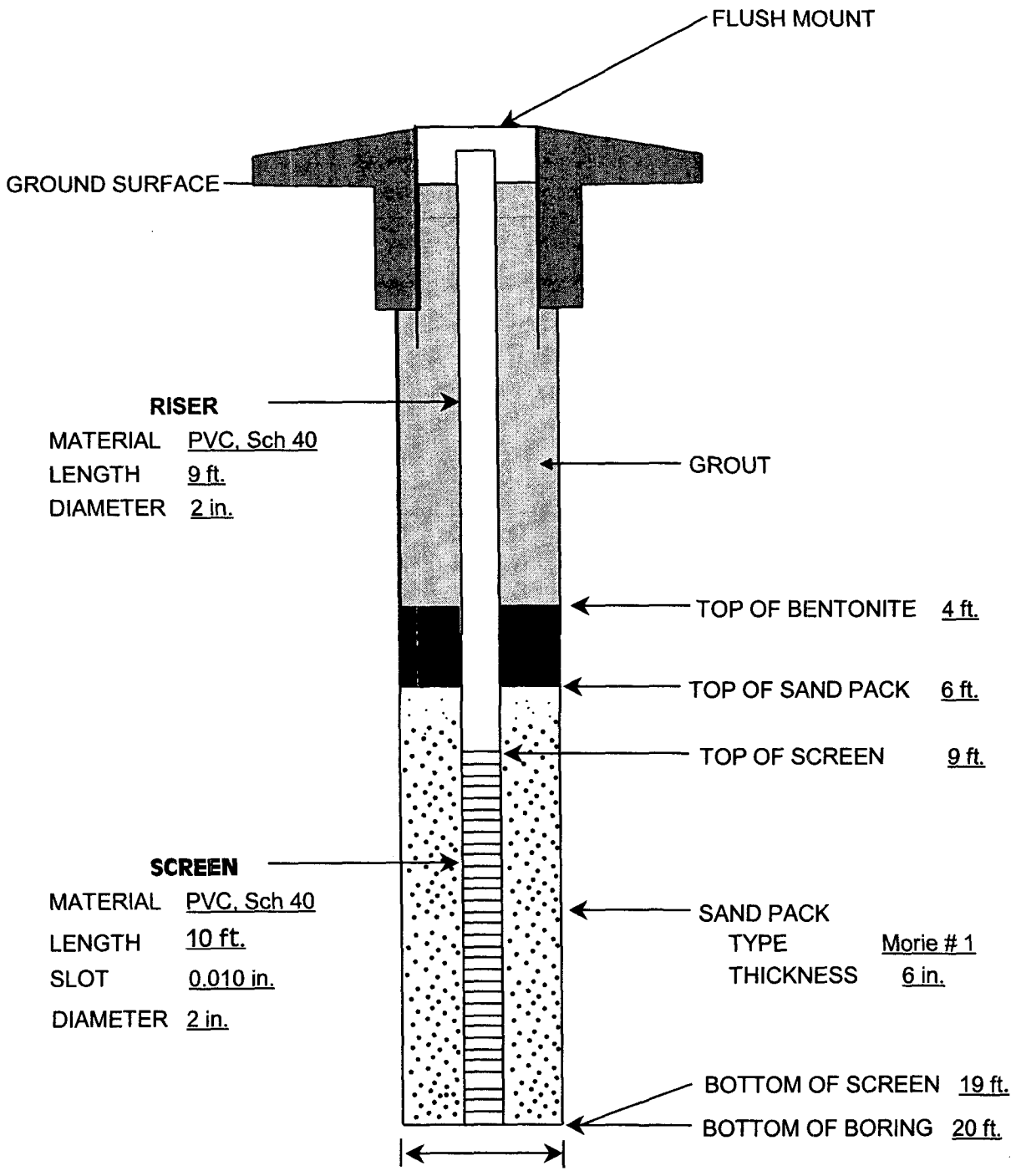

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 10/23/03 WELL NUMBER: OW-25

PROJECT NUMBER: 276360000 DRILLING COMPANY: B&B, Inc. METHOD: H. S. Auger

REMARKS: Geoprobe Hollow Stem Rig INSPECTOR: M. Patel



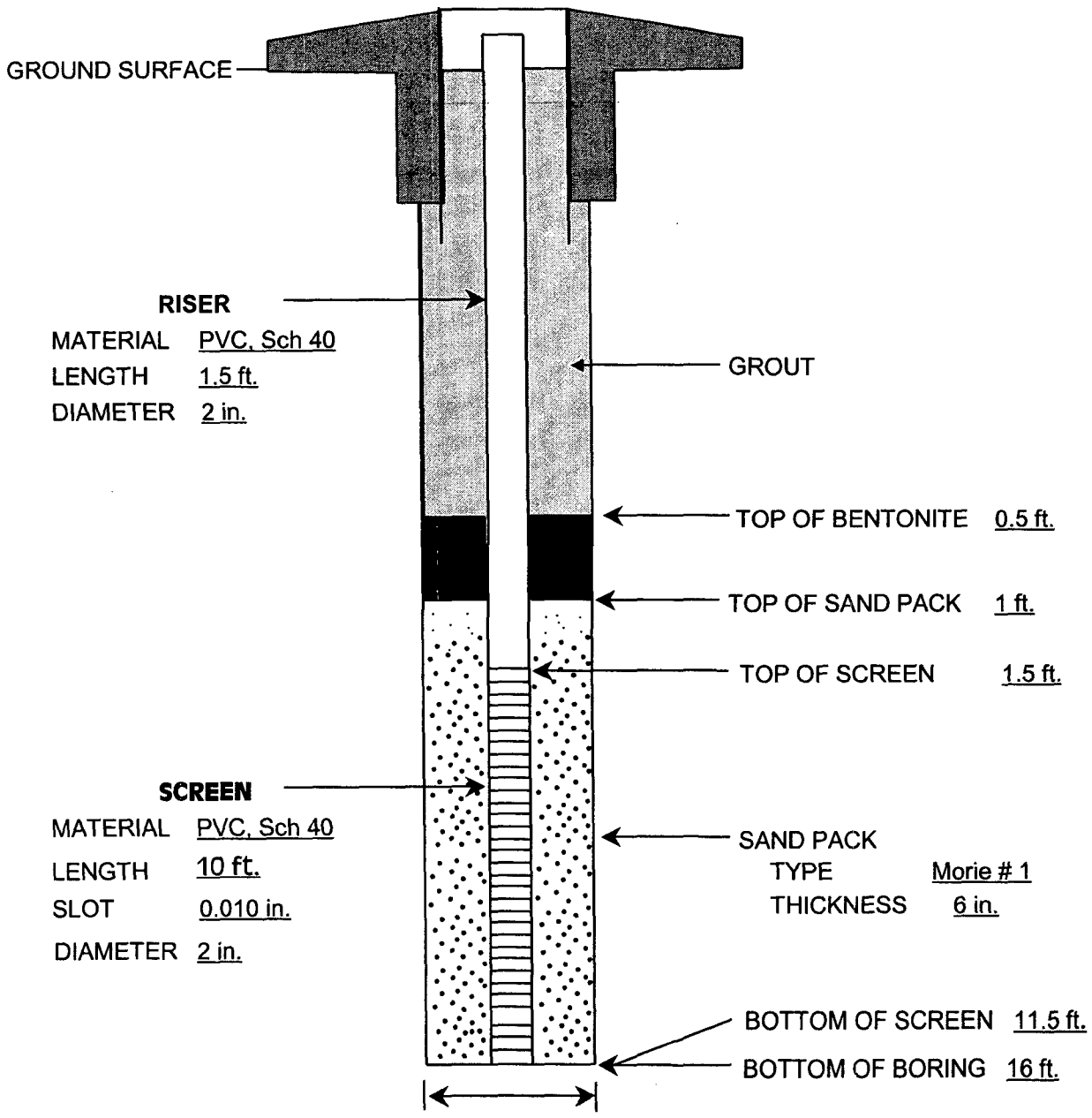

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 10/26/03 WELL NUMBER: OW-26T

PROJECT NUMBER: 276360000 DRILLING COMPANY: B&B, Inc. METHOD: H. S. Auger

REMARKS: Geoprobe Hollow Stem Rig - Temporary Monitor Well INSPECTOR: M. Patel



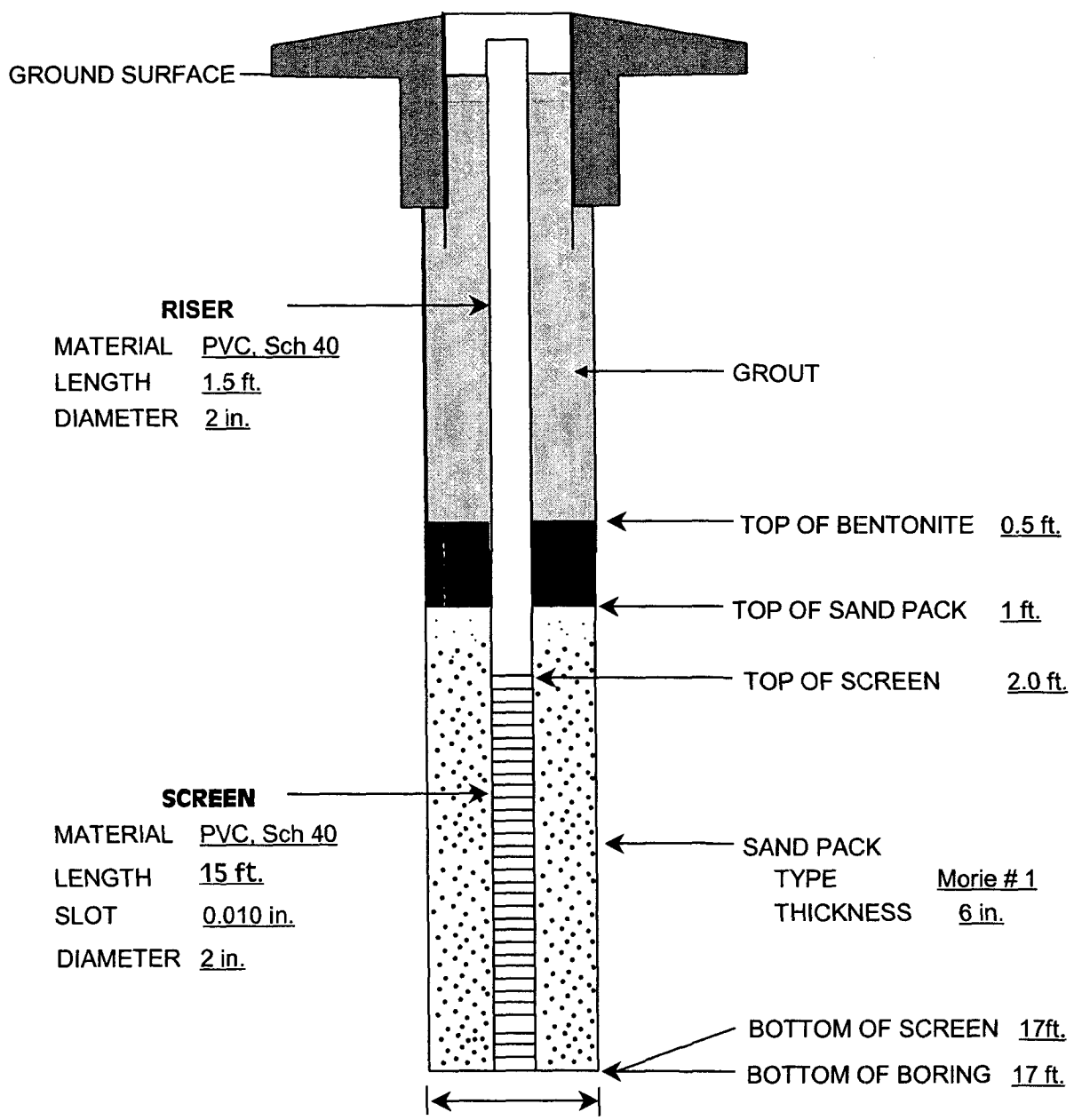

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/03/04 WELL NUMBER: OW-27

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



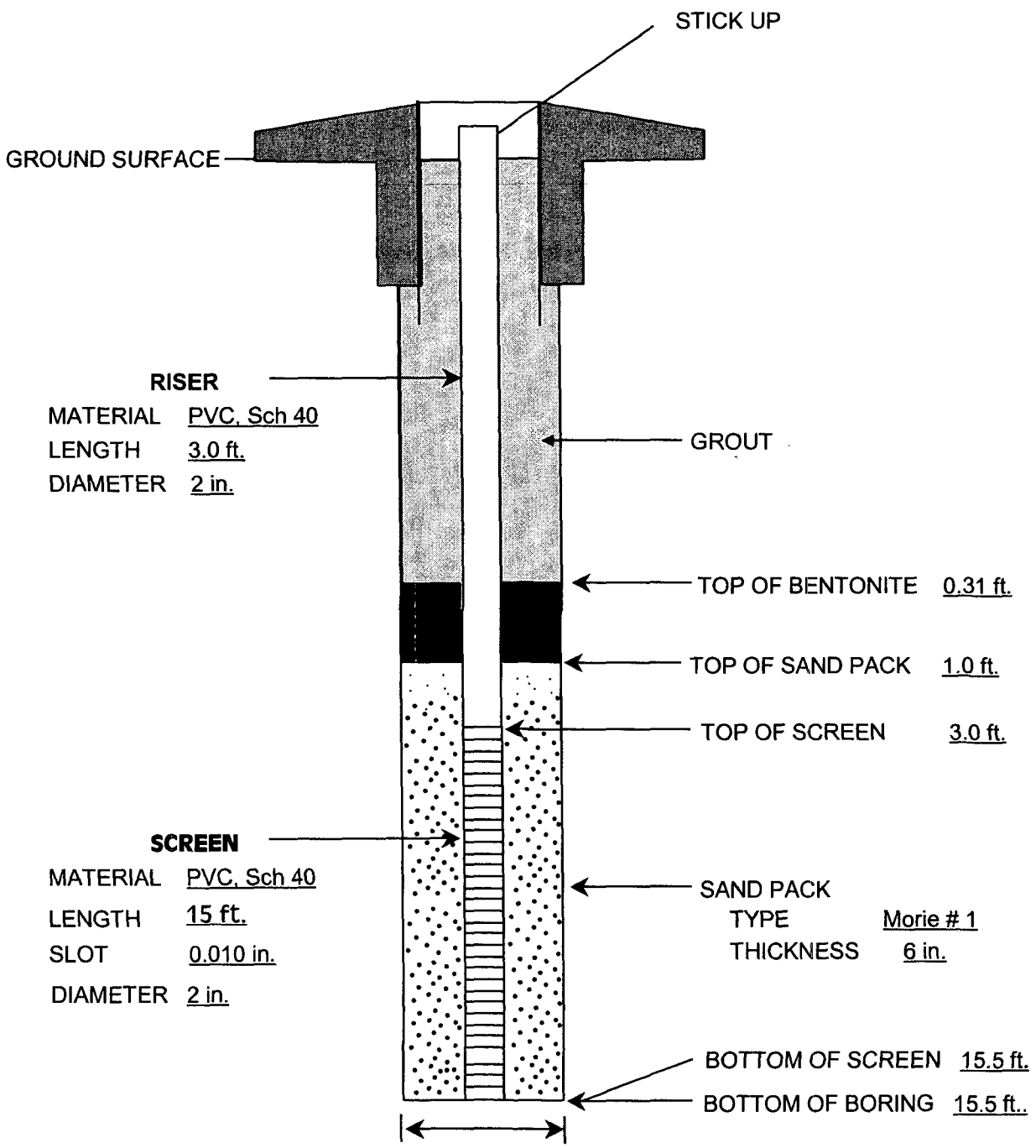

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/06/04 WELL NUMBER: OW-28

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



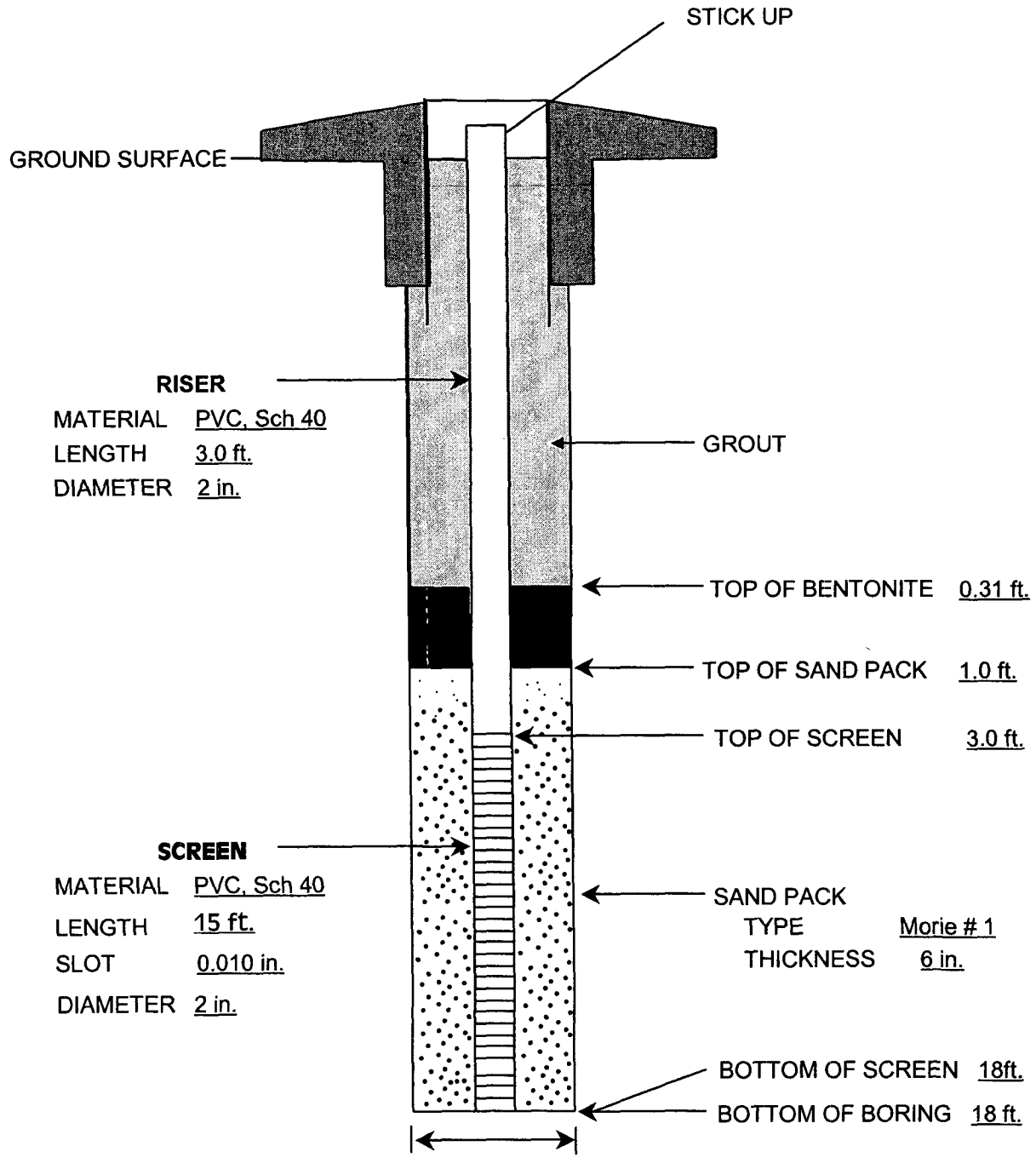

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/04/04 WELL NUMBER: OW-29

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



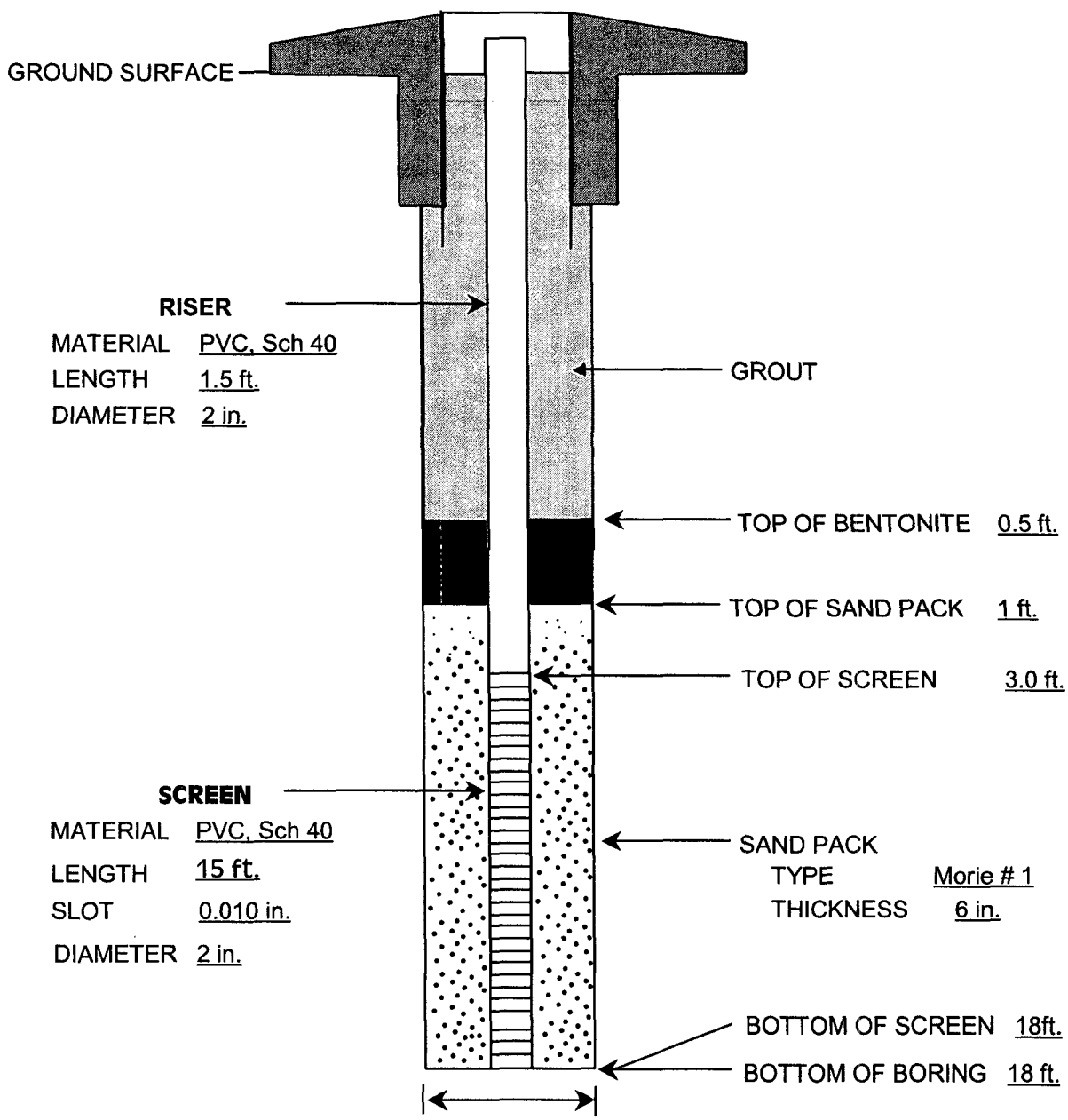

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/04/04 WELL NUMBER: OW-30

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



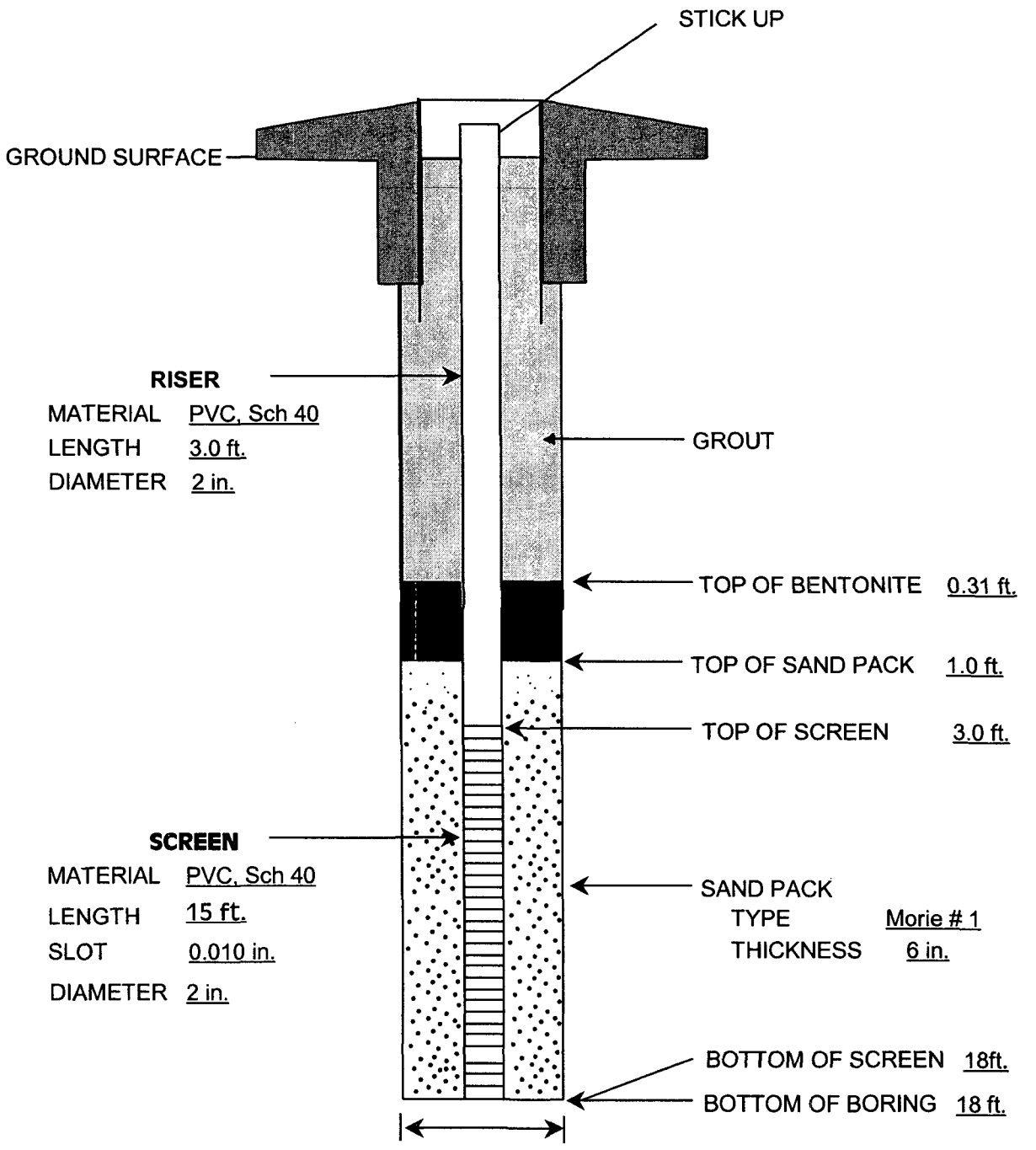

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/07/04 WELL NUMBER: OW-31

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drillng METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



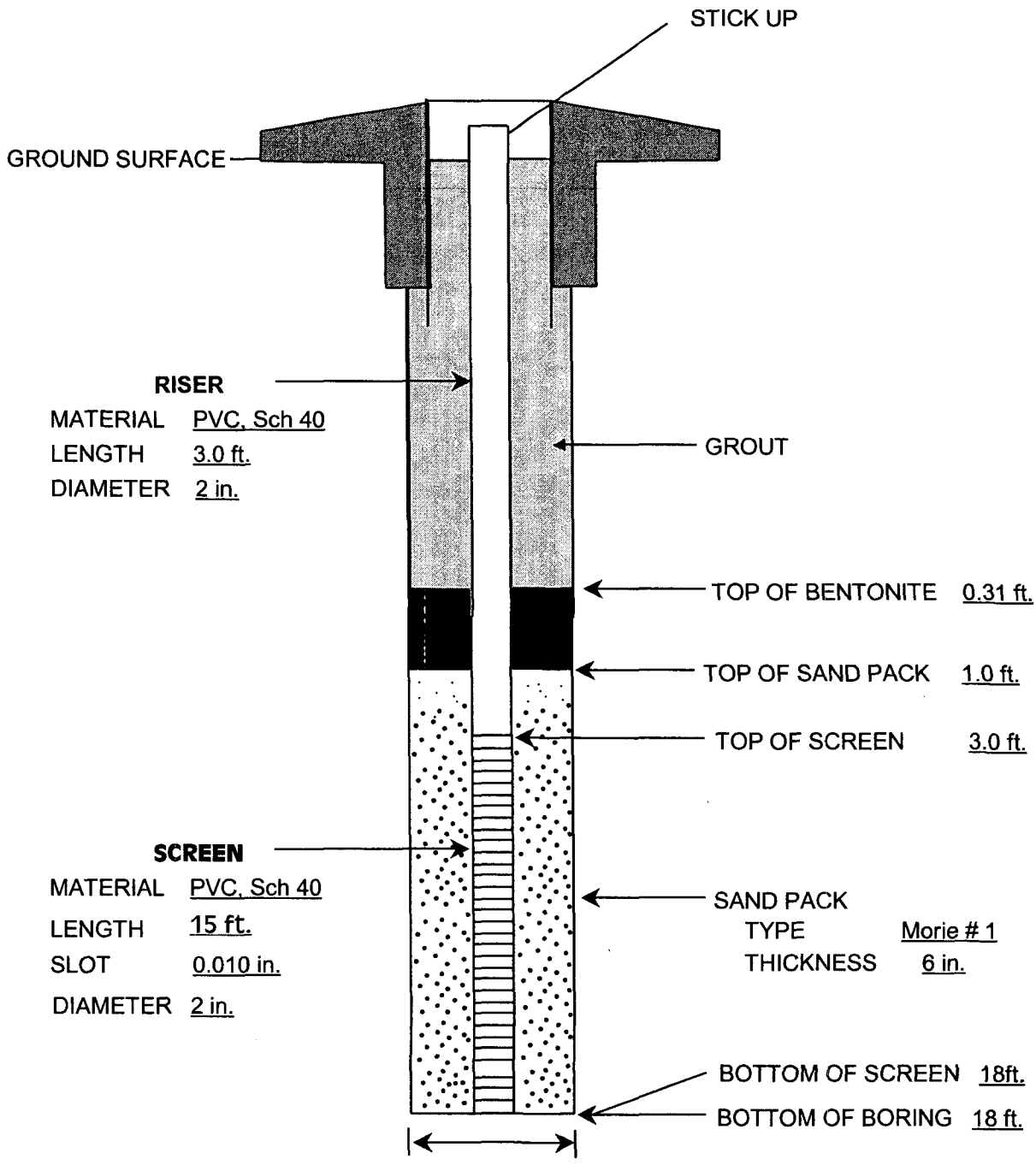

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/06/04 WELL NUMBER: OW-32

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



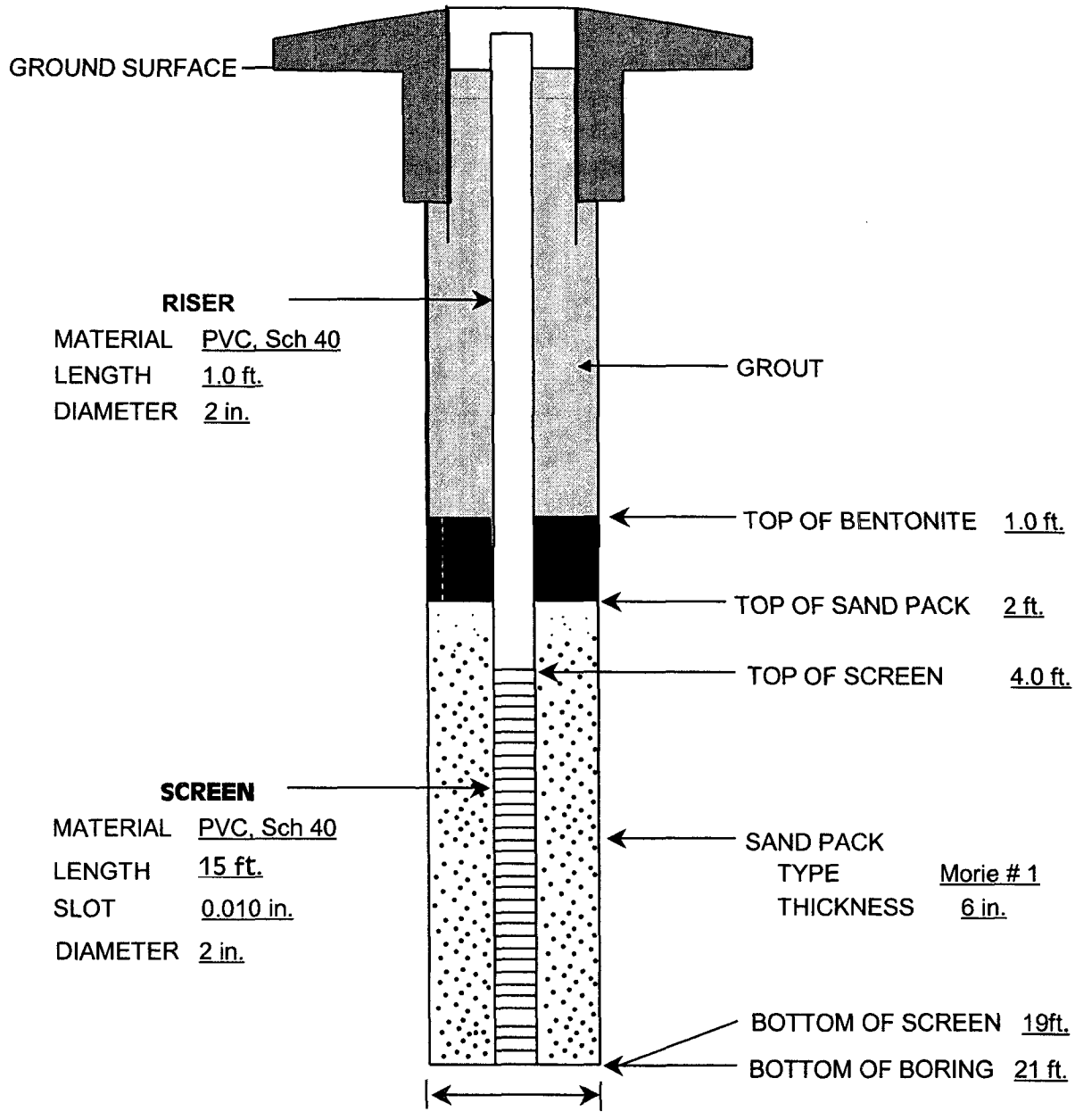

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/30/04 WELL NUMBER: OW-33

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



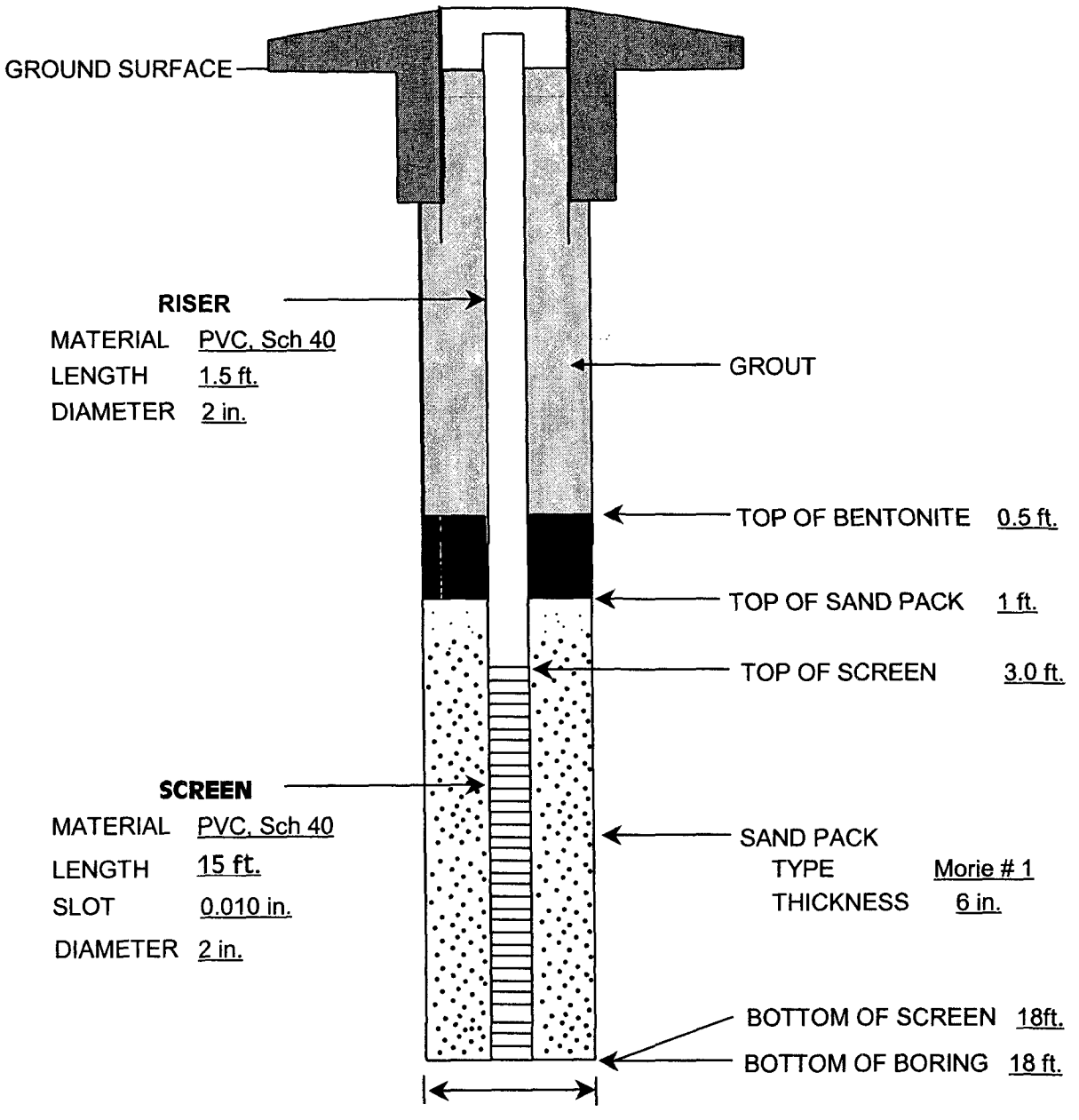

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/03/04 WELL NUMBER: OW-34

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



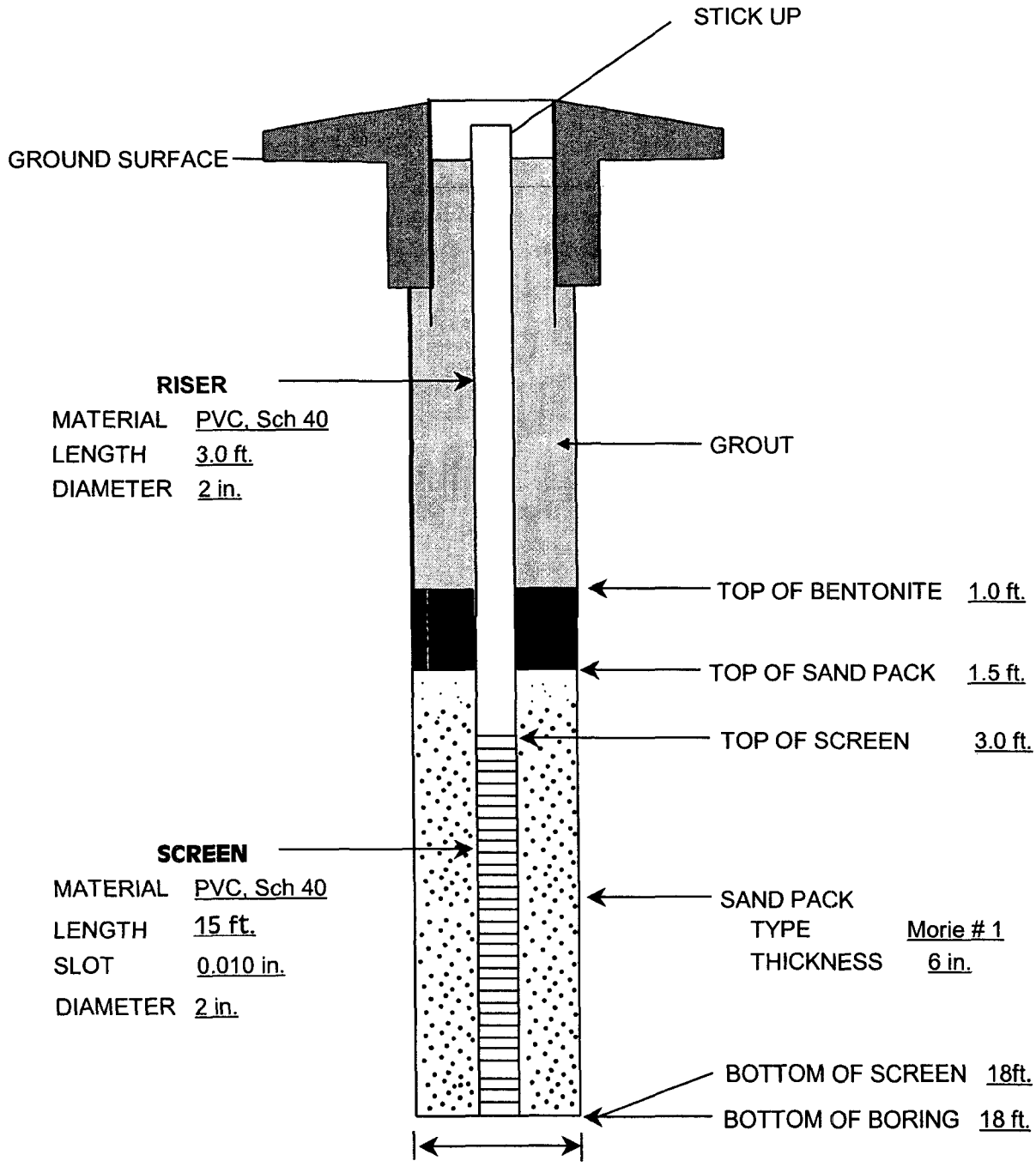

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/26/04 WELL NUMBER: OW-36

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drillng METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



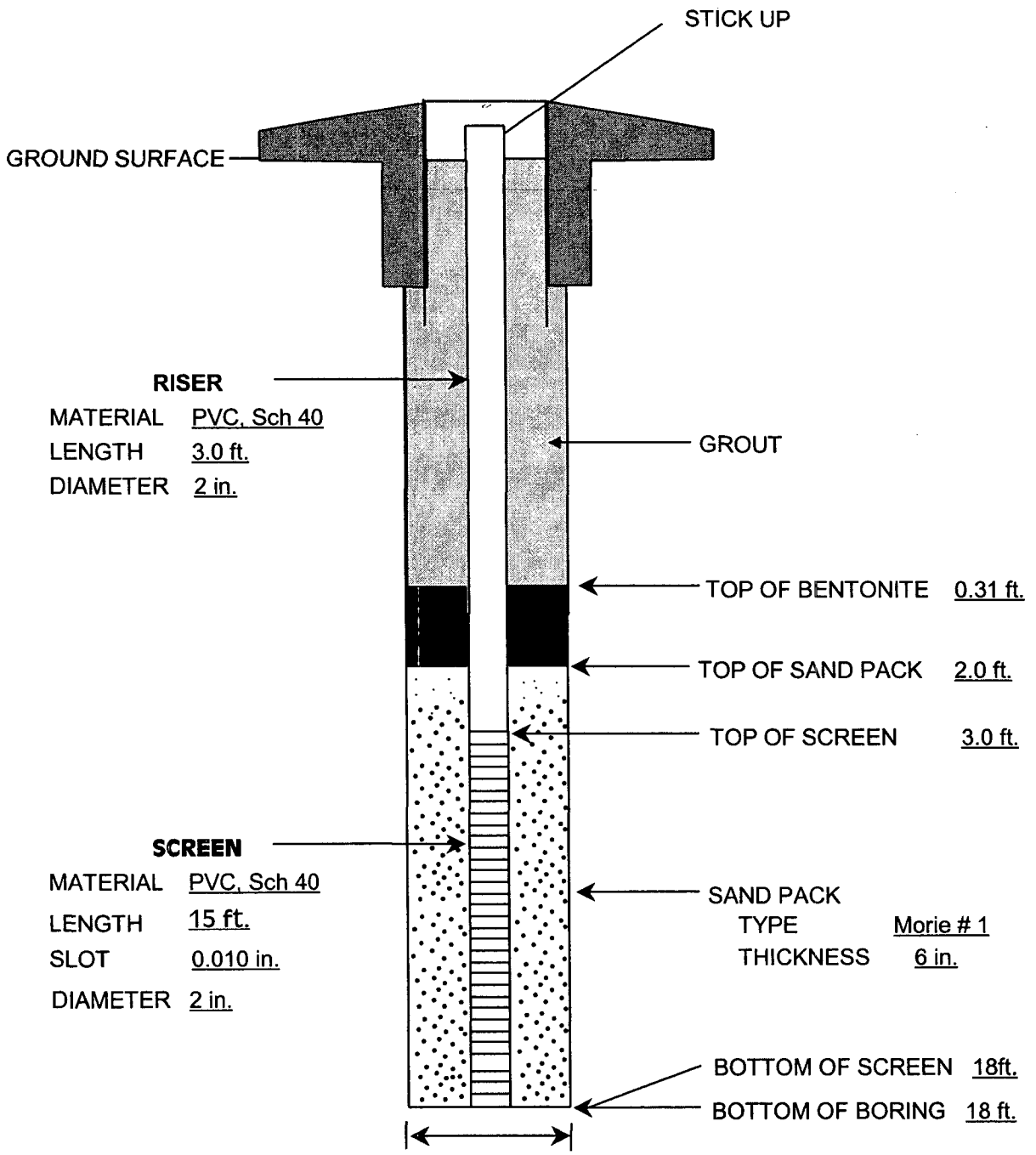

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/26/04 WELL NUMBER: OW-37

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader




BORING DIAMETER 8 in.

