GEOMATRIX

Progress Report for Facility Investigation
Morton International Inc.

Reading, Ohio

Prepared for:

Morton International, Inc.
Reading, Ohio

Fourth Quarter – October to December 2001

Project 7168

Geomatrix Consultants

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GEOMATRIX

January 14, 2002

Ms. Mirtha Capiro
Project Coordinator
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard, DRE-9J
Chicago, Illinois 60604-3590

RE: Fourth Quarter - October to December 2001,
Progress Report for Facility Investigation,
Morton International Inc.,
Reading, Ohio
RCRA Docket No. R3013-5-00-001

Dear Ms. Capiro:

At the direction of the Rohm and Haas Co., Geomatrix Consultants, Inc. (Geomatrix) is submitting the referenced Progress Report. This submittal has been prepared to meet the requirements of the Administrative Order Paragraph 57 for progress reports. The content of the Progress Report is in accordance with Section 8.3 of the Facility Investigation Work Plan.

If you have any questions, please feel free to contact me at (512) 494-0333.

Sincerely,
GEOMATRIX CONSULTANTS, INC.

Mark P. Hemingway
Principal Hydrogeologist

cc: Mr. Peter V. Palena, The Rohm and Haas Co. (1 copy)
Mr. Eric Walker, The Rohm and Haas Co. (2 copies)
Mr. Todd Quillen, TechLaw Inc. (1 copy)

Attachments – 3 copies

PROGRESS REPORT FOR FACILITY INVESTIGATION
MORTON INTERNATIONAL INC.

Reading, Ohio

USEPA I.D. # OHD 000 724 138

Fourth Quarter – October to December 2001

FACILITY INVESTIGATION FIELD ACTIVITY PROGRESS DURING REPORTING PERIOD

Investigation activities commenced on March 6, 2001, and summaries of the investigation activities for the first, second, and third calendar quarters of 2001 have been provided in three previous progress reports. The Facility Investigation Work Plan (FI Work Plan) and Quality Assurance Project Plan (QAPP) outline the scope of work, project objectives, field operating procedures, and quality assurance protocols. This progress report summarizes the activities performed during the time period October to December 2001. This progress report includes two figures that show the on-site and off-site facility investigation sample locations, respectively, and tables that summarize the analytical data reported to date.

Soil Borings:

Additional soil borings were advanced and select samples were submitted for laboratory analysis this quarter. These additional borings (shown on attached figures) consist of the following:

- **Ten Background Borings** – Twenty background soil samples were collected using direct push methods from ten different off-site locations that could not reasonably have been affected by current or historic Morton Facility releases. Borings B-01 to B-05 were located south of the Morton property. Borings B-06 to B-10 were located at the former City of Reading Municipal Well Field, north of the Morton plant. At each location, one soil sample was collected from shallow surface soils (<2 feet below ground surface (bgs)) and one soil sample was collected from subsurface soils (approximately 9 to 11 feet bgs). Although efforts were made to gain access to all of the properties near the Morton Facility, access for sampling could only be obtained from the City of Reading property. The background samples were analyzed for the full CLP-Target Analyte List (TAL) plus aniline, isodrin, and tin (see Table A1-1 of the FI QAPP for the list of CLP target analytes). Analytical results and preliminary calculations of background concentrations are summarized in the attached tables. Background sampling was performed in accordance with the September 10, 2001 letter submitted to the U.S. Environmental Protection Agency (USEPA).
- **SWMU 2 Boring** – DP29 was advanced just east of the former neutralization tank (SWMU2) using a hand auger, and one sample was collected from 5 feet bgs. Samples from DP29 and DP05, which was completed during the third quarter of the investigation, were collected to geochemically characterize the shallow soils adjacent to the former neutralization tank. Sample DP29-5 was analyzed for the CLP-TAL. The analytical results are summarized in the attached tables.

- **Eight Confirmatory Borings** – Eight direct push borings were installed to confirm the surface geophysical survey results. A more detailed description is described in the Geophysical Anomaly Investigation section below.

Geophysical Anomaly Investigation:

Trenching was conducted in order to assess subsurface anomalies identified during the surface geophysical investigation conducted in March 2001. A total of eight trenches were excavated to depths ranging from 12 to 16 feet bgs. Soil samples were collected from the trenches at locations biased to the presence of debris, staining, or elevated photoionization detector (PID) readings, at a typical frequency of two samples per trench. At the Former Swale Area, eight direct push borings were completed in addition to the two trenches. Four soil samples were collected from these eight borings for chemical analysis. Soil samples were analyzed for the Appendix IX-TAL (see Table A1-2 of the FI QAPP for the list of App. IX target analytes). The analytical results from the trench samples are summarized in the attached tables; the results from the direct push borings are pending.

A table that summarizes the findings of the trenching investigation is included as an attachment to this progress report. There was a strong correlation between the occurrence of geophysical anomalies and the presence of metallic objects.

Well Development and Well Sampling

The completion of well development of wells installed during Phase 2 (UAW10-50, UAW10-80, UAW16-10, UAW18-10, UAW22-20, UAW23-20, UAW24-80, UAW25-20, and LAW12-60) and the collection of Phase 2 groundwater samples was completed in October 2001. Groundwater samples were analyzed for either the CLP-TAL or the App. IX-TAL, depending on the protocols specified in the FI Work Plan.

In November 2001, Geomatrix performed the Phase 3 groundwater sampling and water level measurements of all monitoring wells. Groundwater samples were analyzed for either the CLP-TAL or the App. IX-TAL, depending on the protocols specified in the FI Work Plan.

Seep and Sediment Sampling at Mill Creek

Twelve sediment samples were collected along the east bank of Mill Creek. These samples were collected adjacent to the stream monitoring stations positioned at 100-foot increments along the section of Mill Creek adjacent to the Morton facility. Two seep samples were also collected at locations where small seeps were observed along the creek bank west of the Morton facility. The seep and sediment samples were analyzed for the seep/sediment-target analyte list that was provided to the USEPA, prior to sample collection.

An evaluation of the data associated with the Mill Creek investigation was summarized in a letter prepared by Geomatrix Consultants Inc. (Geomatrix) and submitted to the USEPA on December 20, 2001.

Combined Sewer System Evaluation (SWMU 11)
The combined sewer system evaluation was completed using a combination of camera surveys, borings, and shallow monitoring wells. The results of this evaluation are currently under review.

Aquifer Testing
Step drawdown tests were performed on well clusters UAW-02-20/UAW-02-40, UAW15-20/UAW15-40, and UAW20-60/EPA-2. The results from the tests are currently being evaluated.

Sampling
The following samples were collected for chemical analysis:

- 52 groundwater samples
- 42 soil samples
- 13 sediment samples
- 2 seep samples

These quantities include duplicate samples. In accordance with the FI Work Plan QAPP, the appropriate number of quality assurance/quality control samples were also collected.

The following samples were split with the on-site USEPA representatives from TechLaw, Inc.:

- T-2-9 (11/8/01 soil sample from Trench 2)
- SS-1 (10/11/01 split volatile organics, seep sample from Mill Creek station SS-1)
- UAW-14-10 (11/9/01 monitoring well sample)
- UAW-11-10 (11/12/01 monitoring well sample)

Survey
Abercrombie and Associates, licensed professional surveyors, surveyed the Phase 2 monitoring wells, on-site DPT sample locations, off-site/background sample locations, and the existing USEPA wells.

Sample Analysis
Severn Trent Laboratories (STL) is performing the analysis of the project samples. Samples were analyzed by STL for the parameters specified in the approved QAPP and as referenced above. During this reporting period, STL continued to provide final analytical data for investigation samples. Draft tables summarizing the analytical results

compiled since the beginning of the Facility Investigation are included as an attachment to this report.

SIGNIFICANT FINDINGS

Although data evaluation is in progress, the following may be summarized as preliminary findings:

- There appears to be a complete hydrologic pathway between the uppermost groundwater underlying the Morton Facility and neighboring facilities and Mill Creek. A saturated sand underlies most of the western portion of the Morton Facility (and apparently surrounding areas) at approximately the same elevation as the lower creek bank. Groundwater flow within this zone is generally to the west, from the Morton Facility toward Mill Creek. Visual evidence of seepage has been observed along the east bank of Mill Creek. Two relatively small seeps have been observed west of the Morton Facility, and one large seep has been observed to the north of the Morton Facility. Samples from the two seeps observed west of the Morton Facility and sediment samples collected along the side bank of Mill Creek contain low levels of metals, volatile organics (VOCs), and semivolatile organics (SVOCs), including pesticides.

- Trenching at locations of geophysical anomalies in the Former Swale Area (SWMU 10) supported the results of the surface geophysical survey. The surface geophysical survey and confirmatory sampling do not support historical anecdotal reports that large numbers of fiber and metal drums of waste were buried in the area. The trenching results are consistent with the historical documentation that the area contains waste from the former dairy, construction rubble, demolition debris, fill dirt, and neutralized acid wastes (lime sludge).

- Site specific background soil samples were collected for geochemical analyses on October 9, 2001. A preliminary statistical evaluation has been performed on the resulting analytical data to calculate soil background concentrations for 20 metals at the 95 percent upper tolerance limits. At this time, a background evaluation has not been completed for the organic constituents.

  Statistical evaluations grouped the metals results into the following data sets:
  - 10 surface soil samples (samples collected within the one to two foot depth range),
  - 11 subsurface soil samples (samples collected below the two foot depth to approximately 11.5 feet below ground surface, and
  - 21 soil samples total (includes surface and subsurface soil).

The statistical values were obtained in accordance with the procedure published in *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities*, dated April 1998. "Tolerance Factors (K) for One-sided Normal Tolerance Intervals with Probability Level (Confidence Factor) Y= 0.95 and Coverage P = 95%" were used from Table 5, Page B-8 of the referenced publication to select values of K for populations of n = 11, 10, and 21, respectively, for surface, subsurface and total number of soil samples (K varies with n).

The statistical evaluations were not performed for constituents having a significant number of non-detect results. Where non-detect results were included in a data set, one-half the value of the detection limit is used in the statistical evaluation. The results of the background statistical evaluations are provided in Table 9 included as an attachment to this progress report. A comparison of the background concentrations to the corresponding applicable ecological data quality limits (EDQL) and the human health screening levels (HHSL) specified in the QAPP supports the following preliminary findings:

- EDQL values for soil are applicable to surface soils, as defined as the upper four feet of soils. Comparison of EDQL values to the statistical surface soil background concentrations show that the surface soil background concentrations are greater than the EDQL for the following:
  - arsenic,
  - barium,
  - cadmium,
  - chromium,
  - cobalt,
  - copper,
  - lead,
  - mercury,
  - thallium,
  - tin,
  - vanadium, and
  - zinc.

- HHSL values are applicable to both the surface and subsurface soils. Comparison of HHSL values to the statistical background concentrations show that background concentrations are greater than the HHSL concentrations for the following:

  - arsenic in surface and subsurface soils,

- chromium in surface soils only,
- iron in surface soils only, and
- thallium in surface and subsurface soils.

- The groundwater at Lower Aquifer well LAW-12-60 was analyzed for the full App IX-TAL. Chemical constituents in groundwater from this well are not consistent with shallow groundwater and soil constituents from the Morton Facility. However, the chlorinated hydrocarbons detected, including 1,1-dichloroethane, 1,2-dichloroethene, and 1,2-dichloroethane, are consistent with the Lower Aquifer contamination associated with a nearby off-site source. Constituents derived from Morton, therefore, are not believed to have migrated to the Lower Aquifer.

CHANGES MADE TO THE FACILITY INVESTIGATION (Variance)

Two variances were logged during the reporting period. These variances are documented in the attached forms entitled "Log of Variance, Nonconformance, or Clarification." It is not anticipated that these variances will affect the project objectives.

PROBLEMS AND REMEDIES IDENTIFIED DURING REPORTING PERIOD (Nonconformance)

No nonconformances were logged during the reporting period.

QUALITY ASSURANCE FIELD AUDIT REPORT

A quality assurance field audit was performed on November 9 to 11, 2001, during groundwater sampling and trenching at the geophysical anomalies. A copy of the Quality Assurance Field Audit Report is attached.

SUMMARY OF SIGNIFICANT CONTACTS

Regulatory (USEPA, USEPA Consultants, OEPA)

The following contacts were made:

- Rohm and Haas, Inc. and Geomatrix submitted multiple emails communicating field schedules and schedule changes to the USEPA and TechLaw, Inc.
- Rohm and Haas, Inc and Geomatrix submitted a letter to USEPA summarizing the evaluation of Mill Creek Sediments on December 20, 2001. This letter

summarized the findings of the assessment of Mill Creek and provided a scope of work to further characterize Mill Creek.

CHANGES IN KEY PERSONNEL DURING REPORTING PERIOD

There were no changes in key personnel during the reporting period.

PROJECTED WORK FOR NEXT REPORTING PERIOD

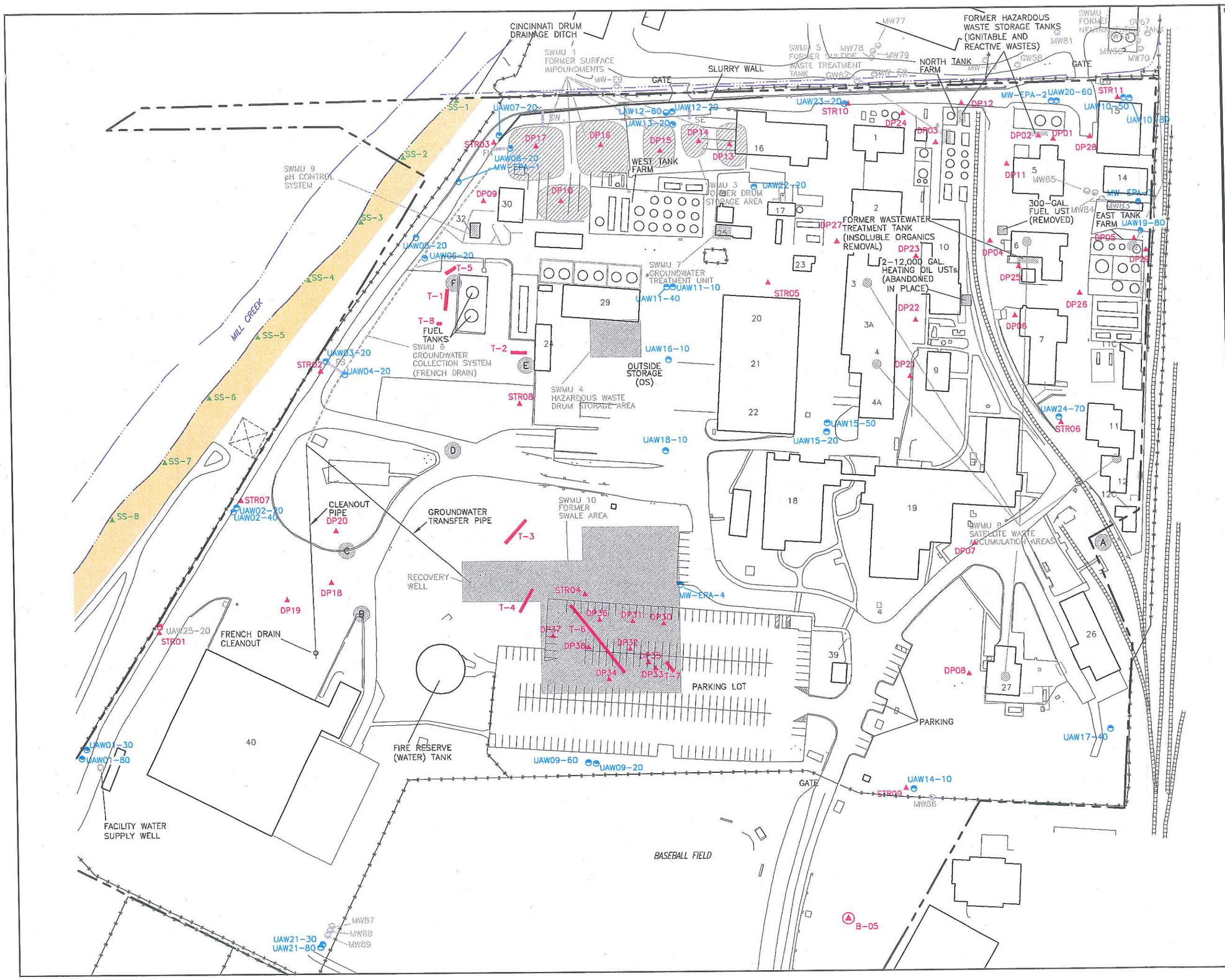
- Data validation
- Collection of sediment samples within Mill Creek.
- Further evaluation of field and chemical data
- Preparation of the final Facility Investigation Report

ATTACHED SUPPORTING DOCUMENTATION

- Summary of Analytical Results Tables and Background Statistics
- Field Activity Daily Logs
- Field Boring Logs
- Monitoring Well Sampling and Development Logs
- Sample Control Logs and Chain of Custody Records
- Field Quality Assurance Inspection
- Log of Variance and Nonconformances

Summary of Investigation Areas, Geophysical Anomalies, and Findings from Fourth Quarter 2001 Trenching and Boring

Area	Geophysical Anomaly	Trench or Boring Identification	Findings
Former Swale – facility parking lot	C	T-6	Buried burned wood, fill soil, remains of drum, bottles, spoon, white/hard soil (possibly diatomaceous clay), metal rod, sludge material.
		T-7	No buried materials.
		DP30 to DP38	Traces of broken glass, asphalt, burned material, wood material, diatomaceous clay. Black discoloration noted.
Former Swale-northwest of facility parking lot	D	T-4	1.5 foot diameter metal disc, wire mesh, trash: ceramic pottery, mason jar, Listerine bottle, concrete rubble, glass.
Former Swale – northwest of facility parking lot	E	T-3	Wire mesh, concrete rebar.
Reported Burial Area E – west of Building 24	North Central Anomaly (not assigned letter designation in report)	T-2	No buried materials identified in the trench. A five-gallon paint can was removed from the location, however, at the time of the geophysical survey.
Reported Burial Area F – west of fuel tanks	I	T-1	Old scrap metal (pieces of crushed drum), empty green drum/cemented soil.
		T-5	Large bolt, concrete.
		T-8	18-inch piece of angle iron.



Base Map Source: Abercombie & Associates, Inc.
May 2001

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APPROXIMATE SCALE (FEET)

-N-

EXPLANATION

- T-3 — TRENCH LOCATION
- B-05 — BACKGROUND SAMPLE LOCATION
- DP14 — DIRECT PUSH LOCATION
- DIRECT PUSH – FRENCH DRAIN AND SLURRY WALL CONFIRMATION LOCATION
- STR09 — STRATIGRAPHIC BORING LOCATION
- UAW11-40 — UPPER AQUIFER WELL
- UAW12-60 — LOWER AQUIFER WELL
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- RECONNAISSANCE OF MILL CREEK
- SS-2 — STREAM STATION LOCATION (SEDIMENT AND SEEP SAMPLING OPTICAL BRIGHTNER TESTING)
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION (PRC, 1993)
- MORTON FACILITY PROPERTY BOUNDARY
- LOCATION OF REPORTED WASTE BURIAL
- RECOVERY WELL LOCATION
- CW50 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

USEPA ID NO. OHD 000 724 138
FOURTH QUARTER – OCTOBER TO DECEMBER 2001

PROGRESS REPORT FOR FACILITY INVESTIGATION

MORTON INTERNATIONAL, INC.
READING, OHIO

GEOMATRIX

Project No.	Figure
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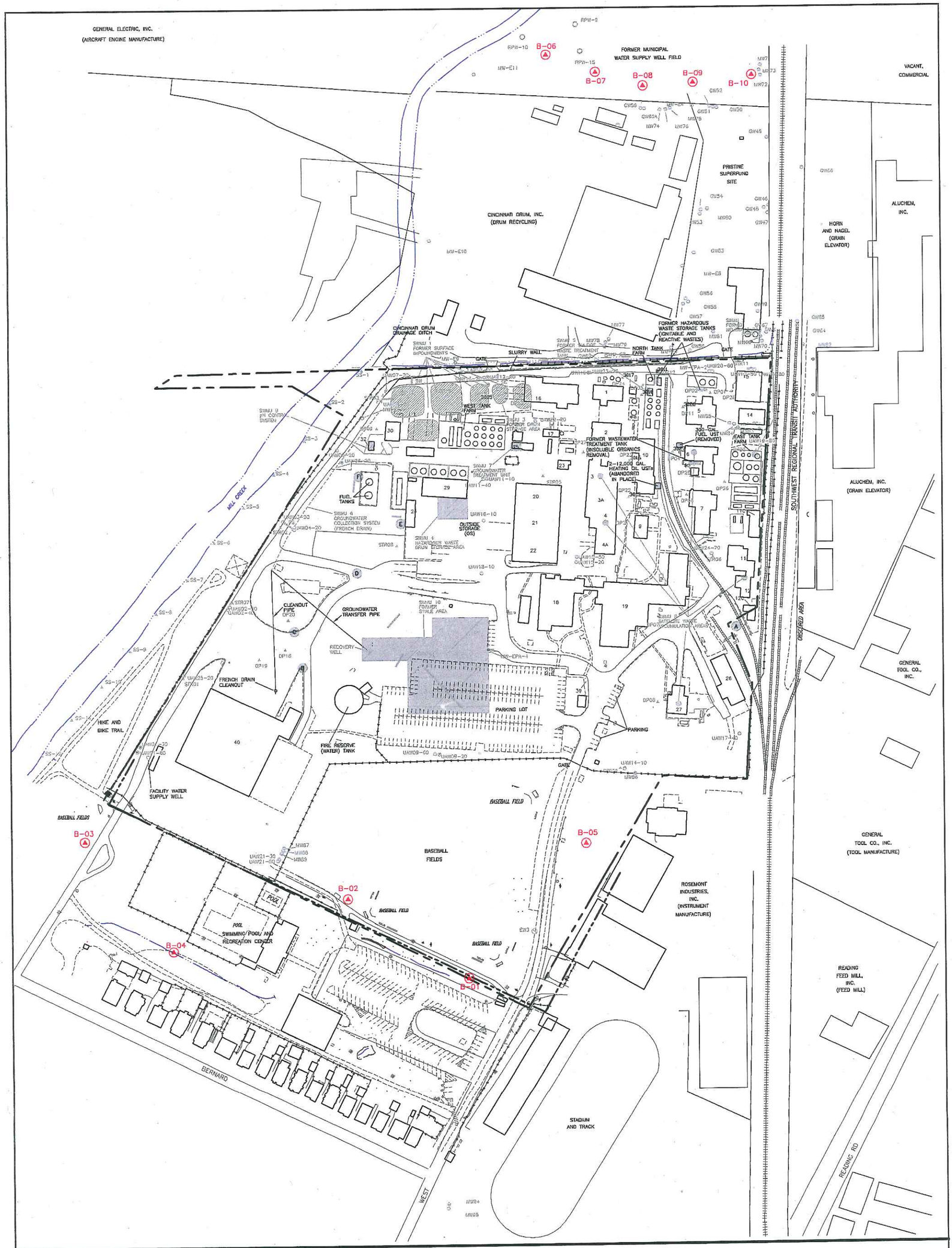

Base Map Source: Abercombie & Associates, Inc., May 2001 and American Process Design, Inc., Cincinnati, OH, June 1998.

EXPLANATION

- BACKGROUND SAMPLE LOCATION
- DIRECT PUSH LOCATION
- DIRECT PUSH – FRENCH DRAIN AND SLURRY WALL LOCATION CONFIRMATION
- STRATIGRAPHIC BORING LOCATION
- UPPER AQUIFER WELL
- LOWER AQUIFER WELL
- SS-2 STREAM STATION LOCATION
- MW-EPA-1 UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- MORTON FACILITY PROPERTY BOUNDARY
- LOCATION OF REPORTED WASTE BURIAL
- RECOVERY WELL LOCATION (APPENDIX IX ANALYSIS)
- GW50 PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

N

0 100 200
APPROXIMATE SCALE (FEET)

FOURTH QUARTER–OCTOBER TO DECEMBER 2001
BACKGROUND SOIL SAMPLE LOCATIONS
PROGRESS REPORT FOR FACILITY INVESTIGATION
MORTON INTERNATIONAL, INC.
READING, OHIO
USEPA I.D. NO. OHD 000 724 138

GEOMATRIX

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Summary of Analytical Results Tables and Background Statistics

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Table 3	Summary of Pesticides and PCBs Data Soil and Sediment Samples
Table 4	Summary of Metals Data Soil and Sediment Samples
Table 5	Summary of Volatile Organic Data Groundwater and Seep Samples
Table 6	Summary of Semivolatile Organic Data Groundwater and Seep Samples
Table 7	Summary of Pesticides and PCBs Data Groundwater and Seep Samples
Table 8	Summary of Metals Data Groundwater and Seep Samples
Table 9	Metals Background Sample Data Statistical Analysis Work Sheet

DRAFT

Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	2-Butanone (MEK)	Acetone	Acrylonitrile	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Cyclohexane	Dichlorodifluoromethane	Ethylbenzene	Iodomethane
B01-1.5'	10/9/2001	<0.0046	<0.0046	<0.0046	<0.018		0.0044 J B		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0023	<0.0092	<0.0046	<0.0046	
B01-11.5'	10/9/2001	<0.0057	<0.0057	<0.0057			0.0061 J B		<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0029	<0.011	<0.0057	<0.0057	
B02-1.5'	10/9/2001	<0.0046	<0.0046	<0.0046	<0.018		0.0044 J B		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0023	<0.0092	<0.0046	<0.0046	
B02-11.5'	10/9/2001	<0.0058	<0.0058	<0.0058	0.004 J B		0.0055 J B		<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.0029	<0.012	<0.0058	<0.0058	
B03-1.5'	10/9/2001	<0.0048	<0.0048	<0.0048	<0.019		0.004 J B		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0024	<0.0096	<0.0048	<0.0048	
B03-11.5'	10/9/2001	<0.0054	<0.0054	<0.0054	<0.022		0.0051 J B		<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0027	<0.011	<0.0054	<0.0054	
B04-1.5'	10/9/2001	<0.0054	<0.0054	<0.0054	<0.022		0.0044 J B		<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0027	<0.011	<0.0054	<0.0054	
B04-1.5' Blind Dup	10/9/2001	<0.0055	<0.0055	<0.0055	<0.022		0.005 J B		<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0027	<0.011	<0.0055	<0.0055	
B04-11.5'	10/9/2001	<0.0052	<0.0052	<0.0052	0.0037 J B		0.0053 J B		<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.0026	<0.01	<0.0052	<0.0052	
B05-1.5'	10/9/2001	<0.0046	<0.0046	<0.0046	<0.018		0.0039 J B		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0023	<0.0092	<0.0046	<0.0046	
B05-11.5'	10/9/2001	<0.0059	<0.0059	<0.0059	<0.024		0.006 J B		<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.003	<0.012	<0.0059	<0.0059	
B06-1.5'	10/9/2001	<0.0049	<0.0049	<0.0049	0.0033 J B		0.0047 J B		<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0024	<0.0098	<0.0049	<0.0049	
B06-11'	10/9/2001	<0.0053	<0.0053	<0.0053	<0.021		0.0047 J B		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0026	<0.011	<0.0053	<0.0053	
B07-1'	10/9/2001	<0.0058	<0.0058	<0.0058	<0.023		0.0051 J B		<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.0029	<0.012	<0.0058	<0.0058	
B07-9'	10/9/2001	<0.0051	<0.0051	<0.0051	<0.02		0.0046 J B		<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.01	<0.0026	<0.01	<0.0051	<0.0051	
B08-2'	10/9/2001	<0.0053	<0.0053	<0.0053	<0.021		0.0045 J B		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0026	<0.011	<0.0053	<0.0053	
B08-9'	10/9/2001	<0.0048	<0.0048	<0.0048	0.0041 J B		0.0088 J B		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0024	<0.0096	<0.0048	<0.0048	
B09-2'	10/9/2001	<0.0093	<0.0093	<0.0093	<0.037		0.012 J B		<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.019	<0.0046	<0.019	<0.0093	<0.0093	
B09-10'	10/9/2001	0.0083	0.0052 J	0.027	<0.023		0.0064 J B		0.00078 J	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	0.027	<0.012	<0.0058	<0.0058	
B10-2'	10/9/2001	<0.011	<0.011	<0.011	<0.043		<0.043		<0.011	<0.011	<0.011	<0.011	<0.011	<0.021	<0.0054	<0.021	<0.011	<0.011	
B10-11'	10/9/2001	<0.005	<0.005	<0.005	<0.02		0.0047 J B		<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.0025	<0.01	<0.005	<0.005	
DP01-2'	7/24/2001	<1.4	<1.4	<1.4	0.64 J		15		<1.4	<1.4	<1.4	<1.4	<1.4	<2.8	<0.71	<2.8	<1.4	5.7	
DP01-9.5'	7/24/2001	<0.26	<0.26	<0.26	<1		<1		<0.26	<0.26	<0.26	<0.26	<0.26	<0.52	<0.13	<0.52	<0.26	0.16 J	
DP02-2'	7/24/2001	<0.0044	<0.0044	<0.0044	<0.018		0.015 J		<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088	<0.0022	<0.0088	<0.0044	<0.0044	
DP02-9.5'	7/24/2001	<0.0055	<0.0055	<0.0055	<0.022		0.0093 J		<0.0055	<0.0055	<0.0055	0.013	<0.0055	<0.011	<0.0028	<0.011	<0.0055	<0.0055	
DP03-2'	7/24/2001	<0.0047	<0.0047	<0.0047	<0.019		<0.019		<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093	<0.0023	<0.0093	<0.0047	<0.0047	
DP03-8.5'	7/24/2001	<0.0045	<0.0045	<0.0045	<0.018		<0.018		<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0022	<0.009	<0.0045	<0.0045	
DP05-1'	7/25/2001	<0.0046	<0.0046	<0.0046	<0.018		<0.018		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0023	<0.0091	<0.0046	<0.0046	
DP05-8.5'	7/25/2001	<0.0044	<0.0044	<0.0044	<0.017		<0.017		<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0087	<0.0022	<0.0087	<0.0044	<0.0044	
DP07-9'	7/26/2001	<0.0046	<0.0046	<0.0046	<0.018		<0.018		<0.0046	0.0015 J	<0.0046	<0.0046	0.0036 J	<0.0091	<0.0023	<0.0091	<0.0046	<0.0046	
DP08-6'	7/26/2001	<0.0057	<0.0057	<0.0057	<0.023		0.007 J		<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0028	<0.011	<0.0057	<0.0057	
DP08-11'	7/26/2001	<0.0049	<0.0049	<0.0049	<0.02		<0.02		<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0025	<0.0098	<0.0049	<0.0049	
DP09-12'	7/27/2001	<0.0048	<0.0048	<0.0048	<0.019		4.1		<0.0048	<0.0048	0.2	<0.0048	<0.0048	<0.0095	<0.0024	<0.0095	<0.0048	<0.0048	
DP10-2'	7/27/2001	<0.0048	<0.0048	<0.0048	0.0037 J		0.0091 J	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0024		<0.0048	<0.0048	<0.0048
DP10-10'	7/27/2001	<0.27	<0.27	<0.27	0.17 J B		<1.1	<5.3	<0.27	<0.27	0.18 J	<0.27	<0.27	<0.27	<0.13		<0.27	0.13 J	<0.27
DP10-10' Blind Dup	7/27/2001	<0.27	<0.27	<0.27	0.17 J B		<1.1	<5.3	<0.27	<0.27	0.095 J	<0.27	<0.27	<0.27	<0.13		<0.27	0.084 J	<0.27
DP12-1.5'	7/28/2001	<0.004	<0.004	<0.004	<0.016		0.0019 J		<0.004	<0.004	<0.004	<0.004	<0.004	<0.008	<0.002	<0.008	<0.004	<0.004	
DP12-9'	7/28/2001	<0.0052	<0.0052	<0.0052	<0.021		<0.021		<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.0026	<0.01	<0.0052	<0.0052	
DP13-3'	7/29/2001	<0.0053	<0.0053	<0.0053	0.0031 J		0.0085 J	<0.11	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0027		<0.0053	<0.0053	<0.0053

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Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	2-Butanone (MEK)	Acetone	Acrylonitrile	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Cyclohexane	Dichlorodifluoromethane	Ethylbenzene	Iodomethane
DP13-11'	7/29/2001	<5.3	<5.3	<5.3	<21		<21	<110	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<2.7		<5.3	<5.3	<5.3
DP14-3'	7/29/2001	<0.22	<0.22	<0.22	<0.89		<0.89	<4.5	<0.22	<0.22	1.5	<0.22	<0.22	<0.22	<0.11		<0.22	<0.22	<0.22
DP14-9'	7/29/2001	<0.26	<0.26	<0.26	<1		<1	<5.2	<0.26	<0.26	0.89	<0.26	<0.26	<0.26	<0.13		<0.26	<0.26	<0.26
DP15-2'	7/29/2001	<0.0048	<0.0048	<0.0048	0.0051 J		0.01 J	<0.097	0.0017 J	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0024		<0.0048	<0.0048	<0.0048
DP15-9'	7/29/2001	<0.31	<0.31	<0.31	<1.2		<1.2	<6.2	<0.31	<0.31	0.22 J	<0.31	<0.31	<0.31	<0.16		<0.31	<0.31	<0.31
DP16-2.8'	7/30/2001	<0.0055	<0.0055	<0.0055	<0.022		<0.022	<0.11	<0.0055	<0.0055	<0.0055	0.0043 J	<0.0055	<0.0055	<0.0027		<0.0055	<0.0055	<0.0055
DP16-12.5'	7/30/2001	<12	<12	<12	<49		<49	<250	<12	<12	<12	1.5 J	<12	<12	<6.1		<12	6.2 J	<12
DP17-3'	7/30/2001	<0.26	<0.26	<0.26	<1		<1	<5.2	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.13		<0.26	<0.26	<0.26
DP17-13'	7/30/2001	<1.5	<1.5	<1.5	<6.1		0.52 J	1.1 J	0.67 J	<1.5	0.95 J	0.81 J	<1.5	<1.5	<0.76		<1.5	1.7	<1.5
DP18-2'	7/30/2001	<0.005	<0.005	<0.005	<0.02		<0.02		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.0099	<0.005	<0.005	
DP18-14.5'	7/30/2001	<0.0049	<0.0049	<0.0049	<0.019		<0.019		<0.0049	<0.0049	<0.0049	0.00053 J	<0.0049	<0.0049	<0.0024	<0.0097	<0.0049	<0.0049	
DP19-2'	7/30/2001	<0.0059	<0.0059	<0.0059	0.0082 J		0.02 J		<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0029	<0.012	0.0032 J	<0.0059	
DP19-13'	7/30/2001	<0.0057	<0.0057	<0.0057	<0.023		<0.023		<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0029	<0.011	<0.0057	<0.0057	
DP20-2'	7/30/2001	<0.005	<0.005	<0.005	<0.02		<0.02		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.0099	<0.005	<0.005	
DP20-14.5'	7/30/2001	<0.26	<0.26	<0.26	<1		<1		<0.26	<0.26	<0.26	0.079 J	<0.26	<0.26	<0.13	<0.52	<0.26	<0.26	
DP23-2.5'	8/1/2001	<0.0062	<0.0062	<0.0062	<0.025		<0.025		<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	<0.012	<0.0031	<0.012	<0.0062	<0.0062	
DP23-9'	8/1/2001	<0.0053	<0.0053	<0.0053	<0.021		<0.021		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0027	<0.011	<0.0053	<0.0053	
DP25-2.5'	8/7/2001	<0.0053	<0.0053	<0.0053	<0.021		0.0045 J		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0027	<0.011	<0.0053	<0.0053	
DP25-2.5' Blind Dup	8/7/2001	<0.0047	<0.0047	<0.0047	<0.019		0.0032 J		<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0024	<0.0094	<0.0047	<0.0047	
DP25-7.5'	8/7/2001	<0.0044	<0.0044	<0.0044	<0.018		0.0025 J		<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0089	<0.0022	<0.0089	<0.0044	<0.0044	
DP29-5	11/9/2001	<0.0056	<0.0056	<0.0056	<0.022		0.0036 J B		<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0028	<0.011	<0.0056	<0.0056	
SS-1	10/11/2001	<0.0049	<0.0049				0.0047 J		0.0036 J	<0.0049	<0.0049	0.018	<0.0049				<0.0049	0.00077 J	
SS-2	10/11/2001	<0.0048	<0.0048				<0.019		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048				<0.0048	<0.0048	
SS-3	10/11/2001	<0.0061	<0.0061				<0.024		<0.0061	<0.0061	<0.0061	<0.0061	<0.0061				<0.0061	<0.0061	
SS-4	10/11/2001	<0.0054	<0.0054				0.018 J		<0.0054	<0.0054	0.0072	<0.0054	<0.0054				<0.0054	<0.0054	
SS-5 ~25' South	10/11/2001	<0.0057	<0.0057				0.0083 J		<0.0057	<0.0057	<0.0057	0.0043 J	<0.0057				<0.0057	<0.0057	
SS-5 Blind Dup.	10/11/2001	<0.0059	<0.0059				0.0067 J		<0.0059	<0.0059	<0.0059	0.0037 J	<0.0059				<0.0059	<0.0059	
SS-6	10/11/2001	<0.0054	<0.0054				<0.022		<0.0054	<0.0054	<0.0054	<0.0054	<0.0054				<0.0054	<0.0054	
SS-7	10/11/2001	<0.0051	<0.0051				<0.02		<0.0051	<0.0051	<0.0051	<0.0051	<0.0051				<0.0051	<0.0051	
SS-8	10/11/2001	<0.0066	<0.0066				0.0029 J		<0.0066	<0.0066	<0.0066	<0.0066	<0.0066				<0.0066	<0.0066	
SS-9	10/11/2001	<0.0059	<0.0059				0.0029 J		<0.0059	<0.0059	<0.0059	<0.0059	<0.0059				<0.0059	<0.0059	
SS-10	10/11/2001	<0.005	<0.005				<0.02		<0.005	<0.005	<0.005	<0.005	<0.005				<0.005	<0.005	
SS-11	10/11/2001	<0.0059	<0.0059				<0.023		<0.0059	<0.0059	<0.0059	<0.0059	<0.0059				<0.0059	<0.0059	
SS-12	10/11/2001	<0.0055	<0.0055	<5.5	<22		<0.022		<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<5.5	<2.8		<0.0055	<0.0055	
STR01-3'	3/8/2001	<0.0045	<0.0045	<0.0045	<0.018		<0.018		<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0091	<0.0023	<0.0091	<0.0045	<0.0045	
STR01-21'	3/8/2001	<0.0052	<0.0052	<0.0052	<0.021		0.015 J		<0.0052	<0.0052	<0.0052	0.013	<0.0052	<0.01	<0.0026	<0.01	<0.0052	<0.0052	
STR01-73'	3/9/2001	<0.0055	<0.0055	<0.0055	<0.022		<0.022		0.0057	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0027	0.026	<0.0055	0.005 J	
STR01-88'	3/9/2001	<0.0071	<0.0071	<0.0071	<0.028		<0.028		0.0087	<0.0071	0.0076	<0.0071	<0.0071	<0.014	<0.0035	0.022	<0.0071	0.0064 J	
STR02-1'	3/13/2001	<0.0052	<0.0052	<0.0052	<0.021		<0.021		<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.0026	<0.01	<0.0052	<0.0052	

