# AMERADA HESS CORPORATION

732-750-6000
732-750-6105 (FAX)

1 HESS PLAZA
WOODBRIDGE, NJ 07095-0961

December 30, 2005

Mr. Peter Miller
Bureau of Spill Prevention and Response
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

**Via:** **CERTIFIED MAIL # 7002 2410 0003 9874 1077**
**RETURN RECEIPT REQUESTED**

**Re:** **2005 Fourth Quarter Hydrogeologic Status Report**
**Closed Hess Station # 32458**
**1314 Fairport Road**
**Fairport, New York**
**NYSDEC Spill #97-01135**

Dear Mr. Miller:

Amerada Hess Corporation (Hess) is pleased to submit this Hydrogeologic Status Report for the above-referenced site. The report has been prepared by Shaw Environmental, Inc. and Geologic Services Corporation, and contains data obtained during the fourth quarter of 2005. The next sampling event is scheduled for January 2006.

Attached, please find a diskette, which contains the electronic version of this report for the NYSDEC eDOCs initiative. If you have any questions, please contact Meagan Gabe of Quantum Management Group, Inc. at (732) 750-6482 or the undersigned at (732) 750-6616.

Sincerely,

John Schenkewitz
Remediation Coordinator

Enclosure

cc: Shaw Environmental, Inc., Rensselaer (w/o Enclosure)
Brian Kelly – GSC (w/o Enclosure)
Meagan Gabe – Quantum (w/o Enclosure)

# AMERADA HESS CORPORATION
# SITE STATUS REPORT

| | |
|---|---|
| **Site Address:** Closed Hess Station #32458<br>1314 Fairport Road<br>Fairport, New York | **Regulatory Agency:** NYSDEC Region 8<br>**Regulatory Contact:** Peter Miller<br>**Case No:** 97-01135<br>**Consultant:** GSC\|Kleinfelder/Shaw Environmental |
| **Hess Contact:** John Schenkewitz | **Project Manager / Environmental Scientist:**<br>Mark Schaaf/Alex Wirth, Pat Storz |

**Report Date:** December 2005.

**Current Site Status:** Closed Hess Station.

**Monitoring Period:** August through October 2005.

**Work Performed:** Gauged and groundwater sampled 10 monitoring wells on October 19, 2005.

Operation and maintenance (O&M) events were conducted on August 4, 11, 26, September 5, 19, and October 5, 12, 18, 2005.

**Groundwater Monitoring:**

| | |
|---|---|
| Number of Wells: | 15 |
| Containing LPH: | 1 (MW-7, 0.05 feet) |
| Gauging Frequency: | Quarterly |
| Sampling Frequency: | Quarterly |
| Groundwater Depth: | 7.53 feet to 12.73 feet below grade |
| Groundwater Flow: | Southwest |
| Groundwater Gradient: | 0.0324 feet per foot |
| Maximum BTEX Concentration: | 17,396.9 (MW-1) |
| Maximum MTBE Concentration: | 89.9 (MW-10) |
| Maximum Naphthalene Concentration: | 1,550 (MW-1) |

**Potential Sensitive Receptors:** The Monroe County Water Authority and the Monroe County Department of Health indicate that there are no potable water supply wells in the vicinity of the site. The Erie Canal is located approximately 1,500 feet east of the site.

**Remedial Activities:** A Groundwater Extraction and Treatment System (PTS) has been operating in conjunction with a Soil Vapor Extraction (SVE) System since May 3, 2004. Since system start-up, the PTS has treated approximately 342,000 gallons of groundwater. Moreover, since start-up, the SVE system has removed approximately 816 pounds of total petroleum hydrocarbons (TPH).

**Current Plans/Proposals** Continual optimization of the remediation system is planned during bi-monthly operation and maintenance events. The next groundwater sampling event is scheduled for January 2006.

**List of Attachments:**

Tables:
- Table 1 – Historical Summary of Groundwater Data
- Table 2 – Groundwater Extraction and Treatment System Analytical Data
- Table 3 – Historical Soil Vapor Extraction System Analytical Data Summary
- Table 4 – Monitoring Well Sampling Schedule

Figures:
- Figure 1 – Area Map
- Figure 2 – Hydrocarbon Distribution/Groundwater Contour Map
- Figure 3 – Groundwater Extraction and Treatment System Flow Rate
- Figure 4 – Groundwater Extraction and Treatment System Influent Concentration
- Figure 5 – Groundwater Extraction and Treatment System Mass Removal
- Figure 6 – Soil Vapor Extraction System Flow Rate
- Figure 7 – Soil Vapor Extraction System Influent Vapor Concentration
- Figure 8 – Soil Vapor Extraction System Mass Removal

Appendices:
- Appendix A – Laboratory Sample Analytical Report and Chain of Custody

# TABLES

**Table 1**
**Historical Summary of Groundwater Data**
**Closed Hess Station #32458**
**Fairport, New York**

| Well ID | Sample Date | Top of Casing[a] (feet) | Depth to Water[b] (fbg) | Depth to Product/ Thickness (feet) | Water Table Elevation (feet) | Benzene | Toluene | Ethylbenzene | Total Xylenes[c] | Total BTEX[d] | MTBE[e] | Naphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 11/18/98 | NG | NG | NP | NA | -- | -- | -- | -- | 32,722 | <100 | 5.1 |
| | 11/17/99 | 93.96 | 11.50 | NP | 82.46 | -- | -- | -- | -- | 30,620 | <200 | ND |
| | 02/22/00 | 93.96 | 10.35 | NP | 83.61 | -- | -- | -- | -- | 25,486.8 | ND | 467 |
| | 05/23/00 | 93.96 | 7.26 | NP | 86.70 | -- | -- | -- | -- | 22,340 | 150 | 660 |
| | 08/29/00 | 93.96 | 10.31 | NP | 83.65 | -- | -- | -- | -- | 20,780 | ND | 710 |
| | 11/20/00 | 93.96 | 10.68 | NP | 83.28 | -- | -- | -- | -- | 21,770 | 130 | 610 |
| | 02/19/01 | 93.96 | 8.10 | NP | 85.86 | -- | -- | -- | -- | 24,760 | 180 | 670 |
| | 05/21/01 | 93.96 | 8.70 | NP | 85.26 | -- | -- | -- | -- | 19,350 | 90 | 610 |
| | 08/15/01 | 93.96 | 12.57 | NP | 81.39 | -- | -- | -- | -- | 20,910 | 500 | 400 |
| | 11/14/01 | 93.96 | 11.91 | NP | 82.05 | NS | NS | NS | NS | NS | NS | NS |
| | 02/07/02 | 93.96 | 8.88 | NP | 85.08 | 4,300 | 540 | 5,600 | 19,600 | 30,040 | <50 | 1,200 |
| | 06/11/02 | 93.96 | 7.62 | NP | 86.34 | 3,700 | 310 | 3,700 | 11,700 | 19,410 | 170 | 860 |
| | 09/09/02 | 93.96 | 12.16 | NP | 81.80 | 5,700 | 360 | 4,000 | 11,200 | 21,260 | 200 | 730 |
| | 12/11/02 | 93.96 | 10.50 | NP | 83.46 | 4,600 | 350 | 5,100 | 15,600 | 25,650 | <200 | 2,500 |
| | 03/18/03 | 93.96 | 7.52 | NP | 86.44 | 1,500 | 300 | 3,900 | 11,400 | 17,100 | 160 | 900 |
| | 06/18/03 | 93.96 | 7.87 | NP | 86.09 | 4,200 | 140 | 2,600 | 6,700 | 13,640 | <100 | 460 |
| | 09/22/03^ | 98.39 | 11.19 | NP | 87.20 | 5,500 | 140 | 2,700 | 7,100 | 15,440 | 120 | 590 |
| | 12/01/03 | 98.39 | 7.65 | NP | 90.74 | 3,000 | 190 | 2,000 | 7,800 | 12,990 | <100 | 720 |
| | 03/30/04 | 98.39 | 6.07 | NP | 92.32 | 4,100 | 170 | 3,300 | 8,900 | 16,470 | 110 | 660 |
| | 07/13/04^ | 98.33 | 7.87 | NP | 90.46 | 4,800 | 120 | 2,000 | 5,340 | 12,260 | 160 | 310 |
| | 10/07/04 | 98.33 | 9.05 | NP | 89.28 | 3,500 | 75 | 1,700 | 4,120 | 9,395 | 110 | 320 |
| | 01/12/05 | 98.33 | 6.25 | NP | 92.08 | 120 | 2.6 | ND | 161 | 283.6 | 25 | 97 |
| | 04/19/05 | 98.33 | 6.48 | NP | 91.85 | 1,140 | 51.4 | 78.6 | 1,611 | 2,881.0 | 162 | 153 |
| | 07/14/05 | 98.33 | 10.17 | NP | 88.16 | 1,600 | 74.2 | 1,500 | 4,471 | 7,645.2 | 71.2 | 452 |
| | 10/19/05 | 98.33 | 12.73 | NP | 85.60 | 2,680 | 76.9 | 4,440 | 10,200 | 17,396.9 | 7.9 | 1,550 |
| MW-2 | 11/18/98 | NA | NG | NA | NA | -- | -- | -- | -- | 1,188 | ND | 88.6 |
| | 11/17/99 | NA | 10.60 | NP | NA | -- | -- | -- | -- | 1,738 | ND | 23.3 |
| | 02/22/00 | NA | 9.33 | NP | NA | -- | -- | -- | -- | 1,177 | ND | 58.4 |
| | 05/23/00 | NA | 7.69 | NP | NA | -- | -- | -- | -- | 4,870 | 410 | 330 |
| | 08/29/00 | NA | 8.35 | NP | NA | -- | -- | -- | -- | 521 | 10 | 39 |
| | 11/20/00 | NA | 9.55 | NP | NA | -- | -- | -- | -- | 558 | ND | ND |
| | Well destroyed 11/2000 | | | | | | | | | | | |
| MW-2R | 05/21/01 | 94.10 | 8.65 | NP | 85.45 | -- | -- | -- | -- | 64,500 | 4,100 | 810 |
| | 08/15/01 | 94.10 | 11.91 | NP | 82.19 | -- | -- | -- | -- | 320,500 | 5,200 | 4,500 |
| | 11/14/01 | 94.10 | 12.57 | 11.55/1.02 | 81.53* | NS | NS | NS | NS | NS | NS | NS |
| | 02/07/02 | 94.10 | 8.76 | 8.39/0.37 | 85.34* | NS | NS | NS | NS | NS | NS | NS |
| | 06/11/02 | 94.10 | 7.45 | 7.45/0.01 | 86.65* | 20,000 | 46,000 | 13,000 | 70,000 | 149,000 | 2,200 | 6,300 |
| | 09/09/02 | 94.10 | 12.95 | 11.92/1.03 | 81.15* | NS | NS | NS | NS | NS | NS | NS |
| | 12/11/02 | 94.10 | 10.39 | 10.10/0.29 | 83.91* | NS | NS | NS | NS | NS | NS | NS |
| | 03/18/03 | 94.10 | 8.08 | 7.14/0.94 | 86.68* | NS | NS | NS | NS | NS | NS | NS |
| | 06/18/03 | 94.10 | 10.01 | 7.22/2.79 | 86.04* | NS | NS | NS | NS | NS | NS | NS |
| | 09/22/03^ | 98.50 | 13.78 | 11.82/1.96 | 86.09* | NS | NS | NS | NS | NS | NS | NS |
| | 12/01/03 | 98.50 | 8.47 | 7.35/1.12 | 90.81* | NS | NS | NS | NS | NS | NS | NS |
| | 03/30/04 | 98.50 | 7.18 | 6.17/1.01 | 92.03* | NS | NS | NS | NS | NS | NS | NS |
| | 07/13/04^ | 98.66 | 9.31 | NP | 89.35 | 7,400 | 18,000 | 8,700 | 79,000 | 113,100 | 700 | 7,200 |
| | 10/07/04 | 98.66 | 9.08 | NP | 89.58 | 7,000 | 4,300 | 2,400 | 23,100 | 36,800 | <500 | 1,600 |
| | 01/12/05 | 98.66 | 7.11 | NP | 91.55 | 130 | <50 | <50 | 3,500 | 3,630 | <50 | 220 |
| | 04/19/05 | 98.66 | 6.19 | NP | 92.47 | 19 | 82.3 | <10 | 1,891 | 1,992.3 | 32.7 | 127 |
| | 07/14/05 | 98.66 | 7.79 | NP | 90.87 | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| | 10/19/05 | 98.66 | DRY | NP | NA | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| MW-3R | 05/23/00 | 93.84 | 6.66 | NP | 87.18 | -- | -- | -- | -- | 87,700 | 4700 | 570 |
| | 08/29/00 | 93.84 | 9.93 | NP | 83.91 | -- | -- | -- | -- | 62,300 | 3,300 | 1,800 |
| | 11/20/00 | 93.84 | 10.01 | NP | 83.83 | -- | -- | -- | -- | 28,400 | 2000 | 540 |
| | 02/19/01 | 93.84 | 7.34 | NP | 86.50 | -- | -- | -- | -- | 65,600 | 4100 | 660 |
| | 05/21/01 | 93.84 | 8.25 | NP | 85.59 | -- | -- | -- | -- | 59,100 | 3,600 | 760 |
| | 08/15/01 | 93.84 | 11.95 | NP | 81.89 | -- | -- | -- | -- | 54,400 | 4000 | 910 |
| | 11/14/01 | 93.84 | 11.36 | NP | 82.48 | -- | -- | -- | -- | 75,000 | 4,600 | 5,700 |
| | 02/07/02 | 93.84 | 7.63 | NP | 86.21 | 5,900 | 38,000 | 2,900 | 19,200 | 66,000 | 4,500 | 920 |
| | 06/11/02 | 93.84 | 6.85 | NP | 86.99 | 2,300 | 29,000 | 2,900 | 16,400 | 50,600 | 1,400 | 1,400 |
| | 09/09/02 | 93.84 | 11.94 | NP | 81.90 | 2,900 | 36,000 | 3,200 | 17,500 | 59,600 | 3,200 | 570 |
| | 12/11/02 | 93.84 | 9.49 | NP | 84.35 | 3,500 | 26,000 | 4,800 | 24,100 | 58,400 | 1,200 | 3,400 |
| | 03/18/03 | 93.84 | 5.82 | NP | 88.02 | 3,600 | 50,000 | 8,700 | 52,000 | 114,300 | 1,100 | 3,200 |
| | 06/18/03 | 93.84 | 7.47 | 7.37/0.10 | 86.44* | NS | NS | NS | NS | NS | NS | NS |
| | 09/22/03^ | 98.57 | 11.05 | NP | 87.52 | 3,300 | 15,000 | 3,000 | 16,500 | 37,800 | 1,600 | 650 |
| | 12/01/03 | 98.57 | 5.08 | NP | 93.49 | 1,500 | 8,600 | 2,100 | 10,300 | 22,500 | 420 | 550 |
| | 03/30/04 | 98.57 | 3.72 | NP | 94.85 | 560 | 8,400 | 1,500 | 12,800 | 23,260 | <100 | 1,000 |
| | 07/13/04^ | 97.43 | 8.12 | NP | 89.31 | 3,100 | 230 | 820 | 3,940 | 8,090 | 170 | 300 |
| | 10/07/04 | 97.43 | 6.27 | NP | 91.16 | 790 | 520 | 290 | 3,240 | 4,840 | 71 | 240 |
| | 01/12/05 | 97.43 | 5.11 | NP | 92.32 | 250 | <50 | <50 | 990 | 1,240 | <50 | 130 |
| | 04/19/05 | 97.43 | 4.71 | NP | 92.72 | 51.3 | 9.2 | ND | 71.1 | 131.6 | 51.6 | 13.3 |
| | 07/14/05 | 97.43 | 9.05 | NP | 88.38 | 109 | 475 | 761 | 1,740 | 3,085 | 195 | 150 |
| | 10/19/05 | 97.43 | DRY | NA | NA | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