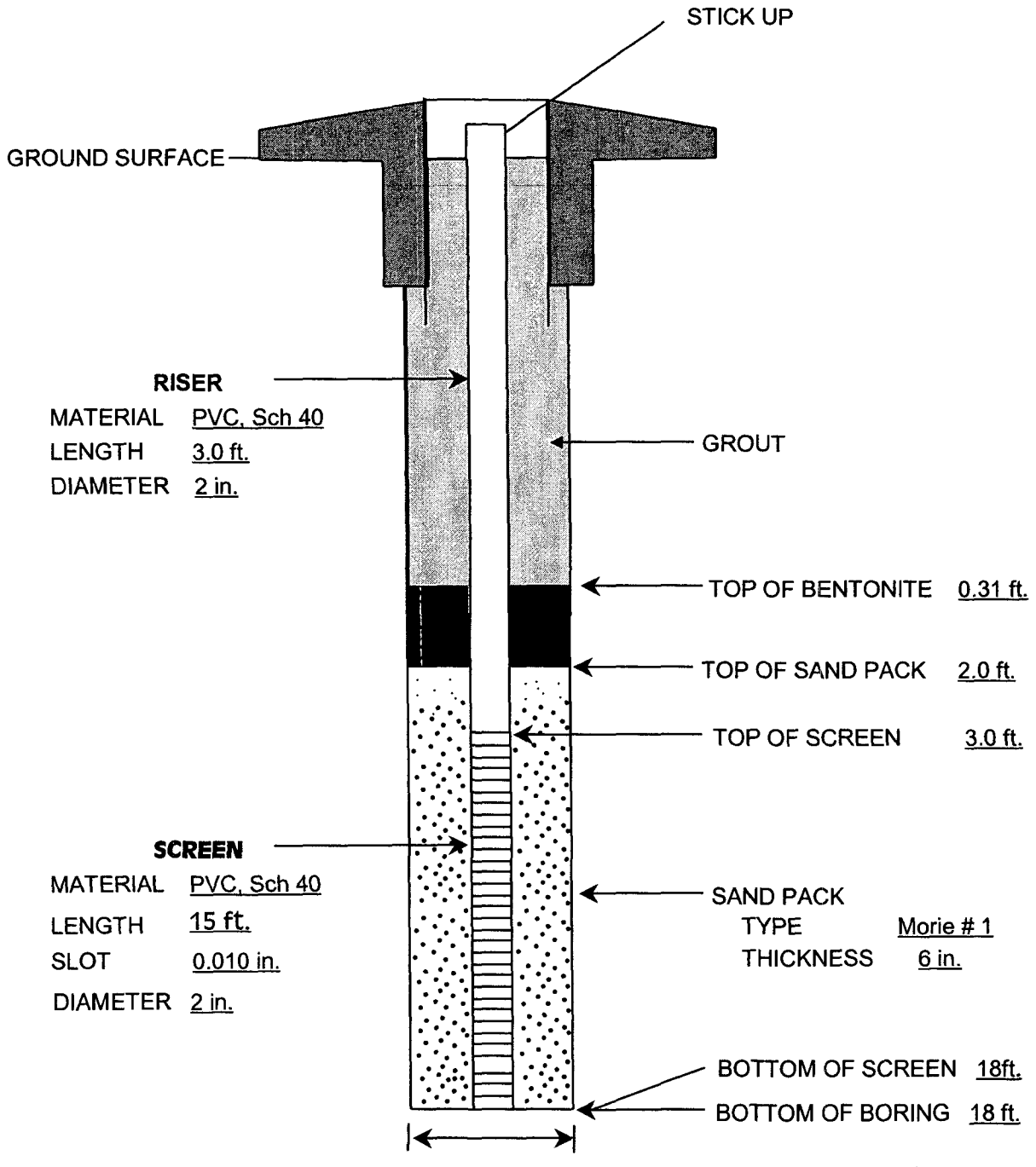
NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/27/04 WELL NUMBER: OW-38

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



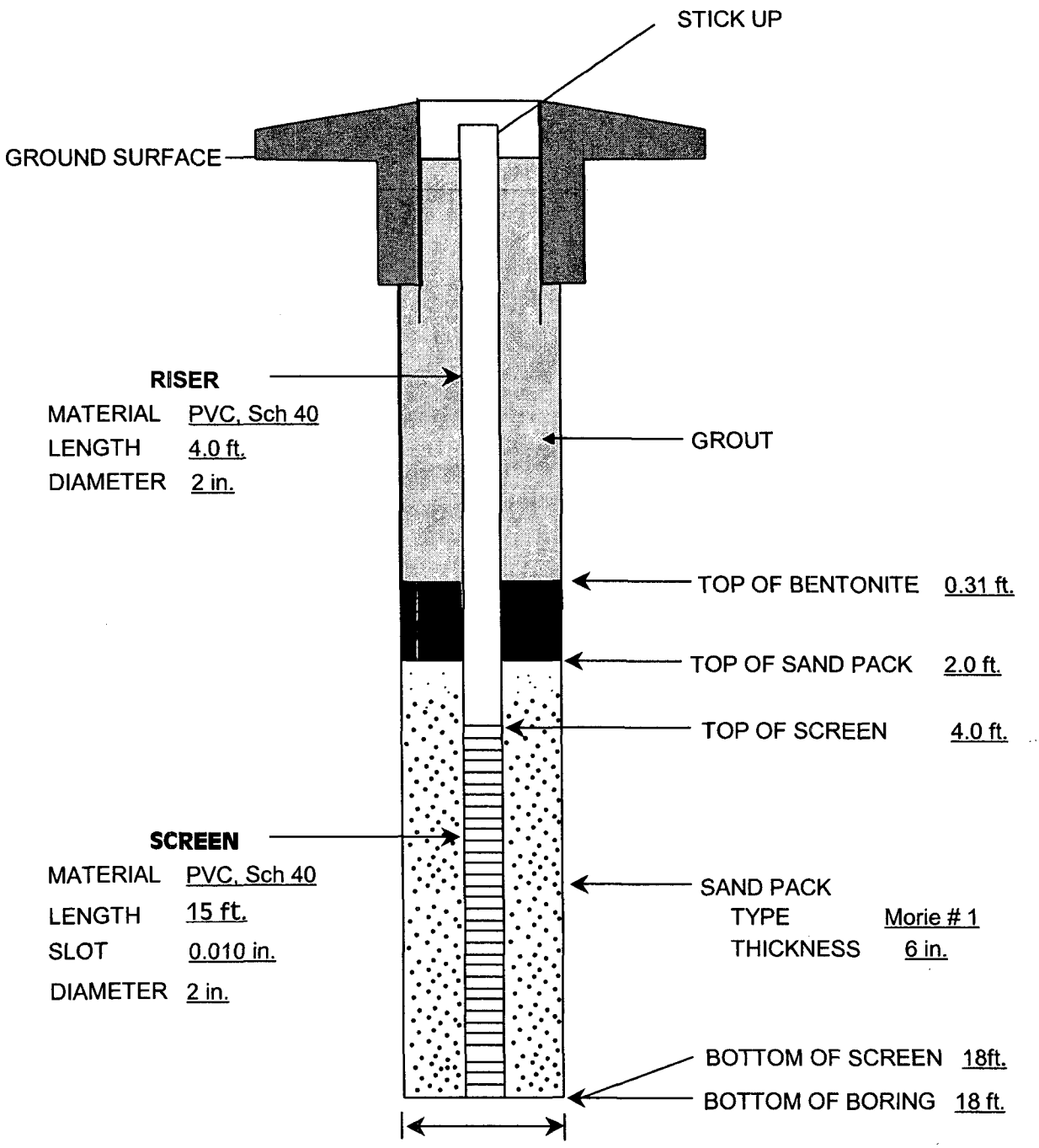

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/27/04 WELL NUMBER: OW-39

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



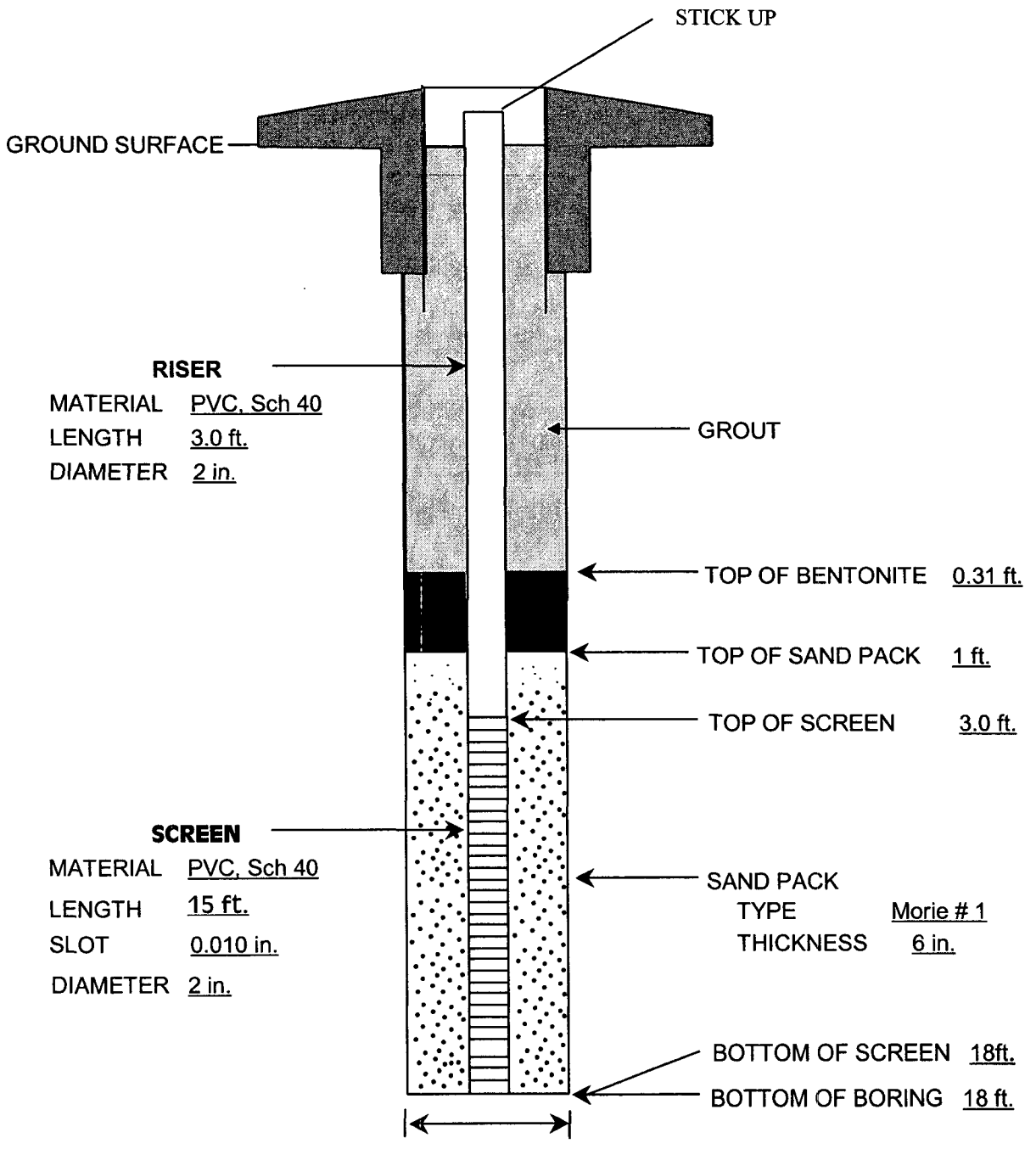

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/28/04 WELL NUMBER: OW-40

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drillng METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



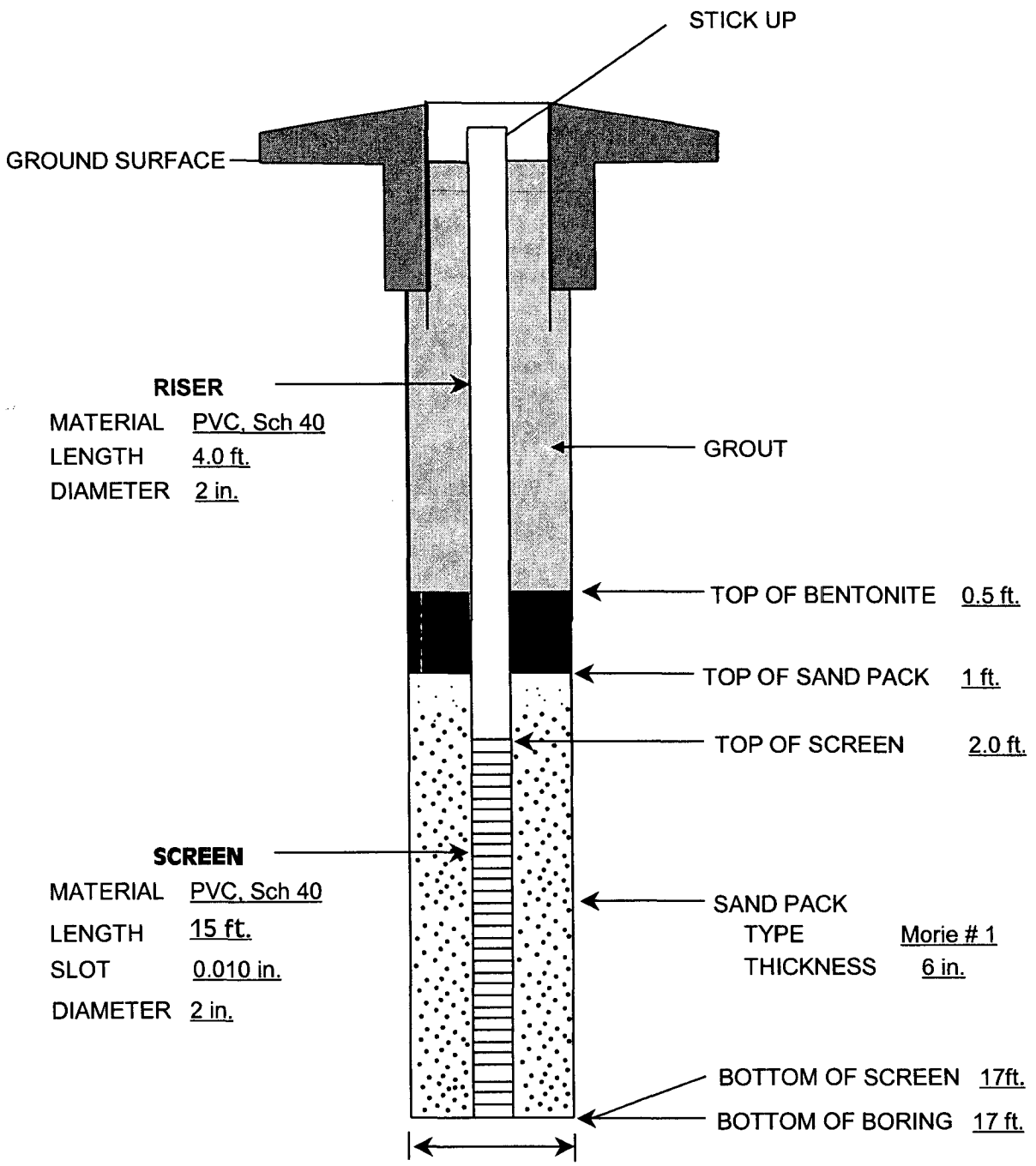

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/29/04 WELL NUMBER: OW-41

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



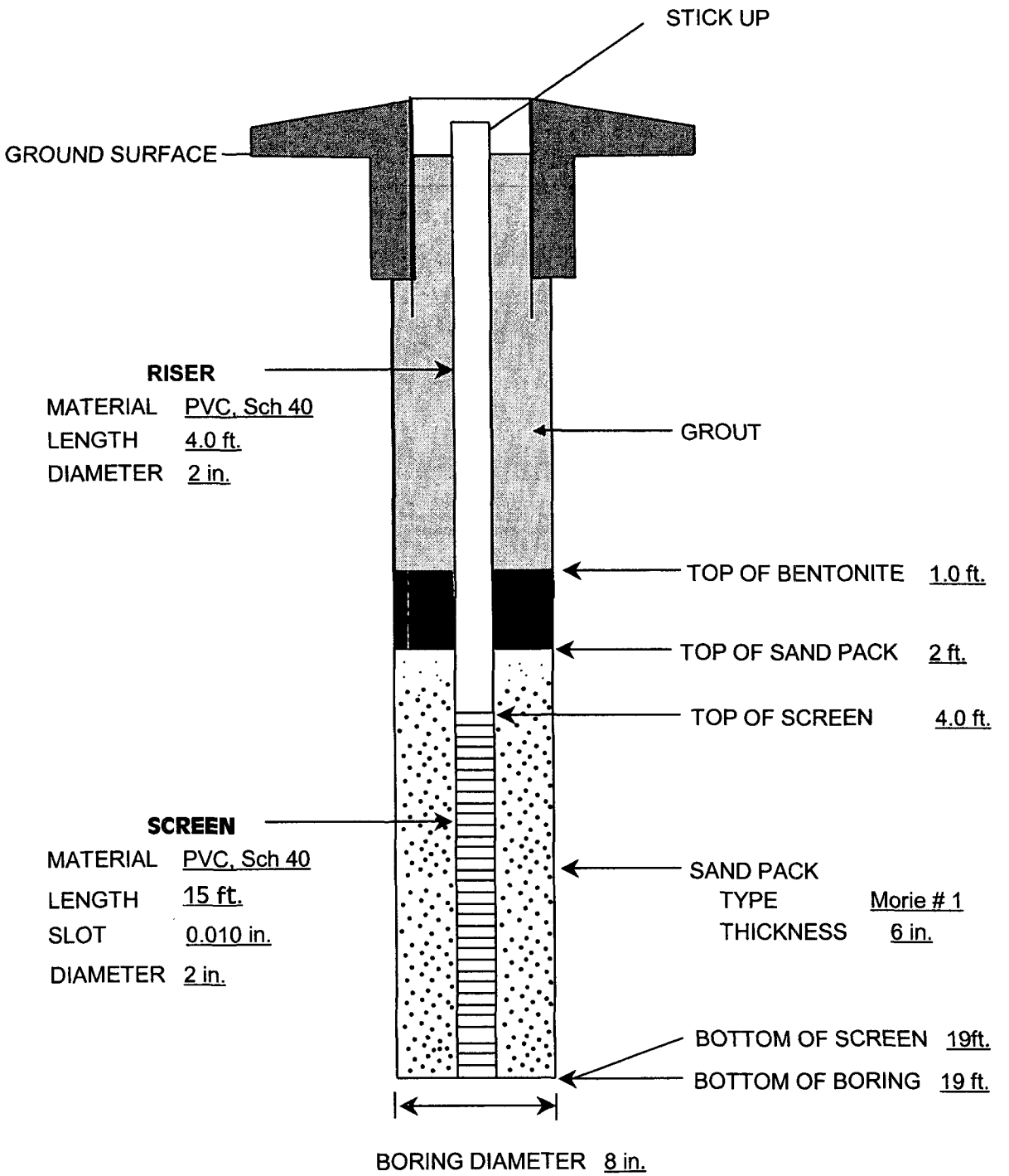

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/29/04 WELL NUMBER: OW-42

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drillng METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



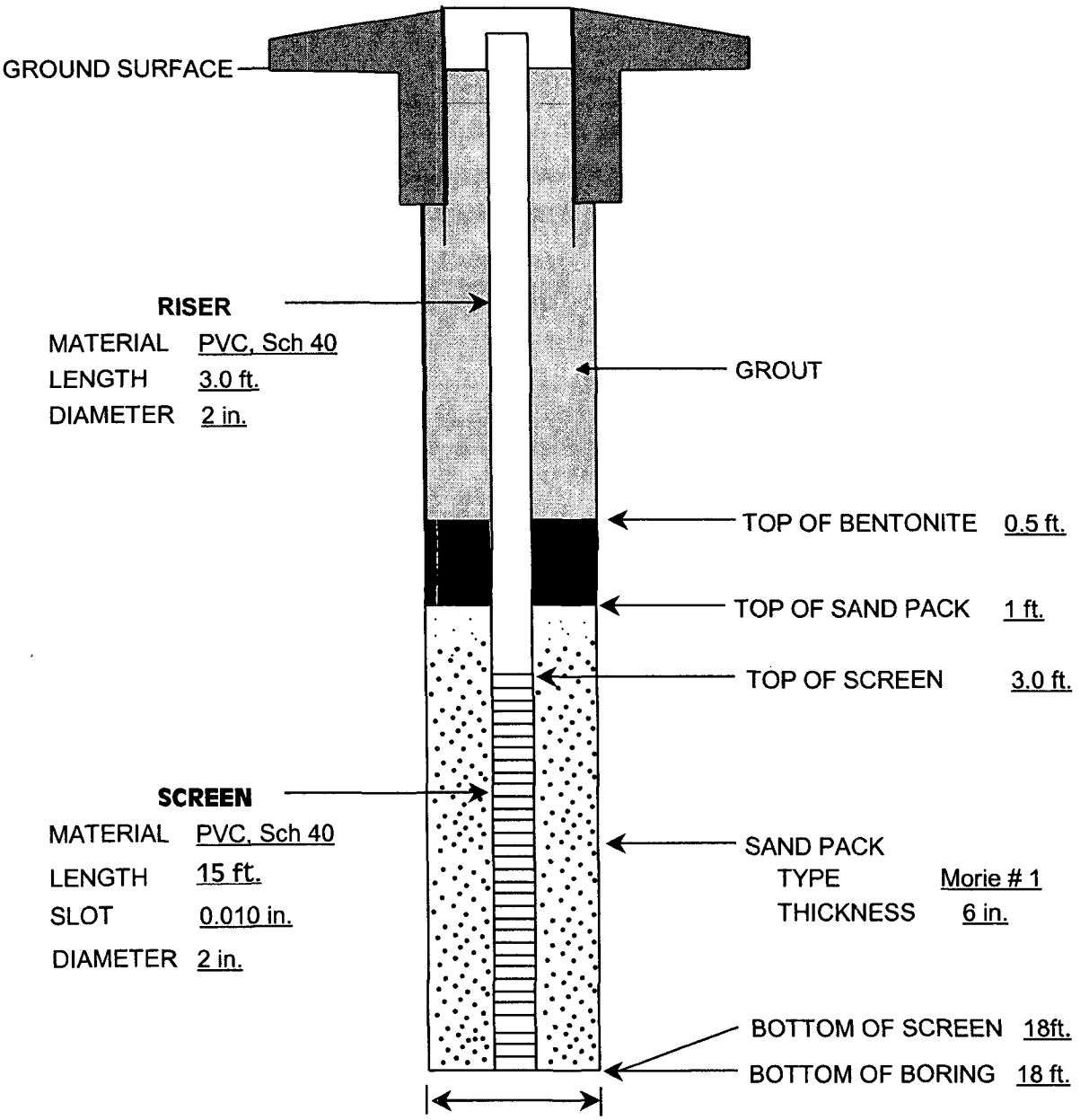

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 04/29/04 WELL NUMBER: OW-43

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drillng METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



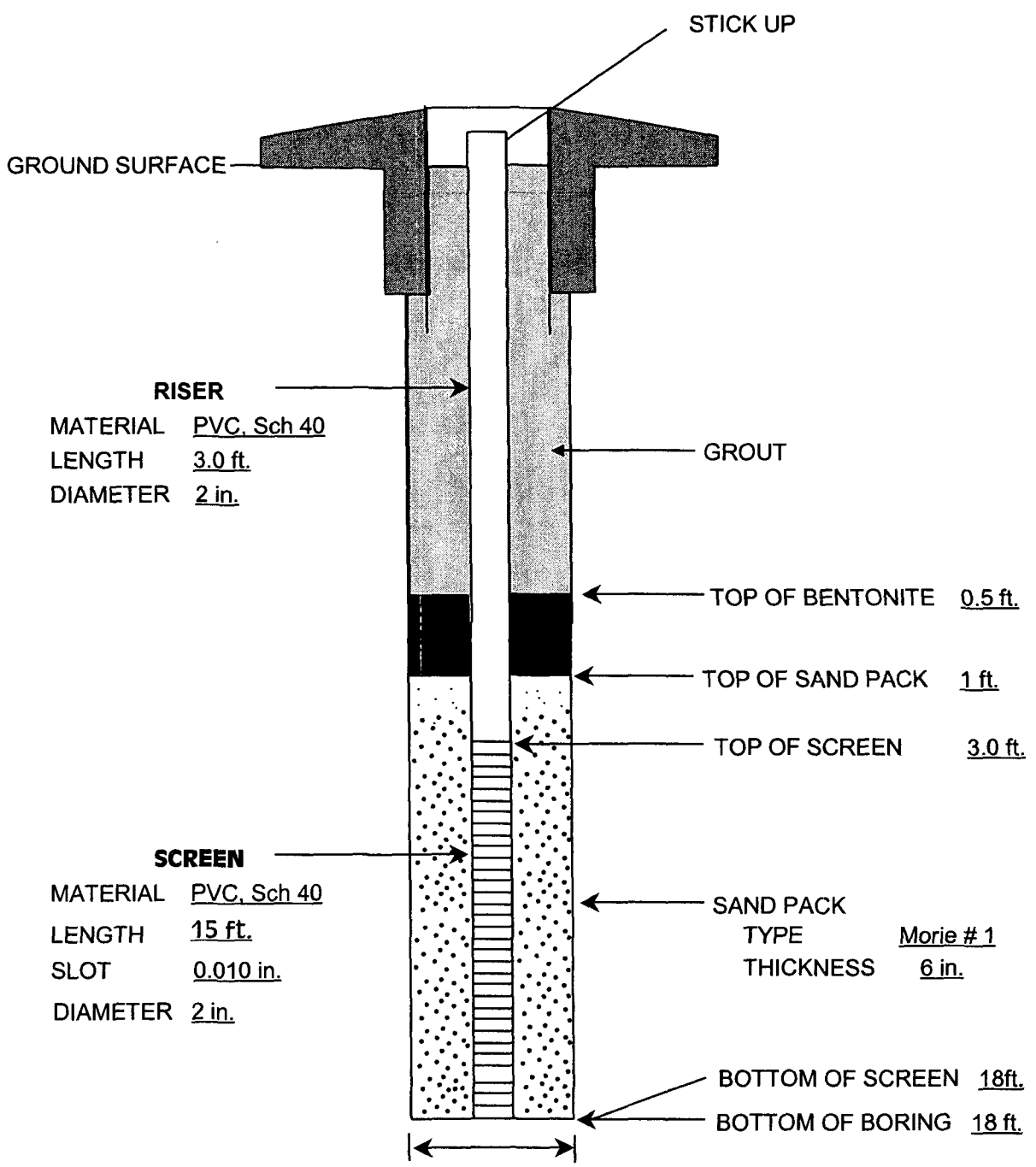

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/04/04 WELL NUMBER: OW-44

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



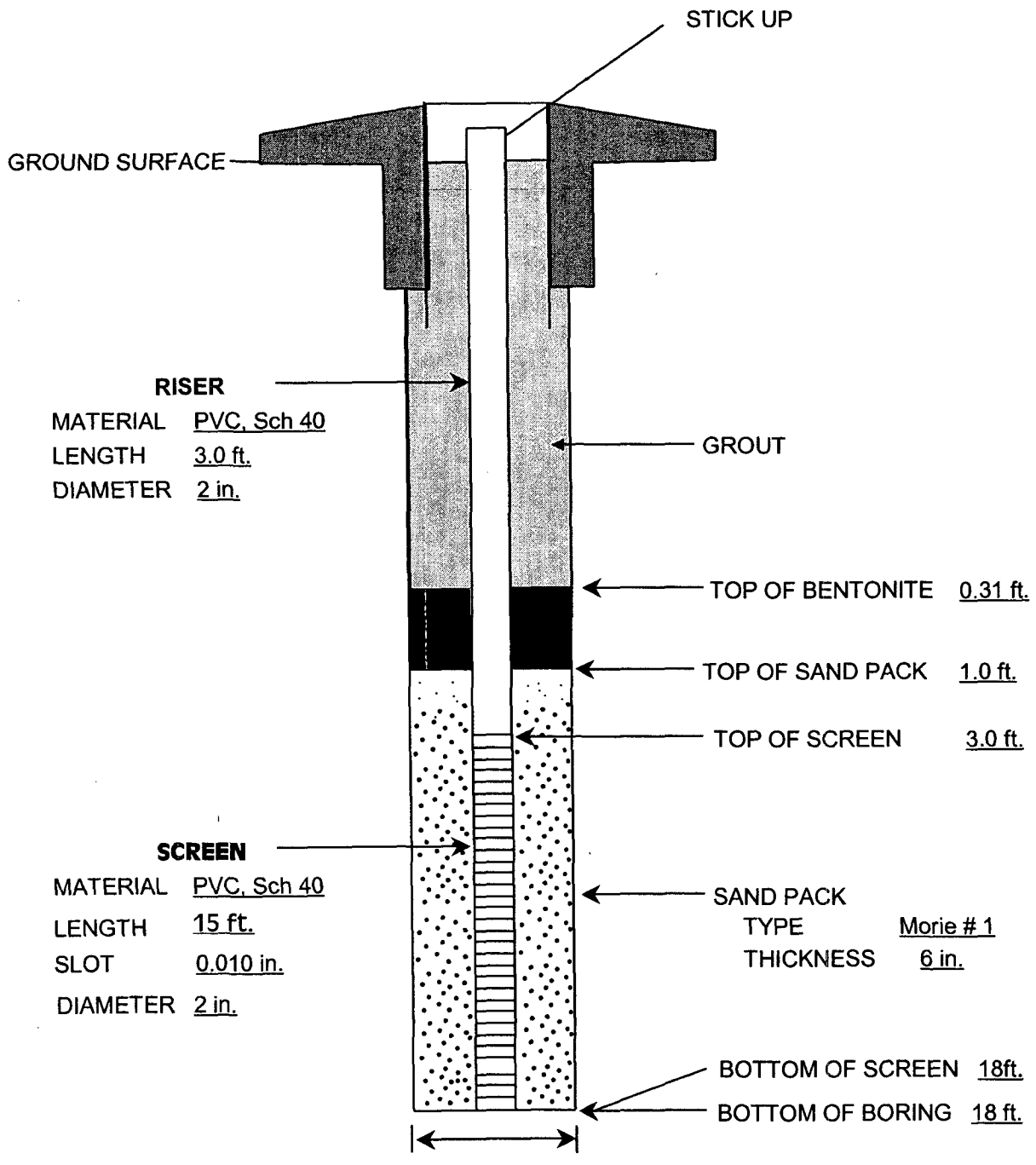

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/07/04 WELL NUMBER: OW-47

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



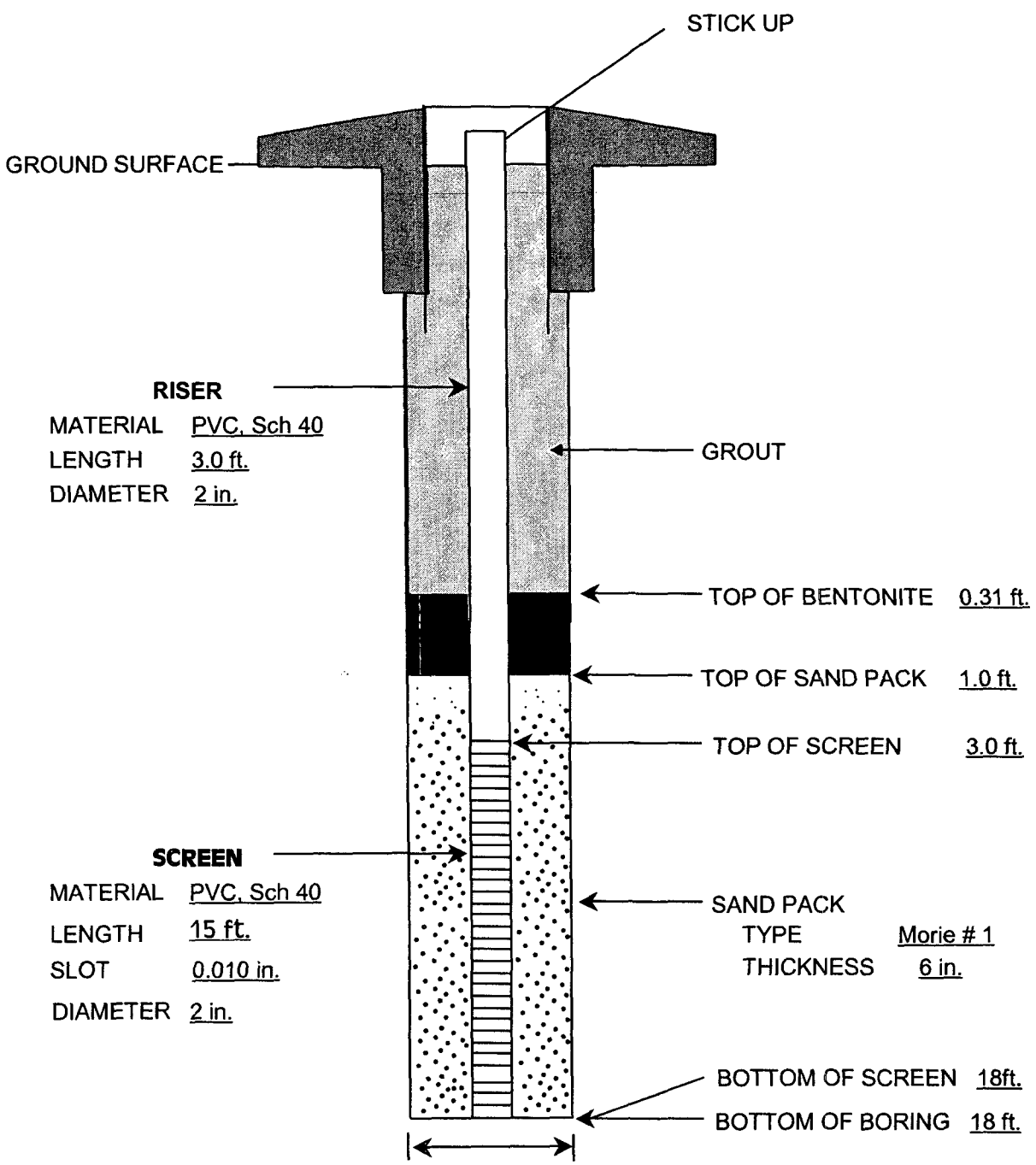

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/10/04 WELL NUMBER: OW-49

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



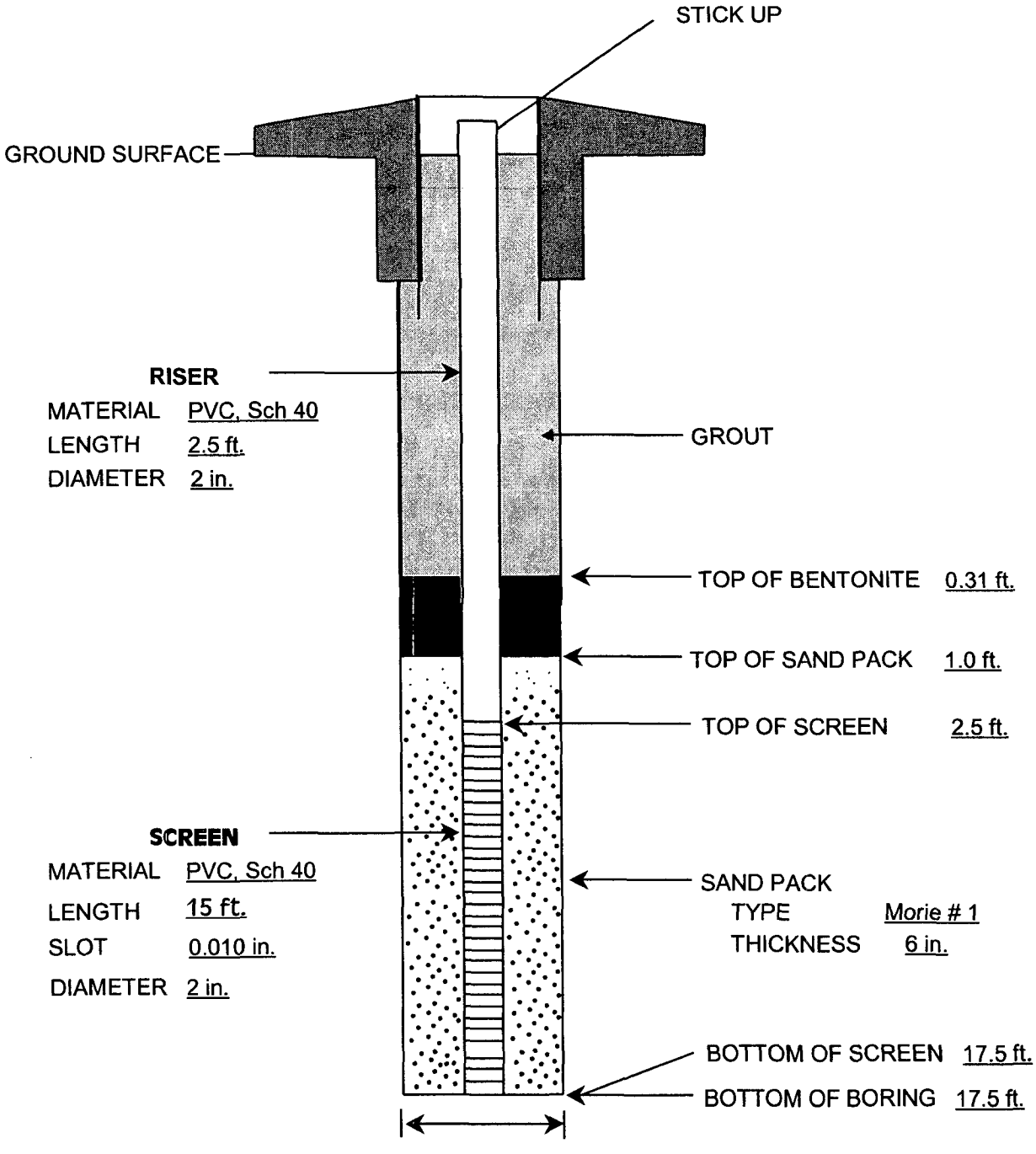

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/11/04 WELL NUMBER: OW-50

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



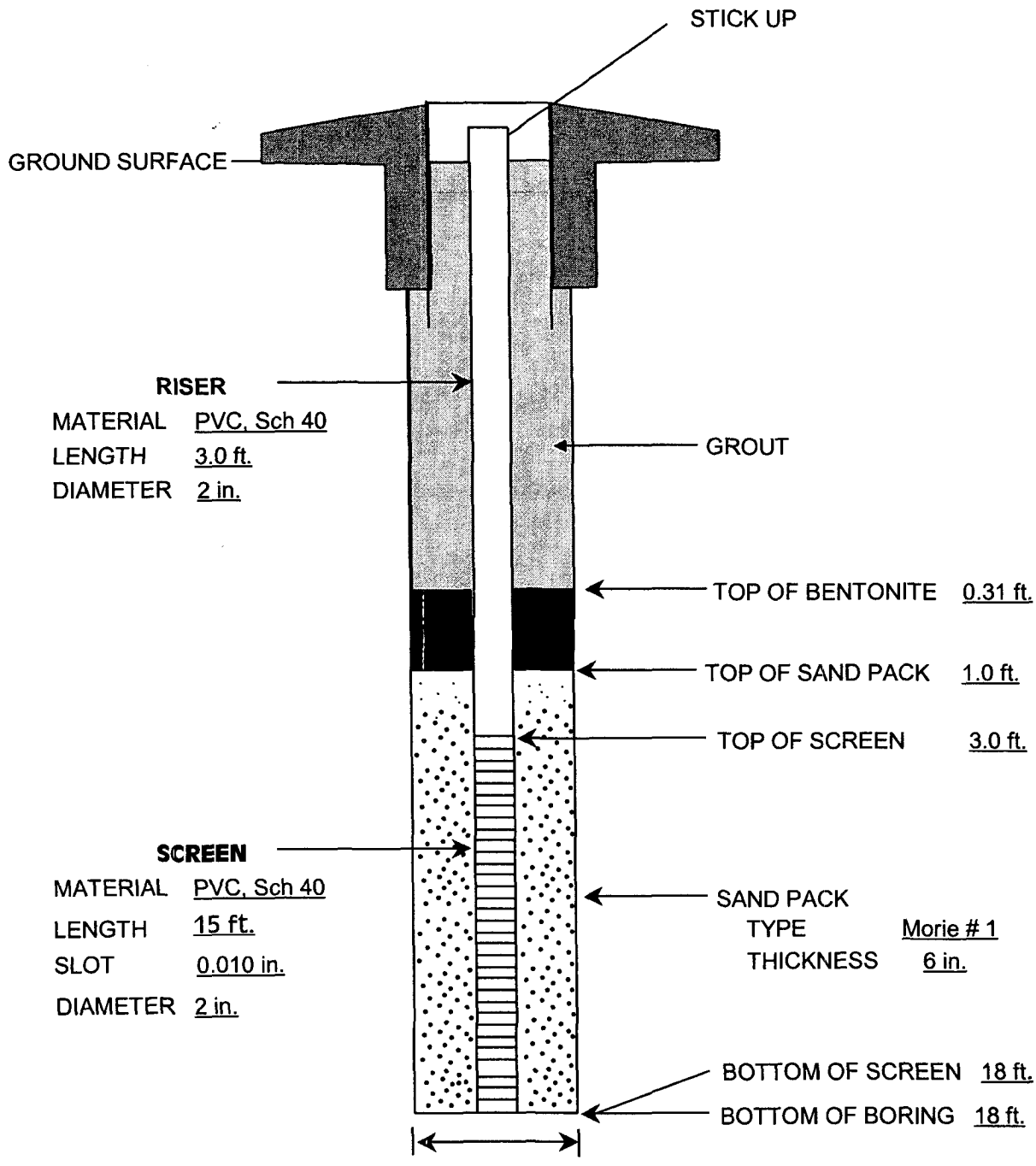

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/11/04 WELL NUMBER: OW-51

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



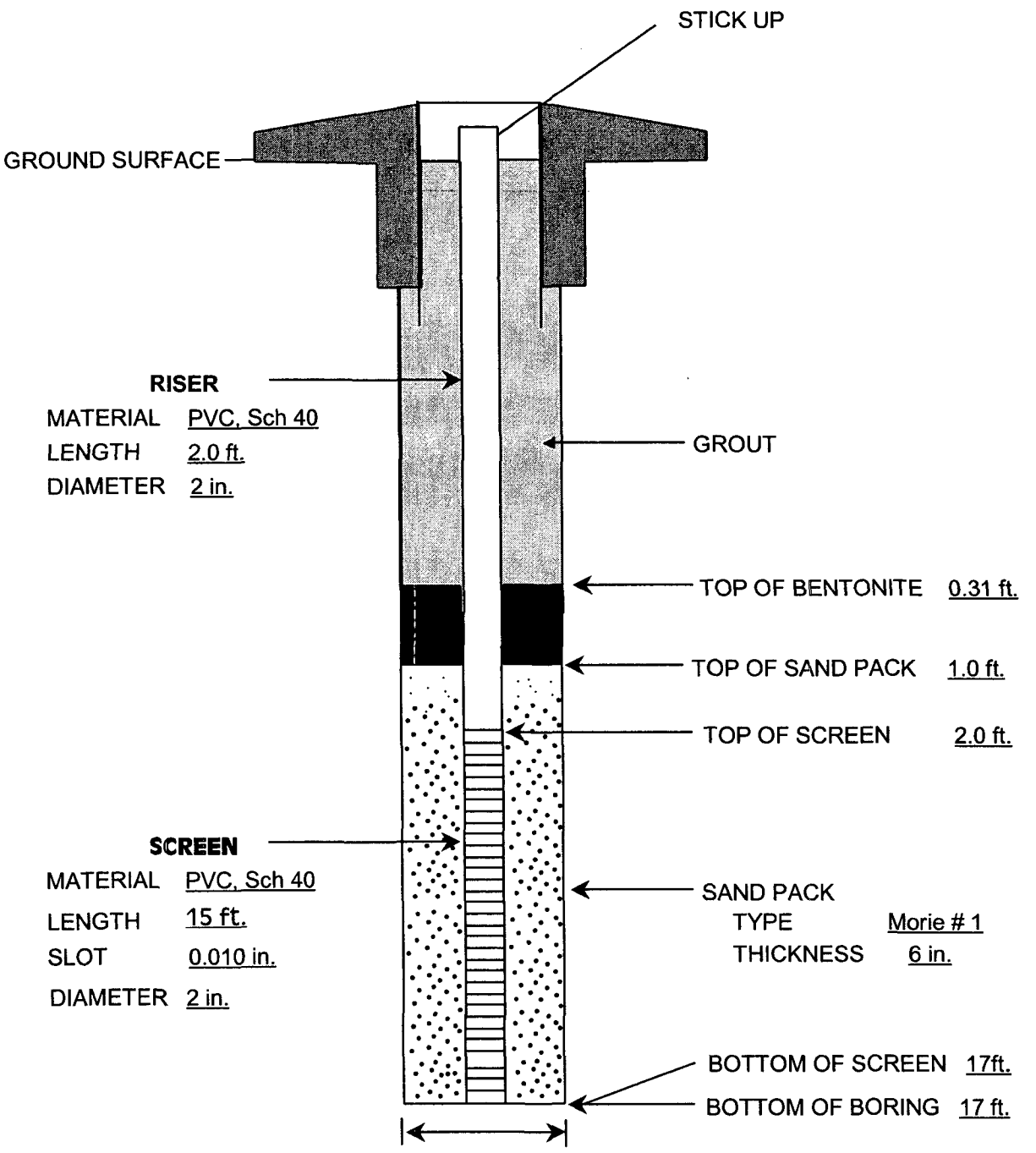

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/05/04 WELL NUMBER: OW-45

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



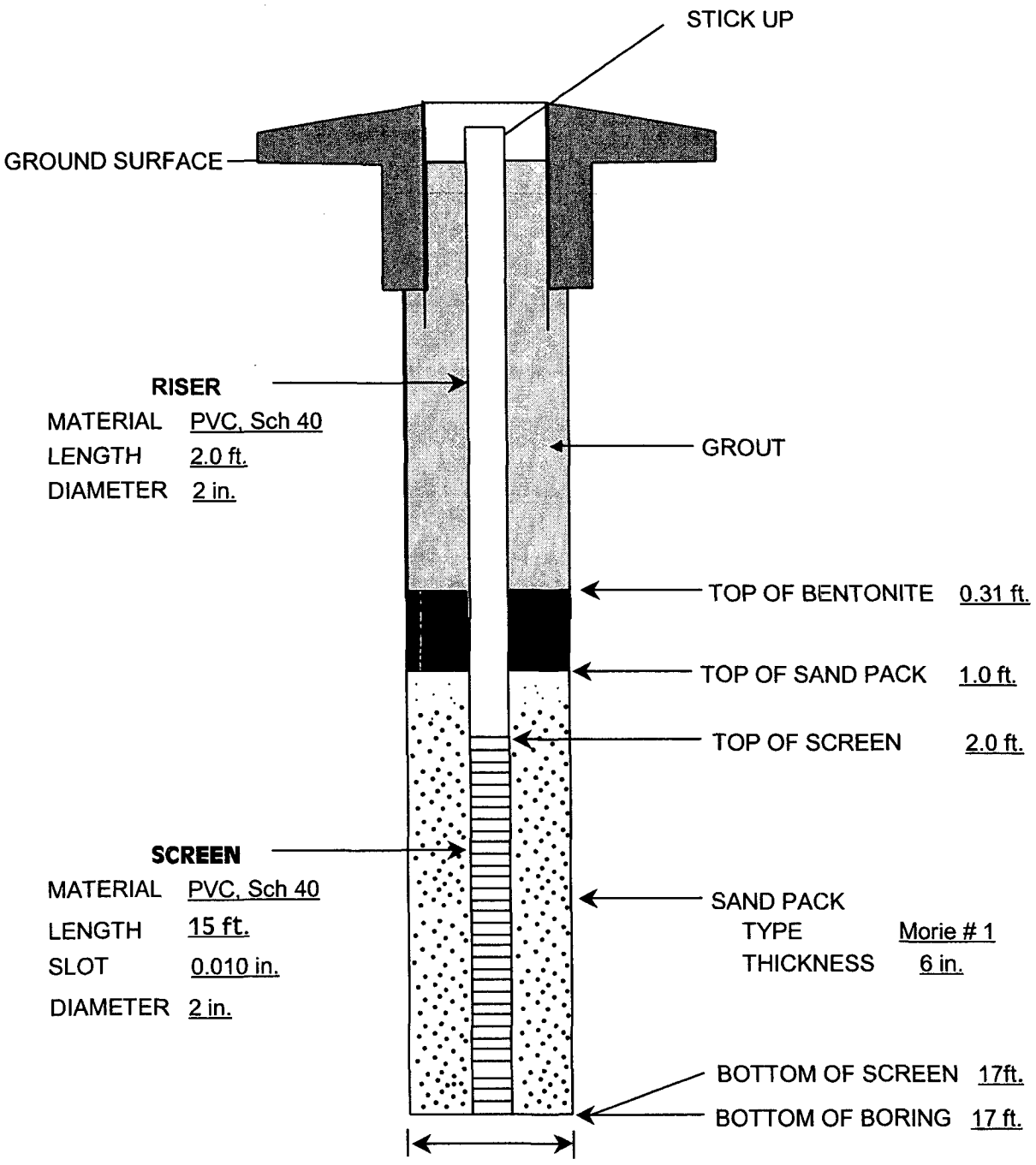

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/05/04 WELL NUMBER: OW-46

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



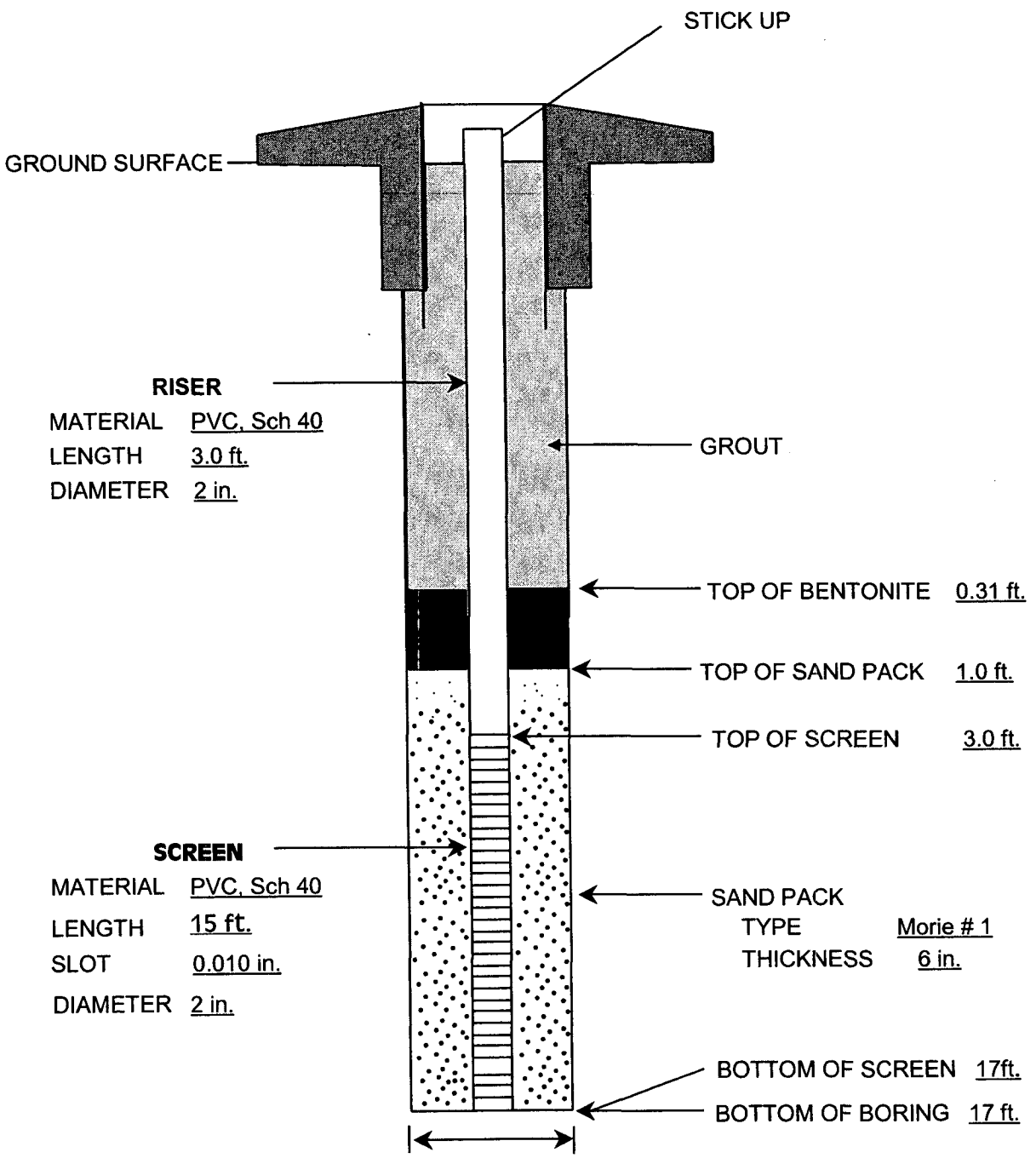

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# WELL CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 05/05/04 WELL NUMBER: OW-48

PROJECT NUMBER: 276360000 DRILLING COMPANY: Summit Drilling METHOD: H. S. Auger

REMARKS: Hollow Stem Rig - Monitor Well INSPECTOR: C. Schrader



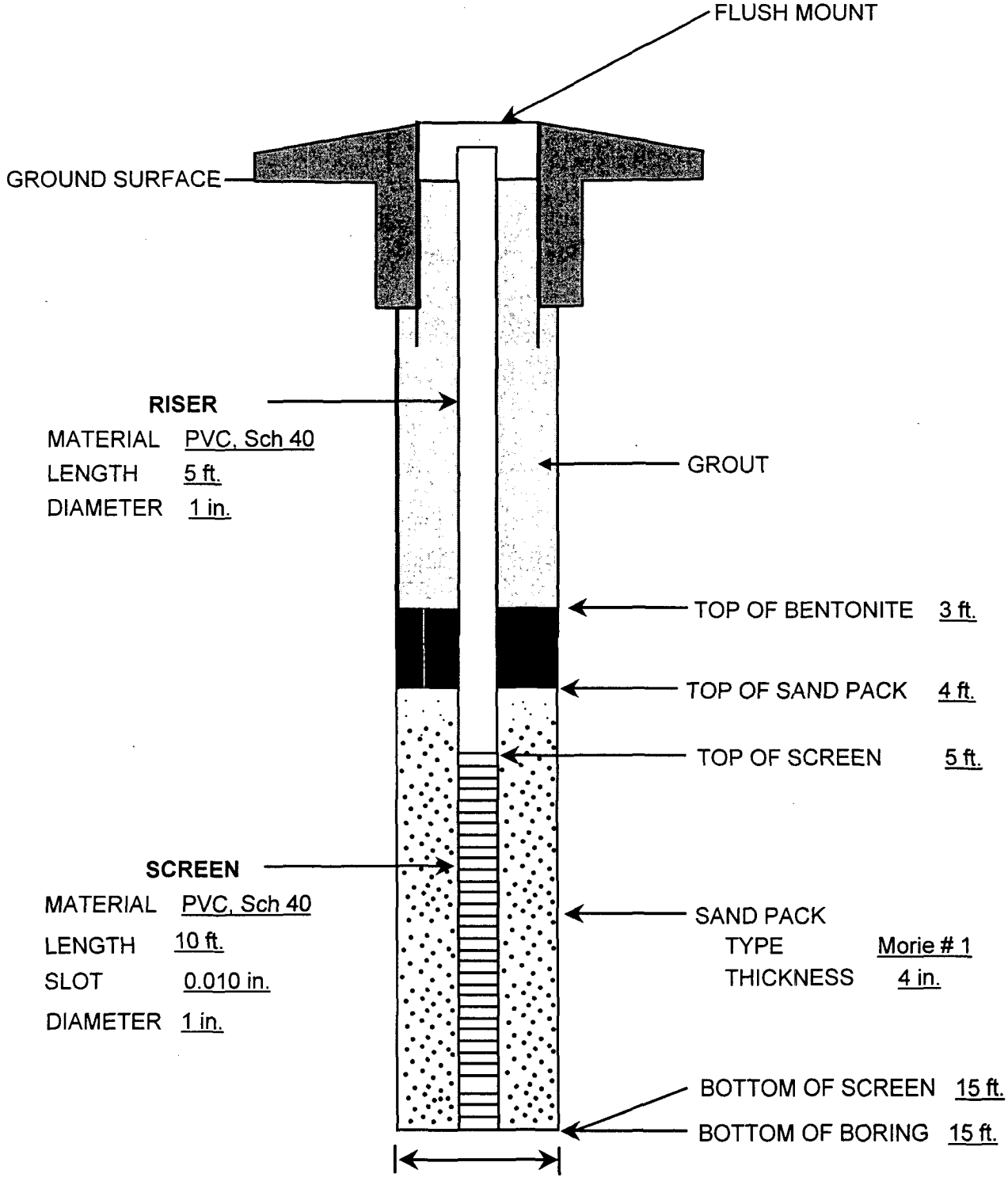

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE

# PIEZOMETER CONSTRUCTION DIAGRAM

PROJECT NAME: GM, Sleepy Hollow, NY DATE INSTALLED: 5/18/04 PIEZOMETER #: PZ-35

PROJECT NUMBER: 276360000 DRILLING COMPANY: B&B, Inc. METHOD: Geoprobe

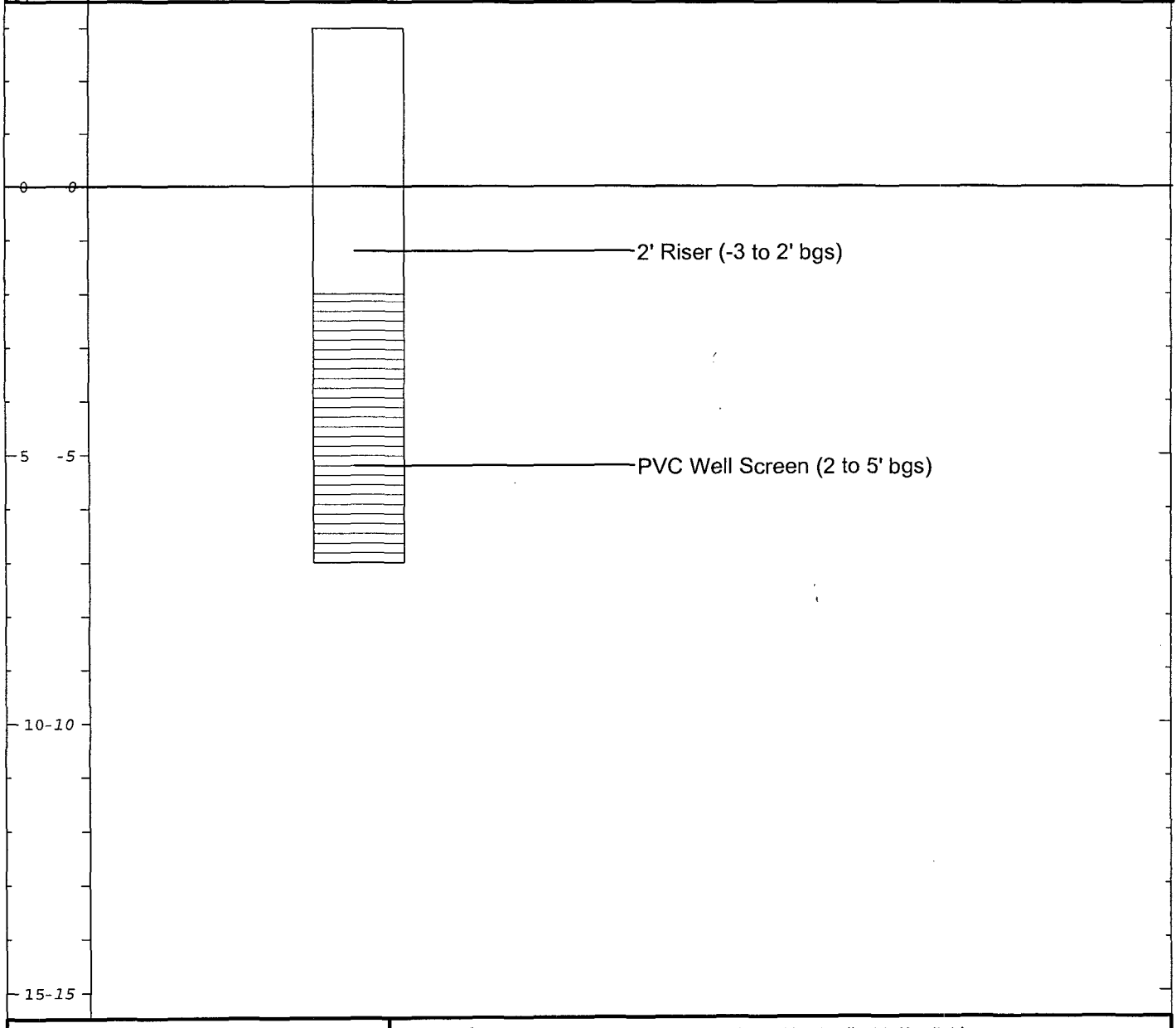
REMARKS: Geoprobe 5' double-tube sampler INSPECTOR: D. Mackie



| | | |
|---|---|---|
| **Date Start/Finish:**<br>**Drilling Company:** B&B<br>**Driller's Name:** JoAnn Robertson<br>***Drilling Method:*** *Hollow Stem Auger*<br>**Bit Size:** Geoprobe<br>**Auger Size:**<br>**Rig Type:**<br>**Sampling Method:** | **Northing:** NA<br>**Easting:** NA<br>**Casing Elevation:** NA<br><br>**Borehole Depth:** 7' below grade<br>**Surface Elevation:** NA<br><br>**Geologist:** JoAnn Robertson | **Well ID:** SI-29-B36<br>**Client:** General Motors<br><br>**Location:** Former General Motors Assembly Plant Site<br>Sleepy Hollow, NY |

**DRAFT**

# Well Construction Details




BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**Remarks:** bgs = below ground surface; NA = Not Applicable/Available.