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Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	2-Butanone (MEK)	Acetone	Acrylonitrile	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Cyclohexane	Dichlorodifluoromethane	Ethylbenzene	Iodomethane
STR02-12.5'	3/13/2001	<0.0051	<0.0051	<0.0051	<0.02		0.0071 J		<0.0051	<0.0051	0.0039 J	0.026	<0.0051	<0.01	<0.0026	<0.01	<0.0051	<0.0051	
STR03-4'	3/14/2001	<0.25	<0.25	<0.25	<1		<1	<5	<0.25	<0.25	<0.25	0.31	<0.25	<0.25	<0.13		<0.25	<0.25	<0.25
STR03-12.5'	3/14/2001	<0.0048	<0.0048	<0.0048	<0.019		0.019	<0.095	<0.0048	<0.0048	0.0026 J	0.029	<0.0048	<0.0048	<0.0024		<0.0048	0.01	<0.0048
STR04-1.5'	3/19/2001	<0.0051	<0.0051	<0.0051	<0.02		<0.02		<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.01	<0.0026	<0.01	<0.0051	<0.0051	
STR04-17.5'	3/19/2001	<0.0052	<0.0052	<0.0052	<0.021		0.0076 J		<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.0026	<0.01	<0.0052	<0.0052	
STR04-17.5' DUP	3/19/2001	<0.0046	<0.0046	<0.0046	<0.019		<0.019		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0023	<0.0093	<0.0046	<0.0046	
STR05-1.5'	3/10/2001	<0.0048	<0.0048	<0.0048	<0.019		0.011 J		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0024	<0.0096	<0.0048	<0.0048	
STR05-9'	3/10/2001	<0.0046	<0.0046	<0.0046	<0.019		<0.019		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0023	<0.0093	<0.0046	<0.0046	
STR05-11.3'	3/10/2001	<0.0044	<0.0044	<0.0044	<0.017		0.0072 J		<0.0044	<0.0044	0.0029 J	0.0068	<0.0044	<0.0087	<0.0022	<0.0087	<0.0044	<0.0044	
STR06-1'	3/11/2001	<0.0048	<0.0048	<0.0048	<0.019		0.013 J		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097	<0.0024	<0.0097	<0.0048	<0.0048	
STR06-15'	3/11/2001	<0.0045	<0.0045	<0.0045	<0.018		<0.018		<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.0023	<0.009	<0.0045	<0.0045	
STR07-1.5'	3/21/2001	<0.0053	<0.0053	<0.0053	0.0091 J		0.03		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0027	<0.011	<0.0053	<0.0053	
STR07-18'	3/21/2001	<0.26	<0.26	<0.26	<1.1		<1.1		<0.26	<0.26	<0.26	1.1	<0.26	<0.53	<0.13	<0.53	<0.26	<0.26	
STR08-1.5'	3/26/2001	<0.0053	<0.0053	<0.0053	<0.021		<0.021		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0026	<0.011	<0.0053	<0.0053	
STR08-13'	3/26/2001	<0.24	<0.24	<0.24	<0.96		3.2		<0.24	<0.24	0.38	<0.24	<0.24	<0.48	<0.12	<0.48	<0.24	<0.24	
STR08-13' DUP	3/26/2001	<0.23	<0.23	<0.23	<0.94		5.9		<0.23	<0.23	0.29	0.079 J	<0.23	<0.47	<0.12	<0.47	<0.23	<0.23	
STR09-7.5'	4/4/2001	<0.0054	<0.0054	<0.0054	<0.022		<0.022		<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0027	<0.011	<0.0054	<0.0054	
STR10-1.5'	4/7/2001	<0.0044	<0.0044	<0.0044	<0.018		<0.018	<0.088	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0022		<0.0044	<0.0044	<0.0044
STR10-11'	4/7/2001	0.022	0.0026 J	0.0051 J	<0.023		0.0081 J	<0.11	0.0022 J	<0.0056	<0.0056	0.0038 J	<0.0056	<0.0056	0.0051		<0.0056	<0.0056	<0.0056
STR11-2'	8/20/2001	<0.0048	<0.0048	<0.0048	<0.019		<0.019		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0024	<0.0096	<0.0048	<0.0048	
STR11-9'	8/20/2001	<0.0045	<0.0045	<0.0045	<0.018		<0.018		<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0089	<0.0022	<0.0089	<0.0045	<0.0045	
STR11-9' Blind Dup	8/20/2001	<0.0047	<0.0047	<0.0047	<0.019		<0.019		<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093	<0.0023	<0.0093	<0.0047	<0.0047	
T-1-4	11/8/2001	<1.3	<1.3	<1.3		<5.3	1.8 J B	<27	<1.3	<1.3	<1.3	<1.3	<1.3	1.7	<0.67		<1.3	<1.3	36
T-1-6	11/8/2001	<0.005	<0.005	<0.005		0.0066 J	0.012 J B	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.0025		<0.005	<0.005	0.18
T-2-3	11/8/2001	<0.0054	<0.0054	<0.0054		<0.022	0.0028 J B	<0.11	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0027		<0.0054	<0.0054	<0.0054
T-2-9	11/8/2001	<0.25	<0.25	<0.25		0.13 J B	0.54 J B	<5.1	<0.25	<0.25	<0.25	0.98	<0.25	<0.25	<0.13		<0.25	<0.25	<0.25
T-3-3	11/8/2001	<0.25	<0.25	<0.25		<1	0.58 J B	<5	0.037 J	<0.25	<0.25	<0.25	<0.25	<0.25	<0.13		<0.25	0.13 J B	<0.25
T-3-11	11/8/2001	<0.0047	<0.0047	<0.0047		<0.019	0.0027 J B	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0023		<0.0047	<0.0047	<0.0047
T-4-3	11/9/2001	<0.0045	<0.0045	<0.0045		<0.018	0.007 J B	<0.091	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0023		<0.0045	<0.0045	<0.0045
T-4-9	11/9/2001	<0.0055	<0.0055	<0.0055		<0.022	0.0033 J B	<0.11	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0027		<0.0055	<0.0055	<0.0055
T-5-3	11/9/2001	<0.0064	<0.0064	<0.0064		<0.026	0.0035 J B	<0.13	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0032		<0.0064	<0.0064	<0.0064
T-5-9	11/9/2001	<0.0053	<0.0053	<0.0053		0.0087 J	0.028 B	<0.11	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0026		<0.0053	<0.0053	<0.0053
T-6-3	11/10/2001	<0.0057	<0.0057	<0.0057		0.0045 J	0.027 B	<0.11	<0.0057	<0.0057	<0.0057	0.017	<0.0057	<0.0057	<0.0028		<0.0057	<0.0057	<0.0057
T-6-7.5	11/11/2001	<0.68	<0.68	<0.68		<2.7	23 B	<14	<0.68	<0.68	0.27 J	<0.68	<0.68	<0.68	<0.34		<0.68	0.24 J B	0.6 J B
T-6-10	11/10/2001	<0.24	<0.24	<0.24		<0.95	0.42 J B	<4.8	<0.24	<0.24	<0.24	2.5	<0.24	<0.24	<0.12		<0.24	<0.24	<0.24
T-8-3	11/11/2001	<0.0055	<0.0055	<0.0055		<0.022	0.0032 J B	<0.11	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0027		<0.0055	<0.0055	<0.0055
T-8-9	11/11/2001	<0.0054	<0.0054	<0.0054		<0.022	0.0032 J B	<0.11	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0027		<0.0054	<0.0054	<0.0054
UAW01-30-1.5'	4/2/2001	<0.0054	<0.0054	<0.0054	<0.021		<0.021		<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0027	<0.011	<0.0054	<0.0054	
UAW01-30-15'	4/2/2001	<0.0056	<0.0056	<0.0056	<0.022		<0.022		<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0028	<0.011	<0.0056	<0.0056	

Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	2-Butanone (MEK)	Acetone	Acrylonitrile	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Cyclohexane	Dichlorodifluoromethane	Ethylbenzene	Iodomethane
UAW04-20-10'	3/23/2001	<7.1	<7.1	<7.1	<28		<28		<7.1	<7.1	<7.1	<7.1	<7.1	<14	<3.5	<14	<7.1	<7.1	
UAW05-20-13'	3/23/2001	<0.22	<0.22	<0.22	<0.9		<0.9		<0.22	<0.22	<0.22	1.6	<0.22	<0.45	<0.11	<0.45	<0.22	<0.22	
UAW06-20-1.5'	3/26/2001	<0.0053	<0.0053	<0.0053	0.0072 J		0.029		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0026	<0.011	<0.0053	<0.0053	
UAW06-20-11.5'	3/26/2001	<0.005	<0.005	<0.005	<0.02				<0.005	<0.005	0.036	0.043	<0.005	<0.0099	<0.0025	<0.0099	<0.005	<0.005	
UAW08-20-13'	3/24/2001	<0.46	<0.46	<0.46	<1.8		<1.8	<9.2	0.19 J	<0.46	0.28 J	0.26 J	<0.46	<0.92	<0.23		<0.46	0.32 J	<0.46
UAW09-20-1.5'	3/27/2001	<0.0049	<0.0049	<0.0049	<0.02		<0.02		<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0025	<0.0098	<0.0049	<0.0049	
UAW09-20-15'	3/27/2001	<0.0054	<0.0054	<0.0054	<0.021		<0.021		<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0027	<0.011	<0.0054	<0.0054	
UAW11-40-2'	4/17/2001	<0.0048	<0.0048	<0.0048	<0.019		0.013 J		<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097	<0.0024	<0.0097	<0.0048	<0.0048	
UAW11-40-10'	4/17/2001	<0.28	<0.28	<0.28	<1.1		2.3		<0.28	<0.28	<0.28	<0.28	<0.28	<0.56	<0.14	<0.56	<0.28	<0.28	
UAW12-20-12'	3/24/2001	<0.3	<0.3	<0.3	<1.2		<1.2	<6	<0.3	<0.3	<0.3	0.86	<0.3	<0.6	<0.15		<0.3	<0.3	<0.3
UAW13-20-1.5'	3/24/2001	<0.0047	<0.0047	<0.0047	<0.019		0.025	<0.093	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093	<0.0023		<0.0047	<0.0047	<0.0047
UAW13-20-11.5'	3/24/2001	<0.28	<0.28	<0.28	<1.1		<1.1	<5.7	<0.28	<0.28	<0.28	<0.28	<0.28	<0.57	<0.14		<0.28	<0.28	<0.28
UAW14-10-1.5'	4/4/2001	<0.0049	<0.0049	<0.0049	<0.02		<0.02		<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0099	<0.0025	<0.0099	<0.0049	<0.0049	
UAW15-20-2'	4/9/2001	<0.0043	<0.0043	<0.0043	0.008 J		0.028		<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0086	<0.0022	<0.0086	<0.0043	<0.0043	
UAW15-20-2' DUP	4/9/2001	<0.0046	<0.0046	<0.0046	0.019		0.075		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0023	<0.0093	<0.0046	<0.0046	
UAW15-20-8.5'	4/9/2001	<0.0049	<0.0049	<0.0049	<0.02		<0.02		<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0025	<0.0098	<0.0049	<0.0049	
UAW16-10-2'	8/22/2001	<0.0057	<0.0057	<0.0057	0.0039 J		0.013 J		<0.0057	<0.0057	<0.0057	0.0092	<0.0057	<0.011	<0.0029	<0.011	<0.0057	<0.0057	
UAW16-10-5.5'	8/22/2001	<0.0061	<0.0061	<0.0061	0.0035 J		0.013 J		<0.0061	<0.0061	<0.0061	0.032	<0.0061	<0.012	<0.003	<0.012	<0.0061	<0.0061	
UAW17-40-1.5'	4/5/2001	<0.0046	<0.0046	<0.0046	<0.018		<0.018		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0023	<0.0091	<0.0046	<0.0046	
UAW17-40-5'	4/5/2001	<0.24	<0.24	<0.24	<0.96		0.69 J		<0.24	<0.24	<0.24	<0.24	<0.24	<0.48	<0.12	<0.48	<0.24	<0.24	
UAW18-20-1'	8/23/2001	<0.26	<0.26	<0.26	<1		1.3		<0.26	<0.26	<0.26	<0.26	<0.26	<0.52	<0.13	<0.52	<0.26	<0.26	
UAW18-20-15'	8/23/2001	<0.0047	<0.0047	<0.0047	<0.019		0.0029 J		<0.0047	<0.0047	0.0018 J	0.014	<0.0047	<0.0095	<0.0024	<0.0095	<0.0047	<0.0047	
UAW19-80-1.5'	4/6/2001	<0.005	<0.005	<0.005	<0.02		<0.02		<0.005	<0.005	<0.005	<0.005	<0.005	<0.0099	<0.0025	<0.0099	<0.005	<0.005	
UAW19-80-15'	4/6/2001	<0.0046	<0.0046	<0.0046	<0.018		<0.018		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0023	<0.0091	<0.0046	<0.0046	
UAW20-60-1.5'	4/9/2001	<0.0047	<0.0047	<0.0047	<0.019		<0.019		<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093	<0.0023	<0.0093	<0.0047	<0.0047	
UAW20-60-9.5'	4/9/2001	<0.0053	<0.0053	<0.0053	<0.021		<0.021		<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0026	<0.011	<0.0053	<0.0053	
UAW21-30-1.5'	4/11/2001	<0.005	<0.005	<0.005	<0.02		<0.02		<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.0025	<0.01	<0.005	<0.005	
UAW21-30-10'	4/11/2001	<0.0046	<0.0046	<0.0046	<0.018		<0.018		<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0023	<0.0092	<0.0046	<0.0046	
UAW22-20-2'	9/5/2001	<0.0044	<0.0044	<0.0044	0.0036 J		0.01 J		<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088	<0.0022	<0.0088	<0.0044	<0.0044	
UAW22-20-11'	9/5/2001	<0.0063	<0.0063	<0.0063	<0.025		0.0043 J		<0.0063	<0.0063	0.0064	0.037	<0.0063	<0.013	<0.0031	<0.013	<0.0063	<0.0063	

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Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Isopropylbenzene	Methyl acetate	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)
B01-1.5'	10/9/2001	<0.0046	<0.0092	<0.0092	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0092
B01-11.5'	10/9/2001	<0.0057	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011
B02-1.5'	10/9/2001	<0.0046	<0.0092	<0.0092	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0092
B02-11.5'	10/9/2001	<0.0058	<0.012	<0.012	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.012
B03-1.5'	10/9/2001	<0.0048	<0.0096	<0.0096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0096
B03-11.5'	10/9/2001	<0.0054	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011
B04-1.5'	10/9/2001	<0.0054	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011
B04-1.5' Blind Dup	10/9/2001	<0.0055	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.011
B04-11.5'	10/9/2001	<0.0052	<0.01	<0.01	<0.0052	<0.0052	0.0006 J	<0.0052	<0.01	<0.01
B05-1.5'	10/9/2001	<0.0046	<0.0092	<0.0092	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092	<0.0092
B05-11.5'	10/9/2001	<0.0059	<0.012	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.012
B06-1.5'	10/9/2001	<0.0049	<0.0098	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0098
B06-11'	10/9/2001	<0.0053	<0.011	<0.011	<0.0053	0.002 J	<0.0053	<0.0053	<0.011	<0.011
B07-1'	10/9/2001	<0.0058	<0.012	<0.012	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.012
B07-9'	10/9/2001	<0.0051	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.0051	<0.01	<0.01
B08-2'	10/9/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
B08-9'	10/9/2001	<0.0048	<0.0096	0.00071 J	<0.0048	<0.0048	0.00066 J	<0.0048	<0.0096	<0.0096
B09-2'	10/9/2001	<0.0093	<0.019	<0.019	<0.0093	0.0059 J	<0.0093	<0.0093	<0.019	<0.019
B09-10'	10/9/2001	<0.0058	<0.012	<0.012	<0.0058	0.0022 J	<0.0058	0.0013 J	0.0091 J	<0.012
B10-2'	10/9/2001	<0.011	0.0031 J	<0.021	<0.011	0.0028 J	<0.011	<0.011	<0.021	<0.021
B10-11'	10/9/2001	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DP01-2'	7/24/2001	0.24 J	<2.8	1.3 J	<1.4	<1.4	<1.4	<1.4	<2.8	50
DP01-9.5'	7/24/2001	<0.26	<0.52	<0.52	0.086 J B	<0.26	<0.26	<0.26	<0.52	1.4
DP02-2'	7/24/2001	<0.0044	<0.0088	<0.0088	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088	<0.0088
DP02-9.5'	7/24/2001	<0.0055	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.011
DP03-2'	7/24/2001	<0.0047	<0.0093	<0.0093	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093	<0.0093
DP03-8.5'	7/24/2001	<0.0045	<0.009	<0.009	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.009
DP05-1'	7/25/2001	<0.0046	<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0091
DP05-8.5'	7/25/2001	<0.0044	<0.0087	<0.0087	<0.0044	<0.0044	<0.0044	<0.0044	<0.0087	<0.0087
DP07-9'	7/26/2001	<0.0046	<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0091
DP08-6'	7/26/2001	<0.0057	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011
DP08-11'	7/26/2001	<0.0049	<0.0098	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0098
DP09-12'	7/27/2001	<0.0048	0.07	<0.0095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0095
DP10-2'	7/27/2001				<0.0048	<0.0048	0.00056 J	<0.0048	<0.0048	<0.0095
DP10-10'	7/27/2001				<0.27	<0.27	2.4	<0.27	<0.27	0.32 J
DP10-10' Blind Dup	7/27/2001				<0.27	<0.27	3.8	<0.27	<0.27	0.2 J
DP12-1.5'	7/28/2001	<0.004	<0.008	<0.008	<0.004	<0.004	<0.004	<0.004	<0.008	<0.008
DP12-9'	7/28/2001	<0.0052	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.01
DP13-3'	7/29/2001				<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011

Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Isopropylbenzene	Methyl acetate	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)
DP13-11'	7/29/2001				5.7 B	<5.3	16	<5.3	<5.3	<11
DP14-3'	7/29/2001				0.18 J B	<0.22	0.076 J	<0.22	<0.22	<0.45
DP14-9'	7/29/2001				0.23 J B	<0.26	0.76	<0.26	<0.26	<0.52
DP15-2'	7/29/2001				<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097
DP15-9'	7/29/2001				0.7 B	<0.31	0.44	<0.31	<0.31	<0.62
DP16-2.8'	7/30/2001				0.0014 J B	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
DP16-12.5'	7/30/2001				11 J B	<12	150	<12	<12	24 J
DP17-3'	7/30/2001				0.27 B	<0.26	0.063 J	<0.26	<0.26	0.045 J
DP17-13'	7/30/2001				0.41 J B	<1.5	35	<1.5	<1.5	9.1
DP18-2'	7/30/2001	<0.005	<0.0099	<0.0099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0099
DP18-14.5'	7/30/2001	<0.0049	<0.0097	<0.0097	0.0015 J B	<0.0049	<0.0049	<0.0049	<0.0049	<0.0097
DP19-2'	7/30/2001	<0.0059	0.0024 J	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012
DP19-13'	7/30/2001	<0.0057	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011
DP20-2'	7/30/2001	<0.005	0.0019 J	<0.0099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0099
DP20-14.5'	7/30/2001	<0.26	<0.52	<0.52	0.25 J B	<0.26	<0.26	<0.26	<0.26	<0.52
DP23-2.5'	8/1/2001	<0.0062	<0.012	<0.012	<0.0062	<0.0062	<0.0062	<0.0062	<0.012	<0.012
DP23-9'	8/1/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
DP25-2.5'	8/7/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
DP25-2.5' Blind Dup	8/7/2001	<0.0047	<0.0094	<0.0094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0094
DP25-7.5'	8/7/2001	<0.0044	<0.0089	<0.0089	<0.0044	<0.0044	<0.0044	<0.0044	<0.0089	<0.0089
DP29-5	11/9/2001	<0.0056	<0.011	<0.011	0.0032 J	<0.0056	0.00065 J	<0.0056	<0.011	<0.011
SS-1	10/11/2001			0.00081 J	<0.0049		<0.0049			0.002 J
SS-2	10/11/2001			<0.0097	<0.0048		<0.0048			<0.0097
SS-3	10/11/2001			<0.012	<0.0061		<0.0061			<0.012
SS-4	10/11/2001			<0.011	<0.0054		<0.0054			<0.011
SS-5 ~25' South	10/11/2001			<0.011	<0.0057		<0.0057			<0.011
SS-5 Blind Dup.	10/11/2001			0.0011 J	<0.0059		<0.0059			<0.012
SS-6	10/11/2001			<0.011	<0.0054		<0.0054			<0.011
SS-7	10/11/2001			<0.01	<0.0051		<0.0051			<0.01
SS-8	10/11/2001			<0.013	<0.0066		<0.0066			<0.013
SS-9	10/11/2001			<0.012	<0.0059		<0.0059			<0.012
SS-10	10/11/2001			<0.01	<0.005		<0.005			<0.01
SS-11	10/11/2001			<0.012	<0.0059		<0.0059			<0.012
SS-12	10/11/2001			<0.011	<0.0055	<5.5	<0.0055	<5.5	<5.5	<0.011
STR01-3'	3/8/2001	<0.0045	<0.0091	<0.0091	<0.0045	<0.0045	<0.0045	<0.0045	<0.0091	<0.0091
STR01-21'	3/8/2001	<0.0052	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.01
STR01-73'	3/9/2001	<0.0055	<0.58	0.029	<0.0055	<0.0055	0.012	<0.0055	<0.011	0.0092 J
STR01-88'	3/9/2001	<0.0071	<0.47	0.023	<0.0071	<0.0071	0.019	<0.0071	<0.014	0.012 J
STR02-1'	3/13/2001	<0.0052	<0.01	<0.01	0.0018 J	<0.0052	<0.0052	<0.0052	<0.01	<0.01

Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Isopropylbenzene	Methyl acetate	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)
STR02-12.5'	3/13/2001	<0.0051	<0.01	<0.01	0.0024 J	<0.0051	<0.0051	<0.0051	<0.01	<0.01
STR03-4'	3/14/2001				<0.25	<0.25	<0.25	<0.25	<0.25	<0.5
STR03-12.5'	3/14/2001				<0.0048	<0.0048	0.0057	<0.0048	<0.0048	0.02
STR04-1.5'	3/19/2001	<0.0051	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.0051	<0.01	<0.01
STR04-17.5'	3/19/2001	<0.0052	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.0052	<0.01	<0.01
STR04-17.5' DUP	3/19/2001	<0.0046	<0.0093	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0093
STR05-1.5'	3/10/2001	<0.0048	<0.0096	<0.0096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0096
STR05-9'	3/10/2001	<0.0046	<0.0093	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0093
STR05-11.3'	3/10/2001	<0.0044	<0.0087	<0.0087	<0.0044	<0.0044	0.004 J	<0.0044	<0.0087	<0.0087
STR06-1'	3/11/2001	<0.0048	<0.0097	<0.0097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097	<0.0097
STR06-15'	3/11/2001	<0.0045	<0.009	<0.009	<0.0045	<0.0045	<0.0045	<0.0045	<0.009	<0.009
STR07-1.5'	3/21/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
STR07-18'	3/21/2001	<0.26	<0.53	<0.53	<0.26	<0.26	<0.26	<0.26	<0.53	<0.53
STR08-1.5'	3/26/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
STR08-13'	3/26/2001	<0.24	<0.48	<0.48	<0.24	<0.24	<0.24	<0.24	<0.48	<0.48
STR08-13' DUP	3/26/2001	<0.23	<0.47	<0.47	<0.23	<0.23	<0.23	<0.23	<0.47	<0.47
STR09-7.5'	4/4/2001	<0.0054	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011
STR10-1.5'	4/7/2001				<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088
STR10-11'	4/7/2001				<0.0056	0.0047 J	<0.0056	0.0025 J	0.0084	<0.011
STR11-2'	8/20/2001	<0.0048	<0.0096	<0.0096	<0.0048	0.0026 J	<0.0048	<0.0048	<0.0096	<0.0096
STR11-9'	8/20/2001	<0.0045	<0.0089	<0.0089	<0.0045	<0.0045	<0.0045	<0.0045	<0.0089	<0.0089
STR11-9' Blind Dup	8/20/2001	<0.0047	<0.0093	<0.0093	<0.0047	0.0016 J	<0.0047	<0.0047	<0.0093	<0.0093
T-1-4	11/8/2001				<1.3	<1.3	<1.3	<1.3	<1.3	<2.7
T-1-6	11/8/2001				<0.005	<0.005	0.00085 J	<0.005	<0.005	<0.01
T-2-3	11/8/2001				<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011
T-2-9	11/8/2001				0.28	<0.25	0.027 J B	<0.25	<0.25	0.11 J B
T-3-3	11/8/2001				0.29	<0.25	0.47 B	<0.25	<0.25	0.96 B
T-3-11	11/8/2001				<0.0047	<0.0047	0.00052 J	<0.0047	<0.0047	<0.0094
T-4-3	11/9/2001				<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0091
T-4-9	11/9/2001				0.0017 J	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
T-5-3	11/9/2001				0.0029 J	<0.0064	<0.0064	<0.0064	<0.0064	<0.013
T-5-9	11/9/2001				0.0028 J	<0.0053	0.00064 J	<0.0053	<0.0053	<0.011
T-6-3	11/10/2001				0.0019 J	<0.0057	<0.0057	<0.0057	<0.0057	<0.011
T-6-7.5	11/11/2001				<0.68	0.067 J B	0.35 J	<0.68	<0.68	2.1 B
T-6-10	11/10/2001				0.096 J B	0.031 J B	<0.24	<0.24	<0.24	0.088 J B
T-8-3	11/11/2001				<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
T-8-9	11/11/2001				0.0014 J B	<0.0054	<0.0054	<0.0054	<0.0054	<0.011
UAW01-30-1.5'	4/2/2001	<0.0054	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011
UAW01-30-15'	4/2/2001	<0.0056	<0.011	<0.011	0.002 J	<0.0056	<0.0056	<0.0056	<0.011	<0.011

Table 1
Summary of Volatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Isopropylbenzene	Methyl acetate	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)
UAW04-20-10'	3/23/2001	<7.1	<14	<14	5.6 J B	<7.1	160	<7.1	<14	<14
UAW05-20-13'	3/23/2001	<0.22	<0.45	0.22 J	<0.22	<0.22	<0.22	<0.22	<0.45	<0.45
UAW06-20-1.5'	3/26/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
UAW06-20-11.5'	3/26/2001	<0.005	<0.0099	<0.0099	<0.005	<0.005	0.0017 J	<0.005	<0.0099	0.0025 J
UAW08-20-13'	3/24/2001				<0.46	<0.46	2	<0.46	<0.92	1.5
UAW09-20-1.5'	3/27/2001	<0.0049	<0.0098	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0098
UAW09-20-15'	3/27/2001	<0.0054	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011
UAW11-40-2'	4/17/2001	<0.0048	<0.0097	<0.0097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097	<0.0097
UAW11-40-10'	4/17/2001	<0.28	<0.56	<0.56	0.099 J	<0.28	<0.28	<0.28	<0.56	<0.56
UAW12-20-12'	3/24/2001				<0.3	<0.3	<0.3	<0.3	<0.6	<0.6
UAW13-20-1.5'	3/24/2001				<0.0047	<0.0047	<0.0047	<0.0047	<0.0093	<0.0093
UAW13-20-11.5'	3/24/2001				0.26 J B	<0.28	0.15 J	<0.28	<0.57	<0.57
UAW14-10-1.5'	4/4/2001	<0.0049	<0.0099	<0.0099	<0.0049	<0.0049	<0.0049	<0.0049	<0.0099	<0.0099
UAW15-20-2'	4/9/2001	<0.0043	<0.0086	<0.0086	<0.0043	<0.0043	<0.0043	<0.0043	<0.0086	<0.0086
UAW15-20-2' DUP	4/9/2001	<0.0046	<0.0093	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0093
UAW15-20-8.5'	4/9/2001	<0.0049	<0.0098	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0098
UAW16-10-2'	8/22/2001	<0.0057	<0.011	0.00082 J	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011
UAW16-10-5.5'	8/22/2001	<0.0061	<0.012	0.0028 J	<0.0061	<0.0061	<0.0061	<0.0061	<0.012	<0.012
UAW17-40-1.5'	4/5/2001	<0.0046	<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0091
UAW17-40-5'	4/5/2001	<0.24	6	<0.48	<0.24	<0.24	<0.24	<0.24	<0.48	<0.48
UAW18-20-1'	8/23/2001	<0.26	<0.52	<0.52	<0.26	<0.26	<0.26	<0.26	<0.52	<0.52
UAW18-20-15'	8/23/2001	<0.0047	<0.0095	<0.0095	<0.0047	<0.0047	0.0015 J	<0.0047	<0.0095	<0.0095
UAW19-80-1.5'	4/6/2001	<0.005	<0.0099	<0.0099	<0.005	<0.005	<0.005	<0.005	<0.0099	<0.0099
UAW19-80-15'	4/6/2001	<0.0046	<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091	<0.0091
UAW20-60-1.5'	4/9/2001	<0.0047	<0.0093	<0.0093	<0.0047	0.0092	<0.0047	<0.0047	<0.0093	<0.0093
UAW20-60-9.5'	4/9/2001	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011
UAW21-30-1.5'	4/11/2001	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
UAW21-30-10'	4/11/2001	<0.0046	<0.0092	<0.0092	<0.0046	<0.0046	0.0034 J	<0.0046	<0.0092	0.002 J
UAW22-20-2'	9/5/2001	<0.0044	<0.0088	0.00076 J	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088	<0.0088
UAW22-20-11'	9/5/2001	<0.0063	<0.013	<0.013	<0.0063	<0.0063	<0.0063	<0.0063	<0.013	<0.013

Notes:
J = Estimated result; result is less than reporting limit.
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
Blank cell indicates chemical was not on the target analyte list for that sample.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

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Table 2
Summary of Semivolatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	3-Methylphenol	4-Methylphenol	Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Ethylhexyl) phthalate	Carbazole	Chrysene	Di-n-octyl phthalate	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
B01-1.5'	10/9/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
B01-11.5'	10/9/2001	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
B02-1.5'	10/9/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
B02-11.5'	10/9/2001	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
B03-1.5'	10/9/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
B03-11.5'	10/9/2001	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
B04-1.5'	10/9/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	0.06 J	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
B04-1.5' Blind Dup	10/9/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	0.063 J	0.076 J	0.1 J	0.072 J	<0.35	<0.35	<0.35	0.082 J	<0.35	<0.35	<0.35	0.15 J	<0.35	<0.35	<0.35	0.096 J	<0.35	0.14 J
B04-11.5'	10/9/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
B05-1.5'	10/9/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
B05-11.5'	10/9/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
B06-1.5'	10/9/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	0.12 J	0.19 J	0.18 J	0.16 J	0.096 J	<0.38	<0.38	0.14 J	<0.38	<0.38	<0.38	0.19 J	<0.38	0.15 J	<0.38	0.12 J	<0.38	0.19 J
B06-11'	10/9/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
B07-1'	10/9/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
B07-9'	10/9/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
B08-2'	10/9/2001	<19	<19	<19	<19	4.3 J	<19		<19	37	<19	<19	26	36	24	29	9.2 J	18 J	<19	4.4 J	37	<19	3.5 J	26	120	32	9.2 J	3 J	110	<19	83
B08-9'	10/9/2001	<0.37	<0.37	<0.37	<0.37	0.23 J	<0.37		<0.37	0.3 J	<0.37	<0.37	0.15 J	0.14 J	0.08 J	0.094 J	<0.37	<0.37	<0.37	<0.37	0.14 J	<0.37	<0.37	0.33 J	0.51	0.32 J	<0.37	0.088 J	0.68	<0.37	0.35 J
B09-2'	10/9/2001	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43		<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	0.18 J	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
B09-10'	10/9/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
B10-2'	10/9/2001	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
B10-11'	10/9/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
DP01-2'	7/24/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP01-9.5'	7/24/2001	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP02-2'	7/24/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.07 J	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP02-9.5'	7/24/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
DP03-2'	7/24/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP03-8.5'	7/24/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
DP05-1'	7/25/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP05-8.5'	7/25/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP07-9'	7/26/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP08-6'	7/26/2001	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42		<0.42	<0.42	<0.42		<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
DP08-11'	7/26/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP09-12'	7/27/2001	0.13 J	<0.38	0.073 J	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.072 J	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP10-2'	7/27/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	0.16 J		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
DP10-10'	7/27/2001	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	1.5		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP10-10' Blind Dup	7/27/2001	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	0.89 J		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP12-1.5'	7/28/2001	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34		<0.34	<0.34	<0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
DP12-9'	7/28/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
DP13-3'	7/29/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	0.07 J	<0.39	0.086 J	<0.39	<0.39	0.16 J	<0.39	0.076 J	<0.39	<0.39	<0.39	0.14 J	<0.39	<0.39	<0.39	<0.39	<0.39	0.13 J

Table 2
Summary of Semivolatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	3-Methylphenol	4-Methylphenol	Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Ethylhexyl) phthalate	Carbazole	Chrysene	Di-n-octyl phthalate	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
DP13-11'	7/29/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	0.069 J	<0.39	<0.39	0.18 J	0.46	0.45	0.49	0.25 J	0.23 J	0.26 J		0.47	<0.39	<0.39	<0.39	1.1	0.063 J	0.22 J	<0.39	0.61	<0.39	0.85
DP14-3'	7/29/2001	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	6.5 J		<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
DP14-9'	7/29/2001	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	0.25 J	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP15-2'	7/29/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.23 J		0.064 J	0.29 J	<0.38	<0.38	0.13 J	<0.38	<0.38	<0.38	0.21 J	0.075 J	0.11 J
DP15-9'	7/29/2001	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6		<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
DP16-2.8'	7/30/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
DP16-12.5'	7/30/2001	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	26		<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19
DP17-3'	7/30/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP17-13'	7/30/2001	21 J	<22	<22	<22	<22	<22	5.4 J #	5.4 J #	<22	<22	3.9 J	<22	<22	<22	<22	<22	<22	26		<22	<22	<22	<22	<22	<22	<22	<22	<22	4.7 J	<22
DP18-2'	7/30/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	0.16 J	0.19 J	0.25 J	0.12 J	0.097 J	<0.38	<0.38	0.2 J	<0.38	<0.38	<0.38	0.37 J	<0.38	0.12 J	<0.38	0.14 J	<0.38	0.29 J
DP18-14.5'	7/30/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
DP19-2'	7/30/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	0.11 J	0.12 J	0.2 J	0.089 J	0.078 J	0.46	<0.4	0.14 J	<0.4	<0.4	<0.4	0.27 J	<0.4	<0.4	<0.4	0.1 J	<0.4	0.2 J
DP19-13'	7/30/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.062 J	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
DP20-2'	7/30/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	0.1 J	0.085 J	0.11 J	<0.38	<0.38	<0.38	<0.38	0.099 J	<0.38	<0.38	<0.38	0.25 J	<0.38	<0.38	<0.38	0.19 J	<0.38	0.19 J
DP20-14.5'	7/30/2001	0.15 J	<0.38	0.062 J	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP23-2.5'	8/1/2001	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42		<0.42	<0.42	<0.42		<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
DP23-9'	8/1/2001	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43		<0.43	<0.43	<0.43		<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
DP25-2.5'	8/7/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
DP25-2.5' Blind Dup	8/7/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
DP25-7.5'	8/7/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP29-5	11/9/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
SS-1	10/11/2001	0.13 J		<0.4			<0.4		<0.4			<0.4																			
SS-2	10/11/2001	<0.38		<0.38			<0.38		<0.38			<0.38																			
SS-3	10/11/2001	<0.43		<0.43			<0.43		<0.43			<0.43																			
SS-4	10/11/2001	<0.4		<0.4			<0.4		<0.4			<0.4																			
SS-5 ~25' South	10/11/2001	0.17 J		<0.41			<0.41		<0.41			<0.41																			
SS-5 Blind Dup.	10/11/2001	0.2 J		<0.41			<0.41		<0.41			<0.41																			
SS-6	10/11/2001	<0.41		<0.41			<0.41		<0.41			<0.41																			
SS-7	10/11/2001	<0.41		<0.41			<0.41		<0.41			<0.41																			
SS-8	10/11/2001	<0.43		<0.43			<0.43		<0.43			<0.43																			
SS-9	10/11/2001	<0.42		<0.42			<0.42		<0.42			<0.42																			
SS-10	10/11/2001	<0.39		<0.39			<0.39		<0.39			<0.39																			
SS-11	10/11/2001	<0.43		<0.43			<0.43		<0.43			<0.43																			
SS-12	10/11/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	0.09 J	0.57	0.74	0.99	0.68	0.33 J	0.14 J	0.073 J	0.8	<0.41	0.16 J	<0.41	1.6	<0.41	0.59	<0.41	0.61	<0.41	1.4
STR01-3'	3/8/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR01-21'	3/8/2001	0.17 J	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
STR01-73'	3/9/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR01-88'	3/9/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR02-1'	3/13/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	0.14 J	0.14 J	0.14 J	<0.4	<0.4	<0.4	<0.4	0.17 J	<0.4	<0.4	<0.4	0.42	<0.4	<0.4	<0.4	0.33 J	<0.4	0.36 J

DRAFT

Table 2
Summary of Semivolatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	3-Methylphenol	4-Methylphenol	Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Ethylhexyl) phthalate	Carbazole	Chrysene	Di-n-octyl phthalate	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
STR02-12.5'	3/13/2001	0.32 J	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
STR03-4'	3/14/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR03-12.5'	3/14/2001	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	150		<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18
STR04-1.5'	3/19/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR04-17.5'	3/19/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR04-17.5' DUP	3/19/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.18 J	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
STR05-1.5'	3/10/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR05-9'	3/10/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR05-11.3'	3/10/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
STR06-1'	3/11/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
STR06-15'	3/11/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR07-1.5'	3/21/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR07-18'	3/21/2001	0.61	<0.38	0.18 J	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR08-1.5'	3/26/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	0.14 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR08-13'	3/26/2001	0.34 J	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
STR08-13' DUP	3/26/2001	0.31 J	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR09-7.5'	4/4/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR10-1.5'	4/7/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR10-11'	4/7/2001	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42		<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
STR11-2'	8/20/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR11-9'	8/20/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
STR11-9' Blind Dup	8/20/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
T-1-4	11/8/2001	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2		<4.2	<4.2	<4.2	0.64 J	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2
T-1-6	11/8/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
T-2-3	11/8/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
T-2-9	11/8/2001	0.28 J	<0.37	0.074 J	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
T-3-3	11/8/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	0.084 J	<0.37	<0.37	<0.37	<0.37	<0.37	0.063 J
T-3-11	11/8/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
T-4-3	11/9/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	0.07 J	<0.37	<0.37	<0.37		0.064 J	<0.37	<0.37	<0.37	0.098 J	<0.37	<0.37	<0.37	<0.37	0.07 J	<0.37	0.068 J
T-4-9	11/9/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
T-5-3	11/9/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
T-5-9	11/9/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
T-6-3	11/10/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
T-6-7.5	11/11/2001	<86	<86	<86	<86	22 J	<86	<86	<86	<86	<86	<86	<86	<86	<86	<86	<86	<86	<86		<86	<86	<86	<86	<86	<86	<86	<86	<86	<86	<86
T-6-10	11/10/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
T-8-3	11/11/2001	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42		<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
T-8-9	11/11/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
UAW01-30-1.5'	4/2/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	0.58	<0.38		1.5	5.4	6.2	7	2.8	2.8	<0.38	0.48	5.9	<0.38	0.82	0.32 J	14	0.61	2.7	<0.38	6.5	<0.38	11
UAW01-30-15'	4/2/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35

DRAFT

Table 2
Summary of Semivolatile Organic Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	3-Methylphenol	4-Methylphenol	Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Ethylhexyl) phthalate	Carbazole	Chrysene	Di-n-octyl phthalate	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
UAW04-20-10'	3/23/2001	<0.45	<0.45	<0.45	<0.45	<0.45	0.57		0.46 #	<0.45	<0.45		<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
UAW05-20-13'	3/23/2001	3.3	<0.38	0.49	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
UAW06-20-1.5'	3/26/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW06-20-11.5'	3/26/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
UAW08-20-13'	3/24/2001	2.3	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	22	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4		<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4
UAW09-20-1.5'	3/27/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
UAW09-20-15'	3/27/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35		<0.35	<0.35	<0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
UAW11-40-2'	4/17/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.17 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW11-40-10'	4/17/2001	0.12 J	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
UAW12-20-12'	3/24/2001	14	0.26 J	1.3	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW13-20-1.5'	3/24/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.26 J	0.23 J	0.24 J	0.14 J	<0.38	<0.38		0.25 J	<0.38	<0.38	<0.38	0.52	<0.38	0.13 J	<0.38	0.22 J	<0.38	0.38
UAW13-20-11.5'	3/24/2001	0.25 J	<0.39	<0.39	<0.39	0.16 J	<0.39	<0.39	<0.39	<0.39	<0.39	0.16 J	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
UAW14-10-1.5'	4/4/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
UAW15-20-2'	4/9/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
UAW15-20-2' DUP	4/9/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
UAW15-20-8.5'	4/9/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
UAW16-10-2'	8/22/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
UAW16-10-5.5'	8/22/2001	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		<0.36	<0.36	<0.36		<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.13 J	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
UAW17-40-1.5'	4/5/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38		<0.38	<0.38	<0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
UAW17-40-5'	4/5/2001	<8.4	<8.4	<8.4	24	3.1 J	15		35 #	<8.4	3.3 J		<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	<8.4	3.5 J	4.6 J	4.3 J	<8.4	3.8 J	9.8	13	4.3 J
UAW18-20-1'	8/23/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW18-20-15'	8/23/2001	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41		<0.41	<0.41	<0.41		<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
UAW19-80-1.5'	4/6/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW19-80-15'	4/6/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
UAW20-60-1.5'	4/9/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
UAW20-60-9.5'	4/9/2001	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		<0.4	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW21-30-1.5'	4/11/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39		<0.39	<0.39	<0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
UAW21-30-10'	4/11/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
UAW22-20-2'	9/5/2001	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73		<0.73	<0.73	<0.73		<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	0.17 J	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73
UAW22-20-11'	9/5/2001	0.071 J	<0.37	<0.37	<0.37	<0.37	<0.37		<0.37	<0.37	<0.37		<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37

Notes:

J = Estimated result; result is less than reporting limit.