**Table 1**
**Historical Summary of Groundwater Data**
**Closed Hess Station #32458**
**Fairport, New York**

| Well ID | Sample Date | Top of Casing[a] (feet) | Depth to Water[b] (fbg) | Depth to Product/ Thickness (feet) | Water Table Elevation (feet) | Benzene | Toluene | Ethylbenzene | Total Xylenes[c] | Total BTEX[d] | MTBE[e] | Naphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 11/18/98 | 92.86 | NG | NP | NA | ND | ND | ND | ND | ND | ND | ND |
| | 11/17/99 | 92.86 | 9.76 | NP | 83.10 | ND | ND | ND | ND | ND | ND | ND |
| | 02/22/00 | 92.86 | 7.00 | NP | 85.86 | – | – | – | – | 0.99 | ND | ND |
| | 05/23/00 | 92.86 | 5.63 | NP | 87.23 | ND | ND | ND | ND | ND | ND | ND |
| | 08/29/00 | 92.86 | 8.66 | NP | 84.20 | ND | ND | ND | ND | ND | ND | ND |
| | 11/20/00 | 92.86 | 9.10 | NP | 83.76 | ND | ND | ND | ND | ND | ND | ND |
| | 02/19/01 | 92.86 | 6.25 | NP | 86.61 | ND | ND | ND | ND | ND | ND | ND |
| | 05/21/01 | 92.86 | 7.20 | NP | 85.66 | ND | ND | ND | ND | ND | ND | ND |
| | 08/15/01 | 92.86 | 10.72 | NP | 82.14 | – | – | – | – | 7.5 | ND | 2.20 |
| | 11/14/01 | 92.86 | 10.38 | NP | 82.48 | – | – | – | – | 5.0 | ND | 20 |
| | 02/07/02 | 92.86 | 6.60 | NP | 86.26 | ND | ND | ND | ND | ND | ND | ND |
| | 06/11/02 | 92.86 | 6.01 | NP | 86.85 | ND | ND | ND | ND | ND | ND | ND |
| | 09/09/02 | 92.86 | 10.81 | NP | 82.05 | ND | ND | ND | ND | ND | ND | ND |
| | 12/11/02 | 92.86 | 8.89 | NP | 83.97 | ND | ND | ND | ND | ND | ND | ND |
| | 03/18/03 | 92.86 | 4.85 | NP | 88.01 | ND | ND | ND | ND | ND | ND | ND |
| | 06/18/03 | 92.86 | 6.35 | NP | 86.51 | ND | ND | ND | ND | ND | ND | ND |
| | 09/22/03^ | 97.64 | 9.69 | NP | 87.95 | ND | ND | ND | 1.2 | 1.2 | ND | ND |
| | 12/01/03 | 97.64 | 5.64 | NP | 92.00 | ND | ND | ND | ND | ND | ND | ND |
| | 03/30/04 | 97.64 | 4.50 | NP | 93.14 | ND | ND | ND | ND | ND | ND | ND |
| | 07/13/04^ | 97.63 | 7.90 | NP | 89.73 | ND | ND | ND | ND | ND | ND | ND |
| | 10/07/04 | 97.63 | 7.52 | NP | 90.11 | ND | 2.6 | ND | 7.8 | 10.4 | ND | 11 |
| | 01/12/05 | 97.63 | 5.01 | NP | 92.62 | ND | ND | ND | ND | ND | ND | ND |
| | 04/19/05 | 97.63 | 5.48 | NP | 92.15 | ND | ND | ND | ND | ND | ND | ND |
| | 07/14/05 | 97.63 | 9.16 | NP | 88.47 | ND | ND | ND | ND | ND | ND | ND |
| | 10/19/05 | 97.63 | 10.46 | NP | 87.17 | NS+ | NS+ | NS+ | NS+ | NS+ | NS+ | NS+ |
| MW-5 | 11/18/98 | 91.45 | NG | NA | NA | – | – | – | – | 1.5 | ND | ND |
| | 11/17/99 | 91.45 | 8.45 | NP | 83.00 | ND | ND | ND | ND | ND | ND | ND |
| | 02/22/00 | 91.45 | 6.87 | NP | 84.58 | ND | ND | ND | ND | ND | ND | ND |
| | 05/23/00 | 91.45 | 3.68 | NP | 87.77 | ND | ND | ND | ND | ND | ND | ND |
| | 08/29/00 | 91.45 | 7.52 | NP | 83.93 | ND | ND | ND | ND | ND | ND | ND |
| | 11/20/00 | 91.45 | 7.49 | NP | 83.96 | ND | ND | ND | ND | ND | ND | ND |
| | 02/19/01 | 91.45 | 4.36 | NP | 87.09 | – | – | – | – | 1.6 | 1.6 | ND |
| | 05/21/01 | 91.45 | 6.00 | NP | 85.45 | ND | ND | ND | ND | ND | ND | ND |
| | 08/15/01 | 91.45 | 10.15 | NP | 81.30 | – | – | – | – | 29.8 | ND | 1.2 |
| | 11/14/01 | 91.45 | 8.99 | NP | 82.46 | ND | ND | ND | ND | ND | ND | ND |
| | 02/07/02 | 91.45 | 4.02 | NP | 87.43 | ND | 1.1 | ND | ND | 1.1 | ND | ND |
| | 06/11/02 | 91.45 | 4.61 | NP | 86.84 | ND | ND | ND | ND | ND | ND | ND |
| | 09/09/02 | 91.45 | 10.18 | NP | 81.27 | ND | ND | ND | ND | ND | ND | ND |
| | 12/11/02 | 91.45 | 7.39 | NP | 84.06 | ND | ND | ND | ND | ND | ND | ND |
| | 03/18/03 | 91.45 | 3.92 | NP | 87.53 | ND | ND | ND | ND | ND | ND | ND |
| | 06/18/03 | 91.45 | 4.82 | NP | 86.63 | ND | ND | ND | ND | ND | ND | ND |
| | 09/22/03^ | 98.55 | 8.70 | NP | 89.85 | ND | ND | ND | 1.2 | 1.2 | ND | 1.1 |
| | 12/01/03 | 98.55 | 2.82 | NP | 95.73 | ND | ND | ND | ND | ND | ND | ND |
| | 03/30/04 | 98.55 | 2.51 | NP | 96.04 | ND | ND | ND | ND | ND | ND | ND |
| | 07/13/04^ | 98.54 | 5.89 | NP | 92.65 | ND | ND | ND | ND | ND | ND | ND |
| | 10/07/04 | 98.54 | 6.33 | NP | 92.21 | ND | ND | ND | ND | ND | ND | ND |
| | 01/12/05 | 98.54 | 3.61 | NP | 94.93 | ND | ND | ND | ND | ND | ND | ND |
| | 04/19/05 | 98.54 | 3.80 | NP | 94.74 | ND | ND | ND | ND | ND | ND | 33.1 |
| | 07/14/05 | 98.54 | 7.98 | NP | 90.56 | 1.3 | 1.50 | ND | 1.14 | 4.0 | 1.24 | ND |
| | 10/19/05 | 98.54 | 8.50 | NP | 90.04 | NS+ | NS+ | NS+ | NS+ | NS+ | NS+ | NS+ |
| MW-6 | 05/23/00 | 93.51 | 6.64 | NP | 86.87 | – | – | – | – | 14,040 | 230 | 920 |
| | 08/29/00 | 93.51 | 10.17 | NP | 83.34 | – | – | – | – | 16,110 | 210 | 1,000 |
| | 11/20/00 | 93.51 | 10.58 | NP | 82.93 | – | – | – | – | 12,880 | 130 | 1,100 |
| | 02/19/01 | 93.51 | 7.56 | NP | 85.95 | – | – | – | – | 11,983 | 150 | 870 |
| | 05/21/01 | 93.51 | 8.50 | NP | 85.01 | – | – | – | – | 4,326 | 44 | 370 |
| | 08/15/01 | 93.51 | 12.12 | NP | 81.39 | – | – | – | – | 10,270 | 110 | 800 |
| | 11/14/01 | 93.51 | 12.02 | NP | 81.49 | – | – | – | – | 15,691 | 44 | 1,600 |
| | 02/07/02 | 93.51 | 8.27 | NP | 85.24 | 89 | 120 | 3,900 | 17,300 | 21,409 | <50 | 2,000 |
| | 06/11/02 | 93.51 | 6.96 | NP | 86.55 | <50 | 190 | 740 | 3,300 | 4,230 | 58 | 870 |
| | 09/09/02 | 93.51 | 12.20 | NP | 81.31 | <35 | <50 | 920 | 7,400 | 8,320 | 55 | 780 |
| | 12/11/02 | 93.51 | 10.48 | NP | 83.03 | <70 | <100 | 850 | 6,800 | 7,650 | <100 | 570 |
| | 03/18/03 | 93.51 | 6.75 | NP | 86.76 | 81 | 40 | 1,400 | 4,900 | 6,421 | 56 | 900 |
| | 06/18/03 | 93.51 | 7.36 | NP | 86.15 | <35 | <50 | 260 | 1,000 | 1,260 | <50 | 500 |
| | 09/22/03^ | 98.22 | 11.15 | NP | 87.07 | <35 | <50 | 650 | 4,500 | 5,150 | 50 | 660 |
| | 12/01/03 | 98.22 | 7.08 | NP | 91.14 | <35 | <50 | 330 | 1,720 | 2,050 | <50 | 330 |
| | 03/30/04 | 98.22 | 4.78 | NP | 93.44 | ND | 9.6 | ND | 12.7 | 22.3 | ND | 2.7 |
| | 07/13/04^ | 98.21 | 9.00 | NP | 89.21 | 2.5 | 4.9 | 62 | 211 | 280.4 | ND | 31 |
| | 10/07/04 | 98.21 | 8.86 | NP | 89.35 | 2.3 | 6.4 | 20 | 249 | 277.7 | 1.4 | 81 |
| | 01/12/05 | 98.21 | 6.49 | NP | 91.72 | 20 | 4.2 | 120 | 333 | 477.2 | 3.3 | 87 |
| | 04/19/05 | 98.21 | 6.16 | NP | 92.05 | ND | 34.3 | 149 | 805 | 988.3 | 17.3 | 203 |
| | 07/14/05 | 98.21 | 10.70 | NP | 87.51 | ND | ND | ND | 1.16 | 1.16 | ND | ND |
| | 10/19/05 | 98.21 | 12.09 | NP | 86.12 | ND | ND | ND | 7.0 | 7.0 | ND | ND |