# *Appendix F*

# Monitoring Well Redevelopment Records – Remedial Investigation

BBL®
an ARCADIS company

well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-6 Date: 10/21/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY Weather: cloudy, breezy

Remarks: _____ Sampler(s): KS

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 8.67 Well Depth (ft): 14.48

Water Column (ft): 4.81 Water Column (gal.) 0.77 Casing Dia. (in): 2

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 2.4

Screen Interval (ft bgs): - Intake (ft bgs): ~13

Purging Method: HB / PP / CP (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 11:00 End Time: 12:48

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | ~~DO (mg/l)~~ Depth to Water (ft) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 11:00 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 11:08 | begin mechanical surging | | | every 5 to 10 min | 8.10 | not working | water turbid with some brown fine |
| 11:25 | | | | | 8.11 | 72.3 | black flake in purge water |
| 11:40 | | | | | 8.12 | 40.5 | |
| 11:55 | | | | | 8.14 | 22.7 | |
| 12:10 | | | | | 8.15 | 62.1 | |
| 12:25 | | | | | 8.16 | 18.6 | end mechanical surging |
| 12:35 | | | | | 8.17 | 4.61 | |

End Time: 1248 see back of sheet Total Volume Purged (gal.): ~25

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-7 Date: 10/21/03.

Project Name: GM Sleepy Hollow AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: cloudy, breezy

Remarks: Sampler(s): K S

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 8.85 Well Depth (ft): 14.89

Water Column (ft): 6.04 Water Column (gal.) 0.97 Casing Dia. (in): 2

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 2.9

Screen Interval (ft bgs): - Intake (ft bgs): ~13.5

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = ~~Centrifugal Pump~~, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:15 End Time: 9:40

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | ~~DO~~ depth to water (ft) (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 8:15 | | | | | 8.85 | slightly turbid | If 3 volume method, include Start Time chemistry data only |
| 8:40 | | | | | 8.89 | 17.34 | mechanically surge well every 5 to 10 min |
| 9:05 | | | | | 9.16 | 6.82 | turn down pump speed |
| 9:25 | | | | | 9.05 | 1.07 | |
| 9:30 | | | | | 9.09 | 1.19 | |
| 9:35 | | | | | 9.11 | 0.69 | |
| | | | | | | | |
| | | | | | | | |

End Time: 9:40 Total Volume Purged (gal.): ~20 gal

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

Well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-10 Date: 10/20/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY Weather: partly cloudy

Remarks: _____ Sampler(s): KS

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 4.81 Well Depth (ft): 14.47

Water Column (ft): 9.66 Water Column (gal.) 1.55 Casing Dia. (in): 2

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 4.65

Screen Interval (ft bgs): - Intake (ft bgs): 13

Purging Method: HB / PP / CP (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:10 End Time: 1140

Pump at steady rate with mechanical surging Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | ~~DO (mg/l)~~ | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | Depth to Water (ft) | | If 3 volume method, include Start Time chemistry data only |
| 9:25 | | | | | 4.85 | 66.5 | depth to water 4.85 ft |
| 9:45 | | | | | 4.90 | 50.8 | mechanically surge every 3-5 min |
| 10:05 | | | | | 4.87 | 62.3 | water contain black fine material |
| 10:25 | | | | | 4.83 | 21.2 | calibration off - clean instrument |
| 10:45 | | | | | 4.83 | 86.6 53. | RPT 10/20/03 recalibrate & re-read |
| 11:30 | | | | | 4.89 | 4.82 | stop mechanical surge at 11:25 |
| 11:35 | | | | | 4.86 | 3.91 | |

End Time: 1140 Total Volume Purged (gal.): ~35 to 40 gal

11:40 4.86 2.35 end purging

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min): _____

60.7 after calib

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-11 Date: 10/20/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: few clouds, light breeze

Remarks: Sampler(s): KS

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 2.10 Well Depth (ft): 12.11

Water Column (ft): 10.01 Water Column (gal.) 1.6 Casing Dia. (in): 2

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 4.8

Screen Interval (ft bgs): - Intake (ft bgs): ~10.5

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 13:04 End Time: 1458

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | ~~DO~~ ~~(mg/l)~~ | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 13:04 | | | | | depth to water (ft) | | If 3 volume method, include Start Time chemistry data only |
| 13:10 | | | | | 2.05 | 98.8 | dark fines in water - surge rev |
| 13:30 | | | | | 2.05 | 75.5 | ~~dark fines in mechanical surging every 3 to 5 min~~ |
| 13:50 | | | | | 2.05 | 97.8 | |
| 14:10 | | | | | 2.05 | 73.3 | |
| 14:30 | | | | | 2.09 | 68.0 | end mechanical surging |
| 14:45 | | | | | 2.08 | 6.1 | water almost clear |
| 14:50 | | | | | 2.08 | 4.7 | |

5 to 10 min

End Time: 1458 Total Volume Purged (gal.): ~40

see back of sheet

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-12 Date: 10/15/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY Weather: cloudy, windy

Remarks: Sampler(s): KS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.94 Well Depth (ft): 14.50 Casing Dia. (in): 2

Water Column (ft): 9.56 Water Column (gal.) 1.55

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 4.65

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 11:36 End Time: 1340

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 11:41 | | | | | | 60.8 | surge every 3 to 5 min |
| 11:50 | reconnect tubing to pump | | | | | | |
| 11:59 | | | | | | 33.6 | |
| 12:10 | | | | | | 81.9 | |
| 12:20 | | | | | | 44.1 | |
| 12:30 | | | | | | | turn up pumping rate (.8Hz |
| 12:40 | | | | | | 52.1 | |

End Time: 13:40 Total Volume Purged (gal.):

Purged Dry: Y / N see back of sheet If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-20 Date: 10/16/03 - 10/21/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360006

Project Location: Sleepy Hollow NY Weather: partly cloudy

Remarks: Sampler(s): KS

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 3.86 Well Depth (ft): 14.74 Casing Dia. (in): 2

Water Column (ft): 10.88 Water Column (gal.) 1.90

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.7

Purging Method: HB / PP / CP / SP (finish with HB, start with SP) Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 10:22 End Time: 13:40 10/21/03

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 10:22 | | | | | | 56.5 | surge over 3-5 min |
| 10:36 | drawdown water to 10 ft, | | turn off | pump, surge mechanically, allow well to recharge | | | |
| 11:18 | restart pumping at | less than | 1 gpm | rate, water level continues to drop | | | |
| 11:21 | | | | | | 78.6 | mech. surge every 10 min |
| 11:27 | water level 10.25 ft | | | | | | |
| 11:45 | | | | | | 28.1 | water level 11.4 ft |
| 11:50 | shut of pump backwash, | restart | pumping, | < 1 gpm, | | | |

End Time: 13:40 on 10/21/03 Total Volume Purged (gal.): ~15

see back of sheet

Purged Dry: (Y) N to within 0.3 ft If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

well redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-22 Date: 10/15/03 - 10/16/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: cloudy, breezy

Remarks: well redevelopment Sampler(s): KS

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 2.85 Well Depth (ft): 14.92 Casing Dia. (in): 2

Water Column (ft): 12.07 Water Column (gal.) 1.93

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.79

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): < 1 gpm

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume ~~method~~: Start Time: ~~14~~:23 End Time: 9:16 on 10/16

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| ~~14~~:25 | | | | | | 28.1 | purge every 3 to 5 min pump=63 check water level |
| ~~14~~:35 | | | | | | | set pump at 90ft |
| ~~14~~:45 | | | | | | 22.6 | |
| ~~14~~:55 | | | | | | 26.5 | |
| ~~15~~:05 | ran out of gas - end work for 10/15/03 | | | | | | |
| ~~15~~:10 | | | | | | | |

End Time: 9:16 on 10/16/03 Total Volume Purged (gal.): 50

Purged Dry: Y / N see back of sheet If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Well Development

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-24 Date: 10/24/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow, NY Weather: clear

Remarks: _____ Sampler(s): KS

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.69 top of casing Well Depth (ft): 20.29 top of casing (uncut)

Water Column (ft): 7.6 Water Column (gal.) 1.24 Casing Dia. (in): 2

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 3.7

Screen Interval (ft bgs): _____ Intake (ft bgs): _____

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:58 End Time: 1416

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | ~~DO~~ (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | Depth to Water (ft) | | If 3 volume method, include Start Time chemistry data only |
| 13:15 | | | | | 15.86 | 183.1 | decrease pumping rate |
| 13:30 | | | | | 13.96 | 129.4 | increase pumping rate |
| 13:45 | | | | | 15.38 | 188.1 | and mechanical pump |
| 13:55 | | | | | 15.34 | 28.8 | |
| 14:05 | | | | | 15.36 | 4.09 | |
| 14:10 | | | | | 15.39 | 3.43 | |
| 14:15 | | | | | 15.39 | 2.25 | |

End Time: 14:16 Total Volume Purged (gal.): 40 to 45 gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Well Redevelopment

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-25 Date: 10/24/03

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY Weather: clear, windy, cold

Remarks: _____ Sampler(s): KS

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.84 top of uncut casing Well Depth (ft): 19.24 top of uncut casing

Water Column (ft): 6.40 Water Column (gal.) 1.02 Casing Dia. (in): 2

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 3.06

Screen Interval (ft bgs): - Intake (ft bgs): _____

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:15 End Time: 11:20

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | ~~DO (mg/l)~~ | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | Depth to Water | | If 3 volume method, include Start Time chemistry data only |
| 9:30 | | | | | 14.08 | turbid | mechanically surge every 5-10 min |
| 9:45 | | | | | 14.14 | turbid | |
| 10:00 | | | | | 14.01 | 190.2 | |
| 10:15 | | | | | 13.80 | 138.1 | |
| 10:30 | | | | | 13.59 | 155.6 | |
| 10:40 | | | | | 13.59 | 188.7 | |
| 11:10 | | | | | 13.54 | 14.84 | stop mechanical surging |

End Time: 1120 Total Volume Purged (gal.): 45 to 50 gal

Purged Dry: Y / N see back of sheet If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Well Development

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-26T  Date: 10/28/03

Project Name: GM, Sleepy Hollow  AMEC Project No.: 276 360000

Project Location: Sleepy Hollow, NY  Weather: Cloudy

Remarks: _____  Sampler(s): VG

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.2  Well Depth (ft): ~12  Casing Dia. (in): 2

Water Column (ft): 9.8  Water Column (gal.) 1.6

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N  DNAPL: Y / N

Volume of Water to be Purged (3 volume method): ~~0.2~~ 4.8

Purging Method: HB / PP / CP / SP  Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:**  If 3 volume method: Start Time: 1520  End Time: 1628

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1522 | 17.46 | 8.41 | 0.182 | 31 | 10.55 | 999 | If 3 volume method, include Start Time chemistry data only |
| 1532 | 16.72 | 7.84 | 0.302 | -157 | 5.04 | 999 | |
| 1542 | 16.51 | 7.58 | 0.327 | -170 | 3.83 | 999 | |
| 1608 | 16.63 | 7.78 | 0.396 | -167 | 9.14 | 214 | |
| 1618 | 16.67 | 7.37 | 0.407 | -188 | 3.48 | 75.6 | |
| 1623 | 16.67 | 7.35 | 0.424 | -188 | 3.23 | 35.0 | |
| 1628 | 16.70 | 7.34 | 0.430 | -188 | 3.07 | 39.8 | |
| | | | | | | | |

End Time: 1628  Total Volume Purged (gal.): _____

Purged Dry: Y / N  If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:**  Sample Time (Start / End): _____

Depth to Water (ft): _____  Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# *Appendix G*

# Monitoring Well Purging/Sampling Logs – Remedial Investigation

BBL®
an ARCADIS company

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: ~~ES~~(OW-37) SI-37-B20 Date: 05/10/2004 / 05/11/04

Project Name: GM AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY

Remarks: _____ Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 5.06' 4.94' Well Depth (ft): 17.1' 17.04' Casing Dia. (in):

Water Column (ft): ~~11.94~~ 12.04' Water Column (gal.) 1.9649

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 0735 End Time: _____

Actual Volume Purged (gal.): _____

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time ~~0815~~ 0735 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0810 | | | | | | 550 | MUDDY, PUMP AT 67HZ |
| 0820 | | | | | | 270 | MUDDY, PUMP AT 67HZ |
| 0830 | | | | | | 160 | MURKY, PUMP AT 67HZ |
| 0840 | | | | | | 220 | CLOUDY, PUMP AT 67HZ |
| 0850 | | | | | | 100 | PUMP AT 72HZ, CLOUDY |
| 0900 | | | | | | 35 | CLEAR, PUMP AT 72HZ |
| 0910 | | | | | | 40 | CLEAR, PUMP AT 72HZ |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): _____ Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B1W-1 Date: 5/3/4

Project Name: GM AMEC Project No.: 276 360000

Project Location: Sleepy Hollow NY Weather: raining

Remarks: Sampler(s): K. Saunders

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 7.68 Well Depth (ft): 17.31

Water Column (ft): 9.63 Water Column (gal.) 0.39 Casing Dia. (in): 1"

Clear Bailer Survey: LNAPL: Y / N / NA DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 1.2

Screen Interval (ft bgs): - Intake (ft bgs): _____

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): ~0.04

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1305 End Time: 1340

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1305 | | 12.1 | | | | | If 3 volume method, include Start Time chemistry data only |
| 1310 | 12.51 | 7.82 | 36.3 | 190 | 11.22 | — | |
| 1320 | ~~10.92~~ | 7.56 | 0.1 | 206 | 10.97 | — | |
| 1335 | 11.52 | 7.57 | 6.6 | 228 | 11.34 | 880 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: 1340 Total Volume Purged (gal.): ~1.5 gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** collected triple volume for MS/MSD Sample Time (Start / End): 1340

Depth to Water (ft): _____ Sampling Method: (Bailer) / In-Line VOCs chromium

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 11.52 | 7.57 | 6.6 | 228 | 11.34 | 880 |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B13W-1 Date: 7/26/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: sunny, warm

Remarks: temporary well Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.40 Well Depth (ft): 18.70 Casing Dia. (in): 1"

Water Column (ft): 6.3 Water Column (gal.) 0.26

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.77

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): 0.06

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| (1 (0.083)) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.5 x WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 10:39 End Time: 12:05

Actual Volume Purged (gal.): 5.5

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 10:39 | | | mS/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 10:46 | 21.57 | 9.50 | 39.1 | 115 | 7.05 | — | brown w/visible particles |
| 10:50 | 20.00 | 8.71 | 40.3 | 126 | 3.22 | — | pump stopped |
| 11:00 | 20.95 | 8.58 | 40.9 | 124 | 3.12 | 340 | |
| 11:24 | 19.60 | 8.57 | 41.2 | 135 | 4.05 | 160 | missed readings due to moving equip |
| 11:35 | 19.26 | 8.57 | 41.3 | 128 | 2.78 | 320/26.7 | finds likely collected in flow-thru cell |
| 11:45 | 19.27 | 8.52 | 41.1 | 126 | 2.51 | 290/13.0 | |
| 11:55 | 19.22 | 8.51 | 41.0 | 125 | 2.37 | 220/7.6 | |
| End Time: 12:05 | | | | | Total Volume Purged (gal.): | | 5.5 |
| 12:05 | 19.37 | 8.51 | 41.1 | 125 | 2.28 | 230/10.7 | |

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 12:05

Depth to Water (ft): 12.60 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID no color noted

metals VOCs

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: Chromium unfiltered & filtered (0.45 micron) - in-line
VOCs w/bailer

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B2W-1 Date: 5/4/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY Weather: sunny, breezy

Remarks: _____ Sampler(s): K. Saunders

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 9.70 Well Depth (ft): 19.15 Casing Dia. (in): 1

Water Column (ft): 9.45 Water Column (gal.) 0.38

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 1.16

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): ~0.11

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 10:53 End Time: 16:15

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 10:53 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 10:55 | 14.40 | 8.11 | 52.8 | 274 | 12.58 | — | Turbid |
| 11:00 | 13.16 | 7.81 | 50.6 | 287 | 10.12 | 121 | |
| 11:05 | 13.17 | 7.68 | 50.1 | 295 | 9.67 | 159 | |
| 11:10 | 13.17 | 7.72 | 49.8 | 294 | 9.52 | 137 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: 11:15 Total Volume Purged (gal.): ~2.5

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 11:15

Depth to Water (ft): 9.69 Sampling Method: ~~Bailer~~ VOCs In-Line Chromium

| If 3 volume method, indicate sample chemistry data | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 13.24 | 7.78 | 49.7 | 291 | 9.34 | 115/150 |

5/4

Sample Visual Appearance: CLEAR / (SLIGHTLY TURBID) / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: greenish-yellow color not seen

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B3W  Date: 5/4/5

Project Name: 6M  AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY  Weather: sunny, breezy

Remarks: _____  Sampler(s): K Saunders

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.84  Well Depth (ft): 19.50

Water Column (ft): 8.66  Water Column (gal.) 0.35  Casing Dia. (in): 1

Clear Bailer Survey: LNAPL: Y / N / NA  DNAPL: Y / N / NA

Volume of Water to be Purged (gal) [3 volume method]: 1.06

Screen Interval (ft bgs): _____  Intake (ft bgs): _____

Purging Method: HB / (PP) / CP / SP  Pumping Rate (gpm): ~0.12

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:**

If 3 volume method: Start Time: 805  End Time: 835

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 805 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 810 | 12.38 | 6.43 | 51.3 | -31 | 6.76 | — | |
| 815 | 12.70 | 6.76 | 71.6 | -46 | 6.61 | 280 | |
| 820 | 12.71 | 6.86 | 73.3 | -62 | 6.34 | 115 | |
| 825 | 12.74 | 7.10 | 74.0 | -78 | 5.91 | 87.5 | |
| 830 | 12.63 | 7.08 | 74.5 | -84 | 5.75 | 81.4 | |
| 835 | 12.48 | 7.11 | 75.3 | -98 | 5.51 | 210 | |

End Time: 835  Total Volume Purged (gal.): 3.5

Purged Dry: Y / (N)  If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:**

Sample Time (Start / End): 835

Depth to Water (ft): 12.09  Sampling Method: Bailer / In-Line (VOCs) (metals)

| If 3 volume method, indicate sample chemistry data | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 12.48 | 7.11 | 7.53 | -98 | 5.51 | 2.10 |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-4W  Date: 5/4/4

Project Name: 6M  AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY  Weather: sunny breezy

Remarks: _____  Sampler(s): K. Saunders

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.53  Well Depth (ft): 14.61  Casing Dia. (in): 1

Water Column (ft): 2.08  Water Column (gal.) 0.08

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC; CD = Casing Dia. (ft); WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N  DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.25

Purging Method: HB / (PP) / CP / SP  Pumping Rate (gpm): 0.01

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

**WELL PURGE DATA:**  If 3 volume method: Start Time: 13:35  End Time: 1400

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 13:35 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1340 | 16.99 | 9.30 | 20.6 | 234 | 9.68 | — | Turbid |
| 1345 | 17.99 | 9.17 | 32.7 | 237 | 9.35 | — | turbid |
| 1355 | 17.65 | 9.20 | 32.0 | 238 | 1.41 | — | Turbid |
| 1400 | 17.58 | 9.19 | 30.2 | 238 | 1.033 | — | turbid |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: 1400  Total Volume Purged (gal.): ~0.25 gal

Purged Dry (Y) / N  If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:**  Sample Time (Start / End): 1400 / 1520

Depth to Water (ft): 13.85  Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: slow recharge

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B5W  Date: 5/4/4

Project Name: GM  AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY  Weather: sunny, breezy

Remarks: _____  Sampler(s): K. Saunders

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.46  Well Depth (ft): 16.30  Casing Dia. (in): 1

Water Column (ft): 4.84  Water Column (gal.) 0.19

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N  DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.59

Purging Method: HB / (PP) / CP / SP  Pumping Rate (gpm): 0.1

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC; CD = Casing Dia. (ft); WC = Water Column (ft)

**WELL PURGE DATA:**  If 3 volume method: Start Time: 1235  End Time: 1300

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1235 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1240 | 13.6 | 7.52 | 41.7 | 20 | 9.26 | — | turbid |
| 1245 | ~~9.18~~ | 7.12 | 42.6 | 17 | 6.55 | — | turbid |
| 1250 | 13.31 | 6.99 | 44.6 | 45 | 5.61 | — | turbid |
| 1255 | 13.24 | 7.01 | 44.9 | 35 | 6.78 | — | turbid |
| 1300 | 13.22 | 7.07 | 45.2 | 29 | 6.68 | — | turbid |
| | | | | | | | |
| | | | | | | | |

End Time: 1300  Total Volume Purged (gal.): ~2.5 gal

Purged Dry: Y / (N)  If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:**  Sample Time (Start / End): 1300

Depth to Water (ft): 13.73  Sampling Method: (Bailer) / In-Line  VOCs Chromium

| If 3 volume method, indicate sample chemistry data | Temperature (°C) °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 13.22 | 7.07 | 45.2 | 29 | 6.68 | turbid |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B64N  Date: 5/4/4

Project Name: GM  AMEC Project No.: 276 360000

Project Location: Sleepy Hollow NY  Weather: Sunny, breezy

Remarks: _____  Sampler(s): K. Saunders

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.51  Well Depth (ft): 14.35  Casing Dia. (in): 1

Water Column (ft): 3.84  Water Column (gal.) 0.16

Clear Bailer Survey: LNAPL: Y / N  DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.47

Purging Method: HB / (PP) / CP / SP  Pumping Rate (gpm): 0.05

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:**  If 3 volume method: ~~Start Time~~: 11:37  End Time: 1205

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 11:37 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 11:40 | 13.94 | 8.37 | 77.6 | -69 | 6.53 | — | Turbid |
| 11:45 | 13.91 | 7.29 | 51.2 | 211 | 8.09 | — | Turbid |
| 11:50 | 13.61 | 7.06 | 61.6 | 270 | 8.69 | 305 | |
| 11:55 | 13.53 | 7.12 | 60.4 | 290 | 8.77 | 329 | |
| 12:00 | 13.54 | 7.20 | 60.1 | 294 | 8.88 | 291 | |
| 12:05 | 13.55 | 7.28 | 50.2 | 296 | 9.02 | 252 | |

End Time: 1205  Total Volume Purged (gal.): 1.5 to 2 gal

Purged Dry: Y / (N)  If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:**  Sample Time (Start / End): 12:05

Depth to Water (ft): 10.78  Sampling Method: ~~Bailer~~ / Hi-Flow  VOCs  Chromium

| If 3 volume method, indicate sample chemistry data | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 13.55 | 7.28 | 50.2 | 296 | 9.02 | 252 |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B7W Date: 5/4/4

Project Name: GM AMEC Project No.: 276360 000

Project Location: Sleepy Hollow NY Weather: sunny breezy

Remarks: Sampler(s): K. Saunders

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.53 Well Depth (ft): 17.15 Casing Dia. (in): 1

Water Column (ft): 5.62 Water Column (gal.) 0.23

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.69

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC; CD = Casing Dia. (ft); WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 955 End Time: 1020

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 955 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1000 | 13.61 | 7.58 | 75.2 | 222 | 10.37 | — | Turbid |
| 1005 | 13.67 | 7.36 | 82.6 | 131 | 9.72 | — | turbid |
| 1010 | 13.72 | 7.10 | 85.9 | 109 | 8.95 | — | turbid |
| 1015 | 13.72 | 7.06 | 87.1 | 102 | 8.58 | — | turbid |
| 1020 | 13.62 | 7.14 | 87.5 | 91 | 8.11 | — | turbid |
| | | | | | | | |
| | | | | | | | |

End Time: 1020 Total Volume Purged (gal.): _____

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1020

Depth to Water (ft): 11.66 Sampling Method: Bailer / (In-Line) VOCs Chromium

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 13.62 | 7.14 | 87.5 | 91 | 8.11 | turbid |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

filtered sample greenish-yellow

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-BTW Date: 05/24/2004

Project Name: General Motors AMEC Project No.: 2763660000

Project Location: Sleepy Hollow, NY Weather: SUNNY/WARM

Remarks: _____ Sampler(s): AC

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.06 Well Depth (ft): 17.83 Casing Dia. (in): 1

Water Column (ft): 5.77 Water Column (gal.) .2354

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): .7062

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)^2 * (CD/2)^2 * 3.23 = Vwc

CD = Casing Dia. (ft)

Vwc = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1239 End Time: 1340

Actual Volume Purged (gal.): _____

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1239 | | | S/M | | | | If 3 volume method, include Start Time chemistry data only |
| 1245 | 15.88 | 8.05 | 0.108 | 124 | 7.88 | — | Too Turbid |
| 1300 | 15.74 | 8.39 | 0.104 | 125 | 8.77 | — | Too Turbid |
| 1310 | 15.95 | 8.04 | 0.103 | 134 | 8.19 | 560 | |
| 1320 | 15.99 | 8.00 | 0.102 | 140 | 7.73 | 420 | Yellowish |
| 1330 | 15.91 | 8.01 | 0.101 | 142 | 7.81 | 440 | " |
| 1336 | 16.05 | 8.02 | 0.100 | 142 | 7.81 | 400 | " |
| 1340 | 16.02 | 8.02 | 0.100 | 142 | 7.74 | 360 | |

End Time: 1340 Total Volume Purged (gal.): 7

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 1342

Depth to Water (ft): 12.13 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: SAMPLED SI-47-BTW FOR CL (FILTERED AND UNFILTERED) IN-LINE AND VOCs USING BAILER.

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-138W  Date: 5/4/4

Project Name: GM  AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow NY  Weather: sunny, windy

Remarks: _____  Sampler(s): K. Saunders

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.39  Well Depth (ft): 18.76  Casing Dia. (in): 1

Water Column (ft): 6.37  Water Column (gal.) 0.26

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC; CD = Casing Dia. (ft); WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N  DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.78

Purging Method: HB (PP) / CP / SP  Pumping Rate (gpm): 0.12

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID (TURBID)

**WELL PURGE DATA:**  If 3 volume method: Start Time: 9:05  End Time: 9:30

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 9:05 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:10 | 12.43 | 7.08 | 71.3 | -125 | 9.30 | — | Turbid |
| 9:15 | 12.25 | 6.97 | 71.6 | -132 | 8.09 | — | turbid |
| 9:20 | 12.48 | 7.14 | 71.0 | -155 | 7.28 | — | turbid |
| 9:25 | 12.26 | 7.17 | 70.8 | -166 | 6.91 | — | turbid |
| 9:30 | 12.26 | 7.17 | 70.7 | -170 | 5.82 | — | looks slightly turbid |
| | | | | | | | |
| | | | | | | | |

End Time: 9:30  Total Volume Purged (gal.): ~3

Purged Dry: Y / (N)  If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:**  Sample Time (Start / End): 9:30

Depth to Water (ft): 12.49  Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | 12.26 | 7.17 | 70.7 | -170 | 5.82 | slightly turbid |

Sample Visual Appearance: CLEAR / (SLIGHTLY TURBID) / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: Sample appeared slightly turbid to turbid but readings were higher than instrument limits

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B Date: 05/24/2004

Project Name: General Motors AMEC Project No.: 2162360000

Project Location: Sleepy Hollow, NY Weather: Cloudy, cool

Remarks: Sampler(s): JAL

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): ~~12.78~~ 12.78 Well Depth (ft): ~~18.97~~ 18.97 Casing Dia. (in): 4

Water Column (ft): ~~06.19~~ 06.19 Water Column (gal.) ~~.2526~~ .2526

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): .757B

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)² x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1119 End Time: 1205

Actual Volume Purged (gal.): 6

| Time | Temperature (°C) °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1119 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 1120 | 14.58 | 9.35 | 66.6 | 103 | 9.26 | — | TOO TURBID FOR READING |
| 1130 | 14.18 | 8.32 | 75.6 | 113 | 8.13 | 420 | CLOUDY |
| 1140 | 14.22 | 8.40 | 75.9 | 111 | 8.54 | 140 | SLIGHTLY CLOUDY |
| 1145 | 14.29 | 8.42 | 76.3 | 110 | 8.70 | 120 | SLIGHTLY CLOUDY |
| 1150 | 14.34 | 8.43 | 76.3 | 108 | 8.60 | 110 | |
| 1155 | 14.33 | 8.46 | 76.3 | 106 | 8.86 | 110 | |
| 1200 | 14.33 | 8.48 | 76.4 | 105 | 8.90 | 100 | |

End Time: 1205 Total Volume Purged (gal.): 6

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1214

Depth to Water (ft): 12.82 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: SAMPLED SI-47-BDW FOR VOCs WITH BAILER & Cr (Filtered & Unfiltered) in line.

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-12W Date: 05/25/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: Sunny Hot

Remarks: _____ Sampler(s): JK

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): _____ Well Depth (ft): _____ Casing Dia. (in): _____

Water Column (ft): _____ Water Column (gal.) _____

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: _____ End Time: _____

Actual Volume Purged (gal.): _____

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B13 Date: 05/24/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: CLOUDY, COOL

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 13.41 Well Depth (ft): 18.49 Casing Dia. (in):

Water Column (ft): 5.08 Water Column (gal.) 0.2073

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.6218 gal

Purging Method: HB (PP) CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x Wc

CD = Casing Dia. (ft)

Wc = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time 0843 End Time: 0920

Actual Volume Purged (gal.): 2.5 gallons

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0843 | | | MS/M | | | | If 3 volume method, include Start Time chemistry data only |
| 0845 | 15.34 | 8.15 | 41.0 | 71 | 6.20 | — | TURBIDITY TOO HIGH |
| 0920 | 16.01 | 8.86 | 59.0 | 92 | 8.98 | — | TURBIDITY TOO HIGH |
| 0925 | 15.89 | 8.81 | 58.8 | 93 | 8.85 | — | TURBIDITY TOO HIGH |
| 0930 | 15.71 | 8.82 | 58.6 | 93 | 8.87 | — | TURBIDITY TOO HIGH |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: DID NOT SAMPLE — TOO TURBID. TRIED ADJUSTING PUMP SPEED AND POSITION OF TUBE IN WELL.

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B14 Date: 05/24/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: CLOUDY, COOL

Remarks: _____ Sampler(s): JAC

WELL PURGING: PID Head Space Reading (ppm): _____

Depth to Water (ft): 13.66 Well Depth (ft): _____ Casing Dia. (in): _____

Water Column (ft): _____ ~~Water Column (gal.)~~ METER OFF SCALE BREACHED 13.66'

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (8 volume method): _____

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons/Foot per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: $(CD/2)^2 \times (CD/2) \times 2.5 = \text{Vol}$

CD = Casing Dia. (ft)

WC = Water Column (ft)

WELL PURGE DATA: If 3 volume method: Start Time: 0949 End Time: 1035

Actual Volume Purged (gal.): 3.5

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0949 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 0955 | 14.06 | 8.67 | 69.8 | 104 | 8.40 | 250 | |
| 1000 | 13.99 | 8.39 | 68.7 | 112 | 8.46 | 77 | CLEAR |
| 1005 | 12.98 | 8.24 | 68.9 | 117 | 8.46 | 81 | |
| 1010 | 13.97 | 8.26 | 68.8 | 118 | 8.08 | 57 | |
| 1015 | 14.01 | 8.23 | 69.0 | 119 | 8.01 | 56 | |
| 1020 | 13.97 | 8.23 | 69.0 | 121 | 8.62 | 49 | |
| 1025 | 13.96 | 8.24 | 69.0 | 122 | 8.70 | 48 | |

End Time: 1035 Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

SAMPLING DATA: Sample Time (Start / End): 1037

Depth to Water (ft): _____ Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: DUPLICATE SAMPLED SI-47-B14- FOR VOCs AND Cr (filtered/unfiltered)

bailer in line

SI-47-B14 5/24/04

| TIME | TEMPERATURE | pH | CONDUCTIVITY | REDOX | DO | TURBIDITY |
|---|---|---|---|---|---|---|
| 1030 | 13.99 | 8.19 | 68.8 | 123 | 8.47 | 47 |
| 1035 | 14.05 | 8.18 | 69.0 | 125 | 8.42 | 44 |

* bailer only half full each time - turbid.
4th bailer empty. waited 5 minutes

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B15 Date: 05/24/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: SUNNY, WARM

Remarks: Sampler(s): JAZ

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 10.94 Well Depth (ft): 14.61 Casing Dia. (in): 2

Water Column (ft): 3.67 Water Column (gal): 1.44

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): .4491

Purging Method: HB (PP) CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.14 x WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1409 End Time: 1450

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1409 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 1415 | 16.93 | 9.57 | 73.5 | 60 | 9.11 | — | Turbidity too high/yellow |
| 1420 | 16.74 | 9.18 | 74.5 | 73 | 9.08 | — | " / yellow-brown |
| 1425 | 16.77 | 9.07 | 74.8 | 78 | 9.09 | 830 | yellow-brown |
| 1430 | 16.75 | 9.02 | 75.0 | 79 | 9.11 | 810 | |
| 1435 | 16.79 | 8.97 | 75.1 | 78 | 9.14 | 650 | |
| 1440 | 16.82 | 8.96 | 75.0 | 78 | 9.12 | 600 | |
| 1445 | 16.79 | 8.94 | 75.1 | 77 | 9.14 | 590 | |

End Time: 1450 Total Volume Purged (gal.): 4

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1452

Depth to Water (ft): 10.94 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B16W Date: 7/27/11

Project Name: BM Sleepy Hollow AMEC Project No.: 276360000

Project Location: NY Weather: cloudy

Remarks: TEMPORARY WELL Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 9.09 Well Depth (ft): 11.96 Casing Dia. (in): 1"

Water Column (ft): 2.87 Water Column (gal.): 0.12

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.35

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): 0.1

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID) BROWN

| Casing Dia. In. (ft) | Gallons Water per Linear Ft |
|---|---|
| ~~1 (0.083)~~ | ~~0.0408~~ |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)x(CD/2)x3.14x(WC) CD = Casing Dia. (ft) WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 7:37 End Time: 8:40

Actual Volume Purged (gal.): 6

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) mS/m | REDOX (Eh-mV) | DO (mg/l) g/L | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 7:40 | 18.29 | 6.51 | 54.3 | 238 | 3.76 | — | |
| 7:50 | 18.24 | 7.38 | 54.0 | 222 | 4.56 | 916 | |
| 8:00 | 18.23 | 7.60 | 53.8 | 232 | 6.56 | 473 | |
| 8:10 | 18.56 | 7.51 | 55.1 | 227 | 4.95 | 457/26 | |
| 8:20 | 18.56 | 7.53 | 55.0 | 227 | 5.07 | 98.2/5.2 | |
| 8:30 | 18.73 | 7.51 | 54.8 | 225 | 5.16 | 97.6/3.5 | |
| 8:40 | 18.65 | 7.50 | 54.8 | 222 | 5.28 | 96.7/2.2 | |

End Time: 8:40 Total Volume Purged (gal.): 6

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 8:40

Depth to Water (ft): 9.11 Sampling Method: Bailer (VOCs) / In-Line (Chromium)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / (TURBID) metals VOCs

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: Chromium (Unfiltered & Filtered, 0.45 micron) and VOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B17 Date: 07/27/2004

Project Name: General Motors AMEC Project No.: 27636 0000

Project Location: Sleepy Hollow, NY Weather: Cloudy, Cool ~70°F

Remarks: Well Sampling Sampler(s): Cuppernell

**WELL PURGING:** PID Head Space Reading (ppm): _____

13.87
7.44

Depth to Water (ft): 7.44 Well Depth (ft): 13.87 Casing Dia. (in): 1"

Water Column (ft): 6.43 Water Column (gal.) .2623

| Casing Dia. in (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): .7870 gal

Purging Method: HB (PP) CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 0750 End Time: 0900

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | s/m | | | | If 3 volume method, include Start Time chemistry data only |
| 0750 | 18.18 | 7.88 | 0.210 | 37 | 0.71 | -5 | |
| 0800 | 18.17 | 8.44 | 0.152 | -133 | 0.35 | 800 | BROWN/ WATER |
| 0805 | 18.06 | 8.50 | 0.131 | -196 | 0.29 | 400 | " |
| 0810 | 17.92 | 8.52 | 0.117 | -224 | 0.23 | 310 | CLOUDY BROWN W/PARTICLES |
| 0815 | 17.94 | 8.51 | 0.106 | -239 | 0.16 | 300 | |
| 0820 | 17.84 | 8.52 | 0.094 | -251 | 0.12 | 280 | TURB = 76.9 NTU USING OTHER METER |
| 0825 | 17.88 | 8.51 | 0.085 | -255 | 0.12 | 270 | |

End Time: 0900 Total Volume Purged (gal.): _____

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): 7.48 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: SAMPLED UNFILTERED AND FILTERED CHROMIUM IN-LINE. SAMPLED VOAs WITH BAILER

SI-41-DVI 7/27/04

| TIME | TEMPERATURE °C | pH | CONDUCTIVITY mS/m | REDOX MV | DO mg/L | TURBIDITY NTU | COMMENTS |
|---|---|---|---|---|---|---|---|
| 0830 | 17.96 | 8.49 | 79.1 | -259 | 0.10 | 230/51.1 | SLIGHTLY CLEAR |
| 0835 | 17.94 | 8.47 | 74.4 | -262 | 0.08 | 260/55.1 | SLIGHTLY CLEAR |
| 0840 | 17.95 | 8.42 | 71.7 | -265 | 0.07 | 178/46.8 | MOSTLY CLEAR |
| 0845 | 17.95 | 8.40 | 67.3 | -267 | 0.06 | 110/25.5 | " |
| 0850 | 17.92 | 8.35 | 65.2 | -266 | 0.05 | 86/21.3 | " |
| 0855 | 17.89 | 8.29 | 62.8 | -264 | 0.05 | 98/22 | |
| 0900 | 17.86 | 8.24 | 60.5 | -261 | 0.05 | 96 | |
| 0905 | | | | | | | |
| 0910 | | | | | | | |

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B18W Date: 7/26/14

Project Name: GM SLEEPY HOLLOW AMEC Project No.: 276 360 000

Project Location: NY Weather: SUNNY HOT

Remarks: TEMPORARY WELL Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm): _____

Height of Stick-up 2'9"

Depth to Water (ft): 6.95 Well Depth (ft): 12.29 Casing Dia. (in): 1

Water Column (ft): 5.34 Water Column (gal.) 0.22

| Casing Dia. (in) (ft) | Gallons/Foot per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| ~~2 (0.167)~~ | ~~0.1632~~ |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.65

Purging Method: HB (PP) / CP / SP Pumping Rate (gpm): 0.16

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

**WELL PURGE DATA:** If 3 volume method: Start Time: ~~14:09~~ 14:09 End Time: 15:10

Actual Volume Purged (gal.): 9.5

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) mS/m | REDOX (Eh-mV) | DO (mg/l) g/L | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 14:10 | 24.79 | 9.79 | 22.4 | 111 | 4.06 | — | |
| 14:20 | 24.68 | 9.05 | 20.4 | 106 | 1.14 | 92.4 | |
| 14:30 | 24.54 | 8.65 | 20.1 | 96 | 0.77 | 22.2 | |
| 14:40 | 24.66 | 8.24 | 19.9 | 58 | 0.63 | 7.1 | |
| 14:50 | 24.59 | 8.11 | 19.7 | 17 | 0.55 | 5.3 | |
| 15:00 | 24.60 | 8.01 | 19.6 | -4 | 0.55 | 4.2 | |
| 15:10 | 24.59 | 7.89 | 19.6 | -16 | 0.50 | 4.6 | |

End Time: 15:10 Total Volume Purged (gal.): 9.5

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 15:10

Depth to Water (ft): 6.96 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: Chromium VOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: SI-47-B19W Date: 7/26/4

Project Name: GM SLEEPY HOLLOW AMEC Project No.: 276360005

Project Location: NY Weather: SUNNY

Remarks: TEMPORARY WELL Sampler(s): K. SAUNDERS

**WELL PURGING:** 4'4" HEIGHT OF STICK-UP PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.27 Well Depth (ft): 14.71 Casing Dia. (in): 1

Water Column (ft): 2.44 Water Column (gal.) 0.10

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 0.30

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): 0.55

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID BROWN

| Casing Dia. In. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:42 End Time: 13:45

Actual Volume Purged (gal.): 3.5

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 12:42 | | | ms/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 12:45 | 25.22 | 9.86 | 56 | 146 | 6.06 | — | |
| 12:55 | 23.75 | 8.77 | 54.6 | 80 | 3.54 | 720 | SWITCH TO 4-22-07 |
| 13:10 | 23.23 | 6.78 | 54.5 | 187 | 8.44 | 8.0186 | |
| 13:15 | 23.85 | 7.00 | 54.3 | 143 | 4.23 | 87.8 | |
| 13:20 | 22.91 | 7.31 | 54.1 | 100 | 4.22 | 23.2 | |
| 13:25 | 22.95 | 7.40 | 54.1 | 69 | 4.30 | 8.7 | |
| 13:40 | 23.03 | 7.42 | 53.4 | 63 | 4.31 | 9.3 | |
| End Time: 13:45 | | | | | Total Volume Purged (gal.): | | |
| 13:45 | 23.06 | 7.43 | 53.8 | 56 | 4.32 | 2.2 | |

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 13:45

Depth to Water (ft): 12.47 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: Metals CLEAR / SLIGHTLY TURBID / TURBID VOCs - BROWN

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: Chromium (Unfiltered & Filtered (0.45µ) in-line & VOCs with bailer

**GM Tarrytown NY**
**64462-027**
*Site*

Site Investigation Sampling
*Event*

## GROUNDWATER SAMPLING LOG

| | | | |
|---|---|---|---|
| **Sampling Personnel:** | Jo Ann Robertson | **Well ID:** | SI-47-B27 |
| **Client / Job Number:** | GM Tarrytown NY 64462-027 | **Date:** | 10/5/04 |
| **Weather:** | 60° Clear | **Time In:** 14:00 | **Time Out:** 15:35 |

### Well Information

| | | | | |
|---|---|---|---|---|
| Depth to Water: | (feet) 11.12 / 2.3 raiser | (from MP) | | |
| Total Depth: | (feet) 18.62 | (from MP) | | |
| Length of Water Column: | (feet) | | | |
| Volume of Water in Well: | (gal) | | | |
| Three Well Volumes: | (gal) | | | |

| | | | |
|---|---|---|---|
| Well Type: | Flushmount | | (Stick-Up) |
| Well Material: | Stainless Steel | | (PVC) |
| Well Locked: | Yes | | (No) |
| Measuring Point Marked: | Yes | | (No) |
| Well Diameter: | (1") | 2" | Other: Jemo |

### Purging Information

| | | | | |
|---|---|---|---|---|
| Purging Method: | Bailer | (Peristaltic) | Grundfos | Other: |
| Tubing/Bailer Material: | St. Steel | (Polyethylene) | Teflon | Other: |
| Sampling Method: | (Bailer) | (Peristaltic) | Grundfos | Other: |
| Duration of Pumping: | (min) ~~Stab~~ | 14:04 – 15:30 | | |
| Average Pumping Rate: | (ml/min) | Water-Quality Meter Type: | | Horiba U-10 |
| Total Volume Removed: | (gal) 5 | Did well go dry: | Yes | (No) |

| Conversion Factors | | | | |
|---|---|---|---|---|
| gal / ft. of water | 1" ID | 2" ID | 4" ID | 6" ID |
| | 0.041 | 0.163 | 0.653 | 1.469 |
| 1 gal = 3.785 L =3875 ml = 0.1337 cubic feet | | | | |

| Unit Stability | | | |
|---|---|---|---|
| pH | DO | Cond. | ORP |
| ± 0.1 | ± 10% | ± 3.0% | ± 10 mV |

| Parameter: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| | 2:05 | 2:10 | 2:15 | 2:21 | 2:26 | 2:31 | 2:36 | 2:41 | 2:46 |
| Volume Purged (gal) | | | | | | | | | |
| Rate (mL/min) | 100 | | | | | | | | |
| Depth to Water (ft.) | NA | | | | | | | | |
| pH | 6.63 | 6.56 | 6.56 | 6.55 | 6.54 | 6.54 | 6.52 | 6.55 | 6.55 |
| Temp. (C) | 15.26 | 15.23 | 15:23 | 15.27 | 15.56 | 15.26 | 15.27 | 15.20 | 15.22 |
| Conductivity (mS/cm) | 0.530 | 0.542 | 0.545 | 0.543 | 0.542 | 0.541 | 0.541 | 0.544 | 0.543 |
| Dissolved Oxygen | 5.16 | 3.27 | 3.29 | 3.41 | 3.25 | 3.25 | 4.05 | 3.19 | 3.23 |
| ORP (mV) | 82 | 23 | 34 | 37 | 38 | 39 | 47 | 42 | 45 |
| Turbidity (NTU) | 999 | 999 | 999 | 721.3 | 480 | 483 | 209 | 147 | 145 |
| Notes: | | | cleaned meter | | | cleaned meter | change do to meter drainage (not calibrating) | | |

### Sampling Information

| Analyses | # | Laboratory |
|---|---|---|
| VOC | | CAS |
| CF/total diss | | CAS |
| | | |
| | | |
| | | |
| Sample ID: SI-47-B27 | Sample Time: 15:20 | |
| MS/MSD: (Yes) | No | |
| Duplicate: Yes | (No) | |
| Duplicate ID | Dup. Time: | |
| Chain of Custody Signed By: JRobertson | | |

**Problems / Observations**

**GM Tarrytown NY**
**64462-027**

Site Investigation Sampling

*Site* *Event*

# GROUNDWATER SAMPLING LOG

| | | | |
|---|---|---|---|
| **Sampling Personnel:** | Jo Ann Robertson | **Well ID:** | SI-47-B27 |
| **Client / Job Number:** | GM Tarrytown NY 64462-027 | **Date:** | 10/5 |
| **Weather:** | | **Time In:** | **Time Out:** |

## Well Information

| | | |
|---|---|---|
| Depth to Water: | (feet) | (from MP) |
| Total Depth: | (feet) | (from MP) |
| Length of Water Column: | (feet) | |
| Volume of Water in Well: | (gal) | |
| Three Well Volumes: | (gal) | |

| | | | |
|---|---|---|---|
| Well Type: | Flushmount | | Stick-Up |
| Well Material: | Stainless Steel | | PVC |
| Well Locked: | Yes | | No |
| Measuring Point Marked: | Yes | | No |
| Well Diameter: | 1" | 2" | Other: |

## Purging Information

| | | | | |
|---|---|---|---|---|
| Purging Method: | Bailer | Peristaltic | Grundfos | Other: |
| Tubing/Bailer Material: | St. Steel | Polyethylene | Teflon | Other: |
| Sampling Method: | Bailer | Peristaltic | Grundfos | Other: |

| | | | | |
|---|---|---|---|---|
| Duration of Pumping: | (min) | | | |
| Average Pumping Rate: | (ml/min) | Water-Quality Meter Type: | | Horiba U-10 |
| Total Volume Removed: | (gal) | Did well go dry: | Yes | No |

| Conversion Factors | | | | |
|---|---|---|---|---|
| gal / ft. of water | 1" ID | 2" ID | 4" ID | 6" ID |
| | 0.041 | 0.163 | 0.653 | 1.469 |
| 1 gal = 3.785 L =3875 ml = 0.1337 cubic feet | | | | |

| Unit Stability | | | |
|---|---|---|---|
| pH | DO | Cond. | ORP |
| ± 0.1 | ± 10% | ± 3.0% | ± 10 mV |

| Parameter: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| | 2:56 | 3:07 | | | | | | | |
| Volume Purged (gal) | | | | | | | | | |
| Rate (mL/min) | | | | | | | | | |
| Depth to Water (ft.) | | | | | | | | | |
| pH | 6.55 | 6.56 | | | | | | | |
| Temp. (C) | 15.19 | 15.20 | | | | | | | |
| Conductivity (mS/cm) | 0.544 | 0.545 | | | | | | | |
| Dissolved Oxygen | 3.17 | 3.70 | | | | | | | |
| ORP (mV) | 48 | 48 | | | | | | | |
| Turbidity (NTU) | 79.8 | 36.1 | | | | | | | |
| Notes: | | | | | | | | | |

## Sampling Information

| Analyses | # | Laboratory |
|---|---|---|
| | | CAS |
| | | CAS |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| Sample ID: | | Sample Time: |
| MS/MSD: | Yes | No |
| Duplicate: | Yes | No |
| Duplicate ID | | Dup. Time: |
| Chain of Custody Signed By: | | |

## Problems / Observations

**GM Tarrytown NY**
**64462-027**
*Site*

Site Investigation Sampling
*Event*

# GROUNDWATER SAMPLING LOG

**Sampling Personnel:** Jo Ann Robertson
**Well ID:** SI-47-B28
**Client / Job Number:** GM Tarrytown NY 64462-027
**Date:** 10/5/04
**Weather:** 65° Clear / Windy
**Time In:** 11:00 **Time Out:** 12:40

## Well Information

| | | | |
|---|---|---|---|
| Depth to Water: | 12.3 (feet) | (2 ft raiser) (from MP) | |
| Total Depth: | 19 (feet) | (from MP) | |
| Length of Water Column: | (feet) 6.7 | | |
| Volume of Water in Well: | (gal) | | |
| Three Well Volumes: | (gal) | | |

| | | | |
|---|---|---|---|
| Well Type: | Flushmount | (Stick-Up) | |
| Well Material: | Stainless Steel | (PVC) | |
| Well Locked: | Yes | (No) | |
| Measuring Point Marked: | Yes | (No) | |
| Well Diameter: | (1") | 2" | Other: temp. well |

## Purging Information

| | | | | |
|---|---|---|---|---|
| Purging Method: | Bailer | (Peristaltic) | Grundfos | Other: |
| Tubing/Bailer Material: | St. Steel | (Polyethylene) | Teflon | Other: |
| Sampling Method: | (Bailer) | (Peristaltic) | Grundfos | Other: |

Duration of Pumping: (min) 11:21 - 12:27
Average Pumping Rate: (ml/min) 100 Water-Quality Meter Type: Horiba U-22
Total Volume Removed: (gal) 4 Did well go dry: Yes No

| Conversion Factors | | | | |
|---|---|---|---|---|
| gal / ft. of water | 1" ID | 2" ID | 4" ID | 6" ID |
| | 0.041 | 0.163 | 0.653 | 1.469 |
| 1 gal = 3.785 L =3875 ml = 0.1337 cubic feet | | | | |

| Unit Stability | | | |
|---|---|---|---|
| pH | DO | Cond. | ORP |
| ± 0.1 | ± 10% | ± 3.0% | ± 10 mV |

| Parameter: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 11:31 | 11:36 | 11:41 | 11:46 | 11:53 | 11:57 | 12:00 | 12:05 | 12:08 | 12:11 |
| Volume Purged (gal) | | | | | | | | | | |
| Rate (mL/min) | 100 ml/min | 100 | | | | | | | | |
| Depth to Water (ft.) | | | | | | | | | | |
| pH | 6.81 | 6.85 | 6.91 | 6.94 | 7.02 | 7.05 | 7.05 | 7.08 | 7.08 | 7.0 |
| Temp. (C) | 14.45 | 14.41 | 14.38 | 14.30 | 14.30 | 14.51 | 14.26 | 14.26 | 14.30 | 14.2 |
| Conductivity (mS/cm) | 0.556 | 0.557 | 0.56 | 0.564 | 0.569 | 0.570 | 0.569 | 0.569 | 0.569 | 0.57 |
| Dissolved Oxygen | 2.82 | 2.60 | 4.06 | 3.79 | 2.91 | 2.79 | 2.74 | 2.74 | 2.79 | 2.74 |
| ORP (mV) | 88 | 61 | 54 | 44 | 42 | 40 | 51 | 57 | 58 | 61 |
| Turbidity (NTU) | 999 | 742 | 534 | 538 | 278 | 233 | 78.5 | 78.5 | 61.7 | 49. |
| Notes: | | | | cleaned flow meter | | | | | | |

## Sampling Information

| Analyses | # | Laboratory |
|---|---|---|
| VOC | 3 | CAS |
| Cr/total/Diss | 2 | CAS |
| | | |
| | | |
| | | |

Sample ID: SI-47-B28 Sample Time: 12:25
MS/MSD: Yes (No)
Duplicate: (Yes) No
Duplicate ID SI-47-B28 Dup. Time:
Chain of Custody Signed By: JRobertson

## Problems / Observations

Windy day, temp. changes with wind. turbidity was 46.8 at time of sampling.