= Co-Elution of 3-Methylphenol and 4-Methylphenol.

Blank cell indicates chemical was not on the target analyte list for that sample.

This table only includes target analytes detected in one or more Facility Investigation samples.

See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

Table 3
Summary of Pesticides and PCBs Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	Chlorobenzilate	Dieldrin	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor epoxide	Isodrin	Methoxychlor	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
B01-1.5'	10/9/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
B01-11.5'	10/9/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0034	<0.0034	<0.034	<0.034	<0.034	<0.034	<0.034
B02-1.5'	10/9/2001	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0075	<0.0075	<0.038	<0.038	<0.038	<0.038	<0.038
B02-11.5'	10/9/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0034	<0.0034	<0.034	<0.034	<0.034	<0.034	<0.034
B03-1.5'	10/9/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0038	<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
B03-11.5'	10/9/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0034	<0.0034	<0.034	<0.034	<0.034	<0.034	<0.034
B04-1.5'	10/9/2001	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036		<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0071	<0.0071	<0.035	<0.035	<0.035	<0.035	<0.035
B04-1.5' Blind Dup	10/9/2001	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036		<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0071	<0.0071	<0.035	<0.035	<0.035	<0.035	<0.035
B04-11.5'	10/9/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0035	<0.0035	<0.035	<0.035	<0.035	<0.035	<0.035
B05-1.5'	10/9/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
B05-11.5'	10/9/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0035	<0.0035	<0.035	<0.035	<0.035	<0.035	<0.035
B06-1.5'	10/9/2001	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		0.041	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0075	<0.0075	<0.038	<0.038	<0.038	<0.038	0.015 J
B06-11'	10/9/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0038	<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
B07-1'	10/9/2001	<0.004	0.0015 J	<0.004	0.11	<0.004	<0.004		0.055	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0054 J	<0.0077	<0.039	<0.039	<0.039	0.11	<0.039
B07-9'	10/9/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039	<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
B08-2'	10/9/2001	<0.02	0.019 J	<0.02	<0.02	<0.02	<0.02		0.031	<0.02	<0.02	<0.02	<0.02	0.13	<0.02	<0.02	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038
B08-9'	10/9/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
B09-2'	10/9/2001	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045		0.015	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0087	<0.0087	<0.043	<0.043	<0.043	<0.043	0.24
B09-10'	10/9/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0041	<0.0041	<0.041	<0.041	<0.041	<0.041	<0.041
B10-2'	10/9/2001	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0044	<0.0044	<0.044	<0.044	<0.044	<0.044	<0.044
B10-11'	10/9/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
DP01-2'	7/24/2001	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.038	<0.038	<0.038	<0.038	<0.038	<0.038
DP01-9.5'	7/24/2001	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099		<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099		<0.019	<0.039	<0.039	<0.039	<0.039	0.016 J
DP02-2'	7/24/2001	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0076	<0.038	<0.038	<0.038	0.038	<0.038
DP02-9.5'	7/24/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0041	<0.041	<0.041	<0.041	<0.041	<0.041
DP03-2'	7/24/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
DP03-8.5'	7/24/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0035	<0.035	<0.035	<0.035	<0.035	<0.035
DP05-1'	7/25/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
DP05-8.5'	7/25/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
DP07-9'	7/26/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
DP08-6'	7/26/2001	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		0.0017 J	<0.042	<0.042	<0.042	<0.042	<0.042
DP08-11'	7/26/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
DP09-12'	7/27/2001	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0076	<0.38	<0.38	<0.38	<0.38	<0.38
DP10-2'	7/27/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0037	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
DP10-10'	7/27/2001	<0.2	<0.2	<0.2	<0.2		<0.2	<0.38	<0.2	<0.2	<0.2	<0.2	<0.2			<0.2	<0.38	<0.38	<3.8	<3.8	<3.8	<3.8	<3.8
DP10-10' Blind Dup	7/27/2001	<0.0039	<0.0039	<0.0039	<0.0039		0.0038 J	<0.0075	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039			<0.0039	<0.0075	<0.0075	<0.38	<0.38	<0.38	<0.38	<0.38
DP12-1.5'	7/28/2001	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035		<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035		<0.0068	<0.034	<0.034	<0.034	<0.034	<0.034
DP12-9'	7/28/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0041	<0.041	<0.041	<0.041	<0.041	<0.041
DP13-3'	7/29/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039	<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
DP13-11'	7/29/2001	<2	<2	<2	<2		<2	10 PG	<2	<2	<2	<2	<2			<2	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9

Table 3
Summary of Pesticides and PCBs Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	Chlorobenzilate	Dieldrin	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor epoxide	Isodrin	Methoxychlor	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
DP14-3'	7/29/2001	<0.89	<0.89	<0.89	<0.89		<0.89	<1.7	<0.89	<0.89	<0.89	<0.89	<0.89			<0.89	<1.7	<1.7	<69	<69	<69	<69	<69
DP14-9'	7/29/2001	<0.39	<0.39	<0.39	<0.39		<0.39	<0.75	<0.39	<0.39	<0.39	<0.39	<0.39			<0.39	<0.75	<0.75	<75	<75	<75	<75	<75
DP15-2'	7/29/2001	<0.39	<0.39	<0.39	<0.39		<0.39	<0.76	<0.39	<0.39	<0.39	<0.39	<0.39			<0.39	<0.76	<0.76	<1.9	<1.9	<1.9	<1.9	<1.9
DP15-9'	7/29/2001	<0.02	<0.02	<0.02	<0.02		<0.02	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02			<0.02	<0.04	<0.04	<40	<40	<40	<40	<40
DP16-2.8'	7/30/2001	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0035	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018			<0.0018	<0.0035	<0.0035	<0.035	<0.035	<0.035	<0.035	<0.035
DP16-12.5'	7/30/2001	<0.99	<0.99	0.78 J	<0.99		<0.99	<1.9	<0.99	<0.99	<0.99	<0.99	<0.99			<0.99	<1.9	4.5 PG	<19	<19	<19	<19	<19
DP17-3'	7/30/2001	<0.002	0.0018 J	<0.002	<0.002		<0.002	<0.0039	<0.002	<0.002	<0.002	<0.002	<0.002			<0.002	<0.0039	<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
DP17-13'	7/30/2001	<1.1	<1.1	<1.1	<1.1		<1.1	<2.2	<1.1	<1.1	<1.1	<1.1	<1.1			<1.1	<2.2	<2.2	<22	<22	<22	<22	<22
DP18-2'	7/30/2001	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039		<0.0075	<0.038	<0.038	<0.038	<0.038	<0.038
DP18-14.5'	7/30/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0036	<0.036	<0.036	<0.036	<0.036	<0.036
DP19-2'	7/30/2001	<0.0021	0.0017 J	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	0.021 J
DP19-13'	7/30/2001	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038		<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038		<0.0073	<0.036	<0.036	<0.036	<0.036	<0.036
DP20-2'	7/30/2001	<0.0019	0.0037	0.0081	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0038	<0.038	<0.038	<0.038	0.047	<0.038
DP20-14.5'	7/30/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
DP23-2.5'	8/1/2001	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		<0.0042	<0.042	<0.042	<0.042	<0.042	<0.042
DP23-9'	8/1/2001	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022		<0.0043	<0.043	<0.043	<0.043	<0.043	<0.043
DP25-2.5'	8/7/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0041	<0.041	<0.041	<0.041	<0.041	<0.041
DP25-2.5' Blind Dup	8/7/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
DP25-7.5'	8/7/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
DP29-5	11/9/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0041	<0.041	<0.041	<0.041	<0.041	<0.041
Poly Tank Compsite	7/24/2001																		<0.069	<0.069	<0.069	<0.069	<0.069
Roll Off Composite	7/24/2001																		<0.042	<0.042	<0.042	<0.042	<0.042
SS-1	10/11/2001	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041		<0.0041	<0.0041		<0.0041	<0.0041	<0.0041		<0.0041	<0.0079						
SS-2	10/11/2001	<0.0039	<0.0039	0.004	<0.0039	<0.0039	<0.0039		<0.0039	<0.0039		<0.0039	<0.0039	<0.0039		<0.0039	<0.0075						
SS-3	10/11/2001	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022		<0.022	<0.022		<0.022	<0.022	<0.022		<0.022	<0.043						
SS-4	10/11/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.094 PG		<0.0021	<0.0021		<0.0021	<0.0021	<0.0021		<0.0021	<0.004						
SS-5 ~25' South	10/11/2001	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021		<0.021	<0.021		<0.021	<0.021	<0.021		<0.021	<0.041						
SS-5 Blind Dup.	10/11/2001	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021		<0.021	<0.021		<0.021	<0.021	<0.021		<0.021	<0.041						
SS-6	10/11/2001	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043		<0.0043	<0.0043		<0.0043	<0.0043	<0.0043		<0.0043	<0.0083						
SS-7	10/11/2001	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021		<0.021	<0.021		<0.021	<0.021	<0.021		<0.021	<0.041						
SS-8	10/11/2001	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022		<0.022	<0.022		<0.022	<0.022	<0.022		<0.022	<0.043						
SS-9	10/11/2001	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022		<0.022	<0.022		<0.022	<0.022	<0.022		<0.022	<0.042						
SS-10	10/11/2001	<0.004	0.0046 PG	<0.004	<0.004	<0.004	<0.004		<0.004	<0.004		<0.004	<0.004	<0.004		<0.004	<0.0078						
SS-11	10/11/2001	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044		<0.0044	<0.0044		<0.0044	<0.0044	<0.0044		<0.0044	<0.0085						
SS-12	10/11/2001	<0.021	0.023 PG	<0.021	<0.021	<0.021	<0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.041	<0.041					
STR01-3'	3/8/2001	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.038	<0.038	0.063	<0.038	<0.038	<0.038
STR01-21'	3/8/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.0017 J		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0037	<0.07	0.26	<0.07	<0.07	<0.07
STR01-73'	3/9/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.004	<0.04	0.12	<0.04	<0.04	<0.04
STR01-88'	3/9/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0038	<0.038	0.48	<0.038	<0.038	<0.038
STR02-1'	3/13/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04

Table 3
Summary of Pesticides and PCBs Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	Chlorobenzilate	Dieldrin	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor epoxide	Isodrin	Methoxychlor	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
STR02-12.5'	3/13/2001	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096		<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096		<0.019	<0.037	<0.037	<0.037	<0.037	<0.037
STR03-4'	3/14/2001	<0.0079	<0.0079	<0.0079	<0.0079		<0.0079	<0.079	<0.0079	<0.0079	<0.0079	<0.0079	<0.0079			<0.0079	<0.015	<0.015	<0.038	<0.038	<0.038	<0.038	<0.038
STR03-12.5'	3/14/2001	<0.074	<0.074	<0.074	<0.074		<0.074	<0.74	<0.074	<0.074	<0.074	<0.074	0.19 PG			<0.074	<0.14	<0.14	<1.8	<1.8	<1.8	<1.8	<1.8
STR04-1.5'	3/19/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
STR04-17.5'	3/19/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
STR04-17.5' DUP	3/19/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0036	<0.036	<0.036	<0.036	<0.036	<0.036
STR05-1.5'	3/10/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
STR05-9'	3/10/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
STR05-11.3'	3/10/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0036	<0.036	<0.036	<0.036	<0.036	<0.036
STR06-1'	3/11/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
STR06-15'	3/11/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
STR07-1.5'	3/21/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		0.003 J	<0.04	<0.04	<0.04	<0.04	<0.04
STR07-18'	3/21/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
STR08-1.5'	3/26/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
STR08-13'	3/26/2001	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019		<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019		<0.037	<0.037	<0.037	<0.037	<0.037	<0.037
STR08-13' DUP	3/26/2001	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039		<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039		<0.075	<0.038	<0.038	<0.038	<0.038	<0.038
STR09-7.5'	4/4/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
STR10-1.5'	4/7/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0038	<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
STR10-11'	4/7/2001	<0.0022	<0.0022	<0.0022	<0.0022		<0.0022	<0.022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022			<0.0022	<0.0042	<0.0042	<0.042	<0.042	<0.042	<0.042	<0.042
STR11-2'	8/20/2001	<0.002	0.0041 PG	<0.002	<0.002	<0.002	<0.002		0.0041 PG	<0.002	0.0028 PG	<0.002	0.0032 PG	0.0017 J	0.0025 PG	<0.002		<0.004	<0.04	<0.04	<0.04	0.37	<0.04
STR11-9'	8/20/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
STR11-9' Blind Dup	8/20/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
T-1-4	11/8/2001	<0.022	<0.022	<0.022	<0.022		<0.022	<0.22	<0.022	<0.022	<0.022	<0.022	<0.022			0.019 J	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
T-1-6	11/8/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.019	<0.0019	<0.0019	<0.0019	0.0025 PG	<0.0019			<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
T-2-3	11/8/2001	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021			<0.0021	<0.004	<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
T-2-9	11/8/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
T-3-3	11/8/2001	<0.0038	<0.0038	<0.0038	<0.0038		<0.0038	<0.038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038			<0.0038	<0.0074	<0.0074	<0.037	<0.037	0.011 J	<0.037	<0.037
T-3-11	11/8/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
T-4-3	11/9/2001	<0.0019	0.0016 J	0.0022	<0.0019		<0.0019	<0.0037	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0037	<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
T-4-9	11/9/2001	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0036	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018			<0.0018	<0.0036	<0.0036	<0.036	<0.036	<0.036	<0.036	<0.036
T-5-3	11/9/2001	<0.002	<0.002	<0.002	<0.002		<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.002			<0.002	<0.004	<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
T-5-9	11/9/2001	<0.002	<0.002	<0.002	<0.002		<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.002			<0.002	<0.004	<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
T-6-3	11/10/2001	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021			<0.0021	<0.004	<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
T-6-7.5	11/11/2001	<0.098	<0.098	<0.098	<0.098		<0.098	<0.97	<0.098	<0.098	<0.098	<0.098	<0.098			<0.098	<0.19	<0.19	<4.8	<4.8	<4.8	<4.8	<4.8
T-6-10	11/10/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0036	<0.0036	<0.036	<0.036	<0.036	0.024 J	<0.036
T-8-3	11/11/2001	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021			<0.0021	<0.0042	<0.0042	<0.042	<0.042	<0.042	<0.042	<0.042
T-8-9	11/11/2001	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019			<0.0019	<0.0036	<0.0036	<0.036	<0.036	<0.036	<0.036	<0.036
UAW01-30-1.5'	4/2/2001	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099		<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099		<0.019	<0.038	<0.038	<0.038	<0.038	0.012 J
UAW01-30-15'	4/2/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0035	<0.035	<0.035	<0.035	<0.035	<0.035
UAW04-20-10'	3/23/2001	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		<0.22	<0.045	<0.045	<0.045	<0.045	<0.045

Table 3
Summary of Pesticides and PCBs Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	Chlorobenzilate	Dieldrin	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor epoxide	Isodrin	Methoxychlor	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
UAW05-20-13'	3/23/2001	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098		<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098		<0.19	0.016 J	<0.038	<0.038	<0.038	<0.038
UAW06-20-1.5'	3/26/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
UAW06-20-11.5'	3/26/2001	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019		<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019		<0.037	<0.037	<0.037	<0.037	<0.037	<0.037
UAW08-20-13'	3/24/2001	<0.095	<0.095	<0.095	<0.095		<0.095	<0.95	<0.095	<0.095	<0.095	<0.095	<0.095			<0.095	<0.18	<0.18	0.016 J	<0.037	<0.037	<0.037	<0.037
UAW09-20-1.5'	3/27/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
UAW09-20-15'	3/27/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0035	<0.035	<0.035	<0.035	<0.035	<0.035
UAW11-40-2'	4/17/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
UAW11-40-10'	4/17/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
UAW12-20-12'	3/24/2001	<0.1	<0.1	<0.1	<0.1		<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	<0.2	<0.2	<0.04	0.26	<0.04	<0.04	<0.04
UAW13-20-1.5'	3/24/2001	<0.039	<0.039	<0.039	<0.039		<0.039	<0.39	<0.039	<0.039	<0.039	<0.039	<0.039			<0.039	<0.076	<0.076	<0.038	<0.038	<0.038	<0.038	0.028 J
UAW13-20-11.5'	3/24/2001	<0.1	<0.1	<0.1	<0.1		<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	<0.2	<0.2	<0.039	<0.039	<0.039	<0.039	<0.039
UAW14-10-1.5'	4/4/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
UAW15-20-2'	4/9/2001	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038		<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038		<0.0073	<0.037	<0.037	<0.037	<0.037	<0.037
UAW15-20-2' DUP	4/9/2001	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037		<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037		<0.0073	<0.036	<0.036	<0.036	<0.036	<0.036
UAW15-20-8.5'	4/9/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
UAW16-10-2'	8/22/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0038	<0.038	<0.038	<0.038	<0.038	<0.038
UAW16-10-5.5'	8/22/2001	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		<0.0036	<0.036	<0.036	<0.036	<0.036	<0.036
UAW17-40-1.5'	4/5/2001	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097		<0.0097	<0.0097	0.012 PG	<0.0097	0.01 PG	<0.0097	<0.0097	<0.0097		<0.019	<0.38	<0.38	<0.38	0.98	<0.38
UAW17-40-5'	4/5/2001	<0.11	0.2	<0.11	<0.11	<0.11	<0.11		<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11		<0.21	<0.042	<0.042	<0.042	0.071	<0.042
UAW18-20-1'	8/23/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
UAW18-20-15'	8/23/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0023		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0041	<0.041	<0.041	<0.041	<0.041	<0.041
UAW19-80-1.5'	4/6/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
UAW19-80-15'	4/6/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
UAW20-60-1.5'	4/9/2001	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038		<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038		<0.0074	<0.037	<0.037	<0.037	<0.037	0.011 J
UAW20-60-9.5'	4/9/2001	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021		<0.004	<0.04	<0.04	<0.04	<0.04	<0.04
UAW21-30-1.5'	4/11/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.0039	<0.039	<0.039	<0.039	<0.039	<0.039
UAW21-30-10'	4/11/2001	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019		<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037
UAW22-20-2'	9/5/2001	0.00064 J	0.00074 J	0.0027	<0.0019	0.00083 J	<0.0019		0.0012 J	0.0015 J	<0.0019	0.0021	0.0013 J	<0.0019	0.00047 J	0.0001 J		<0.0037	<0.037	<0.037	<0.037	0.26	<0.037
UAW22-20-11'	9/5/2001	<0.0019	0.0002 J	0.00065 J	<0.0019	<0.0019	<0.0019		0.00015 J	<0.0019	<0.0019	0.00048 J	0.0013 J	<0.0019	<0.0019	<0.0019		<0.0037	<0.037	<0.037	<0.037	<0.037	<0.037

Notes:
J = Estimated result; result is less than reporting limit
PG = The percentage difference between the original and confirmation analyses is greater than 40%
Blank cell indicates chemical was not on the target analyte list for that sample.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

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Table 4
Summary of Metals Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Acid-insoluble Sulfide	Acid-Soluble Sulfide	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Tin	Vanadium	Zinc
B01-1.5'	10/9/2001		<56	9620	<1.1	7.4	47.4 J	0.26 B	0.19 B	1210 L	10.1	7.1 L	12.5	<0.56	15600	9.5	1680	424 J	0.026 B	12.5 L	655	<0.56	<0.56	<556	<1.1	0.88 B J	20	39 L
B01-11.5'	10/9/2001		<52	1620	<1	2.3	6.9 B J	<0.52	0.15 B	115000	3.8	2.8 B	6.2	0.2 B	5010	3.2	37400	171 J	<0.1	5.7	384 B	<0.52	<0.52	98.8 B	1.3	0.95 B J	5.9	18.8
B02-1.5'	10/9/2001		79	10800	<1.1	8.4	58.7 J	0.37 B	0.21 B	1720	11.8	6.7	13.3	<0.57	17200	10.1	1840	379 J	0.027 B	13.2	688	<0.57	<0.57	<569	<1.1	0.79 B J	21.9	42
B02-11.5'	10/9/2001		<52	1750	<1	3.9	7.1 B J	<0.52	0.16 B	113000	3.8	3 B	6.9	<0.52	6000	3.6	35700	182 J	<0.1	6.2	369 B	<0.52	<0.52	91.7 B	0.74 B	1 B J	6.1	20.1
B03-1.5'	10/9/2001		79	10800	<1.1	5.1	68 J	0.5 B	0.27	3870	12.2	8	13.4	<0.57	18700	11.1	2380	589 J	0.026 B	15.1	976	<0.57	<0.57	<569	<1.1	0.9 B J	18.3	41.1
B03-11.5'	10/9/2001		<52	1650	<1	3	7.5 B J	<0.52	0.15 B	126000	4	2 B	6.2	<0.52	5620	2.8	37800	329 J	0.0089 B	4.8	370 B	<0.52	<0.52	105 B	1.5	0.93 B J	5.5	15.6
B04-1.5'	10/9/2001		<54	1870	<1.1	4	9.8 B J	<0.54	0.16 B	86600	3.7	2.8 B	7.3	<0.54	5760	4.1	31100	191 J	0.0098 B	6.5	368 B	<0.54	<0.54	69.2 B	1.5	0.93 B J	6.2	22.3
B04-1.5' Blind Dup	10/9/2001		<53	2200	<1.1	3.7	11.4 B J	<0.53	0.16 B	97000	3.7	2.9 B	6.8	<0.53	5980	4.3	36200	198 J	<0.11	6.2	387 B	<0.53	<0.53	66.6 B	1.2	0.97 B J	6.7	21.6
B04-11.5'	10/9/2001		<53	1550	<1.1	2.7	6 B J	<0.53	0.13 B	114000	3.5	2.5 B	5.4	<0.53	4670	3	37300	163 J	<0.11	5.4	346 B	<0.53	<0.53	91.1 B	1.8	0.93 B J	5.5	17.3
B05-1.5'	10/9/2001		<56	13000	<1.1	10	66.1 J	0.46 B	0.22 B	2370	15.7	8	15.6	<0.56	19800	11.4	2090	393 J	0.03 B	14.9	660	<0.56	<0.56	<565	<1.1	0.82 B J	23.9	51.4
B05-11.5'	10/9/2001		120	1660	<1.1	3.7	6.4 B J	<0.53	0.15 B	98200	3.2	2.3 B	7.9	<0.53	5880	4	39400	158 J	<0.11	4.8	370 B	<0.53	<0.53	92.9 B	1.5	1.1 B J	6.4	21.9
B06-1.5'	10/9/2001		<57	6950	<1.1	6.2	67.7 J	0.35 B	0.52	38300	13.5	6.4	18.4	<0.57	12600	25.3	9650	585 J	0.15	12.2	1130	<0.57	<0.57	64.1 B	1.1	1.5 B J	19.9	63.3
[illegible]-11'	10/9/2001		<58	1860	<1.2	1.4	9.4 B J	0.059 B	0.2 B	119000	4.1	2.3 B	6.9	<0.58	5380	3.7	36600	196 J	0.013 B	6.3	399 B	<0.58	<0.58	111 B	1.2	0.96 B J	5.7 B	25
B07-1'	10/9/2001		<59	8140	<1.2	6.2	134 J	0.64	0.43	35600	15.4	6.8	17.6	0.24 B	12600	29	8670	645 J	0.073 B	12.2	1210	0.69	<0.59	<585	<1.2	1.5 B J	16.3	49.9
B07-9'	10/9/2001		<59	6520	<1.2	2.6	33.4 J	0.29 B	0.19 B	43800	8.4	5.4 B	8.8	<0.59	9050	7.2	20500	221 J	0.013 B	9.9	729	<0.59	<0.59	67.3 B	1.5	<11.8	12.1	31.7
B08-2'	10/9/2001		<58	11500	<1.2	7.5	123 J	0.61	0.7	8400	69.7	8.6	22.4	<0.58	18800	59.3	2690	854 J	0.16	15.7	1810	1.6	<0.58	<580	<1.2	2.9 B J	56.4	88.1
B08-9'	10/9/2001		<57	6210	<1.1	3	20.4 B J	0.23 B	0.26	65100	13.4	4.5 B	15.6	<0.57	11300	7	23000	225 J	0.01 B	7	637	<0.57	<0.57	58.9 B	<1.1	<11.3	13	30.4
B09-2'	10/9/2001		<330	5780	3.3	16.2	985 J	0.85	0.33	3960	50.6	5 B	64.8	0.42 B	10600	410	838	68.6 J	0.046 B	10.6	674	2.5	<0.66	<657	0.92 B	1.9 B J	24.9	85.2
B09-10'	10/9/2001		<62	12800	<1.2	6	71.5 J	0.31 B	0.2 B	13000	25.1	3.7 B	41.8	<0.62	22600	8.9	1710	81.6 J	0.026 B	14.2	1750	<0.62	<0.62	<618	<1.2	<12.4	42.3	59.2
B10-2'	10/9/2001		<330	5020	<1.3	13.5	327 J	1.4	0.14 B	1910	5.9	5 B	26.1	0.25 B	4030	16.1	340 B	14.6 J	0.047 B	11.1	993	1.7	<0.66	<659	0.96 B	1.3 B J	22.8	15.7
B10-11'	10/9/2001		<60	9360 J	<1.2	4.9	69 J	0.46 B	0.24	4160	16.5	3.6 B	20.4	<0.6	17100	9.4	1640	123 J	0.018 B	11.5	730	<0.6	<0.6	<599	<1.2	0.89 B J	20.8	41.5
DP01-2'	7/24/2001		<58	7090 J	<1.2	5.7	51.5	0.44 B	0.25	21600	8.4	5 B	13.3	<0.58	11100	22.6	7180	302	0.012 B	10.8	569 B J	0.68	<0.58	<581	<1.2		14.9	37.2
DP01-9.5'	7/24/2001		64	8580 J	<1.2	7.2	55.3	0.5 B	0.84	10400	15.4	6.1	20.4	<0.58	16400	36.7	3000	430	0.022 B	15.8	648 J	0.68	<0.58	<585	<1.2		19.4	84
DP02-2'	7/24/2001		63	7260 J	<1.2	6	62.6	0.47 B	0.4	29900	11	5.7 B	18.5	<0.58	11900	25.8	8390	265	0.052 B	11.3	642 J	0.63	<0.58	<576	<1.2		16.1	56
DP02-9.5'	7/24/2001		<63	11800 J	<1.3	9.2	72.8	0.67	0.52	8390	16.6	10.4	23.2	<0.63	25300	18.2	4290	484	0.023 B	25.1	1110 J	0.87	<0.63	112 B	<1.3		23	69
DP03-2'	7/24/2001		64	6390 J	<1.2	5.4	51.3	0.41 B	0.21 B	16100	9	5.8	10	<0.58	11500	11.5	2880	533	0.026 B	9.6	666 J	0.49 B	<0.58	<584	<1.2		14.6	39.6
DP03-8.5'	7/24/2001		<53	4640 J	<1.1	8	57.4	0.44 B	0.42	107000	8.2	10.3	11	<0.53	16900	13.4	21000	1120	0.012 B	9.7	506 B J	0.52 B	<0.53	101 B	<1.1		16.2	29.2
DP05-1'	7/25/2001		<59	9420 J	<1.2	8.1	56.9	0.56 B	0.33	38100	12.8	5.8 B	15.4	<0.59	16900	19.9	13200	322	0.025 B	14.3	1050 J	0.66	<0.59	<592	<1.2		19.5	52.6
DP05-8.5'	7/25/2001		54 B	8990 J	<1.1	7.5	85.9	0.51 B	0.47	64000	12.2	8.6	16.5	<0.57	19500	9.3	22000	472	0.016 B	19.2	1670 J	0.68	<0.57	92.3 B	<1.1		17.9	50.9
DP07-9'	7/26/2001		170	8220 J	<1.2	4.4	44	0.46 B	0.4	102000	10.6	6.6	14.5	<0.58	16800	8.1	20800	325	<0.12	14.6	1560 J	0.37 B	<0.58	146 B	<1.2		15.4	43.7
DP08-6'	7/26/2001		180	14100 J	<1.3	10.2	92.8	0.73	0.4	12700	16.3	9.7	21.5	<0.64	25500	15.1	6140	429	0.026 B	20.6	1290 J	0.69	<0.64	<640	<1.3		28.8	59.2
DP08-11'	7/26/2001		180	8070 J	<1.2	5	40.9	0.55 B	0.17 B	6140	11.6	6.3	9.7	1.3	12800	11.6	2970	306	0.015 B	8.7	587 B J	0.68	<0.59	<593	<1.2		23.4	28.3
DP09-12'	7/27/2001		610	2290 J	<1.1	1.2	9 B	0.13 B	0.18 B	112000	5.5	3.1 B	6.4	<0.57	5890	3.8	27600	350	<0.11	6.3	364 B J	<0.57	<0.57	158 B	<1.1		7.5	29.4
DP10-2'	7/27/2001		<56		<1.1	4.3	26.3	0.27 B	0.95		6.6	3.8 B	9.9	<0.56		7.7			<0.11	9.2		<0.56	<0.56		<1.1	27.2	10.7	31.7
DP10-10'	7/27/2001		1400		<1.2	0.74 B	13.9 B	0.091 B	0.25		7.9	3.7 B	5.3	<0.58		2.9			0.09 B	7.8		<0.58	<0.58		<1.2	531	5.7 B	100
[illegible]10-10' Blind Dup	7/27/2001		820		<1.1	1.2	8.2 B	0.1 B	0.18 B		6.9	3.4 B	6.8	0.25 B		2.7			0.046 B	7.8		<0.57	<0.57		<1.1	273	6.5	49.1
[illegible]2-1.5'	7/28/2001		<51	4930 J	<1	7.1	56.2	0.33 B	0.42	111000	7.5	8.4	17	<0.51	9380	12.9	8980	510	0.018 B	8.1	520 J	0.38 B	<0.51	596	<1		11.7	39.8
DP12-9'	7/28/2001		<63	11600 J	<1.3	8.4	47.7	0.41 B	0.2 B	1910	11.4	5 B	14.1	<0.63	18300	10.1	1780	292	0.014 B	12.4	762 J	0.82	<0.63	432 B	<1.3		24.3	46.8
DP13-3'	7/29/2001	160			<1.2	5.4	51.1	0.37 B	0.35		7.8	4.7 B L	11.2	<0.6		11.4 L			<0.12	10.2 L		<0.6	<0.6		<1.2	17	12.5	40.5 L

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Table 4
Summary of Metals Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Acid-insoluble Sulfide	Acid-Soluble Sulfide	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Tin	Vanadium	Zinc
DP13-11'	7/29/2001	310			<1.2	1.4	3.1 B	0.096 B	0.17 B		2.3	1 B	9.9	<0.59		5.9			0.024 B	5.6		<0.59	<0.59		<1.2	887	1.6 B	8.9
DP14-3'	7/29/2001	290			<1	14.3	125	0.7	1.3		9.9	10	13.1	<0.52		39.8			0.049 B	13.9		<0.52	<0.52		<1	78.6	20	66.1
DP14-9'	7/29/2001	600			<1.1	2.1	10.9 B	0.32 B	0.16 B		14.9	1.8 B	11.2	<0.57		7.8			0.082 B	9.4		<0.57	<0.57		<1.1	299	14.8	58.4
DP15-2'	7/29/2001	190			<1.2	5.8	84.2	0.72	0.31		11.3	9.2	14	<0.58		29.9			0.045 B	16.2		<0.58	<0.58		<1.2	46.2	16.2	62.4
DP15-9'	7/29/2001	370			<1.2	1.5	4.9 B	0.37 B	1.1		12.3	82.8	7.5	0.36 B		52.2			<0.12	14.1		<0.6	<0.6		<1.2	283	13.9	110
DP16-2.8'	7/30/2001	89			<1.1	3.3	16.3 B	0.19 B	0.15 B		4.9	3.4 B	6.5	<0.53		3.5			<0.11	8		<0.53	<0.53		<1.1	2.5 B	6.4	23.3
DP16-12.5'	7/30/2001	1100			<1.2	4.7	20.3 B	0.18 B	0.31		7.1	4.1 B	7	0.25 B		11.9			0.028 B	9		<0.58	<0.58		<1.2	2250	7	70
DP17-3'	7/30/2001	150			<1.2	6.7	85.1	0.57 B	0.29		13.2	6.4	19.2	<0.59		31.2			0.046 B	17.9		<0.59	<0.59		<1.2	2.4 B	19.1	61.2
DP17-13'	7/30/2001	990			<1.3	6.5	691	0.39 B	1.3		55.2	54.9	42.8	<0.67		57.6			0.57	21.1		<0.67	<0.67		<1.3	4150	11.4	289
DP18-2'	7/30/2001	<57		7890	<1.1	7.2	49.4	0.45 B	0.49	59200	9.7	5.3 B	10.9	<0.57	13000	14.4	18200	539	0.025 B	11.3	610	<0.57	<0.57	373 B	<1.1		17.2	61
DP18-14.5'	7/30/2001	100		1560	<1.1	2.6	9.6 B	0.15 B	0.16 B	157000	3.5	1.7 B	7.1	<0.55	5750	2.6	48900	502	<0.11	5.1	321 B	<0.55	<0.55	165 B	<1.1		5.4 B	16.4
DP19-2'	7/30/2001	270		8850	<1.2	7.7	119	0.73	0.47	13800	18.6	7.5	18.5	<0.61	15200	29.8	6780	709	0.057 B	14.9	1540	<0.61	<0.61	1030	<1.2		16.9	77
[illegible]9-13'	7/30/2001	110		2570	<1.1	3.1	11.3 B	0.22 B	0.15 B	91600	5.5	2.5 B	7.2	<0.55	7240	3.4	33700	302	<0.11	7.3	401 B	<0.55	<0.55	295 B	<1.1		9	24.9
DP20-2'	7/30/2001	<57		7480	<1.1	8.3	65.8	0.53 B	0.38	37100	11.1	6.6	18.2	<0.57	14500	25.9	9230	529	0.08 B	14.5	659	<0.57	<0.57	<569	<1.1		15.6	58.1
DP20-14.5'	7/30/2001	170		1380	<1.1	2	8.2 B	0.17 B	0.13 B	107000	3.1	2.1 B	6.3	<0.57	3500	2.8	50100	261	<0.11	5.3	243 B	<0.57	<0.57	217 B	<1.1		5.4 B	16.7
DP23-2.5'	8/1/2001		<130	12900 L	<1.3	14.2	106 L	0.75	0.098 B	13800 L	19.9 L	16.8 L	22.1 L	0.38 B	29900 L	21.6 L	4740 L	1730 L	0.03 B	25.9 L	1200	0.79	<0.63	192 B	4.7		29.6 L	67 L
DP23-9'	8/1/2001		<130	13100	<1.3	12.7	112	0.76	<0.26	39800	19.6	14.4	26.5	<0.66	32900	16.9	13900	652	0.018 B	33.2	2120	1.1	<0.66	204 B	2.9		26.1	76.5
DP25-2.5'	8/7/2001		<62	14100	<1.2	8.8	100	0.55 B	6.5	2690	15	7.6	16.2	<0.62	20100	10.2	2290	297	0.024 B	15.4	890	0.53 B	<0.62	574 B	1.5		25.8	54.6
DP25-2.5' Blind Dup	8/7/2001		<56	6530	<1.1	6.1	49.4	0.27 B	0.33	110000	9.6	6.3	13.9	0.56	15900	6.9	27900	404	<0.11	15.8	1160	0.66	<0.56	428 B	2.7		12.2	39.9
DP25-7.5'	8/7/2001		<58	9050	<1.2	6	75.1	0.35 B	2	103000	12.2	7.3	16	<0.58	17300	7.6	23700	575	<0.12	16.8	2050	0.49 B	<0.58	465 B	3.1		17	46.4
DP29-5	11/9/2001		84	10600	<1.3	7.5	59.4 J	0.42 B	0.14 B	54200	13.9	8.9	18.8	<0.63	21100	15.3	15900	515	0.049 B	22.2	1250	<0.63	<0.63	76.2 B	<1.3		18.6	70.2
SS-1	10/11/2001		73	4830	<1.2	4.9	40.2	0.19 B	0.22 B	74400	10.3	5.3 B	12.3	<0.6	12100	11.3	21200	333	<0.12	14.3	874	<0.6		223 B	<1.2	30.8 J	10.7	38.2
SS-2	10/11/2001		<57	7840	<1.1	6.1	62.5	0.36 B	0.41	83900	13.7	7.2	17.8	<0.57	16500	28.9	14000	586	0.06 B	17	1230	<0.57		160 B	<1.1	76.3 J	14.8	54.1
SS-3	10/11/2001		<65	5660	<1.3	5.2	52.1	0.27 B	0.52	58600	16	6.6	19.2	<0.65	14300	24.8	12100	601	0.051 B	17	610 B	<0.65		260 B	<1.3	4.7 B J	13.3	82.8
SS-4	10/11/2001		100	9330	<1.2	3.4	76.9	0.46 B	0.25	18800	16	7.5	11.9	<0.61	17400	10.8	5450	344	0.016 B	14.9	754	<0.61		125 B	<1.2	24.8 J	17	42.5
SS-5 ~25' South	10/11/2001		95	3370	<1.2	3.9	37.2	0.18 B	0.27	65700	9.6	4.2 B	11.3	<0.62	9740	12.5	12600	283	<0.12	9.8	486 B	<0.62		175 B	<1.2	4.9 B J	9.3	38.9
SS-5 Blind Dup.	10/11/2001		100	3870	<1.2	3.8	30.4	0.21 B	0.23 B	67000	15.3	4.5 B	9.3	<0.62	10400	14.1	14900	260	0.011 B	10	529 B	<0.62		196 B	<1.2	3.9 B J	10.4	46.7
SS-6	10/11/2001		<63	6190	<1.3	5.5	52.4	0.29 B	0.32	46100	13.9	6.8	16.5	<0.63	14100	29.8	12300	636	0.073 B	14.9	685	0.48 B		135 B	0.67 B	5.7 B J	13.9	59.5
SS-7	10/11/2001		<62	6080	<1.2	4.9	46.8	0.28 B	0.38	54800	17.2	6.7	19.3	<0.62	13500	24.5	14400	453	0.045 B	16.7	734	0.39 B		173 B	<1.2	5.2 B J	13.4	68.2
SS-8	10/11/2001		<66	5570	<1.3	5.3	63	0.24 B	0.39	56300	14.1	6.3 B	18.2	<0.66	14100	25.8	12500	592	0.056 B	15.9	661	<0.66		275 B	<1.3	7 B J	13.5	62.4
SS-9	10/11/2001		<64	5300	<1.3	4.3	40.9	0.24 B	0.32	52900	14.5	5.7 B	16.2	<0.64	11700	28.4	11500	325	0.038 B	14.6	739	<0.64		341 B	<1.3	3.3 B J	12.4	64.2
SS-10	10/11/2001		<59	4290	<1.2	3.9	29.8	0.17 B	0.24	57100	12.7	4.2 B	14.2	<0.59	9340	14.7	15800	345	0.045 B	12.9	590	<0.59		124 B	0.69 B	3.9 B J	9.3	44.3
SS-11	10/11/2001		<64	6630	<1.3	5.5	55	0.29 B	0.32	53500	16.3	6.8	16.9	<0.64	14900	27.6	13400	615	0.039 B	16.7	810	<0.64		340 B	<1.3	3.6 B J	14.6	71.6
SS-12	10/11/2001		<63	7760	<1.3	6.3	68.2	0.34 B	0.54	47300	22.9	7.8	26	<0.63	17200	38.3	12600	658	0.095 B	22	789	<0.63		360 B	<1.3	33.2 J	16.5	101
STR01-3'	3/8/2001	<58		7920	<1.2	5.3	76	0.25 B	0.094 B	41000	9.7	5.4 B	12.8	<0.58	11800	8.6	18400	585	0.02 B	12.8	1130	<0.58	<0.58	135 B	1.6		17.2	48.2 MBD
[illegible]R01-21'	3/8/2001	<56		1530	<1.1	3.7	6 B	<0.56	<0.23	117000	3.8	2.1 B	5.3	<0.56	4860	2.9	35200	264	<0.11	5	319 B	<0.56	<0.56	157 B	1.1		6.6	14.7 MBD
[illegible]01-73'	3/9/2001	<60		2140	<1.2	5.3	12 B	0.16 B	<0.24	104000	3.7	3.7 B	5	<0.6	9400	5.3	15200	491	<0.12	6.4	460 B	<0.6	<0.6	113 B	1.3		7.9	18.1 MBD
STR01-88'	3/9/2001	<57		1960	<1.1	3.1	15.9 B	0.22 B	<0.23	104000	4.1	4.1 B	4.7	<0.57	10700	5.8	11500	538	<0.11	6.3	288 B	<0.57	<0.57	79 B	0.72 B		7.6	17.9 MBD
STR02-1'	3/13/2001	<120		13700	<1.2	6.5	113	0.62	0.28	14800	58.9	9.4	16.5	<0.61	19700	19.5	4920	1120	0.072 B	18	1580	<0.61	<0.61	694	<1.2		23.4	64