**Table 1**
**Historical Summary of Groundwater Data**
**Closed Hess Station #32458**
**Fairport, New York**

| Well ID | Sample Date | Top of Casing[a] (feet) | Depth to Water[b] (fbg) | Depth to Product/ Thickness (feet) | Water Table Elevation (feet) | Benzene | Toluene | Ethylbenzene | Total Xylenes[c] | Total BTEX[d] | MTBE[e] | Naphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-7 | 05/23/00 | 93.95 | 5.93 | NP | 88.02 | -- | -- | -- | -- | 536 | 20 | 69 |
| | 08/29/00 | 93.95 | 10.50 | NP | 83.45 | -- | -- | -- | -- | 1,581 | 67 | 210 |
| | 11/20/00 | 93.95 | 10.80 | NP | 83.15 | -- | -- | -- | -- | 2,424 | 85 | 170 |
| | 02/19/01 | 93.95 | 7.85 | NP | 86.10 | -- | -- | -- | -- | 260.3 | 61 | 29 |
| | 05/21/01 | 93.95 | 8.70 | NP | 85.25 | -- | -- | -- | -- | 3,120 | 860 | ND |
| | 08/15/01 | 93.95 | 12.55 | NP | 81.40 | -- | -- | -- | -- | 1,999 | 300 | 14 |
| | 11/14/01 | 93.95 | 12.32 | NP | 81.63 | -- | -- | -- | -- | NS | NS | NS |
| | 02/07/02 | 93.95 | 8.61 | NP | 85.34 | 5,300 | 760 | 5,100 | 16,300 | 27,460 | 1,300 | 1500 |
| | 06/11/02 | 93.95 | 7.39 | NP | 86.56 | 79 | <50 | 940 | 2,770 | 3,789 | 120 | 670 |
| | 09/09/02 | 93.95 | 12.71 | NP | 81.24 | 1,000 | 150 | 2,400 | 5,870 | 9,420 | 360 | 640 |
| | 12/11/02 | 93.95 | 10.91 | NP | 83.04 | <140 | 1,100 | 25,000 | 75,300 | 101,400 | 3,000 | 20,000 |
| | 03/18/03 | 93.95 | 7.26 | NP | 86.69 | 260 | 6,700 | 15,000 | 44,500 | 66,460 | 2,700 | 10,000 |
| | 06/18/03 | 93.95 | 8.41 | 8.19/0.22 | 85.69* | NS | NS | NS | NS | NS | NS | NS |
| | 09/22/03^ | 98.67 | 11.88 | 11.72/0.16 | 86.90* | NS | NS | NS | NS | NS | NS | NS |
| | 12/01/03 | 98.67 | NG | NA | NA | NS* | NS* | NS* | NS* | NS* | NS* | NS* |
| | 03/30/04 | 98.67 | 6.02 | NP | 92.65 | 180 | 43 | 1,400 | 4,730 | 6,353 | 61 | 740 |
| | 07/13/04^ | 98.94 | 8.24 | NP | 90.70 | 3,300 | 180 | 1,300 | 3,920 | 8,700 | 220 | 250 |
| | 10/07/04 | 98.94 | 9.63 | NP | 89.31 | 2,300 | 110 | 650 | 3,270 | 6,330 | 150 | 220 |
| | 01/12/05 | 98.94 | 5.54 | NP | 93.40 | 5.2 | ND | ND | 5.9 | 11.1 | 3.5 | 4.8 |
| | 04/19/05 | 98.94 | 6.88 | NP | 92.06 | 96.3 | 27.9 | 284 | 604.4 | 1,012.6 | 41.2 | 149 |
| | 07/14/05 | 98.94 | 9.90 | NP | 89.04 | 56.9 | 65.1 | 570 | 1,585 | 2,277.0 | 32.4 | 18.9 |
| | 10/19/05 | 98.94 | 12.43 | 12.38/.05 | 86.55* | NS | NS | NS | NS | NS | NS | NS |
| MW-8 | 08/15/01 | 94.22 | 12.63 | NP | 81.59 | -- | -- | -- | -- | 61,900 | 210 | 1,400 |
| | 11/14/01 | 94.22 | 12.30 | NP | 81.92 | -- | -- | -- | -- | 65,300 | 73 | 1,000 |
| | 02/07/02 | 94.22 | 7.97 | NP | 86.25 | 32,000 | 7,200 | 3,400 | 25,100 | 67,700 | <50 | 1,100 |
| | 06/11/02 | 94.22 | 8.01 | NP | 86.21 | 14,000 | 8,700 | 3,400 | 22,700 | 48,800 | 330 | 1,400 |
| | 09/09/02 | 94.22 | 12.92 | 12.73/0.19 | 81.30* | NS | NS | NS | NS | NS | NS | NS |
| | 12/11/02 | 94.22 | 11.28 | 10.94/0.34 | 83.18* | NS | NS | NS | NS | NS | NS | NS |
| | 03/18/03 | 94.22 | 7.76 | NP | 86.46 | 15,000 | 5,400 | 4,000 | 21,300 | 45,700 | 240 | 610 |
| | 06/18/03 | 94.22 | 8.60 | 8.37/0.23 | 85.78* | NS | NS | NS | NS | NS | NS | NS |
| | 09/22/03^ | 98.97 | 12.17 | 11.87/0.30 | 87.01* | NS | NS | NS | NS | NS | NS | NS |
| | 12/01/03 | 98.97 | 6.01 | NP | 92.96 | 10,000 | 3,000 | 1,800 | 13,600 | 28,400 | <200 | 520 |
| | 03/30/04 | 98.97 | 4.62 | NP | 94.35 | 10,000 | 2,200 | 2,900 | 22,400 | 37,500 | <200 | 1,000 |
| | 07/13/04^ | 97.28 | 6.81 | NP | 90.47 | 2,400 | 160 | <50 | 3,460 | 6,020 | 170 | 240 |
| | 10/07/04 | 97.28 | 7.83 | NP | 89.45 | 5,100 | 580 | 630 | 7,400 | 13,710 | 160 | 310 |
| | 01/12/05 | 97.28 | 5.28 | NP | 92.00 | 280 | <50 | <50 | 1,020 | 1,300 | <50 | 120 |
| | 04/19/05 | 97.28 | 5.37 | NP | 91.91 | 607 | 59 | ND | 3,206 | 3,872 | 62.3 | 132 |
| | 07/14/05 | 97.28 | NG | NP | NA | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| | 10/19/05 | 97.28 | NG | NP | NA | 890 | 33.1 | 455 | 1,760 | 3,138.1 | 43.5 | 188 |
| MW-9 | 09/09/02 | 90.94 | 9.95 | NP | 80.99 | ND | 9.8 | 47 | 201.6 | 258.4 | 50 | 26 |
| | 12/11/02 | 90.94 | 8.01 | NP | 82.93 | <350 | 960 | 11,000 | 26,300 | 38,260 | 3,800 | 8,900 |
| | 03/18/03 | 90.94 | 2.82 | NP | 88.12 | <35 | 1,800 | 3,500 | 8,260 | 13,560 | 910 | 1,800 |
| | 06/18/03 | 90.94 | 4.81 | NP | 86.13 | <140 | <200 | 1,600 | 3,400 | 5,000 | 340 | 850 |
| | 09/22/03^ | 95.19 | 8.76 | 8.70/0.06 | 86.47* | NS | NS | NS | NS | NS | NS | NS |
| | 12/01/03 | 95.19 | 2.77 | NP | 92.42 | <70 | <100 | 610 | 2,140 | 2,750 | <100 | 450 |
| | 03/30/04 | 95.19 | 2.24 | NP | 92.95 | <3.5 | 10 | 240 | 1,362 | 1,612 | 58 | 210 |
| | 07/13/04^ | 95.18 | 5.38 | NP | 89.80 | 6.1 | 26 | 120 | 605 | 757.1 | 16 | 93 |
| | 10/07/04 | 95.18 | 6.41 | NP | 88.77 | ND | 7.2 | 200 | 368 | 575.2 | 46 | 83 |
| | 01/12/05 | 95.18 | 2.80 | NP | 92.38 | ND | 13.0 | 1.2 | 11.6 | 25.8 | 8.9 | 48 |
| | 04/19/05 | 95.18 | 3.58 | NP | 91.60 | ND | 14.8 | ND | ND | 14.8 | 9.1 | ND |
| | 07/14/05 | 95.18 | 7.34 | NP | 87.84 | 4.24 | 65.9 | ND | 51.9 | 122.0 | 26.9 | 46.7 |
| | 10/19/05 | 95.18 | 7.53 | NP | 87.65 | ND | ND | ND | 16.4 | 16.4 | ND | ND |
| MW-10 | 09/22/03^ | 98.77 | 11.32 | NP | 87.45 | 150 | <20 | 1,900 | 1,322 | 3,372 | 140 | 350 |
| | 12/01/03 | 98.77 | 5.67 | NP | 93.10 | 77 | <20 | 1,000 | 881 | 1,958 | 58 | 190 |
| | 03/30/04 | 98.77 | 4.46 | NP | 94.31 | 42 | 17 | <10 | 881 | 940 | 18 | 160 |
| | 07/13/04^ | 96.77 | 6.27 | NP | 90.50 | 3,500 | 250 | 450 | 4,400 | 8,600 | 170 | 320 |
| | 10/07/04 | 96.77 | 7.52 | NP | 89.25 | 1,500 | 66 | 600 | 800 | 2,966 | 160 | 200 |
| | 01/12/05 | 96.77 | 4.95 | NP | 91.82 | 370 | 48 | 310 | 940 | 1,668 | 45 | 120 |
| | 04/19/05 | 96.77 | 4.89 | NP | 91.88 | 60.9 | 7.2 | ND | 66.3 | 134.4 | 68.2 | ND |
| | 07/14/05 | 96.77 | NG | NP | NA | 648 | 43.6 | 294 | 1,138 | 2,123.6 | 144 | 116 |
| | 10/19/05 | 96.77 | NG | NP | NA | 1,850 | 45.4 | 755 | 1,860 | 4,510.4 | 89.9 | 482 |
| MW-11 | 09/22/03^ | 98.95 | 11.60 | NP | 87.35 | 5,300 | 590 | 1,600 | 13,000 | 20,490 | 130 | 480 |
| | 12/01/03 | 98.95 | 5.99 | NP | 92.96 | 5,200 | 2,100 | 1,500 | 10,400 | 19,200 | <100 | 380 |
| | 03/30/04 | 98.95 | 4.84 | NP | 94.11 | 3,500 | 1,400 | 520 | 11,700 | 17,120 | 130 | 510 |
| | 07/13/04^ | 97.46 | 7.21 | NP | 90.25 | 2,200 | 180 | 38 | 3,240 | 5,658 | 140 | 250 |
| | 10/07/04 | 97.46 | 7.96 | NP | 89.50 | 2,100 | 300 | 1,300 | 5,600 | 9,300 | 91 | 310 |
| | 01/12/05 | 97.46 | 5.70 | NP | 91.76 | 260 | 12 | ND | 910 | 1,182 | 33 | 100 |
| | 04/19/05 | 97.46 | 5.43 | NP | 92.03 | 566 | 106 | 205 | 3,298 | 4,175 | 308 | 228 |
| | 07/14/05 | 97.46 | NG | NP | NA | 649 | 33.0 | 208 | 1,189 | 2,079.0 | 41.5 | 156 |
| | 10/19/05 | 97.46 | NG | NP | NA | 1,100 | 43.7 | 231 | 2,030 | 3,404.7 | 27.4 | 195 |
| MW-12 | 09/22/03^ | 98.59 | 10.99 | NP | 87.60 | 2,700 | 2,400 | 870 | 7,300 | 13,270 | 340 | 320 |
| | 12/01/03 | 98.59 | 5.47 | NP | 93.12 | 4,600 | 7,800 | 1,100 | 11,300 | 24,800 | 240 | 340 |
| | 03/30/04 | 98.59 | 4.38 | NP | 94.21 | 3,200 | 7,400 | 1,200 | 11,900 | 23,700 | 130 | 340 |
| | 07/13/04^ | 97.30 | 7.83 | NP | 89.47 | 2,300 | 290 | 1,400 | 3,340 | 7,330 | 140 | 360 |
| | 10/07/04 | 97.30 | 7.63 | NP | 89.67 | 1,100 | 950 | 670 | 4,480 | 7,200 | 160 | 250 |
| | 01/12/05 | 97.30 | 5.24 | NP | 92.06 | 250 | <25 | <25 | 880 | 1,130 | 34 | 100 |
| | 04/19/05 | 97.30 | 5.18 | NP | 92.12 | <3.5 | ND | ND | 72.9 | 72.9 | 14.9 | 22.8 |
| | 07/14/05 | 97.30 | NG | NP | NA | 531 | 29.1 | 107 | 770 | 1,437.1 | 33.9 | 104 |
| | 10/19/05 | 97.30 | NG | NP | NA | 275 | 28.3 | 908 | 1,240 | 2,451.3 | 29.4 | 173 |