**GM Tarrytown NY**
**64462-027**
*Site*

Site Investigation Sampling
*Event*

# GROUNDWATER SAMPLING LOG

| | | | |
|---|---|---|---|
| **Sampling Personnel:** | Jo Ann Robertson | **Well ID:** | SI-29-B36 |
| **Client / Job Number:** | GM Tarrytown NY 64462-027 | **Date:** | 10-6-04 |
| **Weather:** | 65° Clear | **Time In:** | 15:20 **Time Out:** 17:30 |

## Well Information

| | | | | |
|---|---|---|---|---|
| Depth to Water: | (feet) | 4.91 / 3mp (from MP) | | |
| Total Depth: | (feet) | 7 (from MP) | | |
| Length of Water Column: | (feet) | | | |
| Volume of Water in Well: | (gal) | | | |
| Three Well Volumes: | (gal) | | | |

| | | | |
|---|---|---|---|
| Well Type: | Flushmount | Stick-Up | |
| Well Material: | Stainless Steel | PVC | |
| Well Locked: | Yes | No | |
| Measuring Point Marked: | Yes | No | |
| Well Diameter: | 1" | 2" | Other: temp. |

## Purging Information

| | | | | |
|---|---|---|---|---|
| Purging Method: | Bailer | Peristaltic | Grundfos | Other: |
| Tubing/Bailer Material: | St. Steel | Polyethylene | Teflon | Other: |
| Sampling Method: | Bailer | Peristaltic | Grundfos | Other: |

| | | | | | |
|---|---|---|---|---|---|
| Duration of Pumping: | (min) | 15:31 – 17:15 | | | |
| Average Pumping Rate: | (ml/min) | 100 | Water-Quality Meter Type: | | Horiba U-10 / 22 |
| Total Volume Removed: | (gal) | 5 gallons | Did well go dry: | Yes | No |

| Conversion Factors | | | | |
|---|---|---|---|---|
| gal / ft. of water | 1" ID | 2" ID | 4" ID | 6" ID |
| | 0.041 | 0.163 | 0.653 | 1.469 |
| 1 gal = 3.785 L =3875 ml = 0.1337 cubic feet | | | | |

| Unit Stability | | | |
|---|---|---|---|
| pH | DO | Cond. | ORP |
| ± 0.1 | ± 10% | ± 3.0% | ± 10 mV |

| Parameter: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| | 3:38 | 3:48 | 3:58 | 4:03 | 4:08 | 4:13 | 4:18 | 4:23 | 4:28 |
| Volume Purged (gal) | | | | | | | | | |
| Rate (mL/min) | 150 | | | | | | | | |
| Depth to Water (ft.) | | | | | | | | | |
| pH | 6.74 | 6.77 | 6.76 | 6.75 | 6.75 | 6.75 | 6.75 | 6.75 | 6.74 |
| Temp. (C) | 18.75 | 18.67 | 18.67 | 18.67 | 18.69 | 18.66 | 18.65 | 18.65 | 18.65 |
| Conductivity (mS/cm) | 0.522 | 0.506 | 0.489 | 0.484 | 0.481 | ~~0.481~~ 0.478 | 0.475 | 0.475 | 0.470 |
| Dissolved Oxygen | 1.19 | 2.52 | 0.46 | 0.42 | 0.40 | 0.40 | 0.38 | 0.36 | 0.36 |
| ORP (mV) | -100 | -112 | -115 | -116 | -116 | -117 | -117 | -118 | -118 |
| Turbidity (NTU) | 530 | 435 | 375 | 242 | 157 | 89 | 49.7 | 46.2 | 36.2 |
| Notes: | ~~530~~ | ~~435~~ | | | | | | | |

## Sampling Information

| Analyses | # | Laboratory |
|---|---|---|
| | | CAS |
| | | CAS |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| Sample ID: | | Sample Time: |
| MS/MSD: | Yes | No |
| Duplicate: | Yes | No |
| Duplicate ID | | Dup. Time: |
| Chain of Custody Signed By: | | |

**Problems / Observations**

**GM Tarrytown NY**
**64462-027**
*Site*

Site Investigation Sampling
*Event*

## GROUNDWATER SAMPLING LOG

| | | | |
|---|---|---|---|
| **Sampling Personnel:** | Jo Ann Robertson | **Well ID:** | S1-29-B36 |
| **Client / Job Number:** | GM Tarrytown NY 64462-027 | **Date:** | |
| **Weather:** | | **Time In:** | **Time Out:** |

### Well Information

| | | |
|---|---|---|
| Depth to Water: | (feet) | (from MP) |
| Total Depth: | (feet) | (from MP) |
| Length of Water Column: | (feet) | |
| Volume of Water in Well: | (gal) | |
| Three Well Volumes: | (gal) | |

| | | | |
|---|---|---|---|
| Well Type: | Flushmount | | Stick-Up |
| Well Material: | Stainless Steel | | PVC |
| Well Locked: | Yes | | No |
| Measuring Point Marked: | Yes | | No |
| Well Diameter: | 1" | 2" | Other: |

### Purging Information

| | | | | |
|---|---|---|---|---|
| Purging Method: | Bailer | Peristaltic | Grundfos | Other: |
| Tubing/Bailer Material: | St. Steel | Polyethylene | Teflon | Other: |
| Sampling Method: | Bailer | Peristaltic | Grundfos | Other: |

| | | | | |
|---|---|---|---|---|
| Duration of Pumping: | (min) | | | |
| Average Pumping Rate: | (ml/min) | Water-Quality Meter Type: | | Horiba U-10 |
| Total Volume Removed: | (gal) | | Did well go dry: Yes | No |

| Conversion Factors | | | | |
|---|---|---|---|---|
| gal / ft. of water | 1" ID | 2" ID | 4" ID | 6" ID |
| | 0.041 | 0.163 | 0.653 | 1.469 |
| 1 gal = 3.785 L =3875 ml = 0.1337 cubic feet | | | | |

| Unit Stability | | | |
|---|---|---|---|
| pH | DO | Cond. | ORP |
| ± 0.1 | ± 10% | ± 3.0% | ± 10 mV |

| Parameter: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| | 4:33 | 4:38 | 5:03 | 5:08 | 5:10 | | | | |
| Volume Purged (gal) | | | | | | | | | |
| Rate (mL/min) | 150 | | | | | | | | |
| Depth to Water (ft.) | NA | | | | | | | | |
| pH | 6.75 | 6.75 | 6.75 | 6.75 | 6.75 | | | | |
| Temp. (C) | 18.68 | 18.64 | 18.59 | 18.57 | 18.61 | | | | |
| Conductivity (mS/cm) | 0.465 | 0.466 | 0.455 | 0.454 | 0.453 | | | | |
| Dissolved Oxygen | 0.35 | 0.35 | 0.38 | 0.33 | 0.33 | | | | |
| ORP (mV) | -118 | -119 | -113 | -115 | -116 | | | | |
| Turbidity (NTU) | 33.3 | 39.2 | 21.0 | 16.1 | 15.5 | | | | |
| Notes: | | | | | | | | | |

### Sampling Information

| Analyses | # | Laboratory |
|---|---|---|
| | | CAS |
| | | CAS |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| Sample ID: | | Sample Time: |
| MS/MSD: | Yes | No |
| Duplicate: | Yes | No |
| Duplicate ID | | Dup. Time: |
| Chain of Custody Signed By: | | |

**Problems / Observations**

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: ~~OW-4~~ OW-3 Date: 05/25/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: SUNNY, WARM

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 1.28 Well Depth (ft): 14.02 Casing Dia. (in): 4

Water Column (ft): 12.74 Water Column (gal.): 8.31

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 24.95

| Casing Dia. (in) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| ~~4 (0.333)~~ | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)² x (CD/2)² x 23.5 x Wc
CD = Casing Dia. (ft)
Wc = Water Column (ft)

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):
(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)
Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 0935 End Time: 1035

Actual Volume Purged (gal.): 17

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0935 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 0940 | 13.39 | 7.36 | 36.1 | -61 | 0.00 | 89 | SLIGHTLY CLEAR |
| 0950 | 12.79 | 8.42 | 45.7 | -140 | 0.00 | 12 | CLEAR |
| 1000 | 12.99 | 8.67 | 46.1 | -148 | 0.00 | 10 | |
| 1005 | 13.07 | 8.74 | 46.2 | -150 | 0.00 | 10 | |
| 1010 | 12.47 | 8.97 | 45.8 | -165 | 0.00 | 11 | |
| 1015 | 12.69 | 9.06 | 46.1 | -170 | 0.00 | 8 | |
| 1020 | 12.63 | 9.20 | 46.1 | -180 | 0.00 | 6 | |
| 1025 | | | | | | | |

End Time: 1035 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1041

Depth to Water (ft): 1.31 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: VOCs & SVOCs (Stars)
Dupl ate

OW-3 5/25/2004

| TIME | TEMP | pH | conductivity | redox | DO | turbidity |
|---|---|---|---|---|---|---|
| 1030 | 12.82 | 9.28 | 45.9 | -185 | 0.00 | 8 |
| 1035 | 12.84 | 9.33 | 46.0 | -188 | 0.00 | 6 |

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-4 Date: 05/21/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow NY Weather: Sunny, Hot 79°

Remarks: Sampler(s): JC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): Flush w/CASING Well Depth (ft): 13.53 Casing Dia. (in): 4

Water Column (ft): 13.53 Water Column (gal.)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** ~~If 3 volume method:~~ Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-06 Date: 5/21/4

Project Name: GM AMEC Project No.: 276 360 008

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY

Remarks: Sampler(s): R. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 8.24 Well Depth (ft): 14.43 Casing Dia. (in): 2

Water Column (ft): 6.19 Water Column (gal.) 1.01

| Casing Dia. in. (ft) | Gallons/Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 3.0

Alternate Calculation: $(CD/2)^2 \times (CD/2) \times 23.5 \times WC$

CD = Casing Dia. (ft)

WC = Water Column (ft)

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 10:10 End Time:

Actual Volume Purged (gal.): 3

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ s/m | REDOX (Eh-mV) | DO ~~(mg/l)~~ g/L | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 10:11 | 13.42 | 8.19 | 47.2 | -143 | 7.26 | 10.3 | |
| 10:15 | 12.60 | 8.14 | 37.5 | -204 | 0.62 | 9.5 | |
| 10:20 | 12.58 | 8.12 | 34.9 | -220 | 0.47 | 4.9 | |
| 10:25 | 12.57 | 8.10 | 34.0 | -222 | 0.50 | 2.9 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: 10:25 Total Volume Purged (gal.):

Purged Dry: Y (N) ~~8.22~~ If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 10:25

Depth to Water (ft): 8.22 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-06-1 and OW-06-2 (DUPLICATE) FOR METALS

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-7 Date: 05/21/2004

Project Name: General Motors AMEC Project No.: 2163600000

Project Location: Sleepy Hollow, NY Weather: OVERCAST

Remarks: Sampler(s): JDC

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 8.96 Well Depth (ft): 14.89 Casing Dia. (in): 2

Water Column (ft): 5.93 Water Column (gal.) .967B

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 2.903

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons (water) per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation:
(CD/2) x (CD/2) x 3.14 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1028 End Time: 1050

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1028 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 1030 | 12.84 | 8.46 | 85.6 | 35 | 1.81 | 40 | |
| 1035 | 12.58 | 7.95 | 86.8 | 38 | 0.00 | 7 | |
| 1040 | 12.53 | 7.92 | 86.1 | 38 | 0.00 | 0 | |
| 1045 | 12.48 | 7.93 | 85.9 | 38 | 0.00 | 0 | |
| 1050 | 12.53 | 7.93 | 85.1 | 38 | 0.00 | 0 | |
| | | | | | | | |
| | | | | | | | |

End Time: 1050 Total Volume Purged (gal.): 4

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 1053

Depth to Water (ft): 8.86 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: Metals Only - FILTERED / UNFILTERED IN-LINE

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-8 Date: 5/19/14

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: RAIN, LIGHT

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 6.76 Well Depth (ft): 14.84 Casing Dia. (in): 2

Water Column (ft): 8.08 Water Column (gal.) 1.32

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 3.96

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): 0.15

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 11:36 End Time: 12:08

S/M Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | S/L | | If 3 volume method, include Start Time chemistry data only |
| 11:37 | 14.35 | 7.07 | 0.121 | -132 | 10.63 | 23.5 | |
| 11:45 | 14.03 | 7.03 | 0.117 | -197 | 7.31 | 8.3 | |
| 11:50 | 14.04 | 7.02 | 0.117 | -216 | 6.36 | 7.6 | |
| 11:55 | 14.04 | 7.02 | 0.117 | -228 | 5.52 | 7.3 | |
| 12:00 | 14.07 | 7.01 | 0.117 | -234 | 4.91 | 7.3 | |
| 12:05 | 14.01 | 7.01 | 0.117 | -246 | 3.93 | 7.4 | |

End Time: Total Volume Purged (gal.): 5 gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 12:10

Depth to Water (ft): 6.74 Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

OW-8-I VOCs & SVOCs (STARS

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-8 Date: 05/26/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: CLOUDY/RAIN/56°F

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 6.31 Well Depth (ft): 14.84 Casing Dia. (in): 2

Water Column (ft): 8.53 Water Column (gal.) 1.392

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 4.176 gal

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC; CD = Casing Dia. (ft), WC = Water Column (ft)

Purging Method: HB / ~~PP~~ / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, ~~PP = Peristaltic Pump~~, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 0821 End Time: 0855

Actual Volume Purged (gal.): 4.5

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0821 | | | s/m | | | | If 3 volume method, include Start Time chemistry data only |
| 0825 | 14.05 | 6.89 | 0.126 | -117 | 8.31 | 14.6 | CLEAR |
| 0830 | 14.86 | 6.93 | 0.129 | -139 | 6.80 | 6.2 | " |
| 0835 | 14.84 | 6.92 | 0.130 | -143 | 6.25 | 5.6 | " |
| 0840 | 14.79 | 6.93 | 0.131 | -147 | 5.55 | 5.5 | " |
| 0845 | 14.79 | 6.97 | 0.130 | -151 | 5.38 | 5.4 | " |
| 0850 | 14.74 | 7.00 | 0.130 | -151 | 5.25 | 5.4 | |
| 0855 | 14.68 | 7.02 | 0.130 | -148 | 5.14 | 5.4 | |

End Time: 0855 Total Volume Purged (gal.): 4.5

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 0858

Depth to Water (ft): 6.36 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: SAMPLED WELL OW-8 FOR METALS (FILTERED AND UNFILTERED) IN-LINE.

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-12 Date: 5/21/07

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY, HUMID

Remarks: _____ Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 4.48 Well Depth (ft): 14.48 Casing Dia. (in):

Water Column (ft): 10.00 Water Column (gal.) 1.63

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 4.89

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 14:04 End Time: _____

Actual Volume Purged (gal.): 5

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | s/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 14:05 | 14.09 | 7.34 | 70.7 | -18 | 4.81 | 6.0 | |
| 14:10 | 14.52 | 7.50 | 61.8 | -214 | 0.46 | 0.6 | |
| 14:15 | 14.57 | 7.54 | 61.7 | -218 | 0.35 | 0.8 | |
| 14:20 | 14.52 | 7.54 | 61.8 | -220 | 0.29 | 0.0 | |
| 14:25 | 14.63 | 7.54 | 61.8 | -220 | 0.30 | 0.0 | |
| | | | | | | | |
| | | | | | | | |

End Time: 14:25 Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 14:30

Depth to Water (ft): 4.47 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: OW-12-1 SVOCs & VOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-21 Date: 05/27/2004

Project Name: General Motors AMEC Project No.: 2762360000

Project Location: Sleepy Hollow, NY Weather: Cool, breezy

Remarks: Sampler(s): JJC

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 1.95 Well Depth (ft): 14.69 Casing Dia. (in): 2

Water Column (ft): 12.74 Water Column (gal.) 2.08

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.15 x WC; CD = Casing Dia. (ft); WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.24

Purging Method: ~~HB~~ / ~~PP~~ / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 1813 End Time: 1850

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1813 | ERROR3 | ?? | ms/m | Instrument | batt. | | If 3 volume method, include Start Time chemistry data only |
| 1820 | 13.69 | 7.56 | 91.8 | -226 | 0.44 | 105 | |
| 1825 | 13.70 | 7.54 | 91.7 | -226 | 0.38 | 90.6 | Clear/smells like petro. |
| 1830 | 13.61 | 7.48 | 91.6 | -223 | 0.35 | 74.9 | clear |
| 1835 | 13.61 | 7.71 | 91.2 | -237 | 0.31 | 59.5 | |
| 1840 | 13.61 | 7.76 | 91.1 | -241 | 0.31 | 58.8 | clear |
| 1845 | 13.61 | 7.74 | 91.1 | -240 | 0.31 | 58.4 | |
| 1850 | 13.59 | 7.79 | 91.1 | -245 | 0.29 | 58.2 | |

End Time: 1850 Total Volume Purged (gal.): 12

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 18:55

Depth to Water (ft): 1.90 ft. Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: SAMPLED OW-21 FOR VOCs AND SVOCs (STARS) USING RANGER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-22 Date: 05/21/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: OVERCAST/HUMID/90°

Remarks: Sampler(s): JC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 2.53 Well Depth (ft): 14.93 Casing Dia. (in): 2

Water Column (ft): 12.40 Water Column (gal.) 2.02

| Casing Dia. - in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.06 gal

Alternate Calculation: (CD/2) x (CD/2) x 3.14 x WC; CD = Casing Dia. (ft); WC = Water Column (ft)

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / (SLIGHTLY TURBID) / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 1351 End Time: 1415

Actual Volume Purged (gal.):

| Time | Temperature ((°C) / °F) | pH (units) | Conductivity ~~(us/cm)~~ s/m | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1351 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1355 | 12.93 | 7.65 | 0.211 | -143 | 0.00 | 39 | CLEAR |
| 1400 | 13.13 | 7.73 | 0.136 | -153 | 0.00 | 0 | CLEAR |
| 1405 | 13.45 | 7.80 | 0.119 | -161 | 0.00 | 0 | |
| 1410 | 13.51 | 7.84 | 0.118 | -164 | 0.00 | 0 | |
| 1415 | 13.63 | 7.85 | 0.118 | -166 | 0.00 | 0 | |
| | | | | | | | |
| | | | | | | | |

End Time: 1415 Total Volume Purged (gal.): 7

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start) / End): 1419

Depth to Water (ft): 2.55 Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-22-1 FOR VOC & SVOC (STARS) WITH BAILER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-24 Date: 5/3/14

Project Name: GM Sleepy Hollow AMEC Project No.: 276 360 000

Project Location: Sleepy Hollow, NY Weather: raining

Remarks: Sampler(s): K. Saunders

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 10.31 Well Depth (ft): 18.84 Casing Dia. (in): 2

Water Column (ft): 8.53 Water Column (gal.) 1.39

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 1200 End Time: 1230

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1200 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1215 | 13.62 | 6.77 | 0.2 | 188 | 11.33 | 40 | |
| 1225 | 13.50 | 6.16 | 0.1 | 261 | 10.86 | 33 | |
| pumped dry | | | | | | | |

End Time: 1230 Total Volume Purged (gal.):

Purged Dry: (Y) / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** OW-24-1 Sample Time (Start / End): 1230

Depth to Water (ft): OW-24-2 (duplicate) Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: used bailer for VOCs & Chromium (filtered & unfiltered)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-25 Date: 05/21/2004

Project Name: General Motors AMEC Project No.: 2163600000

Project Location: Sleepy Hollow, NY Weather: overcast

Remarks: Sampler(s): JMC

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.42 Well Depth (ft): 17.58 Casing Dia. (in): 2

Water Column (ft): 6.16 Water Column (gal.) ~~1.053~~ 1.005

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 3.015 gal

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons/Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1114 End Time: _____

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1114 | | | s/m | | | | If 3 volume method, include Start Time chemistry data only |
| 1115 | 17.23 | 8.00 | 0.178 | 68.0 | 7.43 | 750 | |
| 1120 | 14.86 | 7.95 | 0.179 | 67 | 5.16 | 500 | |
| 1125 | 14.09 | 7.75 | 0.175 | -8 | 3.06 | 370 | |
| 1135 | 13.72 | 7.75 | 0.174 | -62 | 1.17 | 37 | |
| 1140 | 14.36 | 7.78 | 0.170 | -69 | 0.74 | 12 | |
| 1145 | 15.02 | 7.82 | 0.170 | -74 | 0.73 | 8 | |

End Time: 1145 Total Volume Purged (gal.): 3.5

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 1149

Depth to Water (ft): 11.49 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: SAMPLE OW-25-1 FOR VOC & SVOC (STARS) WITH BAILER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-27 Date: 05/19/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: OVERCAST

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 6.87 Well Depth (ft): 15.96 Casing Dia. (in):

Water Column (ft): 9.09 Water Column (gal.) 1483

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: _____ End Time: _____

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1355 | | | | | | 60 | CLOUDY WATER |
| 1400 | | | | | | 30 | |
| 1410 | | | | | | 45 | |
| 1415 | | | | | | 20 | |
| 1420 | | | | | | 13 | |
| 1425 | | | | | | 7.2 | |
| 1430 | | | | | | 6.0 | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-28 Date: 5/14/04

Project Name: GM AMEC Project No.: 276360008

Project Location: Sleepy Hollow, NY Weather:

Remarks: Sampler(s): C. Schrader

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 12.1' Well Depth (ft): 21.66' Casing Dia. (in):

Water Column (ft): Water Column (gal.):

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: $(CD/2)^2 \times (CD/2) \times 2.6 = Vg$

CD = Casing Dia. (ft)

Ws = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1250 End Time: 1345

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1300 | | | | | | 116.2 | |
| 1310 | | | | | | 77.2 | |
| 1320 | | | | | | 18.2 | |
| 1330 | | | | | | 5.24 | |
| 1335 | | | | | | 3.66 | |
| 1340 | | | | | | 3.57 | |
| 1345 | | | | | | 3.42 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-28 Date: 5/21/14

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 12.14 Well Depth (ft): 21.29 Casing Dia. (in): 2

Water Column (ft): 9.15 Water Column (gal.) 1.49

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 4.5

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:16 End Time:

Actual Volume Purged (gal.): 4.5

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | s/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 9:20 | 13.25 | 7.86 | 75.4 | -217 | 8.87 | 86.7 | |
| 9:25 | 13.21 | 7.81 | 88.7 | -216 | 7.35 | 26.4 | |
| 9:30 | 13.63 | 7.77 | 94.3 | -204 | 7.00 | 22.8 | |
| 9:35 | 13.46 | 7.77 | 96.8 | -218 | 0.91 | 20.5 | |
| 9:40 | 13.50 | 7.78 | 96.1 | -219 | 0.74 | 12.3 | |
| | | | | | | | |

End Time: 9:40 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 9:45

Depth to Water (ft): 12.24 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-28-I FOR VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-27 Date: 5/21/04

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY Hollow NY Weather: CLOUDY

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 6.98 Well Depth (ft): 15.75 Casing Dia. (in):

Water Column (ft): 8.8 Water Column (gal.) 1.44

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 4.3

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / (SLIGHTLY TURBID) / TURBID

Alternate Calculation: (CD/2)x(CD/2)x3.14 x WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 10:45 End Time:

Actual Volume Purged (gal.): 5

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 47 | | | s/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 10:50 | 13.05 | 7.88 | 0.204 | -84 | 2.10 | 566.0 | |
| 10:51 | 13.13 | 7.70 | 0.174 | -96 | 0.56 | 105.0 | |
| 10:55 | 13.11 | 7.75 | 0.175 | -102 | 0.38 | 37.2 | |
| 11:00 | 13.08 | 7.74 | 0.180 | -108 | 0.36 | 20.4 | |
| 11:05 | 13.01 | 7.74 | 0.178 | -112 | 0.32 | 15.6 | |
| 11:10 | 13.03 | 7.74 | 0.181 | -114 | 0.28 | 16.1 | |

End Time: 11:10 Total Volume Purged (gal.):

Purged Dry: (Y) / N No If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 11:15

VOCs, SVOCs

Depth to Water (ft): 7.01 Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

SVOCs

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-27-1 for VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-29 Date: 5/13/04

Project Name: GM AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather:

Remarks: Sampler(s): C. Schrader

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.6' Well Depth (ft): 22.8' Casing Dia. (in):

Water Column (ft): Water Column (gal.)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / (SP)

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Pumping Rate (gpm):

| Casing Dia. (in) | Gallons / Foot (Gal./Ft.) |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**WELL PURGE DATA:** If 3 volume method: Start Time: 1310 End Time: 1520

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1435 | | | | | | 124.7 | |
| 1445 | | | | | | 73.4 | |
| 1455 | | | | | | 21.4 | |
| 1505 | | | | | | 17.5 | |
| 1510 | | | | | | 13.2 | |
| 1515 | | | | | | 12.7 | |
| 1520 | | | | | | 12.4 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-29 Date: 5/20/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: HAZY, SUNNY

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 12.00 (FROM TOP OF SLAB) Well Depth (ft): 23.50 Casing Dia. (in): 2

Water Column (ft): 11.5 Water Column (gal.) 1.88

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.6

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Alternate Calculation: (CD/2)² x (CD/2) x 3.14 x WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 13:18 End Time:

Actual Volume Purged (gal.): 6

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | S/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 13:20 | 15.67 | 7.28 | 0.661 | -184 | 9.69 | 514.0 | |
| 13:30 | 16.15 | 7.28 | 0.669 | -187 | 0.36 | 119.0 | |
| 13:40 | 15.90 | 7.28 | 0.671 | -188 | 0.41 | 43.7 | |
| 13:45 | 15.92 | 7.29 | 0.671 | -189 | 0.40 | 28.4 | |
| 13:50 | 16.05 | 7.28 | 0.674 | -189 | 0.35 | 22.6 | |
| 13:55 | 16.17 | 7.28 | 0.671 | -188 | 0.32 | 17.5 | |
| 14:00 | 15.98 | 7.27 | 0.670 | -188 | 0.32 | 16.6 | |
| End Time: 14:09 / 14:08 | 15.69 | 7.27 | 0.666 | -188 | Total Volume Purged (gal.): 0.24 | 16.0 | |

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 14:10

Depth to Water (ft): 12.00 Sampling Method: Bailer / In-Line (VOCs SVOCs)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

GRAY

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

OW-29-1 for VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-30 Date: 5/18/04

Project Name: GM AMEC Project No.: 276360000

Project Location: Tarrytown, NY Weather: overcast, 60s

Remarks: Sampler(s): J. LaRock

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.09' Well Depth (ft): 24.62' Casing Dia. (in):

Water Column (ft): _____ Water Column (gal.) _____

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Alternate Calculation: (CD)² x (CD) x 2.5 = gal.
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 0830 End Time: 1020

Actual Volume Purged (gal.):

| Time (24 hrs) | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:45 | | | | | | 22 | |
| 9:55 | | | | | | 18 | |
| 10:05 | | | | | | 25 | |
| 10:10 | | | | | | 20 | |
| 10:15 | | | | | | 21 | |
| 10:20 | | | | | | 20 | |
| | | | | | | | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-30 Date: 05/21/2004

Project Name: GENERAL MOTORS AMEC Project No.: 2763600000

Project Location: SLEEPY HOLLOW, NM Weather: OVERCAST

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 11.31 Well Depth (ft): 24.39 Casing Dia. (in): 2

Water Column (ft): 13.08 Water Column (gal.) 2.135

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.41 gal

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)^2 x (CD/2) x 23.5 = WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 0914 End Time: 0950

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0914 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 0920 | 14.49 | 8.71 | 73.3 | -149 | 0.64 | 210 | SLIGHTLY TURBID |
| 0925 | 14.59 | 9.11 | 68.7 | -160 | 0.00 | 40 | CLEAR |
| 0930 | 14.56 | 9.22 | 67.8 | -164 | 0.00 | 15 | |
| 0935 | 14.65 | 9.25 | 67.9 | -165 | 0.00 | 8 | |
| 0940 | 14.62 | 9.26 | 67.8 | -165 | 0.00 | 6 | |
| 0945 | 14.62 | 9.26 | 67.9 | -165 | 0.00 | 6 | |
| 0950 | 14.62 | 9.26 | 68.1 | -164 | 0.00 | 7 | |

End Time: 0950 Total Volume Purged (gal.): 7 gallons

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 0953

Depth to Water (ft): 11.65 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: SAMPLE OW-30-1 FOR VOC AND SVOC (STARS) WITH BAILER.

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-31 Date: 5/18/04

Project Name: GM AMEC Project No.: 276380 000

Project Location: Tarrytown, NY Weather: overcast, 60's

Remarks: Sampler(s): C. Schroder

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 9.92' Well Depth (ft): 24.50' Casing Dia. (in):

Water Column (ft): _____ Water Column (gal.) _____

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Purging Method: HB / PP / CP / (SP)

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Pumping Rate (gpm): _____

| Casing Dia. (in) (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD)² x (CD)² x 23.5 = VC

CD = Casing Dia. (ft)

VC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:20pm End Time: 0200pm

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1220 | | | | | | 30.2 | |
| 0130 | | | | | | 21.7 | |
| 0140 | | | | | | 10.8 | |
| 0150 | | | | | | 9.8 | |
| 0200 | | | | | | 10.2 | |
| | | | | | | | |
| | | | | | | | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-31 Date: 5/21/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 10.10 Well Depth (ft): 24.48 Casing Dia. (in): 2

Water Column (ft): 14.38 Water Column (gal.) 2.35

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 7.0

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.14 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:02 End Time:

Actual Volume Purged (gal.): 7

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | s/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 8:05 | 13.48 | 7.03 | 0.187 | -262 | 0.63 | 78.5 | |
| 8:15 | 13.63 | 7.11 | 0.169 | -338 | 0.35 | 31.4 | |
| 8:20 | 13.59 | 7.10 | 0.168 | -341 | 0.37 | 23.4 | |
| 8:25 | 13.46 | 7.09 | 0.164 | -346 | 0.35 | 10.6 | |
| 8:30 | 13.36 | 7.10 | 0.160 | -360 | 0.30 | 8.3 | |
| 8:35 | 13.40 | 7.09 | 0.161 | -365 | 0.29 | 5.6 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 8:40

Depth to Water (ft): 10.14 Sampling Method: (Bailer) / In-Line (VOCs, SVOCs)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-31-I FOR VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-32 Date: 05/14/2004

Project Name: GENERAL MOTORS AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW, NY Weather: OVERCAST

Remarks: _____ Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 4.06 Well Depth (ft): 17.14 Casing Dia. (in):

Water Column (ft): 13.08 Water Column (gal.) 2.135

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / PP / CP / (SP)
(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump) Pumping Rate (gpm): _____

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: _____ End Time: _____

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| | | | | | | | |
| | | | | | | | |
| 1140 | | | | | | 75 | |
| 1150 | | | | | | 28 | |
| 1155 | | | | | | 50 | |
| 1200 | | | | | | 19 | |
| 1205 | | | | | | 15 | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-32 Date: 05/21/2024

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: OVERCAST, HUMID

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.09 Well Depth (ft): 16.97 Casing Dia. (in): 2

Water Column (ft): 12.88 Water Column (gal.) 2.10

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.30

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft.)
WC = Water Column (ft.)

**WELL PURGE DATA:** If 3 volume method: Start Time: ~~1122~~ End Time: 1255

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1223 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 1225 | 17.17 | 9.73 | 94.6 | -120 | 7.97 | 410 | |
| 1230 | 14.23 | 8.90 | 0.113 | -165 | 0.00 | 77 | s/m conductivity |
| 1235 | 14.70 | 8.97 | 0.128 | -200 | 0.00 | 26 | |
| 1240 | 13.90 | 9.05 | 0.142 | -219 | 0.00 | 20 | |
| 1245 | 13.86 | 9.25 | 0.144 | -228 | 0.00 | 11 | |
| 1250 | 13.71 | 9.23 | 0.150 | -241 | 0.00 | 9 | |
| 1255 | 13.90 | 9.28 | 0.151 | -242 | 0.00 | 13 | |

End Time: 1255 Total Volume Purged (gal.): 6.5

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1303

Depth to Water (ft): 4.31 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: DUPLICATE (OW-32-1 AND OW-32-2) FOR VOC & SVOC (STARS) WITH BOLDER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-33 Date: 05/13/2004

Project Name: GM AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: OVERCAST, COOL

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 5.90 Well Depth (ft): 18.53 Casing Dia. (in):

Water Column (ft): 12.63 Water Column (gal.) 2.0612

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0930 | | | | | | 220 | |
| 0940 | | | | | | 160 | |
| 0950 | | | | | | 80 | |
| 1010 | | | | | | 55 | |
| 1020 | | | | | | 80 | |
| 1030 | | | | | | 55 | |
| 1040 | | | | | | 75 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-33 Date: 5/21/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY, HUMID

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 6.12 Well Depth (ft): 18.50 Casing Dia. (in): 2

Water Column (ft): 12.38 Water Column (gal.) 2.02

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.06

Alternate Calculation: (CD/2) x (CD/2) x (2.3) x (WC = Water Column (ft); CD = Casing Dia. (ft))

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:51 End Time:

Actual Volume Purged (gal.): 7

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | s/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 13:00 | 13.41 | 7.70 | 62.6 | -176 | 2.64 | 46.6 | |
| 13:05 | 12.98 | 7.51 | 65.1 | -190 | 0.47 | 16.3 | |
| 13:10 | 12.93 | 7.49 | 66.5 | -196 | 0.34 | 15.7 | |
| 13:15 | 13.01 | 7.45 | 68.4 | -199 | 0.32 | 4.2 | |
| 13:20 | 13.01 | 7.43 | 69.1 | -201 | 0.32 | 2.5 | |
| 13:25 | 13.01 | 7.44 | 68.7 | -203 | 0.29 | 1.7 | |
| 13:30 | 13.29 | 7.46 | 67.0 | -208 | 0.30 | 1.6 | |

End Time: 13:34 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 13:35

Depth to Water (ft): 6.13 Sampling Method: Bailer / In-Line (VOCs, SVOCs)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID GRAY FINES

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-33-1 FOR VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: DW-34 Date: 05/13/2004

Project Name: GM AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW, NY Weather: OVERCAST

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): Well Depth (ft): Casing Dia. (in):

Water Column (ft): Water Column (gal.)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1410 | | | | | | 110 | |
| 1420 | | | | | | 95 | |
| 1430 | | | | | | 70 | |
| 1440 | | | | | | 85 | |
| 1450 | | | | | | 80 | |
| 1500 | | | | | | 75 | |
| 1510 | | | | | | 85 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-34 Date: 5/21/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY

Remarks: Sampler(s): K SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 10.30 Well Depth (ft): 15.42 Casing Dia. (in): 2

Water Column (ft): 5.12 Water Column (gal.) 0.84

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 2.5

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 11:53 End Time:

Actual Volume Purged (gal.): 4

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO ~~(mg/l)~~ | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | S/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 11:55 | 13.56 | 10.03 | 69.3 | -78 | 4.75 | 61.3 | REPLACE TUBING 11:58 RE-START 12:02 |
| 12:05 | 12.41 | 10.16 | 63.0 | -83 | 1.01 | 35.6 | |
| 12:10 | 12.40 | 10.21 | 64.0 | -107 | 0.48 | 42.8 | |
| 12:15 | 12.51 | 10.22 | 63.7 | -131 | 0.37 | 39.6 | |
| 12:20 | 12.56 | 10.20 | 63.6 | -135 | 0.35 | 40.8 | |
| | | | | | | | |
| | | | | | | | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 12:25

Depth to Water (ft): 10.34 Sampling Method: Bailer / In-Line (VOCs & SVOCs)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

OW-34-1 MS/MSD TRIPLE VOLUME FOR VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-34 Date: 7/26/4

Project Name: GM SLEEPY HOLLOW AMEC Project No.: 276 360 006

Project Location: NY Weather: SUNNY, LIGHT BREEZE

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm): —

Depth to Water (ft): 9.16 Well Depth (ft): 15.49 Casing Dia. (in): 2"

Water Column (ft): 6.33 Water Column (gal.) 1.03

Clear Bailer Survey: ~~LNAPL: Y / N~~ ~~DNAPL: Y / N~~

Volume of Water to be Purged (3 volume method): 3.1 gal

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): 0.092

(HB=Hand Bailed, PP = Peristaltic Pump, ~~CP = Centrifugal Pump~~, SP = Submersible Pump) 349 ml/min

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Lineal Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2 x (CD/2 x 3.1 x WC

CD = Casing Dia. (ft)

WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:59 End Time: 10:04

Actual Volume Purged (gal.): 6

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 8:59 | | | mS/m | | 9/L | | If 3 volume method, include Start Time chemistry data only |
| 9:05 | 17.81 | 11.55 | 82.2 | -7 | 5.25 | 100 | |
| 9:15 | 18.16 | 11.63 | 79.4 | 2 | 4.41 | 55/25.6 | |
| 9:25 | 17.92 | 11.67 | 77.7 | 3 | 3.99 | 46/18.4 | |
| 9:35 | 17.78 | 11.72 | 76.1 | 2 | 3.47 | 38/17.8 | |
| 9:~~45~~50 | 18.24 | 11.79 | 74.8 | -2 | 3.06 | 37 | |
| 9:55 | 17.72 | 11.82 | 74.2 | -2 | 2.91 | 41 | |
| 10:05 | 17.78 | 11.84 | 73.3 | -4 | 2.67 | 37 | |

End Time: 10:05 Total Volume Purged (gal.): 6

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 10:05

Depth to Water (ft): 9.13 Sampling Method: (Bailer) / In-Line (VOCs / Metals)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: Metals, Unfiltered, & Filtered (0.45 micron)
VOCs w/bailer
+ DUP

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW 36 Date: 05/10/04

Project Name: GM AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.88' Well Depth (ft): 16.8' Casing Dia. (in):

Water Column (ft): 11.92 Water Column (gal.) .9453

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 9:25 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0940 | | | | | | — | TOO HIGH FOR METER TO READ |
| 0955 | | | | | | — | TOO HIGH FOR METER |
| 1005 | | | | | | — | TOO HIGH |
| 1015 | | | | | | — | TOO HIGH |
| 1025 | | | | | | — | TOO HIGH |
| 1035 | | | | | | — | TOO HIGH |
| 1150 | | | | | | 350 | STILL MUDDY AFTER PURGING |

End Time: 12:20 Total Volume Purged (gal.): ~55 gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-36 Date: 09/19/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: Overcast/Humid

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.85 Well Depth (ft): 15.83 Casing Dia. (in):

Water Column (ft): 10.98 Water Column (gal.) 1.7919

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2 (0.167)) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft), WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 0929 End Time: 1015

s/m Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO ~~(mg/l)~~ g/l | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0929 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0929 | 14.72 | 7.30 | 0.152 | 146 | 0.10 | 770 | |
| 0940 | 14.69 | 8.25 | 0.151 | 107 | 0.00 | 45 | |
| 0954 | 14.74 | 8.54 | 0.150 | 83 | 0.00 | 13 | |
| 1000 | 14.75 | 8.57 | 0.150 | 78 | 0.00 | 13 | |
| 1005 | 14.75 | 8.58 | 0.150 | 75 | 0.00 | 11 | |
| 1010 | 14.77 | 8.60 | 0.150 | 72 | 0.00 | 10 | |
| 1015 | 14.74 | 8.60 | 0.150 | 71 | 0.00 | 10 | |

End Time: 1015 Total Volume Purged (gal.): ~8gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 10:10

Depth to Water (ft): 4.81 Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-36-1 FOR VOCs AND SVOCs (STARS)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-37 Date: 5/19/4

Project Name: GM AMEC Project No.: 276 360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY, HUMID

Remarks: Sampler(s): KS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.98 Well Depth (ft): 17.05 Casing Dia. (in): 2

Water Column (ft): 12.07 Water Column (gal.) 1.97

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.9

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): 0.14

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:52 End Time: 9:42

S/M Actual Volume Purged (gal.): ~7 gal.

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 8:53 | 14.46 | 6.97 | 0.122 | 163 | 2.62 | 113.0 | |
| 9:00 | 14.11 | 7.17 | 0.113 | 29 | 0.51 | 87.2 | |
| 9:10 | 14.27 | 7.25 | 0.110 | 34 | 0.41 | 26.0 | |
| 9:20 | 14.23 | 7.38 | 0.108 | -19 | 0.34 | 15.8 | |
| 9:30 9:25 | 14.15 | 7.47 | 0.107 | -34 | 8.29 | 8.7 | RAIN BEGINS |
| 9:35 | 14.15 | 7.48 | 0.106 | -37 | 0.31 | 8.1 | |
| 9:40 | 14.13 | 7.49 | 0.106 | -39 | 0.28 | 6.4 | |

End Time: 9:42 Total Volume Purged (gal.):

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** VOCs & SVOCs (STARS) Sample Time (Start / End): 9:45

Depth to Water (ft): 5.00 Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID for SVOCs

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-37-1 & DUPLICATE OW-37-2

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-38 Date: 05/11/2004

Project Name: ~~Sleepy GM~~ AMEC Project No.: 2763600000

Project Location: Sleepy Hollow Weather: SUNNY 80S

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.92 Well Depth (ft): 17.22 Casing Dia. (in):

Water Column (ft): 12.30 Water Column (gal.) 2.007

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1320 End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1400 | | | | | | 130 | PUMP AT 72Hz / CLOUDY |
| 1410 | | | | | | 90 | PUMP AT 72Hz / SOMEWHAT CLOUDY |
| 1420 | | | | | | 95 | PUMP AT 72Hz / SLIGHTLY CLOUDY |
| 1430 | | | | | | 65 | PUMP AT 80Hz / MOSTLY CLEAR |
| 1440 | | | | | | 39 | PUMP AT 80Hz / MOSTLY CLEAR |
| 1450 | | | | | | 25 | PUMP AT 80Hz |
| 1500 | | | | | | 23 | PUMP AT 80Hz / CLEAR |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-38 Date: 05/19/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: Cloudy / RAIN

Remarks: Sampler(s): JPL

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.97 Well Depth (ft): 17.02 Casing Dia. (in):

Water Column (ft): 12.05 Water Column (gal.) 1.9665

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft), WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1100 End Time: 1150

mS/m Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1100 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1105 | 13.74 | 8.46 | 70.0 | 113 | 1.92 | 690 | |
| 1110 | 13.69 | 8.31 | 67.7 | 105 | 1.23 | 640 | |
| 1120 | 14.15 | 8.41 | 64.7 | 94 | 1.16 | 320 | APPEARS CLEAR |
| 1130 | 14.16 | 8.60 | 65.5 | 83 | 0.88 | 120 | " |
| 1140 | 14.68 | 8.70 | 65.8 | 79 | 0.78 | 80 | " |
| 1145 | 14.95 | 8.71 | 65.5 | 77 | 0.71 | 71 | |
| 1150 | 14.73 | 8.72 | 66.1 | 76 | 0.72 | 66 | |

End Time: 1150 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1153

Depth to Water (ft): 4.98 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-38-1 FOR VOCs AND SVOCs (STARS) WITH BAILER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-39 Date: 05/11/2004

Project Name: GM AMEC Project No.: 27636000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 6.51 Well Depth (ft): 17.88' Casing Dia. (in):

Water Column (ft): 11.37 Water Column (gal.) 1.855

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1020 End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1150 | | | | | | 140 | PUMP AT 76Hz / REDDISH COLOR |
| 1200 | | | | | | 110 | PUMP AT 76Hz / CLOUDY |
| 1210 | | | | | | 100 | PUMP AT 76Hz / CLOUDY |
| 1220 | | | | | | 120 | PUMP AT 76Hz / CLOUDY |
| 1230 | | | | | | 120 | PUMP AT 76Hz / CLOUDY |
| 1240 | | | | | | 120 | PUMP AT 76Hz / CLOUDY |
| | | | | | | | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-39 Date: 5/19/4

Project Name: GM SLEEPY HOLLOW AMEC Project No.: 276360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY

Remarks: _____ Sampler(s): K.SAUNDERS

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 6.49 Well Depth (ft): 17.58 Casing Dia. (in): 2

Water Column (ft): 11.09 Water Column (gal.) 1.81

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.4

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): 0.20
(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 10:32 End Time: 11:06

Actual Volume Purged (gal.): ~7gal

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 10:33 | 12.35 | 7.70 | 92.4 | -85 | 4.89 | 30.3 | |
| 10:40 | 11.69 | 7.31 | 0.105 | -104 | 2.36 | 60.2 | |
| 10:50 | 11.78 | 7.45 | 0.105 | -127 | 2.10 | 32.6 | |
| 10:55 | 11.78 | 7.48 | 0.102 | -132 | 2.08 | 27.9 | |
| 11:00 | 11.75 | 7.52 | 0.100 | -137 | 2.14 | 25.0 | |
| 11:05 | 11.69 | 7.54 | 0.099 | -138 | 2.19 | 21.6 | |

End Time: 11:06 Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 11:10

Depth to Water (ft): 6.51 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____ SVOCs

COMMENTS: OW-39-I VOCs & SVOCs (STARS)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-40 Date: 05/12/2004

Project Name: GM AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY, HOT

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 7.85 Well Depth (ft): 17.29 Casing Dia. (in):

Water Column (ft): 9.44 Water Column (gal.) 1.5406

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1050 End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1210 | | | | | | 16 | CLEAR/PUMP AT 73Hz |
| 1220 | | | | | | 25 | CLEAR/PUMP AT 73Hz |
| 1230 | | | | | | 37 | SLIGHTLY TURBID/73Hz |
| 1240 | | | | | | 28 | CLEAR/PUMP AT 73Hz |
| 1250 | | | | | | 23 | CLEAR/PUMP AT 73Hz |
| 1300 | | | | | | 32 | CLEAR/ " " |
| 1310 | | | | | | 26 | CLEAR |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-40 Date: 5/20/4

Project Name: GM AMEC Project No.: 276360 000

Project Location: SLEEPY HOLLOW NY Weather: PARTLY CLOUDY

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 8.24 Well Depth (ft): 17.11 Casing Dia. (in): 2

Water Column (ft): 8.87 Water Column (gal.) 1.45

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC = ___ gal
CD = Casing Dia. (ft)
WC = Water Column (ft)

Clear Bailer Survey: LNAPL: (Y) N DNAPL: Y / N SLIGHT SHEEN ON TOP OF PURGE WATER

Volume of Water to be Purged (3 volume method): 4.3 gal

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):
(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 7:59 End Time:

Actual Volume Purged (gal.): 4.0

| Time | Temperature (°C) °F | pH (units) | Conductivity ~~(us/cm)~~ S/m | REDOX (Eh-mV) | DO ~~(mg/l)~~ g/L | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 8:00 | 13.12 | 7.46 | 0.125 | -135 | 1.96 | 15.2 | |
| 8:10 | 12.99 | 7.46 | 0.124 | -152 | 0.43 | 8.5 | |
| 8:15 | 12.93 | 7.44 | 0.124 | -157 | 0.38 | 4.3 | |
| 8:20 | 12.97 | 7.47 | 0.124 | -161 | 6.38 | 4.2 | |
| 8:25 | 12.94 | 7.51 | 0.124 | -165 | 0.34 | 4.1 | |
| 8:30 | 12.95 | 7.51 | 0.125 | -166 | 0.32 | 4.2 | |

End Time: 8:30 Total Volume Purged (gal.):

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 8:35

Depth to Water (ft): 8.01 Sampling Method: (Bailer) / In-Line VOCs/SVOCs Metals

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-40-1 for Metals (unfiltered, filtered), VOCs & SVOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-41 Date: 05/12/2004

Project Name: GM AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW NY Weather: OVERCAST, COOL

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 4.65 Well Depth (ft): 15.46 Casing Dia. (in):

Water Column (ft): 10.81 Water Column (gal.) 1.764

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** ~~If 3 volume method~~: Start Time: 0745 End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0840 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0900 | | | | | | 120 | |
| 0910 | | | | | | 100 | |
| 0920 | | | | | | 60 | |
| 0930 | | | | | | 65 | |
| 0940 | | | | | | 45 | |
| 0950 | | | | | | 45 | |
| 1000 | | | | | | 35 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-41 Date: 5/19/4

Project Name: GM AMEC Project No.: 276360 000

Project Location: SLEEPY HOLLOW NY Weather: CLOUDY

Remarks: Sampler(s): KSAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 4.85 Well Depth (ft): 14.53 Casing Dia. (in): 2

Water Column (ft): 9.68 Water Column (gal.) 1.58

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 4.74

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): 0.16

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:32 End Time: 13:06

Actual Volume Purged (gal.): 5.5

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | s/m | | g/L | | If 3 volume method, include Start Time chemistry data only |
| 12:34 | 14.52 | 7.10 | 0.139 | -147 | 2.32 | 143.0 | |
| 12:44 | 14.23 | 7.16 | 0.134 | -175 | 1.07 | 54.7 | |
| 12:50 | 14.17 | 7.20 | 0.128 | -182 | 0.75 | 37.0 | |
| 12:55 | 14.15 | 7.23 | 0.123 | -187 | 0.58 | 32.2 | |
| 13:00 | 14.18 | 7.26 | 0.120 | -190 | 1.08 | 22.6 | |
| 13:05 | 14.24 | 7.26 | 0.121 | -191 | 1.03 | 20.7 | LIGHT RAIN |

End Time: 13:06 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 13:10

Depth to Water (ft): 4.86 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: VOCs SVOCs - DARK GRAY

COMMENTS: OW-41-I MS/MSD TRIPLE VOLUME
VOCs & SVOCs (STARS)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-42 Date: 05/12/2004

Project Name: GM AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather: Sunny

Remarks: Sampler(s): C. Schrader

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 7.44 Well Depth (ft): 17.89 Casing Dia. (In):

Water Column (ft): _____ Water Column (gal.) _____

| Casing Dia. in. (ft) | Gallons Water per Lineal Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Purging Method: HB / PP / CP / (SP)

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pumping Rate (gpm): _____

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Alternate Calculation
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 7:55 am End Time: 9:40 am

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 7:55 | | | | | | 42.2 | |
| 9:20 | | | | | | 10.1 | |
| 9:25 | | | | | | 5.21 | |
| 9:30 | | | | | | 2.92 | |
| 9:35 | | | | | | 2.94 | |
| 9:40 | | | | | | 2.99 | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-42 Date: 05/20/2004

Project Name: GENERAL MOTORS AMEC Project No.: 276360000

Project Location: SLEEPY HOLLOW, NY Weather: OVERCAST

Remarks: _____ Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 8.82 Well Depth (ft): 17.72 Casing Dia. (in): 2

Water Column (ft): 8.9 Water Column (gal.) 1.452

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC = ___ gal.
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 0812 End Time: 0845

Actual Volume Purged (gal.):

| Time | Temperature (°C) / °F) | pH (units) | Conductivity ~~(us/cm)~~ SM | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0815 | 12.87 | 9.20 | 0.101 | -247 | 2.59 | 41 | CLEAR. |
| 0820 | 12.70 | 9.34 | 0.099 | -255 | 4.46 | 18 | |
| 0825 | 12.76 | 9.46 | 0.099 | -264 | 2.91 | 22 | |
| 0830 | 12.83 | 9.58 | 0.099 | -274 | 0.00 | 18 | |
| 0835 | 12.87 | 9.71 | 0.099 | -284 | 0.00 | 24 | |
| 0840 | 13.01 | 9.78 | 0.099 | -289 | 0.00 | 55 | |
| 0845 | 13.09 | 9.84 | 0.099 | -292 | 0.00 | 57 | |

End Time: 0845 Total Volume Purged (gal.): 3.5

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start) / End): 0850

Depth to Water (ft): 8.52 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: OW-42-1 FOR VOCs AND SVOC (STORES) AND TAL METALS FILTERED & UNFILTERED → WITH BAILER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-43 Date: 05/12/2004

Project Name: GM AMEC Project No.: 2763600000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY, HOT

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 4.93 Well Depth (ft): 17.25 Casing Dia. (in):

Water Column (ft): 12.32 Water Column (gal.) 2.006

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):
(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** ~~If 3 volume method:~~ Start Time: 1353 End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1425 | | | | | | 140 | |
| 1435 | | | | | | 80 | |
| 1445 | | | | | | 90 | |
| 1455 | | | | | | 40 | |
| 1505 | | | | | | 50 | |
| 1515 | | | | | | 34 | |
| 1520 | | | | | | 45 | CLEAR/STARTING TO RAIN! |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: DW-44 Date: 5/18/04

Project Name: GM AMEC Project No.: 276360000

Project Location: Tarrytown, NY Weather: overcast, 60's

Remarks: Sampler(s): C. Schrader

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 10.60' Well Depth (ft): 25.14' Casing Dia. (in):

Water Column (ft): Water Column (gal.)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (cw) $\pi r^2 h \times 7.5$ gal/ft³; cw = 2b - 3.0 gal/ft; b = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1045 End Time: 0130 pm

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1240 | | | | | | 34.9 | |
| 1250 | | | | | | 56.4 | |
| 0100 | | | | | | 16.2 | |
| 0110 | | | | | | 9.02 | |
| 0120 | | | | | | 8.94 | |
| 0130 | | | | | | 8.83 | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-43 Date: 05/19/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: Rainy/cloudy

Remarks: Sampler(s): JBL

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 4.97 Well Depth (ft): 16.79 Casing Dia. (in): 2

Water Column (ft): 11.82 Water Column (gal.) 2.269

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): ~7 gal

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. In. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2 (0.167)) | (0.1632) |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: (1245) End Time: 1300

s/m Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO ~~(mg/l)~~ gL | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1225 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1230 | 13.97 | 8.10 | 0.137 | -177 | 0.40 | 180 | |
| 1235 | 14.11 | 8.28 | 0.108 | -168 | 0.16 | 76 | |
| 1240 | 14.41 | 8.31 | 0.095 | -163 | 0.13 | 56 | |
| 1245 | 14.44 | 8.32 | 0.096 | -161 | 0.07 | 46 | |
| 1250 | 14.69 | 8.30 | 0.100 | -161 | 0.06 | 43 | |
| 1255 | 14.49 | 8.32 | 0.103 | -164 | 0.00 | 39 | |
| 1300 | 14.54 | 8.33 | 0.101 | -164 | 0.00 | 34 | |

End Time: 1300 Total Volume Purged (gal.): ~4 gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start) / End): 1305

Depth to Water (ft): 4.84 Sampling Method: (Bailer) / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / (SLIGHTLY TURBID) / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: OW-43-1 FOR VOCs AND SVOC (STARS) WITH BAILER.