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Table 4
Summary of Metals Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Acid-insoluble Sulfide	Acid-Soluble Sulfide	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Tin	Vanadium	Zinc
STR02-12.5'	3/13/2001	800		2350	<1.1	2.1	11.8 B	0.11 B	0.16 B	175000	3.9	3.1 B	4.6	<0.56	5330	3.1	95200	192	<0.11	5.1	427 B	<0.56	<0.56	292 B	<1.1		8.2	16.2
STR03-4'	3/14/2001	800			<1.2	3.4	60.3	0.38 B	<0.23		10	6	6.9	<0.58		7.6			0.021 B	11.4		<0.58	<0.58		<1.2	1.3 B	14.5	30.9
STR03-12.5'	3/14/2001	340			<1.1	0.94 B	6.7 B	<0.55	0.1 B		7.6	2.6 B	5.6	<0.55		2.2			0.013 B	6.2		<0.55	<0.55		<1.1	225	6	42.7
STR04-1.5'	3/19/2001	<120		11900	<1.2	8.1	83.5	0.43 B	0.2 B	20400	15.3	10	14.1	<0.6	17100	13.5	8880	531	0.036 B	17.6	1060	<0.6	<0.6	78.7 B	0.86 B		26.2	46.4
STR04-17.5'	3/19/2001	760		2780	<1.2	3	12.8 B	<0.61	0.13 B	119000	4.8	2.7 B	8.1	<0.61	7050	5.6	26200	259	0.026 B	7	661	<0.61	<0.61	202 B	0.98 B		8.8	28.4
STR04-17.5' DUP	3/19/2001	550		1750	<1.1	2.6	11.9 B	0.077 B	0.16 B	162000	5.2	2.6 B	7.7	0.21 B	7110	5.1	38800	318	<0.11	6.6	334 B	<0.54	<0.54	258 B	0.83 B		6.7	41.1
STR05-1.5'	3/10/2001	<57		10000	<1.1	15.1	63.4	0.45 B	<0.23	3520	13.3	6.7	14.1	<0.57	21700	12.4	2420	283	0.026 B	16	884	0.53 B	<0.57	229 B	<1.1		24.4	51 MBD
STR05-9'	3/10/2001	<58		5400	<1.2	4.8	27	0.22 B	0.087 B	62400	7.3	4.2 B	5.4	0.28 B	14200	4.8	24500	2120	0.011 B	9.5	868	<0.58	<0.58	95 B	1.6		12.9	22.9 MBD
STR05-11.3'	3/10/2001	110		3910	<1.1	5.5	16.8 B	0.11 B	0.082 B	107000	7.3	4.7 B	6.7	0.23 B	9020	3.8	37800	432	<0.11	10.3	831	<0.54	<0.54	237 B	1.6		9.9	21.4 MBD
STR06-1'	3/11/2001	<59		11000	<1.2	7.5	87	0.42 B	<0.24	2150	12.6	8.1	11.2	<0.59	16400	13.8	1690	729	0.028 B	13.3	672	<0.59	<0.59	1310	<1.2		24.3	42.9
STR06-15'	3/11/2001	<61		13500	<1.2	8.4	198	0.66	0.34	42700	18	17	25.5	<0.61	27500	16.1	13200	937	0.028 B	36.3	2570	<0.61	<0.61	102 B	<1.2		25.4	77.9
STR07-1.5'	3/21/2001	34 B		10800	<1.2	7.4	103	0.66	0.3	7110	92.1	9.3	17.3	<0.6	19400	21.7	3440	844	0.035 B	17.3	1410	<0.6	<0.6	1470	<1.2		19.8	67.4
STR07-18'	3/21/2001	<120		2130	<1.2	2.3	9.5 B	0.14 B	0.2 B	175000	4.1	2.8 B	10.4	<0.58	6390	6.7	35300	314	<0.12	7.4	517 B	<0.58	<0.58	247 B	1.1 B		7.9	30.8
STR08-1.5'	3/26/2001	<61		13400	<1.2	5.9	120	0.73	<0.24	8260	20.2	9.4	15.8	<0.61	18600	19.5	4130	1010	0.033 B	15.9	1660	0.58 B	<0.61	<607	1.8		22.2	64 MBD
STR08-13'	3/26/2001	280		4460	<1.1	4.2	34.6	0.13 B	0.063 B	150000	9.4 L	5.2 B	9.7	<0.56	13400	5.9 L	41700	587	<0.11	10.5 L	1010	<0.56	<0.56	311 B	2.6		10.9	38.8 MBD
STR08-13' DUP	3/26/2001	290		3360	<1.1	3.5	25.9	0.12 B	<0.23	146000	6.8	3.5 B	6.5	0.29 B	9380	4.3	24200	414	<0.11	7.8	1020	<0.57	<0.57	240 B	1.5		7.4	25.3 MBD
STR09-7.5'	4/4/2001	<61		11200	<1.2	10.7	80.8	0.34 B	0.32	2670	15.9	5.9 B	22.1	<0.61	21200	9.8	2390	555	0.033 B	21.7	1030	<0.61	<0.61	<606	<1.2		25.9	58.2 MBD
STR10-1.5'	4/7/2001	<57			<1.1	16.2	105	1	0.57		15.6	10.9	21.4	<0.57		21.3			0.021 B	21.8		<0.57	<0.57		<1.1	1.6 B	30.4	61.4 MBD
STR10-11'	4/7/2001	40 B			<1.3	4.5	57.7	0.51 B	0.23 B		15.4	7.9	13.2	<0.63		10			0.031 B	17.4		<0.63	<0.63		<1.3	0.96 B	20.8	50.7 MBD
STR11-2'	8/20/2001		<120	10000	<1.2	8.8	44.3	0.29 B	<0.24	810	10.3	6.8	13.3	<0.6	16700	10.2	1570	386	0.022 B	14.7	632	0.38 B	<0.6	<599	<1.2		21.2	48.1
STR11-9'	8/20/2001		<120	10200	<1.2	19.4	54.7	0.51 B	0.15 B	35400	15	14.8	23.9	<0.59	36200	12.1	12600	317	0.012 B	36.1	1890	0.57 B	<0.59	<586	<1.2		20.9	79.1
STR11-9' Blind Dup	8/20/2001		<120	10200	<1.2	11.8	56.9	0.57 B	0.29	54500	14.4	10	21.4	<0.59	25300	13.1	14400	279	<0.12	28.4	1960	0.42 B	<0.59	72.5 B	<1.2		21.5	65
T-1-4	11/8/2001		<64		65.1	580	25.8 J	0.14 B	1.3		232	7.9	1260	<0.64		19300			0.028 B	35.4		<0.64	5.6		31.8	158000 J	4.9 B	15.4
T-1-6	11/8/2001		<56		<1.1	11	22.3 J	0.2 B	0.82		11.5	34.9	151	<0.56		94.7			<0.11	142		<0.56	<0.56		<1.1	36500 J	7	32.9
T-2-3	11/8/2001		<60		<1.2	4.5	70 J	0.49 B	0.054 B		11.1	7.4	10.6	<0.6		13			0.02 B	14.2		0.73	<0.6		<1.2	7.4 B J	15.4	38.4
T-2-9	11/8/2001		66		<1.1	2.7	19.1 B J	0.064 B	0.085 B		5.6	3.7 B	7.7	<0.57		6.6			<0.11	8.7		0.43 B	<0.57		0.84 B	1.9 B J	9.6	25.9
T-3-3	11/8/2001		<56		1.5	9.1	132 J	0.29 B	0.52		13.8	6.4	44.8	<0.56		144			0.18	14.9		0.42 B	<0.56		<1.1	57.3 J	15.2	317
T-3-11	11/8/2001		<56		<1.1	6.4	42.6 J	0.23 B	0.079 B		9.2	5.2 B	11.1	<0.56		7.9			0.017 B	11.2		0.4 B	<0.56		<1.1	4 B J	14.4	33.4
T-4-3	11/9/2001		<56		<1.1	8.9	72.6 J	0.36 B	0.11 B		10.9	6.7	13.4	<0.56		18.4			0.072 B	11.7		0.6	<0.56		<1.1	2.7 B J	18.9	47.2
T-4-9	11/9/2001		<54		0.6 B	6.8	83.3 J	0.3 B	0.18 B		10.2	6.1	44.8	<0.54		38.9			0.056 B	11.7		<0.54	<0.54		<1.1	6.7 B J	16.1	87.6
T-5-3	11/9/2001		<60		<1.2	4.8	106 J	0.65	0.11 B		17.5	9.2	15.2	<0.6		16.1			0.043 B	16.4		0.61	<0.6		<1.2	12.4 J	17.5	59.9
T-5-9	11/9/2001		<60		<1.2	2.6	56.7 J	0.39 B	0.11 B		9.1	6.5	9.7	<0.6		8.1			<0.12	12		0.39 B	<0.6		<1.2	12.4 J	13.2	33.5
T-6-3	11/10/2001		<61		<1.2	9.7	60.2 J	0.44 B	<0.24		14.5	8	16.5	<0.61		13.4			0.041 B	18.8		<0.61	<0.61		<1.2	3.3 B J	23.2	55.8
T-6-7.5	11/11/2001		<72		<1.4	5.2	112	<0.72	0.19 B		6.5	3.1 B	24.1	0.28 B		57.9			0.051 B	8.2		<0.72	<0.72		<1.4	37.8 J	7.1 B	103
T-6-10	11/10/2001		<55		<1.1	6.9	78.3 J	0.4 B	0.056 B		9.5	5.9	11.9	<0.55		27.1			0.049 B	10.2		<0.55	<0.55		<1.1	2.1 B J	17.4	47.6
T-[illegible]3	11/11/2001		<63		<1.3	5.1	92.1	0.59 B	0.066 B		13.5	9.3	11.9	<0.63		11.3			0.027 B	17.4		<0.63	<0.63		<1.3	1.6 B J	19.7	43.6
T-[illegible]-9	11/11/2001		<54		<1.1	4.2	56.4	0.19 B	0.11 B		6.3	4 B	6.1	<0.54		4.8			0.011 B	8.1		<0.54	<0.54		1.1	11.5 J	10	20.1
UAW01-30-1.5'	4/2/2001	<58		11200	<1.2	8.6	109	0.48 B	0.63	23900 L	15.7 L	7.8 L	22	<0.58	18500 L	75.5 L	7000	429 L	0.071 B	17.3 L	915	<0.58	<0.58	92.9 B	<1.2	34.4	22.4 L	97.5 L MBB
UAW01-30-15'	4/2/2001	<52		2310	<1	3.5	8.4 B	0.052 B	0.21	118000	4.6	3.3 B	8.5	<0.52	5900	3.7	39500	201	<0.1	6.5	443 B	<0.52	<0.52	134 B	0.7 B		7.4	22.9 MBD

Table 4
Summary of Metals Data
Soil and Sediment Samples
Morton International, Inc.
Reading, Ohio
Units: mg/kg

Sample Location	Sample Date	Acid-insoluble Sulfide	Acid-Soluble Sulfide	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Tin	Vanadium	Zinc
UAW04-20-10'	3/23/2001	30 B		8730	8.9	7.8	64.5	0.46 B	0.27	26300	11.3	7.3	12.2	<0.68	14600	10	7420	483	0.016 B	15	856	<0.68	<0.68	97.3 B	<1.4		15.7	44.1
UAW05-20-13'	3/23/2001	220		10100	<1.2	3.4	52.6	0.48 B	0.36	99000	12.5	8	15.6	0.22 B	20500	8.8	20800	482	<0.12	18.3	2050	<0.58	<0.58	329 B	<1.2		17.9	45.6
UAW06-20-1.5'	3/26/2001	<61		13300	<1.2	6.4	121	0.77	0.11 B	5520	30.3	9.5	16.6	<0.61	18700	23.8	2800	646	0.045 B	16.2	1720	0.91	<0.61	450 B	0.92 B		22.8	72 MBD
UAW06-20-11.5'	3/26/2001	<56		1600	<1.1	1.2	5.6 B	<0.56	<0.23	124000	3.8	2 B	6.2	<0.56	4150	3.3	51000	387	<0.11	4.1 B	239 B	<0.56	<0.56	180 B	1.4		6.3	20.3 MBD
UAW08-20-13'	3/24/2001	340			<1.1	2	36.3	<0.56	0.23		51.7	28.8	20.8	0.19 B		6.1			0.024 B	22.9		<0.56	<0.56		1 B	24.8	10.8	142
UAW09-20-1.5'	3/27/2001	<58		6280	<1.2	5.8	45.7	0.19 B	<0.23	1530	8.5	6.7	7.8	<0.58	11300	10.6	1260	516	0.013 B	9	572 B	0.51 B	<0.58	<584	<1.2		16.8	35.9 MBD
UAW09-20-15'	3/27/2001	<53		1790	<1.1	4.2	7.5 B	<0.53	<0.21	106000	3.6	2.5 B	6	<0.53	5900	4.2	37100	156	<0.11	5.6	458 B	<0.53	<0.53	108 B	1.6		7.1	26.8 MBD
UAW11-40-2'	4/17/2001	<60		11800	<1.2	5.2	79.8	0.6	<0.24	4100	13.1	8.7	12.5	<0.6	19400	11.9	2360	560	0.026 B	16.8	903	<0.6	<0.6	701	<1.2		19.6	44.8
UAW11-40-10'	4/17/2001	120		1920	<1.1	2.8	5.4 B	<0.57	0.061 B	125000	4.2	3.2 B	7.4	<0.57	6680	4.1	32600	232	<0.11	8.8	224 B L	<0.57	<0.57	290 B	1.3		7.5	26
UAW12-20-12'	3/24/2001	560			<1.2	0.75 B	3.1 B	0.074 B	0.74		3.8	4 B	6.1	<0.61		3.1			<0.12	7.6		<0.61	<0.61		0.72 B	7.6 B	5.9 B	139
UAW13-20-1.5'	3/24/2001	34 B			<1.2	4.9	62.4	0.34 B	0.37		11.2	6.1	11.6	<0.58		15.4			0.067 B	12.2		<0.58	<0.58		0.68 B	18.1	17.3	50.6
UAW13-20-11.5'	3/24/2001	430			<1.2	0.75 B	2 B	0.07 B	0.21 B		3.9	3 B	5.1	0.22 B		3			<0.12	7.9		<0.6	<0.6		0.61 B	11.5 B	6.1	57.6
W14-10-1.5'	4/4/2001	<59		11500	<1.2	6.4	117	0.72	0.34	5060	16.8	8.1	16.5	<0.59	16200	19.7	2110	1050	0.048 B	16	1340	<0.59	0.37 B	<589	<1.2		19.6	67.3 MBD
UAW15-20-2'	4/9/2001	26 B		5910	<1.1	5.5	45.8	0.21 B	0.093 B	1530	7.5	5.8	9.7	<0.55	10400 MBB	13	1120	257	0.016 B	9.7	576	0.56	0.9	470 B	<1.1		16	36
UAW15-20-2' DUP	4/9/2001	<55		5940	<1.1	6.2	55.1	0.21 B	0.093 B	4310	7.6	5.8	10.3	<0.55	11400 MBB	11.2	1210	530	0.017 B	9.9	594	0.58	1.9	483 B	0.94 B		16.1	37.4
UAW15-20-8.5'	4/9/2001	26 B		6250	<1.1	6.9	38	0.18 B	0.057 B	1110	7.7	6.7	9.6	<0.56	13600 MBB	9	1590	431	0.018 B	12.5	608	0.44 B	<0.56	351 B	<1.1		16.9	38.2
UAW16-10-2'	8/22/2001		<120	9160	<1.2	6.3	53.3	0.49 B	0.11 B	4430	12.8	5.3 B	11.3	<0.58	19500	11.6	1880	367	0.019 B	16	891	0.49 B	<0.58	133 B	<1.2		20.3	40
UAW16-10-5.5'	8/22/2001		<110	1960	<1.1	2.6	8.4 B	<0.54	0.059 B	104000	4.7	2.5 B	6.6	1.7	5650	4.1	38800	371	<0.11	6.5	390 B	<0.54	<0.54	154 B	1.2		6.5	19.1
UAW17-40-1.5'	4/5/2001	<57		10500	<1.1	7.5	118	0.26 B	0.73	39300	17.3	6.2	27.7	0.19 B	14800	28.4	10900	515	0.041 B	17.9	1330	<0.57	0.89	125 B	<1.1		19.4	97.5 MBB
UAW17-40-5'	4/5/2001	<64		5160	1.8	9.1	559	0.34 B	1.8	63500	13.9	4.3 B	77.2	<0.64	16900	128	11100	940	<0.13	22.3	1150	<0.64	1.3	238 B	<1.3		11.2	418 MBD
UAW18-20-1'	8/23/2001		<60	7790	<1.2	4	72.1	0.39 B	0.29	21600	15.2	6.9	11.2	<0.6	13900	14.2	7400	505	0.048 B	13.2	948	0.79	<0.6	737	0.71 B		15	47.2
UAW18-20-15'	8/23/2001		<61	1980	<1.2	3.1	12.6 B	<0.61	0.076 B	135000	4.6	2.7 B	6.8	<0.61	7670	4	37000	295	<0.12	7	408 B	<0.61	<0.61	792	2.1		6.4	21.7
UAW19-80-1.5'	4/6/2001	<61		13800	<1.2	8.5	60.3	0.36 B	0.15 B	2180	14.2	7.6	13.9	<0.61	16700	12.5	1850	212	0.015 B	14	962	<0.61	<0.61	<606	<1.2		26.4	48.9 MBD
UAW19-80-15'	4/6/2001	<59		7980	<1.2	8.1	44.4	0.45 B	0.44	52800	11.7	9.3	19.2	<0.59	19100	10.3	14900	437	<0.12	23.5	1630	<0.59	<0.59	106 B	<1.2		16.2	62.6 MBD
UAW20-60-1.5'	4/9/2001	35 B		8300	<1.1	6.4	69.5	0.57	0.18 B	27800	8	5.6	13.3	<0.56	12600 MBB	22.2	4210	334	0.058 B	12.3	833	0.36 B	0.42 B	2410	<1.1		16.2	49.8
UAW20-60-9.5'	4/9/2001	39 B		12800	<1.2	7.7	48.9	0.66	0.38	50900	11.5	14.1	23	<0.61	25500 MBB	12.6	15900	318	0.032 B	32.8	2620	0.64	<0.61	317 B	<1.2		24.7	75.1
UAW21-30-1.5'	4/11/2001	<59		6490	<1.2	7.8	93	0.32 B	0.13 B	1930	9.1	6.2	9.8	<0.59	12100 MBB	780	1260	608	0.11 B	9.8	543 B	0.41 B	<0.59	224 B	<1.2		17.1	56.4
UAW21-30-10'	4/11/2001	<56		2220	<1.1	4.4	10.7 B	0.093 B	0.1 B	97800	3.5	2.7 B	8	<0.56	5820 MBB	9.1	30500	180	<0.11	6.4	447 B	<0.56	<0.56	131 B	<1.1		6.9	21.2
UAW22-20-2'	9/5/2001		<110	6180 J	<1.1	6	48	0.32 B	0.56	90100	9.6	5.4 B	11.1	<0.56	12200 J	13.5	9680	760	0.03 B J	10.9	777	<0.56	<0.56	252 B	1 B J		12.5	53.3
UAW22-20-11'	9/5/2001		<110	1510 J	<1.1	1.3	7.4 B	0.053 B	0.16 B	131000	3.2	1.8 B	5.4	0.44 B	5770 J	3.5	41200	257	0.019 B J	4.5	287 B	<0.56	<0.56	203 B	1.9 J		5 B	16.3

J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B = Estimated result; result is less than reporting limit

L = Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.

MBD = This analyte is present in the associated method blank at an amount that is less than two times the reporting limit.

MBB = This analyte is present in a reportable level in the associated method blank but is less than 5% of the sample amount.

[illegible] blank cell indicates chemical was not on the target analyte list for that sample.

[illegible] table only includes target analytes detected in one or more Facility Investigation samples.

See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

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Table 5
Summary of Volatile Organic Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Data	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Bromoform	Carbon disulfide	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes (total)
MW-EPA-1	5/8/2001	<50	<50	<50	<50	<50	<50	<50	<500		<500	<50	<50	<50	<50	1600	<50	<25	<50	<50	<50	19 J	<50	<50	<50	<50	<50	<25	<50	<100	30 J
MW-EPA-1	11/15/2001	<83	<83	<83	<83	<83	<83	<83	<830		63 J B	31 J	<83	<83	<83	3200	<83	<42	<83	<83	<83	40 J	<83	<83	140 B	<83	59 J	<42	<83	<170	93
MW-EPA-2	5/8/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	1	<0.5	<1	<1	<1	<1	<1	<1	0.98 J	11	<1	<0.5	<1	<2	<1
MW-EPA-2	11/14/2001	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<33		2 J	<3.3	<3.3	<3.3	<3.3	<3.3	0.81 J	<1.7	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	2 J B	45	<3.3	<1.7	<3.3	<6.7	<3.3
MW-EPA-3	5/6/2001	<1	<1	<1	<1	<1	<1	<1	<10	<10	<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
MW-EPA-3	11/13/2001	<1	<1	<1	<1	<1	<1	<1	<10		2.6 J	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	0.3 J	<0.5	<1	<2	<1
MW-EPA-4	5/8/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
MW-EPA-4	11/13/2001	0.2 J	<1	<1	<1	<1	<1	<1	<10		2.5 J	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
[illegible]overy Well	7/29/2001	<29		<29	<29	<29	<29	<29	<290	<140	1600	<29	<29	<29	<29	8.7 J	<29	<14		<29	<57	<29			<29	<29	<29	<14	<29	<57	<29
UAW01-30	5/4/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	1.6	<1	<0.5	<1	<1	0.41 J	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW01-30	11/8/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	0.5 J	<1	<0.5	<1	<1	0.38 J	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW01-80	5/4/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	1.4 J	<1
UAW01-80	10/10/2001	<1	<1	<1	<1	<1	<1	<1	<10		1.2 J B	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	2.1	<1
UAW01-80	11/12/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	0.23 J	<0.5	<1	1.9 J	<1
UAW02-20	5/7/2001	<1	<1	<1	0.74 J	<1	0.42 J	<1	<10	<10	<10	0.49 J	<1	<1	<1	32	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW02-20 DUP	5/7/2001	<1.2	<1.2	<1.2	0.67 J	<1.2	0.44 J	<1.2	<12		<12	0.47 J	<1.2	<1.2	<1.2	31	<1.2	<0.62	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<0.62	<1.2	<2.5	<1.2
UAW02-20	11/10/2001	<1	<1	<1	0.21 J	<1	<1	<1	<10		<10	0.6 J	<1	<1	<1	32	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	0.45 J	<0.5	<1	<2	<1
UAW02-40	5/7/2001	<2.5	<2.5	<2.5	28	4.3	<2.5	66	<25		<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	62	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.3	<2.5	<5	<2.5
UAW02-40	11/10/2001	<2.5	<2.5	<2.5	27	4.5	<2.5	63	<25		1.8 J B	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	59	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.2	<2.5	<5	<2.5
UAW03-20	5/7/2001	<1	<1	<1	0.84 J	<1	14	<1	<10	<10	3.4 J	1.2	<1	<1	1.5	8.6	<1	<0.5	<1	<1	<1	0.55 J	<1	0.41 J	<1	<1	12	<0.5	<1	<2	2.5
UAW03-20	11/11/2001	<2.5	<2.5	<2.5	<2.5	<2.5	1.2 J	<2.5	<25		3.8 J B	1.4 J	<2.5	<2.5	<2.5	41	<2.5	<1.2	0.73 J	<2.5	<2.5	1.6 J	0.34 J	2.6	1.3 J B	<2.5	3.6	<1.2	<2.5	<5	4.5
UAW04-20	5/7/2001	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<10000		<10000	<1000	<1000	<1000	<1000	<1000	<1000	<500	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	21000	<500	<1000	<2000	<1000
UAW04-20	11/11/2001	<250	<250	<250	<250	<250	<250	<250	<2500		590 J B	<250	<250	<250	<250	<250	<250	<120	<250	<250	<250	<250	<250	<250	200 J B	<250	8800	<120	<250	<500	<250
UAW05-20	5/6/2001	<40	<40	<40	<40	<40	<40	<40	<400		<400	<40	<40	<40	<40	460	<40	<20	<40	<40	<40	<40	<40	<40	<40	<40	<40	<20	<40	<80	<40
UAW05-20	10/10/2001	<40	<40	<40	<40	<40	<40	<40	<400		22 J B	<40	<40	<40	<40	440	<40	<20	<40	<40	<40	<40	<40	<40	<40	<40	<40	<20	<40	<80	<40
UAW05-20	11/12/2001	<22	<22	<22	<22	<22	<22	<22	<220		<220	<22	<22	<22	<22	390	<22	<11	<22	<22	<22	4 J	<22	3.5 J	<22	<22	<22	<11	<22	<44	10 J
UAW06-20	5/6/2001	<10	<10	<10	<10	<10	<10	<10	<100	<100	720	<10	<10	<10	<10	70	<10	<5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5	<10	<20	<10
UAW06-20	10/10/2001	<170	<170	<170	<170	<170	<170	<170	<1700		11000	<170	<170	<170	<170	100 J	<170	<83	<170	<170	<170	<170	<170	<170	<170	<170	<170	<83	<170	<330	<170
UAW06-20	11/13/2001	<670	<670	<670	<670	<670	<670	<670	750 J B		45000	<670	<670	<670	<670	110 J	<670	<330	<670	<670	<670	<670	<670	<670	<670	<670	<670	<330	<670	<1300	<670
UAW07-20	5/8/2001	<2		<2	1.6 J	<2	<2	<2	<20		<20	2.1	<2	<2	2.4	39	<2	<1		<2	<4	4.4			<2	<2	3.5	<1	<2	<4	13
UAW07-20 DUP	5/8/2001	<2.5		<2.5	1.5 J	<2.5	<2.5	<2.5	<25		<25	1.8 J	<2.5	<2.5	1.1 J	38	<2.5	<1.2		<2.5	<5	4.3			<2.5	<2.5	3.6	<1.2	<2.5	<5	13
[illegible]W07-20	11/15/2001	<2		<2	1.2 J	<2	<2	<2		<10	3.3 J B	5.2	<2	<2	<2	64	<2	<1		<2	<4	5.6			2.3 B	<2	1.2 J	<1	<2	<4	13
[illegible]W08-20	5/6/2001	<33		<33	<33	<33	<33	<33	<330		150 J	41	<33	<33	20 J	37	<33	<17		<33	<67	32 J			<33	<33	1100	<17	<33	<67	140
UAW08-20	11/13/2001	<100		<100	<100	<100	<100	<100		<500	580 J	110	<100	<100	64 J	61 J	<100	<50		<100	<200	57 J			42 J B	<100	1400	<50	<100	<200	190
UAW09-20	5/5/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	0.49 J	<1	<1	<1	0.4 J	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1

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Table 5
Summary of Volatile Organic Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Data	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Bromoform	Carbon disulfide	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes (total)
UAW09-20	11/9/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	0.2 J	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	0.28 J B	<2	<1
UAW09-60	5/5/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	0.4 J	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW09-60	11/9/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	0.32 J	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	0.27 J B	<2	<1
UAW10-50	10/12/2001	36	2.1	1.9 J	12	3.4	54	55	<20		1.1 J	<2	<2	<2	<2	<2	20	54	<2	<2	<2	<2	<2	<2	2.1	0.48 J	<2	0.87 J	3.6	0.43 J	<2
UAW10-50	11/13/2001	32	1.5 J	1.4 J	12	1.6 J	45	47	5.3 J B		3 J	<4	<4	<4	<4	<4	35	46	<4	<4	<4	<4	<4	<4	3.5 J B	<4	<4	0.75 J	2.8 J	<8	<4
UAW10-80	10/12/2001	<67	<67	<67	<67	<67	2200	<67	<670		35 J	<67	<67	<67	<67	<67	24 J	<33	<67	<67	<67	<67	<67	<67	240	<67	<67	<33	<67	23 J	<67
UAW10-80	11/13/2001	<170	<170	<170	<170	<170	3500	<170	190 J B		<1700	<170	<170	<170	<170	<170	<170	<83	<170	<170	<170	<170	<170	<170	81 J B	<170	<170	<83	<170	<330	<170
UAW11-10	5/8/2001	<500	<500	<500	<500	<500	<500	<500	<5000		32000	<500	<500	<500	270 J	<500	<500	<250	<500	<500	<500	<500	<500	<500	<500	<500	<500	<250	<500	<1000	<500
W11-10	11/10/2001	<250	<250	<250	<250	<250	<250	<250	<2500		14000	<250	<250	<250	<250	<250	<250	<120	<250	<250	<250	<250	<250	<250	190 J B	<250	<250	<120	<250	<500	<250
UAW11-40	5/8/2001	15	<5	<5	10	<5	160	12	<50		<50	<5	<5	<5	<5	3 J	2.1 J	12	<5	<5	<5	<5	<5	<5	<5	14	<5	<2.5	2.5 J	<10	<5
UAW11-40	11/12/2001	13	<5	<5	9.5	<5	130	12	<50		6.6 J B	<5	<5	<5	<5	3.2 J	3.5 J	12	<5	<5	<5	<5	<5	<5	<5	16	<5	<2.5	2.6 J	<10	<5
UAW12-20	5/6/2001	<56		<56	<56	<56	<56	<56	<560		<560	<56	<56	<56	<56	920	<56	<28		<56	<110	<56			<56	<56	<56	<28	<56	<110	<56
UAW12-20	11/15/2001	<50		<50	<50	<50	<50	<50		<250	<500	<50	<50	<50	<50	1400	<50	<25		<50	<100	<50			79 B	<50	<50	<25	<50	<100	<50
UAW13-20	5/6/2001	<10		<10	4.9 J	<10	<10	<10	<100	<50	180	21	<10	<10	170	20	<10	1.7 J		<10	<20	<10			<10	<10	250	<5	<10	<20	5.4 J
UAW13-20	11/15/2001	<17		<17	<17	<17	<17	<17		22 J	450 B	20	<17	<17	140	31	<17	<8.3		<17	<33	4.1 J			25 B	<17	350	<8.3	<17	<33	9.1 J
UAW14-10	5/5/2001	<1	<1	<1	<1	<1	0.67 J	<1	<10		<10	<1	<1	<1	<1	<1	0.37 J	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW14-10	11/9/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	0.31 J B	<2	<1
UAW15-20	5/6/2001	<1	<1	<1	<1	<1	<1	<1	<10	<10	<10	<1	<1	<1	<1	<1	3.1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW15-20	11/11/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	14	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	5.8	<0.5	<1	<2	<1
UAW15-50	5/6/2001	<120	<120	<120	<120	<120	<120	<120	<1200	<1200	7300	<120	<120	<120	<120	<120	<120	<62	<120	<120	<120	<120	<120	<120	<120	<120	230	<62	<120	<250	<120
UAW15-50	11/11/2001	<170	<170	<170	<170	<170	<170	<170	<1700		10000	<170	<170	<170	<170	25 J	<170	<83	<170	<170	<170	<170	<170	<170	110 J B	<170	200	<83	<170	<330	<170
UAW16-10	10/12/2001	<120	<120	<120	<120	<120	<120	<120	<1200		8000	<120	<120	<120	<120	23 J	<120	<62	<120	<120	<120	<120	<120	<120	<120	<120	<120	<62	<120	<250	<120
UAW16-10 Blind Dup.	10/12/2001	<100	<100	<100	<100	<100	<100	<100	<1000		6500	<100	<100	<100	<100	24 J	<100	<50	<100	<100	<100	<100	<100	<100	<100	<100	<100	<50	<100	<200	<100
UAW16-10	11/13/2001	<100	<100	<100	<100	<100	<100	<100	<1000		6100	<100	<100	<100	<100	23 J	<100	<50	<100	<100	<100	<100	<100	<100	57 J B	<100	<100	<50	<100	<200	<100
UAW17-40	5/5/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW17-40	11/9/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	0.24 J B	<2	<1
UAW18-20	10/12/2001	<1	<1	<1	0.29 J	<1	<1	<1	0.42 J		1.4 J	<1	<1	<1	5.7	2.2	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	0.22 J	<0.5	<1	<2	<1
UAW18-20	11/13/2001	<2	<2	<2	0.49 J	<2	<2	<2	1.4 J B		4.5 J	<2	<2	<2	1.9 J	1.7 J	<2	<1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<4	<2
UAW19-80	5/6/2001	<1.7	<1.7	<1.7	5.7	<1.7	45	1.3 J	<17		<17	<1.7	<1.7	<1.7	<1.7	<1.7	19	1.3	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	0.56 J	<1.7	<1.7	<0.84	<1.7	<3.3	<1.7
UAW19-80	11/12/2001	0.25 J	<1	<1	4.8	0.29 J	33	1.3	<10		1.3 J B	<1	<1	<1	<1	<1	12	1.3	<1	<1	<1	<1	<1	<1	<1	<1	0.36 J	<0.5	<1	<2	<1
UAW19-80 (Dup)	11/12/2001	13	<5	<5	9.8	<5	140	13	<50		6.3 J B	<5	<5	<5	<5	3.3 J	3.7 J	13	<5	<5	<5	<5	<5	<5	<5	15	<5	<2.5	2.7 J	<10	<5
[illegible]V20-60	5/7/2001	83	3.7 J	3.4 J	55	11	300	110	<100		<100	<10	<10	<10	<10	<10	40	100	<10	<10	<10	<10	<10	<10	<10	17	<10	2 J	6.4 J	<20	<10
[illegible]W20-60	11/14/2001	94	4.5 J	4.2 J	52	10 J	310	95	<110		7.8 J	<11	<11	<11	<11	<11	39	92	<11	<11	<11	<11	<11	<11	<11	8 J B	20	<11	2.5 J	7 J	<22	<11
UAW20-60 (Dup)	11/14/2001	98	4.8 J	<11	58	11	320	100	<110		<110	<11	<11	<11	<11	<11	41	99	<11	<11	<11	<11	<11	<11	7.8 J B	20	<11	1.8 J	7.9 J	<22	<11
UAW21-30	5/5/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1

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Table 5
Summary of Volatile Organic Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Data	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (total)	2-Butanone	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Bromoform	Carbon disulfide	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes (total)
UAW21-30	11/11/2001	<1	<1	<1	<1	<1	<1	<1	<10		0.8 J B	<1	<1	<1	<1	<1	0.23 J	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW21-80	5/5/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	0.43 J	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW21-80	11/11/2001	<1	<1	<1	<1	<1	<1	<1	<10		1.3 J B	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW22-20	10/13/2001	<2.5	<2.5	<2.5	53	<2.5	2.5	6.9	<25		6.2 J B	1.3 J	<2.5	<2.5	<2.5	29	<2.5	6.9	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	1.6 J B	<2.5	0.92 J	<1.2	0.39 J	14	<2.5
UAW22-20	11/13/2001	<6.9	<6.9	<6.9	66	<6.9	2.3 J	16	10 J B		5.3 J	2.2 J	<6.9	<6.9	<6.9	38	<6.9	16	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	4.4 J B	<6.9	1.3 J	<3.4	2 J	15	<6.9
UAW23-20	10/12/2001	51	<20	6.3 J	20	<20	660	25	<200		11 J	<20	<20	<20	<20	<20	67	25	<20	<20	<20	<20	<20	<20	<20	82	<20	<10	8.4 J	<40	<20
UAW23-20	11/14/2001	50	<20	<20	17 J	<20	510	21	<200		<200	<20	<20	<20	<20	<20	60	21	<20	<20	<20	<20	<20	<20	15 J B	61	<20	<10	8.8 J	<40	<20
UAW24-70	10/13/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
W24-70	11/15/2001	<1	<1	<1	<1	<1	0.65 J	<1	<10		2.9 J B	<1	<1	<1	1.5	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1
UAW25-20	10/13/2001	<1	<1	<1	0.28 J	<1	<1	<1	0.48 J		1.5 J B	0.6 J	<1	<1	<1	9	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	0.61 J	<0.5	<1	<2	<1
UAW25-20	11/13/2001	<1	<1	<1	0.17 J	<1	<1	<1	<10		2.3 J	0.33 J	<1	<1	<1	11	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	0.77 J	<0.5	<1	<2	<1
LAW12-60	10/13/2001	<1		<1	2.3	<1	4.6	6	<10		0.55 J B	<1	<1	<1	<1	0.14 J	<1	5.3		<1	<2	<1			<1	<1	<1	0.73	<1	0.2 J	<1
LAW12-60	11/16/2001	<1		<1	2.5	<1	4.8	5.8		<5	1.5 J	<1	<1	<1	<1	<1	<1	5.1		<1	<2	<1			<1	<1	<1	0.68	<1	<2	<1
SS-1 (Seep)	10/11/2001				1		<1				2.1 J B	1.1	<1		0.97 J	11	<1				<1	0.39 J		0.49 J	<1		0.45 J				1.7
SS-5 (Seep)	10/11/2001				0.55 J		<1.8				3.1 J B	0.92 J	<1.8		1.1 J	24	<1.8				<1.8	<1.8		0.3 J	<1.8		0.55 J				<1.8
DRILLER'S WATER	3/13/2001	<1	<1	<1	<1	<1	<1	<1	<10		<10	<1	6.9	0.9 J	<1	<1	5.4	<0.5	<1	5.8	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1

Notes:

J = Estimated result; result is less than reporting limit.