**Table 1**
**Historical Summary of Groundwater Data**
**Closed Hess Station #32458**
**Fairport, New York**

| Well ID | Sample Date | Top of Casing[a] (feet) | Depth to Water[b] (fbg) | Depth to Product/ Thickness (feet) | Water Table Elevation (feet) | Benzene | Toluene | Ethylbenzene | Total Xylenes[c] | Total BTEX[d] | MTBE[e] | Naphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-13 | 07/13/04^ | 97.46 | 8.38 | NP | 89.08 | 83 | 49 | 2,400 | 4,110 | 6,642 | 43 | 660 |
| | 10/07/04 | 97.46 | 8.65 | NP | 88.81 | 10 | 5.4 | 240 | 402 | 657.4 | 8.5 | 49 |
| | 01/12/05 | 97.46 | 6.75 | NP | 90.71 | 110 | 21 | 1,100 | 1,271 | 2,502 | 35 | 260 |
| | 04/19/05 | 97.46 | 6.17 | NP | 91.29 | 99.5 | 79 | 1,130 | 3,468 | 4,776.5 | 145 | 320 |
| | 07/14/05 | 97.46 | 9.97 | NP | 87.49 | 59.2 | 43.0 | 1,420 | 2,503 | 4,025.2 | 55.8 | 435 |
| | 10/19/05 | 97.46 | 11.15 | NP | 86.31 | 62.8 | 36.4 | 1,930 | 2,590 | 4,619.2 | ND | 719 |
| MW-14 | 07/13/04^ | 96.75 | 7.87 | NP | 88.88 | 36 | 26 | 450 | 2,150 | 2,662 | 46 | 730 |
| | 10/07/04 | 96.75 | 8.35 | NP | 88.40 | 42 | 16 | 1,200 | 1,180 | 2,438 | 100 | 190 |
| | 01/12/05 | 96.75 | 6.03 | NP | 90.72 | 40 | 11 | 140 | 416 | 607 | 37 | 230 |
| | 04/19/05 | 96.75 | 5.71 | NP | 91.04 | 15.7 | 16.3 | 165 | 1,151 | 1,348.0 | 81.1 | 235 |
| | 07/14/05 | 96.75 | 9.64 | NP | 87.11 | 24.5 | <10 | 643 | 794 | 1,461.5 | 50.7 | 286 |
| | 10/19/05 | 96.75 | 10.46 | NP | 86.29 | 43.0 | 6.7 | 1,210 | 941 | 2,200.7 | ND | 321 |
| MW-15 | 07/13/04^ | 96.12 | 7.29 | NP | 88.83 | 17 | 7.6 | 2.0 | 2.5 | 29.1 | 24 | 11 |
| | 10/07/04 | 96.12 | 8.41 | NP | 87.71 | <3.5 | 7.8 | 290 | 30 | 327.8 | 80 | 89 |
| | 01/12/05 | 96.12 | 5.02 | NP | 91.10 | ND | 12 | 380 | ND | 392 | 23 | 120 |
| | 04/19/05 | 96.12 | 5.56 | NP | 90.56 | <3.5 | 11.6 | 272 | ND | 283.6 | 74.2 | 115 |
| | 07/14/05 | 96.12 | 9.57 | NP | 86.55 | <3.5 | ND | 299 | 34.5 | 333.5 | 50.5 | 139 |
| | 10/19/05 | 96.12 | 9.55 | NP | 86.57 | ND | ND | 633 | 25.1 | 658.1 | ND | 235 |
| NYSDEC Standards | | | | | | 1 | 5 | 5 | 5 | | 10 | 10 |

Notes:

All constituent concentrations are presented in micrograms per liter (ug/L);

a - Relative to an arbitrary benchmark;
b - Measured from top of inside casing;
c - Sum of m, p-Xylenes and o-Xylenes;
d - Sum of Benzene, Toluene, Etvylbenzene, and Total Xylenes;
e - Methyl tertiary butyl ether;
fbg - Feet below grade;
– - Refer to historical status reports for Benzene, Toluene, Ethylbenzene, and Xylenes concentrations;
^ - Monitoring wells resurveyed by GSC;
NG - Well not gauged;
- Groundwater elevation corrected due to SPH.
Corrected groundwater elevation = water elevation + (0.7 x product thickness);

DRY - Insuffecient water column to collect representative sample;
NA - Not applicable;
ND - Not detected above reporting detection limit;
- Not detected, reporting limit greater than NYSDEC Guidance Value;
NS - Not sampled due to liquid phase hydrocarbons;
NS+ - Well not samped per NYSDEC approval;
NP - No liquid phase hydrocarbons noted in well;
NS* - Not sampled; well obstructed;
**Bold** - Value exceeds NYSDEC Ambient Water Quality Standards and Guidance Values.
NYSDEC Standards - New York State Department of Environmental Conservation
Ambient Water Quality Standards and Guidance Values, June 1998 and Addendum 2000;

## Table 2
## Groundwater Extraction and Treatment System Analytical Data

## Closed Hess Station No. 32458
## 1314 Fairport Road
## Fairport, New York

| Sample Location | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes* | Total BTEX** | MTBE | Naphthalene |
|---|---|---|---|---|---|---|---|---|
| Influent | 4-May-04 | 2,820 | 5,060 | 2,440 | 9,130 | 19,450 | 128.0 | 450 |
| | 5-May-04 | 3,230 | 1,690 | 1,700 | 6,780 | 13,400 | 36.0 | 446 |
| | 6-May-04 | 2,620 | 903 | 1,820 | 4,910 | 10,253 | 132.0 | 534 |
| | 18-May-04 | 4,400 | 1,100 | 2,600 | 8,200 | 16,300 | 320.0 | 360 |
| | 27-May-04 | 2,270 | <592 | 1,600 | 5,460 | 9,922 | 50.9 | NC |
| | 4-Jun-04 | 2,720 | 732 | 1,720 | 6,010 | 11,182 | 51.8 | NC |
| | 17-Jun-04 | 2,690 | 377 | 2,110 | 4,890 | 10,067 | 60.1 | NC |
| | 13-Jul-04 | 3,470 | 250.0 | 2,250 | 4,690 | 10,660 | 162.0 | NC |
| | 12-Aug-04 | 2,290 | 303.0 | 1,490 | 5,060 | 9,143 | 38.7 | NC |
| | 9-Sep-04 | 1,330 | 231.0 | 1,050 | 3,090 | 5,701 | 89.3 | NC |
| | 8-Oct-04 | 3,090 | 409.0 | 1,780 | 4,990 | 10,269 | 118.0 | NC |
| | 3-Nov-04 | 1,250 | 191.0 | 1,530 | 3,350 | 6,321 | 78.5 | NC |
| | 8-Dec-04 | 1,740 | 192.0 | 1,660 | 3,270 | 6,862 | 96.4 | NC |
| | 13-Jan-05 | 1,350 | 141.0 | 1,370 | 3,090 | 5,951 | 50.0 | NC |
| | 1-Feb-05 | 1,810 | 168.0 | 1,860 | 2,240 | 6,078 | 59.7 | NC |
| | 4-Mar-05 | 2,030 | 129.0 | 2,340 | 5,100 | 9,599 | <34.9 | NC |
| | 5-Apr-05 | 1,060 | 95.0 | 1,540 | 3,690 | 6,385 | <23.0 | NC |
| | 12-May-05 | 1,320 | 172.0 | 1,740 | 3,130 | 6,362 | 50.7 | NC |
| | 23-Jun-05 | 1,950 | 84.1 | 2,190 | 3,790 | 8,014 | 47.7 | NC |
| | 12-Jul-05 | 1,220 | 81.4 | 1,820 | 3,370 | 6,491 | 37.8 | NC |
| | 11-Aug-05 | 1,310 | 54.8 | 1,560 | 2,720 | 5,645 | 28.9 | NC |
| | 5-Sep-05 | 2,060 | 407 | 6,020 | 24,800 | 33,287 | 28.9 | NC |
| | 18-Oct-05 | 894 | 41.3 | 1,150 | 1,980 | 4,065 | 30.1 | NC |