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-44 Date: 05/21/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: OVERCAST

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.91 Well Depth (ft): 25.15 Casing Dia. (in): 2

Water Column (ft): 14.24 Water Column (gal.) 2.324

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.97 gal

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 0806 End Time: _____

Actual Volume Purged (gal.): _____

| Time | Temperature (°C) °F | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0806 | | | ms/m | | | | If 3 volume method, include Start Time chemistry data only |
| 0810 | 13.26 | 7.86 | 69.0 | -101 | 0.00 | — | Too Turbid / No Recovery |
| 0820 | 13.41 | 8.14 | 57.6 | -112 | 0.00 | 280 | |
| 0830 | 13.51 | 8.28 | 57.3 | -129 | 0.00 | 51 | |
| 0835 | 13.42 | 8.35 | 56.1 | -137 | 0.00 | 18 | CLEAR |
| 0840 | 13.49 | 8.44 | 55.8 | -142 | 0.00 | 11 | |
| 0845 | 13.58 | 8.50 | 56.6 | -147 | 0.00 | 12 | |
| 0850 | — | — | — | — | — | — | |

End Time: 0845 Total Volume Purged (gal.): 7-¼ gal

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 0846

Depth to Water (ft): 10.83 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: SAMPLED OW-44-1 FOR VOCs AND SVOC (STARS) WITH BAILER

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-45 Date: 5/18/04

Project Name: GM AMEC Project No.: 276360000

Project Location: Tarrytown, NY Weather: Overcast, 60's

Remarks: Sampler(s): C Schrader

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 11.76' Well Depth (ft): 23.89' Casing Dia. (in):

Water Column (ft): Water Column (gal.)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)² x (CD/2) x 3.14 x 7.5
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:00am End Time: 11:15

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 10:30 | | | | | | 16.20 | |
| 10:55 | | | | | | 10.68 | |
| 11:05 | | | | | | 10.98 | |
| 11:15 | | | | | | 10.76 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-45 Date: 05/20/2004

Project Name: GENERAL MOTORS AMEC Project No.: 2162600000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY, HOT

Remarks: _____ Sampler(s): JAZ

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.89 Well Depth (ft): 23.45 Casing Dia. (in): 2

Water Column (ft): 11.56 Water Column (gal.) 1.886

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.658 gal

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)x(CD/2)x3.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1005 End Time: _____

MS/MS Actual Volume Purged (gal.): 11 gallons

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1005 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1010 | 12.72 | 8.19 | 90.9 | -140 | 0.57 | 710 | GRAY |
| * 1020 | 12.74 | 8.16 | 89.1 | -133 | 0.11 | 370 | HND TO PRESERVE PUMP TUBING |
| 1040 | 12.77 | 8.09 | 85.6 | -136 | 0.00 | 180 | |
| 1045 | 12.82 | 8.16 | 83.4 | -140 | 0.00 | 180 | |
| 1050 | 12.78 | 8.15 | 81.7 | -141 | 0.00 | 220 | |
| 1055 | 12.82 | 8.17 | 80.5 | -143 | 0.00 | 310 | |
| 1100 | 12.89 | 8.19 | 79.1 | -144 | 0.00 | 340 | |

End Time: 1100 Total Volume Purged (gal.): _____

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 1102

Depth to Water (ft): _____ Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: OW-45-1 FOR VOC AND SVOC (STARS) WITH BAILER. FOR TAL METALS FILTERED AND UNFILTERED AT PUMP.

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-45 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, cool

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.48 Well Depth (ft): 23.46 Casing Dia. (in): 2

Water Column (ft): 11.98 Water Column (gal.) 1.96

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.87

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / (SLIGHTLY TURBID) / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 9:48 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:50 | 17.85 | 10.32 | 0.446 | -112 | 1.85 | 490 | Flow Rate 0.29 L/min |
| 10:00 | 17.08 | 10.22 | 0.524 | -148 | 0.41 | 293 | |
| 10:10 | 16.85 | 10.00 | 0.580 | -149 | 0.86 | 242 | |
| 10:20 | 16.82 | 9.90 | 0.616 | -150 | 0.81 | 230 | |
| 10:30 | 16.81 | 9.76 | 0.646 | -148 | 0.58 | 229 | |
| 10:40 | 16.91 | 9.70 | 0.651 | -147 | 0.59 | 257 | |
| 10:50 | 16.85 | 9.66 | 0.657 | -148 | 0.49 | 283 | see page 2 |

End Time: Total Volume Purged (gal.): 21 gal

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 14:00

Depth to Water (ft): 11.45 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

Unfiltered & Filtered (0.45 micron) samples collected

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-45 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, cool

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 11:00 | 16.82 | 9.61 | 0.653 | -147 | 0.41 | 159 | |
| 11:10 | 16.85 | 9.54 | 0.648 | -145 | 0.37 | 150 | |
| 11:20 | 16.76 | 9.53 | 0.650 | -147 | 0.35 | 236 | |
| 11:30 | 16.91 | 9.48 | 0.641 | -146 | 0.33 | 207 | Water level 11.63 ft |
| 11:40 | 16.83 | 9.46 | 0.640 | -146 | 0.42 | 271 | |
| 11:50 | 16.30 | 9.44 | 0.628 | -146 | 0.19 | 226 | |
| 12:00 | 17.02 | 9.42 | 0.618 | -146 | 0.05 | 229 | |
| 12:10 | 17.03 | 9.41 | 0.607 | -145 | 0.03 | 222 | |
| 12:20 | 17.11 | 9.39 | 0.603 | -145 | 0.00 | 288 | |
| 12:30 | 17.14 | 9.36 | 0.596 | -144 | 0.07 | 303 | |
| 12:40 | 17.35 | 9.31 | 0.585 | -142 | 0.49 | 181 | |
| 12:50 | 17.30 | 9.24 | 0.592 | -141 | 0.00 | 190 | |
| 13:00 | 17.40 | 9.21 | 0.594 | -142 | 0.03 | 327 | |
| 13:10 | 17.41 | 9.18 | 0.591 | -141 | 0.48 | 482 | |
| 13:20 | 17.33 | 9.16 | 0.601 | -141 | 0.12 | 994 | |
| 13:30 | 17.28 | 9.16 | 0.596 | -141 | 0.59 | 883 | |
| 13:34 | 18.72 | 8.82 | 0.669 | -115 | 1.92 | 192 | Water level 11.68 ft |
| 13:40 | 18.07 | 8.97 | 0.664 | -123 | 0.88 | 176 | Restart pump |
| 13:50 | 17.93 | 9.03 | 0.662 | -128 | 1.33 | 180 | Flow Rate 0.25 L/min |
| 14:00 | 17.87 | 9.03 | 0.637 | -129 | 1.53 | 193 | |

COMMENTS:

Volume purged
4.5 gal
4.5 gal @ 11:40
4.5 gal @ 12:30
4.5 gal @ 13:30
3 gal @ 14:00
21 gal total

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-45 Date: 7/20/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny, warm

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.51 Well Depth (ft): 23.36 Casing Dia. (in): 2

Water Column (ft): 11.85 Water Column (gal.) 1.9339

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.87

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:30 End Time: 12:20

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 8:30 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 10:10 | | | | | | 390 | Cloudy gray w/fines |
| 10:15 | | | | | | no reading | Too turbid for reading |
| 10:20 | | | | | | 380 | Cloudy brown w/fines |
| 10:25 | | | | | | no reading | Grayish color/turbid |
| 10:30 | | | | | | 340 | Cloudy brown |
| 10:35 | | | | | | no reading | Grayish/turbid |
| 10:40 | | | | | | 350 | Cloudy brown/turbid |

End Time: 12:20 Total Volume Purged (gal.): _____

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): 11.49 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-45 Date: 7/20/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny, warm

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 10:45 | | | | | | no reading | No reading, water is too turbid |
| 10:50 | | | | | | 300 | Cloudy brown |
| 10:55 | | | | | | no reading | No reading/too turbid |
| 11:00 | | | | | | 320 | Last time surging/cloudy brown |
| 11:05 | | | | | | no reading | Turbidity too high for reading |
| 11:10 | | | | | | 330 | Water is cloudy/brownish |
| 11:15 | | | | | | 160 | slightly cloudy |
| 11:20 | | | | | | 80 | slightly cloudy |
| 11:25 | | | | | | 50 | slightly clear/a few fines |
| 11:30 | | | | | | 38 | clear to bare eye |
| 11:35 | | | | | | 25 | " |
| 11:40 | | | | | | 19 | " |
| 11:45 | | | | | | 17 | " |
| 11:50 | | | | | | 14 | " |
| 11:55 | | | | | | | |
| 12:00 | | | | | | 15 | " |
| 12:05 | | | | | | 10 | " |
| 12:10 | | | | | | 9 | " |
| 12:15 | | | | | | 8 | " |
| 12:20 | | | | | | 8 | End develompent OW-45 |

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-45 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy/breezey

Remarks: Well resampling Sampler(s): Saunders

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.96 Well Depth (ft): 23.15 Casing Dia. (in): 2

Water Column (ft): 12.19 Water Column (gal.) 1.99

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.97

Purging Method: HB (PP) CP / SP Pumping Rate (gpm): 0.14

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID) Black fines

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:05 End Time: 13:20

Actual Volume Purged (gal.): 10.5

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 12:10 | 18.31 | 7.33 | 51.4 | -113 | 1.75 | 220 | |
| 12:20 | 18.93 | 7.45 | 48.7 | -150 | 0.10 | 60.1 | |
| 12:30 | 17.93 | 7.41 | 56.7 | -153 | 0.06 | 49.5 | |
| 12:40 | 17.92 | 7.41 | 57.6 | -156 | 0.02 | 22.3 | 5 gallons |
| 12:50 | 17.91 | 7.37 | 60.1 | -156 | 0.04 | 27.7 | |
| 13:00 | 17.90 | 7.34 | 59.3 | -156 | 0.01 | 60.6/6.6 | check turbidity w/other meter |
| 13:10 | 17.80 | 7.33 | 59.5 | -156 | 0.00 | 53.1/4.6 | 4.5 gallons |

End Time: 13:20 Total Volume Purged (gal.): 10.5

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 13:20

Depth to Water (ft): 10.96 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Metals, filtered (45 micron) & unfiltered

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-45 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, breezy

Remarks: Well resampling Sampler(s): Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 13:20 | 17.79 | 7.34 | 59.1 | -157 | 0.00 | 510/3.9 | 1 gal |

COMMENTS:

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, NJ 08873 (732) 302-9500 / (732) 302-9504 (fax)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-46 Date: 5/13/04

Project Name: GM AMEC Project No.: 276360 000

Project Location: Sleepy Hollow, NY Weather:

Remarks: Sampler(s): C. Schroder

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 11.8' Well Depth (ft): 24.18' Casing Dia. (in):

Water Column (ft): Water Column (gal.):

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. (in) | Gallons Water per Linear ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation:
$(CD_1)^2 + (CD_2)^2 \times 7.5 \times 0.04 = CD$ = Casing Dia. (in)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 0800 End Time: 0935

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 0905 | | | | | | 62.5 | |
| 0910 | | | | | | 74.2 | |
| 0915 | | | | | | 34.0 | |
| 0920 | | | | | | 24.2 | |
| 0925 | | | | | | 18.0 | |
| 0930 | | | | | | 16.7 | |
| 0935 | | | | | | 17.3 | |

End Time: 0935 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-46 Date: 5/20/4

Project Name: GM SLEEPY HOLLOW AMEC Project No.: 276 360 000

Project Location: NY Weather: PARTLY CLOUDY

Remarks: Sampler(s): KSAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

(FROM TOP OF CONCRETE SLAB)

Depth to Water (ft): 11.91 Well Depth (ft): 24.12 Casing Dia. (in): 2

Water Column (ft): 12.21 Water Column (gal.) 1.99

| Casing Dia. in (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): ~~5.97~~

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:28 End Time:

Actual Volume Purged (gal.): 6.5

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | ~~ms/m~~ | | ~~g/L~~ | | If 3 volume method, include Start Time chemistry data only |
| 9:30 | 13.92 | 7.71 | 41.9 | -94 | 2.16 | 15.0 | |
| 9:40 | 13.37 | 7.53 | 45.9 | -129 | 3.31 | 20.1 | |
| 9:50 | 14.19 | 7.41 | 47.7 | -140 | 1.42 | 13.9 | |
| 10:00 | 13.30 | 7.38 | 48.3 | -143 | 1.32 | 13.6 | |
| 10:05 | 13.31 | 7.39 | 48.7 | -147 | 1.17 | 12.5 | |
| 10:10 | 13.35 | 7.42 | 48.5 | -152 | 0.93 | 13.7 | |
| 10:15 | 13.29 | 7.47 | 48.7 | -156 | 0.86 | 12.6 | |

End Time: 10:16 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 10:20

Depth to Water (ft): 11.87 Sampling Method: Bailer / In-Line SVOCs/VOCs METALS

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: VOCs, Metals SVOCs

COMMENTS:

OW-46-1 AND DUPLICATE OW-46-2 METALS (Filtered & unfiltered) SVOCs, VOCs

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-47 Date: 05/17/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: Sunny, Hot

Remarks: Sampler(s): JDC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 11.69 Well Depth (ft): 24.84 Casing Dia. (in):

Water Column (ft): 13.15 Water Column (gal.) 2.146

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1125 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1220 | | | | | | 140 | PUMP AT 1 1/2 GPM LT. BROWN WATER |
| 1225 | | | | | | 38 | PUMP AT 1 1/2 GPM WATER IS CLOUDY |
| 1240 | | | | | | 14 | RELATIVELY CLEAR. |
| 1245 | | | | | | 8.1 | CLEAR |
| 1250 | | | | | | 5.3 | CLEAR |
| 1255 | | | | | | 3.9 | CLEAR |
| 1300 | | | | | | 2.9 | CLEAR |

End Time: Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-47 Date: 05/20/2004

Project Name: GENERAL MOTORS AMEC Project No.: 2763600000

Project Location: SUNNY HOLLOW, NY Weather: SUNNY/BREEZY

Remarks: _____ Sampler(s): JAZ

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.87 Well Depth (ft): 24.8 Casing Dia. (in): 2

Water Column (ft): 12.93 Water Column (gal.) 2.110

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.33 gal

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. In. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2)² x (CD/2)³ x 3.1 = x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1143 End Time: _____

mS/m Actual Volume Purged (gal.): _____

| Time | Temperature (°C) °F | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1150 | 14.47 | 8.97 | 86.9 | -171 | 0.28 | — | TURBIDITY ABOVE LIMIT |
| 1200 | 14.32 | 8.98 | 75.9 | -187 | 0.00 | 180 | SIGNIFICANTLY LESS TURBID |
| 1205 | 14.38 | 9.09 | 77.1 | -203 | 0.00 | 82 | |
| 1210 | 14.55 | 9.18 | 73.0 | -210 | 0.00 | 56 | |
| 1215 | 14.88 | 9.25 | 72.2 | -220 | 0.00 | 39 | |
| 1220 | 14.73 | 9.33 | 71.2 | -225 | 0.00 | 28 | |
| 1225 | 14.87 | 9.43 | 70.9 | -233 | 0.00 | 25 | |

End Time: 1229 Total Volume Purged (gal.): 6.5

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 1240

Depth to Water (ft): 11.85 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: OW-47-1 FOR VOC & SVOC (STARS) WITH BAILER
FOR METALS FILTERED & UNFILTERED IN LINE

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-47 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, cool

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.42 Well Depth (ft): 24.71 Casing Dia. (in): 2

Water Column (ft): 13.29 Water Column (gal.) 2.17

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.51

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:32 End Time: 12:45

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (mS/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 9:32 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:35 | 15.65 | 9.27 | 2.08 | -125 | 2.25 | 585 | Cloudy, slightly turbid |
| 9:45 | 17.41 | 9.48 | 1.98 | -155 | 2.01 | 477 | |
| 9:55 | 17.29 | 9.59 | 1.90 | -164 | 1.9 | 383 | |
| 10:05 | 17.26 | 9.69 | 1.80 | -169 | 1.77 | 276 | |
| 10:15 | 16.02 | 10.12 | 1.57 | -182 | 1.59 | 157 | |
| 10:25 | 16.00 | 10.26 | 1.35 | -190 | 1.49 | 163 | |
| 10:35 | 16.17 | 10.28 | 1.27 | -191 | 1.45 | 169 | see page 2 |

End Time: 12:45 Total Volume Purged (gal.):

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 12:45

Depth to Water (ft): 11.44 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

12:45 Sample OW-47 for filtered and unfiltered metals (in-line)

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-47 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, cool

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (mS/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 10:45 | 16.29 | 10.32 | 1.24 | -194 | 1.14 | 157 | |
| 10:55 | 16.26 | 10.36 | 1.21 | -197 | 1.36 | 156 | |
| 11:05 | 16.26 | 10.30 | 1.20 | -199 | 1.35 | 162 | |
| 11:15 | 17.05 | 10.35 | 1.19 | -198 | 1.29 | 141 | |
| 11:25 | 19.42 | 10.23 | 1.18 | -195 | 1.16 | 131 | |
| 11:35 | 15.47 | 10.50 | 1.16 | -202 | 1.34 | 75.4 | |
| 11:45 | 15.55 | 10.63 | 1.12 | -211 | 1.30 | 58.3 | Depth to water 11.41 feet |
| 11:55 | 15.66 | 10.66 | 1.10 | -215 | 1.26 | 58.7 | |
| 12:05 | 15.66 | 10.62 | 1.13 | -215 | 1.24 | 61.4 | |
| 12:15 | 15.66 | 10.66 | 1.13 | -216 | 1.23 | 57.9 | |
| 12:25 | 15.69 | 10.66 | 1.14 | -215 | 1.20 | 59.1 | |
| 12:35 | 15.71 | 10.68 | 1.14 | -216 | 1.21 | 57.9 | 4.5 gal |
| 12:45 | 15.72 | 10.68 | 1.13 | -217 | 1.21 | 59.5 | |
| | Sample | | | | | | |
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COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-47 Date: 7/26/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/slight breeze

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.76 Well Depth (ft): 24.66 Casing Dia. (in): 2

Water Column (ft): 13.9 Water Column (gal.) 2.268

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.87

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 8:14 End Time: 11:05

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 8:14 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:30 | | | | | | 750 | Surged pump. Pump at 92 Hz |
| 9:35 | | | | | | 450 | Particle build up in tubing |
| 9:40 | | | | | | 100 | Surged pump. Pump at 92 Hz |
| 9:45 | | | | | | 500 | Water is cloudy |
| 9:50 | | | | | | 75 | Surged pump. Pump at 92 Hz |
| 9:55 | | | | | | 650 | Particles in tubing |
| 10:00 | | | | | | 120 | Water slightly cloudy |

End Time: 11:05 Total Volume Purged (gal.): _____

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): 10.74 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-47 Date: 7/26/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/Slight breeze

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 10:05 | | | | | | 55 | Shook tubing to remove partilces/ water is slightly clear |
| 10:10 | | | | | | 29 | Water appears clear |
| 10:15 | | | | | | 20 | Water appears clear |
| 10:20 | | | | | | 14 | Water appears clear |
| 10:25 | | | | | | 10 | Same |
| 10:30 | | | | | | 7.8 | Appears clear |
| 10:35 | | | | | | 6.2 | Appears clear |
| 10:40 | | | | | | 5.8 | Appears clear |
| 10:45 | | | | | | 5.1 | Appears clear |
| 10:50 | | | | | | 4.6 | Appears clear. Pump at 92 Hz |
| 10:55 | | | | | | 4.3 | Appears clear |
| 11:00 | | | | | | 4.1 | Appears clear. Pump at 92 Hz |
| 11:05 | | | | | | | |
| 11:10 | | | | | | | |
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COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-47 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy/breezy/70 °F

Remarks: Well resampling Sampler(s): Cuppernell

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.9 Well Depth (ft): 24.39 Casing Dia. (in): 2

Water Column (ft): 13.49 Water Column (gal.) 2.2016

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.605

Purging Method: HB (PP) CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 12:05 End Time: 13:40

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 12:05 | 17.83 | 7.73 | 96.1 | -158 | 2.33 | 710 | |
| 12:10 | 16.89 | 7.55 | 96.3 | -180 | 0.49 | 520 | |
| 12:15 | 17.06 | 7.51 | 91.0 | -182 | 0.43 | 130 | |
| 12:20 | 17.25 | 7.56 | 87.0 | -190 | 0.34 | 100 | |
| 12:25 | 17.33 | 7.66 | 80.4 | -201 | 0.26 | 79 | |
| 12:30 | 17.09 | 7.72 | 78.1 | -207 | 0.23 | 75 | |
| 12:35 | 17.52 | 7.79 | 76.3 | -213 | 0.22 | 65 | |

End Time: 13:40 Total Volume Purged (gal.): 8

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 13:45

Depth to Water (ft): 10.93 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:
Sampled OW-47 for metals in-line (filtered and unfiltered)

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-47 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy/breezy/70 °F

Remarks: Well resampling Sampler(s): Cuppernell

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 12:40 | 17.44 | 7.86 | 74.8 | -220 | 0.17 | 65 | 3 gallons |
| 12:45 | 17.37 | 7.91 | 73.3 | -227 | 0.13 | 64 | appears clear |
| 12:50 | 17.35 | 7.92 | 72.9 | -229 | 0.11 | 62 | appears clear |
| 12:55 | 17.19 | 7.95 | 72.4 | -232 | 0.09 | 64 | appears clear |
| 13:00 | 17.22 | 7.97 | 72.2 | -236 | 0.06 | 61 | appears clear |
| 13:05 | 17.20 | 7.99 | 72.3 | -239 | 0.05 | 64 | appears clear |
| 13:10 | 17.17 | 8.02 | 71.9 | -243 | 0.04 | 64 | 3.5 gallons |
| 13:15 | 17.24 | 8.02 | 71.6 | -244 | 0.03 | 65 | water appears clear |
| 13:20 | 17.29 | 8.03 | 71.0 | -247 | 0.02 | 64/5.8 | clear |
| 13:25 | 17.43 | 8.03 | 71.5 | -246 | 0.02 | 68/6.9 | clear |
| 13:30 | 17.62 | 8.04 | 71.6 | -248 | 0.02 | 69/7.3 | clear |
| 13:35 | 17.57 | 8.04 | 71.2 | -248 | 0.02 | 71/5.5 | clear |
| 13:40 | 17.31 | 8.04 | 71.0 | -248 | 0.01 | 69/6.1 | clear |
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COMMENTS:

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, NJ 08873 (732) 302-9500 / (732) 302-9504 (fax)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-48 Date: 05/11/2004

Project Name: GM AMEC Project No.: 2763600000

Project Location: Sleepy Hollow, NY Weather: SUNNY

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.79 (TOP OF SLAB) Well Depth (ft): 23.80 (TOP OF SLAB) Casing Dia. (in):

Water Column (ft): 12.01 Water Column (gal.) 1.960

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 0830 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1005 | | | | | | 27 | |
| 1010 | | | | | | 23 | |
| 1015 | | | | | | 21 | |
| 1020 | | | | | | 20 | |
| 1025 | | | | | | 16 | |
| 1030 | | | | | | 18 | |
| 1035 | | | | | | 16 | END DEVELOPMENT |

End Time: 1035 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: WELL WASN'T ABLE TO RECHARGE AT A RATE WHICH ALLOWED CONTINUOUS PUMPING AT A STEADY RATE. PUMPED AT MINIMUM FLOWRATE TO PREVENT PUMPING WELL DRY.

# GROUNDWATER PURGING AND SAMPLING LOG

amec



Well ID: OW-48 Date: 5/20/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny, Partly cloudy

Remarks: Sampler(s): Saunders

**WELL PURGING:** PID Head Space Reading (ppm):

* From top of slab

Depth to Water (ft): 11.89 * Well Depth (ft): 22.84* Casing Dia. (in): 2

Water Column (ft): 10.95 Water Column (gal.) 1.79

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.36

Purging Method: HB (PP) CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: (CLEAR) SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 11:26 End Time:

Actual Volume Purged (gal.): 6

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 11:27 | 13.96 | 7.98 | 95.4 | -150 | 1.22 | 38.5 | |
| 11:40 | 14.14 | 7.72 | 87.1 | -144 | 1.72 | 120.0 | |
| 11:45 | 14.67 | 7.79 | 87.9 | -155 | 1.37 | 64.0 | |
| | | | | | | | |
| 12:00 | 13.60 | 7.82 | 81.0 | -159 | 1.21 | 94.6 | |
| 12:05 | 15.20 | 8.04 | 88.6 | -182 | 1.08 | 63.8 | |
| 12:10 | 14.74 | 8.03 | 84.5 | -180 | 1.05 | 47.0 | |

End Time: 12:26 Total Volume Purged (gal.):

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 12:30

Depth to Water (ft): 13.43 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR / SLIGHTLY) TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

OW-48-1 MS/MSD triple volume for metals (in-line; filtered & unfiltered) and VOCs & SVOCs (bailer)

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-48 Date: 5/20/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny, partly cloudy

Remarks: Sampler(s): Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 12:15 | 14.23 | 8.01 | 81.4 | -170 | 1.04 | 39.7 | |
| 12:20 | 14.36 | 8.01 | 80.3 | -171 | 1.01 | 36.5 | |
| 12:25 | 12.22 | 8.00 | 80.8 | -170 | 0.97 | 36.5 | |
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COMMENTS:

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, NJ 08873 (732) 302-9500 / (732) 302-9504 (fax)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-49 Date: 5/17/04

Project Name: GM AMEC Project No.: 276360000

Project Location: Sleepy Hollow, NY Weather:

Remarks: Sampler(s): C. Schrader

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.9' Well Depth (ft): 23.4' Casing Dia. (in):

Water Column (ft): Water Column (gal.):

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP (SP) Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. (in.) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation:
(pi/2) x (CD/2 x 2)3 x WC
CD = Casing Diameter (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1130 End Time: 1315

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1240 | | | | | | 87.2 | |
| 1250 | | | | | | 29.4 | |
| 1300 | | | | | | 12.3 | |
| 1305 | | | | | | 9.7 | |
| 1310 | | | | | | 8.4 | |
| 1315 | | | | | | 8.2 | |

End Time: 1315 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-49 Date: 03/20/2004

Project Name: GENERAL MOTORS AMEC Project No.: 2763600000

Project Location: SLEEPY HOLLOW, NY Weather: SUNNY/BREEZY

Remarks: _____ Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 12.02 Well Depth (ft): 26.04 Casing Dia. (in): 2

Water Column (ft): 14.02 Water Column (gal.) 2.288

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| ~~2 (0.167)~~ | ~~0.1632~~ |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.6 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.864 gallons

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**WELL PURGE DATA:** If 3 volume method: Start Time: 1320 End Time: 1425

Actual Volume Purged (gal.):

| Time | Temperature (°C) °F | pH (units) | Conductivity ~~(us/cm)~~ S/M | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1320 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1330 | 17.51 | 7.69 | 0.729 | -107 | 2.09 | 920 | |
| 1340 | 16.90 | 7.71 | 0.714 | -110 | 0.65 | 750 | |
| 1350 | 16.95 | 7.72 | 0.740 | -112 | 1.14 | 600 | |
| 1400 | 15.86 | 7.74 | 0.707 | -112 | 0.99 | 300 | APPEARS CLEAR IN BUCKET |
| 1410 | 15.30 | 7.75 | 0.640 | -112 | 0.62 | 290 | " |
| 1415 | 15.45 | 7.76 | 0.591 | -113 | 0.53 | 250 | " |
| 1420 | 15.53 | 7.77 | 0.595 | -114 | 0.31 | 420 | |

End Time: 1425 Total Volume Purged (gal.): 7.5

Purged Dry: Y / N If Purged Dry, Recovery Rate (ml/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 1427

Depth to Water (ft): 12.05 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: SAMPLED OW-49-1 FOR VOCs/SVOC (STARS) WITH BAILER & FOR METALS (FILTERED/UNFILTERED) W/ IN-LINE

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-49 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/Humid

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.56 Well Depth (ft): 25.91 Casing Dia. (in): 2

Water Column (ft): 14.41 Water Column (gal.) 2.35

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 7.06

Purging Method: HB / PP / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 13:09 End Time: 15:45

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (mS/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 13:09 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 13:10 | 16.59 | 9.23 | 7.04 | -99 | 3.28 | 374 | |
| 13:15 | 15.93 | 9.27 | 7.08 | -109 | 1.48 | 348 | |
| 13:25 | 19028 | 9.20 | 7.09 | -120 | 1.77 | 122 | Flow Rate 143 ml/min |
| 13:35 | 17.77 | 9.19 | 7.01 | -119 | 2.56 | 94.4 | |
| 13:45 | 17.06 | 9.22 | 6.74 | -120 | 2.46 | 90.8 | |
| 13:55 | 16.88 | 9.24 | 5.94 | -122 | 2.28 | 90.8 | |
| 14:05 | 16.78 | 9.27 | 5.61 | -124 | 2.04 | 87.3 | 4.5 gal |

End Time: 15:45 Total Volume Purged (gal.): 14.5 gal

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 15:45

Depth to Water (ft): 11.67 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Sampled OW-49 for filtered & unfiltered metals in-line

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-49 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/humid

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (mS/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 14:15 | 16.78 | 9.27 | 5.49 | -124 | 1.96 | 79.7 | |
| 14:25 | 16.53 | 9.28 | 5.41 | -124 | 1.88 | 77.0 | |
| 14:35 | 16.56 | 9.28 | 5.43 | -125 | 1.82 | 74.7 | |
| 14:45 | 16.68 | 9.29 | 5.26 | -126 | 1.73 | 74.1 | 4 gal |
| 14:55 | 16.82 | 9.30 | 5.18 | -127 | 1.68 | 74.9 | |
| 15:05 | 16.75 | 9.31 | 5.20 | -127 | 1.66 | 71.6 | |
| 15:15 | | | | | | | |
| 15:25 | 16.74 | 9.32 | 5.22 | -128 | 1.59 | 70.1 | 4 gal |
| 15:35 | 16.71 | 9.31 | 5.29 | -128 | 1.58 | 71.0 | |
| 15:45 | 16.77 | 9.30 | 5.44 | -129 | 1.57 | 68.2 | 2 gal sampled |
| 15:55 | | | | | | | |
| 16:05 | | | | | | | |
| 16:15 | | | | | | | |
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COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-49 Date: 7/26/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/Hot/Breeze

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.04 Well Depth (ft): 23.01 Casing Dia. (in): 2

Water Column (ft): 16.97 Water Column (gal.) 2.705

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.87

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 11:33 End Time: 14:30

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 11:33 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 13:05 | | | | | | 300 | Cloudy-brownish |
| 13:10 | | | | | | 150 | Brownish. Surged pump |
| 13:15 | | | | | | 320 | Cloudy-brown |
| 13:20 | | | | | | 120 | Cloudy, brown/Surged |
| 13:25 | | | | | | 500 | Surged pump. Pump at 92 Hz |
| 13:30 | | | | | | 130 | Appears slightly cloudy |
| 13:35 | | | | | | 50 | slightly cloudy |

End Time: 14:30 Total Volume Purged (gal.): _____

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): 11.19 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-49 Date: 7/26/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/Hot/Breeze

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 13:40 | | | | | | 37 | Appears slightly clear; some particles |
| 13:45 | | | | | | 26 | Appears clear |
| 13:50 | | | | | | 17 | Appears clear |
| 13:55 | | | | | | 80 | Slightly cloudy |
| 14:00 | | | | | | 28 | Mostly clear |
| 14:05 | | | | | | 15 | Clear |
| 14:10 | | | | | | 12 | Clear |
| 14:15 | | | | | | 9.4 | Clear |
| 14:20 | | | | | | 7 | Clear |
| 14:25 | | | | | | | |
| 14:30 | | | | | | | |
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COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-49 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, cool

Remarks: Sampler(s): Saunders

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.03 Well Depth (ft): 25.83 Casing Dia. (in): 2

Water Column (ft): 14.8 Water Column (gal.) 2.4

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 7.2

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

Purging Method: HB (PP) CP / SP Pumping Rate (gpm): 0.089

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID) Black fines

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:43 End Time: 11:30

Actual Volume Purged (gal.): 9.5

| Time | Temperature (°C) | pH (units) | Conductivity (S/m) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:45 | 17.06 | 6.99 | 0.625 | -99 | 2.94 | | |
| 9:55 | 17.91 | 6.90 | 0.617 | -112 | 0.52 | | |
| 10:05 | 17.78 | 6.91 | 0.652 | -120 | 0.25 | 664/240 | |
| 10:15 | 17.52 | 6.93 | 0.655 | -125 | 0.18 | 251/75 | |
| 10:25 | 17.47 | 6.92 | 0.670 | -126 | 0.13 | 155/39 | |
| 10:35 | 17.36 | 6.92 | 0.661 | -128 | 0.22 | 191/26 | |
| 10:45 | 17.41 | 6.92 | 0.670 | -128 | 0.29 | 200/16 | |

End Time: 11:30 Total Volume Purged (gal.): 9.5

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 11:30

Depth to Water (ft): 11:10 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:
Metals, filtered & unfiltered

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-49 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy, cool

Remarks: Sampler(s): Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/m) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 10:55 | 17.35 | 6.93 | 0.655 | -129 | 0.34 | 242/13 | |
| 11:05 | 17.50 | 6.93 | 0.662 | -129 | 0.36 | 195/93 | |
| 11:15 | 17.40 | 6.93 | 0.656 | -130 | 0.36 | 220/6.9 | |
| 11:25 | 17.35 | 6.94 | 0.651 | -130 | 0.36 | 239/5.3 | |
| 11:30 | 17.43 | 6.94 | 0.654 | -131 | 0.37 | 211/5.2 | |

COMMENTS:

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, NJ 08873 (732) 302-9500 / (732) 302-9504 (fax)

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-50 Date: 5/17/04

Project Name: GM AMEC Project No.: 276360000

Project Location: Tarrytown, NY Weather: Sunny, 70's

Remarks: Sampler(s): C. Schmola

**WELL PURGING:**

PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.82 Well Depth (ft): 23.69 Casing Dia. (in): _____

Water Column (ft): _____ Water Column (gal.) _____

| Casing Dia. (in) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Baller Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): _____

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

* Alternate Calculation
(CD(2) x (CD(2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 7:50am End Time: 11:05am

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 08:55 | | | | | | 47.7 | |
| 10 80 | | | | | | 41.1 | |
| 10 05 | | | | | | 33.6 | |
| 10 15 | | | | | | 31.5 | |
| 10 25 | | | | | | 30.2 | |
| 10 39 | | | | | | 23.5 | |
| 10 45 | | | | | | 23.4 | |

End Time: _____ Total Volume Purged (gal.): _____

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): Sampling Method: Baller / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS: Filled drum

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-50 Date: 5/20/4

Project Name: GM AMEC Project No.: 276360 000

Project Location: SLEEPY HOLLOW NY Weather: SUNNY, WINDY

Remarks: Sampler(s): K. SAUNDERS

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 12.00 (FROM TOP OF SLAB) Well Depth (ft): 22.85 Casing Dia. (in): 2

Water Column (ft): 10.85 Water Column (gal.) 1.77

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.3

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 3.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: ~~13:00~~ 15:00 5/20/4 End Time:

Actual Volume Purged (gal.): 5.5

| Time | Temperature (°C) °F | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 15:00 | | | S/m | | 9/L | | If 3 volume method, include Start Time chemistry data only |
| ~~13:00~~ | 14.11 | 7.92 | 0.148 | -109 | 12.46 | 27.2 | |
| ~~13:10~~ | 14.39 | 7.87 | 86.5 | -137 | 6.82 | 17.9 | |
| ~~13:15~~ | 14.38 | 7.84 | 85.0 | -136 | 6.10 | 17.2 | |
| 15:20 | 14.38 | 7.85 | 87.0 | -139 | 5.23 | 17.3 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

End Time: 15:20 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 15:25

Depth to Water (ft): 12.07 Sampling Method: ~~Bailer~~ / In-Line SVOCs, NOCs Metals

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

OW-50-1 for VOCs, SVOCs, Metals

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-51 Date: 05/17/2004

Project Name: General Motors AMEC Project No.: 27636000

Project Location: Sleepy Hollow, NY Weather: Sunny, Hot

Remarks: Sampler(s): JAC

**WELL PURGING:**

PID Head Space Reading (ppm):

Depth to Water (ft): 11.83 Well Depth (ft): 24.81 Casing Dia. (in):

Water Column (ft): 12.98 Water Column (gal.) 2.1185

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| (2) (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method):

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, (SP) = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

**Alternate Calculation**
(CD/2) x (CD/2) x 23.5 x WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 1420 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 1450 | | | | | | 700 | CLOUDY BROWN |
| 1455 | | | | | | 80 | CLOUDY |
| 1500 | | | | | | 45 | |
| 1505 | | | | | | 24 | |
| 1510 | | | | | | 15 | MOSTLY CLEAR |
| 1515 | | | | | | 13 | CLEAR |
| 1520 | | | | | | 13 | CLEAR |

End Time: 1520 Total Volume Purged (gal.):

Purged Dry: Y / N If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End):

Depth to Water (ft): Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG

amec

Well ID: OW-51 Date: 05/20/2004

Project Name: General Motors AMEC Project No.: 2763600000

Project Location: Sterry Harbor NY Weather: Sunny/Breezy

Remarks: Sampler(s): JAC

**WELL PURGING:** PID Head Space Reading (ppm):

Depth to Water (ft): 11.03 Well Depth (ft): 24.68 Casing Dia. (in): 2

Water Column (ft): 13.65 Water Column (gal.) 2.227

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.681

Purging Method: HB / PP / CP / SP Pumping Rate (gpm):

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

| Casing Dia. in. (ft) | Gallons Water per Linear Ft. |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Alternate Calculation: (CD/2) x (CD/2) x 23.5 = WC
CD = Casing Dia. (ft)
WC = Water Column (ft)

**WELL PURGE DATA:** If 3 volume method: Start Time: 1452 End Time:

Actual Volume Purged (gal.):

| Time | Temperature (°C / °F) | pH (units) | Conductivity ~~(us/cm)~~ | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time | | | S/M | | | | If 3 volume method, include Start Time chemistry data only |
| 1455 | 14.62 | 8.49 | 0.670 | -77 | 0.02 | 830 | TURBID |
| 1500 | 14.58 | 8.40 | 0.661 | -85 | 0.00 | 640 | |
| 1506 | 15.17 | 8.57 | 0.431 | -92 | 0.00 | 97 | |
| 1511 | 15.10 | 8.69 | 0.380 | -101 | 0.00 | 69 | |
| 1515 | 15.07 | 8.76 | 0.350 | -108 | 0.00 | 59 | |
| 1521 | 15.19 | 8.80 | 0.322 | -113 | 0.00 | 49 | |
| 1526 | 15.17 | 8.81 | 0.316 | -115 | 0.00 | 44 | |

End Time: 1526 Total Volume Purged (gal.): 7gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): 1528

Depth to Water (ft): 12.01 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm:

COMMENTS: OW-51-1 FOR VOCs/SVOCs (STARS) WITH BAILERS
FOR METALS (Filtered/unfiltered) in-line

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-51 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Humid/Breeze

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.51 Well Depth (ft): 24.56 *Casing Dia. (in)*: 2

Water Column (ft): 13.05 Water Column (gal.) 2.13

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 6.39

Purging Method: HB / (PP) / CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 14:24 End Time: 16:30

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 14:24 | 22.45 | 7.73 | 5.14 | 7 | 10.27 | 665 | If 3 volume method, include Start Time chemistry data only |
| 14:30 | 18.09 | 8.05 | 5.97 | -22 | 2.64 | 901 | Flow Rate 305 mL/min |
| 14:40 | 19.71 | 7.62 | 2.12 | 13 | 5.24 | 462 | |
| 14:50 | 19.98 | 7.64 | 1.53 | 16 | 5.09 | 204 | |
| 15:00 | 20.22 | 7.88 | 1.17 | -2 | 4.43 | 157 | |
| 15:10 | 20.38 | 8.00 | 1.05 | -13 | 3.96 | 152 | |
| 15:20 | 20.34 | 8.17 | 0.94 | -27 | 3.37 | 152 | 4.5 gal purged |
| 15:30 | 20.43 | 8.24 | 0.847 | -35 | 2.74 | 147 | |

End Time: 16:30 Total Volume Purged (gal.): 11 gal

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 16:30

Depth to Water (ft): 11.52 Sampling Method: Bailer / (In-Line)

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: (CLEAR) / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:
Unfiltered & filtered samples

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-51 Date: 7/14/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Humid/Breeze

Remarks: Sampler(s): Cuppernell/Saunders

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 15:40 | 20.09 | 8.30 | 0.816 | -41 | 2.71 | 149.0 | |
| 15:50 | 20.07 | 8.36 | 0.785 | -46 | 2.52 | 147.0 | |
| 16:00 | 20.12 | 8.38 | 0.751 | -47 | 2.46 | 147.0 | |
| 16:10 | 20.12 | 8.39 | 0.742 | -49 | 2.38 | 146.0 | 4.5 gal |
| 16:15 | 20.11 | 8.42 | 0.749 | -51 | 2.43 | 146.0 | |
| 16:20 | 20.09 | 8.42 | 0.732 | -51 | 2.35 | 146.0 | |
| 16:25 | 20.09 | 8.42 | 0.738 | -51 | 2.35 | 146.0 | 2 gal |
| 16:30 | Sample | | | | | | |

COMMENTS:

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, NJ 08873 (732) 302-9500 / (732) 302-9504 (fax)

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-51 Date: 7/20/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/hot

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 11.53 Well Depth (ft): 24.54 Casing Dia. (in): 2

Water Column (ft): 13.01 Water Column (gal.) 1.1232

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.87

Purging Method: HB / PP / CP / (SP) Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 13:02 End Time: 15:30

Actual Volume Purged (gal.):

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 13:02 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 14:15 | | | | | | 700 | Cloudy brownish |
| 14:20 | | | | | | 340 | Cloudy brownish |
| 14:25 | | | | | | 650 | " |
| 14:30 | | | | | | 120 | " Surged |
| 14:35 | | | | | | 550 | |
| 14:40 | | | | | | 95 | Surged pump |
| 14:45 | | | | | | 950 | |

End Time: 15:30 Total Volume Purged (gal.): _____

Purged Dry: Y / (N) If Purged Dry, Recovery Rate (ft/min):

**SAMPLING DATA:** Sample Time (Start / End): _____

Depth to Water (ft): 11.58 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-51 Date: 7/20/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Sunny/Hot

Remarks: Well redevelopment Sampler(s): Cuppernell

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (S/cm) | REDOX (Eh-mV) | DO (g/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 14:50 | | | | | | 370 | Light murky brown color pump @102 Hz |
| 14:55 | | | | | | 55 | Water appears clear |
| 15:00 | | | | | | 17 | Water appears clear |
| 15:05 | | | | | | 15 | Clear |
| 15:10 | | | | | | 14 | Clear |
| 15:15 | | | | | | 11 | Clear |
| 15:20 | | | | | | 10 | Clear |
| 15:25 | | | | | | 9 | Clear |
| 15:30 | | | | | | 9 | Clear |
| | | | | | | | |
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COMMENTS:

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-51 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy/Breezy/Cool

Remarks: Well Re-sampling Sampler(s): Cuppernell

**WELL PURGING:** PID Head Space Reading (ppm): _____

Depth to Water (ft): 10.92 Well Depth (ft): 23.23 Casing Dia. (in): 2

Water Column (ft): 12.21 Water Column (gal.) 1.9926

Clear Bailer Survey: LNAPL: Y / N DNAPL: Y / N

Volume of Water to be Purged (3 volume method): 5.998

Purging Method: HB (PP) CP / SP Pumping Rate (gpm): _____

(HB=Hand Bailed, PP = Peristaltic Pump, CP = Centrifugal Pump, SP = Submersible Pump)

Pre-Purge Visual Appearance: CLEAR / SLIGHTLY TURBID / (TURBID)

| Casing Dia. in. (ft) | Gallons Water per Linear Ft |
|---|---|
| 1 (0.083) | 0.0408 |
| 2 (0.167) | 0.1632 |
| 4 (0.333) | 0.6528 |
| 6 (0.500) | 1.4688 |

**Alternate Calculation**
**(CD/2) x (CD/2) x 23.5 x WC**
**CD = Casing Dia. (ft)**
**WC = Water Column (ft)**

**WELL PURGE DATA:** If 3 volume method: Start Time: 9:40 End Time: _____

Actual Volume Purged (gal.): _____

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| Start Time 9:40 | | | | | | | If 3 volume method, include Start Time chemistry data only |
| 9:40 | 20.63 | 8.08 | 46.6 | 66 | 8.11 | 360 | |
| 9:45 | 19.49 | 7.72 | 0.107 | 37 | 1.46 | 480 | Cond. In S/m |
| 9:50 | 20.34 | 7.70 | 82.8 | 13 | 1.74 | 220 | cond. In mS/m |
| 9:55 | 20.74 | 7.75 | 61.5 | 19 | 2.59 | 94 | |
| 10:00 | 20.83 | 7.79 | 51.0 | 20 | 2.93 | 51 | slightly cloudy |
| 10:05 | 20.89 | 7.80 | 47.3 | 19 | 2.91 | 32 | |
| 10:10 | 20.93 | 7.81 | 45.0 | 16 | 2.77 | 25 | |

End Time: 11:15 Total Volume Purged (gal.): 9.5

Purged Dry: Y (N) If Purged Dry, Recovery Rate (ft/min): _____

**SAMPLING DATA:** Sample Time (Start / End): 11:20

Depth to Water (ft): 10.94 Sampling Method: Bailer / In-Line

| If 3 volume method, indicate sample chemistry data | Temperature (°C / °F) | pH (units) | Conductivity (us/cm) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) |
|---|---|---|---|---|---|---|
| | | | | | | |

Sample Visual Appearance: CLEAR / SLIGHTLY TURBID / TURBID

Ferrous Iron ($Fe^{2+}$), ppm: _____

COMMENTS:

Sampled filtered and unfitered in line for metals - Duplicate

# GROUNDWATER PURGING AND SAMPLING LOG



Well ID: OW-51 Date: 7/27/2004

Project Name: General Motors AMEC Project No.: 276360000

Project Location: Sleepy Hollow NY Weather: Cloudy/Breezy/Cool

Remarks: Well re-sampling Sampler(s): Cuppernell

**WELL PURGE DATA:**

| Time | Temperature (°C) | pH (units) | Conductivity (mS/m) | REDOX (Eh-mV) | DO (mg/l) | Turbidity (NTU) | COMMENTS (color, odor, change in pump rate, etc.) |
|---|---|---|---|---|---|---|---|
| 10:15 | 20.95 | 7.80 | 45.0 | 11 | 2.46 | 22 | Mostly clear |
| 10:20 | 20.96 | 4.79 | 45.3 | 4 | 2.20 | 18 | |
| 10:25 | 20.87 | 7.79 | 45.1 | -3 | 2.09 | 16 | |
| 10:30 | 20.97 | 7.78 | 45.4 | -9 | 1.92 | 15 | |
| 10:35 | | | | | | | 5 gal |
| 10:40 | 20.92 | 7.72 | 46.0 | -16 | 1.76 | 19 | |
| 10:45 | 21.11 | 7.97 | 42.3 | -33 | 1.70 | 18 | |
| 10:50 | 21.13 | 7.99 | 42.1 | -39 | 1.68 | 12 | |
| 10:55 | 21.13 | 7.97 | 42.6 | -45 | 1.53 | 11 | |
| 11:00 | 21.19 | 7.97 | 43.0 | -49 | 1.50 | 10 | Clear |
| 11:05 | 21.16 | 7.96 | 43.8 | -53 | 1.53 | 10 | |
| 11:10 | 21.14 | 7.95 | 44.5 | -54 | 1.53 | 10 | 4 gal |
| 11:15 | 21.19 | 7.95 | 45.5 | -59 | 1.49 | 10 | |
| Sampled at 11:20 duplicates | | | | | | | |

COMMENTS:

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, NJ 08873 (732) 302-9500 / (732) 302-9504 (fax)

# *Appendix H*

# Assessment of Ecological Resources for Lighthouse Landing Redevelopment Project, Village of Sleepy Hollow, Westchester County, New York

BBL®
an ARCADIS company

# ASSESSMENT OF ECOLOGICAL RESOURCES
# FOR
# LIGHTHOUSE LANDING
# REDEVELOPMENT PROJECT
# VILLAGE OF SLEEPY HOLLOW
# WESTCHESTER COUNTY, NEW YORK

Prepared for:

Roseland/Sleepy Hollow, LLC
233 Canoe Brook Road
Short Hills, New Jersey 07078

Prepared by:

EcolSciences, Inc.
75 Fleetwood Drive, Suite 250
Rockaway, New Jersey

April 8, 2004

Revised
January 5, 2005

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## ABSTRACT

Wetland, terrestrial, and aquatic studies were performed of the former General Motors Corporation (GM) Assembly Plant site located along the Hudson River within the Village of Sleepy Hollow. The West Parcel and South Parcel are currently being proposed for redevelopment with a mix of commercial, residential, and park uses that will collectively be known as Lighthouse Landing at Sleepy Hollow and the East Parcel will be redeveloped with public works and park uses. This project is subject to the requirements of the New York State Environmental Quality Review Act (SEQRA) and a Draft Environmental Impact Statement (DEIS) is being prepared to address these requirements.

Available data regarding the ecological resources of the site and surrounding area was compiled through a review of existing information, including reports and maps prepared by local, state, and federal agencies. Field studies were conducted by as necessary to inventory ecological resources on the site and adjacent parkland. Jurisdictional wetland boundaries on the East Parcel near the Metro-North tracks were flagged in the field and surveyed and are shown on the site plans for the project; the wetlands on the site are former drainage ditches. The project site and adjacent parklands include ten vegetative communities based on the ecological community classification system set forth by the NHP (2002). These include Tidal River, Estuarine Riprap/Artificial Shore, Brackish Tidal Marsh, Ditch/Artificial Intermittent Stream, Red Maple-Hardwood Swamp, Oak-Tulip Tree Forest, Mowed Lawn with Trees, Mowed Lawn, Railroad, and Urban Vacant Land.

Implementation of the proposed development should not adversely affect the limited ecological resources of the project site. The vast majority of the project site has been identified as Urban Vacant Lot. Due to the presence of extensive pavements and concrete pads remaining from the demolished plant facilities, the existing plant community is restricted to scattered plants and small strips of vegetation composed of weedy or non-native species. The ecological value of this plant community and its associated wildlife habitat is extremely low and its loss would not be significant. Redevelopment of the site would increase the value of portions of the site through the establishment of new native vegetation. Although wetlands will be filled and replaced by culverts as part of the conversion of part of the East Parcel for Village playing fields, they provide only limited ecological function and value in part due to the dominance of exotic and weedy plant species. The construction of the proposed project is not expected to have significant impacts on aquatic communities of the Hudson and Pocantico Rivers. Potential short-term impacts to aquatic communities would be minimized by strict adherence to the Soil Erosion and Sediment Control Plan and potential impacts to aquatic communities during the operation of the project would be mitigated through the construction of a stormwater management system.