B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Blank cell indicates chemical was not on the target analyte list for that sample.

This table only includes target analytes detected in one or more Facility Investigation samples.

See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

Table 6
Summary of Semivolatile Organic Data
Groundwater and Seep Samples
Morton International, Inc.
Reading,Ohio
Units: µg/L

Sample Location	Sample Date	1,1'-Biphenyl	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,4-Dichlorophenol	2,4-Dimethylphenol	2-Chlorophenol	2-Methylphenol	4-Methylphenol	Acenaphthene	Aniline	Benzaldehyde	bis(2-Ethylhexyl) phthalate	Butyl benzyl phthalate	Caprolactam	Di-n-octyl phthalate	Dimethyl phthalate	Fluorene	Phenol
MW-EPA-1	5/8/2001	<120	<120	940	<120	160		<120	<120	<120	<120	<120	<120		<120	<120	<120	<120	<120	<120	<120	<120
MW-EPA-1	11/15/2001	<200	<200	1700	35 J	260		<200	<200	<200	<200	<200	<200		<200	<200	<200	<200	<200	<200	<200	<200
MW-EPA-2	5/8/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
MW-EPA-2	11/14/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
MW-EPA-3	5/6/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
MW-EPA-3	11/13/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
MW-EPA-4	5/8/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
MW-EPA-4	11/13/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
Recovery Well	7/29/2001		<10	2.4 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	4.6 J		<10	<10		<10	<10	<10	<10
UAW01-30	5/4/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	3.4 J	<10	<10	<10	<10	<10	<10
UAW01-30	11/8/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW01-80	5/4/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW01-80	11/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW02-20	5/7/2001	<10	<10	12	<10	3.7 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW02-20 DUP	5/7/2001	<10	<10	11	<10	3.5 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW02-20	11/10/2001	<10	<10	12	<10	4.1 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW02-40	5/7/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW02-40	11/10/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW03-20	5/7/2001	<10	<10	19	<10	3.3 J		<10	<10	<10	<10	7.7 J #	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW03-20	11/11/2001	<20	<20	140	3.5 J	19 J		<20	<20	<20	<20	<20	<20		<20	<20	<20	<20	<20	<20	<20	<20
UAW04-20	5/7/2001	<40	<40	<40	<40	<40		<40	<40	<40	140	150 #	<40		53	<40	<40	<40	<40	<40	<40	<40
UAW04-20	11/11/2001	<100	<100	<100	<100	<100		<100	<100	<100	47 J	57 J #	<100		<100	<100	<100	<100	<100	<100	<100	<100
UAW05-20	5/6/2001	<100	<100	880	<100	120		<100	<100	<100	<100	<100	<100		<100	<100	<100	<100	<100	<100	<100	<100
UAW05-20	10/10/2001	<10	2.4 J		20			2.8 J	<10	6.3 J	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW05-20	11/12/2001	<100	<100	590	16 J	82 J		<100	<100	<100	<100	<100	<100		<100	<100	<100	<100	<100	<100	<100	<100
UAW06-20	5/6/2001	<10	<10	14	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW06-20	10/10/2001	<25	<25	16 J	<25	<25		<25	<25	<25	<25	<25	<25		<25	<25	<25	<25	<25	<25	<25	<25
UAW06-20	11/13/2001	7.3 J	<25	25	<25	4 J		<25	<25	<25	<25	5.4 J #	6.4 J		<25	<25	<25	<25	<25	<25	5.9 J	<25
UAW07-20	5/8/2001		<100	37 J	<100	<100	<100	<100	<100	<100	<100	<100	<100	150		<100	<100		<100	<100	<100	<100
UAW07-20 DUP	5/8/2001		<25	34	<25	<25	<25	<25	<25	<25	<25	<25	<25	44		<25	<25		<25	<25	<25	<25
UAW07-20	11/15/2001		<40	57	<40	8 J	<40	<40	<40	<40	<40	<40	<40	120		<40	<40		<40	<40	<40	<40
UAW08-20	5/6/2001		<1700	<1700	<1700	<1700	<1700	<1700	<1700	<1700	<1700	<1700	<1700	12000		<1700	<1700		<1700	<1700	<1700	<1700
UAW08-20	11/13/2001		<1300	530 J	<1300	<1300	<1300	<1300	<1300	<1300	<1300	330 J #	<1300	12000		<1300	<1300		<1300	<1300	<1300	<1300
UAW09-20	5/5/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW09-20	11/9/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW09-60	5/5/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW09-60	11/9/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10

Table 6
Summary of Semivolatile Organic Data
Groundwater and Seep Samples
Morton International, Inc.
Reading,Ohio
Units: µg/L

Sample Location	Sample Date	1,1'-Biphenyl	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,4-Dichlorophenol	2,4-Dimethylphenol	2-Chlorophenol	2-Methylphenol	4-Methylphenol	Acenaphthene	Aniline	Benzaldehyde	bis(2-Ethylhexyl) phthalate	Butyl benzyl phthalate	Caprolactam	Di-n-octyl phthalate	Dimethyl phthalate	Fluorene	Phenol
UAW10-50	10/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	7.9 J	<10	<10	<10	<10
UAW10-50	11/13/2001	<10	<10	5 J	<10	2.3 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW10-80	10/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10		<10	1.5 J	<10	19
UAW10-80	11/13/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	2.4 J	11	<10	1.2 J	<10	<10
UAW11-10	5/8/2001	<500	<500	<500	<500	<500		<500	<500	<500	<500	<500	<500		<500	<500	<500	<500	<500	<500	<500	<500
UAW11-10	11/10/2001	<25	<25	13 J	<25	3.7 J		<25	<25	<25	<25	9 J #	<25		<25	<25	<25	<25	<25	<25	<25	<25
UAW11-40	5/8/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW11-40	11/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW12-20	5/6/2001		<250	1600	<250	150 J	<250	<250	<250	<250	<250	<250	<250	<250		<250	<250		<250	<250	<250	<250
UAW12-20	11/15/2001		<200	1900	41 J	230	<200	<200	<200	<200	<200	<200	<200	<200		<200	<200		<200	<200	<200	<200
UAW13-20	5/6/2001		<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	400		<200	<200		<200	<200	<200	<200
UAW13-20	11/15/2001		<200	49 J	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200		<200	<200		<200	<200	<200	<200
UAW14-10	5/5/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW14-10	11/9/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW15-20	5/6/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW15-20	11/11/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW15-50	5/6/2001	<200	<200	<200	<200	<200		<200	<200	<200	<200	<200	<200		<200	<200	<200	<200	<200	<200	<200	<200
UAW15-50	11/11/2001	<500	<500	<500	<500	<500		<500	<500	<500	<500	110 J #	<500		<500	<500	<500	<500	<500	<500	<500	<500
UAW16-10	10/12/2001	<10	<10	6.9 J	<10	12		<10	<10	<10	<10	2.4 J #	<10		<10	<10	<10	19	<10	<10	<10	<10
UAW16-10 Blind Dup.	10/12/2001	<10	<10	6.2 J	<10	11		<10	<10	<10	<10	3.4 J #	<10		<10	<10	<10	17	<10	<10	<10	<10
UAW16-10	11/13/2001	<10	<10	7.5 J	<10	10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW17-40	5/5/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW17-40	11/9/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW18-20	10/12/2001	<10	<10	5.7 J	<10	2.8 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	6 J	<10	<10	<10	<10
UAW18-20	11/13/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	2.7 J	14	<10	<10	<10	<10
UAW19-80	5/6/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW19-80	11/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW19-80 (Dup)	11/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW20-60	5/7/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW20-60	11/14/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW20-60 (Dup)	11/14/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW21-30	5/5/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW21-30	11/11/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW21-80	5/5/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW21-80	11/11/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW22-20	10/13/2001	<10	<10	70	1.6 J	9.7 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	2.5 J	<10	<10	<10	<10
UAW22-20	11/13/2001	<10	<10	78	1.7 J	9.9 J		<10	<10	<10	<10	<10	<10		<10	<10	2.3 J	2.6 J	1.2 J	<10	<10	<10

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Sample Location	Sample Date	1,1'-Biphenyl	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,4-Dichlorophenol	2,4-Dimethylphenol	2-Chlorophenol	2-Methylphenol	4-Methylphenol	Acenaphthene	Aniline	Benzaldehyde	bis(2-Ethylhexyl) phthalate	Butyl benzyl phthalate	Caprolactam	Di-n-octyl phthalate	Dimethyl phthalate	Fluorene	Phenol
UAW23-20	10/12/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW23-20	11/14/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW24-70	10/13/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW24-70	11/15/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW25-20	10/13/2001	<10	<10	11	<10	3 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
UAW25-20	11/13/2001	<10	<10	11	<10	3.2 J		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10
LAW12-60	10/13/2001		<10	<10	<10	<10	1.6 J	<10	1.6 J B	<10	<10	<10	<10	<10		<10	<10		<10	<10	<10	<10
LAW12-60	11/16/2001		<10	<10	<10	<10	1.5 J	<10	<10	<10	<10	<10	<10	<10		<10	<10		<10	<10	<10	<10
SS-1 (Seep)	10/11/2001			21		2.6 J					<10	<10		<10	<10							
SS-5 (Seep)	10/11/2001			14		1.7 J					<10	<10		<10	<10							
DRILLER'S WATER	3/13/2001	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10

Notes:
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J = Estimated result; result is less than reporting limit
# = Co-Elution of 3-Methylphenol and 4-Methylphenol.
Blank cell indicates chemical was not on the target analyte list for that sample.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

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Table 7
Summary of Pesticides and PCBs Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Isodrin	Aroclor 1242
MW-EPA-1	5/8/2001	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.11 J	<0.25	0.13 J	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<1
MW-EPA-1	11/15/2001	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5		<1
MW-EPA-2	5/8/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
MW-EPA-2	11/14/2001	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<1
MW-EPA-3	5/6/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
MW-EPA-3	11/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
MW-EPA-4	5/8/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
MW-EPA-4	11/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
Recovery Well	7/29/2001	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.2	<200
UAW01-30	5/4/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.03 J	<0.05		<1
UAW01-30	11/8/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW01-80	5/4/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
W01-80	10/10/2001																			<1
UAW01-80	11/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW02-20	5/7/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW02-20 DUP	5/7/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW02-20	11/10/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW02-40	5/7/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW02-40	11/10/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW03-20	5/7/2001	0.074 PG	<0.05	<0.05	<0.05	<0.05	0.053 PG	<0.05	<0.05	0.062 PG	<0.05	<0.05	<0.05	<0.05	0.14 PG	<0.05	<0.05	0.041 J		<2
UAW03-20	11/11/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.03 J	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW04-20	5/7/2001	<0.05	<0.05	<0.05	<0.05	<0.05	0.039 J	0.041 J	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW04-20	11/11/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW05-20	5/6/2001	0.03 J	<0.05	<0.05	<0.05	0.029 J	<0.05	<0.05	<0.05	<0.05	0.021 J	0.028 J	<0.05	0.097 PG	<0.05	<0.05	<0.05	<0.05		<1
UAW05-20	10/10/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.022 J	<0.05	<0.05	<0.05	<0.05	<0.05	0.028 J		<1
UAW05-20	11/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		0.92 J
UAW06-20	5/6/2001	<0.05	0.024 J	0.022 J	<0.05	<0.05	<0.05	0.16 PG	0.023 J	0.033 J	<0.05	0.039 J	<0.05	<0.05	0.045 J	<0.05	<0.05	<0.05		<1
UAW06-20	10/10/2001	<0.05	<0.05	<0.05	<0.05	<0.05	0.026 J	0.12	<0.05	0.022 J	<0.05	0.034 J	<0.05	<0.05	<0.05	<0.05	0.054 PG	<0.05		<1
UAW06-20	11/13/2001	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		<1
UAW07-20	5/8/2001	<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25	<0.25	0.19 J	0.13 J	<0.25	<0.25		<0.25	<0.25	<0.25	<0.5	<1
UAW07-20 DUP	5/8/2001	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.35 J		<0.5	<0.5	<0.5	<1	<10
UAW07-20	11/15/2001	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5	<1
UAW08-20	5/6/2001	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<2	<1
UAW08-20	11/13/2001	<0.5	<0.5	<0.5	<0.5	0.32 J		<0.5	<0.5	0.52 PG	<0.5	<0.5	<0.5	<0.5		<0.5	0.49 J	0.32 J	<1	<1
UAW09-20	5/5/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW09-20	11/9/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW09-60	5/5/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW09-60	11/9/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW10-50	10/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1

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Table 7
Summary of Pesticides and PCBs Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Isodrin	Aroclor 1242
UAW10-50	11/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW10-80	10/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.081		<1
UAW10-80	11/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW11-10	5/8/2001	<0.05	<0.05	<0.05	0.42	<0.05	<0.05	<0.05	0.11	0.054 PG	<0.05	<0.05	0.043 J	<0.05	<0.05	<0.05	0.1 PG	<0.05		<1
UAW11-10	11/10/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW11-40	5/8/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW11-40	11/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		0.52 J
UAW12-20	5/6/2001	0.045 J	<0.05	<0.05	<0.05	<0.05		0.017 J	0.058	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	0.017 J	<1
UAW12-20	11/15/2001	0.022 J	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.033 J		<0.05	0.09 PG	<0.05	<0.1	<1
UAW13-20	5/6/2001	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	0.25 J	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	0.91 PG	<1	<1
UAW13-20	11/15/2001	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<10	<1
UAW14-10	5/5/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
W14-10	11/9/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW15-20	5/6/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW15-20	11/11/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW15-50	5/6/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW15-50	11/11/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.024 J	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.034 J	0.031 J		0.55 J
UAW16-10	10/12/2001	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<25	<25	<25	<2.5	<2.5	<2.5	<2.5	<2.5		130 J
UAW16-10 Blind Dup.	10/12/2001	<2.5	<10	<10	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5		<100
UAW16-10	11/13/2001	<0.05	<0.05	<0.05	<0.05	0.053	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.041 J PG	<0.05	<0.05		<1
UAW17-40	5/5/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW17-40	11/9/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW18-20	10/12/2001	<0.05	0.021 J	<0.05	0.03 J	<0.05	<0.05	0.51 PG	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW18-20	11/13/2001	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.24	<0.1	<0.1	<0.1	0.14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<1
UAW19-80	5/6/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW19-80	11/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW19-80 (Dup)	11/12/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW20-60	5/7/2001	<0.05	<0.05	<0.05	<0.05	<0.05	0.021 J	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW20-60	11/14/2001	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<1
UAW20-60 (Dup)	11/14/2001	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<1
UAW21-30	5/5/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW21-30	11/11/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		0.45 J
UAW21-80	5/5/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW21-80	11/11/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW22-20	10/13/2001	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<1
UAW22-20	11/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW23-20	10/12/2001	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2		<1
UAW23-20	11/14/2001	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5		<1
UAW24-70	10/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1

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Table 7
Summary of Pesticides and PCBs Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Isodrin	Aroclor 1242
UAW24-70	11/15/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW25-20	10/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1
UAW25-20	11/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14 PG	<0.05	0.051 PG	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.022 J PG		<1
LAW12-60	10/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.1	<1
LAW12-60	11/16/2001	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.1	<1
SS-1 (Seep)	10/11/2001	<0.05	<0.05	0.028 J	<0.05	<0.05	<0.05	0.042 J	<0.05	0.053 PG	<0.05	0.046 J	<0.05	<0.05	<0.05		<0.05	0.033 J	0.005 J	
SS-5 (Seep)	10/11/2001	<0.05	0.025 J	<0.05	<0.05	<0.05	0.02 J	0.056	<0.05	<0.05	0.03 J	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.1	
DRILLER'S WATER	3/13/2001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<1

Notes:
J = Estimated result; result is less than reporting limit
P[illegible] = The percentage difference between the original and confirmation analyses is greater than 40%
[illegible]nk cell indicates chemical was not on the target analyte list for that sample.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

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Table 8
Summary of Metals Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	Aluminum	Aluminum-DISS	Antimony	Antimony-DISS	Arsenic	Arsenic-DISS	Barium	Barium-DISS	Beryllium	Beryllium-DISS	Cadmium	Cadmium-DISS	Calcium	Calcium-DISS	Chromium	Chromium-DISS	Cobalt	Cobalt-DISS	Copper	Copper-DISS	Cyanide, Total	Iron	Iron-DISS	Lead	Lead-DISS	Magnesium	Magnesium-DISS	Manganese	Manganese-DISS	Mercury	Mercury-DISS	Nickel	Nickel-DISS	Potassium
MW-EPA-1	5/8/2001	129 B		3.3 B		246		287		<5		<2		354000	365000	73		2.1 B		<25		<10	7800	<100	<3		126000	127000	330		<0.2		112		12000
MW-EPA-1	11/15/2001	138 B J		<10		611		217 J		<5		<2		435000 J	418000 J	9.8		1.4 B		<25		3.6 B	2140	240	<3		173000	152000	520		<0.2		32.1 B		17600 J
MW-EPA-2	5/8/2001	38400		3.6 B		27.4		496		1.9 B		0.65 B		327000	266000	1250		38.9		74.3		<10	64800	<100	27.6		114000	91100	1610		<0.2		271		15900 L
MW-EPA-2	11/14/2001	39300 J		5.4 B		31.7		292		1.8 B		5.2		254000	151000	1750		51.2		109		2.6 B	74600	<100	32.4		88100 J	50700 J	1640		0.15 B		369		13300
MW-EPA-3	5/6/2001	1330		<10		<10		71.9 B		<5		1.5 B		188000	274000	29.9		2.8 B		11.2 B		<10	5540	<100	<3		68900	94600	357		<0.2		34.4 B		1770 B
MW-EPA-3	11/13/2001	16400		<10		14.1		120 B		1.1 B		1.2 B		470000 J	332000 J	75.8		14.5		37.5		<10	40500	2700	13.7		175000 J	123000 J	1440 J		<0.2		80.3		6910 J
MW-EPA-4	5/8/2001	<200		<10		<10		235		<5		0.31 B		269000	271000	37.7		2.8 B		<25		<10	950	<100	<3		63600	64000	352		<0.2		140		4830 B
MW-EPA-4	11/13/2001	41.7 B		<10		<10		114 B		<5		<2		157000 J	136000 J	130		11.4		<25		<10	8220	398	<3		40600 J	35200 J	284 J		0.16 B		910		2430 B J
Recovery Well	7/29/2001			<10		39.6		328		<5		8.6				264		11.1		4640		<10			405						<0.2		311		
UAW01-30	5/4/2001	82.1 B		<10		13		339		<5		<2		341000	358000	7.7		2.2 B		<25		8 B	9970	150	<3		77200	84600	1240		<0.2		109		13000
UAW01-30	11/8/2001	81.8 B J		<10		5.1 B		164 B J		0.58 B		0.29 B		151000 J	146000 J	15.2		14.8		<25		<10	8940	7700	<3		31800	30900	569		0.093 B		802		13900 J
UAW01-80	5/4/2001	331		<10		3.9 B		309		<5		<2		117000	118000	2.4 B		<7		<25		<10	10600	3070	<3		30800	31900	563		<0.2		4.1 B		2140 B
UAW01-80	11/12/2001	105 B J		<10		<10		308		<5		<2		112000	115000	<5		<7		<25		<10	9600	279	<3		29900	31000	527		<0.2		<40		2630 B
[illegible] W02-20	5/7/2001	49.1 B		<10		3.9 B		400		<5		<2		331000	316000	3.3 B		<7		<25		<10	4200	641	<3		58700	59200	892		<0.2		27.1 B		6670
[illegible] W02-20 DUP	5/7/2001	61.2 B		<10		6.1 B		395		<5		<2		316000	302000	22.6		<7		<25		<10	4480	659	<3		56200	53400	869		<0.2		47.2		6600 L
UAW02-20	11/10/2001	<200		2.9 B		<10		169 B		<5		<2		177000 J	157000 J	<5		<7		<25		<10	1940	340	<3		33200 J	29800 J	686 J		<0.2		35.9 B		2990 B
UAW02-40	5/7/2001	213		<10		<10		130 B		<5		<2		98800	99200	<5		<7		<25		<10	4260	100	<3		36100	36000	500		<0.2		18.9 B		2420 B
UAW02-40	11/10/2001	<200		2.5 B		<10		156 B		<5		0.36 B		106000 J	101000 J	<5		<7		<25		<10	3110	122	<3		40000 J	38400 J	652 J		<0.2		31.3 B		2900 B
UAW03-20	5/7/2001	39.6 B		<10		20.4		422		<5		<2		524000	551000	2.8 B		3.8 B		<25		<10	2490	1650	<3		92100	80300	2860		<0.2		39.4 B		8740
UAW03-20	11/11/2001	124 B J		<10		17.6		235		<5		<2		219000	210000	3.5 B		10.7		<25		<10	1720	978	<3		37500	36100	1500		0.3		39.5 B		6010
UAW04-20	5/7/2001	42.6 B		11.9		82.4		771		<5		<2		343000	339000	6		17.3		<25		7.3 B	10500	2410	<3		65600	64000	3170		<0.2		28.9 B		7590
UAW04-20	11/11/2001	78.5 B J		7.6 B		20.5		600		<5		1.5 B		255000	235000	4 B		7.1		<25		<10	5060	1820	<3		43100	39600	2000		<0.2		35.3 B		5790
UAW05-20	5/6/2001	2550		<10		8.7 B		102 B		<5		<2		338000	391000	8.1		2.2 B		7.8 B		<10	3900	<100	<3		60200	66900	938		<0.2		15 B		7020
UAW05-20	10/10/2001	189 B		<10		21		67.9 B		<5		<2		292000	334000	7.3		<7		<25		<10	2750	<100	<3		45300	50300	901		<0.2		57.3		3900 B J
UAW05-20	11/12/2001	558 J		<10		18.7		68.6 B		<5		<2		265000	280000	8.8		1.8 B		5.3 B		<10	2930	<100	<3		49300	45900	802		<0.2		24.9 B		4480 B L
UAW06-20	5/6/2001	754		<10		13.4		105 B		<5		<2		310000	344000	3.9 B		2.6 B		4.5 B		<10	3880	1150	<3		48300	54200	1580		<0.2		29.6 B		7400
UAW06-20	10/10/2001	391		<10		26.7		132 B		<5		<2		343000	294000	10.8		1.5 B		<25		<10	1330	178	<3		43800	38800	2590		<0.2		25 B		6430 J
UAW06-20	11/13/2001	330		<10		34.3		154 B		<5		<2		407000 J	376000 J	13.4		<7		<25		4.2 B	1020	<100	<3		58000 J	52800 J	3000 J		<0.2		24.5 B		6820 J
UAW07-20	5/8/2001			<10		<10		90.3 B		<5		<2		466000	453000	1.6 B		<7		<25		<10	270	<100	<3		58000	57200			<0.2		2.5 B		11500
UAW07-20 DUP	5/8/2001			<10		4.6 B		95.8 B		<5		0.32 B		496000	479000	<5		<7		<25		<10	303	<100	<3		61600	60400			<0.2		2.3 B		12100
UAW07-20	11/15/2001			<10		<10		80.4 B		<5		<2			421000	<5		<7		87.7		3.1 B		<100	<3			55200			<0.2		2.3 B		
UAW08-20	5/6/2001			3.8 B		36.2		87.3 B		<5		0.44 B		810000	925000	15		8.7		13.8 B		<10	4680	<100	<3		179000	203000			<0.2		30.5 B		17700
UAW08-20	11/13/2001			<10		113		144 B		0.96 B		0.61 B		969000 J	935000 J	67.6		15		41.9		<10	22000	132	15.8		141000 J	129000 J			<0.2		53.4		21300 J
UAW09-20	5/5/2001	90.6 B		<10		<10		80.3 B		<5		<2		108000	106000	<5		<7		<25		<10	<100	<100	<3		31000	31500	12.4 B		<0.2		<40		1720 B
UAW09-20	11/9/2001	<200		<10		<10		78.7 B		<5		<2		109000 J	101000 J	10.4		1.4 B		<25		<10	288	212	<3		25000 J	23100 J	17.1 J		<0.2		81.9		2420 B
UAW09-60	5/5/2001	142 B		<10		<10		249		<5		<2		91900	99300	<5		<7		13.7 B		<10	132	<100	<3		31500	35300	348		<0.2		5.5 B		1400 B
UAW09-60	11/9/2001	30.4 B		<10		<10		268		<5		<2		88100 J	97800 J	<5		<7		<25		<10	<100	<100	<3		31500 J	34900 J	226 J		<0.2		<40		1740 B
[illegible] 10-50	10/12/2001	32800		<10		19.2		281		1.9 B		0.97 B		271000	193000	46.7		23.9		61.6		3 B	49200	<100	21.3		73100	54600	1210		<0.2		61.8		13400 J
UAW10-50	11/13/2001	318		<10		<10		107 B		<5		<2		185000 J	176000 J	<5		2.2 B		12.3 B		<10	346	<100	<3		55000 J	52400 J	469 J		0.095 B		15.3 B		4260 B J
UAW10-80	10/12/2001	1670		<10		5.1 B		131 B		<5		<2		181000	191000	34.8		6.3 B		10.1 B		2.6 B	4990	5360	<3		57700	61000	3360		<0.2		75.3		5680 J

Table 8
Summary of Metals Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	Aluminum	Aluminum-DISS	Antimony	Antimony-DISS	Arsenic	Arsenic-DISS	Barium	Barium-DISS	Beryllium	Beryllium-DISS	Cadmium	Cadmium-DISS	Calcium	Calcium-DISS	Chromium	Chromium-DISS	Cobalt	Cobalt-DISS	Copper	Copper-DISS	Cyanide, Total	Iron	Iron-DISS	Lead	Lead-DISS	Magnesium	Magnesium-DISS	Manganese	Manganese-DISS	Mercury	Mercury-DISS	Nickel	Nickel-DISS	Potassium
UAW10-80	11/13/2001	503		<10		6.1 B		118 B		<5		0.58 B		192000 J	196000 J	<5		3.5 B		5.8 B		<10	6130	190	<3		59700 J	60900 J	3560 J		0.091 B		9.7 B		7990 J
UAW11-10	5/8/2001	<200		1060		176		295		<5		<2		224000	154000	249		9.6		<25		8.1 B	50000	34500	4.4		41100	28400	8440		0.21		240		8730
UAW11-10	11/10/2001	47.3 B		62.6		62.9		41.3 B		<5		<2		110000 J	116000 J	11.3		1.5 B		<25		5.6 B	3900	3140	<3		45500 J	49400 J	470 J		0.13 B		39.3 B		7700
UAW11-40	5/8/2001	355		2.3 B		<10		31.4 B		<5		0.61 B		361000	383000	6.7		12.7		13.7 B		<10	930	<100	<3		81000	85100	1130		<0.2		49.4		5680
UAW11-40	11/12/2001	62 B J		<10		<10		24.4 B		<5		0.51 B		347000	335000	13		13.2		11.6 B		<10	<100	<100	<3		79100	76500	1150		<0.2		66.5		5770
UAW12-20	5/6/2001			<10		5.8 B		75.7 B		<5		<2		727000	679000	2.2 B		<7		<25		<10	3010	141	<3		54800	51300			<0.2		18.2 B		10500
UAW12-20	11/15/2001			<10		<10		20.3 B		<5		<2			648000	<5		<7		19.7 B		5 B		114	<3			55200			<0.2		5.3 B		
UAW13-20	5/6/2001			<10		36.1		21.2 B		<5		<2		818000	764000	3.4 B		<7		<25		<10	90.4 B	<100	<3		81900	87200			<0.2		12.4 B		10400
UAW13-20	11/15/2001			4.2 B		83.1		27.4 B		<5		0.28 B			916000	315		<7		597		8.5 B		<100	<3			103000			0.11 B		23.2 B		
UAW14-10	5/5/2001	286		<10		<10		82.6 B		<5		<2		107000	108000	<5		<7		13.3 B		<10	294	<100	<3		30600	32200	53.8		<0.2		6.1 B		1270 B
UAW14-10	11/9/2001	177 B		<10		<10		69.1 B		<5		<2		110000 J	109000 J	<5		<7		<25		1.8 B	453	387	<3		31700 J	31400 J	26.4 J		<0.2		3.4 B		1530 B
UAW15-20	5/6/2001	147 B		<10		<10		221		<5		0.49 B		237000	253000	2 B		21.4		26.4		<10	156	<100	<3		61600	65300	397		<0.2		55.1		2430 B
UAW15-20	11/11/2001	271 J		<10		<10		330		<5		0.48 B		311000	297000	8.7		14.6		4.9 B		<10	398	<100	<3		77100	73700	231		<0.2		102		3060 B
UAW15-50	5/6/2001	147 B		14.4		83.5		1090		<5		<2		257000	219000	3.1 B		13.7		<25		<10	15600	407	<3		107000	89800	735		<0.2		130		9520
UAW15-50	11/11/2001	197 B J		16		83		960		<5		0.29 B		250000	230000	1.9 B		11		<25		4.3 B	16400	582	<3		108000	99000	653		0.18 B		102		8780
UAW16-10	10/12/2001	98.3 B		<10		24.9		55.5 B		<5		<2		223000	226000	7		1.9 B		<25		<10	1300	1570	<3		38900	39900	2760		<0.2		17.1 B		7420 J
UAW16-10 Blind Dup.	10/12/2001	98.6 B		<10		23.2		55.1 B		<5		<2		221000	226000	6.9		1.8 B		<25		<10	1250	1250	<3		38200	39400	2740		<0.2		17.5 B		7310 J
UAW16-10	11/13/2001	94.1 B		3.6 B		20.6		49.6 B		<5		<2		277000 J	243000 J	4.3 B		<7		6.8 B		<10	1150	418	<3		45700 J	40200 J	2390 J		<0.2		12.7 B		9650 J
UAW17-40	5/5/2001	955		<10		7.6 B		216		<5		<2		102000	102000	2 B		<7		<25		<10	3720	<100	<3		31400	33200	242		<0.2		12.5 B		1900 B
UAW17-40	11/9/2001	395		<10		16.2		177 B		<5		<2		116000 J	116000 J	2.5 B		<7		<25		<10	4700	4760	<3		36900 J	36900 J	301 J		<0.2		5 B		1720 B
UAW18-20	10/12/2001	97.9 B		<10		12		169 B		<5		0.31 B		73100	72200	1.5 B		2 B		<25		4.7 B	5340	5300	<3		13900	13800	1220		<0.2		28.8 B		6060 J
UAW18-20	11/13/2001	60.8 B		<10		11.7		186 B		<5		<2		89100 J	81900 J	<5		1.8 B		<25		5.4 B	4800	<100	<3		16800 J	15600 J	1130 J		<0.2		28.6 B		6120 J
UAW19-80	5/6/2001	150 B		<10		<10		112 B		<5		0.33 B		194000	191000	1.4 B		<7		<25		<10	363	<100	<3		58700	55400	117		<0.2		11.7 B		1970 B
UAW19-80	11/12/2001	1010 J		<10		<10		113 B		<5		<2		177000	186000	19.6		1.4 B		12.4 B		<10	1700	<100	<3		52700	55400	60.9		<0.2		14.1 B		2020 B
UAW19-80 (Dup)	11/12/2001	65.4 B J		<10		<10		25.4 B		<5		0.62 B		358000	349000	11.8		13.3		12.1 B		<10	<100	<100	<3		81600	79200	1190		<0.2		66.3		5960
UAW20-60	5/7/2001	200		<10		<10		149 B		<5		<2		390000	482000	4.1 B		3 B		16.8 B		<10	268	<100	<3		97400	122000	366		<0.2		18.4 B		4060 B
UAW20-60	11/14/2001	<200		<10		<10		26.5 B		<5		0.3 B		446000	430000	<3		2.3 B		5.8 B		2.9 B	<100	<100	<3		124000 J	120000 J	303		<0.2		8.7 B		3640 B
UAW20-60 (Dup)	11/14/2001	70.6 B J		2.8 B		<10		26.1 B		<5		0.33 B		436000	431000	<3		2.2 B		5.3 B		1.9 B	175	<100	<3		123000 J	121000 J	303		<0.2		8.9 B		3550 B L
UAW21-30	5/5/2001	832		<10		<10		125 B		<5		<2		153000	191000	1.5 B		1.3 B		9.9 B		<10	923	<100	<3		40200	50200	82.8		<0.2		17.7 B		5210
UAW21-30	11/11/2001	3170 J		2.5 B		<10		55.4 B		<5		<2		109000	107000	670		6.5 B		24.2 B		3.4 B	5520	<100	2.7 B		27000	25400	152		<0.2		170		3610 B
UAW21-80	5/5/2001	271		<10		24.2		258		<5		<2		135000	127000	<5		<7		<25		<10	2020	<100	<3		42800	42200	609		<0.2		7.6 B		1190 B
UAW21-80	11/11/2001	282		<10		42.6		231		<5		<2		136000 J	142000 J	2.1 B		<7		<25		<10	2990	<100	<3		44500	46300	728		<0.2		7.5 B		1350 B
UAW22-20	10/13/2001	12100		<10		14.3		182 B		0.9 B		0.29 B		283000	229000	22.2		8.5		29.2		<10	41400	169	12.2		68000	46600	8260		<0.2		56.4		18400 J
UAW22-20	11/13/2001	14700		<10		15.9		174 B		1.1 B		0.47 B		351000 J	244000 J	27.1		10.6		34.4		2.5 B	31600	253	15.4		97200 J	50200 J	6960 J		<0.2		57.3		16600 J
UAW23-20	10/12/2001	117 B		<10		<10		29.6 B		<5		<2		408000	403000	6.9		<7		<25		<10	154	109	<3		97200	96200	31.5		<0.2		12.8 B		26900 J
UAW23-20	11/14/2001	<200		<10		<10		25 B		<5		<2		394000	390000	5.6		6.2 B		<25		2.1 B	1980	488	<3		90900 J	90700 J	227		<0.2		296		23200
UAW24-70	10/13/2001	251		<10		<10		213		<5		<2		128000	129000	2.1 B		<7		<25		<10	355	482	<3		39900	40500	115		<0.2		5.5 B		2150 B J
UAW24-70	11/15/2001	358 J		<10		<10		145 B J		<5		<2		71500 J	76500 J	4 B		<7		<25		3.2 B	1030	<100	<3		31500	31500	154		<0.2		3.8 B		4220 B J
UAW25-20	10/13/2001	383		<10		26.1		171 B		<5		0.38 B		239000	239000	2.6 B		3 B		11.4 B		<10	3550	3530	<3		43200	43300	1000		<0.2		27.7 B		3530 B J
UAW25-20	11/13/2001	60.2 B		<10		32.4		162 B		<5		<2		223000 J	200000 J	10.5		2.6 B		9 B		<10	6370	327	<3		41800 J	37300 J	914 J		<0.2		97.5		3480 B J

Table 8
Summary of Metals Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	Aluminum	Aluminum-DISS	Antimony	Antimony-DISS	Arsenic	Arsenic-DISS	Barium	Barium-DISS	Beryllium	Beryllium-DISS	Cadmium	Cadmium-DISS	Calcium	Calcium-DISS	Chromium	Chromium-DISS	Cobalt	Cobalt-DISS	Copper	Copper-DISS	Cyanide, Total	Iron	Iron-DISS	Lead	Lead-DISS	Magnesium	Magnesium-DISS	Manganese	Manganese-DISS	Mercury	Mercury-DISS	Nickel	Nickel-DISS	Potassium
LAW12-60	10/13/2001			<10		<10		113 B		<5		<2		133000	128000	6.9		2.5 B		<25		<10	888	621	<3		41200	39800			<0.2		14.2 B		10000 J
LAW12-60	11/16/2001			<10		<10		127 B J		<5		<2		120000 J	104000 J	4.1 B		<7		10.7 B		<10	374	<100	<3		46200	41000			<0.2		5.8 B		11100 J
SS-1 (Seep)	10/11/2001	48300	47.8 B	<10	<10	25.7	<10	494	73.8 B	3.1 B	<5	1.7 B	<2	430000	361000	174	<5	43.8	<7	104	<25	<10	90100	<100	126	<3	90100	45100	2150	2070	<0.2	<0.2	214	22.3 B	14200 J
SS-5 (Seep)	10/11/2001	14300	112 B	<10	<10	6.1 B	4.7 B	143 B	233	1.2 B	<5	0.28 B	<2	417000	257000	36.7	<5	10.4	12.4	31.9	<25	<10	23800	734	24.2	<3	67100	39000	2730	947	0.18 B	<0.2	57.7	85.9	14100 J
DRILLER'S WATER	3/13/2001	102 B		<10		<10		36.9 B		<5		<2		32100		<5		<7		<25		<10	<100		<3		8760		1.5 B		<0.2		2.5 B		2140 B