## Table 2
## Groundwater Extraction and Treatment System Analytical Data

## Closed Hess Station No. 32458
## 1314 Fairport Road
## Fairport, New York

| Sample Location | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes* | Total BTEX** | MTBE | Naphthalene |
|---|---|---|---|---|---|---|---|---|
| Midfluent-1 | 4-May-04 | 12.7 | 20.8 | 8.2 | 40 | 82 | 1.5 | 5 |
| | 5-May-04 | NC | NC | NC | NC | NC | NC | NC |
| | 6-May-04 | NC | NC | NC | NC | NC | NC | NC |
| | 18-May-04 | <1.0 | <1.0 | <1.0 | 3.4 | <6 | <1.0 | <1.0 |
| | 27-May-04 | 1.4 | 1.9 | 2.6 | 10.9 | 17 | <1.0 | NC |
| | 4-Jun-04 | 9.9 | 4.8 | 4.9 | 25.1 | 45 | <1.0 | NC |
| | 17-Jun-04 | 3.9 | 1.7 | 3.2 | 10.6 | 19 | <1.0 | NC |
| | 13-Jul-04 | 1.3 | 3.1 | 1.1 | 2.8 | 8 | <1.0 | NC |
| | 12-Aug-04 | <1.0 | 0.2 | <1.0 | <1.0 | <3 | <1.0 | NC |
| | 9-Sep-04 | <0.4 | 1.2 | <1.0 | 0.92 | <4 | <1.0 | NC |
| | 8-Oct-04 | 0.99 | 1.0 | 0.40 | 1.6 | <4 | <1.0 | NC |
| | 3-Nov-04 | <1.0 | 1.0 | <1.0 | <1.0 | <4 | <1.0 | NC |
| | 8-Dec-04 | 4.0 | 1.3 | 2.7 | 7.5 | 16 | <1.0 | NC |
| | 13-Jan-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4 | <1.0 | NC |
| | 1-Feb-05 | <26.0 | <2.1 | <11.9 | <53.5 | <94 | <2.3 | NC |
| | Midfluent-1 removed from sampling network | | | | | | | |
| Midfluent-2 | 4-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | <2.0 |
| | 5-May-04 | NC | NC | NC | NC | NC | NC | NC |
| | 6-May-04 | NC | NC | NC | NC | NC | NC | NC |
| | 18-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | <2.0 |
| | 27-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 4-Jun-04 | <1.0 | 0.5 | <1.0 | 0.4 | <3 | <1.0 | NC |
| | 17-Jun-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 13-Jul-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 12-Aug-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 9-Sep-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 8-Oct-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 3-Nov-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 8-Dec-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 13-Jan-05 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 1-Feb-05 | 2.7 | 0.42 | 1.3 | 3.3 | 8 | 0.70 | NC |
| | Midfluent-2 removed from sampling network | | | | | | | |

Table 2
Groundwater Extraction and Treatment System Analytical Data

Closed Hess Station No. 32458
1314 Fairport Road
Fairport, New York

| Sample Location | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes* | Total BTEX** | MTBE | Naphthalene |
|---|---|---|---|---|---|---|---|---|
| System Effluent | 4-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | <2.0 |
| | 5-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | <2.0 |
| | 6-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | <2.0 |
| | 18-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | <2.0 |
| | 27-May-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 4-Jun-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 17-Jun-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 13-Jul-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 12-Aug-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 9-Sep-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 8-Oct-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 3-Nov-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 8-Dec-04 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 13-Jan-05 | <1.0 | <1.0 | <1.0 | <1.0 | BDL | <1.0 | NC |
| | 1-Feb-05 | 0.61 | <1.0 | 0.69 | 2.0 | 4.3 | <1.0 | NC |
| | 4-Mar-05 | <1.0 | <1.0 | <1.0 | 0.56 | 3.6 | <1.0 | NC |
| | 5-Apr-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | NC |
| | 12-May-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | NC |
| | 23-Jun-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | NC |
| | 12-Jul-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | NC |
| | 11-Aug-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | NC |
| | 5-Sep-05 | 0.19 | <1.0 | <1.0 | 0.96 | <4.0 | <1.0 | NC |
| | 18-Oct-05 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | NC |
| NYSDEC Stipulation Agreement Water Discharge Limits | -- | 1 | 5 | 5 | 5 | -- | 10 | 10 |

Notes:
All constituent concentrations are presented in micrograms per liter (ug/L);
* - Summation of ortho, meta and para-xylenes;
** - Summation of compounds that were detected above the laboratory method reporting limit;
BTEX - benzene, toluene, ethylbenzene, and total xylenes;
MTBE - methyl tertiary-butyl ether;
BDL - below detection limit; and
NC - sample not collected.

KLEINFELDER
Employee-owned

Table 3
Historical Soil Vapor Extraction System Analytical Data Summary

Closed Hess Station No. 32458
1314 Fairport Road
Fairport, New York

| Date | Parameter | NYSDEC Ambient Air Quality Standards* | Effluent ($mg/m^3$) | Air Flow (SCFM) |
|---|---|---|---|---|
| 6-May-04 | Benzene | 26.486 | 26 | 143.7 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | 1.0 | |
| | MTBE | NA | <0.18 | |
| 27-May-04 | Benzene | 15.892 | 6.4 | 253.7 |
| | Toluene | NA | 40.3 | |
| | Ethylbenzene | NA | 6.1 | |
| | Total Xylenes | NA | 40 | |
| | MTBE | NA | 0.90 | |
| 17-Jun-04 | Benzene | 15.892 | 0.99 | 284.3 |
| | Toluene | NA | 6.4 | |
| | Ethylbenzene | NA | 1.0 | |
| | Total Xylenes | NA | 13 | |
| | MTBE | NA | <0.18 | |
| 13-Jul-04 | Benzene | 19.864 | 1.10 | 168.5 |
| | Toluene | NA | 4.10 | |
| | Ethylbenzene | NA | 0.48 | |
| | Total Xylenes | NA | 20 | |
| | MTBE | NA | <0.18 | |
| 12-Aug-04 | Benzene | 19.864 | <0.080 | 171.2 |
| | Toluene | NA | 1.10 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | 1.40 | |
| | MTBE | NA | <0.18 | |
| 9-Sep-04 | Benzene | 26.468 | 1.3 | 144.3 |
| | Toluene | NA | 1.5 | |
| | Ethylbenzene | NA | 1.5 | |
| | Total Xylenes | NA | 8.3 | |
| | MTBE | NA | 1.8 | |
| 8-Oct-04 | Benzene | 19.864 | <0.080 | 169.2 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | <0.22 | |
| | MTBE | NA | <0.18 | |
| 3-Nov-04 | Benzene | 26.486 | <0.080 | 125.9 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | <0.22 | |
| | MTBE | NA | <0.18 | |
| 8-Dec-04 | Benzene | 26.486 | <0.080 | 132.0 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | <0.22 | |
| | MTBE | NA | <0.18 | |

**Table 3**
**Historical Soil Vapor Extraction System Analytical Data Summary**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**

| Date | Parameter | NYSDEC Ambient Air Quality Standards* | Effluent ($mg/m^3$) | Air Flow (SCFM) |
|---|---|---|---|---|
| 13-Jan-05 | Benzene | 26.486 | <0.080 | 130.3 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | <0.22 | |
| | MTBE | NA | <0.18 | |
| 1-Feb-05 | Benzene | 26.486 | 0.28 | 132.4 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 17-Feb-05 | Benzene | 26.486 | 0.12 | 121.7 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 4-Mar-05 | Benzene | 26.486 | 0.08 | 141.2 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 15-Mar-05 | Benzene | 26.486 | 0.11 | 141.3 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 5-Apr-05 | Benzene | 26.486 | 0.15 | 148.2 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | 0.87 | |
| | MTBE | NA | <0.18 | |
| 22-Apr-05 | Benzene | 26.486 | 0.13 | 139.0 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 12-May-05 | Benzene | 26.486 | 0.13 | 148.3 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 27-May-05 | Benzene | 26.486 | 0.07 | 147.2 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 7-Jun-05 | Benzene | 26.486 | 0.08 | 138.4 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 23-Jun-05 | Benzene | 26.486 | 0.05 | 139.3 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |

**Table 3**
**Historical Soil Vapor Extraction System Analytical Data Summary**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**

| Date | Parameter | NYSDEC Ambient Air Quality Standards* | Effluent ($mg/m^3$) | Air Flow (SCFM) |
|---|---|---|---|---|
| 12-Jul-05 | Benzene | 26.486 | 0.08 | 137.5 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 26-Jul-05 | Benzene | 26.486 | 0.12 | 137.9 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 11-Aug-05 | Benzene | 26.486 | 0.47 | 146.7 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 26-Aug-05 | Benzene | 26.486 | 1.17 | 147.4 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 5-Sep-05 | Benzene | 26.486 | 0.96 | 142.6 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 19-Sep-05 | Benzene | 26.486 | 0.82 | 126.4 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 5-Oct-05 | Benzene | 26.486 | 0.72 | 130.2 |
| | Toluene | NA | NA | |
| | Ethylbenzene | NA | NA | |
| | Total Xylenes | NA | NA | |
| | MTBE | NA | NA | |
| 18-Oct-05 | Benzene | 26.486 | 0.08 | 148.4 |
| | Toluene | NA | <0.19 | |
| | Ethylbenzene | NA | <0.22 | |
| | Total Xylenes | NA | 0.22 | |
| | MTBE | NA | <0.18 | |

***Notes:***
* - NYSDEC Ambient Air Quality Standards using a 25' stack height;
NA - Not Applicable;
$mg/m^3$ - milligrams per cubic meter;
SCFM - Standard cubic feet per minute;
< - value less than reporting limit.

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Table 4
Monitoring Well Sampling Schedule
Closed Hess Station #32458
Fairport, New York

| Groundwater Sampling Months | Montoring Well ID | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | MW-1 | MW-2R | MW-3R | MW-4 | MW-5 | MW-6 | MW-7 | MW-8 |
| January | X | X | X | NS | NS | X | X | X |
| April | X | X | X | NS | NS | X | X | X |
| July | X | X | X | NS | NS | X | X | X |
| October | X | X | X | NS | NS | X | X | X |

| Groundwater Sampling Months | Montoring Well ID | | | | | | |
|---|---|---|---|---|---|---|---|
| | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 |
| January | X | X | X | X | X | X | X |
| April | X | X | X | X | X | X | X |
| July | X | X | X | X | X | X | X |
| October | X | X | X | X | X | X | X |

**NOTES:**
All wells sampled EPA 624; BTEX,MTBE & Naphthalene;
Quarterly Hydrogeologic Status Reports submitted in March, June, September, and December;
X - Denotes well sampled;
NS - Not sampled per NYSDEC approval.

# FIGURES


Feet

0 50 100 200

FIGURE 1
AREA MAP

HESS STATION No. 32458
1314 FAIRPORT ROAD
FAIRPORT, NEW YORK

| | | | |
|---|---|---|---|
| DRAWN BY: | JL | SCALE: | GRAPHIC |
| REVISED BY: | | PROJECT No.: | 0201708 |
| DATE: | OCTOBER 25, 2005 | SOURCE: | Contact GSC\|Kleinfelder for metadata |
| CHECKED BY: | | | |