## EXECUTIVE SUMMARY

Wetland, terrestrial, and aquatic studies were performed of the former General Motors Corporation (GM) Assembly Plant site located along the Hudson River within the Village of Sleepy Hollow (formerly North Tarrytown), Westchester County, New York. The site is a total of 94.5 acres with 64.5 acres of land west of the existing Metro-North railroad tracks ("West Parcel"), 1.7 acres south of Beekman Avenue ("South Parcel"), and another 28.3 acres east of the tracks ("East Parcel"). The site is bordered by a mix of various storefronts and residential dwellings that front along Beekman Avenue, commercial/industrial business operations along River Street, Westchester County and Sleepy Hollow Village parkland to the north and west, the Pocantico River and the Philipsburg Manor Restoration to the north, and the Hudson River to the west. The site's shoreline along the Hudson River is defined by a riprapped slope. The historic Tarrytown Lighthouse is located along the site's western shoreline.

The West Parcel and South Parcel are currently being proposed for redevelopment by Roseland/Sleepy Hollow, LLC with a mix of commercial, residential, and park uses that will collectively be known as Lighthouse Landing at Sleepy Hollow. The East Parcel will be redeveloped with Village of Sleepy Hollow public works and park uses.

This project is subject to the requirements of the New York State Environmental Quality Review Act (SEQRA) and a Draft Environmental Impact Statement (DEIS) is being prepared to address these requirements. The wetland, terrestrial, and aquatic studies documented within this report were conducted in conjunction with the preparation of the DEIS.

Available data regarding the ecological resources of the site and surrounding area was compiled through a review of existing information, including reports and maps prepared by local, state, and federal agencies. Field studies were conducted to inventory ecological resources on the site and adjacent parkland (i.e., Kingsland Point Park, Devries Park, and Philipsburg Manor Historic Site). Existing vegetative, wildlife, and aquatic communities were described according to the ecological communities classified by the New York Natural Heritage Program (NHP) for New York State (NHP, 2002). A Vegetative Communities Map was developed based on the field surveys and an analysis of aerial photographs.

In the project area, activities in wetlands may be regulated by the U.S. Army Corps of Engineers (ACOE), the New York State Department of Environmental Conservation (DEC), and/or the Village of Sleepy Hollow. Jurisdictional wetland boundaries were flagged in the field and surveyed and are shown on the site plans for the project.

The project site and adjacent parklands include nine vegetative communities based on the ecological community classification system set forth by the NHP (2002). Estuarine Riprap/Artificial Shore occurs along the project site's shoreline with the Hudson River. Brackish Tidal Marsh occurs along a portion of the shoreline of the Pocantico River within Devries Park. Ditch/Artificial Intermittent Stream occurs in association with a series of wetland ditches connected by pipes along the east side of the railroad tracks. Off-site wetlands along the Pocantico River upslope of the Brackish Tidal Marsh would fall into the Red Maple-Hardwood Swamp community. The project site and its immediate vicinity appear to contain remnant areas of Oak-Tulip Tree Forest. Because of historic disturbance, only a small number of canopy trees remain from this forest community. In most areas, introduced species occur with the native species in the canopy and most native shrubs have been eliminated. Within the project site, this community has only been mapped on the steep slopes along the eastern boundary of the East Parcel. Oak-Tulip Tree Forest is more prevalent in the adjacent parklands, though its expanse is restricted by park and residential development. It occurs within upland slopes along the Pocantico River within Devries Park and Philipsburg Manor Historic Site. Because of routine maintenance, most of the wooded areas within Devries Park and Kingsland Point Park are best classified as Mowed Lawn with Trees and Mowed Lawn. The existing Metro-North railroad tracks divide the project site into the East Parcel and West Parcel. Vegetation occurs in strips on either side of the tracks. Urban Vacant Lot is the predominant ecological community within the project site. Vegetation grows in the cracks of the pavement, on soil piles, in unpaved fill areas, and next to the concrete slabs.

No Significant Coastal Fish and Wildlife Habitats have been mapped by the State of New York Department of State (DOS) on or immediately adjacent to the project site. The presence of wildlife cover within the project site and adjacent parklands directly corresponds to the nine ecological communities. A tenth ecological community, Tidal River, is included to represent wildlife habitat provided by the Hudson and Pocantico Rivers. Of the 136 species of birds identified as occurring or potentially occurring within the project vicinity, only 59 or 43 percent of the total have been identified by the study as potentially breeding because the project site and adjacent parklands do not contain a diversity of habitats. Most of the identified species would likely occur only as migrants because of the site's position along the Hudson River, which is an important bird migration corridor.

Eleven species of reptiles and amphibians are identified as occurring or potentially occurring within the project vicinity, including three species of turtles, two species of snakes, one species of salamander, two species of toads; one species of treefrog; and two species of true

frogs. No reptile or amphibian species were observed during the field studies. Whitetail deer, eastern gray squirrel, and eastern chipmunk were observed on the project site. However, the primary habitat for these species is within the woodlands of the adjacent parklands. Although not observed during the field studies, it is expected that Norway rat, house mouse, and perhaps, white-footed mouse occur within the project site. In addition to these species, short-tail shrew would be expected to occur in the adjacent parklands.

The Hudson River and Pocantico River provide Tidal River habitat in the project vicinity. More than 150 species of fish, many introduced, are known to occur within the tidal portion of the Hudson River and its tidal tributaries. These species include freshwater or diadromous (migratory between fresh and salt waters) forms and marine strays. Of these, about 80 are freshwater or diadromous forms and 50 occur regularly in nearshore (shallow water) areas. During field studies of the project site, banded killifish were observed in the wetland ditches and in an area of ponded water in the northeastern portion of the site.

The NHP has a record of shortnose sturgeon, a State-endangered species, within the lower Hudson River. The NHP also has historical records for three rare plants that may be on or in the immediate vicinity of the site. During field studies of the site, these plants were not observed on the site and are not expected to occur due to the disturbance of the site and its being largely covered by impervious surfaces.

Implementation of the proposed project should not adversely affect the limited ecological resources of the project site. The vast majority of the project site has been identified as Urban Vacant Lot. Due to the presence of extensive pavements and concrete pads remaining from the demolished plant facilities, the existing plant community is restricted to scattered plants and small strips of vegetation composed of weedy or non-native species. The ecological value of this plant community and its associated wildlife habitat is extremely low and its loss would not be significant. Redevelopment of the site would increase the value of portions of the site through the establishment of new native vegetation. Although the wetland ditches would be filled and their drainage functions served by culverts, these ditched wetlands are man-made features, which provide only limited ecological function and value in part due to the dominance of exotic and weedy plant species and that the ditches were constructed for stormwater management purposes. Also, opportunities exist for the mitigation of this impact by the construction of new wetlands in the vicinity of the Pocantico River.

The construction of the proposed project is not expected to have significant impacts on aquatic communities of the Hudson and Pocantico Rivers. Potential short-term impacts on

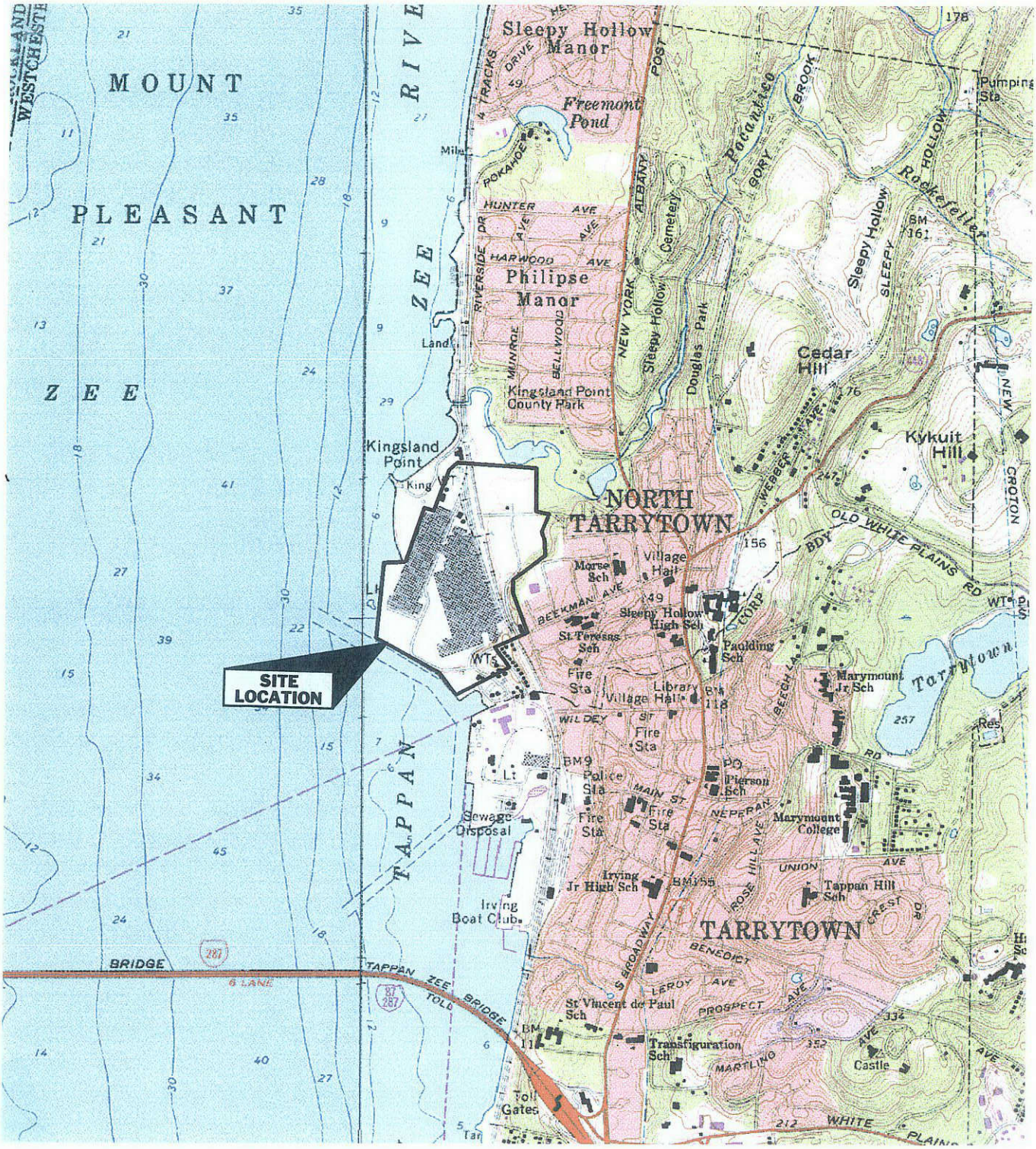
surface water quality would be minimized by strict adherence to the measures specified in the Soil Erosion and Sediment Control Plan. Potential impacts to aquatic communities during the operation of the project would be mitigated through the construction of a stormwater management system.

# I. INTRODUCTION AND METHODOLOGY

EcolSciences, Inc. was retained by Roseland/Sleepy Hollow, LLC of Short Hills, New Jersey to conduct wetland, terrestrial, and aquatic studies of the former General Motors Corporation (GM) Assembly Plant site located at 199 Beekman Avenue within the Village of Sleepy Hollow (formerly North Tarrytown), Westchester County, New York (Figure 1). The site is located along the eastern shoreline of the Hudson River north of the Tappan Zee Bridge. The following lots are included within the site: Section 15.10, Block 1, Lot 1; Section 15.11, Block 1, Lots 2 and 85; and Section 15.15, Block 1, Lot 1. The GM automotive assembly plant produced Chevrolet automobiles on the premises from *circa* 1914 until cessation of their operations and subsequent building demolition activities that began in 1996. Various other industrial entities existed on the site from *circa* 1830 until 1914.

The West Parcel and South Parcel are currently being proposed for redevelopment by Roseland/Sleepy Hollow, LLC with a mix of commercial, residential, and park uses that will collectively be known as Lighthouse Landing at Sleepy Hollow. According to preliminary plans, the East Parcel will be redeveloped with Village of Sleepy Hollow public works and park uses. This project is subject to the requirements of the New York State Environmental Quality Review Act (SEQRA) and a Draft Environmental Impact Statement (DEIS) is being prepared to address these requirements. The wetland, terrestrial, and aquatic studies documented within this report were conducted in conjunction with the preparation of the DEIS.

The site is a total of 94.5 acres with 64.5 acres of land west of the existing Metro-North railroad tracks ("West Parcel"), 1.7 acres south of Beekman Avenue ("South Parcel"), and another 28.3 acres east of the tracks ("East Parcel"). The site has 740± feet of roadway frontage along the northerly line of Beekman Avenue and 2,634± feet of frontage along the Hudson River. The majority of the site consists of upland created through a series of filling events dating from *circa* 1927 to 1960. At the present time, the overall site is characterized by nearly level topography, with elevations ranging from 10± feet above Mean Sea Level (MSL) along the Hudson River frontage to 20± feet MSL along the eastern site boundary. Remnants of the former GM plant include extensive concrete building slabs that cover the majority of lands west of the railroad tracks and asphalt pavement that covers most of the eastern portion of the site. The site is bordered by a mix of various storefronts and residential dwellings that front along Beekman Avenue, commercial/industrial business operations along River Street, Westchester County and Sleepy Hollow Village parkland to the north and west, the Pocantico River and the Philipsburg Manor Restoration to the north, and the Hudson River to the west. The site's shoreline along the






QUADRANGLE LOCATION
LATTITUDE: 41° 5' 1.0"
LONGITUDE: 73° 52' 13.4"

N

## FIGURE 1: REGIONAL SITE LOCATION MAP

Lighthouse Landing
Redevelopment Project
Village of Sleepy Hollow
Westchester County, New York

Source : USGS, 1979 Nyack and White Plains, N.Y. Quadrangles

**EcolSciences, Inc.**
Environmental Management & Regulatory Compliance

DATE : 04/08/04
SCALE : 1" = 2,000'
f:\jobs01\hw01-159\hw01-159.vsd

Hudson River is defined by a riprapped slope. The historic Tarrytown Lighthouse is located along the site's western shoreline.

The improvements planned in conjunction with the Lighthouse Landing project would affect the ecological resources of the site and its vicinity. Examples of the ecological resources that have the potential to be affected include wetland, terrestrial, and aquatic communities. In order to properly assess the project's impacts upon these resources, existing data have been compiled and field studies performed to determine the extent of ecological resources on the site and in the surrounding area.

Available data regarding the ecological resources of the site and surrounding area was compiled through a review of existing information, including reports and maps prepared by local, state, and federal agencies. Information concerning the presence of plant and animal communities on the project site and its vicinity was obtained from existing agency sources such as the New York State Natural Heritage Program (NHP), New York State Department of Environmental Conservation (DEC), New York State Department of State (DOS), and U.S. Fish and Wildlife Service (USFWS). Other sources of information included various technical publications from private and academic concerns such as Audubon New York, Hudsonia, Ltd., and Cornell University. Field studies were conducted by EcolSciences as necessary to inventory ecological resources on the site and adjacent parkland (i.e., Kingsland Point Park, Devries Park, and Philipsburg Manor Historic Site).

This report presents the technical analyses performed to assess the potential impacts of the proposed project on the ecological resources of the site. Where appropriate, discussions are provided that describe the natural resources of the site in the context of the region, the Hudson River watershed, and the site vicinity. For each of the topics of discussion, specific methodologies used to compile information concerning the topic are presented as appropriate. The following subsections describe the various types of ecological communities and relevant agency jurisdiction over each, and summarize the field work conducted by EcolSciences for each of these areas. The next section of the report describes existing conditions, and the last section discusses potential project impacts on the relevant ecological resources.

## A. Wetland Communities

Wetlands are lands where water saturation is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands are transitional areas between terrestrial and aquatic systems. In the project area, activities in wetlands may be regulated by the U.S. Army Corps of Engineers (ACOE), the

New York State Department of Environmental Conservation (DEC), and/or the Village of Sleepy Hollow. The State regulates tidal wetlands, freshwater wetlands of 12.4 acres in size or greater, and smaller freshwater wetlands of unusual local significance. The ACOE and the Village of Sleepy Hollow regulate wetlands (as defined by the respective jurisdictions) regardless of size. Details of each of the wetland regulatory programs are provided below:

**1. U.S. Army Corps of Engineers Jurisdiction**

According to regulations promulgated by the ACOE and the U.S. Environmental Protection Agency (EPA) (33 CFR Section 328.3 and 40 CFR Section 230.3, respectively), wetlands are those areas that are inundated or saturated within surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturate soil conditions, commonly known as hydrophytic vegetation. Wetlands generally include swamps, marshes, bogs, and similar areas.

The ACOE has jurisdiction over "Waters of the United States," including tidal wetlands and freshwater wetlands. Activities in waters are regulated by the ACOE in accordance with Section 404 of the Clean Water Act and, for navigable waters, by Section 10 of the Rivers and Harbors Act of 1899. Section 10 regulates work or structures on, over, or under navigable waters of the United States [33 CFR Part 320.2(b)]. Navigable waters of the United States are "those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used or have been used in the past or may be susceptible for use to transport interstate or foreign commerce" [33 CFR Part 322.2(a)]. Section 404 regulates the discharge of dredged or fill material into waters of the United States pursuant to 33 CFR Part 323. Waters of the United States include navigable waters in addition to most other non-navigable tidal and non-tidal waters and adjacent wetlands as defined at 33 CFR Part 328.3(a). Section 404 does not regulate buffers adjacent to regulated wetlands.

**2. New York State Jurisdiction**

As defined by the New York State Environmental Conservation Law (ECL Sec. 24-0703[7]), wetlands are lands under water that may be permanently, temporarily or intermittently covered with fresh or salt-water and commonly referred to as flood basins or flats, meadows, marshes, shrub swamps, wooded swamps, or bogs.

*Freshwater Wetlands*

Pursuant to the New York State Freshwater Wetlands Act (Article 24 of the Environmental Conservation Law), "freshwater wetlands" are defined as:

Lands and waters of the state shown on the freshwater wetlands map which contain any or all of the following:

a. Lands and submerged lands commonly called marshes, swamps, sloughs, bogs, and flats supporting aquatic or semi-aquatic vegetation of the following types: [what follows is a list of commonly occurring wetland trees and shrubs; emergent vegetation; rooted floating-leaved vegetation; free-floating vegetation; wet meadow vegetation; bog mat vegetation and submerged vegetation];

b. Lands and submerged lands containing the remnants of any vegetation that is not aquatic or semi-aquatic that has died because of wet conditions over a sufficiently long period, provided that such wet conditions do not exceed a maximum seasonal water table depth of six feet and provided further that such condition can be expected to persist indefinitely, barring human intervention;

c. Lands and waters substantially enclosed by aquatic or semi-aquatic vegetation as set forth in paragraph (a) or by dead vegetation as set forth in paragraph (b), the regulation of which is necessary to protect and preserve the aquatic and semi-aquatic vegetation; and

d. The waters overlying the areas set forth in (a) and (b) and the lands underlying (c) [N.Y. Environmental Conservation Law Section 24-0107(1)].

Areas within 100 feet of freshwater wetlands (or further when specifically found by the DEC necessary to protect the wetlands) are termed adjacent areas and are also subject to regulation.

The DEC regulates activities in freshwater wetlands larger than 12.4 acres or smaller wetlands of unusual local importance and associated adjacent areas pursuant to 6 NYCRR Part 663. Permits are issued for activities in these regulated areas under standards emphasizing the need for the proposed activity to be compatible with the wetlands proposed to be affected; generally the agency requires an applicant to demonstrate that impacts to these areas have been avoided and minimized to the extent practicable. The classification of the wetlands also plays a role in the issuance of permits. Compensatory mitigation is usually required when permits are issued. To be regulated, the freshwater wetlands must first be mapped and the maps promulgated through a public hearing process; however, if wetlands that qualify for regulation are discovered on a proposed project site, the DEC may seek to amend the relevant map to include such areas or the applicant may agree to treat such wetlands as regulated and proceed accordingly.

*Tidal Wetlands*

Pursuant to the New York State Tidal Wetlands Act (Article 25 of the Environmental Conservation Law), "tidal wetlands" are defined as:

> Any lands delineated as tidal wetlands on an inventory map and shall comprise the following classifications as delineated on such map:
>
> a. Coastal Fresh Marsh – The tidal wetland zone found primarily in the upper tidal limits of riverine systems where significant freshwater inflow dominates the tidal zone. Species normally associated with this zone include narrow-leaved cattail (*Typha augustifolia*), the tall brackish water cordgrasses (*Spartina pectinata* and/or *S. cynsuroides*), and the more typically emergent freshwater species such as arrow arum (*Peltandra sp.*), pickerelweed (*Pontederia sp.*), and cutgrass (*Leersia sp.*).
>
> b. Intertidal Marsh - The vegetated tidal wetland zone lying between average high and low tidal elevations. The predominant vegetation in this zone is low marsh cordgrass (*Spartina alterniflora*).
>
> c. Coastal Shoals, Bars and Flats - The tidal wetland zone that, unless otherwise determined by the DEC, includes land that (i) at high tide is covered by water, (ii) at low tide is exposed or is covered by water to a maximum depth of approximately one foot, and (iii) is not vegetated by low marsh cordgrass (*Spartina alterniflora*).
>
> d. Littoral Zone - The tidal wetlands zone that, unless otherwise determined by the DEC, includes all lands under tidal waters which are not included in any other category provided there shall be no littoral zone under water deeper than six feet at mean low water.
>
> e. High Marsh or Salt Meadow - The normal uppermost tidal wetland zone, usually dominated by salt meadow grass (*Spartina patens*) and spike grass (*Distichlis spicata*). This zone is periodically flooded by spring and storm tides and is often vegetated by low vigor *Spartina alterniflora* and seaside lavender (*Limonium carolinianum*). Upper limits of this zone often include black grass (*Juncus gerardi*), chairmaker's rush (*Scirpus sp.*), marsh elder (*Iva frutescens*) and groundsel bush (*Baccharis halimifolia*).
>
> f. Formerly-connected Tidal Wetlands – The tidal wetlands zone in which normal tidal flow is restricted by man-made causes. Typical tidal wetland plant species may exist in such areas although they may be infiltrated with common reed (*Phragmites sp.*).

The DEC regulates activities in tidal wetlands of any size and an associated adjacent area up to 300 feet wide pursuant to 6 NYCRR Part 661. Standards for the issuance of permits for activities in tidal wetlands are similar to those for freshwater wetlands and focus on avoidance, minimization, compensation, and wetlands classification. In addition, the regulations impose certain development restrictions on regulated tidal wetlands and adjacent areas. Tidal wetlands

must first be mapped and the maps promulgated through a public hearing process to be regulated. but DEC can regulate unmapped wetlands that meet the statutory and regulatory criteria for delineation.

### 3. Village of Sleepy Hollow Jurisdiction

The Village of Sleepy Hollow regulates activities in freshwater wetlands, watercourses, and associated 100-foot wide buffers within its limits through Chapter 61 of the Village Code. The Code defines wetlands as those areas that are identified as wetlands on the official Freshwater Wetlands Map promulgated by the DEC Commissioner. The Village Code also defines wetlands as those areas that are inundated or saturated within surface or ground water at a frequency and duration sufficient to support, and that inundated or saturated with surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of hydrophytic vegetation as defined by the Federal Interagency Committee for Wetland Delineation, 1989, *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. (Note that the ACOE uses the 1987 *Corps of Engineers Wetlands Delineation Manual*.) The Village Code does not require that the wetlands be previously mapped and does not specify a minimum size to be subject to regulation. A permit is required from the Village Planning Board for proposed impacts to regulated areas, which would be issued if it is demonstrated that the impacts are unavoidable, they have been minimized, and that there is no practicable alternative locations for the proposed activity. If the permit is issued, mitigation of the impacts would be required.

A wetlands study of the site was performed by EcolSciences in October 2003. This study was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) and the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (Federal Interagency Committee for Wetland Delineation, 1989), both of which generally require a coincidence of hydric soils, positive hydrological indicators, and a prevalence of hydrophytic vegetation for a determination that an area is a wetland (i.e., all three factors must be present, absent unusual circumstances such as man-made disturbance). The delineated wetland boundaries were flagged in the field and surveyed and are shown on the site plans for the project.

## B. Vegetative Communities

Vegetation is the plant life or the total plant cover that is found in a specific area, whether indigenous or introduced by humans. Communities of vegetation evolve through of complex interaction of geology, topography, soils, hydrology, weather, and the activities of humans and animals. The New York Natural Heritage Program (NHP) published a report entitled *Ecological Communities of New York State* (Carol Reschke editor) in March 1990. This report identifies

and characterizes ecological communities of New York State into a total of 218 ecological communities within seven systems as follows: Marine; Estuarine; Riverine; Lacustrine; Palustrine; Terrestrial; and Subterranean. Each system is composed of from two to five subsystems and each subsystem is composed of from two to 35 ecological communities. The communities described are largely naturally occurring; however, each system contains a Cultural subsystem that identifies communities that are created or maintained by human activities. In January 2002, a draft of a Second Edition of this report was published by the NHP (Edinger, Evans, Gebauer, Howard, Hunt, and Olivero editors). While most of the second edition remains unchanged from the first, six previously undescribed communities have been added, 23 new communities have been split off from previously identified communities, and revised descriptions are provided for most of the remainder.[1]

Each of the broad categories of systems is briefly described below per the NHP (2002):

- Marine – open ocean overlying the continental shelf, the associated coastline that is exposed to wind and waves, and shallow coastal bays that are saline because they lack significant freshwater inflow. The limits extend from mean high water seaward, beyond the limits of rooted vascular vegetation. Salinity is greater than 18.0 parts per thousand (ppt) ocean-derived salts.

- Estuarine – deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed but have open, partly obstructed, or sporadic access to open ocean or tidal fresh waters, and in which ocean water is at least occasionally diluted by freshwater runoff. The limits extend from the upstream limits of tidal influence seaward to an imaginary line closing the mouth of a river or bay. Salinity is usually less than 30 ppt ocean-derived salts.

- Riverine – linear aquatic communities of flowing, non-tidal waters with a discrete channel, with persistent emergent vegetation sparse or lacking, but may include areas with abundant submerged or floating-leaved aquatic vegetation.

- Lacustrine – ponded waters situated in topographic depressions or dammed river channels, with persistent emergent vegetation sparse or lacking, but including many any areas with abundant submerged or floating-leaved aquatic vegetation.

- Palustrine – non-tidal, perennial wetlands characterized by emergent vegetation. The system includes wetlands permanently saturated by seepage, permanently flooded

[1] Please note that that an additional report, Biodiversity Assessment Manual for the Hudson River Estuary Corridor (Kiviat and Stevens, 2001), was reviewed during the preparation of this report. This report provides broader classifications of communities than are described in the NHP report.

wetlands, and wetlands that are seasonally or intermittently flooded (these may be seasonally dry) if the vegetative cover is predominantly hydrophytic and the soils are hydric.

- Terrestrial – upland habitats that have well-drained soils that are dry to mesic (never hydric), and vegetative cover that is never predominantly hydrophytic, even if the soil surface is occasionally or seasonally flooded or saturated.

- Subterranean – both aquatic and non-aquatic habitats beneath the earth's surface, including air-filled cavities with openings to the surface (caves), water-filled cavities and aquifers, and interstitial habitats in small crevices within an inorganic matrix.

The NHP defines ecological communities as "a variable assemblage of interacting plant and animal populations that share a common environment" (NHP, 2002). Therefore, for the purposes of this report, the ecological communities classified by the NHP were used to describe vegetative communities and wildlife habitats within the project site and adjacent parklands. EcolSciences conducted field surveys of the project site and adjacent parklands to the north in October and December 2003 to identify plant species and to classify the vegetative communities within the study area according to the ecological communities described by the NHP (2002). A Vegetative Communities Map was developed based on the field surveys and an analysis of aerial photographs (see Plate 1). The Vegetative Communities Map shows communities on the site and within a 200-foot radius of the site boundaries. The classification of communities was largely based upon the dominance and maturity of the identified plant species, in addition to topography, soils, hydrology, and level of human disturbance. In addition, the sizes (diameter at breast height (dbh)) of trees on the site were measured to determine the presence of specimen or unusually large trees.

C. Wildlife Communities

Historically, the project area exhibited a diversity of faunal habitats due to the complex interplay of bedrock and surficial geology, topography, plant communities, tidal and fresh waters, and human activity. In modern times, the loss or disturbance of the area's natural habitats, initially through agricultural conversion of habitats and more recently through urbanization, has altered the composition and abundance of fauna. Loss of certain species, increasing scarcity of some species, increasing abundance of others, and competition by introduced species have been contributing factors to the current status of fauna within the area.

The utility value of an area as wildlife habitat depends on many factors. All wildlife species require food, water, cover, and space. The relative abundance of these factors or lack thereof in relation to each species' requirements will, in part, determine the species composition and distribution within a particular area. In addition, the types of vegetative communities

present, the size, shape, and complexity of the habitat and the surrounding land uses further interact to determine the success of various wildlife species in the location being considered. Some species have demonstrated great adaptability and tolerance to human presence; others are less able to tolerate such activities and are displaced to more suitable habitats, if such habitats are available.

Studies were performed to characterize the wildlife communities that may be directly affected by the proposed redevelopment project. Available data regarding the site and surrounding area was compiled through a review of existing information, including reports and maps prepared by public, private, and academic organizations. Information concerning the presence of animal communities on the project site and its vicinity was obtained from existing agency sources such as NHP, DEC, DOS, and USFWS. Information was also obtained from existing public and private organizations such as National Audubon Society, New York Audubon, and Cornell University. Field surveys were conducted to identify wildlife species that are present on and in the vicinity of the project site, and to determine, based on the presence of suitable habitat, what species may be supported by the site, even if not observed. Wildlife habitats were verified in the field and classified in accordance with the ecological communities described by the NHP (2002). A list of wildlife species observed on the site or expected to occur on the site or its immediate vicinity as resident or transient species was developed based on field observation, existing data sources, and the presence of habitat types.

D. Aquatic Communities

The characteristics of aquatic communities that inhabit surface waters are generally shaped by the physical (e.g., water depth, flow, temperature, etc.), chemical (e.g., dissolved oxygen, salinity, etc.), and biotic (e.g., food availability, competition, predation, etc.) factors of the waters. Principal components of aquatic communities that are typically evaluated for classifying the health of surface waters are the fishes and benthic (i.e. bottom-dwelling) macroinvertebrates. Benthic macroinvertebrates include organisms that are aquatic throughout their lives and organisms that have distinct aquatic and terrestrial life stages.

The aquatic communities of the surface waters on and adjacent to the site, including the Hudson River and Pocantico River, were evaluated based on existing data sources and observations made during the field surveys.

E. Threatened and Endangered Species

As defined at 6 NYCRR Part 193.3, endangered plant species are those: with five or fewer extant sites; or with fewer than 1,000 individuals; or restricted to fewer than four U.S.

Geological Survey (USGS) 7.5 minute topographical maps; or species listed as endangered by the U.S. Department of Interior (USDOI), Fish and Wildlife Division. Threatened species are those: with six to fewer than 20 extant sites; or within 1,000 to less than 3,000 individuals: or restricted to not less than four or more than seven USGS maps; or species listed as threatened by the USDOI. Rare species have 20 to 35 extant sites or 3,000 to 5,000 individuals statewide. Species meeting these criteria are listed at 6 NYCRR Part 193.3 as promulgated by the DEC.

As defined at 6 NYCRR Part 182.2, endangered animal and insect species are any native species in imminent danger of extirpation or extinction in New York, or any species listed as endangered by the USDOI. Threatened animal species are any species likely to become endangered within the foreseeable future in New York, or any species listed as threatened by the USDOI. Special concern species are not yet recognized as endangered or threatened, but documented concern exists for their continue welfare in New York. Species meeting these criteria are listed at 6 NYCRR 182.6 as promulgated by the DEC.

The DEC and NHP track the status of New York's flora and faunal community. The ranking system of DEC provides a legal protected status to species. In addition, the NHP assigns both a state and a global rank to threatened and endangered species. A request was submitted to the agencies concerning listed species that may currently or have historically occurred on or in the vicinity of the project site.

Any plant or animal species that occurs on state and federal lists of threatened and endangered species, or is otherwise listed as rare or of special concern on official lists, was identified as such if it was observed on the site. If it was determined that on-site cover types are potentially suitable for threatened or endangered species that occur in the project area, then the habitat types have been identified and the probability of it harboring these species discussed in this report.

F. Future Conditions Without the Project

Future No Action conditions are discussed in this report using information from the ecological resources assessment. An assessment of the future condition of ecological resources within the project site and adjacent lands is provided based on the assumption that the redevelopment project would not be implemented.

G. Project Related Impact

Analyses of the impacts of the project upon the site's ecological resources are documented in this report. These analyses include an assessment of the implications of the loss

of each habitat type. In addition, this report contains discussions concerning the following issues:

- The on-site habitat type requirements for wildlife observed on the site, as well as species expected to be found on the site;
- The short-term and long-term impacts of habitat type loss;
- Threatened and endangered species of plants and animals pursuant to state and federal guidelines; and
- Impacts to ecological resources due to stormwater discharges.

Construction and operation/maintenance of the project may affect the ecological resources within the site and adjacent lands. The report includes a discussion of the potential effects of the proposed action on relevant ecological resources within the site and adjacent portions of the Hudson River and Pocantico River.

## II. EXISTING CONDITIONS

A. Wetland Communities

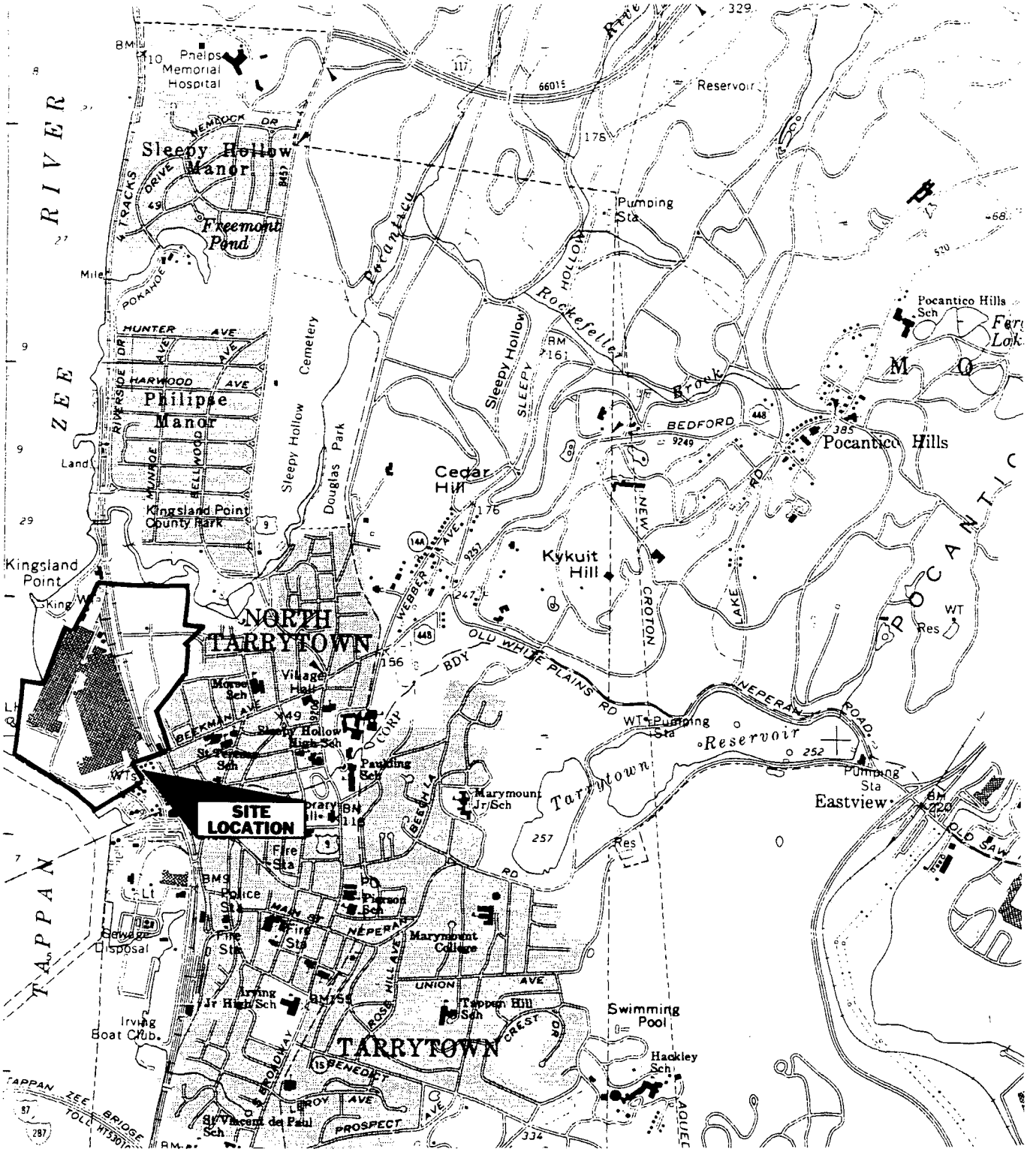
No State-regulated freshwater wetlands are identified on or adjacent to the site (DEC. Freshwater Wetlands Map, Westchester County, Map 10 of 14) (see Figure 2). Based on EcolSciences' recent contacts with the DEC, tidal wetlands maps are in the process of being prepared for the area of the Hudson River north of the Tappan Zee Bridge to the Troy Lock and none are publicly available for the project area.

A wetlands delineation was conducted on the site by EcolSciences in October 2003. Federal and Sleepy Hollow jurisdictional wetlands were delineated on the site in association with a series of man-made ditches connected by pipes along the east side of the railroad tracks. The ditches are approximately 12 feet in width and 825 feet in length, totaling approximately 9,900 square feet in size as shown on the site plans. These ditches appear to connect to the Pocantico River, a tributary of the Hudson River, via a pipe that extends off the property to the north. As a result of this connection and based on the observation of killifish in the ditches, it is likely that the ditches are tidally influenced. The Hudson River is known to be tidally influenced to approximately the Troy Lock (River Mile 150). In addition, it was observed that an approximately 10,000 square foot portion of the northeast corner of the property, adjacent to the Pocantico River, is flooded by the daily tides. This area contains wetland vegetation on sediment deposited over pavement. Killifish were also observed in this area. This area was not identified as jurisdictional wetlands due to the presence of pavement.

Wetlands were also identified adjacent to the project site within Devries Park along the Pocantico River to the north and northeast of the east portion of the site. These wetlands were not flagged and surveyed, but their approximate boundaries are shown on the Vegetative Communities Map that accompanies this report.

The ACOE and the Village of Sleepy Hollow regulate activities in the identified wetlands. Further, the Village regulates activities in the 100-foot buffers along the wetlands.

The on-site wetlands are of low ecological function and quality. Their small size (i.e., 0.23 acres±) coupled with their configuration (i.e., linear, narrow, and discontinuous) result in limited potential for the wetlands to perform typical wetland functions (e.g., flood storage, water quality improvement, groundwater recharge, wildlife habitat, etc.). In addition, the elevations of






**QUADRANGLE LOCATION**
**LATTITUDE: 41° 5' 1.0"**
**LONGITUDE: 73° 52' 13.4"**

N

## FIGURE 2: FRESHWATER WETLANDS MAPPING

Lighthouse Landing
Redevelopment Project
Village of Sleepy Hollow
Westchester County, New York

Source : NYDEC, 1987 New York State Freshwaters Wetlands Map - Westchester County Map 10

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Environmental Management & Regulatory Compliance

DATE : 04/08/04
SCALE : 1" = 2,000'
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the pipes connecting the ditches restrict the free exchange of water between the ditches and the Pocantico River. These physical characteristics, along with the dominance of exotic/weedy plants and existing impacts due to stormwater discharges into the ditches, limit the ability of the wetlands to perform these functions. Therefore, the wetlands are of low ecological quality. Further reducing the quality of the wetlands is the presence of pavement, rather than vegetated buffers, surrounding the ditches.

B. Vegetative Communities

The project site and adjacent parklands include nine vegetative communities based on the ecological community classification system set forth by the NHP (2002). These include: two communities within the Estuarine System - Estuarine Riprap/Artificial Shore and Brackish Tidal Marsh; one community within the Riverine System - Ditch/Artificial Intermittent Stream; one community within the Palustrine System - Red Maple-Hardwood Swamp; and five communities within the Terrestrial System - Oak-Tulip Tree Forest, Mowed Lawn with Trees, Mowed Lawn, Railroad, and Urban Vacant Lot. Of these communities, six fall within the Cultural Subsystem of their respective system due to the influence of human activities: Estuarine Riprap/Artificial Shore, Ditch/Artificial Intermittent Stream, Mowed Lawn with Trees, Mowed Lawn, Railroad, and Urban Vacant Lot. The extents of these communities are presented on Plate 1 and descriptions of their characteristics on and adjacent to the site are presented below. Vegetative species identified during the field are presented in Appendix A. Please note that the vegetative communities observed within the project site and its immediate vicinity do not precisely fit into the selected communities in all cases. The NHP acknowledges that, for the purpose of their report, "artificial boundaries between communities have been drawn across the continuous ecological gradients that occur in the real landscape" (NHP, 2002).

Estuarine Riprap/Artificial Shore – the wetland community of a constructed estuarine shore in which the substrate is composed of broken rocks, wooden bulkheads, or concrete placed so as to reduce erosion. Vegetative cover and species diversity are low as compared to natural shorelines (NHP, 2002).

The project site's shoreline with the Hudson River is not natural rather it is comprised of an armored slope of stone riprap. The vegetative community along the shoreline is restricted to a fairly dense brushy strip containing tree-of-heaven, Queen Anne's lace, seaside goldenrod, evening primrose, bittersweet, multiflora rose, and biennial mugwort.

Brackish Tidal Marsh – a marsh community that occurs where water salinity ranges from 0.5 to 18.0 ppt, and water is less than 2 m (6 ft) deep at high tide. This community consists of a mixture of salt marsh and freshwater tidal marsh species, with no species attaining dominance over extensive areas (although some species are locally abundant in

patches). The vegetation in a brackish tidal marsh is dense and dominated by tall graminoids (NHP, 2002).

Brackish Tidal Marsh occurs along a portion of the shoreline of the Pocantico River within Devries Park. Vegetation within the wetlands is largely herbaceous with trees and shrubs scattered along the edge. Common reed is the dominant herbaceous plant with Japanese knotweed also observed. Identified tree species include black willow, cottonwood, red maple, ash, American elm, alder, and American sycamore. Identified shrubs and vines include multiflora rose, grape, and poison ivy.

A portion of the northeast corner of the property, adjacent to the Pocantico River, is flooded by the daily tides. This area contains wetland vegetation on sediment deposited over pavement. From a vegetative standpoint, this area could be considered Brackish Tidal Marsh. Vegetation in this area is dominated by common reed with some purple loosestrife, biennial mugwort, black locust, multiflora rose, and alder. The vegetation grows either on sediment that has been deposited over pavement or coming through the cracks of the asphalt.

Ditch/Artificial Intermittent Stream – the aquatic community of an artificial waterway constructed for drainage or irrigation of adjacent lands. Water levels either fluctuate in response to variations in precipitation and groundwater levels, or water levels are artificially controlled. The sides of ditches are often vegetated. Exotic or weedy species are common (NHP, 2002).

The wetlands that were delineated on the site in association with a series of man-made ditches connected by pipes along the east side of the railroad tracks would fall into this classification. The ditches were likely constructed for stormwater management purposes during the operation of the site. Vegetation within the wetlands is largely herbaceous with scattered trees and shrubs along the banks of the ditches. Identified herbaceous species include common reed, cattail, purple loosestrife, soft rush, goldenrod, evening primrose, and mugwort. Identified woody species include black willow, cottonwood, black locust, tree-of-heaven, multiflora rose, and summer grape. The wetlands are of low ecological value due in part to the dominance of exotic and weedy plants and impacts due to stormwater discharges into the ditches. These ditches appear to connect to the Pocantico River via a pipe that extends off the property to the north and thus are likely tidally-influenced due to relative elevations. As such, the lower reach of the ditch may also fall into the brackish tidal marsh community.

Red Maple-Hardwood Swamp – a hardwood swamp that occurs in poorly-drained depressions, usually on inorganic soils. This is a broadly defined community with many regional and edaphic variants. In any one stand red maple is either the only canopy

dominant, or it is codominant with one or more hardwoods including ashes, elms, yellow birch, and swamp white oak (NHP, 2002).

Off-site wetlands along the Pocantico River upslope of the Brackish Tidal Marsh would fall into this classification. These primarily wooded wetlands extend along the tidally-influenced section of the river to about the dam at Philipsburg Manor. These wetlands would not be inundated by the diurnal tides; however, spring tides or storm tides would likely inundate them. Identified tree species include black willow, cottonwood, red maple, ash, American elm, alder, and American sycamore. Identified shrubs and vines include multiflora rose, grape, and poison ivy. Herbaceous plants are prevalent throughout the wetlands and identified species include common reed and Japanese knotweed.

Oak-Tulip Tree Forest – a mesophytic hardwood forest that occurs on moist, well-drained sites in southeastern New York. The dominant trees include a mixture of five or more of the following: red oak, tulip tree, beech, black birch, red maple, scarlet oak, black oak, and white oak (NHP, 2002).

The project site and its immediate vicinity appear to contain only remnant areas of Oak-Tulip Tree Forest. Because of disturbance, only a small number of canopy trees appear to remain from this forest community. In most areas, introduced species occur with the native species in the canopy and most native shrubs have been eliminated. Within the project site, this community has been mapped on the steep slopes along the eastern boundary of the East Parcel. The canopy contains black locust, Norway maple, black cherry, tree-of-heaven, and elm. Many of the canopy trees in this area exceed 12 in. dbh. Two of the largest trees, a black cherry and a black locust are 27 in. dbh and 24 in. dbh, respectively. Shrubs and vines include multiflora rose, wineberry, poison ivy, and fox grape. Due to the presence of non-native species such as Norway maple, tree-of-heaven, and multiflora rose, this forest is not of high quality.

Oak-Tulip Tree Forest is more prevalent in the adjacent parklands, though its expanse is restricted by park and residential development. It occurs within upland slopes along the Pocantico River within Devries Park and Philipsburg Manor Historic Site. The forest canopy contains red oak, black oak, black birch, black cherry, sugar maple, white ash, and black locust. On the knoll south of the intersection of Devries Avenue and Munroe Avenue, the underbrush has been cleared creating a grove-like setting with park benches. Because of routine maintenance, most of the wooded areas within Devries Park and Kingsland Point Park are best classified as Mowed Lawn with Trees and Mowed Lawn as described below.

Mowed Lawn with Trees – residential, recreational, or commercial land in which the groundcover is dominated by clipped grasses and forbs, and it is shaded by at least 30%

cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing (NHP, 2002).

Much of Kingsland Point Park is covered by former forest, most likely Oak-Tulip Tree Forest. However, most of the forest has been modified by the development of the park, including the removal of underbrush to create picnic groves, the removal of trees to create expanses of lawn, and the planting and invasion of non-native vegetation. These modifications have adversely affected the quality of the forest. Trees identified within the canopy include black locust, London planetree, sugar maple, red oak, black oak, white pine, eastern hemlock, tree-of heaven, and Norway maple. Identified shrubs and vines include multiflora rose, forsythia, and bittersweet.

In addition to the Visitor Center and historic buildings, a portion of the Philipsburg Manor Historic Site contains a small working-farm including a pasture and garden. Planted trees and shrubs are intermixed with the native forest trees.

Mowed Lawn – residential, recreational, or commercial land, or unpaved airport runways in which the groundcover is dominated by clipped grasses and forbs and there is less than 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing (NHP, 2002).

Most of Devries Park contains recreational facilities including ballfields, a playground, a picnic area, and comfort facilities. Existing vegetation here consists of maintained lawn with planted ornamental trees and shrubs. The central portion of Kingsland Point Park is maintained lawn.

Railroad – a permanent road having a line of steel rails fixed to wood ties and laid on a gravel roadbed that provides a track for cars or equipment drawn by locomotives or propelled by self-contained motors. There may be sparse vegetation rooted in the gravel substrate. The railroad right of way may be maintained by mowing or herbicide spraying (NHP, 2002).

The existing Metro-North railroad tracks divide the project site into the East Parcel and West Parcel. Vegetation occurs in strips on either side of the tracks. Scattered small trees such as tree-of-heaven, cottonwood, and black locust are present as are vines and woody shrubs such as summer grape, poison ivy, bittersweet, and multiflora rose. Herbaceous vegetation includes pokeweed, common milkweed, wooly mullein, goldenrod, common reed, daisy fleabane, switchgrass, evening primrose, path rush, biennial mugwort, and pigweed.

Urban Vacant Lot – an open site in a developed urban area that has been cleared either for construction or following the demolition of a building. Vegetation may be sparse, with large areas of exposed soil, and often with rubble or other debris. Characteristic trees are often naturalized exotic species such as Norway maple, white mulberry, and tree of heaven (NHP, 2002).

Urban Vacant Lot is the predominant ecological community within the project site. Vegetation grows in the cracks of the pavement, on soil piles, in unpaved fill areas, and next to the concrete slabs. Scattered small trees such as tree-of-heaven, cottonwood, and black locust are present as are vines and woody shrubs such as summer grape, poison ivy, bittersweet, and multiflora rose. Herbaceous vegetation includes pokeweed, common milkweed, wooly mullein, goldenrod, common reed, daisy fleabane, switchgrass, evening primrose, path rush, biennial mugwort, and pigweed.

C. Wildlife Communities

No Significant Coastal Fish and Wildlife Habitats have been mapped by the State of New York Department of State (DOS) on or immediately adjacent to the project site (see Appendix B). The nearest mapped significant habitat is the Piermont Marsh located 3-4 miles downstream of the site along the western shoreline of the Hudson River in the Town of Orangetown. Piermont Marsh is an approximately 725-acre wetland complex of brackish marsh and intertidal shallows. It is one of the largest, undeveloped wetland complexes on the Hudson River and provides habitat for a large diversity of bird, reptile, small mammal, and fish species.

The presence of wildlife cover within the project site and adjacent parklands directly corresponds to the nine ecological communities (i.e., Estuarine Riprap/Artificial Shore, Brackish Tidal Marsh, Ditch/Artificial Intermittent Stream, Red Maple-Hardwood Swamp, Oak-Tulip Tree Forest, Mowed Lawn with Trees, Mowed Lawn, Railroad, and Urban Vacant Lot) identified within the Vegetative Communities Section of this Chapter and as presented on Plate 1. A tenth ecological community, Tidal River, is included herein to represent wildlife habitat provided by the Hudson River and Pocantico River.

Wildlife species known to or are likely to occur within the habitats of the project site and adjacent parklands are contained within a table in Appendix C. This list was compiled through an analysis of records contained within the NYS Breeding Bird Atlas (1980-1985 and 2000-2004 interim data), National Audubon Society Christmas Bird Count (1995-1999), Cornell University-sponsored Great Backyard Bird Count (1998-2003), and New York State Amphibian and Reptile Atlas (1990-1998 Interim Report), as well as field observations. The table identifies bird species as potential breeders, winter residents, and migratory transients based on the presence of suitable

habitat. Certain species identified within the existing records as being observed near the project site are not listed due to the absence of suitable habitat. The table provides the species' general cover type of occurrence and, as available, its foraging guild (per DeGraaf and Rudis, 1987). Species are also identified as to their legal status (i.e., Special Concern, Threatened, or Endangered). Species observed during site inspections of the study area are identified in bold type. The following sections provide a discussion of the wildlife communities of the project site and adjacent parklands.

**1. Birds**

Of the 136 species of birds listed as occurring or potentially occurring within the project site, adjacent parklands, and Hudson River: three species are herons; 25 species are waterfowl; two species are loons; three species are grebes, two species are cormorants, one species is a vulture; five species are hawks; three species are falcons; one species is a coot; four species are plovers and sandpipers; five species are gulls; two species are pigeons and doves; one species is a cuckoo; five species are owls; one species is a swift; one species is a kingfisher; five species are woodpeckers; three species are flycatchers; three species are swallows; three species are jays and crows; two species are titmice; two species are nuthatches; one species is a creeper; four species are wrens; seven species are thrushes; two species are kinglets; one species is a pipit; one species is a waxwing; one species is a starling; two species are vireos; 13 species are warblers; one species is a weaver finch; five species are blackbirds; one species is a tanager; and 15 species are finches, sparrows, and buntings. Only 59 or 43 percent of the total number of species have been listed as potentially breeding within the project site and adjacent parklands. These areas do not contain a diversity of habitats that would allow for the potential breeding of additional species. Most of the listed species would likely occur only as migrants because of the site's position along the Hudson River, which is an important bird migration corridor.

Thirty-one of the 136 species of birds listed in Appendix C were directly observed during the survey of the project site and adjacent parklands by EcolSciences, Inc. in October and December 2003. The following species were observed on the project site: downy woodpecker, hairy woodpecker, red-bellied woodpecker, Canada goose, rock dove, European starling, northern mockingbird, blue jay, American robin, snow bunting, mourning dove, song sparrow, white-throated sparrow, field sparrow, house finch, ruby-crowned kinglet, palm warbler, American goldfinch, greater yellowlegs, American crow, and northern harrier. Most of these species were observed as individuals or in small flocks foraging within the denser brush along the ditches and Hudson River shoreline, as well as along the property boundaries adjacent to the wooded parklands. Canada geese were observed flying over the site, although goose feces were observed on the concrete slabs indicating that the geese may forage here. Rock doves, mourning

doves, and northern mockingbirds were observed perching on the utility wires along the railroad tracks. A greater yellowlegs and two snow buntings were observed foraging within ponded water on pavement of the East Parcel before flying off-site. The northern harrier was only briefly observed flying over the site before two American crows chased it away.