Table 8
Summary of Metals Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
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Sample Location	Sample Date	Potassium-DISS	Selenium	Selenium-DISS	Silver	Sodium	Sodium-DISS	Thallium	Thallium-DISS	Tin	Tin-DISS	Total Sulfide	Vanadium	Vanadium-DISS	Zinc	Zinc-DISS
MW-EPA-1	5/8/2001	12000	<5		<5	472000	474000	7.6 B				2600	4.6 B		<20	
MW-EPA-1	11/15/2001	15700 J	<5		<5	642000	584000	5.6 B				7500	5.8 B		<20	
MW-EPA-2	5/8/2001	3860 B	5		<5	480000	486000	10.4				4500	85.2		193	
MW-EPA-2	11/14/2001	2190 B	<5		<5	336000	340000	10.8				1100	91.7		280	
MW-EPA-3	5/6/2001	1500 B	<5		<5	26300	31700	9.4 B				<1000	2.4 B		71.3	
MW-EPA-3	11/13/2001	1700 B J	<5		<5	48000 J	40400 J	<10				1800	32.1		163 J	
MW-EPA-4	5/8/2001	4740 B	<5		<5	704000	684000	8.5 B				<1000	<7		<20	
MW-EPA-4	11/13/2001	2170 B J	<5		<5	104000 J	106000 J	<10				1300	<7		<20	
Recovery Well	7/29/2001		<5		<5			<10		1650		2700	76		1100	
UAW01-30	5/4/2001	15900	<5		<5	315000	335000	<10				<1000	<7		<20	
UAW01-30	11/8/2001	13500 J L	<5		<5	243000	236000	7.1 B				2900 J	<7		<20	
UAW01-80	5/4/2001	2390 B	<5		<5	51900	53100	<10				<1000	<7		<20	
UAW01-80	11/12/2001	2530 B	<5		<5	50300	51300	10.1 J				<1000	<7		<20	
[illegible]W02-20	5/7/2001	6130	<5		<5	496000	446000	7.2 B				<1000	37.3		<20	
[illegible]W02-20 DUP	5/7/2001	6280 L	<5		<5	475000	452000	8.5 B				1800	39.2		<20	
UAW02-20	11/10/2001	2650 B	<5		<5	140000 J	124000 J	<10				<1000	16.6		<20	
UAW02-40	5/7/2001	2340 B	<5		<5	99900	99400	<10				<1000	<7		<20	
UAW02-40	11/10/2001	2860 B	<5		<5	149000 J	145000 J	5.3 B				<1000	<7		<20	
UAW03-20	5/7/2001	8150	<5		<5	308000	289000	10				4000	148		54.7	
UAW03-20	11/11/2001	5920	<5		<5	165000	161000	9.2 B J				3700	36.4		<20	
UAW04-20	5/7/2001	7380	<5		<5	291000	285000	11.7				1100	110		14.8 B MBE	
UAW04-20	11/11/2001	5350	<5		<5	183000	171000	6.1 B J				1200	65.6		<20	
UAW05-20	5/6/2001	7400	<5		<5	353000	395000	5.4 B				<1000	6.6 B		108 MBD	
UAW05-20	10/10/2001	4290 B J	<5		<5	219000	245000	8.1 B		425		4300	3 B		<20	
UAW05-20	11/12/2001	4270 B	<5		<5	254000	236000	11.8 J				5000	3.1 B		<20	
UAW06-20	5/6/2001	8270	<5		<5	218000	245000	<10				<1000	127		15.7 B MBE	
UAW06-20	10/10/2001	5480 J	<5		<5	309000	264000	5.6 B				2300	106		22.8	
UAW06-20	11/13/2001	6190 J	<5		<5	368000 J	335000 J	<10				7200	119		21.9 J	
UAW07-20	5/8/2001	10800	<5		<5	413000	397000	10.6		866		5800	3.2 B		12.4 B	
UAW07-20 DUP	5/8/2001	11600	<5		<5	432000	417000	8.3 B		1010		7500	3.9 B		<20	
UAW07-20	11/15/2001	10800	<5		<5		395000	9.6 B J		706 L		1600	3.1 B		<20	
UAW08-20	5/6/2001	20200	<5		<5	523000	596000	9.8 B		3420		3100	11.2		45.1 MBD	
UAW08-20	11/13/2001	18900 J L	<5		<5	401000 J	400000 J	<10		6090		7900	27.1		132 J	
UAW09-20	5/5/2001	1850 B	<5		<5	63200	62400	<10				<1000	<7		<20	
UAW09-20	11/9/2001	2220 B	<5		<5	92500 J	84300 J	<10				1800	<7		<20	
UAW09-60	5/5/2001	1610 B	<5		<5	17600	14700	<10				<1000	<7		<20	
UAW09-60	11/9/2001	1930 B	<5		<5	22800 J	24500 J	6 B				1500	<7		<20	
[illegible]/10-50	10/12/2001	4270 B J	<5		2.5 B	67800	69300	7.9 B J				<1000	65.2		164	
UAW10-50	11/13/2001	3900 B J	<5		<5	60400 J	54500 J	<10				1500	<7		25.3 J	
UAW10-80	10/12/2001	5970 J	<5		<5	40800	44300	7.5 B J				<1000	2.9 B		30.3	

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Summary of Metals Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
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Sample Location	Sample Date	Potassium-DISS	Selenium	Selenium-DISS	Silver	Sodium	Sodium-DISS	Thallium	Thallium-DISS	Tin	Tin-DISS	Total Sulfide	Vanadium	Vanadium-DISS	Zinc	Zinc-DISS
UAW10-80	11/13/2001	8200 J	<5		<5	41000 J	45600 J	<10				2200	<7		38 J	
UAW11-10	5/8/2001	5660	<5		<5	2230000	1500000	<10				2700	113		310	
UAW11-10	11/10/2001	8050	<5		<5	440000 J	454000 J	7 B				1300	15.6		22.4 J	
UAW11-40	5/8/2001	5780	<5		<5	239000	248000	8.2 B				960 B	0.91 B		<20	
UAW11-40	11/12/2001	5530	<5		<5	253000	244000	7.8 B J				<1000	<7		<20	
UAW12-20	5/6/2001	9700	<5		<5	485000	455000	14.4		66.9 B		<1000	2.8 B		29.8 MBD	
UAW12-20	11/15/2001	8090	<5		<5		348000	12.1 J		82.9 B		2000	6 B		<20	
UAW13-20	5/6/2001	9990	<5		<5	491000	488000	5 B		1060		5800	14.8		22.1 MBD	
UAW13-20	11/15/2001	13300	<5		<5		948000	16.6 J		1930		2800	16.4		23.7	
UAW14-10	5/5/2001	1300 B	<5		<5	36500	35800	<10				1500	<7		<20	
UAW14-10	11/9/2001	1510 B	<5		<5	37900 J	37500 J	<10				1200	<7		<20	
UAW15-20	5/6/2001	2490 B	<5		<5	421000	443000	6.2 B				<1000	<7		23 MBD	
UAW15-20	11/11/2001	2840 B	<5		<5	506000	480000	14 J				<1000	<7		<20	
[illegible] W15-50	5/6/2001	7590	<5		<5	261000	218000	6.1 B				<1000	<7		24.6	
[illegible] W15-50	11/11/2001	7910	<5		<5	253000	234000	16.7 J				<1000	<7		<20	
UAW16-10	10/12/2001	7400 J	<5		<5	277000	276000	5.5 B J				3900	59.3		<20	
UAW16-10 Blind Dup.	10/12/2001	7360 J	<5		<5	275000	278000	8.6 B J				6300	59.1		<20	
UAW16-10	11/13/2001	8630 J	<5		<5	281000 J	244000 J	<10				2500	29.1		<20	
UAW17-40	5/5/2001	2020 B	<5		<5	17400	18300	<10				<1000	1.5 B		<20	
UAW17-40	11/9/2001	1750 B	<5		<5	13100 J	13300 J	<10				<1000	0.92 B		<20	
UAW18-20	10/12/2001	6200 J	<5		<5	1520000	1490000	5.8 B J				3100	1.7 B		<20	
UAW18-20	11/13/2001	5510 J	<5		<5	1720000 J	1610000 J	<10				2200	<7		<20	
UAW19-80	5/6/2001	1780 B	<5		<5	53000	51200	<10				990 B	<7		18.4 B	
UAW19-80	11/12/2001	1850 B	<5		<5	58700	59400	10.3 J				<1000	1 B		<20	
UAW19-80 (Dup)	11/12/2001	5750	<5		<5	261000	254000	8.2 B J				<1000	<7		<20	
UAW20-60	5/7/2001	3640 B	<5		<5	128000	162000	7.4 B				960 B	<7		14.4 B MBE	
UAW20-60	11/14/2001	3530 B	<5		<5	139000	134000	13.8				1600	<7		<20	
UAW20-60 (Dup)	11/14/2001	3610 B	<5		<5	137000	137000	10.3				1800	<7		<20	
UAW21-30	5/5/2001	6420	<5		<5	284000	347000	<10				<1000	0.95 B		<20	
UAW21-30	11/11/2001	2820 B	<5		<5	53500	54100	6.7 B J				<1000	6.4 B		30	
UAW21-80	5/5/2001	1210 B	<5		<5	28600	26900	<10				<1000	<7		13.8 B	
UAW21-80	11/11/2001	1310 B	<5		<5	30700	31900	9.2 B				<1000	<7		<20	
UAW22-20	10/13/2001	15500 J	<5		<5	661000	673000	<10				<1000	24		86.8	
UAW22-20	11/13/2001	12400 J	<5		<5	706000 J	676000 J	<10				1800	29.6		132 J	
UAW23-20	10/12/2001	26800 J	6.1		<5	167000	166000	8.9 B J				2000	<7		<20	
UAW23-20	11/14/2001	23500	9.5		<5	169000	169000	11.3				<1000	<7		<20	
UAW24-70	10/13/2001	2050 B J	<5		<5	50500	55500	<10				2800	<7		<20	
[illegible] W24-70	11/15/2001	3380 B J	<5		<5	57200	79300	5 B				1100	<7		<20	
UAW25-20	10/13/2001	3540 B J	<5		<5	338000	340000	<10				1500	1.2 B		99.2	
UAW25-20	11/13/2001	3160 B J	<5		<5	328000 J	296000 J	<10				2200	5.2 B		<20	

Table 8
Summary of Metals Data
Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
Units: µg/L

Sample Location	Sample Date	Potassium-DISS	Selenium	Selenium-DISS	Silver	Sodium	Sodium-DISS	Thallium	Thallium-DISS	Tin	Tin-DISS	Total Sulfide	Vanadium	Vanadium-DISS	Zinc	Zinc-DISS
LAW12-60	10/13/2001	9590 J	<5		<5	61300	59200	5.5 B		<100		1500	2 B		<20	
LAW12-60	11/16/2001	9780 J	<5		<5	54900	49500	<10		<100		<1000	<7		<20	
SS-1 (Seep)	10/11/2001	9600 J L	<5	<5		149000	361000	<10	<10	782	121	<1000	124	1.6 B	411	12.6 B
SS-5 (Seep)	10/11/2001	7180 J	<5	<5		375000	159000	<10	<10	1340	348	<1000	33.2	11.6	219	19.4 B
DRILLER'S WATER	3/13/2001		<5		<5	21400		<10				<1000	<7		<20	

Notes:
B = Estimated result; result is less than reporting limit
J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L = Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.
MBB = This analyte is present at a reportable level in the associated method blank but is less than 5% of the sample amount.
MBD = This analyte is present in the associated method blank at an amount that is less than two times the reporting limit.
MBE = This analyte is present in the associated method blank.
Blank cell indicates chemical was not on the target analyte list for that sample.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Tables A1-1 and A1-2 of the Facility Investigation Quality Assurance Project Plan for the complete CLP and Appendix IX - target analyte list.

Table 9
Metals Background Sample Data
Statistical Analysis Work Sheet

Sample Location	Sample Date	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Thallium	Tin	Vanadium	Zinc
	EDQL	**NE**	**5.7**	**1.04**	**1.06**	**0.00222**	**NE**	**0.4**	**0.14433**	**0.3132**	**NE**	**0.05373**	**NE**	**NE**	**0.1**	**0.03692**	**1.59**	**7.62**	**6.62**
	HHSL	**76000**	**2.7**	**1600**	**63**	**8**	**NE**	**38**	**100000**	**76000**	**23000**	**1000**	**NE**	**1800**	**2**	**0.7**	**100000**	**6000**	**12000**
B01-1.5'	10/9/2001	9620	7.4	47.4	0.260	0.19	1210	10.1	7.1	12.5	15600	9.5	1680	424	0.026	0.55	0.88	20	39
B02-1.5'	10/9/2001	10800	8.4	58.7	0.370	0.21	1720	11.8	6.7	13.3	17200	10.1	1840	379	0.027	0.55	0.79	21.9	42
B03-1.5'	10/9/2001	10800	5.1	68.0	0.500	0.27	3870	12.2	8.0	13.4	18700	11.1	2380	589	0.026	0.55	0.9	18.3	41.1
B04-1.5'	10/9/2001	1870	4.0	9.8	0.270	0.16	86600	3.7	2.8	7.3	5760	4.1	31100	191	0.0098	1.5	0.93	6.2	22.3
B04-1.5' Blind Dup	10/9/2001	2200	3.7	11.4	0.265	0.16	97000	3.7	2.9	6.8	5980	4.3	36200	198	0.055	1.2	0.97	6.7	21.6
B05-1.5'	10/9/2001	13000	10.0	66.1	0.460	0.22	2370	15.7	8.0	15.6	19800	11.4	2090	393	0.03	0.55	0.82	23.9	51.4
B06-1.5'	10/9/2001	6950	6.2	67.7	0.350	0.52	38300	13.5	6.4	18.4	12600	25.3	9650	585	0.15	1.1	1.5	19.9	63.3
B07-1'	10/9/2001	8140	6.2	134.0	0.64	0.43	35600	15.4	6.8	17.6	12600	29.0	8670	645	0.073	0.6	1.5	16.3	49.9
B08-2'	10/9/2001	11500	7.5	123.0	0.61	0.70	8400	69.7	8.6	22.4	18800	59.3	2690	854	0.16	0.6	2.9	56.4	88.1
B09-2'	10/9/2001	5780	16.2	985.0	0.85	0.33	3960	50.6	5.0	64.8	10600	410.0	838	69	0.046	0.92	1.9	24.9	85.2
B10-2'	10/9/2001	5020	13.5	327.0	1.4	0.14	1910	5.9	5.0	26.1	4030	16.1	340	15	0.047	0.96	1.3	22.8	15.7
B01-11.5'	10/9/2001	1620	2.3	6.9	0.260	0.15	115000	3.8	2.8	6.2	5010	3.2	37400	171	0.05	1.3	0.95	5.9	18.8
B02-11.5'	10/9/2001	1750	3.9	7.1	0.260	0.16	113000	3.8	3.0	6.9	6000	3.6	35700	182	0.05	0.74	1	6.1	20.1
B03-11.5'	10/9/2001	1650	3.0	7.5	0.260	0.15	126000	4.0	2.0	6.2	5620	2.8	37800	329	0.0089	1.5	0.93	5.5	15.6
B04-11.5'	10/9/2001	1550	2.7	6.0	0.265	0.13	114000	3.5	2.5	5.4	4670	3.0	37300	163	0.055	1.8	0.93	5.5	17.3
B05-11.5'	10/9/2001	1660	3.7	6.4	0.265	0.15	98200	3.2	2.3	7.9	5880	4.0	39400	158	0.055	1.5	1.1	6.4	21.9
B06-11'	10/9/2001	1860	1.4	9.4	0.059	0.20	119000	4.1	2.3	6.9	5380	3.7	36600	196	0.013	1.2	0.96	5.7	25
B07-9'	10/9/2001	6520	2.6	33.4	0.290	0.19	43800	8.4	5.4	8.8	9050	7.2	20500	221	0.013	1.5	5.9	12.1	31.7
B08-9'	10/9/2001	6210	3.0	20.4	0.230	0.26	65100	13.4	4.5	15.6	11300	7.0	23000	225	0.01	0.55	5.65	13	30.4
B09-10'	10/9/2001	12800	6.0	71.5	0.310	0.20	13000	25.1	3.7	41.8	22600	8.9	1710	82	0.026	0.6	6.2	42.3	59.2
B10-11'	10/9/2001	9360	4.9	69.0	0.460	0.24	4160	16.5	3.6	20.4	17100	9.4	1640	123	0.018	0.6	0.89	20.8	41.5
Statistics																			
Surface Soils																			
Mean		7789.1	8.3	172.6	0.4	0.3	25540.0	19.3	6.1	19.8	12879.1	53.7	8861.6	394.7	0.1	0.8	1.3	21.6	47.2
Std. Deviation		3757.83	4.29	283.23	0.10	0.18	35471.83	21.07	1.97	15.99	5699.54	119.24	12674.47	260.71	0.05	0.33	0.64	13.16	24.08
Tolerance Factor, K*		2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911	2.911
Statistical Background Concentration**		**18728**	**20.8**	**997.0**	**0.636**	**0.82**	**128799**	**80.6**	**11.9**	**66.4**	**29470**	**400.7**	**45757**	**1154**	**0.206**	**1.79**	**3.17**	**59.9**	**117.3**
Subsurface Surface Soils																			
Mean		4498.0	3.6	23.8	0.3	0.2	76917.8	7.7	3.2	12.6	5325.0	5.3	27105.0	185.0	0.0	1.1	2.5	12.3	28.2
Std. Deviation		4044.63	1.21	25.99	0.10	0.04	46910.68	7.34	1.09	11.34	597.47	2.57	14882.33	66.42	0.02	0.46	2.40	11.66	13.48
Tolerance Factor, K*		2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815	2.815
Statistical Background Concentration**		**15884**	**7.0**	**96.9**	**0.539**	**0.30**	**208971**	**28.4**	**6.3**	**44.5**	**7007**	**12.5**	**68999**	**372**	**0.086**	**2.44**	**9.19**	**45.1**	**66.1**
Surface and Subsurface Soils Combined																			
Mean		6221.9	5.9	101.7	0.3	0.2	48660.0	14.1	4.7	16.4	10864.7	30.6	17549.0	294.8	0.0	1.0	1.9	17.2	38.1
Std. Deviation		4154.39	3.91	214.97	0.10	0.14	47712.85	17.07	2.17	14.12	5936.01	87.89	16344.91	217.91	0.04	0.42	1.77	13.04	21.62
Tolerance Factor, K*		2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371	2.371
Statistical Background Concentration**		**16072**	**15.2**	**611.4**	**0.548**	**0.59**	**161787**	**54.6**	**9.9**	**49.9**	**24939**	**239.0**	**56303**	**811**	**0.142**	**1.97**	**6.05**	**48.1**	**89.4**

Notes:
Shaded results are for samples with non-detect analyses, and are listed at one-half the detection limit.
* Values are from "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities," 4/89 from Table 5, Page B-8 for n = 11, 10, and 21 respectively for surface, subsurface and total (varies with n).
**Upper Tolerance Limit = assumes 95% confidence level of referenced data set.

Field Activity Daily Logs

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FS Phase II	Reading OH	T. Jennings
Date	**Contractor/Representative**		**Time Arrived**
10/9/01	Boart Longyear / H.C. Nutting		0640
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
Tuesday	Rohm & Haas	Peter Polena	~~1730~~ TJ 1910
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. Hemingway	Clear Low 39° High ~69	0.5
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0640 Arrived at Plant prepping for off site DPT & Well Development

0650 Boart crew arrived w/ Rig to continue well development UAW10-50, UAW10-80, LAW12-60, UAW22-20, and UAW24-80

0730 Eric & Nutting going to do off-site; Charles overseeing Boart; TJ Prepping for gw sampling (labling etc.)

1430 Going to install well points into seep sample locations to enhance flow - installed verticle point in seeps near T Post "SS-6" on Monday 10/9/01

Note: Water level has risen and covered most of these seeps - although they are still active as evidenced by digging a hole in the bank of the creek - drove point into seep area at an angle away from creek - will sample with disposable bailer.

- At seep area near "SS-1" flow has slowed to the point that water will not flow thru well points - This is Rohm & Haas property, so we went up on the bank about 10' from water and installed verticle point.

1630 Completed installing seep points - Eric is finished with off-site. - Prepping samples for shipping and Completed prepping for GW Sampling

1910 Left Site for Day

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING FI	READING, OHIO	E. MANSELL
Date	**Contractor/Representative**		**Time Arrived**
10-9-01	HC NUTTING		0640
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
TUESDAY	ROHM & HAAS	PETER PALENA	
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. HEMINGWAY	SUNNY - 70°	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0640 - ARRIVE ONSITE

0700 - CALIBRATE PID - TOTAL SAFETY # 2490 96.7 ppm

- 100 ppm ISOBUTYLENE CALIBRATION GAS

0820 - SET UP AT B01 (BACKGROUND BORING 1)

- SAMPLE B01-1.5' (183) 0830, B01-11.5' 0850 (184)

0915 - COLLECT EQUIPMENT BLANK AT B02 LOCATION, 100901185

- USE VOC FREE WATER FROM LAB (PURGE WATER) FOR VOLATILE 40ml GLASS,

USE DI WATER PROVIDE BY LAB FOR REMAINING BOTTLES

POUR WATER THROUGH ACETATE LINER AND DECONED SAMPLE SPOON

0930 - SAMPLE B02-1.5' 100901186 0940 B-2-11.5' 100901187

1010 - SET UP AT B03 - 100901188 - B03-1.5' - 1015

- 100901189 - B03-11.5' - 1025

1100 - SET UP AT B04 - 100901190 - B14-1.5' 1105 BLIND DUP 100901191

- 100901192 + MS/MSD 1125

1143 - SET UP AT B05 - 100901193 - 1150 B05-1.5'

100901194 - 1200 B05-11.5'

1355 - RILEY KINMAN OF RMK ENV. REPRESENTING CINCINNATI DRUM STOPPED BY TO CHECK ON US - TOLD HIM WE WERE COLLECTING BACKGROUND SAMPLES FOR ROHM & HAAS - HE SAID THIS FIELD WAS A FORMER DUMP FIELD FROM AN INCINERATOR

1400 TAKE SAMPLE - B06-11'

100901195 (1335) - 100901196

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING	10-9-01

Observations/Remarks (continued):

1415 - SET UP ON B07
1420 B07-1' - 100901197
1435 B07-9' 100901198
1450 SET UP ON B08
1500 B08 - 2' 100901199 (B08) ~1'-1.5' WOOD MATERIAL WITH
1510 B08 - 9' 100901200 MOTHBALL TYPE ODOR
1520 SET UP ON B09
1530 B09 - 2' 100901201
1540 B09 - 10' 100901202
1550 SETUP ON B10
1600 100901203 - B10-2'
1615 B10-11' 100901204
1700 HC NUTTING LEAVES SITE
1730 PACK SAMPLES FOR OVERNIGHT DELIVERY

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON Reading	Reading OHIO	C. YOUNG

Date	Contractor/Representative	Time Arrived
10/9/01	Boart Longyear	7:10

Day of Week	Client	Observations Reported to	Time Departed
TUESDAY	Morton	Peter Palena	

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	MARK Hemingway	Cool in AM - Clear Nice	

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 arrive on site. - Prepare to Develope monitoring wells.

0800 Boart Longyear are at UAW10-80 - TOOK The Static H_2O level it is 41.98 from TOC. - workers are preparing the surge block.

805 Started Surging the Well.

820 Removed the surge block - Prepare to develope and remove H_2O.

835 - The Grundfos pump will Not Start up - The workers have removed it and are doing some maintenance.

845 The workers could not disassemble the pump because the Screws are rounded off.

0900 The workers have called for another pump - said they Should have one here by noon.

0920 Boart Departed the Site to pick up the New pump.

1130 Boart Back on site. Set up on UAW10-80 and installed the pump.

1145 Removed 25 Gallons - the Well purged dry.

1200 Boart Began Surging the Well using the drill rig.

1235 Stopped Surging the Well

1245 Began hand Bailing using 1-4" Disposable Bailer (clear)

1315 have Removed alot of Silt and Probably ~ 15 More Gallons of H_2O.

1320 The Well is dry. had boart decon the Slug and the Bailer.

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443 A	MORTON - Reading	10/9/01

Observations/Remarks (continued): 1350 H_2O level in UAW 10 - 50 is 41.02 from TOC.
Boart Longyear is now installing the slug 1355 now surging the well.
1410 Removed the slug and are now going to bail out the silt. 1420 have removed 20 Gallons and the well went dry.
1430 moved back up to UAW 10-80 and began developing H_2O using a 4" Clear acrylic bailer.
1440 Removed ~3 Gallons - Checked the H_2O level and it was 80.10 from TOC.
* Requested the Contractor to decon his equipment and go to UAW12 - 60
UAW 12 - 60 H_2O level is 18.70 from TOC.
1530 Boart Longyear is developing UAW12 - 60 - first they purged it for 20 minutes and then pumped it dry - They Removed 55 Gallons.
1730 The workers are still developing the well slow - and the well has gone dry several times - Checked it for recharge and it is recharging at 1" per minute.
1830 have removed another 55 Gallons from UAW 12 - 60 since 1600 -
1840 Boart Longyear - going to decon equip and depart the site
1850 Boart Departed the site.

Charles E. Gray
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FI Phase II	Reading OH	T. Jennings
Date: 10/10/01	Contractor/Representative: Boart Longyear; Abercrombie Surveyors; Equipt		Time Arrived: 0645
Day of Week: Wednesday	Client: Rohm & Haas	Observations Reported to: Peter Pokeng	Time Departed: 1930
Daily Field Report No.	Geomatrix Project Manager: M. Hemingway	Weather: Clear Low ~49° High ~75°	Travel Time (hours): 0.5
Reviewed By	Date Reviewed	Contractor Received Copy of This Report: ☐ Yes ☐ No	Contractor Received All Attachments: ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0645 Arrived at site - Prepping for GW Sampling; Continued well development, surveying (Off Site, New Wells, on-site DPT & EPA wells); Clean out of Frac Tank.

0655 : Boart on Site - held Safety meeting

0730 : Dicarlo on site - Safety orientation - going to get pumps

Talked to Eric walker - they need our stuff for Auction on Friday.

He is also ordering another Roll off to hold volume of frac tank

0915 Prepping to bail UAW05 & UAW06 - to purge and will sample later today.

1000 Purged UAW06-20 dry by bailing ~8 gallons.

1005 Boart Longyear Safety officer on site for Boart Safety Audit.

1030 TJ Purging UAW05-20 by Bailing Dry (~5 gal)

1045 DiCarlo (Equipt) had to line Roll Off - it came unlined.

1100 Began pumping Sed. from Frac tank into Roll off.

1130 Sludge is too thick to move in tank - ordered 2 more Rolloffs and Talked To John Stuney about using water from a fire hydrant to wash down sed to lower end He is getting it set up for us.

1200 Setting up to Sample UAW01-80
Sample Number will be 101001205

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443A	Morton RI	10/10/01

Observations/Remarks (continued):

1330 having trouble w/power supply
1330 began purging UAW01-80
1345 Sampled UAW01-80
1400 Watching frac tank Cleaning
1530 Prepping to Sample UAW05-20 - Bailed Dry earlier today Sample # 101001206 (this is closest to fence) *
1545 Sampled UAW05-20 (101001206) w/bailer
1620 Prepping to Sample UAW06-20 - Bailed dry earlier today Sample # 101001208
1700 Packing Samples and prepping for steam sampling tomorrow
1730 Went to well points at seeps to check water availability for tomorrows sampling
- @ SS-5 should be able to fill all bottles
- @ SS-1 may have trouble getting all volume @ outline
1930 Left Plant for day

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON Reading	Reading OHIO	C. YOUNG
Date 10/10/01	Contractor/Representative		Time Arrived 6:30
Day of Week Wednesday	Client	Observations Reported to	Time Departed
Daily Field Report No.	Geomatrix Project Manager Mark Hemingway	Weather Cool Clear	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 630 arrive on site. 6:45 went to get The Hot work permits. Boart Longyear on site. Tim Held the tailgate safety meeting.
0715 Boart Workers went to LAW 12-60 and started surging the well.
745 Removed the Slug.
750 Started Bailing the silt
0800 Installed the pump down to the bottom of the well. Pumping at 1/2 Gallon per minute.
0830 Taking H2O parameters.
0945 Still Pumping H2O at 1/2 Gallon per minute.
1015 The Contractor turned the pump up to 1.25 Gallon per min and the well ran dry.
1045 The H2O level is recovering. Had the workers Begin Surging the Well.
11:30 Stopped Surging and begun bailing the silts out.
1145 installed the pump and are now pumping at 1/2 GPM.
1200 The Well ran dry.
1230 The Contractor Dissassembled the pump and replaced the impellers and Nylon washers.
The Contractor went to lunch
1325 The Contractor is back on

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Charles Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON - Reading	10/10/01

Observations/Remarks (continued): site. - finishing up reassembling the pump and the hose lead.
1330 Started pumping H_2O. - Steady Stream ≈ .75 GPM.
1510 Have Removed 240 Gallons of H_2O - Clear 1/20 No noticeable odor. Stopped development and move back to UAW-10-80
1525 One worker Started Surging UAW-10-80 using the drill rig and I went with the other worker to the Sump to Dispose of the development H_2O from LAW-12-60
1600 Back at UAW-10-80 - The driller has begun lowering the pump into UAW-10-80
1620 Started pumping H_2O. The other worker is preparing to Hand bail and false bail UAW-10-50.
1700 UAW-10-80 Went dry - have removed 50 gallons - going to let recover.
1710 HAVE removed 10 Gallons from UAW-10-50
1735 Still waiting on the groundwater to recover in both wells - UAW-10-80 and 50. The H_2O is recovering at 1/2" Per minute. 1/2 inch per min.
1750 Requested The Contractor to Clean up and dump the Waste water in the sump.
1810 The Contractor has cleaned up and installed the plugs on the wells. -
1835 The Contractor is dumping the waste water.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FI	Reading OH	T. Jennings

Date	Contractor/Representative	Time Arrived
10/11/01	Boost LY - Devel. / Equipt - Tank Cleanout	0640

Day of Week	Client	Observations Reported to	Time Departed
Thursday	Rohm & Haas	Peter Polena	1930

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	M. Hemingway	Cloudy ~65° intermittent Rain	0.5

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0640 Arrived @ site - Preping for Sed/seep Sampling and Safety Meeting

0720 - Going to Mill Creek to sample seeps

0755 Sampled Seed @ Station SS-1 - this is a vertical 2"x2" Stainless Steel well point driven into sediments ~10' from the waters edge and ~5' above the water split VOCs w/ Mike Welly of Tech-Law - EPA Contractor - Unable to fill all of Pest. an first Sampling attempt - all other bottles are filled

0840 Completed filling Pest. Sample @ SS-1

0825 - Sampling Seeps near (~30' South) station SS-5 This a vertical 2"x2' Stainless Steel well point driven into the Seep area ~2' of waters edge and ~6" above surface water level - flow of Seeps toward creek was confirmed on 10-9-01 by digging into the bank at the location of these seeps.

0900 Returning to Plant to get Encores and other Supplies for Sed Sampling

0910 Equipt Personnel have openned fire hydrant w/o Antherization - If they continue to do things outside the Plan we will Fire them

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Morton FI	10-11-01

Observations/Remarks (continued):

1300 preparing to Sample sed. - Geochem & Geotech @ Stream Station SS1 - Geochem 101101211 ; Geotech 101101225

1330 Had to meet repair man for generator - Eric Sampled SS-2 and SS-3 while I was gone

1415 Returned to mill Creek - met Eric @ SS-4

1430 Sampled SS-4 #101101214

1440 Sampling Sed Sample ~25 South of SS-5 and ~10' South of Seep Sample loc. @ SS-5. Note this entire area is a seep area from ~20 N of SS-5 to ~35' South of SS-5
SS-5 Sample # is 101101214 - Blind Dup at this loc. is #101101215
Sample location is near and old abandoned culvert Coming from the Morton Plant and is ~18" from present water level in Creek

1455 Sampling Sediment @ Station SS-6 (Old SS-7) #101101217 ~1' above surface water at "T" post

1510 Sampling Sediment @ Station SS-7 (Old SS8) #101101218 ~1' above water and ~5' S of T-Post.

1525 Sampling Sed. @ Station SS-8 (Old SS-9) #101101219 ~1' above water and ~3' S. of T-Post (Photo #28)

1535 Sampling Sed. @ Station SS-9 (Old SS-10) #101101220 ~1' above water in small wash ~5' South of T-Post (Photo 27)

1550 Sampling Sed @ Station SS10 (Old SS 11) #101101221 ~1' above wl and ~3' N of T-Post. (Photo #26)

1600 Sampling Sed @ Station SS11 (Old SS-12) #101101222 ~1' above water level and ~2' South of T-Post (Photo #25)

1615 Sampling Sed @ Station SS-12 #101101223 w/ MS/MSD Location is ~1' above water on steep bank ~3' S of T-Post and ~15' N of lg Culvert off SW corner of Morton Plant (Photo #24)

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
2443A	Morton FI	10/11/01

Observations/Remarks (continued):

1630 Completed Sed Sampling - Returning to Plant to unload Samples

1700 Returned to seep locations to collect GW Quality Samples

1805 Returned to Plant - Packing samples and Preparing for Step Drawdown tests tomarrow.

1930 Left Plant for FedEx.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON	Reading OHIO	C. YOUNG
Date 10/11/01	Contractor/Representative		Time Arrived
Day of Week Thur	Client	Observations Reported to Peter Palena	Time Departed
Daily Field Report No.	Geomatrix Project Manager MARK HEMINGWAY	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0640 arrive on Site.
0650 Depart the office to get the hot work permit.
0705 Received the Hot Work Permit and Steve Vaught said he would have the trailer at building #7 moved.
Boart Longyear on Site.
0720 The Drillers went to VAW-10-80 and VAW-10-50.
0735 Now developing H_2O from both wells. using a grundfos pump in the 80 ft. well and hand bailing the 50' well.
0800 Equip Inc. on site. 2 men. Held the tail gate Safety meeting for them. — Stressed that they wear the full body Harness if they have to get on top of the Baker tank.
0810 Hooked up the grundfos pump Controller belonging to Boart Longyear to see if the generator would operate the pump.
0815 The Generator breakers have tripped — Need to have RSC Come out and repair the generator.
0820 Boart Workers have purged both wells dry. 25 gallons out of VAW-10-80 and 10 Gallons out of VAW-10-50
0840 Decomed the pump and bailer — went to VAW 25-70
0905 Start Pumping H_2O.
0930 Start taking H_2O Parameters
1000 When Ajusting the Pumping

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON	10/11/01

Observations/Remarks (continued): Rate. to 1.5 GPM The Well Runs dry, Sustains at .5 GPM
11:30 Take lunch.
1200 on Site Start Sewer Inventory W/. Eric Walker.
2:15 Depart to go to Apartments to meet w/ the Cleaning people.
3:00 on Site. Boart Still pumping H_2O at VAW 24-70. Still at 1/2 GPM.
They have Surged the Well twice at 30 min Each. - water is Clearing.
5:00 have helped Tim Collect H_2O Sup Samples -
6:00 Boart Still pumping at VAW 24-70.
6:20 Requested Boart to Clean up.
~~[illegible]~~ Boart and Gmx Depart the site.
7:15

Charles E Gay
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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FS - Phase II	Reading OH	T. Jennings
Date: 10-12-01	Contractor/Representative: Boart Longyear / Equipt		Time Arrived: 0650
Day of Week: Friday	Client: Rohm and Haas	Observations Reported to: Peter Polena	Time Departed: 2030
Daily Field Report No.	Geomatrix Project Manager	Weather: Cloudy Light Rain (on + off)	Travel Time (hours): .75
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0650 Arrived at Plant - prepping for Sampling GW and Safety meeting
0800 Moving to begin Sampling LAW12-60
0830 Trouble w/ drawdown on this well - it will stabilize but drawdown will be more than 2' - will need to do Variance
Sampling LAW12-60 Sample # 101201224
1030 Setting up to Sample UAW23-20 # 101201226
1125 Sampled UAW23-20
1145 Prepping to Collect Equip. Blank @ UAW23-20
1215 Sampling Equip Blank @ UAW23-20 # 101201227
1440 Prepping to Sample UAW10-50 & 10-80
Based on Development data - 10-50 must be bail sampled and 10-80 was bailed dry @ 1750 and has only recovered to 73' after 2 hrs - it will also have to be bailed.
1430 Sampling UAW10-80 # 101201228 (Bailed)
1520 Sampling UAW10-50 # 101201229 (Bailed)
1615 Prepping to Sample UAW16-20 # 101201230
Blind Duplicate will be collected at this location and will be # 101201231
1745 Sampled UAW16-10 w/ Blind Dup 101201232
1815 Prepping to sample UAW18-20 #

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Marton FI Phase II	10/12/01

Observations/Remarks (continued):

1855 Sampling UAW18-20 101201232 w/MS/MSD
1820 Packing Samples
2030 Left for Fed Ex

Note: on Well development: Wells Drilled by Bart Longyear that were drilled dry have developed well and cleaned up; however, wells in which water was used to wash down casing to total depth all appear to have formation damage due to "drilling mud" ~~damage~~ intrusion into the formation - These include UAW10-50, UAW10-80, UAW24-70, and CAW12-60 Damage (Plugging) to formation is most sever in the UAW10 wells which had to be sampled w/a bailer - flow was too low to micro purge. CAW12-60 is of particular concern because pH ranges from 12.5 - 9.5 it does drop after long periods of pumping. This well has now had 400-500 gallons removed - only 120 gal. were lost during well installation, so we have met development requirements w/the exception of the pH issue.
UAW10-50, UAW10-80, and UAW24-70 have not had volume removed so varieties must be written - these explaining installation and development.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON Reading	Reading OHIO	C. YOUNG
Date 10/12/01	Contractor/Representative		Time Arrived
Day of Week FRIDAY	Client MORTON	Observations Reported to Peter Palena	Time Departed
Daily Field Report No.	Geomatrix Project Manager MARK HEMINGWAY	Weather Cloudy - SOME RAIN	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0655 on site.
0710 Got Hot work permit. Boart Longyear on site.
Boart Went to UAW 24-70 TO Resume development.
0945 Boart went to Develop UAW-10-80 and UAW 10-50
1030 Boart bailed well UAW-22-20 dry.
1100 one Workers is still pumping H_2O from UAW-10-80
1130 Boart and Geomatrix went to lunch.
1200 Gmt back on site. - Helping Tim Sangle
~~UAW~~ Equipment Blank at UAW 23-20
1230 Checked on the Equip Bre. Workers - still pumping the mud sludge out of the baker tank.
1300 Erik Back on site. unloaded his truck. Microwaves, Vacume cleaner - apartment stuff.
1335 Unloading TV's and all apartment stuff in Kirk Lambertz old office.
1400 Boart Longyear - going to pump more water from UAW 12-00 - having some pump trouble.
1420 Have Removed 15 Gallons - Water is Clearing the ph is lowering
1520 The Contractor has taken the pump apart - full of Silt -
1530 Resume pumping H_2O.
: 25 GPM.

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Charles E. Young
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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON	10/12/01

Observations/Remarks (continued):

1640 The well produces ~ .5 GPM Ph is still around 10.40.
Also the H20 at 59 feet recovers 1" per 20 Seconds.
The Well has pumped dry - letting it recover and will resume pumping again.

Charles E. Gary
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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Morton FI	Reading OH	J. Jennings
Date: 10-13-01	Contractor/Representative: Boart Longyear		Time Arrived: 0655
Day of Week: Saturday	Client: Rohm & Haas	Observations Reported to: Pete Polena	Time Departed: 1910
Daily Field Report No.	Geomatrix Project Manager: M. Hemingway	Weather: Cloudy inter rain ~65°	Travel Time (hours): 0.5
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0655 Arrived at site - prepping for safety meeting and GW sampling - will continue development on LAW12-60

0800 Setting up to sample UAW24-70 Sample #10130233

0900 Sampled UAW24-70 - Seasonal Boardy Conditions seen during sampling

1000 Checking pH and Development on LAW12-60 after surging and bailing for another hour flow rate has inc to ~3gpm and pH=7.5 Cumulative Developed water is up to ~550 gpm

1030 Sampling UAW22-20 w/Bailer Sample # 10130234

1055 Checking pH and other parameter on LAW12-60 pH 7.38, temp 17.02°c; - Total Vol. Developed ~600gal. will set up to resample - note Sample Collected at this location yesterday was not sent to lab and will be discarded.

1100 Setting up to Resample LAW12-60 #10130224 App IX Sample

1145 Sampled LAW12-60 - pH@ sampling was ~7.7

1300 Boart personell have completed emptying tank and cleaning up all well completions - Development is complete w/out additional means - Since LAW12-60 shows indication of grout leakage - we will let it stabilize and perform additional pumping in Nov.

1330 Prepping to Sample UAW25-20 Sample # 10130235

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
2443	Murton FJ	10-13-01

Observations/Remarks (continued):

1430 Packing Samples and Prepping for Step Drawdown Tests
- Will Start with UAW02-4 - Observe UAW02-20

1635 Setting up for Step drawdown @ UAW02-40
Screen 31.5-46.5
- Pump (our Redi flow 2) was unable to drawdown this well enough for an effective test.

1730 Setting up to attempt test on UAW02-20

1840 45 minutes into this test (at the beginning of the 3rd step) the tubing blew off of the pump and we lost the test - Some recovery data was recorded, but we will redo this test.

1910 Left plant after dumping water in sump.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Morton Reading FR	Reading OH	T. Jennings
Date: 10-14-01	Contractor/Representative		Time Arrived: 0730
Day of Week: Sunday	Client: Rohm & Haas	Observations Reported to: Peter Polena	Time Departed: 1815
Daily Field Report No.	Geomatrix Project Manager: M. Hemingway	Weather: Cloudy - Rain	Travel Time (hours): .75
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0730 Arrived at Plant Preping to continue Step Drawdown tests and taking supply inventory and preparing for 2nd Plantwide Sampling event in Nov.
- Rain delay - Preping for Phase 3 Sampling etc.