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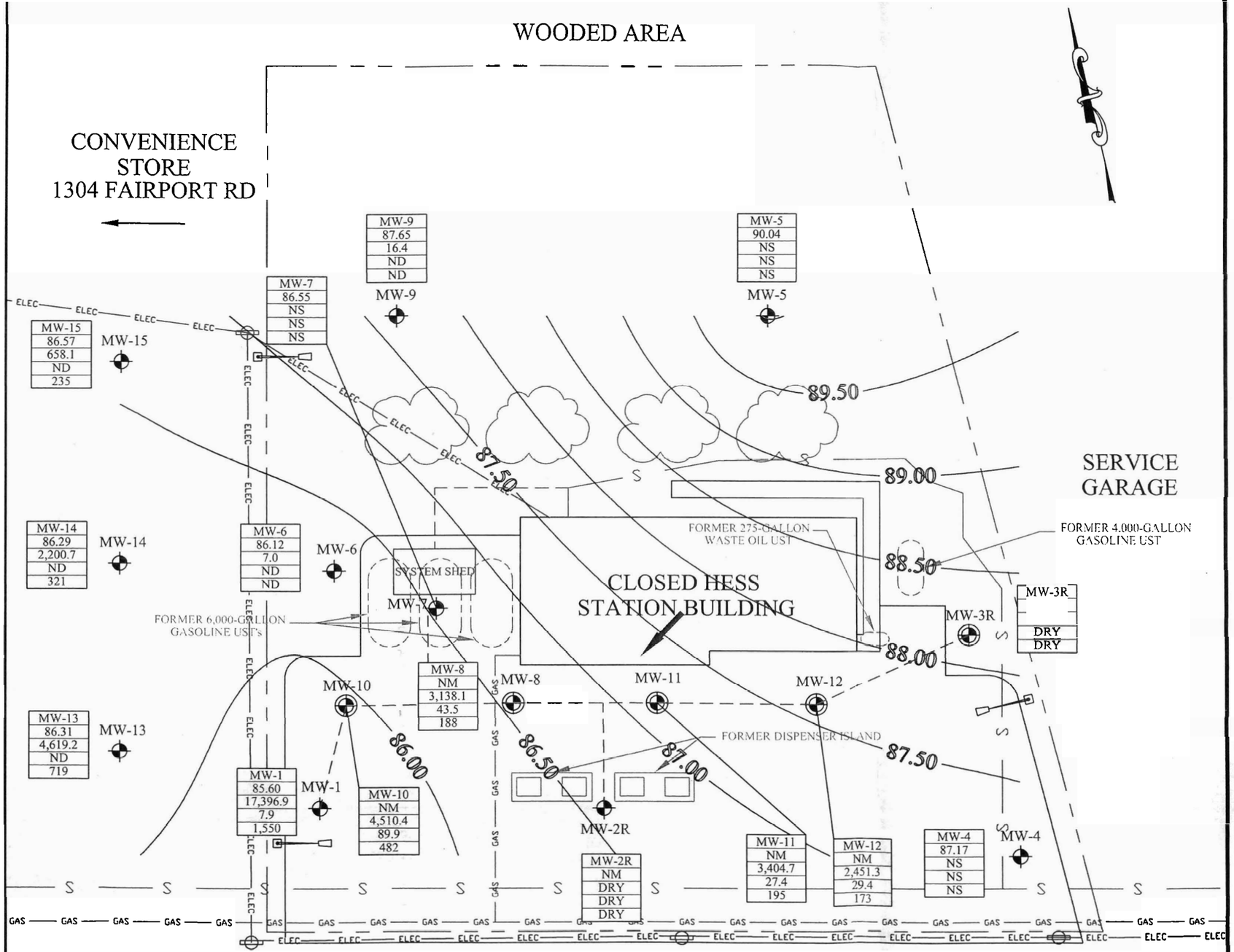
484 Temple Hill Road, Suite 100 • New Windsor, NY 12553 • (845) 561-9890




LEGEND

- MONITORING WELL LOCATION
- MONITORING/RECOVERY/SVE WELL
- MONITORING/SVE WELL
- FORMER UST LOCATION
- PROPERTY LINE
- SANITARY SEWER LINE
- UTILITY LINES
- GAS LINE
- RECOVERY/ SVE LINES
- UTILITY POLE
- LIGHT POST

| MW-14 |
|---|
| 86.29 |
| 2,200.7 |
| ND |
| 321 |

- MONITORING WELL IDENTIFICATION
- WATER TABLE ELEVATION (ft)
- TOTAL BTEX CONCENTRATION ( µg/l)
- MTBE CONCENTRATION ( µg/l)
- NAPHTHALENE CONCENTRATION ( µg/l)

- ASSUMED GROUNDWATER FLOW DIRECTION
- WATER TABLE CONTOUR (0.50 ft Interval)

ND BELOW DETECTION LIMIT
NM NOT MONITORED
NS NOT SAMPLED

NOTES

1. Groundwater samples were collected on October 19, 2005 by Shaw Environmental, Inc.

SCALE (feet)

0 22' 44'

# FIGURE 2
# HYDROCARBON DISTRIBUTION/ GROUNDWATER CONTOUR MAP

CLOSED HESS STATION No. 32458
1314 FAIRPORT ROAD
FAIRPORT, NEW YORK

| | | | |
|---|---|---|---|
| DRAWN BY: | JG | SCALE: | 1 inch = 22 feet |
| REVISED BY: | EM | PROJECT NUMBER: | 0201708 |
| CHECKED BY: | | SOURCE: | |
| DATE: | NOVEMBER 16, 2005 | GSC\|KLEINFELDER FIELD RESEARCH | |

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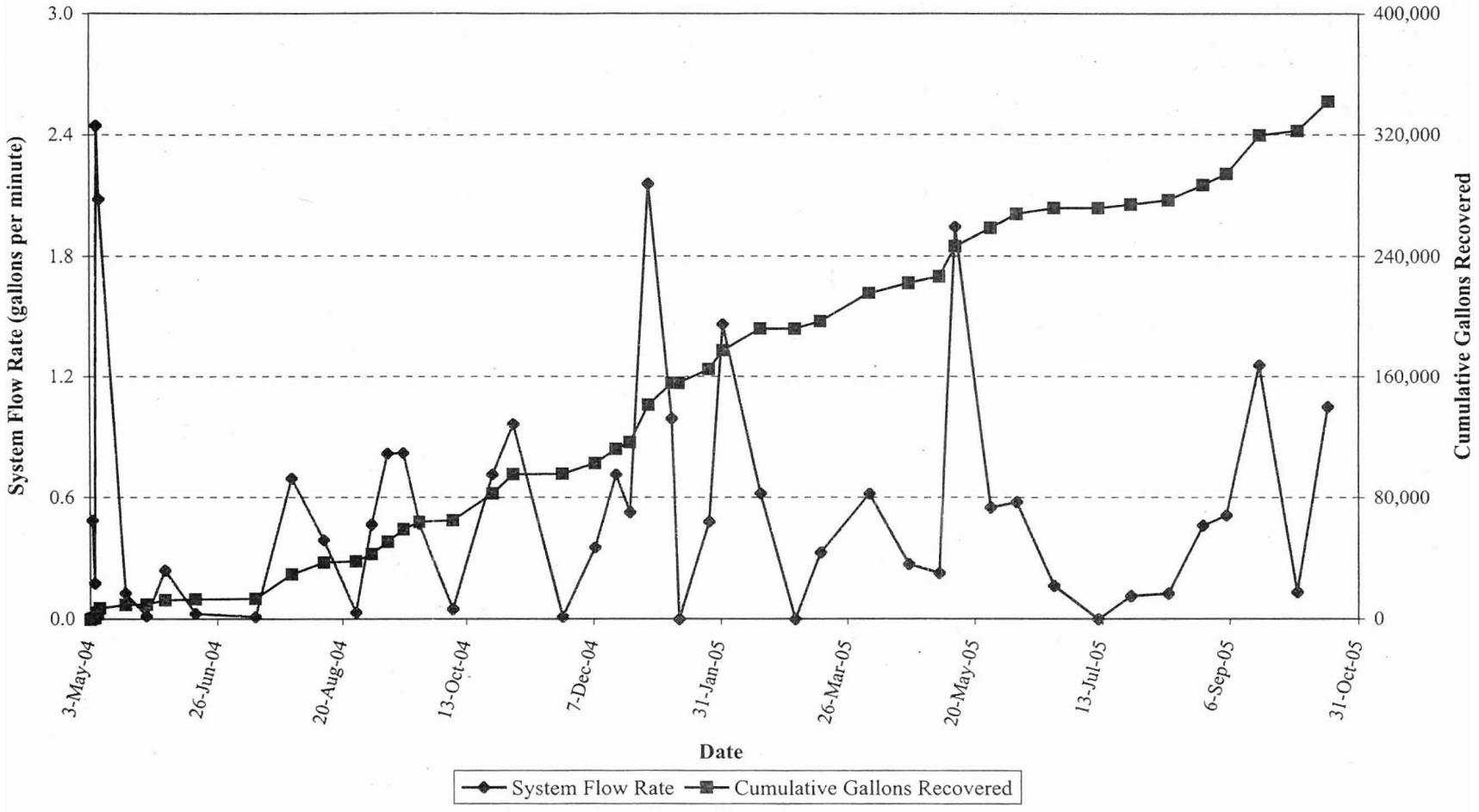
**Figure 3**
**Groundwater Extraction and Treatment System Flow Rate**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**




$$FlowRate = \frac{Q}{Days \times 1440}$$

***Where:***
***Flow Rate = System flow Rate (gallons per minute)***
***Q = Flow (gallons)***

***Flow is measured with a totalizing flow meter.***

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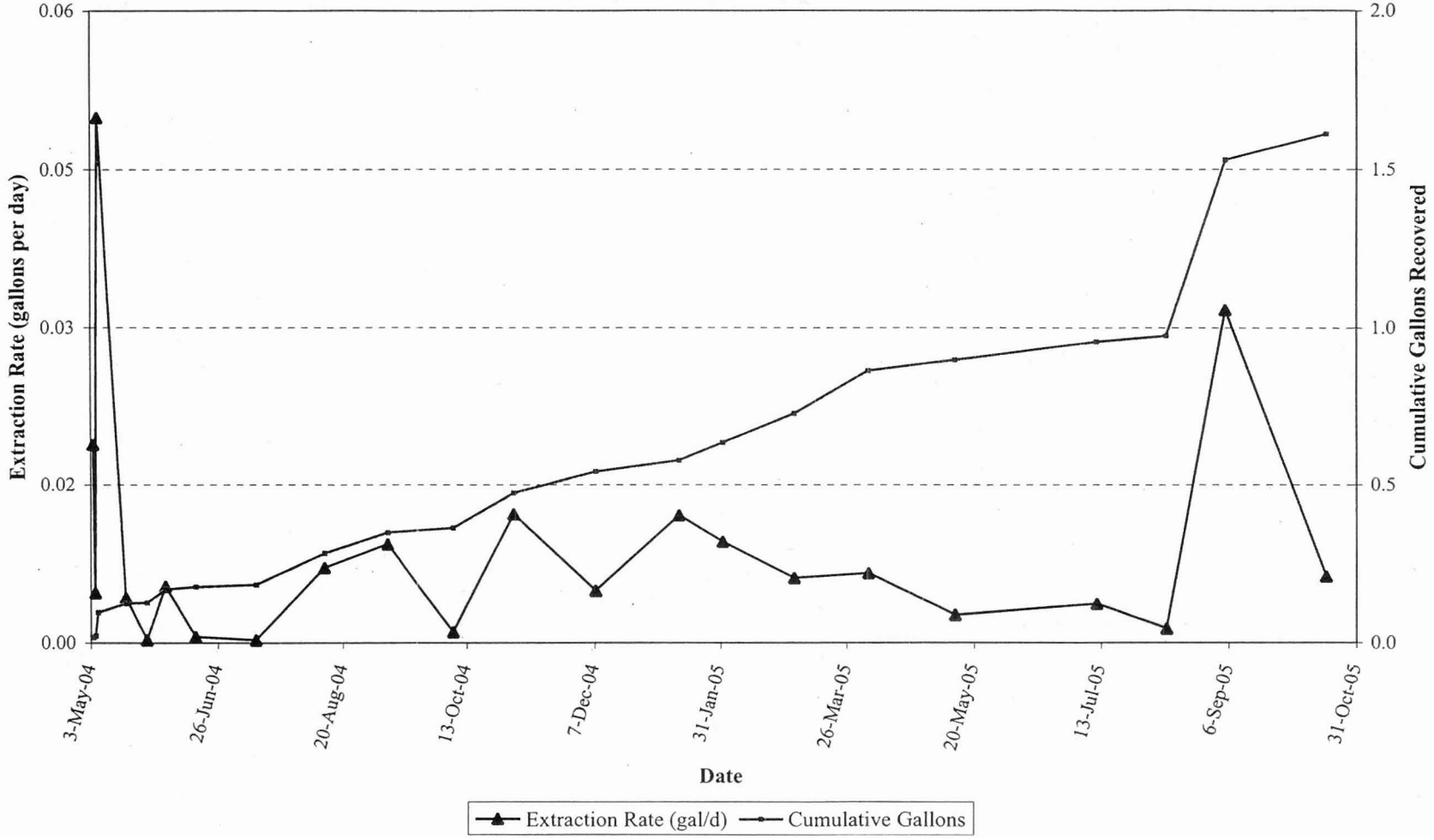
**Figure 5**
**Groundwater Extraction and Treatment System Mass Removal**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**




$$ExtractionRate = \frac{C \times 3.78 \times V \times 10^{-6} \times \left(\frac{1}{453.59}\right)}{(6.1) \times days}$$