The following bird species were observed within the parklands adjacent to the site: Canada goose, belted kingfisher, downy woodpecker, hairy woodpecker, red-bellied woodpecker, yellow-bellied sapsucker, European starling, northern mockingbird, bluejay, northern cardinal, mourning dove, song sparrow, white-throated sparrow, house finch, titmouse, dark-eyed junco, ruby-crowned kinglet, gray catbird, American goldfinch, American crow, and red-tailed hawk. These birds were mainly observed foraging within the woodlands. However, Canada geese were observed flying over Devries Park and goose feces were observed on the lawn area of Kingsland Point Park. A belted kingfisher was observed flying over the Pocantico River through Devries Park.

A number of waterfowl and gulls were observed on or over the Hudson River and Pocantico River: Canada goose, mute swan, bufflehead, mallard, and herring gull. Several Canada geese were observed on the Hudson River, a small flock of mute swans were flying low over the river, and solitary herring gulls were flying over the river. Two pairs of buffleheads were observed foraging close to the site's shoreline. Several mallards were observed in the Pocantico River.

The bird species observed during the field study likely represent late fall migrants and winter residents. The palm warblers, catbird, and American robins were late migrants as they do not winter in the area. The snow buntings, white-throated sparrows, dark-eyed juncos, yellow-bellied sapsucker, and ruby-crowned kinglet are solely winter residents as they breed further north. The northern harriers foraging habitats are wide-ranging in the winter, but they typically nest in fields to the north and west and tidal marshes to the south. The remaining species are likely permanent residents that summer and winter in the project area. Some limited north-south movements of individuals may occur depending on local weather conditions.

Due to general lack of cover provided by the project site, the site does not provide significant habitat for breeding birds. Small numbers of common birds such as sparrows, mockingbirds, robins, mourning doves, and house finches may breed on the site in limited areas of brush. Starlings and house sparrows may breed in existing structures. One species, the killdeer, may breed on areas of pavement. Overall, the breeding bird community within the project site is not anticipated to be significant.

Woodland habitat (i.e., Red Maple-Hardwood Swamp, Oak-Tulip Tree Forest, and Mowed Lawn with Trees) within the adjacent parklands provides substantially more opportunities for nesting by birds than does the project site. However, due to the largely disturbed nature of the woodlands, relatively small area involved, the removal of underbrush, and close proximity to developed areas, these woodlands would also not provide significant habitat for breeding birds. The birds that may breed within the parklands would be relatively common "forest-edge" species such as house wren, gray catbird, Baltimore oriole, and warbling vireo rather than "forest-interior" species such as scarlet tanager, wood thrush, and veery. Though it is possible that some forest-interior species may attempt to breed in small woodlots such as these, the scientific literature has established that these attempts are generally unsuccessful due to predation (by feral and domestic cats, raccoons, crows, bluejays, and chipmunks) and brood parasitism (by brown-headed cowbirds).

Certain raptor species may also breed within the parks' woodlands including great-horned owl, eastern screech owl, and red-tailed hawk. These are forest-edge species that require open areas for hunting and readily adapt to human habitation.

The Hudson River is an important migratory corridor for waterfowl and landbirds. Due to the site's location along the river, it is likely that birds pass through or by the site during spring and fall migration. Since the site lacks cover and foraging habitat for birds, the site is not a significant stopover during migration. Woodlands within the adjacent parks, which do offer a degree of cover and foraging habitat, would play a more important role.

**2. Reptiles and Amphibians**

Of the eleven species of reptiles and amphibians listed as occurring or potentially occurring within the project site, adjacent parklands, and Hudson River: three species are turtles; two species are snakes; one species is a salamander; two species are toads; one species is a treefrog; and two species are true frogs. No reptile or amphibian species were observed during the field studies performed by EcolSciences.

The New York State Amphibian and Reptile Atlas ("Herp Atlas") identifies snapping turtle, eastern box turtle, and painted turtle as occurring within the survey block containing the study area. Snapping turtle and painted turtle may occur within the Pocantico River through Devries Park and the impoundment within the Philipsburg Manor Historic Site. There is only a low possibility that eastern box turtle occurs within the study area, because it requires larger expanses of woodland than are present.

The Herp Atlas identifies northern water snake as the only snake present in the study area. Its habitat occurs along the Pocantico River. Though not recorded for the survey block, eastern garter snake would be expected to occur in the study area based on suitable habitat being present.

Two of the amphibian species listed by the Herp Atlas for the survey block, spotted salamander and wood frog, are not expected to occur within the study area. The temporary (or "vernal") fish-free pools required for the breeding of these species are not present in the study area. The other toad and frog species identified by the Herp Atlas for the survey block are less selective concerning their breeding site requirements. These species may breed in surface waters containing fish or temporary puddles (including temporary puddles on fill or pavement). Expected species include American toad, Fowler's toad, northern spring peeper, bullfrog, and green frog. The ditch on the project site and the Pocantico River provides suitable habitat for these species.

The only salamander species expected to occur within the study area is redback salamander. This species may occur under decaying logs, leaf litter, and debris in the woodlands of the adjacent parklands.

### 3. Mammals

Unlike for birds, reptiles, and amphibians, there are no comprehensive census programs for mammals in New York State (except possibly for large game animals). Therefore the eight mammal species listed in the table in Appendix C are based upon field observations and the provision of suitable habitat. Whitetail deer, eastern gray squirrel, and eastern chipmunk were observed on the project site. However, these observations were made along the site boundaries with the adjacent parkland. The primary habitat for these species is within the woodlands of the adjacent parklands. During the field study, several deer trails were observed in the snow within Devries Park, a muskrat was observed along the Pocantico River, and dozens of gray squirrels were observed foraging for acorns within Kingsland Point Park.

Although not observed during the field studies, it is expected that Norway rat, house mouse, and perhaps, white-footed mouse occur within the project site. In addition to these species, short-tail shrew would be expected to occur in the adjacent parklands.

D. Aquatic Communities

The Hudson River and Pocantico River provide Tidal River habitat within the study area. The Hudson River is known to be tidally-influenced to approximately the Troy Lock (River Mile 150) and the Pocantico River is tidally-influenced to the Philipsburg Manor dam. Likewise, the interconnected ditches on the project site appear to be influenced by the tides as they are connected to the Pocantico River via a pipe. The water in the Hudson River is strictly fresh (although tidal) as far south as Hyde Park. During spring floods, the water is fresh to below the Tappan Zee Bridge. As the flow of freshwater declines through the summer, the salt front (i.e., 100 parts per million) gradually moves upriver, reaching Beacon many years and penetrating as far north as Poughkeepsie or Hyde Park during severe droughts (Kiviat and Stevens, 2001). Under normal conditions, therefore, the water of the Hudson River in the project vicinity is brackish. The water of the Pocantico River is also brackish except, perhaps, during low tide when the fresh water from above the Philipsburg Manor dam exerts a greater influence. The tidal range in the project area is about three feet.

More than 150 species of fish, many introduced, are known to occur within the tidal portion of the Hudson River and its tidal tributaries. These species include freshwater or diadromous (migratory between fresh and salt waters) forms and marine strays. Of these, about 80 are freshwater or diadromous forms and 50 occur regularly in nearshore (shallow water) areas (Smith, 1985). The nearshore fish community of the Hudson River is dynamic and changes on a daily, seasonal, and annual basis (Daniels, undated). Based on a 1990 survey, the two dominant resident species were spottail shiner (*Notropis hudsonicus*) and white perch *(Morone americana*). During the summer, diadromous fish numbers dominate nearshore areas due to the presence of young-of-year fish including blueback herring (*Alosa aestivalis*), alewife (*A. pseudoharengus*), American shad (*A. sapidissima*), bay anchovy (*Anchoa mitchilli*), American eel (*Anguilla rostrata*), and striped bass (*Morone saxatilis*) (Daniels, undated).

During field studies of the project site by EcolSciences, Inc. in October 2003, banded killifish (*Fundulus diaphanus*) were observed in the wetland ditches and in the ponded water in the northeastern portion of the site.

The aquatic community of the tidal Hudson River also includes a variety of invertebrates, many of which constitute important food sources for the local fish and waterfowl populations. Invertebrates known from the tidal Hudson include jellyfish, copepods, sponges, segmented worms, snails, whelks, mussels, clams, crayfish, sand shrimps, crabs, mayfly and dragonfly nymphs, caddis fly larvae, and midges (Riverkeeper, 2003).

E. Threatened and Endangered Species

The NHP has a record of shortnose sturgeon (*Acipenser brevirostrum*), a State-endangered species, within the lower Hudson River from the Battery in New York City at its junction with Upper New York Bay, upstream to the Federal Dam in Troy and a portion of Schodack Creek (see Appendix B). The shortnose sturgeon is restricted in range to the Atlantic seaboard in North America. It occurs in estuaries and large coastal rivers. The shortnose sturgeon is semi-anadromous. Each year, between April and May, adult sturgeon migrate up the Hudson River from their mid-Hudson overwintering area to spawn in freshwater sites north of Coxackie (Stegemann, 1999).

The NHP also has records for three rare plants that may be on or in the immediate vicinity of the site: rattlebox (*Crotalaria sagittalis*) – State-endangered; shrubby St. John's-wort (*Hypericum prolificum*) – State-threatened; Virginia false gromwell (*Onosmodium virginianum*) – State-endangered. It is important to note that the existing records for these species occurred in the 1890s. During field studies of the site by EcolSciences, these species were not observed on the site and are not expected to occur on the site due to the site being largely covered by impervious surfaces.

The NHP identifies one other rare species (though not listed as State-endangered, threatened, or of special concern) as being on or in the immediate vicinity of the site – Kentucky warbler (*Oporormis formosus*). While this species may occasionally pass through the study area during migration, it would not typically breed in the area due to the lack of suitable habitat (i.e., dense underbrush of woodlands).

## III. FUTURE CONDITIONS WITHOUT THE PROJECT

Future No Action conditions would result within the former General Motors Assembly Plant site if the proposed redevelopment plan were not implemented. This condition assumes that the existing use of the property by the Village (i.e., for DPW vehicle and materials storage and for event parking) would continue unchanged. It also assumes that no site remediation activities are implemented, except for remediation needed for closure of the oil spill associated with the former 10,000 gallon heating oil UST located in the north-north central portion of the West Parcel. Based on these assumptions, the vegetative community within the site would continue to expand and to mature in areas not being used by the Village. As the paved areas and concrete slabs break up further due to weathering and plant growth, they would eventually be overgrown by woodland plant communities, though this succession would take decades. Use of the site as wildlife habitat would likely increase as a result.

Existing conditions within the adjacent parklands would likely remain unchanged should the project not be implemented. Recreational facilities within Devries Park could not be expanded as currently proposed because there is not enough available land without the use of the East Parcel. The expansion of public waterfront access from Kingsland Point Park to the lighthouse and further downriver to the proposed Ichabod's Landing development would not proceed as currently planned.

## IV. PROBABLE IMPACTS OF THE PROPOSED PROJECT

The West Parcel and South Parcel are currently being proposed for redevelopment by Roseland/Sleepy Hollow, LLC with a mix of commercial, residential, and park uses that will collectively be known as Lighthouse Landing at Sleepy Hollow. The East Parcel will be redeveloped for Village of Sleepy Hollow public works and park uses. Implementation of the proposed project should not adversely affect the limited ecological resources of the project site. The site contains the remnants of the former General Motors Assembly Plant and has a long history of prior development. Its current state is actually an interim condition following the demolition of the assembly plant. Therefore, the ecological resources of the site are severely limited as most of the site has experienced significant disturbance related to the previous development. As part of the redevelopment plan, the majority of the site will be modified from its existing condition. In conjunction with the compilation of existing information and field studies, analyses of the potential impacts of the proposed plan upon the site's ecological resources have been conducted and are included in this section. In addition to site-specific impacts, construction and operation/maintenance of the project have the potential to indirectly affect ecological resources within the adjacent parklands and Hudson and Pocantico Rivers. These potential impacts and mitigating measures are discussed in this section.

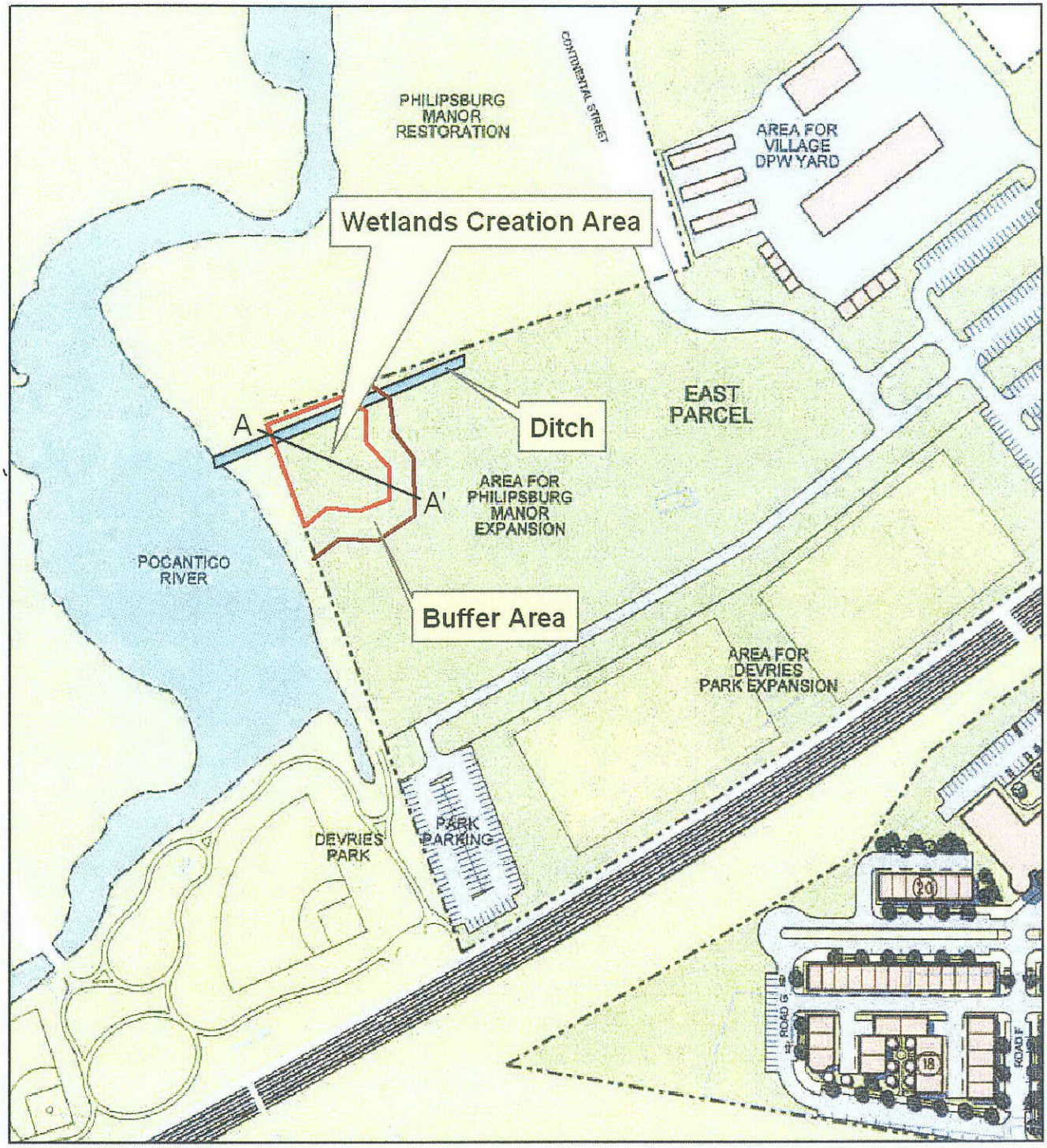
### A. Wetlands

Jurisdictional wetlands within the project site are restricted to the series of interconnected man-made stormwater ditches located within the East Parcel. These wetlands are of low ecological function and quality in part due to the dominance of exotic and weedy plants and their stormwater management function. The current redevelopment plan proposes that this portion of the East Parcel will be redeveloped for play fields. This will necessitate the filling of these approximately 0.23 acres of wetland ditches, with culverts serving their drainage function. Preliminary plans call for the Village of Sleepy Hollow to consolidate its Department of Public Works (DPW) vehicle and materials storage within a 5± acre compound on existing pavement in the southern portion of the East Parcel. A new Metro-North train station would be constructed along the tracks in this area, as would new parking for 400 vehicles. The Village would construct additional recreational facilities within northern portion of the East Parcel adjacent to Devries Park. In addition, the possible expansion of the Philipsburg Manor Restoration may be implemented within the East Parcel. Existing pavement would be removed to facilitate the construction of these facilities.

The area of the East Parcel proposed for wetlands mitigation (see Figure 3) is largely covered by asphalt pavement and is currently inundated by the high tides of the Pocantico River. A ditch currently connects this area to the river. The pavement would be removed from the mitigation area and within a 30-foot wide buffer. Both the mitigation area and the buffer would be overexcavated to allow the placement of one foot of topsoil. The final grade of the mitigation area would be based on the mean high water elevation, which will allow for the inundation of the area (see Figure 4). The mean high water elevation will be obtained through the establishment of tidal benchmarks in the site vicinity.

The wetland creation area would encompass 0.46 acres, whereas the 30-foot wide buffer would encompass an additional 0.23 acres, for a total of 0.69 acres of mitigation. The mitigation area and adjacent buffer would be planted with a variety of native herbaceous and woody species. Herbaceous plants, such as pickerelweed (*Pontederia cordata*), arrowleaf (*Peltandra virginica*), arrowhead (*Saggitaria latifolia*), bulrush (*Scirpus americanus*), yellow iris (*Iris pseudacorus*), and rose mallow (*Hibiscus moscheutus*), would be planted within the interior of the mitigation area. Sapling trees and shrubs, which are less tolerant of tidal inundation, such as red maple (*Acer rubrum*), black willow (*Salix nigra*), green ash (*Fraxinus pensylvanica*), American sycamore (*Platanus occidentalis*), alder (*Alnus serrulata*), silky dogwood (*Cornus amomum*), and graystem dogwood (*Cornus racemosa*), would be planted along the perimeter of the wetland creation area. The buffer area would be planted with a mix of upland grasses and herbs, interspersed with sapling trees and shrubs such as red oak (*Quercus rubra*), black oak (*Q. velutina*), and white oak (*Q. alba*), American sycamore, red maple, eastern red cedar (*Juniperus virginiana*), tulip tree (*Liriodendron tulipifera*), graystem dogwood, arrowwood (*Viburnum dentatum*), and bayberry (*Myrica pensylvanica*). These selected species will provide food and cover for a variety of wildlife species.

The new wetlands would contribute to the functions of the existing wetlands and would be of a higher quality than the wetland ditches. The provision of a vegetated buffer would protect and contribute to the quality of the new wetlands, as well as the existing wetlands. The wetlands creation would also provide a 2:1 replacement ratio for the filling of the ditches, and an overall 3:1 mitigation ratio.




N

**CONCEPTUAL WETLANDS MITIGATION PLAN**

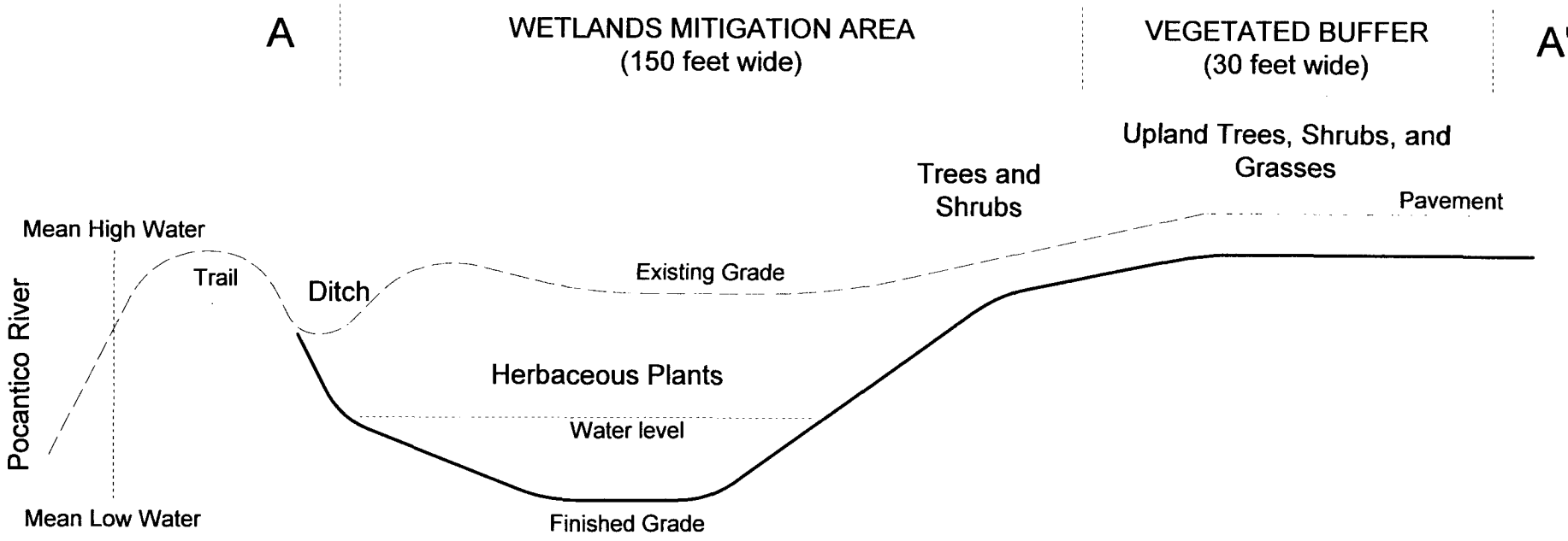
Lighthouse Landing
Redevelopment Project
Village of Sleepy Hollow
Westchester County, New York

Base Map: Divney-Tung-Schwalbe, 2004

EcolSciences, Inc.
Environmental Management & Regulatory Compliance

Date: 8/31/04

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**Wetlands Mitigation Plan Cross-section**

Lighthouse Landing
Redevelopment Project
Village of Sleepy Hollow
Westchester County, New York

**EcolSciences, Inc.**
Environmental Management & Regulatory Compliance

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B. Plant Communities

**1. Former GM Assembly Plant**

With the exception of the Ditch/Artificial Intermittent Stream and Oak-Tulip Tree Forest delineated on the East Parcel, the entirety of the project site has been identified as Urban Vacant Lot. Due to the presence of extensive pavements and concrete pads remaining from the demolished plant facilities, the existing plant community is restricted to scattered plants and small strips of vegetation composed of weedy or non-native species. The ecological value of this plant community is extremely low and its loss would not be significant. Redevelopment of the site would increase the value of portions of the site through the establishment of new native vegetation within portions of the site in conjunction with the construction of recreational facilities within the East Parcel, the possible expansion of the Philipsburg Manor Restoration, and the extension of waterfront parkland along the Hudson River within the West Parcel. Landscaping will also be provided within the interior of the commercial/residential development along roadways and within public spaces.

**2. Adjacent Parklands**

Existing plant communities within Devries Park, Kingsland Point Park, and Philipsburg Manor Historic Site would not be adversely impacted by the proposed project. They would actually be enhanced by the provision of new landscaping with the expansion of Devries Park recreational facilities and Philipsburg Manor within the East Parcel and the expansion of waterfront parkland within the West Parcel along the Hudson River.

C. Wildlife Communities

**1. Former GM Assembly Plant**

The Urban Vacant Lot habitat provided on the project site is of very low value to wildlife communities. Cover and food are both in extremely short supply within the site. The fact that a considerable number of animal species were observed on the site is a testament to the resilience of many animals to survive under adverse conditions. Of note is that the availability of the site for use by wildlife is only an interim condition. For the better part of the twentieth century, the site has been subject to intensive industrial use and, as such, was unavailable for use by wildlife. Only since the demolition of GM's facilities in the late-1990s has the site been available for wildlife use.

The expansion of recreational facilities and waterfront parkland under the redevelopment plan as described in the previous section would enhance wildlife habitat within portions of the

site. Thus, the redevelopment of the site would not adversely impact wildlife populations. A possible exception may be the loss of foraging habitat to hawks and owls. Under existing conditions, hawks and owls may hunt for mice and other small mammals across the extensive open area of the site. Though this activity was not documented, two hawks were observed on and adjacent to the site; a northern harrier was observed for a brief period over the site, though not hunting; and a red-tail hawk was observed within the forest in Devries Park. Notwithstanding, the loss of this habitat should not result in significant adverse impacts to hawks and owls, because the existing availability of the site for foraging is only an interim condition since the demolition of the industrial buildings.

In addition, a variety of birds may currently use the site that would otherwise not do so because of the relative isolation of portions of the site. For example, two snow buntings and a greater yellowlegs were observed on the pavement of the site presumably drinking from puddles of water. Individuals of other species may also use the site for this purpose or for temporary loafing or roosting. Upon redevelopment, the site would not be available for this purpose. Loss of this opportunistic use of the site is not anticipated to be significant to bird populations, because the existing availability of the site for these activities is only an interim condition since the demolition of the industrial buildings..

Local populations of certain bird species that are extremely tolerant of human activities may increase following redevelopment of the site due to increased cover and food supply. These species include house sparrow, house finch, starling, robin, rock dove, mourning dove, and mockingbird. Certain small mammals may also increase in numbers including gray squirrel and chipmunk. Reptile and amphibian numbers are not expected to change, because under existing conditions the site does not provide significant habitat for these species.

**2. Adjacent Parklands**

Existing wildlife communities within Devries Park, Kingsland Point Park, and Philipsburg Manor Historic Site would not be adversely impacted by the proposed project. The existing condition of the site is only an interim condition since the cessation of industrial activities. The proposed residential, commercial, and recreation use would be less intrusive than the former industrial activities. Existing wildlife communities would actually be enhanced by the provision of new landscaping with the expansion of Devries Park recreational facilities and Philipsburg Manor within the East Parcel and the expansion of waterfront parkland within the West Parcel along the Hudson River.

D. Aquatic Communities

The construction of the proposed project is not expected to have significant impacts on aquatic communities of the Hudson and Pocantico Rivers. Potential short-term impacts on water quality are associated with soil loss and sedimentation during construction activities. Soil loss can increase suspended material in the water column and increase turbidity. However, soil loss and associated impacts to surface waters would be minimized by strict adherence to the measures specified in the Soil Erosion and Sediment Control Plan and are therefore not expected to be significant to aquatic communities.

The operation of the new development has the potential for impacts to aquatic communities as a result of the filling of the man-made ditches and through the discharge of stormwater off paved and landscaped surfaces to surface waters. The wetlands in the ditches are of low quality in part due to their past use for stormwater purposes and due to the presence of exotic plants or plants of low value including common reed, purple loosestrife, and cattail. Common constituents in stormwater runoff off roadways and parking lots include oils and grease, heavy metals, salt, and sediment. Common constituents in stormwater runoff off landscaped areas include nutrients and pesticides. The proposed plan provides for the construction of a stormwater management system that collects stormwater off paved and landscaped surfaces and passes it through sediment catchment chambers to filter the stormwater prior to discharging it through three existing outfalls to the Hudson River. In addition, since under existing conditions most of the site is covered by impervious surfaces and that stormwater runoff is currently uncontrolled within the site, the reduction in the amount of impervious surfaces under the proposed plan and the controlling of stormwater runoff, stormwater runoff associated with the proposed project is not expected to result in a significant adverse impact to aquatic communities of the Hudson River. Overall, therefore, the project's impacts to aquatic communities would not be significant.

E. Threatened and Endangered Species

There are no known records of threatened or endangered plant or animal species within the project site or adjacent parklands and suitable habitat for these species is not present. However, the NHP has a record of shortnose sturgeon, a State-endangered species, within the lower Hudson River. The potential for impact to this species would be from uncontrolled and unfiltered stormwater flowing into the river. With the implementation of the proposed stormwater management plan, the redevelopment project would not result in a significant adverse impact to this species.

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# ATTACHMENT A

Vegetative Species List

**EcolSciences, Inc.**
Environmental Management & Regulatory Compliance

**Vegetation Identified Within and Adjacent to the**
**Former General Motors Corporation Tarrytown Plant**
**Village of Sleepy Hollow**
**Westchester County, New York**

| SCIENTIFIC NAME | COMMON NAME | GM Plant | Adjacent Parks |
|---|---|---|---|
| **TREES** | | | |
| *Acer negundo* | Boxelder | X | X |
| *Acer platanoides* | Norway maple | | X |
| *Acer rubrum* | Red maple | | X |
| *Acer saccharum* | Sugar maple | | X |
| *Ailanthus altissima* | Tree-of-heaven | X | X |
| *Betula lenta* | Black birch | | X |
| *Betula populifolia* | Gray birch | | X |
| *Fraxinus americana* | White ash | | X |
| *Juniperus virginiana* | Eastern red cedar | | X |
| *Paulownia tomentosa* | Princess tree | | X |
| *Picea abies* | Norway spruce | | X |
| *Pinus strobus* | White pine | | X |
| *Platanus occidentalis* | Sycamore | | X |
| *Populus deltoides* | Cottonwood | X | X |
| *Prunus serotina* | Black cherry | X | X |
| *Quercus rubra* | Northern red oak | | X |
| *Quercus velutina* | Black oak | | X |
| *Robinia pseudoacacia* | Black locust | X | X |
| *Salix babylonica* | Weeping willow | | X |
| *Salix nigra* | Black willow | X | X |
| *Tsuga canadensis* | Eastern hemlock | | X |
| *Ulmus americana* | American elm | X | X |
| **SHRUBS/VINES** | | | |
| *Alnus serrulata* | Smooth alder | X | X |
| *Celastrus scandens* | Bittersweet | X | |
| *Forsythia* | Forsythia | | X |
| *Lonicera japonica* | Japanese honeysuckle | X | X |
| *Rhamnus cathartica* | Buckthorn | X | |
| *Rosa multiflora* | Multiflora rose | X | X |
| *Rubus phoenicolasius* | Wineberry | X | X |
| *Salix discolor* | Pussy willow | X | X |
| *Toxicodendron radicans* | Poison ivy | X | X |
| *Vitis aetivalis* | Summer grape | X | |
| **HERBS** | | | |
| *Amaranthus retroflexus* | Pigweed | X | |
| *Artemisia biennis* | Biennial mugwort | X | X |
| *Asclepias syriaca* | Common milkweed | X | |
| *Cyperus esculentus* | Nut sedge | X | |

| SCIENTIFIC NAME | COMMON NAME | GM Plant | Adjacent Parks |
|---|---|---|---|
| *Daucus carota* | Queen Anne's lace | X | |
| *Erigeron annuus* | Daisy fleabane | X | |
| *Eupatorium sp.* | Thoroughwort | X | |
| *Juncus effusus* | Soft rush | X | |
| *Juncus tenuis* | Path rush | X | |
| *Lythrum salicaria* | Purple loosestrife | X | |
| *Oenothera biennis* | Evening primrose | X | |
| *Panicum virgatum* | Switchgrass | X | |
| *Phragmites australis* | Common reed | X | X |
| *Polygonum cuspidatum* | Japanese knotweed | X | X |
| *Solidago sempervirens* | Seaside goldenrod | X | |
| *Solidago sp.* | Goldenrod | X | X |
| *Verbascum thapsus* | Woolly mullein | X | |

# ATTACHMENT B

Correspondence

STATE OF NEW YORK
DEPARTMENT OF STATE
41 STATE STREET
ALBANY, NY 12231-0001

GEORGE E. PATAKI
GOVERNOR

RANDY A. DANIELS
SECRETARY OF STATE

Karin Tekel
EcolSciences, Inc.
75 Fleetwood Drive, Suite 250
Rockaway, New Jersey 07866

November 18, 2003

Karin:

Attached is the Significant Habitat information you requested. The Piermont Marsh is actually in Rockland County but is downstream of the proposed project area and hence is the Significant Habitat most relevant to this project. Please call me at (518) 473 - 8359 if you have any questions.

Jaime Reppert,
Coastal Resource Specialist

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# SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS PROGRAM
# A PART OF THE NEW YORK COASTAL MANAGEMENT PROGRAM

## BACKGROUND

New York State's Coastal Management Program (CMP) includes a total of 44 policies which are applicable to development and use proposals within or affecting the State's coastal area. Any activity that is subject to review under Federal or State laws, or under applicable local laws contained in an approved local waterfront revitalization program will be judged for its consistency with these policies.

Once a determination is made that the proposed action is subject to consistency review, a specific policy aimed at the protection of fish and wildlife resources of statewide significance applies. The specific policy statement is as follows: "Significant coastal fish and wildlife habitats will be protected, preserved, and, where practical, restored so as to maintain their viability as habitats." The New York State Department of Environmental Conservation (DEC) evaluates the significance of coastal fish and wildlife habitats, and following a recommendation from the DEC, the Department of State designates and maps specific areas. Although designated habitat areas are delineated on the coastal area map, the applicability of this policy does not depend on the specific location of the habitat, but on the determination that the proposed action is subject to consistency review.

Significant coastal fish and wildlife habitats are evaluated, designated and mapped under the authority of the Coastal Management Program's enabling legislation, the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). These designations are subsequently incorporated in the Coastal Management Program under authority provided by the Federal Coastal Zone Management Act.

This narrative, along with its accompanying map, constitutes a record of the basis for this significant coastal fish and wildlife habitat's designation and provides specific information regarding the fish and wildlife resources that depend on this area. General information is also provided to assist in evaluating impacts of proposed activities on parameters which are essential to the habitat's values. This information is to be used in conjunction with the habitat impairment test found in the impact assessment section to determine whether the proposed activities are consistent with the significant coastal habitats policy.

COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: Piermont Marsh

Designated: November 15, 1987

County: Rockland

Town(s): Orangetown

7½' Quadrangle(s): Nyack, NY

| Score | Criterion |
|---|---|
| 25 | Ecosystem Rarity (ER)<br>This is the only large, undeveloped, predominantly brackish marsh on the Hudson River; rare in the major ecological region. |
| 16 | Species Vulnerability (SV)<br>Diamondback terrapin (SC) regularly use the area; least bittern (SC) and sedge wren (SC) reported nesting but not adequately documented. |
| 15 | Human Use (HU)<br>Part of the Hudson River Estuarine Sanctuary, providing opportunities for fish and wildlife related research and education, of regional significance. Popular birding area.<br>Additive division: 9 + 9 / 2 + 4 / 4 = 15 |
| 6 | Population Level (PL)<br>Concentrations of various fish and wildlife species are unusual in the lower Hudson Valley; geometric mean: $(4 \times 9)^{\frac{1}{2}} = 6$. |
| 1.2 | Replaceability (R)<br>Irreplaceable. |

SIGNIFICANCE VALUE = [( ER + SV + HU + PL ) X R]

= 74

DESIGNATED HABITAT: PIERMONT MARSH

HABITAT DESCRIPTION:

Piermont Marsh is located on the west side of the Hudson River, at the southern edge of the Village of Piermont, in the Town of Orangetown, Rockland County (7.5' Quadrangle: Nyack, N.Y.). The fish and wildlife habitat is an approximate 725 acre area, encompassing a large, intertidal, predominantly brackish marsh, extensive tidal shallows (less than 6 feet deep below mean low water), and the mouth of Sparkill Creek. The marsh area is dominated by narrow-leaved cattail and common reed, with lesser amounts of saltmarsh cordgrass, saltmeadow cordgrass, saltgrass, and purple loosestrife; sparse growths of pondweeds are present in the shallows. Sparkill Creek and Crumkill Creek meander through the marsh, but account for a very limited amount of open water.

Piermont Marsh is bounded on the north by a mile-long earthen pier, constructed in 1839 as the eastern terminus of the Erie Railroad. The western end of the pier is occupied by several factories, while the eastern end is a park area owned by the Village of Piermont. Most of Piermont Marsh and the land area to the west (predominantly steep, undeveloped, forestland) are within Tallman Mountain State Park, owned by the Palisades Interstate Park Commission. The south and east sides of the area open broadly to the Hudson River. The NYSDEC owns an approximate 70 acre parcel at the north end of the marsh.

FISH AND WILDLIFE VALUES:

Piermont Marsh is one of the largest, undeveloped, wetland complexes on the Hudson River. It is the only sizeable intertidal brackish marsh within the Hudson estuary, and is exemplary of this ecological community type. For these reasons, Piermont Marsh has been designated as one of four sites comprising the Hudson River Estuarine Sanctuary, dedicated to environmental research and education.

Piermont Marsh is a productive wetland area, with minimal human disturbance. Consequently, it provides favorable habitats for a variety of fish and wildlife species. Probable or confirmed breeding bird species in the area include pied-billed grebe, green-backed heron, mallard, black duck, gadwall, wood duck, American woodcock, marsh wren, red-winged blackbird, and swamp sparrow. Other species that have been reported at Piermont, but were not documented breeding there since at least 1980, include American bittern, least bittern (SC), Virginia rail, sora, king rail, fish crow, and sedge wren (SC). Concentrations of herons, waterfowl, and shorebirds occur in the tidal flats and shallows during spring and fall migrations (March-April and September-November, respectively), but the extent of use by these birds has not been documented.

Other resident wildlife species in the area include muskrat, mink, raccoon, diamondback terrapin (SC), snapping turtle, and northern water snake.

Sparkill Creek and Crumkill Creek provide limited spawning and nursery habitats for a variety of anadromous and resident freshwater fishes. Species found in the area include alewife, blueback herring, white perch, striped bass, banded killifish, and mummichog. Fiddler crabs are abundant in the marsh, and blue claw crabs occur regularly in the shallows.

The diversity and abundance of fish and wildlife species at Piermont Marsh are unusual in the lower Hudson River. Opportunities for birdwatching, fishing, and informal nature study, especially from Piermont Pier, attract a substantial number of Rockland County residents to the area. More importantly, however, is that designation of Piermont Marsh as an Estuarine Sanctuary will focus research and education activities in the Hudson Valley on this area.

IMPACT ASSESSMENT:

A **habitat impairment test** must be met for any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific **habitat impairment test** that must be met is as follows.

> In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:
>
> destroy the habitat; or,
>
> significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The tolerance range of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in appplying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;
2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,
3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

It is essential that any potential impacts on Piermont Marsh be evaluated with respect to the research and management program of the Estuarine Sanctuary, and the need to maintain natural or controlled experimental conditions. Any activity that would substantially degrade water quality, increase turbidity or sedimentation, reduce freshwater inflows, or alter tidal fluctuations in Piermont Marsh, would result in significant impairment of the habitat. Discharges of sewage, stormwater runoff, or industrial wastewater, could severely impair the quality of this productive wetland.

Elimination of marsh or shallow water areas, through dredging, filling, or bulkheading, would result in a direct loss of valuable fish and wildlife habitats. Activities that would subdivide this relatively large, undisturbed area into smaller fragments should be restricted.

However, limited habitat management activities, including expansion of open water areas in the marsh, may be designed to maintain or enhance populations of certain fish or wildlife species. Existing undisturbed areas bordering Piermont Marsh should be maintained to provide cover, perch sites and buffer zones; significant human encroachment into adjacent areas could adversely affect certain species of wildlife.

Strict management of public access may be necessary to ensure that the various human uses of fish and wildlife resources in the area are compatible.

KNOWLEDGEABLE CONTACTS:

Tom Hart
N.Y.S. Department of State
Division of Coastal Resources &
Waterfront Revitalization
162 Washington Avenue
Albany, NY 12231
Phone: (518) 474-6000

Glenn Cole, Wildlife Manager
or Wayne Elliot, Fisheries Manager
or Jack Isaacs, Environmental Protection Biologist
NYSDEC - Region 3
21 So. Putt Corners Road
New Paltz, NY 12561
Phone: (914)255-5453

Elizabeth Blair
Hudson River Estuarine Research Reserve
Bard College
Annandale, NY 12057
Phone: (914) 758-9153

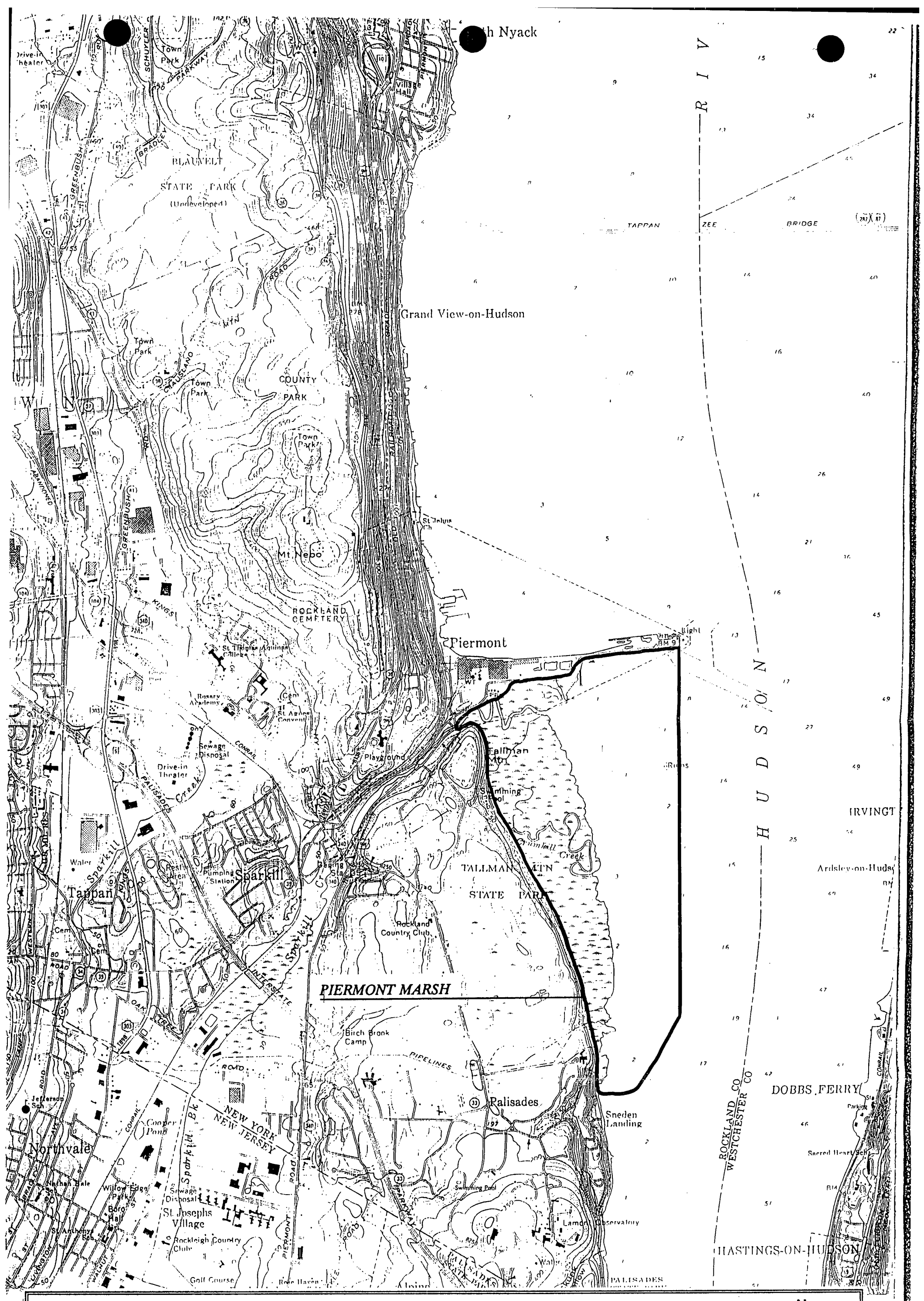
William Van Cura
192 Ferdon Avenue, Box 112
Piermont, NY 10968
Phone: (914)359-4639

Emilio Di Francesco, Environmental Aide
Town of Orangetown
Town Hall
Orangeburg, NY 10962
Phone: (914) 359-5100

NYSDEC Information Services
700 Troy-Schenectady Road
Latham, NY 12110
Phone: (518)783-3932

# SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

## Piermont Marsh




New York State Department of State Division of Coastal Resources and Waterfront Revitalization

Prepared by T. Hart and G. Capobianco September 1990

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
Patuxent Wildlife Research Center
11510 American Holly Drive
Laurel, Maryland 20708-4017
26 November 2003

Karin Tekel
Environmental Scientist
EcolSciences, Inc.
75 Fleetwood Drive
Suite 250
Rockaway, NJ 07866

Dear Ms. Tekel:

Thank you for your letter of 13 Nov 2003 regarding Christmas Bird Count data for New York. We have some analyses on our website, at:

http://www.mbr-pwrc.usgs.gov/bbs/cbc.html

You may be able to obtain some analyses using the clickable map at that site. However, I have not done any recent analyses of those data, and I refer inquiries to the BirdSource website for all CBC data. They have the current data, and some analytical capabilities. While we hope to do more analyses of these data, it will all be done in conjunction with the National Audubon Society, and they are the best source of data and other information.

I hope these comments are of use to you.

Sincerely,

John Sauer

John R. Sauer
Wildlife Biologist

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New York State Department of Environmental Conservation
**Division of Fish, Wildlife & Marine Resources**
**New York Natural Heritage Program**
625 Broadway, 5th floor, Albany, New York 12233-4757
**Phone:** (518) 402-8935 • **FAX:** (518) 402-8925
**Website:** www.dec.state.ny.

Erin M. Crotty
Commissioner

December 10, 2003

**RECEIVED**
DEC 11 2003
**ECOLSCIENCES, INC.**

Karin Tekel
EcolSciences, Inc
75 Fleetwood Dr, Suite 250
Rockaway, NJ 07866

Dear Ms. Tekel:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed Re-development of the former General Motors Corp. Plant site on Beekman Avenue, site as indicated on the map you provided, located in the Village of Sleepy Hollow, Town of Mount Pleasant, Westchester County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

The presence of rare species may result in this project requiring additional permits, permit conditions, or review. For further guidance, and for information regarding other permits that may be requi red under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,
Heidi Krahling
Heidi J. Krahling, Information Services
NY Natural Heritage Program

Encs.
cc: Reg. 3, Wildlife Mgr.
Reg. 3, Fisheries Mgr.

# Natural Heritage Report on Rare Species and Ecological Communities

Prepared 8 December 2003 by NY Natural Heritage Program, NYS DEC, Albany, New York

This report contains SENSITIVE information that should be treated in a sensitive manner -- Please see cover letter. Refer to the Users' Guide for explanations of codes, ranks, and fields.
We do not always provide maps of locations of species most vulnerable to disturbance, nor of some records whose locations and/or extents are not precisely known or are too large to display.



* County
** Town

| Scientifc Name, COMMON NAME, & Group Name | NY Legal Status, Heritage Ranks, & Federal Status | EO Rank & Last Seen | Detailed Location | General Habitat and Quality | Office Use |
|---|---|---|---|---|---|
| * COLUMBIA, PUTNAM, RENSSELAER, ROCKLAND, ORANGE, NEW YORK, DU | | | | | |
| ** MOUNT PLEASANT, SAUGERTIES, BETHLEHEM, CITY OF RENSSELAER, CITY OF NEW YORK, FISHKILL, CITY OF NEW Y | | | | | |
| *Acipenser brevirostrum*<br>SHORTNOSE STURGEON<br>Fish | ENDANGERED<br>G3 S1<br>LE | | HUDSON RIVER<br>The lower Hudson River from The Battery in New York City at its junction with Upper New York Bay, upstream to the Federal Dam in Troy and a portion of Schodack Creek. | A long tidal river representing the Lower Hudson River. The river constitutes the lower part of a 315 mile stream system. It is fed upstream by two large main channel streams, which provide 80% of the freshwater input, and numerous other smaller stre | 4107368<br>BOF |
| * WESTCHESTER | | | | | |
| ** GREENBURGH, MOUNT PLEASANT | | | | | |
| *Oporornis formosus*<br>KENTUCKY WARBLER<br>Bird | PROTECTED<br>G5 S2 | E<br>1980 | TARRYTOWN<br>[Tarrytown?]. | | 4107317 |
| ** MOUNT PLEASANT | | | | | |
| *Crotalaria sagittalis*<br>RATTLEBOX<br>Vascular Plant | ENDANGERED<br>G5 S1 | F<br>1896-08-04 | NORTH TARRYTOWN<br>Roadsides. North Tarrytown. | Roadsides.<br>Most of North Tarrytown is developed and little habitat remains. | 4107317 |

# Natural Heritage Report on Rare Species and Ecological Communities

Prepared 8 December 2003 by NY Natural Heritage Program, NYS DEC, Albany, New York

This report contains SENSITIVE information that should be treated in a sensitive manner -- Please see cover letter. Refer to the Users' Guide for explanations of codes, ranks, and fields.
We do not always provide maps of locations of species most vulnerable to disturbance, nor of some records whose locations and/or extents are not precisely known or are too large to display.



* County
** Town

| Scientifc Name, COMMON NAME, & Group Name | NY Legal Status, Heritage Ranks, & Federal Status | EO Rank & Last Seen | Detailed Location | General Habitat and Quality | Office Use |
|---|---|---|---|---|---|
| * WESTCHESTER | | | | | |
| ** MOUNT PLEASANT | | | | | |
| *Hypericum prolificum*<br>SHRUBBY ST. JOHN'S-WORT<br>Vascular Plant | THREATENED<br>G5 S2 | F<br>1898-07-21 | NORTH TARRYTOWN<br>Roadsides. North Tarrytown. | Roadsides.<br>Most of North Tarrytown is developed and little habitat remains. | 4107317 |
| *Onosmodium virginianum*<br>VIRGINIA FALSE GROMWELL<br>Vascular Plant | ENDANGERED<br>G4 S1 | F<br>1896-06-02 | NORTH TARRYTOWN<br>North Tarrytown. | Most of North Tarrytown is developed and little habitat remains. | 4107317 |

5 Records Processed

V = Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.
U = Unprotected; no state status.

**NEW YORK STATE STATUS** (communities): At this time there are no categories defined for communities.

**FEDERAL STATUS** (plants and animals): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527.

(blank) = No Federal Endangered Species Act status.
LE = The element is formally listed as endangered.
LT = The element is formally listed as threatened.
E/SA = The element is treated as endangered because of similarity of appearance to other endangered species or subspecies.
PE = The element is proposed as endangered.
PT = The element is proposed as threatened.
C= The element is a candidate for listing.
(LE) = If the element is a full species, all subspecies or varieties are listed as endangered; if the element is a subspecies, the full species is listed as endangered.
(LE-LT) = The species is formally listed as endangered in part of its range, and as threatened in the other part; or, one or more subspecies or varieties is listed as endangered, and the others are listed as threatened.
(LT-C) = The species is formally listed as threatened in part of its range, and as a candidate for listing in the other part; or, one or more subspecies or varieties is listed as threatened, and the others are candidates for listing.
(LT-(T/SA)) = One or more subspecies or populations of the species is formally listed as threatened, and the others are treated as threatened because of similarity of appearance to the listed threatened subspecies or populations.
(PS) = Partial status: the species is listed in parts of its range and not in others; or, one or more subspecies or varieties is listed, while the others are not listed.

**GLOBAL AND STATE RANKS** (animals, plants, ecological communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Infraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world. ? = Indicates a question exists about the rank. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

GLOBAL RANK:
G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.
G2 = Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.
G3 = Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.
G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
GH = Historically known, with the expectation that it might be rediscovered.
GX = Species believed to be extinct.

STATE RANK:
S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.
S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.
S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.
S4 = Apparently secure in New York State.
S5 = Demonstrably secure in New York State.
SH = Historically known from New York State, but not seen in the past 15 years.
SX = Apparently extirpated from New York State.
SZ = Present in New York State only as a transient migrant.

SxB and SxN, where Sx is one of the codes above, are used for migratory animals, and refer to the rarity within New York State of the breeding (B) populations and the non-breeding populations (N), respectively, of the species.

TAXON (T) RANK: The T-ranks (T1 - T5) are defined the same way as the Global ranks (G1 - G5), but the T-rank refers only to the rarity of the subspecific taxon.
T1 through T5 = See Global Rank definitions above.
Q = Indicates a question exists whether or not the taxon is a good taxonomic entity.

**OFFICE USE**: Information for use by the Natural Heritage Program.

# USERS GUIDE TO NY NATURAL HERITAGE DATA

**NATURAL HERITAGE PROGRAM**: The Natural Heritage Program is an ongoing, systematic, scientific inventory whose goal is to compile and maintain data on the rare plants and animals native to New York State, and significant ecological communities. The data provided in the report facilitate site planning, conservation, and natural resource management and help to conserve the plants, animals and ecological communities that represent New York's natural heritage.

**DATA SENSITIVITY**: The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should not be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

**NATURAL HERITAGE REPORTS** (may contain any of the following types of data):

COUNTY NAME: County where the occurrence of a rare species or significant ecological community is located.
TOWN NAME: Town where the occurrence of a rare species or significant ecological community is located.
USGS 7 ½' TOPOGRAPHIC MAP: Name of 7.5 minute US Geological Survey (USGS) quadrangle map (scale 1:24,000).

SIZE (acres): Approximate acres occupied by the rare species or significant ecological community at this location. A blank indicates unknown size.
SCIENTIFIC NAME: Scientific name of the occurrence of a rare species or significant ecological community.
COMMON NAME: Common name of the occurrence of a rare species or significant ecological community.
ELEMENT TYPE: Type of element (i.e. plant, animal, significant ecological community, other, etc.)

LAST SEEN: Year rare species or significant ecological community last observed extant at this location.