1015 Setting up to perform Step-Drawdown tests on UAW15-20 & 50

1545 Setting up to redo Step Drawdown test on UAW02-20

1615 Started SDD Test - pumping rate was not sufficient for good test (ie: could not achieve 50% drawdown.
- Will Redo this test when we have larger equipment.

1815 left Plant after securing site - ~~[illegible]~~
- Reviewed work left to be done with Charles - he will cover waste mgt. the remainder of week.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7443	MORTON	Reading OHIO	C. Young

Date	Contractor/Representative	Time Arrived
10/15/01	Equip Inc. / Abercombe surveying.	7:00

Day of Week	Client	Observations Reported to	Time Departed
MONDAY	MORTON	Peter Palma	1730

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	MARK Hemingway	Cool Clear	

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 arrive on site.
Pack up Equipment.
0900 Equipment Inc on site, Abercomby on site held the tail gate safety meeting.
0915 The Surveyors went to finish the survey Elevations.
Equip Inc. went to evacuate H_2O from the roll off Boxes.
1030 Verox has turned the Hydrant on for Equip Inc. - all Roll offs have been untarped and the free liquids removed. The workers start Cleaning the large frac tank.
1230 The workers went to lunch.
1300 Back on site to resume Cleaning the frac tank.
1630 The workers have Cleaned the frac tank. - Took a smoke break and began evacuating H_2O from the Roll off box nearest to the frac tank. The H_2O is Water used when Cleaning the frac. tank.
1730 Equip Inc. and Geomatrix depart the site. All Roll off Boxes are Covered and the area Cleaned.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: MORTON	Location: Reading OHIO	Engineer/Technician: C. YOUNG
Date: TUESDAY	Contractor/Representative		Time Arrived
Day of Week: 10/16/01	Client: MORTON	Observations Reported to: Peter Palena	Time Departed
Daily Field Report No.	Geomatrix Project Manager	Weather: WET - Cold (RAIN)	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 Arrive on site
0745 Equip Inc on site. - held the tailgate safety meeting - It is raining and the wind is blowing hard out of the north. The workers don't want to work in these conditions. I requested that they get some coffee and wait a while to see if the weather changes.
10:00 It is still raining and the wind is still blowing hard -
10:20 Equip Inc. departed the site.
- Called DAN at Fish Bum - he said his man would pick the frac tank up today around 2 or three PM.
1100 finished the sewer inventory and went to see the guards.
1130 Told the guards that Fishbum would be here to pick the frac tank up today.
- Depart the site.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON	Reading OHIO	C. YOUNG
Date 10/17/01	Contractor/Representative Equipment Inc.		Time Arrived
Day of Week WEDNESDAY	Client MORTON	Observations Reported to Peter Palena	Time Departed
Daily Field Report No.	Geomatrix Project Manager	Weather Cold - Clear	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 700 on site.
800 Equip. Inc on site. held the tailgate safety meeting.
820 Equip inc went out to pump off excess water in the three Roll off boxes.
840 Started mixing portland in the first Roll off box -
0915 have put 36 bags of Portland in the Roll off and are mixing it with the back hoe.
0930 Have begun mixing portland into the second roll off box.
1000 The second box is mixed - now going to the third Roll off - It hesn't been pumped off yet.
1010 Workers are pumping off H_2O from the roll off box.
1140 Mixing the last Roll off Box
1210 Removing more H_2O that settled in the first Roll off Box
1240 Workers are sprinkling portland over the top of the contents of Roll off Boxes 1 and 2. 1255 The workers took a lunch break.
1330 Back to work.
They have sprinkled portland

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON	10/17/01

Observations/Remarks (continued): over the contents of the third roll off Box - preparing to put the paper portland bags in the roll off Boxes and cover them.
1420 now picking up Equip and cleaning up.
1500 all Depart the site. The workers will come back tommorrow and add more portland if needed to solidify any remaining soft material.
The Contents are firming up pretty well and are close to passing a paint filter test as of now.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING F1	READING, OHIO	ERIK MANSECK
Date 11-8-01	**Contractor/Representative** EQUIPT		**Time Arrived** 0650
Day of Week THURS.	**Client** ROHM & HAAS	**Observations Reported to** PETER PALENA	**Time Departed** 1945
Daily Field Report No.	**Geomatrix Project Manager** M. HEMINGWAY	**Weather** SUNNY - 50'S	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☒ Other(s) TRENCH DIAGRAMS, AIR MONITORING LOG

Unresolved Tests/Issues:

Observations/Remarks: 0650 ARRIVE ON SITE

0700 MEET WITH DAN AND SCOTT OF EQUIPT - SCOTT GETS PLANT SAFETY TRAINED WITH KURT OF ROHM & HAAS

0800 MEET WITH DAN AND GO AROUND TO ALL THE TRENCH LOCATIONS

0900 ATTEMPT TO LOCATE UTILITY (STORM DRAIN FROM SECONDARY CONTAINMENT) - COULD NOT LOCATE IN AREA SOUTH OF TRENCH

1025 BEGIN TRENCHING SOUTH PORTION OF TRENCH 1

1040 SAMPLE T-1-4' 110801236 - APP-IX - B

1100 STOPPED TRENCHING - CALLED MARK/ANNE ASKED WHAT TO TO WITH OLD SCRAP METAL (DRUM) - SAID TO PUT IN ROLL OFF

1145 SAMPLE T-1-6' 110801237 - APPIX - VERY HARD SOIL BENEATH GREEN DRUM

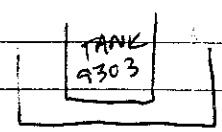
1150 BEGIN BACKFILLING WITH NATIVE MATERIAL

1310 GO TO LUNCH

1345 RETURN FROM LUNCH, DECON BACKHOE BUCKET

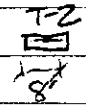
1415 START TRENCH -2

1420 T-2-3' - MIDDLE OF TRENCH, 3' BGS 110801238



BLDG

1440 110801239 T-2-9' - MIDDLE WHT, GRAY, BLACK SAND



24

SPLIT SAMPLE WITH TECH-LAW

1525 - START TRENCHING TRENCH-3 (T-3) AT ANAMOLY E-

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7669	MORTON READING F1	11-8-01

Observations/Remarks (continued): 1530 - FOUND WIRE MESH MATERIAL AT SOUTHWEST PORTION OF T-3 (~ 1'-2' BGS) - THIS CORRESPONDS TO METALIC ANAMOLY FOUND IN GEOPHYSICAL STUDY

1545 - TRENCH DOWN TO ~11' BGS - SIDEWALLS KEEP CAVING IN, TOLD OPERATOR TO CONTINUE TRENCHING NORTHEASTWARD TOWARD NE END OF TRENCH

1550 - RON LANZIM ONSITE - EXPLAINED TRENCHING PLANS

1630 - BEGIN BACKFILL TRENCH T-3 -

1730 - MARK OFF AREAS OF PARKING LOT

1800 - PACK SAMPLES

1945 - LEAVE SITE

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

Subject TRENCH 1 — PROFILE

Project No. 7689

Task No.

File No.

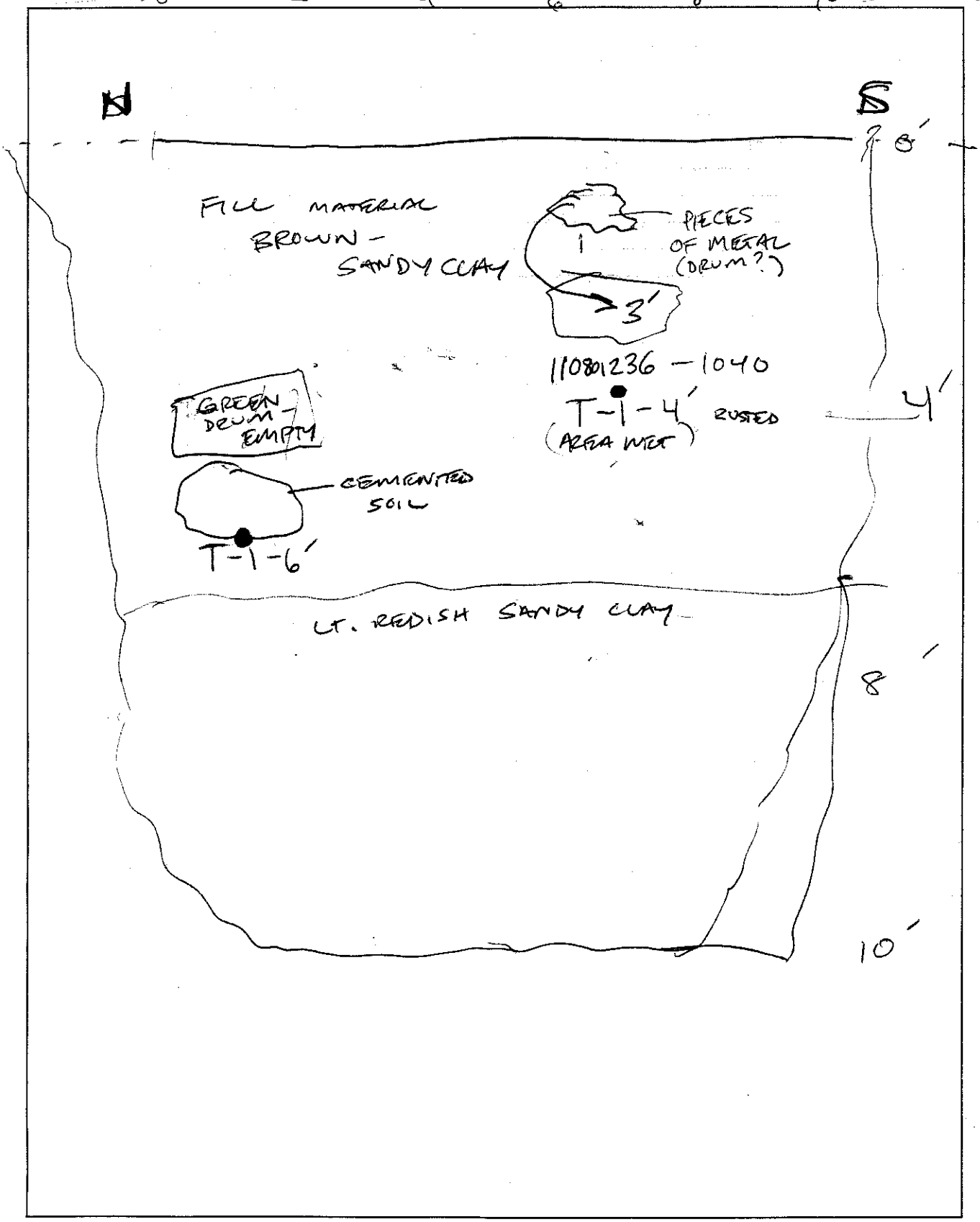
Sheet of

By

Checked By

Date 11/8/01

Date



Field Boring Logs

PROJECT: MORTON READING FI	Log of Boring No. DP 30	
BORING LOCATION: NE PARKING LOT	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL 2-1/8" OD	LOGGED BY: J. MANSELL	
HAMMER WEIGHT: DROP: 1.75" ID	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. (Surface Elevation:)	REMARKS
					ASPHALT (3-4") / CONCRETE (3-4")	
1					POORLY GRADED SAND W/ GRAVEL (SC) [FILL]	
2						
					2.5'-3' (CLAY LENS) - DK OLIVE GRAY [FILL?]	
3				0.0	POORLY GRADED SAND (SC) [FILL?] LT OLIVE BROWN (2.5Y 5/6), MOIST, ~95% MED SAND, ~5% GRAVEL (<1/2"), TRACE FINES	
4					SAME AS ABOVE	
5						
6				0.0	SANDY LEAN CLAY (CL): (5Y 3/2), MOIST, [FILL] ~85% MED PLAST CLAY, ~15% SAND; TRACE GRAVEL (1"), SOFT	
7					1"-2" PIECES OF ASPHALT AT 7.5'	
8					SAME AS ABOVE	
9				0.0		
10					10-10.5' (CLAY?) - PALE YELLOW (2.5Y 8/2), MOIST, ~100% LOW PLAST FINES, SOFT	
11					10.5-11' (SANDY LEAN CLAY) DK BROWN	
12				0.0	SANDY LEAN CLAY (CL) VERY DK GRAYISH ~~GRAY~~ BROWN (2.5Y 3/2) MOIST ~85% LOW PLAST FINES, ~15% GRAVEL, ~~SAND~~	— 1" PIECES OF BROKEN GLASS
13					POORLY GRADED SAND (SP): YELLOWISH BROWN (10YR 5/4), MOIST, ~100% MED. SAND	
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1

B-1 (Blank)

PROJECT:

Log of Boring No. DP30

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15						
16					SAME AS ABOVE WET	
17						
18				0.0		
19					SILT LENS 19-19.5' - SATURATED	
20						
					TD = 20' @ 0905 HOLE OPEN TO 17' - BGS, BENTONITE CHIPS TO SURFACE PUREGOLD - MED CHIPS ~ 3/4 BAG ~ 50 lbs	

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure 2

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP-31	
BORING LOCATION:	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD:	LOGGED BY: I. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					0-6" - ASPHALT	
1					SANDY LEAN CLAY (CL): LT OLIVE BROWN (2.5Y 5/3) [FILL]	
2					MOIST, ~90% MED PLAST FINES, ~10% SAND, TRACE GRAVEL, SOFT/FIRM	
3				0.0		
4					SAME AS ABOVE [FILL]	
5						
6				0.0		
7						
8					SAME AS ABOVE [FILL]	
9				0.0		
10						
11					SMALL BLACK (BURNED?) MATERIAL (1/2" - HARD)	
12				0.0	SAME AS ABOVE	
13						
14						
15	1710501294			4.9	BLACK STAINING, ODOR	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1

B-1 (Blank)

PROJECT:

Log of Boring No. DP31

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistancy, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15						
16					POORLY GRADED SAND (SP): (5Y 5/2) OLIVE GRAY, MOIST, ~100% MED SAND	
17					SAME AS ABOVE, SATURATED AT 17'	
18					TD = 18' @ 1000	
					HOLE OPEN TO 16.5' BGS	
					~3/4 BAG OF BENT. CHIPS TO SURFACE SOIL	

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure 2

B-2 (Blank)

PROJECT: MORTON READING FL	Log of Boring No. DP32	
BORING LOCATION:	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: T. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. — Surface Elevation:	REMARKS
					ASPHALT (0-6")	
1					SANDY CLAY (CL): DK YELLOWISH BROWN (10YR 4/6), [FILL] MOIST, ~90% LOW PLAST FINES, ~10% FINE SAND, FIRM	
2						
					FINE GRAVEL @ 2.5'	
3				0.0	DK BROWN	REFUSAL AT 2½' BGS, PULL RODS, MOVE 3' OVER
					WOOD MATERIAL @ 3.5'	
4					VERY PALE BROWN (10YR 8/2) (DIATOMACEOUS SILTY CLAY?)	
					SAME AS ABOVE [FILL]	
5						
6				0.0	DK GRAYISH BROWN [SANDY CLAY (CL)] CONT. (2.5Y 4/2)	
7						
8					[FILL] SILTY CLAY (CL): WHITE (5Y 8/1), MOIST, ~95% LOW PLAST FINES, ~5% VERY FINE SAND,	
9				0.0	BLOCKY, SOFT (CEMENTED) - 1" THROUGHOUT	
10						
11						
12				0.0	SAME AS ABOVE	
13					(SANDY CLAY) CL [FILL]: DK YELLOWISH BROWN (10YR 4/4), MOIST, ~90% LOW PLAST FINES, ~10% SAND, FIRM	
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT:

Log of Boring No. DP32

DEPTH (feet)	SAMPLES Sample No.	Sample	Blows/ Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
	15			0.0	POORLY GRADED SAND (SP): LT OLIVE BROWN (2.5Y 5/3), MOIST, ~100% MED SAND	
	16				TD = 16'	
					HOLE OPEN TO 15.5' BGS,	
					~3/4 BAG 50/6 BENT CHIPS TO SURFACE	

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP33	
BORING LOCATION:	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD:	LOGGED BY: E MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					0-6" ASPHALT	
1					SANDY CLAY (CL): [FILL]: DK YELLOWISH BROWN (10YR 4/4), MOIST, ~80% LOW PLAST FINE, ~20% FINE SAND, FIRM	
2						
3				0.0		
4					POORLY GRADED SAND (SP): YELLOWISH BROWN (10YR 5/4), MOIST, ~100% MED PLAST. SAND, TRACE FINES	
5					5-5.5' - SILT LENS 5.5-6' - CLAY LENS	
6				0.0	POORLY GRADED SAND (SP) CONT. - TRACE FINE GRAVEL	
7						
8					POORLY GRADED SAND (SP) CONT.	
9				0.0		
10						
11						
12					SAME AS ABOVE	
13						
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1

B-1 (Blank)

PROJECT:

Log of Boring No. DP33

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	32 REMARKS
16					TD = 16' — OPEN TO 15.3' ~ 3/4 50 lb BAG OF BENT. CHIPS	

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure 2

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP34	
BORING LOCATION:	ELEVATION AND DATUM: GROUND	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					ASPHALT (0-6")	
1					[FILL] - SANDY CLAY DK GRAYISH BROWN (2.5Y 4/2)	
2						
3				0.0	SILTY CLAY (CL) [FILL]: [DIATOMACEOUS EARTH?]; WHITE (2.5Y 8/1), MOIST, ~95% LOW PLAST FINES, ~5% FINE SAND, BLOCKY, FIRM	
4					SAME AS ABOVE	
5						
6				0.0		
7						
8					SAME AS ABOVE	
9				0.0		
10						
11						
12				0.0	SAME AS ABOVE	
13						
14					SANDY CLAY (CL): DK YELLOWISH BROWN (10YR 4/4), MOIST, ~80% LOW PLAST FINES, ~20% FINE SAND, TRACE GRAVEL, SOFT	
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT:

Log of Boring No. DP34

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
5				0.0	POORLY GRADED SAND (SP): YELLOWISH BROWN (10YR 5/4), MOIST, ~95% MED SAND, 5% GRAVEL, TRACE FINES	
16					TD=16'	
					— HOLE OPEN TO 15.7' BGS	
					~ 3/4 50 lb bag. bent. chips to surface	

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure 7

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP35	
BORING LOCATION:	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H C. NOTTING.	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD:	LOGGED BY: L MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistancy, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					6" ASPHALT / 6" CONCRETE	
1						
2					SANDY CLAY (CL): [FILL] BROWN (5/3), MOIST, ~80% LOW PLAST FINES, ~20% MED SAND, SOFT	
3				0.0		
4					POORLY GRADED SAND (SP): LT OLIVE BROWN (2.5Y 5/4), MOIST, ~90% MED SAND, ~5% FINE GRAVEL, TRACE FINES	
5					SAME AS ABOVE	
6				0.0		
7						
8					SAME AS ABOVE	
9						
10						
11						
12					SAME AS ABOVE	
13						
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1

B-1 (Blank)

PROJECT:

Log of Boring No.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistancy, structure, cemantation, react. w/HCl, geo. inter.	REMARKS DP35
15					15.5'-15.8' - SILT LENS - WET	
16					TD=16' HOLE OPEN TO 14.5'	

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure 2

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP36
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01 / DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: / MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD:	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
					10" ASPHALT	
1					SANDY CLAY (CL) [FILL]: VY DK GRAYISH BROWN (2.5Y 3/2) MOIST, ~80% LOW PLAST FINES, ~20% MED SAND, TRACE GRAVEL, SOFT	
2						— PID - 1400 BATTERY IS OUT — (NO PID)
3					LT OLIVE BROWN (2.5Y 5/4), MORE FIRM THAN ABOVE	
4					SAME AS ABOVE [FILL]	
5						
6					BLACK MATERIAL <1" (BURNED?)	
7						
8					SAME AS ABOVE [FILL]	
9						
10					REDISH BROWN LAMINATIONS [IRON?]	
11						
12					2" COBBLE AT 12'	
13					SAME AS ABOVE	
14					ODOR	(NOTE SAMPLE TAKEN FROM (13'-15')
15						

~~12050-1240 — BOND DUP 1206~~
~~12050-1247 1415~~ NOT SUBMITTED — ERM 12-5-01 PER M. HEMINGWAY

1415

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1

B-1 (Blank)

PROJECT:

Log of Boring No. DP36

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
5						
16					POORLY GRADED SAND (SP): OLIVE ~~GRAY~~ BROWN (2.5Y 5/3), MOIST, ~95% MED SAND, ~5% FINE GRAVEL	
17						
18					BLACK DISCOLORATION, STRONG ODOR 17.5'–19.5'	▼ 17.2' BGS 12-5-01
19	12050129 8 1430					
20					SANDY LEAN CLAY (CL) [TILL]: OLIVE (5Y 4/3), MOIST, ~85% LOW PLAST FINES, ~15% FINE SAND, TRACE GRAVEL, HARD	
21					TD = 21' HOLE OPEN TO 20' BGS 1-50 lb bag of BENT. CHIPS	

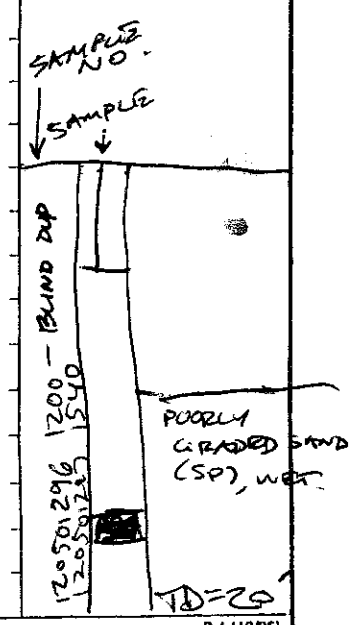
B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP37	
BORING LOCATION: NW	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01	DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD:	LOGGED BY: I. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
0–4					6"-8" ASPHALT + GRAVEL BASE (6"-12")	COBBLE WEDGED IN SHOE – ZERO RECOVERY 0-4'
4–8					SANDY CLAY (CL) [FILL]: YELLOWISH BROWN (10YR 5/4), MOIST, ~85% COMPLAST FINES, ~15% FINE SAND, FIRM	
8–9					8.8'-9' - DK BROWN — BROKEN GLASS 9-9.5 - REDDISH BROWN (2.5 YR 4/4)	
9–15					SAME AS ABOVE – DK BROWN (10YR 3/3) [FILL]	



B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1

B-1 (Blank)

PROJECT: MORTON READING FI	**Log of Boring No.** DP 38
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 12-5-01 / DATE FINISHED: 12-5-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 20' / MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD:	LOGGED BY: I MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
					0-6" ASPHALT	PID NOT FUNCTIONING LOW BAT.
1					CLAY (CL) [FILL]: YELLOWISH BROWN (10YR 5/6), MOIST, ~90% MED PLAST FINE, ~10% FINE SAND, HARD	
2						
3					DK YELLOWISH BROWN (10YR 3/4)	
4					SAME AS ABOVE	
5						
6					1½" COBBLE AT 5.5'	HOLE OPEN TO 18.4' CHIP TO SURFACE
7						
8						← COBBLE WEDGED IN SHOE - ZERO RECOVERY 8-12'
9						
10						
11						
12						
13					B.5-14' — WOOD MATERIAL, BROKEN GLASS, ODOR	
14	120501299 1620 + MS/MSD				~~14-14.5~~ BLACK DISCOLORATION POORLY GRADED SAND (SP). DK GRAYISH BROWN (2.5Y 4/2), MOIST-WET, ~100% MED SAND	
15						

15, 16, 17, 18, 19, 20

SAME AS ABOVE.

ODOR, BLACK DISCO. 19-20'

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

20' = TD

Monitoring Well Sampling and Development Logs

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW01-80

Well ID: UAW01-80

Sample ID: 10/001205 Duplicate ID: —

Sample Depth: ~~55~~ 74'

Project and Task No.: MORTON READING 7443

Project Name: MORTON READING F1

Date: 10-10-01

Sampled By: ERM

Method of Purging: 2" LOW FLOW GRUNDFOS

Method of Sampling: LOW FLOW

Initial Depth to Water: 26.92

Depth to Water after Sampling:

Total Depth of Well: 83.20 Me.

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	(NTU)	DO (mg/L)
1330	74'	700	1	18.44	6.88	1032	CLEAR	13.5	1.05
1335	74'	700	2	18.88	6.63	1003	CLEAR	11.2	1.08
1338	74'	700	2.5	18.93	6.59	10~~X~~30	CLEAR	11.8	0.92
1341	74'	700	3	18.97	6.51	10~~X~~34	CLEAR	11.4	1.02
1345	74'	700	4.5	19.05	6.45	10~~X~~41	CLEAR	10.3	1.06
→ SAMPLE @ 1345									

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI - 610 D

DRT-15CE TURBIDITY METER

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: VOC, PCBs ONLY (CLP)

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW05-20

Well ID: UAW05-20 (1545)

Sample ID: ~~101001206~~ ZRM ~~Duplicate ID:~~ 101001206

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING

Date:

Sampled By: ZRM

Method of Purging: BAILER

Method of Sampling: DISP. BAILER

Initial Depth to Water: 12.45 BTOC (AFTER BAIL DRY)

Depth to Water after Sampling: 13.05' 1604

Total Depth of Well: 16.40 BTOC

Well Diameter: 4" PVC

1 Casing/Borehole Volume = —
(Circle one)

4 Casing/Borehole Volumes = —
(Circle one)

Total Casing/Borehole Volumes Removed: (BAILED DRY) 1030

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
BAILED DRY — 4 1/2 GALLONS							
1545	—	SAMPLE		—			
1600	—	—	—	21.05	6.87	5002	BLACK, DO = 2.24 mg/L

pH CALIBRATION (choose two)					Model or Unit No.:
Buffer Solution	pH 4.0	pH 7.0	pH 10.0		
Temperature °C					
Instrument Reading					

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION				Model or Unit No.:
KCL Solution (µS/cm = µmhos/cm)				
Temperature °C				
Instrument Reading				

Notes: (CLP-TAL)

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW06-20

Well ID: UAW06-20 TIME (1630)

Sample ID: 101001208 Duplicate ID:

Sample Depth:

Project and Task No.: 7443

Project Name: MORTON READING

Date: 10-10-01

Sampled By: ERM

Method of Purging: BAIL DRY 1000

Method of Sampling: DISP. BAILER

Initial Depth to Water: 11.12 @ (1622)

Depth to Water after Sampling:

Total Depth of Well: 19.25'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: BAILED DRY @ 1000 8 GALLONS

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1630				SAMPLE			
1648				20.74	6.81	5517	BLACK. DO: = 1.38 mg/L

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: STRONG ODOR AFTER FIRST WATER LEVEL (CLP-TAL)

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW10-50

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7443

Project Name: MORTON

Date: _____

Sampled By: _____

Method of Purging: Grundfos Pump

Method of Sampling: _____

Initial Depth to Water: 41.02 - 10-9-01

Depth to Water after Sampling: _____

Total Depth of Well: _____

Well Diameter: 4" PVC

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: _____

.12
.3
.3
.69gal
.75 sec.
.3
.75 = .8

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) DO
9-9-01	1030	—	BAILED	15 GALLONS			—	—
	1340	—	PUMPED	15 GALLONS				
	1520	~56'		55				
	1740	~56'		75 + 10 = 85 gallons				
9-10-01	0814	~56'	~0.1	95	19.3	8.66	1570	570 NTU / 9.65 mg/L
				125	16.2			
10/9/01	1435	"	Baited	~~225~~	148	7.52	1.08 mS/cm	Cloudy, 999 NTU / High
10/10/01	1710	~56'	~0.1	158	16.2	7.48	1.00 mS/cm	Cloudy 999 / mod
10/11/01	0820	"	"	168	—	—	—	" " "
10/12/01	1019	"	Bailed	180	—	—	—	DARK BROWN / High / High

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: 1340 - 1520 - ADJUSTING FLOW RATES FROM 1-2 gal/min, WELL KEEPS PUMPING DRY
1535 - MOVE TO UAW10-80
WELL ~~Pumps~~ Bails dry Recovers 1/2 inch P/M

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW10-50

Well ID: UAW10-50

Sample ID: 101201229 Duplicate ID:

Sample Depth: TIME: 1520

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 10-12-01

Sampled By: ERW / TPJ

Method of Purging: 2" GRUNDFOS

Method of Sampling: DISPOSABLE BAILER

Initial Depth to Water: 45.61

Depth to Water after Sampling:

Total Depth of Well: ~86'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
—	PUMPED	DRY		@ 1200	10-12-01		—
~~1546~~	cm			~~16.76~~ 9AM	7.18	1465	TAN, CLOUDY DO=9.44 mg/L
1546				16.14			

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

32.25 - 9-9-01

Well ID: UAW10-80

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING F1

Date: 9-9-01, 9-10-01

Sampled By: —

Method of Purging: 2" SUBMERSIBLE PUMP / BAILER

Method of Sampling: —

Initial Depth to Water: 37.1 - 9-10-01, 41.98 - 10-9-01

Depth to Water after Sampling:

Total Depth of Well:

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
	1100	—	—	BAILED 15 GALLONS	—			
	1540			35				
9-10-01	—	—	—	50	—	—	—	SEE DAILY FIELD NOTES
10/9/01	1200			75				
10/10/01	1628		.50	80	18.9	7.91	1.81 mS/cm	DARK BROWN / High Silt
	1635		.75	85	18.7	7.65	1.78	" " / moderate
	1655		.75	100	18.9	7.75	1.83	" " / LOW
	1700		"	103	18.8	7.46	.986	Light Brown / LOW
10/11/01	0820	83'	"	128	—	—	—	—
10/12/01	1015	"	.50	153	—	—	—	Light brown / LOW

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: 1535 - START PUMPING - PUMP STOPS AFTER 20 GALLONS - TAKE PUMP OUT, PUMP IS COVERED IN SILT & MUD, CLEAN PUMP MOVE BACK TO UAW10-50 - 1710

1705 - CHARLES & JERRY (BOART) GO TO LOWES TO GET TREMIE PIPE, WILL ATTEMPT TO USE TRASH PUMP TO CLEAN UP WELL - PUMPED ~8 GALLONS WITH TRASH PUMP - 1841 - CAN'T OVERCOME HEAD

1700 WELL RECOVERS 1/2 INCH P/m PUMPS dry @ < .5 GPM

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

32.25 - 9-9-01

Well ID: UAW10-80

Initial Depth to Water: 37.1-9-10-01

Sample ID: —

Duplicate ID: —

Depth to Water after Sampling:

Sample Depth: —

Total Depth of Well:

Project and Task No.: 7443

Well Diameter: 4" PVC

Project Name: MORTON READING FL

1 Casing/Borehole Volume = (Circle one)

Date: 9-9-01, 9-10-01

4 Casing/Borehole Volumes = (Circle one)

Sampled By: —

Method of Purging: 2" SUBMERSIBLE PUMP/ BAILER

Method of Sampling: —

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1100	—	—	BAILED 15 GALLONS	—			
1540			35				
9-10-01 —	—	—	50	—	—	—	SEE DAILY FIELD NOTES

pH CALIBRATION (choose two)					Model or Unit No.:
Buffer Solution	pH 4.0	pH 7.0	pH 10.0		
Temperature °C					
Instrument Reading					

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION				Model or Unit No.:
KCL Solution (µS/cm = µmhos/cm)				
Temperature °C				
Instrument Reading				

Notes: 1535 - START PUMPING - PUMP STOPS AFTER 20 GALLONS - TAKE PUMP OUT, PUMP IS COVERED IN SILT & MUD, CLEAN PUMP MOVE BACK TO UAW10-50 - 1710
1705 - CHARLES & JERRY (BOART), GO TO LOWES TO GET TREMIE PIPE, WILL ATTEMPT TO USE TRASH PUMP TO CLEAN UP WELL - PUMPED ~8 GALLONS WITH TRASH PUMP - 1841 - CAN'T OVERCOME HEAD

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW10-80

Well ID: UAW10-80

Sample ID: 10201228 Duplicate ID: —

Sample Depth: — TIME: 1430

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 10-12-01

Sampled By: ERM / TPJ

Method of Purging: 2" GRUNDFOS

Method of Sampling: DISPOSABLE BAILER

Initial Depth to Water: 72.95

Depth to Water after Sampling:

Total Depth of Well: ~58'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
PUMPED	DRY	AT	1200 —	10-12-01			
1508	—	—	—	16.76	7.48	1806	TAN, CLOUDY DO: 10.3 mg/L

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI
DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: LAW 12-60
Sample ID: _____ Duplicate ID: _____
Sample Depth: _____
Project and Task No.: 7443
Project Name: MORTON Reading
Date: 10/9/01
Sampled By: _____
Method of Purging: Grundfos Pump
Method of Sampling: _____

Initial Depth to Water: 18.70
Depth to Water after Sampling: _____
Total Depth of Well: 62.90
Well Diameter: 4"
1 Casing/Borehole Volume = _____ (Circle one)
4 Casing/Borehole Volumes = _____ (Circle one)
Total Casing/Borehole Volumes Removed: _____

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
10/9/01	1530	60	—	55	—	—	—	DARK BROWN, High silt
	1830	"	—	110	—	—	mS/cm	" "
10/10/01	0825	60	.75	160	16.1°C	12.11	3.73	TAN - Silty - Moderate
	0830	"	.50	165	16.1°C	12.30	3.71	" " "
	0900	"	"	178	16.2°C	12.20	3.24	" " Low
	0915	"	"	185	16.1°C	12.12	3.25	Clearing — Low
	1000	"	"	195	18.1°C	12.16	2.94	
	1015	"	1.25	210	15.8°C	12.15	2.43	Well RAN DRY —
	1430	"	.75	225	15.6	12.11	2.38	Clear —
	1445	"	"	235	15.6	12.09	2.37	Clear
	1510	"	"	240	15.6	12.11	2.35	Clear
10/12/01	1420	"	[illegible]	255	21.4	10.75	.969	Clear, 79.0, NONE

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C	25			
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: _____

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: LAW-12-60

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7443

Project Name: MORTON Reading

Date: 10/12/01

Sampled By: _____

Method of Purging: Grundfos Pump

Method of Sampling: _____

Initial Depth to Water: 18.70

Depth to Water after Sampling: _____

Total Depth of Well: 62.90

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: _____

DO	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
10.54	1540	60'	.50	280	19.0	9.88	.776	~~[illegible]~~ Clear, 434, NONE
11.23	1600	"	"		18.9	10.28	.860	Clear, 30.0, NONE
10.61	1635	"	"	295	18.6	9.53	.789	Clear 144, NONE
10.53	1745	"	"	320	18.3	9.44	.778	Clear 78, NONE
10.24	1830	"	~.50	340	18.4	9.63	.747	Clear 69 NONE

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: INTAKE Depth is at 60.70 from TOC. Boosts Grundfos pump at times shuts off for no apparent reason.

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

LAW-12-60

SAMPLE NOT SUBMITTED FOR LAB ANALYSIS

Well ID: LAW12-60

Sample ID: _____ Duplicate ID: _____

Sample Depth: 58.5' BGS

Project and Task No.: _____

Project Name: _____

Date: 10-12-01

Sampled By: _____

Method of Purging: _____

Method of Sampling: _____

Initial Depth to Water: 18.78

Depth to Water after Sampling: _____

Total Depth of Well: 63.5

Well Diameter: _____

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: _____

Time	Intake Depth	Rate (gpm) mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	(NTU)	DO = mg/L
0834	58.5	900	—	16.31	12.22	2854	CLEAR	16.47	1.30
0843	58.5	400	1.5	17.25	12.34	2849	CLEAR	15.39	0.21
0850	58.5	300	2.0	17.45	12.25	2217	CLEAR	14.3	1.31
0855	58.5	300	2.5	17.69	12.01	1471	CLEAR	6.0	1.79
0900	58.5	300	2.7	17.78	11.84	1245	CLEAR	9.2	1.56
0905	58.5	300	3.0	17.72	11.62	1157	CLEAR	9.8	1.79
0910	58.5	300	3.2	17.80	11.57	1007	CLEAR	9.6	1.94
0914	58.5	400	3.8	17.88	11.56	992	CLEAR	9.4	2.03
0918	58.5	400	4.5	17.85	11.56	989	CLEAR	7.5	1.94
0920	—	SAMPLE		—					
0950	58.5	400	7	18.02	11.50	944	CLEAR	4.1	1.71

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: APP-IX –
0843 – WL = 20.83
0852 – WL = 22.35
0855 – WL = 22.80
0903 – WL = 23.25
0906 – WL = 23.76
0913 – WL = 24.17
0919 – WL = 24.91
0948 WL = 28.21

(NO SAMPLE SUBMITTED)

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

LAW12-60

Well ID: LAW12-60
Sample ID: 101301224 Duplicate ID:
Sample Depth: 58.5'
Project and Task No.: 7443
Project Name: MORTON READING FI
Date: 10-13-01
Sampled By: ERW / TPJ
Method of Purging: 2" SUBMERSIBLE
Method of Sampling: LOW FLOW

Initial Depth to Water: 20.6'
Depth to Water after Sampling:
Total Depth of Well: 63.5'
Well Diameter: 4" PVC
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	TURBIDITY	DO (mg/L)
1131 ~~1050~~	58.5	650	—	16.57	7.99	955	CLEAR	58	2.20
1135	58.5	600	.5	16.92	8.01	979	CLEAR	64	1.33
1138	58.5	500	1	17.13	7.88	980	CLEAR	62	1.14
1142	58.5	500	1.6	17.30	7.81	981	CLEAR	65	1.40
SAMPLE 1145	58.5	500	2	17.51	7.77	990	CLEAR	57	1.37
1215	58.5	400	5	18.00	7.40	1031	CLEAR		1.05

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI
~~DRT ISCE HE SCIENTIFIC~~

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: HORIBA U10 WATER CHECKER

Notes: PURGED 200 GALLONS PRIOR TO SAMPLING (TODAY)
WL @ 1131 21.26
WL @ 1141 21.80'
WL @ 1216 21.64'
TURBIDITY METER DOES NOT APPEAR TO BE FUNCTIONING PROPERLY

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW 16-10

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING F1

Date: 9-8-01

Sampled By: —

Method of Purging: BAILER / 2" GRUNDFOS

Method of Sampling: —

Initial Depth to Water: 10.2

Depth to Water after Sampling: —

Total Depth of Well: —

Well Diameter: 4" PVC

1 Casing/Borehole Volume = ~14g.
(Circle one)

4 Casing/Borehole Volumes = ~56g.
(Circle one)

Total Casing/Borehole Volumes Removed: ~45

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1010	~7'	~3gpm	10	23.3	9.6	11.5	Turb=58 ; DO=8.8 mg/l
1035	~10'	~3gpm	~50	23.8	9.59	9.6	Turb=5.0 ; DO=9.11 mg/l
1045	~10'	~3gpm	~70	23.8	9.6	10.2	Turb=6.0 ; DO=9.37

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Water is black at start and after clears up turns back in 5min - High H2S Odor

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW16-10

Well ID: UAW16-10

Sample ID: 10/201230 Duplicate ID: 10/201231

Sample Depth: 12' BGS

Project and Task No.: 7443

Project Name: MORTON READING FI

Date:

Sampled By: ERM / TPJ

Method of Purging:

Method of Sampling:

Initial Depth to Water: 8.32'

Depth to Water after Sampling: 9.72

Total Depth of Well: 14.4'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm) mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	NTU	DO
1710	12'	800	1	23.33°	6.96	3142	CLEAR	6.2	4.56 mg/L
1713	12'	800	1.5	23.50	6.91	3211	CLEAR	4.2	2.99 mg/L
1716	12'	800	2	23.53	6.91	3294	CLEAR	2.9	3.22 mg/L
~~1719~~	12'	800	2.2	23.56	6.91	3332	clear	2.26	1.67 mg/L
1750	12'	800	8	23.53	6.92	4075	clear	2.20	1.64

Post Sample

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: 1725 WL = 8.41
1750 WL = 9.72

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW18-20
Sample ID: —
Duplicate ID: —
Sample Depth: —
Project and Task No.: 7443
Project Name: MORTON READING F1
Date: 9-8-01
Sampled By:
Method of ~~Purging~~ Development: BAILER / 2" PUMP
Method of Sampling:

Initial Depth to Water: 12.2
Depth to Water after Sampling:
Total Depth of Well: 18'
Well Diameter: 4" PVC
1 Casing/Borehole Volume =
(Circle one)
3 ~~4 Casing/Borehole~~ lost water Volumes = 1 1/2
(Circle one)
Total ~~Casing/Borehole~~ Water Volumes Removed: ~160 g

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
0930	10	~3gpm	8.98 40	21.5C	9.3		Turb=7; DO=9.53
0945	12	~3gpm	8.7 150	21.3	9.3		Turb=6; DO=9.4
0955	16	~3gpm	7.05 120	21.5	9.4		Turb=6; DO=9.6

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:
Bailed & Surged w/3" bailer ~15gals; pumped w/2" 12v. pump
~~T~~ ~~160~~ g 145 gal.