***Where:***
***Removal Rate = Gallons per day***
***C = concentration (micrograms per liter)***
***V = volume (gallons)***
***days = number of days in the monitoring period***

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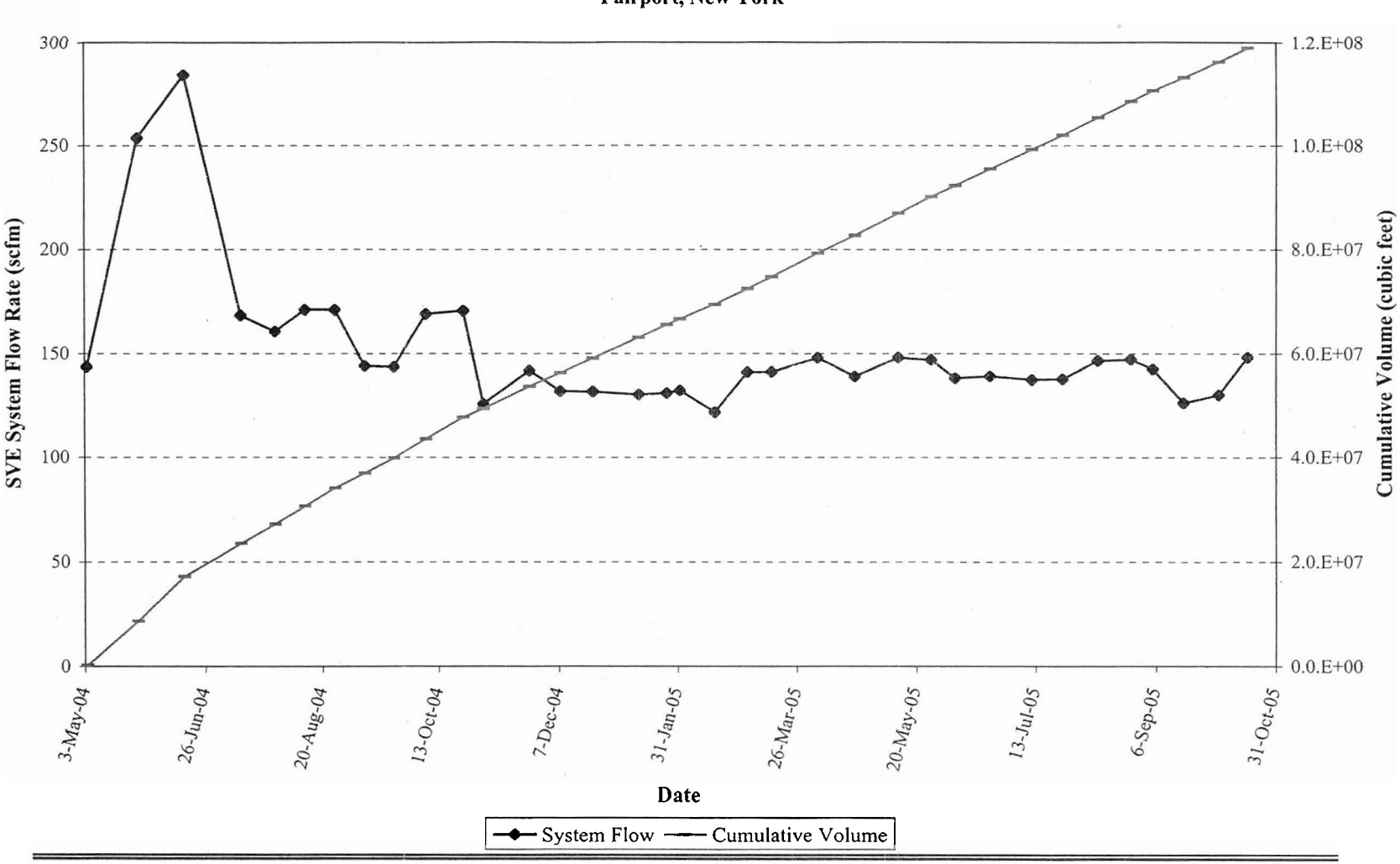
**Figure 6**
**Soil Vapor Extraction System Flow Rate**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**




$$Q = 128.8 \times K \times D^2 \times \sqrt{\frac{P \times \Delta P}{T + 460}}$$

$$Cumulative Volume (ft^3 / \min) = Q \times Operating Hours$$

***Where:***
***Q = flow (scfm)***
***K = Flow coefficient***
***D = pipe diameter (inches)***
***P = pressure (inches of water)***
***T = temperature (F)***

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**Figure 7**
**Soil Vapor Extraction System Influent Vapor Concentration**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**

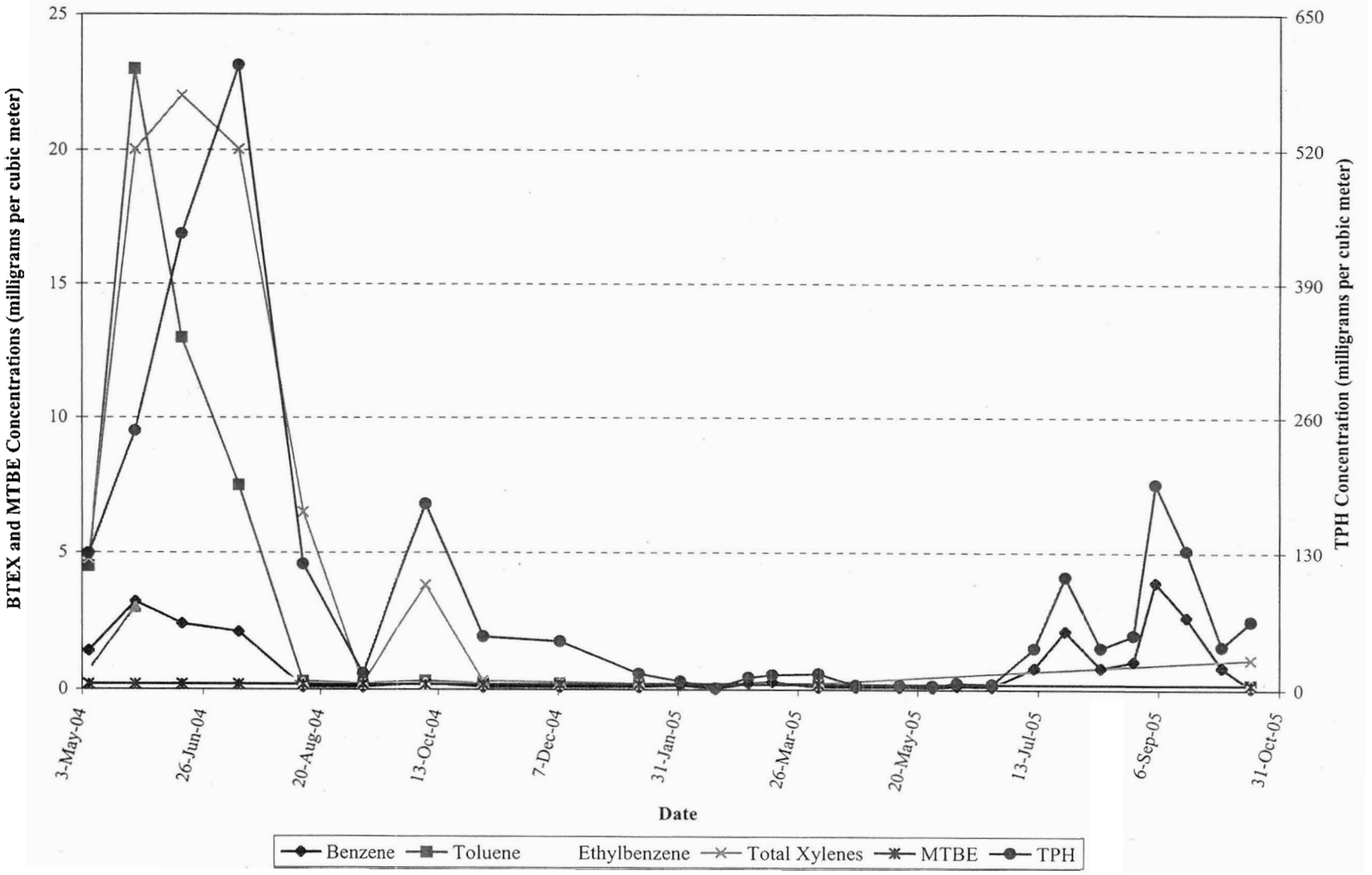
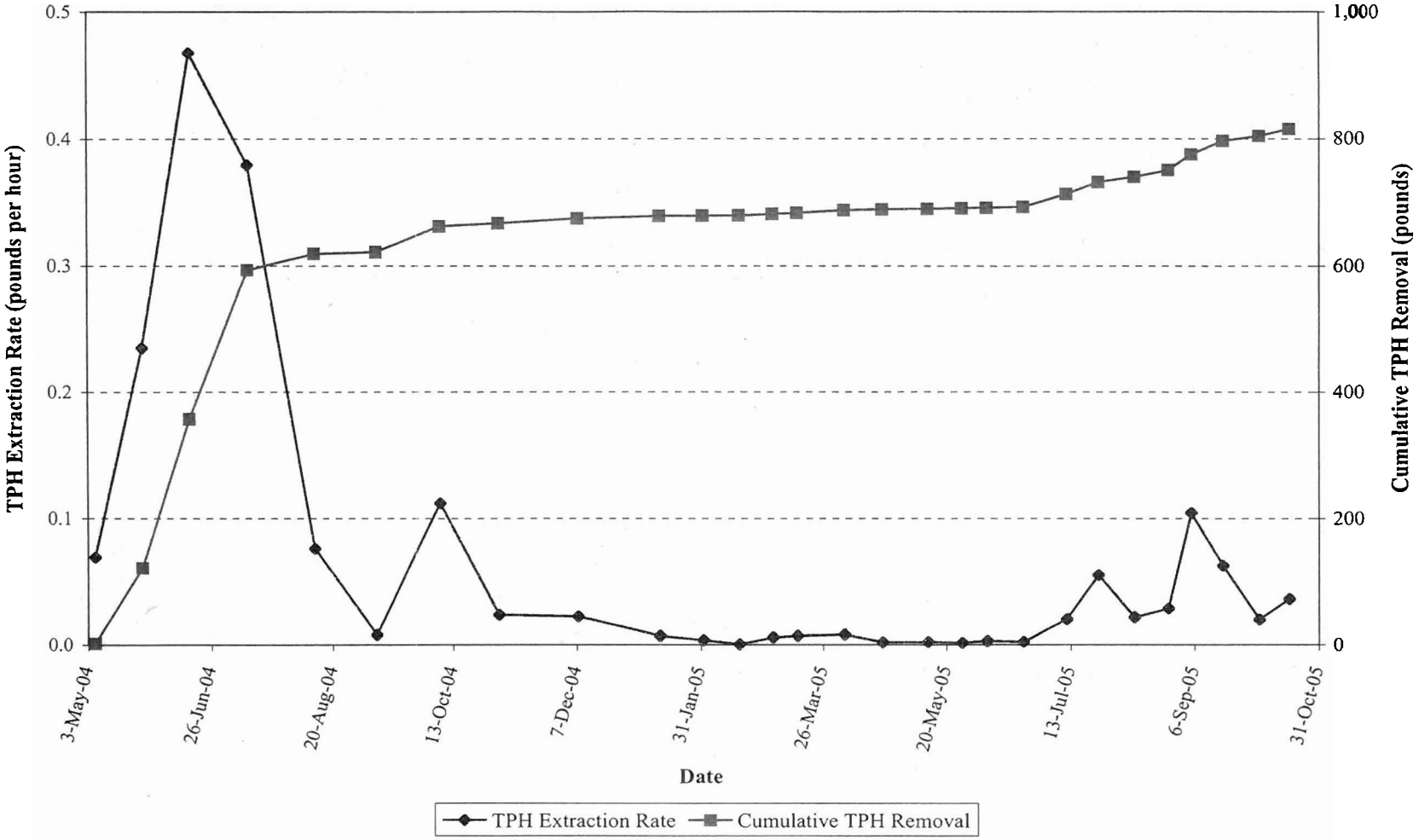


**Figure 8**
**Soil Vapor Extraction System Mass Removal**

**Closed Hess Station No. 32458**
**1314 Fairport Road**
**Fairport, New York**




$$VOC = Q \times C \times 0.000003746$$

Where:
VOC = VOC extraction rate (pounds per hour)
C = concentration (mg/m3)
Q = Flow (cfm)

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*Employee-owned*

# APPENDIX A

## Laboratory Sample Analytical Report and Chain of Custody

New Jersey
ACCUTEST.
Laboratories

11/08/05

Technical Report for

Amerada Hess Corp.