EO RANK: Comparative evaluation summarizing the quality, condition, viability and defensibility of this occurrence. Use with LAST SEEN.
A-E = Extant: A=excellent, B=good, C=marginal, D=poor, E=extant but with insufficient data to assign a rank of A - D.
F = Failed to find. Did not locate species, but habitat is still there and further field work is justified.
H = Historical. Historical occurrence without any recent field information.
X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.
? = Unknown.
Blank = Not assigned.

**NEW YORK STATE STATUS** (animals): Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.
E = Endangered Species: any species which meet one of the following criteria:
1) Any native species in imminent danger of extirpation or extinction in New York.
2) Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.
T = Threatened Species: any species which meet one of the following criteria:
1) Any native species likely to become an endangered species within the foreseeable future in NY.
2) Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.
SC = Special Concern Species: those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, species of special concern receive no additional legal protection under Environmental Conservation Law section 11-0535 (Endangered and Threatened Species).
P = Protected Wildlife (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.
U = Unprotected (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.
G = Game (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

**NEW YORK STATE STATUS** (plants): The following categories are defined in regulation 6NYCRR part 193.3 and apply to NYS Environmental Conservation Law section 9-1503.
E = Endangered Species: listed species are those with:
1) 5 or fewer extant sites, or
2) fewer than 1,000 individuals, or
3) restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or
4) species listed as endangered by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.
T = Threatened: listed species are those with:
1) 6 to fewer than 20 extant sites, or
2) 1,000 to fewer than 3,000 individuals, or
3) restricted to not less than 4 or more than 7 U.S.G.S. 7 and ½ minute topographical maps, or
4) listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.
R = Rare: listed species have:
1) 20 to 35 extant sites, or
2) 3,000 to 5,000 individuals statewide.

continued on next page

| | | |
|---|---|---|
| 7 | Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga & Tompkins<br><br>Telephone: (315) 426-7438 | Ralph Manna<br>NYS-DEC<br>615 Erie Blvd. West<br>(Env.Permits Room 206)<br>Syracuse, NY 13204-2400 |
| 7<br>(sub-office) | <br><br>Telephone: (607) 753-3095 | Michael Barylski*<br>NYS-DEC<br>1285 Fisher Avenue<br>Cortland, NY 13045-1090 |
| 8 | Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne & Yates<br><br>Telephone: (716) 226-5390 | Peter Lent<br>NYS-DEC<br>6274 East Avon Lima Road<br>Avon, NY 14414-9519 |
| 9 | Allegany, Cattaraugus, Chautauqua, Erie, Niagara & Wyoming<br><br>Telephone: (716) 851-7165 | Steve Doleski<br>NYS-DEC<br>270 Michigan Avenue<br>Buffalo, NY 14203-2999 |
| 9<br>(sub-office) | <br><br>Telephone: (716) 372-0645 | Ken Taft*<br>NYS-DEC<br>182 East Union, Suite 3<br>Allegany, NY 14706-1328 |

* Deputy Regional Permit Administrator

# DIVISION OF ENVIRONMENTAL PERMITS

June 2001

| REGION | COUNTIES | REGIONAL PERMIT ADMINISTRATORS |
|---|---|---|
| 1 | Nassau & Suffolk<br><br>Telephone: (631) 444-0365 | John Pavacic<br>NYS-DEC<br>BLDG. 40<br>SUNY at Stony Brook<br>Stony Brook, NY 11790-2356 |
| 2 | New York City (Boroughs of Manhattan, Brooklyn, Bronx, Queens, & Staten Island<br><br>Telephone: (718) 482-4997 | John Cryan<br>NYS-DEC<br>One Hunters Point Plaza<br>47-40 21st Street<br>Long Island City, NY 11101-5407 |
| 3 | Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster & Westchester<br><br>Telephone: (845) 256-3054 | Margaret Duke (Peg)<br>NYS-DEC<br>21 South Putt Corners Road<br>New Paltz, NY 12561-1696 |
| 4 | Albany, Columbia, Greene, Montgomery, Rensselaer & Schenectady<br><br>Telephone: (518) 357-2069 | William Clarke<br>NYS-DEC<br>1150 North Wescott Road<br>Schenectady, NY 12306-2014 |
| 4<br>(sub-office) | Delaware, Otsego & Schoharie<br><br>Telephone: (607) 652-7741 | John Feltman<br>NYS-DEC<br>Route 10<br>HCR#1, Box 3A<br>Stamford, NY 12167-9503 |
| 5 | Clinton, Essex, Franklin & Hamilton<br><br>Telephone: (518) 897-1234 | Richard Wild<br>NYS-DEC<br>Route 86, PO Box 296<br>Ray Brook, NY 12977-0296 |
| 5<br>(sub-office) | Fulton, Saratoga, Warren & Washington<br><br>Telephone: (518) 623-1281 | Thomas Hall*<br>NYS-DEC<br>County Route 40<br>PO Box 220<br>Warrensburg, NY 12885-0220 |
| 6 | Jefferson, Lewis & St. Lawrence<br><br>Telephone: (315) 785-2245 | Brian Fenlon<br>NYS-DEC<br>State Office Building<br>317 Washington Street<br>Watertown, NY 13601-3787 |
| 6<br>(sub-office) | Herkimer & Oneida<br><br>Telephone: (315) 793-2555 | J. Joseph Hornburger*<br>NYS-DEC<br>State Office Building<br>207 Genesee Street<br>Utica, NY 13501-2885 |

# ATTACHMENT C

Wildlife Species List

**EcolSciences, Inc.**
Environmental Management & Regulatory Compliance

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank[2] | Breeding[3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| **Order Anseriformes** | | | | | | | | |
| Family Anatidae - Waterfowl | | | | | | | | |
| Wood Duck * + | *Aix sponsa* | PB-GS | N | Sp, Su, F, W | | X | | Shallows |
| Northern Pintail + | *Anas acuta* | PB-GS | N | Sp, F, W | | | X | Shallows |
| American Wigeon + | *Anas americana* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Northern Shoveler + | *Anas clypeata* | PB-GS | N | Sp, F, W | | | X | Shallows |
| American Green-winged Teal + | *Anas crecca* | PB-GS | N | Sp, F, W | | X | X | Shallows |
| Eurasian Wigeon + | *Anas penelope* | PB-GS | N | Sp, F, W | | | X | Shallows |
| **Mallard * # +** | *Anas platyrhynchos* | PG-GS | Y | Sp, Su, F, W | | X | X | Shallows |
| American Black Duck * # + | *Anas rubripes* | PB-GS | N | Sp, F, W | | X | X | Shallows |
| Gadwell # + | *Anas strepera* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Lesser Scaup + | *Aythya affinis* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Ring-necked Duck # + | *Aythya collaris* | PB-GS | N | Sp, F, W | | X | X | Shallows |
| Greater Scaup + | *Aythya marila* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Canvasback + | *Aythya valisineria* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Brant + | *Branta bernicla* | PB-GS | N | Sp, F, W | | | X | Shallows |
| **Canada Goose * # +** | *Branta canadensis* | PB-GS | Y | Sp, Su, F, W | X | X | X | Shallows |
| Common Goldeneye + | *Bucephala clangula* | PB-GS | N | Sp, F, W | | | X | Shallows |
| **Bufflehead # +** | *Bucephala albeola* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Snow Goose # | *Chen caerulescens* | PB-GS | N | Sp, F, W | | | X | Shallows |
| **Mute Swan * # +** | *Cygnus olor* | PB-GN | Y | Sp, F, W | | X | X | Shallows |
| Hooded Merganser # + | *Lophodytes cucullatus* | PB-GS | N | Sp, F, W | | X | X | Shallows |
| Surf Scoter + | *Melanitta perspicillata* | PB-GS | N | Sp, F, W | | | X | Shallows |
| White-winged Scoter + | *Melanitta fusca* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Common Merganser # + | *Mergus merganser* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Red-breasted Merganser + | *Mergus serrator* | PB-GS | N | Sp, F, W | | | X | Shallows |
| Ruddy Duck + | *Oxyura jamaicensis* | PB-GS | N | Sp, F, W | | | X | Shallows |
| | | | | | | | | |
| **Order Gaviiformes** | | | | | | | | |
| Family Gaviidae - Loons | | | | | | | | |
| Common Loon + | *Gavia immer* | PB-SC | N | Sp, F, W | | | X | Shallows |
| Red-throated Loon + | *Gavia stellata* | PB | N | Sp, F, W | | | X | Shallows |
| | | | | | | | | |
| | | | | | | | | |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank[2] | Breeding[3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| **Order Podicipediformes** | | | | | | | | |
| Family Podicipedidae - Grebes | | | | | | | | |
| Horned Grebe + | *Podiceps auritus* | PB | N | Sp, F, W | | | X | Shallows |
| Red-necked Grebe + | *Podiceps grisegena* | PB | N | Sp, F, W | | | X | Shallows |
| Pied-billed Grebe + | *Podilymbus podiceps* | PB-T | N | Sp, F, W | | X | X | Shallows |
| **Order Pelecaniformes** | | | | | | | | |
| Family Phalacrocoracidae - Cormorants | | | | | | | | |
| Double-crested Cormorant + | *Phalacrocorax auritus* | PB | N | Sp, Su, F, W | | | X | Shallows |
| Great Cormorant + | *Phalacrocorax carbo* | PB | N | Sp, F, W | | | X | Shallows |
| **Order Ciconiiformes** | | | | | | | | |
| Family Ardeidae - Herons and Bitterns | | | | | | | | |
| Great Blue Heron # | *Ardea herodias* | PB | N | Sp, Su, F, W | | X | X | Shallows, Marsh, Swamp, Forest |
| Green Heron * | *Butorides virescens* | PB | Y | Sp, Su, F | | X | X | Shallows, Marsh, Swamp, Forest |
| Black-crowned Night-Heron * # | *Nycticorax nycticorax* | PB | N | Sp, Su, F, W | | X | X | Shallows, Marsh, Swamp, Forest |
| Family Cathartidae - Vultures | | | | | | | | |
| Turkey Vulture * | *Cathartes aura* | PB | N | Sp, Su, F | X | X | X | Forest, Waste Ground |
| **Order Falconiformes** | | | | | | | | |
| Family Accipitridae - Hawks | | | | | | | | |
| Cooper's Hawk + | *Accipiter cooperii* | PB-SC | N | Sp, Su, F | X | X | | Forest, Waste Ground |
| Sharp-shinned Hawk + | *Accipiter striatus* | PB-SC | N | Sp, Su, F | X | X | | Forest, Waste Ground |
| **Red-tailed Hawk * # +** | *Buteo jamaicensis* | PB | Y | Sp, Su, F, W | X | X | | Forest, Waste Ground |
| Broad-winged Hawk * | *Buteo platypterus* | PB | N | Sp, Su, F | X | X | | Forest |
| **Northern Harrier +** | *Circus cyaneus* | PB-T | N | W | X | X | | Marsh, Waste Ground |
| Family Falconidae - Falcons | | | | | | | | |
| Merlin + | *Falco columbarius* | PB | N | Sp, F, W | X | X | X | Marsh, Waste Ground |
| Peregrine Falcon + | *Falco peregrinus* | PB-E | N | Sp, F, W | X | X | X | Marsh, Waste Ground |
| American Kestrel * + | *Falco sparverius* | PB | N | Sp, F, W | X | X | X | Marsh, Waste Ground |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank[2] | Breeding[3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| **Order Gruciformes** | | | | | | | | |
| Family Rallidae - Coots and Rails | | | | | | | | |
| American Coot + | *Fulica americana* | PB-GS | N | Sp, F, W | | X | X | Shallows |
| **Order Charadriiformes** | | | | | | | | |
| Family Charadriidae - Plovers | | | | | | | | |
| Killdeer * + | *Charadrius vociferus* | PB-GN | Y | Sp, Su, F, W | X | X | | Waste Ground |
| Family Scolopacidae - Sandpipers | | | | | | | | |
| Spotted Sandpiper * | *Actitis macularia* | PB-GN | Y | Sp, Su, F | | X | X | Marsh |
| Purple Sandpiper + | *Calidris maritima* | PB-GN | N | Sp, F | | | X | Marsh |
| American Woodcock * + | *Scolopax minor* | PB-GS | N | Sp, Su, F, W | X | X | | Marsh |
| **Greater Yellowlegs** + | *Tringa melanoleuca* | PB-GN | N | Sp, F, W | X | X | X | Marsh, Waste Ground |
| Family Laridae - Gulls | | | | | | | | |
| **Herring Gull** + | *Larus argentatus* | PB | N | Sp, Su, F, W | X | X | X | Shallows, Marsh, Waste Ground |
| Ring-billed Gull # + | *Larus delawarensis* | PB | N | Sp, F, W | X | X | X | Shallows, Marsh, Waste Ground |
| Lesser Black-backed Gull + | *Larus fuscus* | PB | N | W | | X | X | Shallows, Marsh, Waste Ground |
| Great Black-backed Gull + | *Larus marinus* | PB | N | Sp, Su, F, W | X | X | X | Shallows, Marsh, Waste Ground |
| Bonaparte's Gull + | *Larus philadelphia* | PB | N | W | | X | X | Shallows, Marsh, Waste Ground |
| **Order Columbiformes** | | | | | | | | |
| Family Columbidae - Pigeons and Doves | | | | | | | | |
| **Rock Dove** * # + | *Columba livia* | Un | Y | Sp, Su, F, W | X | X | | Waste Ground |
| **Mourning Dove** * # + | *Zenaida macroura* | PB | Y | Sp, Su, F, W | X | X | | Forest Edges, Waste Ground |
| **Order Cuculiformes** | | | | | | | | |
| Family Cuculidae - Cuckoos | | | | | | | | |
| Yellow-billed Cuckoo * | *Coccyzus americanus* | PB | Y | Sp, Su, F | | X | | Forest |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank [2] | Breeding [3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| **Order Strigiformes** | | | | | | | | |
| Family Strigidae - Typical Owls | | | | | | | | |
| Northern Saw-whet Owl + | *Aegolius acadicus* | PB | N | W | | X | | Forest |
| Long-eared Owl + | *Asio otus* | PB | N | W | | X | | Forest |
| Great Horned Owl * + | *Bubo virginianus* | PB | Y | Sp, Su, F, W | X | X | | Forest, Waste Ground |
| Eastern Screech-Owl * + | *Otus asio* | PB | Y | Sp, Su, F, W | X | X | | Forest |
| Barn Owl + | *Tyto alba* | PB | N | W | X | X | | Waste Ground |
| **Order Apodiformes** | | | | | | | | |
| Family Apodidae - Swifts | | | | | | | | |
| Chimney Swift * | *Chaetura pelagica* | PB | N | Sp, Su, F | X | X | | Waste Ground |
| **Order Coraciiformes** | | | | | | | | |
| Family Alcedinidae - Kingfishers | | | | | | | | |
| **Belted Kingfisher +** | *Ceryle alcyon* | PB | N | Sp, F, W | | X | X | Shallows, Marsh |
| **Order Piciformes** | | | | | | | | |
| Family Picidae - Woodpeckers | | | | | | | | |
| Northern Flicker * + | *Colaptes auratus* | PB | Y | Sp, Su, F, W | | X | | Forest |
| **Red-bellied Woodpecker * # +** | *Melanerpes carolinus* | PB | Y | Sp, Su, F, W | | X | | Forest |
| **Downy Woodpecker * # +** | *Picoides pubescens* | PB | Y | Sp, Su, F, W | X | X | | Forest, Waste Ground |
| **Hairy Woodpecker * # +** | *Picoides villosus* | PB | Y | Sp, Su, F, W | | X | | Forest |
| **Yellow-bellied Sapsucker +** | *Sphyrapicus varius* | PB | N | Sp, F, W | | X | | Forest |
| **Order Passeriformes** | | | | | | | | |
| Family Tyrannidae - Flycatchers | | | | | | | | |
| Great Crested Flycatcher * | *Myiarchus crinitus* | PB | Y | Sp, Su, F | | X | | Forest |
| Eastern Phoebe * + | *Sayornis phoebe* | PB | Y | Sp, F, W | X | X | | Forest, Water's Edge |
| Eastern Kingbird * | *Tyrannus tyrannus* | PB | Y | Sp, Su, F | | X | | |
| Family Vireonidae - Vireos | | | | | | | | |
| Warbling Vireo * | *Vireo gilvus* | PB | Y | Sp, F | | X | | Forest Edge, Water's Edge |
| Red-eyed Vireo * | *Vireo olivaceus* | PB | Y | Sp, Su, F | | X | | Forest |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank [2] | Breeding [3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| Family Corvidae - Jays and Crows | | | | | | | | |
| **American Crow * # +** | *Corvus brachyrhynchos* | PB-GS | Y | Sp, Su, F, W | X | X | | Various |
| Fish Crow * + | *Corvus ossifragus* | PB-GS | Y | Sp, Su, F, W | X | X | X | Various - Coastal |
| **Blue Jay * # +** | *Cyanocitta cristata* | PB-GS | Y | Sp, Su, F, W | X | X | | Forest, Swamp, Waste Ground |
| Family Hirundinidae - Swallows | | | | | | | | |
| Barn Swallow * | *Hirundo rustica* | PB | Y | Sp, Su, F | X | X | | Waste Ground |
| Northern Rough-winged Swallow * | *Stelgidopteryx serripennis* | PB | N | Sp, Su, F | | X | X | Waters |
| Tree Swallow * | *Tachycineta bicolor* | PB | N | Sp, Su, F | X | X | | Forest, Waste Ground |
| Family Paridae - Titmice | | | | | | | | |
| **Tufted Titmouse * # +** | *Baeolophus bicolor* | PB | Y | Sp, Su, F, W | | X | | Swamp, Forest |
| Black-capped Chickadee * # + | *Poecile atricapillus* | PB | Y | Sp, Su, F, W | | X | | Swamp, Forest |
| Family Sittidae - Nuthatches | | | | | | | | |
| Red-breasted Nuthatch + | *Sitta canadensis* | PB | N | W | | X | | Forest |
| White-breasted Nuthatch * # | *Sitta carolinensis* | PB | Y | Sp, Su, F, W | | X | | Forest |
| Family Certhiidae | | | | | | | | |
| Brown Creeper + | *Certhia americana* | PB | N | Sp, F, W | | X | | Forest |
| Family Troglodytidae - Wrens | | | | | | | | |
| Marsh Wren + | *Cistothorus platensis* | PB | N | Sp, F, W | | X | | Marsh |
| Carolina Wren * # | *Thryothorus ludovicianus* | PB | Y | Sp, Su, F, W | | X | | Forest |
| House Wren * | *Troglodytes aedon* | PB | Y | Sp, Su, F, W | | X | | Forest Edge |
| Winter Wren # + | *Troglodytes trogladytes* | PB | N | Sp, F, W | | X | | Forest |
| Family Regulidae - Kinglets | | | | | | | | |
| **Ruby-crowned Kinglet +** | *Regulus calendula* | PB | N | Sp, F, W | X | X | | Forest, Waste Ground |
| Gold-crowned Kinglet + | *Regulus satrapa* | PB | N | Sp, F, W | | X | | Forest |
| Family Turdidae - Thrushes | | | | | | | | |
| Hermit Thrush + | *Catharus guttutas* | PB | N | Sp, F, W | | X | | Forest |
| Wood Thrush * | *Hylocichla mustelina* | PB | Y | Sp, Su, F | | X | | Forest |
| Eastern Bluebird * + | *Sialia sialis* | PB | N | Sp, F, W | | X | | Forest Edge |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank [2] | Breeding [3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| **American Robin * # +** | *Turdus migratorius* | PB | Y | Sp, Su, F, W | X | X | | Various |
| Family Mimidae - Mimic Thrushes | | | | | | | | |
| **Gray Catbird * +** | *Dumetella carolinensis* | PB | Y | Sp, Su, F, W | | X | | Forest Edge |
| **Northern Mockingbird * # +** | *Mimus polyglottos* | PB | Y | Sp, Su, F, W | X | | | Forest Edge, Waste Ground |
| Brown Thrasher * + | *Toxostoma rufum* | PB | Y | Sp, Su, F, W | | X | | Forest Edge, Waste Ground |
| Family Sturnidae - Starlings | | | | | | | | |
| **European Starling * # +** | *Sturnus vulgaris* | Un | Y | Sp, Su, F, W | X | X | | Various |
| Family Motacillidae | | | | | | | | |
| American Pipit + | *Anthus lutescens* | PB | N | Sp, F, W | X | | | Waste Ground |
| Family Bombycillidae - Waxwings | | | | | | | | |
| Cedar Waxwing * # + | *Bombycilla cedrorum* | PB | Y | Sp, Su, F, W | | X | | Forest Edge |
| Family Parulidae - Wood Warblers | | | | | | | | |
| Yellow-rumped Warbler + | *Dendroica coronata* | PB | N | Sp, F, W | X | | | Forest, Waste Ground |
| Prairie Warbler * | *Dendroica discolor* | PB | N | Sp, F | | | | Forest |
| **Palm Warbler** | *Dendroica palmarum* | PB | N | Sp, F | X | | | Waste Ground |
| Chestnut-sided Warbler * | *Dendroica pensylvanica* | PB | Y | Sp, Su, F | | X | | Forest Edge |
| Yellow Warbler * | *Dendroica petechia* | PB | Y | Sp, Su, F | X | X | | Forest Edge, Waste Ground |
| Common Yellowthroat * + | *Geothlypis trichas* | PB | Y | Sp, Su, F, W | X | X | | Forest Edge, Waste Ground |
| Worm-eating Warbler * | *Helmitheros vermivorus* | PB | N | Sp, F | | X | | Forest |
| Black-and-white Warbler * | *Mniotilta varia* | PB | Y | Sp, Su, F | | X | | Forest |
| American Redstart * | *Setophaga ruticilla* | PB | Y | Sp, Su, F | | X | | Forest |
| Ovenbird * | *Seiurus aurocapillus* | PB | Y | Sp, Su, F | | X | | Forest |
| Orange-crowned Warbler + | *Vermivora celata* | PB | N | Sp, F, W | | X | | Forest |
| Blue-winged Warbler * | *Vermivora pinus* | PB | Y | Sp, Su, F | | X | | Forest Edge |
| Hooded Warbler * | *Wilsonia citrina* | PB | N | Sp, F | | X | | Forest |
| Family Thraupidae - Tanagers | | | | | | | | |
| Scarlet Tanager * | *Piranga olivacea* | PB | Y | Sp, Su, F | | X | | Forest |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank[2] | Breeding[3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| Family Emberizidae - Sparrows | | | | | | | | |
| **Dark-eyed Junco # +** | *Junco hyemalis* | PB | N | Sp, F, W | X | X | | Forest, Waste Ground |
| Swamp Sparrow + | *Melospiza georgiana* | PB | N | Sp, Su, F | | X | | Marsh, Swamp |
| **Song Sparrow * # +** | *Melospiza melodia* | PB | Y | Sp, Su, F, W | X | X | | Forest Edge, Waste Ground |
| Fox Sparrow + | *Passerella iliaca* | PB | N | Sp, F, W | | X | | Forest |
| Eastern Towhee * # + | *Pipilo erythrophthalmus* | PB | Y | Sp, Su, F, W | | X | | Forest |
| **Snow Bunting * #** | *Plectrophenax nivalis* | PB | N | Sp, F, W | X | | | Forest Edge, Waste Ground |
| American Tree Sparrow # + | *Spizella arborea* | PB | N | Sp, F, W | X | X | | Waste Ground |
| Chipping Sparrow * + | *Spizella passerina* | PB | Y | Sp, Su, F, W | | | | Forest Edge, Waste Ground |
| **Field Sparrow * +** | *Spizella pusilla* | PB | Y | W | X | X | | Forest Edge, Waste Ground |
| **White-throated Sparrow # +** | *Zonotrichia albicollis* | PB | N | Sp, F, W | X | X | | Forest Edge, Waste Ground |
| Family Cardinalidae | | | | | | | | |
| **Northern Cardinal * # +** | *Cardinalis cardinalis* | PB | Y | Sp, Su, F, W | X | X | | Forest |
| Rose-breasted Grosbeak * | *Pheucticus ludovicianus* | PB | Y | Sp, Su, F | | X | | Forest |
| Indigo Bunting * | *Passerina cyanea* | PB | Y | Sp, Su, F | | X | | Forest Edge |
| Family Icteridae - Blackbirds | | | | | | | | |
| Red-winged Blackbird * # + | *Agelaius phoeniceus* | PB | Y | Sp, Su, F, W | | X | | Marsh |
| Rusty Blackbird + | *Euphagus carolinus* | PB | N | Sp, F, W | | X | | Forest, Waste Ground |
| Baltimore Oriole * + | *Icterus galbula* | PB | Y | W | | X | | Forest |
| Brown-headed Cowbird * # + | *Molothrus ater* | PB | Y | Sp, Su, F, W | | X | | Forest |
| Common Grackle * # + | *Quiscalus quiscula* | PB | Y | Sp, Su, F, W | X | X | | Forest Edge |
| Family Fringillidae - Finches | | | | | | | | |
| **American Goldfinch * # +** | *Carduelis tristis* | PB | Y | Sp, Su, F, W | X | X | | Forest Edge, Waste Ground |
| **House Finch * # +** | *Carpodacus mexicanus* | PB | Y | Sp, Su, F, W | X | X | | Various |
| Family Ploceidae - Weaver Finches | | | | | | | | |
| House Sparrow * # + | *Passer domesticus* | Un | Y | Sp, Su, F, W | X | X | | Various |
| **Order Testudines - Turtles** | | | | | | | | |
| Family Chelydridae - Snapping Turtles | | | | | | | | |
| Snapping Turtle | *Chelydra serpentina* | Un | Y | | | X | X | Shallows |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank[2] | Breeding[3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| Family Kinosternidae - Mud and Musk Turtles | | | | | | | | |
| Eastern Box Turtle | *Terrapene carolina carolina* | GN-SC | Y | | | X | | Forest |
| Painted Turtle | *Chryemys picta* | Un | Y | | | X | | Shallows |
| **Order Squamata - Lizards and Snakes** | | | | | | | | |
| Family Colubridae - Colubrids | | | | | | | | |
| Northern Water Snake | *Natrix sipedon sipedon* | Un | Y | | | X | | Waters |
| Common Garter Snake | *Thamnophis sirtalis sirtalis* | Un | Y | | X | X | | Forest, Waste Ground |
| **Order Caudata - Salamanders** | | | | | | | | |
| Family Plethodontidae - Lungless Salamanders | | | | | | | | |
| Redback Salamander* | *Plethodon cinereus* | Un | Y | | | X | | Forest |
| **Order Anura - Toads and Frogs** | | | | | | | | |
| Family Bufonidae - Toads | | | | | | | | |
| Eastern American Toad | *Bufo a. americanus* | GS | Y | | X | X | | Various |
| Fowler's Toad | *Bufo woodhousei fowleri* | GS | Y | | X | X | | Various |
| **Order Anura - Toads and Frogs** | | | | | | | | |
| Family Hylidae - Treefrogs | | | | | | | | |
| Northern Spring Peeper | *Hyla crucifer crucifer* | GS | Y | | | X | | Swamp |
| Family Ranidae - True Frogs | | | | | | | | |
| Bullfrog | *Rana catesbeiana* | GS | | | X | X | | Shallows |
| Green Frog | *Rana clamitans melanota* | GS | | | X | X | | Shallows |
| **Order Insectivora - Insect-eaters** | | | | | | | | |
| Family Soricidae - Shrews | | | | | | | | |
| Shorttail Shrew | *Blarina brevicada* | Un | Y | | X | X | | Forest, Waste Ground |
| **Order Rodentia - Gnawing Mammals** | | | | | | | | |
| Family Sciuridae - Squirrels | | | | | | | | |
| **Eastern Chipmunk** | *Tamias striatus* | Un | Y | | X | X | | Forest |
| **Gray Squirrel** | *Sciurus carolinensis* | GS | Y | | X | X | | Forest |

WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE LIGHTHOUSE LANDING REDEVELOPMENT PROJECT SITE, ADJACENT PARKLANDS, AND HUDSON RIVER
VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

| Order/Family/Common Name [1] | Scientific Name | State Rank[2] | Breeding[3] | Seasonality | GM site | Adjacent Parkland | Hudson River | Habitat Type |
|---|---|---|---|---|---|---|---|---|
| Family Cricetidae - Mice, Rats, and Voles | | | | | | | | |
| **Muskrat** | *Ondatra zibethicus* | GS | Y | | | X | X | Shallows |
| White-footed Mouse | *Peromyscus leucopus* | Un | Y | | X | X | | Forest |
| Family Muridae - Old World Rats and Mice | | | | | | | | |
| Norway Rat | *Rattus norvegicus* | Un | Y | | X | X | X | Various |
| House Mouse | *Mus musculus* | Un | Y | | X | X | | Various |
| Family Cervidae - Deer | | | | | | | | |
| **Whitetail Deer** | *Odocoileus virginianus* | GS | Y | | X | X | | Forest |

[1] Compiled from observations by EcolSciences, Inc. during the period October 2003 to December 2003 and the following sources:
* - NYS Breeding Bird Atlas 1980-1985 (Block 5954A)
# - Cornell Great Backyard Bird Count Results 1998-2003
+ - National Audubon Society Christmas Bird Count for Bronx-Westchester Region 2002

[2] Per New York State DEC, Division of Fish, Wildlife, and Marine Resources
Key:
E - Endangered
T - Threatened
SC - Special Concern Species
GS, GN - Game Species (GS Season Set) (GN No Season)
PB - Protected Birds
Un - Unprotected
SR - Special Regulations

[3] Based on an evaluation of potentially suitable habitat by EcolSciences, Inc. and the above-listed sources

**Bold** - Indicates EcolSciences observed it during its site inspections on October 28, 2003 and December 9, 2003

# ATTACHMENT D

Qualifications of Preparers

**EcolSciences, Inc.**
Environmental Management & Regulatory Compliance

# ECOLSCIENCES, INC.
## CORPORATE HISTORY

EcolSciences, Inc., was founded in 1973 in response to the growing need for responsible environmental planning, as mandated by NEPA, The National Environmental Policy Act. EcolSciences specializes in performing environmental investigations relating to permit acquisition and regulatory compliance, demonstration of "due diligence", waste management, impact analysis, mitigation and remediation. EcolSciences' strength is a proficiency in current environmental and waste management laws, regulations, and policies, coupled with a practical problem-solving approach to analyzing the environmental consequences of projects.

During more than twenty years, EcolSciences has successfully completed more than 3,000 studies for private, quasi-public and public clients. EcolSciences has represented many of the country's leading industries, corporations, developers, and financial institutions including AT&T, American Cyanamid Company, Merck, Johnson & Johnson, Hartz Mountain Industries, Trammell Crow Company, Principal Mutual Life Insurance Company, Midlantic National Bank, and First Fidelity Bank. Among the many utilities that EcolSciences has served are Jersey Central Power & Light, New Jersey Natural Gas Company, Elizabethtown Gas Company, Essex and Hudson County Improvement Authorities, Ocean County Utilities Authority, and numerous municipal utilities authorities. Representative government agency clients include the U.S. Environmental Protection Agency, New York City Economic Development Corporation and New York City Department of Sanitation.

EcolSciences' interdisciplinary staff of environmental engineers, geologists, biologists and scientists has extensive experience in a diversity of studies related to biological assessment and toxic and hazardous materials management. EcolSciences has performed environmental assessments and has acquired appropriate permits and approvals under a wide variety of Federal, state, regional, and local jurisdictions. These permits include: Section 404 and Section 10 authorizations, CAFRA and Waterfront Development permits, Pinelands Commission certifications, New Jersey Freshwater Wetlands Act permits (both general and individual permits), Hackensack Meadowlands Development Commission (HMDC) approvals, and D&R Canal Commission approvals. EcolSciences' senior staff are experienced in the delivery of expert testimony; senior staff of the firm have testified in public hearings, Administrative Law proceedings, and county, regional and municipal planning boards.

Since the promulgation of the New Jersey Environmental Cleanup Responsibility Act (ECRA) and it successor, the Industrial Site Recovery Act (ISRA), EcolSciences has been involved in the implementation of the entire ECRA/ISRA program for its industrial clients. More recently, as the demonstration of "due diligence" has become a lending industry standard, EcolSciences has completed numerous Phase I environmental audits and follow-up Phase II studies to clarify the level of environmental risk and liability associated with past and current practices at a particular site or facility. These audits typically include such activities as hazardous materials inventories, building and site inspections, subsurface soil investigations, groundwater monitoring, tank testing, asbestos bulk sampling, development of remediation plans and supervision of cleanup activities. The firm and technical staff members are also certified by the NJDEP for the performance of underground storage tank installation, closure, and subsurface evaluation. All work is conducted under the supervision of a licensed professional engineer.

The biological staff of EcolSciences has conducted over 2,000 wetland delineations and environmental assessments throughout the eastern and central portions of the United States. Our staff is skilled in all technical aspects of wetland identification and delineation methodologies established by the COE, USFWS, EPA and SCS; the assessment of wetland functions and values using techniques such as HEP and WET; the assessment of development-related wetland impacts; the acquisition of wetland permits; and the development and implementation of mitigation plans. Key members of our staff are certified as Professional Wetland Scientists and provisionally certified by the COE. Additionally, EcolSciences' biologists routinely performs specialized studies related to threatened and endangered species, wildlife habitat surveys and the assessment of development-related impacts. EcolSciences' staff is skilled in the field methodologies and reporting requirements of the Federal and state agencies and has substantial experience in the field identification of protected plants and animals and their preferred habitat.

EcolSciences has and continues to play an instrumental role in the development of federal environmental policies pertaining to wetlands and hazardous waste sites through a number of manuals that have been prepared under government contract for the USEPA. Recent examples include the Manual for Achieving NEPA Functional Equivalency in CERCLA Remedial Actions, Creation of Wetland Banks for Mitigation of Impacts at Superfund Sites, Technical Procedures Manual for the Advance Identification of Wetlands, Policy Document on Wetlands Mitigation at Superfund sites, Wetland Regulations Guidebook for New York State, and Principles of Environmental Assessment: An International Training Manual.

EcolSciences is a multi-disciplinary firm that has the experience and capabilities to provide a full range of environmental services. Studies are conducted in a manner that emphasizes the balance of environmental, engineering and cost factors. This approach provides the information necessary for sound and practical project decisions.

## MICHAEL S. FRIEDMAN

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**EDUCATION:**

*M.S., 1973 - Marine Biology*
*Long Island University*
*B.S., 1970 - Biology*
*Rennselaer Polytechnic Institute*

**AREAS OF EXPERTISE:**

*Contract Administration*
*Project Management*
*Regulatory Compliance*
*Public Participation*
*Wetlands Biology*

**PROFESSIONAL AFFILIATIONS:**

*Water Pollution Control Federation*
*Society of Wetland Scientists*

**EXPERIENCE:**

Mr. Friedman is the President of EcolSciences, Inc. During the past twenty-nine years, Mr. Friedman has been a part of EcolSciences' Corporate management staff with primary responsibilities ranging from project manager, business development manager, and general manager to his present responsibilities. With degrees in Biology and Marine Biology, Mr. Friedman has had considerable experience with a cross-section of environmental issues. Coupled with this background, he has also worked on environmental protection/mitigation aspects of several of the largest construction projects funded by the U.S. Environmental Protection Agency (EPA) during the past twenty years.

Mr. Friedman has managed numerous NEPA-related studies including wastewater management EIS's, EID's and facilities plans, and has been the Principal-in-Charge of numerous EIS's and special NEPA studies prepared for EPA Regions II, III and V. In this capacity, he recently participated in the preparation of an International Training Course in Environmental Assessment which was delivered in Poland by the U.S. EPA. He has also managed the preparation of numerous due diligence studies (Phase I Audits), Brownfields environmental investigations, environmental assessments, wetland investigations and special environmental studies for federal and state agencies and many private clients.

Mr. Friedman has provided expert testimony for a cross-section of projects and has appeared as an expert in New Jersey Superior Court and before numerous planning boards and federal/state boards such as the Hackensack Meadowlands Development Commission. Mr. Friedman routinely provides expert testimony to the legal community on wetland and regulatory issues. Additionally, Mr. Friedman has been a lecturer on New Jersey's wetlands regulations at the Government Institutes, 1993, 1994 and 1995 Fundamentals of New Jersey Environmental Law Compliance Course as well as on several panels including New Jersey's Brownfield's regulations. Several examples of relevant project experience include Mr. Friedman's management of the following:

*Michael S. Friedman*

- Principal-in-Charge for the preparation of a preliminary assessment, site investigation report, remedial action workplan, and remedial investigation report for a major New Jersey brownfield site along the Hudson River waterway.

- Preparation of biological chapters (small mammals, benthos, fish) of an EPA-authorized site investigation at Tinicum National Environmental Center, Philadelphia, PA.

- Detailed plans and specifications for the remediation and restoration of wetland and shoreline habitats on Fresh Kills Sanitary Landfill, Staten Island, NY.

- Preparation of the 404(b) Evaluation Manual for the EPA. This document presented case studies for implementation of 404 COE permits for major construction projects.

- Assistance in the leadership of a two-day seminar on Achieving NEPA Functional Equivalency in CERCLA Remedial Actions under the auspices of EPA Region III.

- Environmental planning for landfill siting studies of Passaic County, New Jersey. Additionally, participated in the analysis of landfill siting in Sussex, Hunterdon and Morris Counties, New Jersey.

- Federal (EPA) Environmental Impact Statement (EIS) for the Manasquan River EIS including major public participation program and CAFRA permit requirements.

- Principal on several hundred wetland investigations within New Jersey and provider of regulatory expertise on the New Jersey Freshwater Wetland Protection Act and the Corps of Engineers' 404 Program.

- Acted as senior wetland consultant for the siting of Bergen County's and Hudson County's proposed resource recovery facility in the Hackensack Meadowlands. Provided review of comprehensive wetland delineation, development of mitigation plan(s), preparation of 404 permit and expert testimony to the Hackensack Meadowlands Development Commission.

- Conducted numerous environmental studies throughout the State of New Jersey and interacted with Pinelands Commission, CAFRA, NJDEP Water Division, EPA Regions II and III, and many local and municipal entities. Also participated in major federal (EIS) projects throughout the United States, including Massachusetts, New York, Pennsylvania, Maryland, Delaware, Michigan, Wisconsin and Louisiana.

*Michael S. Friedman*

Mr. Friedman has had extensive experience administering and managing NEPA support contracts for EPA regional offices. Starting in 1974, Mr. Friedman managed U.S.EPA's first national environmental task order contract with Region III. Since that time, Mr. Friedman has managed EIS projects in EPA Regions I, II, III, V and VI. Project assignments have included conventional EISs, piggyback EISs, 404 program handbooks, and special studies on secondary impacts, wetlands and energy conservation. Mr. Friedman, as a part of EcolSciences' NEPA-support contract with EPA Regions II and III has served as a project administrator on several studies dealing with Advanced Identification Technical Procedures Handbook and Creation of Wetland Mitigation Banks for Superfund sites.

Before joining EcolSciences, Mr. Friedman was assistant director of environmental assessments with WAPORA, Inc., a Washington, DC-based consulting firm. He was involved with environmental studies and was project manager for the preparation of environmental impact statements and assessments for water and wastewater projects. Of particular interest was an EIS for an Emergency Water Pumping Station on the Potomac Estuary prepared for the Corps of Engineers of which Mr. Friedman was project manager. In graduate school, Mr. Friedman conducted research on the impacts of treated sewage effluent on primary productivity after its discharge into the coastal waters in Long Island Sound.

## MICHAEL KOVACS

**EDUCATION:** *B.S., 1979 - Natural Resource Management*
*Rutgers University, New Jersey*

**AREAS OF EXPERTISE:**
*Aquatic, Wetlands, and Terrestrial Ecology*
*Wetlands Construction and Resoration*
*Environmental Impact Assessment and Mitigation Planning*
*Project Management*

**CERTIFICATIONS:**
*Professional Wetland Scientist (SWS)*
*Qualified Bog Turtle Surveyor (USFWS)*
*Wetland Construction and Restoration (WTI)*
*Qualified Ornithologist (NJDEP)*
*Habitat Evaluation Procedure (USFWS)*
*Health and Safety for Hazardous Waste Site Investigation Personnel (NJ/NY HMWTC)*

**PROFESSIONAL ASSOCIATIONS:**
*Society of Wetland Scientists*
*American Fisheries Society*
*Association of Field Ornithologists*
*New Jersey Audubon Society*

**EXPERIENCE:**

Mr. Kovacs is a **Vice President** with EcolSciences, Inc. with over 23 years experience in the environmental consulting field. His areas of expertise lie in the inventory and evaluation of terrestrial, aquatic, and wetland systems, and with the assessment and mitigation of impacts associated with major development. Mr. Kovacs has directed and has participated in a wide variety of comprehensive ecological field studies providing a high degree of competence in sampling protocols and procedures as well as in the identification and ecology of aquatic/terrestrial vertebrate and invertebrate animal species, particularly threatened and endangered species. Elements of Mr. Kovacs' wetlands-related projects include: the delineation of wetlands through an analysis of soils, hydrology, vegetation and aerial photography; the characterization of wetland type; the evaluation of associated functions and values; assessment of development-related impacts; impact mitigation; wetlands construction and restoration; and permit acquisition. A summary of Mr. Kovacs' relevant project experience includes:

**Threatened and Endangered Species Studies**

- Numerous field surveys of Federally- and State-listed threatened and endangered species in NJ, NY and PA. Surveyed species included, but were not limited to: Swamp Pink, Knieskern's Beaked-rush, Blue-spotted Salamander, Long-tailed Salamander, Pine Barrens Treefrog, Cope's Gray Treefrog, Wood Turtle, Bog Turtle, Timber Rattlesnake, Northern Pine Snake, Corn Snake, Cooper's Hawk, Red-shouldered Hawk, Bald Eagle, Peregrine Falcon, Barred Owl, Long-eared Owl, Red-headed Woodpecker, Bobolink, Grasshopper Sparrow, Vesper Sparrow, Savannah Sparrow, and American Bittern.

- Acquisition of T&E species data for SEQRA studies being performed in association with the proposed City of Niagara Falls Redevelopment Project.

*Michael Kovacs*

- An inventory of various T&E species and other wildlife within a 2000± acre site in Cumberland County, New Jersey for a sand mining concern.

- A survey of Timber Rattlesnake within the 2,300± acre Tuxedo Reserve site in Orange County, New York.

- An evaluation of eight NJ Superfund sites for the potential occurrence of the Federally-threatened plant species, Swamp Pink and Knieskern's Beaked-rush, for the USEPA, Region II.

**Avifaunal and Other Wildlife Studies**

- Intensive avifaunal field and literature studies associated with the preparation and implementation of a Bird Deterrent Plan required by the Federal Aviation Administration for a proposed ash-bypass landfill in Onondaga County, NY.

- Wintering/migratory bird field studies for the proposed redevelopment of Flushing Airport by the NYC Economic Development Corp. (formerly Ports and Trade).

- Seasonal wildlife field surveys associated with a SEQRA EIS for the Bloomingdale Park Eastern Recreational Facilities Program proposed by the NYC Department of Design and Construction.

**Landfill Studies**

- Aquatic/terrestrial field and literature studies associated with the preparation of a wetlands/shoreline remediation plan for the Fresh Kills Sanitary Landfill in NY.

- Biological studies of the impacts of Folcroft Landfill upon ecological communities of Tinicum National Environmental Center, Philadelphia, PA for the USEPA, Region III.

- Wetland and wildlife studies for the construction of a resource recovery facility and ash landfill for the Hudson County Improvement Authority.

**Mining Studies**

- Evaluation of the impacts of peat extraction on the functions and values of peatlands in the Pocono Mountain area of PA for the USEPA, Region III.

- Baseline environmental studies conducted for a proposed copper/zinc mine and associated NPDES permit in northern ME for the Superior Mining Company.

- Baseline aquatic surveys of two estuarine marsh systems proposed for phosphate mining for North Carolina Phosphate Company.

- Wetland impact assessment through photo-interpretation for a proposed phosphate mining project in FL for Farmland Industries, Inc.

**Transmission Routing Studies**

- Environmental inventory, impact assessment and mitigative planning for a power transmission line through CAFRA and Pinelands areas and for a transmission line in Newton, NJ for Jersey Central Power and Light Company.

*Michael Kovacs*

- Environmental inventory, impact assessment and wetland permitting for a natural gas transmission line through Gloucester County, NJ for South Jersey Gas Company.

**Oil Refinery and Port Studies**

- Baseline ecological studies for a proposed oil refinery and port in North Carolina for the Brunswick Energy Company.

**Special USEPA Studies**

- Field studies and report preparation for the Advance Identification of Wetlands along Moshannon Creek near Philipsburg, PA for the USEPA, Region III.

- Field studies and report preparation for the Advance Identification of Wetlands along Bog Run near Quakertown, PA for the USEPA, Region III.

- A Status and Trends Analysis of Wetlands of Orange and Rockland Counties, NY through photointerpretation and ground-truthing for USEPA, Region II.

- An evaluation of wetlands creation for stormwater treatment within a proposed regional sedimentation pond in the Lickinghole Creek Watershed in VA for USEPA, Region III.

- An evaluation of the U.S. Army Corps' Nationwide Permitting process through study of headwater stream systems in northern NJ conducted for the USEPA, Region II.

- Preparation of a draft Advance Identification of Wetlands Technical Procedures Handbook for the USEPA, Region III.

**Wetlands Mitigation Studies**

- Preparation of a draft manual for USEPA, Region III entitled Creation of Wetland Banks for Mitigation of Impacts from Superfund Sites in New Castle County, DE.

- Preparation of Phase I and Phase II reports for USEPA Headquarters concerning the appropriateness of wetlands mitigation planning at Superfund sites.

- Preparation of wetland mitigation plans and specifications in conjunction with permits issued by the U.S. Army Corps of Engineers and various State agencies.

- Preparation of mitigation plans and specifications for the remediation of wetlands and shoreline areas of the Fresh Kills Sanitary Landfill, Staten Island, NY.

**Wastewater Facility Studies**

- Preparation of CAFRA EIS's and Freshwater Wetlands Permit applications for Ocean County Utilities Authority's Crestwood Interceptor, Ortley Beach-Alternate Bay Crossing, Toms River Crossing Relief Interceptor and Mill Creek Relief Interceptor projects.

- An evaluation of the State of Ohio's environmental plans and specification requirements for 201 facilities construction for the USEPA, Region V.

*Michael Kovacs*

- Environmental compliance inspection of 201 facilities construction for the Manasquan River Regional Sewerage Authority and Ocean County Utilities Authority.

- Wastewater facilities planning for Atlantic Highlands/Highlands Sewerage Authority, Bayshore Regional Sewerage Authority, Long Branch Sewerage Authority, Tri-Borough Sewerage Authority, and Tri-Municipal Sewerage Commission.

**Commercial/Industrial/Residential Studies**

- Wetlands delineation, impact assessment, permit acquisition and mitigation planning for more than 1,500 development projects in NY, NJ, PA, CT, ME and NH.

- Preparation of NJ CAFRA, Waterfront Development, and Stream Encroachment EIS's.

- Preparation of EIS's for major developments for use in submissions to municipalities and provided expert testimony.

## KARIN TEKEL

---

**EDUCATION:**

*B.S. Environmental Science, May 1997*
*B.S. Natural Resource Management, May 1997*
*Rutgers University, New Brunswick, New Jersey.*
*M.S. Hydrologic Sciences*
*University of California, Davis, California*

**AREAS OF EXPERTISE:**

*Environmental Impact Assessment*
*Regulatory Analysis and Compliance*
*Wetland Delineation and Permitting*
*Wetland Ecology*
*Surface Water Resources*

**PROFESSIONAL ASSOCIATIONS**

*Society of Wetland Scientists*

**EXPERIENCE:**

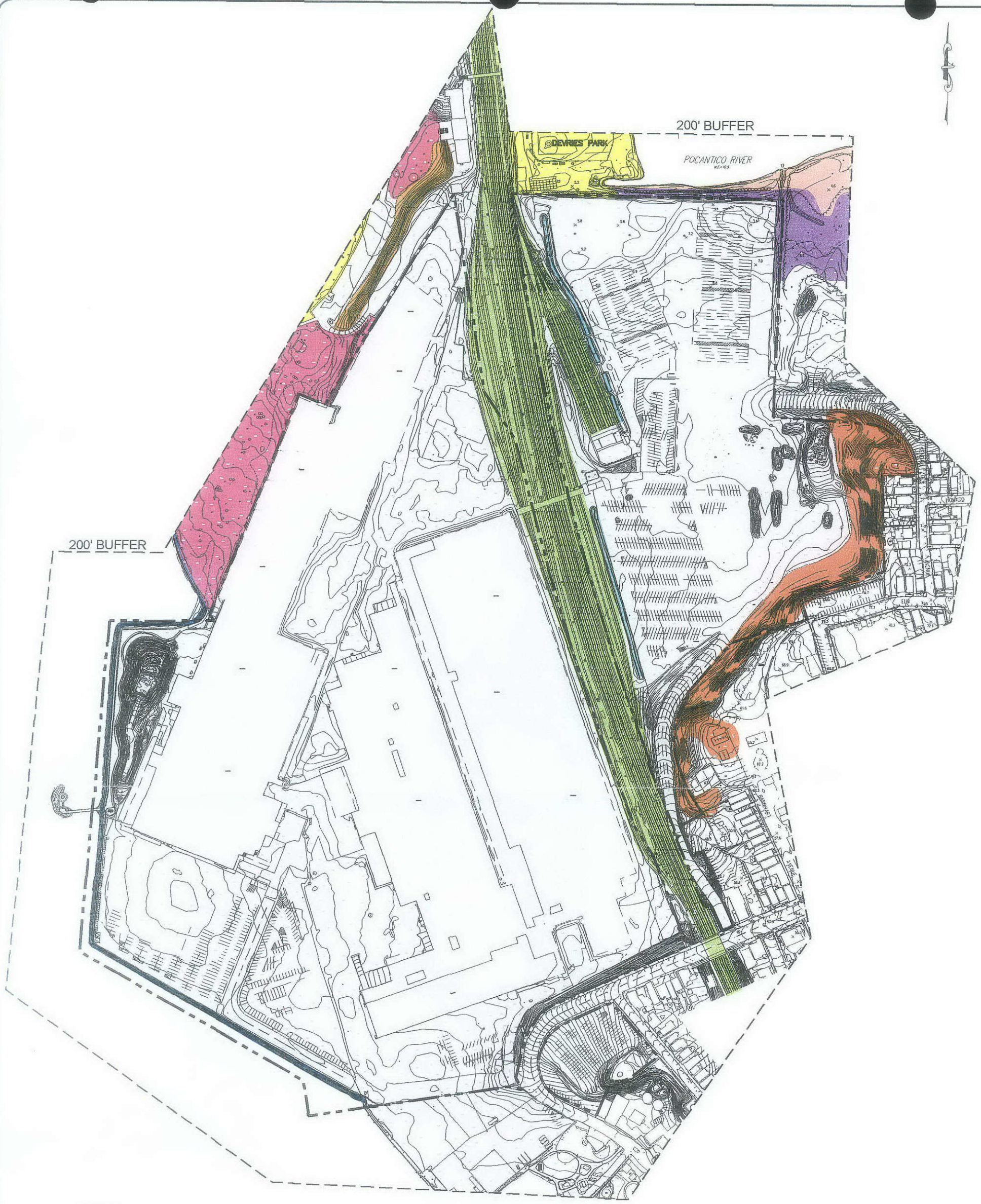
Ms. Tekel is an environmental scientist with EcolSciences, Inc. Her area of expertise lies in the preparation of environmental impact statements and natural resource inventories. In addition, Ms. Tekel has experience in the preparation of Letters of Interpretation, Statewide General Permit and Transition Area Waiver applications in accordance with the New Jersey Freshwater Wetlands Protection Act. Prior to joining EcolSciences, Inc., Ms. Tekel was employed as a Research Assistant at the Water Resources Center of the University of California. A summary of Ms. Tekel relevant experience includes:

- Wetland delineation through the analysis and documentation of soils, hydrology, and vegetation.
- Collection of field observational data on individual wetland plant species pertaining to nutrient resorption.
- Conduction of vegetation surveys for percent cover, biomass estimations, and community composition for inland Californian freshwater marshes.
- Performed streamflow measurements, groundwater, and infiltration analyses.
- Conducted mesocosm experiments to assess the response of selected wetland plant species (native and introduced) to nutrient enrichment and two different water levels.

# PLATE 1

Vegetative Communities Mapping

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LEGEND

- MOWED LAWN
- MOWED LAWN WITH TREES
- BRACKISH TIDAL MARSH
- RED MAPLE–HARDWOOD SWAMP
- ESTUASRINE RIPRAP/ARTIFICIAL SHORE
- RAILROAD
- OAK–TULIP TREE FOREST
- DITCH/ARTIFICIAL INTERMITTENT STREAM
- URBAN VACANT LOT

300 0 300 600

1"=300'

TITLE:

# VEGETATIVE COMMUNITIES MAPPING

LIGHTHOUSE LANDING REDEVELOPMENT PROJECT

VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK

EcolSciences, Inc.
Environmental Management & Regulatory Compliance

| DRAWN BY: | DESIGNED BY: | APPROVED BY: | PLATE NUMBER: |
|---|---|---|---|
| AG | KT | MK | 1 |
| DATE: | SCALE: | PROJECT NO.: | |
| 5/4/04 | AS SHOWN | HW01-159 | |