Hess #32458

32458 Fairport

Accutest Job Number: J13511

Sampling Date: 10/19/05

Report to:

Amerada Hess Corp.

PStorz@hess.com

ATTN: Pat Storz

Total number of pages in report: 15

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Sections:

# Table of Contents

# Sample Summary

Amerada Hess Corp.

Job No: J13511

Hess #32458
Project No: 32458 Fairport

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Matrix Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| J13511-1 | 10/19/05 | 15:30 | RA | 10/24/05 | AQ | Ground Water | MW-6 32458 |
| J13511-2 | 10/19/05 | 15:35 | RA | 10/24/05 | AQ | Ground Water | MW-1 32458 |
| J13511-3 | 10/19/05 | 15:11 | RA | 10/24/05 | AQ | Ground Water | MW-8 32458 |
| J13511-4 | 10/19/05 | 16:04 | RA | 10/24/05 | AQ | Ground Water | MW-9 32458 |
| J13511-5 | 10/19/05 | 15:00 | RA | 10/24/05 | AQ | Ground Water | MW-10 32458 |
| J13511-6 | 10/19/05 | 15:05 | RA | 10/24/05 | AQ | Ground Water | MW-11 32458 |
| J13511-7 | 10/19/05 | 15:16 | RA | 10/24/05 | AQ | Ground Water | MW-12 32458 |
| J13511-8 | 10/19/05 | 15:42 | RA | 10/24/05 | AQ | Ground Water | MW-13 32458 |
| J13511-9 | 10/19/05 | 15:50 | RA | 10/24/05 | AQ | Ground Water | MW-14 32458 |
| J13511-10 | 10/19/05 | 15:57 | RA | 10/24/05 | AQ | Ground Water | MW-15 32458 |

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-6 32458 | | |
| Lab Sample ID: | J13511-1 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | C96029.D | 1 | 11/02/05 | DFT | n/a | n/a | VC2929 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.11 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.14 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.38 | ug/l | |
| 1330-20-7 | Xylenes (total) | 7.0 | 1.0 | 0.18 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.17 | ug/l | |
| 91-20-3 | Naphthalene | ND | 2.0 | 0.42 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 111% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 101% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 90% | | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2.2

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-1 32458 | | |
| Lab Sample ID: | J13511-2 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103329.D | 5 | 11/02/05 | SWD | n/a | n/a | VO4630 |
| Run #2 [a] | O103335.D | 50 | 11/02/05 | SWD | n/a | n/a | VO4630 |
| Run #3 | O103304.D | 500 | 11/02/05 | SWD | n/a | n/a | VO4628 |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | 5.0 ml |
| Run #3 | 5.0 ml |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 2680 [b] | 50 | 5.7 | ug/l | |
| 108-88-3 | Toluene | 76.9 | 5.0 | 0.69 | ug/l | |
| 100-41-4 | Ethylbenzene | 4440 [b] | 50 | 19 | ug/l | |
| 1330-20-7 | Xylenes (total) | 10200 [b] | 50 | 9.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 7.9 | 5.0 | 0.85 | ug/l | |
| 91-20-3 | Naphthalene | 1550 [b] | 100 | 21 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Run# 3 | Limits |
|---|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 85% | 85% | 84% | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 93% | 91% | 94% | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 104% | 104% | 100% | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@283010 08:10 08-Nov-2005

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-8 32458 | | |
| Lab Sample ID: | J13511-3 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | O103305.D | 25 | 11/02/05 | SWD | n/a | n/a | VO4628 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 890 | 25 | 2.9 | ug/l | |
| 108-88-3 | Toluene | 33.1 | 25 | 3.4 | ug/l | |
| 100-41-4 | Ethylbenzene | 455 | 25 | 9.6 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1760 | 25 | 4.5 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 43.5 | 25 | 4.3 | ug/l | |
| 91-20-3 | Naphthalene | 188 | 50 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 84% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 94% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 100% | | 80-115% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-9 32458 | | |
| Lab Sample ID: | J13511-4 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | C96023.D | 1 | 11/02/05 | DFT | n/a | n/a | VC2928 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.11 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.14 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.38 | ug/l | |
| 1330-20-7 | Xylenes (total) | 16.4 | 1.0 | 0.18 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.17 | ug/l | |
| 91-20-3 | Naphthalene | ND | 2.0 | 0.42 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 112% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 100% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 91% | | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-10 32458 | | |
| Lab Sample ID: | J13511-5 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103330.D | 10 | 11/02/05 | SWD | n/a | n/a | VO4630 |
| Run #2 [b] | O103310.D | 50 | 11/02/05 | SWD | n/a | n/a | VO4629 |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | 5.0 ml |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1850 | 10 | 1.1 | ug/l | |
| 108-88-3 | Toluene | 45.4 | 10 | 1.4 | ug/l | |
| 100-41-4 | Ethylbenzene | 755 | 10 | 3.8 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1860 | 10 | 1.8 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 89.9 | 10 | 1.7 | ug/l | |
| 91-20-3 | Naphthalene | 482 | 20 | 4.2 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 90% | 83% | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 93% | 94% | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 103% | 100% | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.
(b) For QC purpose only.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-11 32458 | | |
| Lab Sample ID: | J13511-6 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103314.D | 25 | 11/02/05 | SWD | n/a | n/a | VO4629 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1100 | 25 | 2.9 | ug/l | |
| 108-88-3 | Toluene | 43.7 | 25 | 3.4 | ug/l | |
| 100-41-4 | Ethylbenzene | 231 | 25 | 9.6 | ug/l | |
| 1330-20-7 | Xylenes (total) | 2030 | 25 | 4.5 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 27.4 | 25 | 4.3 | ug/l | |
| 91-20-3 | Naphthalene | 195 | 50 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 86% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 93% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 95% | | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2.7

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-12 32458 | | |
| Lab Sample ID: | J13511-7 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103315.D | 25 | 11/02/05 | SWD | n/a | n/a | VO4629 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 275 | 25 | 2.9 | ug/l | |
| 108-88-3 | Toluene | 28.3 | 25 | 3.4 | ug/l | |
| 100-41-4 | Ethylbenzene | 908 | 25 | 9.6 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1240 | 25 | 4.5 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 29.4 | 25 | 4.3 | ug/l | |
| 91-20-3 | Naphthalene | 173 | 50 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 85% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 93% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 103% | | 80-115% |

(a) Sample pH did not satisfy field preservation criteria

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2.8

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-13 32458 | | |
| Lab Sample ID: | J13511-8 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103331.D | 10 | 11/02/05 | SWD | n/a | n/a | VO4630 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 62.8 | 10 | 1.1 | ug/l | |
| 108-88-3 | Toluene | 36.4 | 10 | 1.4 | ug/l | |
| 100-41-4 | Ethylbenzene | 1930 | 10 | 3.8 | ug/l | |
| 1330-20-7 | Xylenes (total) | 2590 | 10 | 1.8 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 10 | 1.7 | ug/l | |
| 91-20-3 | Naphthalene | 719 | 20 | 4.2 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 86% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 93% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 105% | | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-14 32458 | | |
| Lab Sample ID: | J13511-9 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103332.D | 10 | 11/02/05 | SWD | n/a | n/a | VO4630 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 43.0 | 10 | 1.1 | ug/l | |
| 108-88-3 | Toluene | 6.7 | 10 | 1.4 | ug/l | J |
| 100-41-4 | Ethylbenzene | 1210 | 10 | 3.8 | ug/l | |
| 1330-20-7 | Xylenes (total) | 941 | 10 | 1.8 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 10 | 1.7 | ug/l | |
| 91-20-3 | Naphthalene | 321 | 20 | 4.2 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 87% | | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 91% | | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 100% | | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@283010 08:10 08-Nov-2005

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | MW-15 32458 | | |
| Lab Sample ID: | J13511-10 | Date Sampled: | 10/19/05 |
| Matrix: | AQ - Ground Water | Date Received: | 10/24/05 |
| Method: | EPA 624 | Percent Solids: | n/a |
| Project: | Hess #32458 | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | O103328.D | 2.5 | 11/02/05 | SWD | n/a | n/a | VO4630 |
| Run #2 [a] | O103334.D | 5 | 11/02/05 | SWD | n/a | n/a | VO4630 |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | 5.0 ml |

Purgeable Aromatics, MTBE, Naphthalene

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 2.5 | 0.29 | ug/l | |
| 108-88-3 | Toluene | ND | 2.5 | 0.34 | ug/l | |
| 100-41-4 | Ethylbenzene | 633 [b] | 5.0 | 1.9 | ug/l | |
| 1330-20-7 | Xylenes (total) | 25.1 | 2.5 | 0.45 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 2.5 | 0.43 | ug/l | |
| 91-20-3 | Naphthalene | 235 | 5.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 (SUR) | 81% | 86% | 63-136% |
| 2037-26-5 | Toluene-D8 (SUR) | 97% | 96% | 90-110% |
| 460-00-4 | 4-Bromofluorobenzene (SUR) | 106% | 103% | 80-115% |

(a) Sample pH did not satisfy field preservation criteria.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

# Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

ACCUTEST. Laboratories

2235 Route 130, Dayton NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: J13511

**Client / Reporting Information**

Company Name: Shaw E&I
Address: 367 American Oil Rd.
City: Rensselaer State: NY Zip: 12144
Project Contact: P. Storz E-mail: Pstorz@Hess.com
Phone #: 518-462-8202
Sampler's Name: Robert Adams

**Project Information**

Project Name: Hess
Street:
City: State:
Project #: 32458 Fairport
Fax #:
Client Purchase Order #:

**Requested Analysis**

| Accutest Sample # | Field ID / Point of Collection | SUMMA # / MEOH Vial # | Collection Date | Time | Sampled By | Matrix | # of bottles | Number of preserved Bottles | Requested Analysis | Matrix Codes / LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|
| -1 | MW-16 32458 | | 10/19/05 | 1530 | BA | GW | 2 | X | | 926 |
| -2 | MW-1 | | | 1535 | | | | X | | |
| -3 | MW-8 | | | 1511 | | | | X | | |
| -4 | MW-9 | | | 1604 | | | | X | | |
| -5 | MW-10 | | | 1500 | | | | X | | |
| -6 | MW-11 | | | 1505 | | | | X | | |
| -7 | MW-12 | | | 1516 | | | | X | | |
| -8 | MW-13 | | | 1542 | | | | X | | |
| -9 | MW-14 | | | 1550 | | | | X | | |
| -10 | MW-15 | | | 1557 | | | | X | | |

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OL - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; LAB USE ONLY

**Turnaround Time (Business Days)**

- [X] Std. 15 Business Days
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

**Data Deliverable Information**

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format

Commercial "A" = Results Only

**Comments / Remarks**

NABs

Sample Custody must be documented below each time samples change possession, including courier delivery.

| Relinquished by Sampler | Date Time | Received by | Relinquished by | Date Time | Received by |
|---|---|---|---|---|---|
| 1 Robert Adams | 10/21 1700 | 1 Fed X | 2 Fed X | 10/20/05 @1620 | 2 |
| 3 | Date Time | 3 | 4 | Date Time | 4 Received by |
| 5 | Date Time | 5 | Custody Seal # | Preserved where applicable | On Ice / Cooler Temp |

FTR

J13511: Chain of Custody
Page 1 of 1