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW 18-20

Sample ID: 10120232 Duplicate ID:

Sample Depth:

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 10-12-01

Sampled By: ERW / TPJ

Method of Purging:

Method of Sampling:

Initial Depth to Water: 10.9

Depth to Water after Sampling: 11.05

Total Depth of Well: 18.4

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate ~~(gpm)~~ ml/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	NTU	DO mg/L
1835	15'	950	0.25	21.73	7.66	7989	clear	3.37	2.67
1840	15'	950	1.0	22.14	7.60	7316	clear	2.25	2.59
1845	15'	950	2.5	22.34	7.46	6943	Clear	1.2	2.49
1850	15'	950	3.0	22.36	7.41	6807	Clear	1.17	2.32
1854	15'	950	4.5	22.39	7.39	6745	Clear	1.05	2.22

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI
DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: Sampling @ 1805

1835 WL = 11.05
1840 WL = 11.05
1845 WL = 11.05
1850 WL = 11.05
1854 WL = 11.05

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW22-20
Sample ID: _____ Duplicate ID: _____
Sample Depth: _____
Project and Task No.: MORTON 7443
Project Name: MORTON READING FI
Date: 9-10-01
Sampled By: —
Method of Purging: BAILER
Method of Sampling: _____

Initial Depth to Water: 12.10
Depth to Water after Sampling: _____
Total Depth of Well: 20'
Well Diameter: 4"
1 Casing/Borehole Volume = _____
(Circle one)
3 Lost Water ~~4 Casing/Borehole~~ Volumes = 300g
(Circle one)
Total Casing/Borehole Volumes Removed: _____

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) NTU	DO (mg/L)
7-8-01	— BAILED 5 GALLONS								
9-9-01	— BAILED +3 GALLONS								
9-9-01	1430	-BAILED +5 GALLONS							
9-9-01	1422		~~20~~	23	25.1°	8.85	5180	DK GRAY 99	9.87
~~9-11-01~~	1454	—		25	—				
10/10/01	1050	— Bailed		37	12 Gallons				
12/12/01	1030	—	—	49	—	—	—	DARK GREY, 999, HIGH	9.58
	1240	—	—	59	19.7	6.98	4.78	" "	LOW 9.82
	1410	—	—	69	19.7	6.96	4.65	" "	LOW 9.78
	1750	—	—	79	19.6	6.92	4.36	" "	LOW 9.74

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: _____

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

VAW22-20

Well ID: VAW22-20

Sample ID: 101301234 ~~Duplicate ID~~: @1030

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 10-13-01

Sampled By: ERM / TPJ

Method of Purging: BAIL

Method of Sampling: DISPOSABLE BAILER

Initial Depth to Water: 12.31' BGS (AFTER BAILING 1-GALLON)

Depth to Water after Sampling: 12.61'

Total Depth of Well:

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) DO: mg/L
1045	—	—	—	21.16	6.81	4636	DK TAN/GRAY 4.73

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI
DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: BAILED DRY (8 GALLONS @ 1500 ON 10-12-01)

CLP

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

~~WELL SAMPLING~~ AND/OR DEVELOPMENT RECORD

Well ID: UAW23-20

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 9-10-01

Sampled By: —

Method of Purging: BAILER

Method of Sampling: —

Initial Depth to Water: 22.9'

Depth to Water after Sampling: —

Total Depth of Well: —

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: 21 GALLONS

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	DO mg/L
9-9-01	—	—	1½	—	—	—	BAILED DRY	
9-10-01	—	—	3	—	—	—	BAILED DRY	
9-11-01	1135	—	—	18	17.6°	9.75	3170 TAN, CLOUDY 84 NTU,	13.77
KSC START PUMPING			21					
	1513	23'	1.5	25	19.1°	8.66	3070 CLOUDY 84 NTU	14.50
	1520	23'	1.5	38	19.4°	7.17	3000 CLOUDY/CLEAR 6 NTU	11.73
	1526	23'	1.5	48	17.9°	7.20	3090 CLEAR 3 NTU	11.21
	1531	23'	1	60	18.4°	7.32	3080 CLEAR 2 NTU	10.61

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: pH MALFUNCTION — RECALIBRATE — pH OK ON 9-11-01 — 1520

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW23-20

Well ID: UAW23-20

Sample ID: 101201226 Duplicate ID:

Sample Depth: 24'

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 10/12/01

Sampled By: ERW / TPJ

Method of Purging:

Method of Sampling:

Initial Depth to Water: 21.47

Depth to Water after Sampling: 22.6

Total Depth of Well: 24.65

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate ~~(gpm)~~ ml/m	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	NTU	DO mg/L
1055	24'	600 ml/m	1/2 gal	18.21	7.08	2880	clear	56.6	0.6
1105	24"	600	1.0 gal	18.37	7.24	2887	clear	7.62	3.27
1110	24"	600	4.5	18.39	7.10	2884	clear	6.4	3.84
1115	24"	600	5.0	18.37	7.04	2880	clear	4.15	2.71
1120	24"	600	5.5	18.27	7.00	2872	clear	3.40	2.13
After Sampling									
1140	24'	600		18.33	6.89	2864	clear		2.66

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI

DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

1055 WL = 22.6

1105 WL = 22.6

1115 WL = 22.6

1120 WL = 22.6

1140 WL = 22.6

Sample Time is 1125

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW24-70
Sample ID: —— Duplicate ID: ——
Sample Depth: ——
Project and Task No.: 7443
Project Name: MORTON READING F1
Date: 9-10-01
Sampled By: ——
Method of Purging: BAILER / 2" SUBMERSIBLE GRUNDFOS
Method of Sampling:

Initial Depth to Water: 53.5' BTOC
Depth to Water after Sampling:
Total Depth of Well:
Well Diameter: 4" PVC
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed:

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) (NTU) DO:
	1645	~71'	1	20				
	1720	~71'	<1	25	23.6°	9.73	1550	TAN, CLOUDY 115 10.56 mg/L
	1730	~71'	<1	30 –	1820 –	45 gallons	– 1900 –	55 gallons
	1928	~71'	1.5	58	20.7°	9.84	918	TAN CLOUDY 78 11.57 mg/L
	1938	~71'	1.5	70	20.7°	9.89	910	CLOUDY 84 10.70 mg/L
10/11/01	0930	271'	1.0	90	18.9°c	10.64	.673	Cloudy, 312, 9.58
	0940	~71'	1.5	100	17.9°c	8.56	.875	cloudy, 999, 10.02
	1000	~71'	.5	110	17.7	8.48	.877	" 0, 423, 10.70
	1020	"	"	120	17.1	7.82	.804	", 711, 10.16
	1030	"	"	125	17.0	7.78	.804	", 683, 10.12
	1120	"	"	150	17.1	7.64	.478	", 561, 10.32
10/11/01	1840	"	.5	365	17.7	7.58	.454	Clear, 103, 10.16

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: pH MALFUNCTION – PUMPED DRY @ 30 – TAKES APPROXIMATELY 6 MIN. TO RECOVER 1 FOOT
will sustain 1/2 GPM H2O level is 68.72 FROM TOC

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

UAW 24-70

Well ID: UAW 24-70
Sample ID: 01301233 Duplicate ID: —
Sample Depth: 68'
Project and Task No.: 7443
Project Name: MORTON READING FI
Date: 10-13-01
Sampled By: ERW / TPJ
Method of Purging: 2" SUBMERSIBLE PUMP
Method of Sampling: LOW FLOW

Initial Depth to Water: 39.20'
Depth to Water after Sampling: 43.1'
Total Depth of Well: 73.2'
Well Diameter: 4" PVC
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm) mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	(NTU)	DO: mg/L
0838	68'	600	—	17.37	7.00	992	CLEAR	—	5.30
0842	68'	600	—	17.91	6.95	987	CLEAR	—	4.75
0845	68'	400	1.5	18.29	6.95	991	CLEAR	63	4.71
0849	68'	400	1.75	18.57	6.97	995	CLEAR	13	4.21
0852	68'	900	2.3	18.54	6.98	994	CLEAR	12	4.09
0856	68'	600	3	18.43	6.97	995	CLEAR	62?	3.67
0900	SAMPLE								
0930	68'	700	6	18.55	7.03	1002	CLEAR	10	3.41

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI (600R) ZM ~~ORP-15CE HE SCIENTIFIC~~

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: HORIBA WATER CHECKER (TURBIDITY) U-10

Notes: TURBIDITY METER NO FUNCTIONING ?
WL @ 0842 40.61' BGS
WL @ 0846 40.87' BGS
WL @ 0851 41.6 BGS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

VAW25-20

Well ID: VAW25-20

Sample ID: 10130235 Duplicate ID: —

Sample Depth: 19'

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 10-13-01

Sampled By: ERW / TPJ

Method of Purging: 2" GRUNDFOS

Method of Sampling: LOW FLOW

Initial Depth to Water: 17.06'

Depth to Water after Sampling: 17.27'

Total Depth of Well: 19.9'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: _____

Time	Intake Depth	Rate ~~(gpm)~~ ml/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	(NTU)	DO: mg/L
1346	19'	700	—	20.06	5.93	2963	CLEAR	62	4.65
1350	19'	700	— 1	20.36	6.38	2952	CLEAR	29	4.62
1354	19'	700	— 1.5	20.47	6.53	2945	CLEAR	18	3.90
1357	19'	700	2	20.50	6.57	2947	CLEAR	13.5	3.42
1401	19'	700	2.5	20.68	6.61	2943	CLEAR	10.6	2.51
1404	19'	700	3	20.64	6.61	2941	CLEAR	9.9	1.92
1407	19'	700	3.3	20.67	6.62	2939	CLEAR	8.1	1.83
SAMPLE → 1410	19'	600	3.5	20.69	6.63	2940	CLEAR	7.0	1.61
1430	19'	600	3.5	20.18	6.71	2948	clear	6.9	~~6.49~~ 1.38

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: 610-D YSI

DRT-15CE HF SCIENTIFIC

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL ~~SAMPLING~~ AND/OR DEVELOPMENT RECORD

9-11-01

Well ID: UAW25-20

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FL

Date: 9-10-01

Sampled By: —

Method of Purging: BAIL / 2" PUMP

Method of Sampling: —

Initial Depth to Water: 16.6' BTOC 16.73'

Depth to Water after ~~Sampling~~ DEVELOP: 16.75' - 9-11-01

Total Depth of Well: 20' BTOC

Well Diameter: 4" PVC

1 Casing/Borehole Volume = ~5 GALLONS (Circle one)

~~4~~ 3 Casing/Borehole Volumes = ~15 GALLONS (Circle one)

Total Casing/Borehole Volumes Removed:

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) DO
9-10-01	1437	20'	—	20 BAIL	19.5°	9.42	4370	CLOUDY 62NTU, 11.37mg/L
9-11-01	1059	19'	+	60	20.7°	9.82	4340	CLEAR 15NTU, 13.23mg/L
	1104	19'	2.5	70	19.9°	9.77	4350	CLEAR 5NTU 13.45mg/L
	1109	19'	2.5	80	20.2°	9.61	4400	CLEAR 3NTU 13.09mg/L

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: pH NOT FUNCTIONING

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1110

Well ID: MW-EPA-1

Sample ID: 111501289 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-15-01

Sampled By: JS/RM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-P~~ Micropurge

Initial Depth to Water: 11.56'

Depth to Water after Sampling: 13.48

Total Depth of Well: 16.5'

Well Diameter:

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~~~3.5~~ ~5 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	D.O. sediment) (mg/L)
13.68	1052	14.5	900	0-5	23.19	7.01	13178	black and cloudy	63	17.34
12.98	1055	"	700	1	23.94	7.02	12703	"	63	13.81
13.04	1058	"	"	1.5	25.14	7.01	12779	"	29.2	~~15.60~~ 12.53
13.09	1101	"	400	2	25.54	6.97	12947	"	17.7	12.55
13.12	1104	"	"	2.5	25.69	6.96	13181	"	10.6	11.83

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1505 – WL 10.25' @ 1445 BTOR

Well ID: MW-EPA-2

Sample ID: 111401286 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-14-01

Sampled By: JS / ERM

Method of Purging: Grundfos Pump DISP

Method of Sampling: ~~Le Peristaltic~~ BAILER

Initial Depth to Water: 9.77 BTOR

Depth to Water after Sampling:

Total Depth of Well: 20.65 BTOR

Well Diameter: 2" STAINLESS - STEEL

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one) 5 GALLONS

Total Casing/Borehole Volumes Removed: PURGED DRY @ 1000

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
~~ZM~~	~~1600~~	~~52.5~~	~~800~~	~~1~~	~~16.96~~	~~5.87~~	~~5424~~	~~CLEAR~~	~~9.2~~	~~8.01~~
~~ZM~~	~~1605~~	~~52.5~~	~~800~~	~~1~~	~~17.58~~	~~6.52~~	~~5518~~	~~CLEAR~~	~~2.8~~	~~8.54~~

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: ()

Notes: 1530 – TAKE EQUIPMENT BLANK @ MW-EPA-2 AND UAW20-60

– USE LABORATORY PROVIDED D.I. WATER = VOC FREE WATER (D.I.) USED FOR VOC ANALYSIS (PURGE WATER)

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: MW EPA 3

Well ID: MW-EPA-3
Sample ID: 111201268 Duplicate ID:
Sample Depth:
Project and Task No.: 7689 A
Project Name: Morton Reading FI
Date: 11/11/01
Sampled By: JSI ERM
Method of Purging: Grundfos Pump
Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 9.92'
Depth to Water after Sampling:
Total Depth of Well: 17.3'
Well Diameter: 2" SS
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~10 gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and sediment) (NTU)	D.O. (mg/L)
11.41	1105	15.5'	500		18.03	5.15	1305.00	Dark Cloudy	>200	19.50
11.41	1109	"	"		18.21	5.24	1750.00	Dark "	>200	18.99
11.45	1112	"	"		18.37	5.25	1758.00	"	>200	18.68
11.63	1115	"	"		18.40	5.24	1833.00	"	>200	18.87
11.63	1118	"	"		18.45	5.22	2002.00	"	"	18.62
11.63	1121	"	"		18.55	5.21	2050.00	"	"	19.23
11.80	1124	"	"		18.49	5.24	2047.00	"	"	19.26
11.81	1127	"	"		19.34	5.43	1367.00	Light Cloudy	164.00	22.35
12.40	1130	"	"		19.46	5.40	1428.00	"	184.00	20.93
12.61	1133	"	"		19.16	5.31	1767.00	"	184.00	18.57
12.68	1137	"	"		19.29	5.27	1887.00	"	184.00	18.13
12.68	1140	"	"		19.72	5.20	2111.00	"	162.00	18.02

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

page 2 of

Sample Time:

Well ID: MW EPA-30 . 3

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: _____

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: _____

Depth to Water after Sampling: _____

Total Depth of Well: _____

Well Diameter: _____

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: _____

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and sediment) (NTU)	D.O. (mg/L)
—	1143	"	"		19.21	5.23	2217.00	clouds	166.00	18.56
—	1146	"	"		18.42	5.31	1266.00	"	165.00	17.77
13.22	1149	"	"		19.41	5.20	2299.00	"	165.00	17.21
13.23	1154	"	"		18.82	5.21	2323.00	"	165.00	17.67
12.97	1159	"	"		19.90	5.18	2393.00	"	165.00	18.58
	1204	"	"					"	165.00	
				NO SAMPLE						

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: Water too turbid; Pumped well to bottom depth = 17' @ 1205; ~~Recover~~

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1415 MW EPA 3

Well ID: MW-EPA-3

Sample ID: 111301280 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By:

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-F~~ Micropurge

Initial Depth to Water: 9.88 BTOC

Depth to Water after Sampling: 12.45

Total Depth of Well:

Well Diameter:

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~5.5 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
—	1357	15.5	800	—	18.37	6.38	5075	BEIGE	>200 OUT OF RANGE	1.65
11.70	1354	15.5	800	—	19.03	6.39	4760	GRAY	>200	1.94
11.99	1357	15.5	800	+	19.55	6.33	4699	GRAY	>200	1.87
11.99	1400	"	"	1.5	20.10	6.29	4983	gray	>200	1.47
11.99	1403	"	450	2	20.12	6.28	5074	gray	>200	1.38
—	1408	"	"	2.5	20.48	6.27	5155	gray	>200	1.29
11.99	1411	"	"	3	20.44	6.26	5202	—	—	~~0.88~~
11.99	1413	"	"	3.5	20.55	6.26	5206	gray	>200	1.34

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: 4

Notes: – WELL DOESN'T APPEAR TO HAVE BEEN DEVELOPED PROPERLY – FINES AND SILT PRESENT IN GROUNWATER

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1140

Well ID: MW-PPA-4

Sample ID: 111301279 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: JS / ERM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 15.58'

Depth to Water after Sampling: 15.61'

Total Depth of Well: ~~20.87~~ JS 20.9'

Well Diameter:

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~6.5 gal.

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
15.61	1112	19.5'	550	~~1.00~~ 1	18.31	2.71	2974	clear	25.2	2.52
"	1115	"	"	1.5	18.60	3.42	2982	cloudy	~~50.1~~ JS 48.7	6.80
"	1118	"	"	2.0	19.31	5.74	3222	clear	17	8.19
"	1121	"	"	2.3	19.44	5.92	3202	—	—	8.06
"	1124	"	"	2.5	19.73	6.20	3170	clear	5.1	8.25
"	1127	"	"	3	20.00	6.24	3148	clear	2.9	8.42
"	1130	"	"	3.5	20.02	6.27	3129	clear	1.7	8.12
"	1133	"	"	4	20.17	6.28	3109	clear	1.5	8.64
"	1136	"	"	4.5	20.14	6.29	3105	clear	1.3	8.65

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610D 600R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

SAMPLE TIME: 16:41

Well ID: VAWD1-30

Sample ID: 11D801250 ~~1mg~~ Duplicate ID: —

Sample Depth: —

Project and Task No.: 7689

Project Name: ~~Rohm AND Haas~~ Morton Reading PD

Date: 11/8/01

Sampled By: JS, CY

Method of Purging: Grundfos Pump

Method of Sampling: Micro Purge

Initial Depth to Water: 25.52'

Depth to Water after Sampling: ~~25.55~~ 25.55'

Total Depth of Well: 31.40'

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~8.5 gal ~~~4.5 gal~~ JS

H2O Level BTOC	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min.	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and ~~sediment~~) (NTU) DO (mg/L)
	16:20	28.50'	800 mL/min.		18.51	7.00	~~2114 µS~~ ~~21.14 mS~~ → 2114.0	clear, 45.5, 20.73
25.55	16:23	~~25.55~~ "	"		18.91	7.09	2175.0	clear, 36.6, 27.51
25.55	16:26	"	"		19.14	7.10	2205.0	clear, 29.0, 30.21
25.55	16:29	"	"		19.21	7.12	2235.0	clear, 20.0 32.83
25.55	16:32	"	"		19.24	7.15	2254.0	clear, 14.9 26.89
25.55	16:35	"	"		19.13	7.16	2270.0 ~~2227 µS~~	clear, 13.7 28.17
25.55	16:38	"	"		19.11	7.18	2289.0	clear, 10.5 27.28
				~4.5 gal				

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 & 610 D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: (

Notes: Took Equipment Blank

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1700

Well ID: UAW01-80
Sample ID: 11201269 Duplicate ID:
Sample Depth:
Project and Task No.: 7689A
Project Name: Morton Rending FI
Date: ~~11/10/01~~ 11/12/01
Sampled By: JS/RM
Method of Purging: Grundfos Pump
Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 26.69'
Depth to Water after Sampling:
Total Depth of Well: ~~81.55~~ 81.6'
Well Diameter: 4" pvc
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~~2.7 gals~~ ~~3 gals~~ ~5

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
26.85'	1645	74'	700		16.52	5.29	942	clear	10.2	0.29
"	1648	"	"		17.04	5.55	945	"	6.5	0.47
"	1651	"	"		17.10	5.63	945	"	5.7	0.57
"	1654	"	"		17.17	5.65	952	"	~~5.8~~ 4.8	0.42
"	1657	"	"		17.19	5.70	957	"	4.6	0.42
				~~3 gal~~ ~5						

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 210 & 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL ~~SAMPLING~~ AND/OR DEVELOPMENT RECORD

SAMPLE TIME: 1130

Well ID: UAW 02-20

Sample ID: 110901257 Duplicate ID:

Sample Depth:

Project and Task No.: 7689

Project Name: Morton Reading FF

Date: 11/10/01

Sampled By: JS/CY

Method of Purging: Grundfos ~~Sampling~~ pump

Method of Sampling: Micropurge

Initial Depth to Water: 12.45'

Depth to Water after Sampling: 12.45'

Total Depth of Well: 17.51'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~7 ~~5 gal~~

H2O Level BTOC	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min.	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	(NTU)	D.O. (mg/L)
12.51'	1110	15.0'	980		20.64	6.87	1820.0	clear	6.6	3.69
12.52'	1113	"	"		20.90	6.96	1952.0	clear	3.9	4.49
12.52'	1116	"	"		~~21.49~~ 21.19	6.97	1991.0	clear	2.3	5.16
12.52'	1119	"	"		21.17	6.97	1972.0	clear	1.5	5.52
12.52'	1122	"	"		21.16	6.96	1965.0	clear	1.6	5.59
12.52'	1125	"	"		21.15	6.95	1967.0	clear	1.3	5.62
				~~5 gal~~ ~7 gal						

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION				
KCL Solution (µS/cm = µmhos/cm)				
Temperature °C				
Instrument Reading				

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

SAMPLE TIME : 0935

Well ID: UAW02-40

Sample ID: 111001256 MS/MSD Duplicate ID:

Sample Depth:

Project and Task No.: 7689

Project Name: Morton Reading FI

Date: 11/10/01

Sampled By: JS, CY

Method of Purging: Grundfos pump

Method of Sampling: Micropurge

Initial Depth to Water: 14.23' BTOC

Depth to Water after Sampling: 14.25'

Total Depth of Well: 45.90' BTOC

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~10.5 ~~8.5~~ ~~6.5~~ gal

H_2O Level BTOC	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min.	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and ~~sediment~~)	Remarks (NTU)	D.O. mg/L
14.23'	0910	38.0'	990		16.91	7.10	1470.0 ~~14.70~~ gs	clear	9.5	1.23
14.23'	0913	"	"		17.16	7.20	1475.0	Clear	5.5	1.69
14.23'	0916	"	"		17.17	7.28	1493.0	clear	4.7	1.88
14.25 ~~14.23~~ gs	0919	"	"		17.15	7.33	1490.0	clear	4.0	2.04
14.25'	0922	"	"		17.07	7.33	1489.0	clear	4.0	2.06
14.25	0925	"	"		17.10	7.36	1489.0	clear	4.0	2.01
				~~6.5~~ gs						

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1345

Well ID: UAW03-20

Sample ID: 111101261 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: JS/CY

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 12.77'

Depth to Water after Sampling: 13.02

Total Depth of Well: 18.48'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~7 gal ~~~25 gals~~

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
13.25'	1326	16.00'	980		19.54	7.56	4988.00	sing	30.3	34.00
13.29	1329	"	"		19.15	7.60	3149.00	"	29.5	46.23
13.33'	1332	"	"		19.37	7.59	2867.00	clear	11.0	48.20
13.33	1335	"	"		19.48	7.57	2914.00	clear	6.4	48.00
13.26	1338	"	"		19.61	7.54	2944.00	clear	5.9	47.86
3.31	1341	"	"		19.66	7.54	2957.00	clear	3.7	46.52
13.31	1344	"	"		19.70	7.54	2985.00	clear	3.2	~~42.7~~ 47.31

~~25 gals~~

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1445

Well ID: UAW 4-20

Sample ID: 11110126 Duplicate ID:

Sample Depth: 16'

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: JS/CY

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ P Micropurge

Initial Depth to Water: 12.91

Depth to Water after Sampling:

Total Depth of Well: 18.16

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~7 gal ~~25 gal~~

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
~~12.29~~	14:26	16'	900		19.29	7.15	6015	Clear	~~35.2~~ 25.2	35.01
12.38	14:29	"	"		20.00	7.30	5914.00	clear	3.14	38.32
~~13.09~~ 12.39	14:32	"	"		20.25	7.32	5201.00	clear	3.40	39.12
12.39	14:35	"	"		20.34	7.36	4511.00	clear	2.00	39.14
12.39	14:38	"	"		20.47	7.36	4302.00	clear	1.60	38.12
12.39	14:41	"	"		20.51	7.36	4307.00	clear	1.63	38.12
			~~25 gal~~							

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: Styrene odor in the air @ 1428
OVM = 0.2 ppm

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

Purge

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time:

Well ID: UAW-05-20

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/12/01

Sampled By: C. YOUNG

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-P~~ Micropurge

Initial Depth to Water: 12.49

Depth to Water after Sampling: _____

Total Depth of Well: 16.17

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: Purged DRY!

Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	~~sediment~~) D.T. (mg/L)

H2O Level (BTOC)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D, 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: _____

Notes: Black water Removed 5 GALS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1740

Well ID: ~~MW5~~ VAW05-20 Hand bailed

Sample ID: 111201270 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading F.I.

Date: ~~11/11/01 JS~~ 11/12/01

Sampled By: JS/ ERM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-Flow~~ Micropurge

Initial Depth to Water: 12.51'

Depth to Water after Sampling:

Total Depth of Well: 16.3'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: MSI 210 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: well bailed dry prior to sampling
Sampled w/ hand bailer

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

Purge

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time:

Well ID: UAW-6-20

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/12/01

Sampled By: C. Young

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 11.19

Depth to Water after Sampling: _____

Total Depth of Well: 19.0

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: Purged Dry

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 210 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: Black water Removed 9 GALLONS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

mw-6

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 11:10

Well ID: UAW-06-20

Sample ID: 111301274 Duplicate ID:

Sample Depth: 13.0'

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: Charles Young

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 11.19

Depth to Water after Sampling: 11.19

Total Depth of Well:

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

120 Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
								Clear		

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1220

Well ID: UAW07-20

Sample ID: 111501290 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-15-0

Sampled By: JS/ERN

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 11.01'

Depth to Water after Sampling: 11.11'

Total Depth of Well: 18.1'

Well Diameter: 7" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~5 gal ~~3 gal~~ JS

120 Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
11.29'	1200	14.5'	600 ~~0.5gp~~	0.5	21.15	7.39	9515	clear	—	3.50
"	1203	"	"	0.75	21.22	7.03	9404	Clear	~~0.03~~ 9.8	6.31
"	1206	"	"	1	21.80	6.97	9292	clear	~~6~~ 5.6	6.42
11.25'	1209	"	"	1.5	22.11	6.95	9068	clear	6.3	6.26
"	1212	"	"	2	22.21	6.91	8605	clear	4.1	~~5.53~~ 6.43
"	1215	"	"	2.5	22.32	6.92	8365	clear	2.90	5.73

~~3 gal~~ JS

~5 gal

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: 1

Notes: – TUBING HAD A SLIGHT PURPLE TINT AFTER SAMPLING

PID @ WELL HEAD 12.2 ppm

Forms(PF) 003 (Revised 12/95)

APP TX

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

PURGE

Sample Time:

Well ID: UAW-08-20

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/12/01

Sampled By: C. YOUNG

Method of Purging: Grundfos Pump

Method of Sampling: ~~LP~~ Milwaukee

Initial Depth to Water: 10.19

Depth to Water after Sampling: _____

Total Depth of Well: 18.32

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: Purged dry

Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	sediment) (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: Black water Removed 8 GALLONS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

APP. IX

Sample Time: 1025

Well ID: UAW-08-20

Sample ID: 11301273 Duplicate ID:

Sample Depth: 13.0

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: C. YOUNG

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-Flow~~ Micropurge

Initial Depth to Water: 10.21

Depth to Water after Sampling: 10.24

Total Depth of Well:

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
								Clear	to black	

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

SAMPLE TIME: 09:35

Well ID: UAW09-20

Sample ID: 110901352 Duplicate ID:

Sample Depth: -

Project and Task No.: 7689

Project Name: ~~Rok~~ Morton Reading FI

Date: 11/9/01

Sampled By: JS, CY

Method of Purging: Grundfos Pump

Method of Sampling: micropurge

Initial Depth to Water: 21.50' BTOC

Depth to Water after Sampling: 21.30'

Total Depth of Well: 25.92' BTOC

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~4 gal.

Time	Intake Depth	Rate ~~(gpm)~~ mL/min.	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment)~~ (NTU)	DO. (mg/L)
H2O level 21.50' 09:16	24.00'	800 mL/min		16.33	4.44	1127.0	tan	>200	12.07
21.60' 09:19	"	"		16.67	4.60	1080.0	clear	30.5	14.27
21.60' 09:22	"	"		16.94	4.79	1039.0	clear	12.3	17.71
21.60' 09:25	"	"		17.12	4.87	1032.0	clear	6.4	18.40
21.60' 09:28	"	"		17.15	4.96	1028.0	clear	4.6	20.25
21.60' 09:31	"	"		17.19	5.01	1031.0	clear	2.6	20.64

~4 gal.

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: OVM Readings: Breathing Zone
09:15 0.0 PPM
0945 0.0 – Decon

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

SAMPLE TIME: 13:20

Well ID: UAW09-6B
Sample ID: 110901253 Duplicate ID:
Sample Depth:
Project and Task No.: 7689 - A
Project Name: Morton Reading FI
Date: 11/9/01
Sampled By: JS, CY
Method of Purging: Grundfos pump
Method of Sampling: micro purge

Initial Depth to Water: 29.77'
Depth to Water after Sampling: 32.79'
Total Depth of Well: 59.35'
Well Diameter: 4"
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~10 gal ~~~8 gal~~ JS

H2O level BTOC	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment)~~ NTU	D.O. mg/L
31.52'	12:55	~~[illegible]~~ "	950		15.72	5.04	747.0	clear	8.9	6.83
31.74'	12:58	56.5'	750		16.01	5.30	746.0	clear	7.2	6.87
31.97'	13:01	"	"		16.11	5.38	746.0	clear	6.5	6.64
32.51'	13:04	"	"		15.93	5.42	746.0	clear	4.7	6.89
32.74'	13:07	"	"		15.83	5.40	746.0	clear	6.7	6.20
32.80	13:10	"	"		15.97	5.43	746.00	clear	5.3	6.13
32.90	13:13	"	"		15.99	5.43	747.0	clear	~~5.45 gs~~ 4.9	6.02

~~8 gal~~ JS

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: OVM Readings: Breathing Zone
12:55 0.0 PPM
13:10 0.2 PPM

Forms(PF).003 (Revised 12/95)

GEOMATRIX

Purge

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time:

Well ID: UAW-10-50

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/12/01

Sampled By: C. YOUNG

Method of Purging: Groundfos Pump

Method of Sampling: ~~Lo~~ PMicropurge

Initial Depth to Water: 40.27

Depth to Water after Sampling: _____

Total Depth of Well: 55.53

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: Purged dry

Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	sediment) (NTU)	D.O. (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: Clear water Removed 11 GALLONS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1340

Well ID: UAW-10-80

Sample ID: 11301276 Duplicate ID:

Sample Depth: 48.5

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: Charles Young

Method of Purging: Grundfos Pump

Method of Sampling: ~~LP~~ Micropurge

Initial Depth to Water: 45.50

Depth to Water after Sampling:

Total Depth of Well:

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
								Clear		

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 & 610 D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

Purge

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time:

Well ID: UAW 10-80

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/12/01

Sampled By: C. YOUNG

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 41.87

Depth to Water after Sampling: _____

Total Depth of Well: 81.70

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: Purged DRY

Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and sediment) (NTU)	D.I. (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 B 610 D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: ·1

Notes: Clear water Removed 15 GALLONS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1420

Well ID: UAW 10-50

Sample ID: 11301277 Duplicate ID:

Sample Depth: 43'

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: Charles YOUNG

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 40.73

Depth to Water after Sampling:

Total Depth of Well: 6

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	sediment)	D.O. (mg/L)
								Clear			

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 R 610 D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1425

Well ID: VAW11-10

Sample ID: 111001258 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading PI

Date: 11/10/01

Sampled By: JS/CY

Method of Purging: Grundfos Pump

Method of Sampling: Micropurge

Initial Depth to Water: 8.05'

Depth to Water after Sampling:

Total Depth of Well: 13.92'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~15 gal

H_2O Level	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)		D.O. (mg/L)
								clear + light precipitate	(NTU)	
8.41'	1355	12.0	850		22.29	7.58	15543.0		5.5	5.70
8.42	1358	"	"		22.29	7.52	13,163	clear	4.7	7.81
8.38	1401	"	"		22.33	7.50	11,809	clear	4.0	8.89
8.40	1404	"	"		22.39	7.49	10873	clear	3.3	10.22
8.40	1407	"	"		22.45	7.46	~~9959~~ 10330	clear	3.3	11.68
8.39	1410	"	"		22.58	7.44	~~9288~~ 9288	clear	3.3	14.20
8.39	1413	"	"		22.58	7.46	~~8974~~ 9248	clear	3.2	16.89
8.38	1416	"	"		22.60	7.39	~~8897~~ 8979	clear	2.9	19.72
8.38	1419	"	"		22.62	7.36	8891	clear	2.9	22.96
8.38	1422	"	"		22.63	7.36	8903	clear	2.6	26.05
				SPLIT	SAMPLES	w/ TODD	QUILLEN	— TECH LAW		

See calibration log

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610D 600R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF).003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1455

Well ID: UAW11-40
Sample ID: 111201268 Duplicate ID: 111201266
Sample Depth:
Project and Task No.: 7689 A
Project Name: Morton Reading FI
Date: ~~11/11/01~~ JS 11/12/01
Sampled By: JS/ERM
Method of Purging: Grundfos Pump
Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 17.43'
Depth to Water after Sampling:
Total Depth of Well: 43.9'
Well Diameter: 4" pvc
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~7 gal ~~~5 gal~~ JS

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
17.46'	1423	38'	650		18.53	4.87	3077.00	cloudy ~~clearing~~	127.5 ~~[illegible]~~	10.91
"	1426	"	"		18.85	5.34	3100.00	cloudy	98.5	10.94
"	1429	"	"		19.10	5.39	3027.00	"	—	10.94
17.46'	1432	"	"		19.21	5.35	2967.00	clear	49.7	10.98
"	1435	"	"		19.30	5.28	2941.00	clear	37.2	10.99
"	1438	"	"		19.37	5.23	2915.00	clear	22.2	~~[illegible]~~ 11.20
"	1441	"	"		19.38	5.21	2910.00	clear	15.8	11.30
"	1444	"	"		19.39	5.21	2889.00	clear	10.9	11.33
"	1447	"	"		19.49	5.19	2880.00	clear	8.3	11.50
"	1450	"	"		19.51	5.17	2870.00	clear	7.8	11.47
				~~5 gal~~ JS						

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: numerous bubbles in discharge tube

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1620

Well ID: UAW12-20

Sample ID: 111501292 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-15-01

Sampled By: JS / ERM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-P~~ Micropurge

Initial Depth to Water: ~~19.72~~ 9.72'

Depth to Water after Sampling:

Total Depth of Well: 16.4'

Well Diameter: 4" pvc

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~5 ~~3.75~~ gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and sediment) (NTU)	D.O. (mg/L)
9.78'	1602	13.5'	600	0.5	20.19	6.90	10,337	Purplish Grey tint	—	-9.94
—	1605	"	"	1	20.93	6.69	10,549	"	26.1	-4.79
—	1608	"	"	1.5	21.14	6.65	10,807	"	13.8	-3.49
9.79'	1611	"	"	2	21.14	6.63	10,152	"	7.6	-15.35
—	1614	"	"	2.5	21.27	6.62	10,052	"	4.9	-4.01
—	1617	"	"	3	21.29	6.61	10,013	"	4.2	-2.38

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 R 610 D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: D.O. probe appears to be nonfunctional

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time:

Well ID: LAW 12-60

Sample ID: ~~[illegible]~~ Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-15-01

Sampled By: JS/ZRM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 19.07' BTOR

Depth to Water after Sampling:

Total Depth of Well: 62.9'

Well Diameter:

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~ D.O.) (NTU)	(mg/L)
19.87'	1418	58.5'	500	0.5	17.04	11.10	2682	~~clear~~ cloudy	—	12.21
—	1421	"	"	1	16.63	11.54	2858	~~clear~~ cloudy	>200	8.35
20.18	1424	"	350	1.25	17.51	11.56	2859			7.47

NO SAMPLE

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600R 610D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: PID @ Wellhead 0.0 ppm

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1020

Well ID: LAW12-60

Sample ID: 111601293 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/16/01

Sampled By:

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-P~~ Micropurge

Initial Depth to Water: 19.62'

Depth to Water after Sampling:

Total Depth of Well: 62.9'

Well Diameter:

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~5 gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
—	1006	58.5	1000	0.5	15.87	7.46	2100	clear	77.0	8.03
20.78'	1009	58.5	500	1	15.71	7.45	2121	clear	52.3	6.81
20.99'	1012	"	400	1.5	15.84	7.45	2105	clear	~~52.30~~ 55.0	6.30
21.64'	1015	"	800	2.0	16.05	7.48	2055	clear	54.4	5.54
22.19'	1018	"	600	2.5	16.80	7.51	2045	clear	46.5	4.62

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: 1.

Notes: 11-15-01 – pH WAS 11.54 – PURGED 200 GALLON – pH DROPPED TO 7.84

11-16-01 0800 – PURGED 10 GALLONS @ 2 L/MIN – pH DOWN TO 7.63

0825 – WL AT 26.22 BTOR – STOP PUMPING, WAIT FOR WATER LEVEL TO GET CLOSER TO STATIC (19.07 ON 11-15-01)

Many bubbles in discharge tube

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1540

Well ID: UAW13-20
Sample ID: 111501291 Duplicate ID:
Sample Depth:
Project and Task No.: 7689 A
Project Name: Morton Reading FI
Date: 11-15-01
Sampled By: JS/RM
Method of Purging: Grundfos Pump
Method of Sampling: ~~Lo-P~~ Micropurge

Initial Depth to Water: 9.69'
Depth to Water after Sampling: 9.91
Total Depth of Well: 16.0'
Well Diameter: 4" PVC
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~5.5 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
9.89'	1515	13.5'	600	0.5	21.17	6.49	22116	purplish gray tint	—	4.19
—	1518	"	"	1	21.46	6.59	21830	"	39.1	13.90
9.89'	1521	"	"	1.5	21.86	6.55	21407	"	27.7	-6.99
"	1524	"	"	2	21.96	6.53	21251	"	23.8	-17.12
9.91'	1527	"	"	2.5	22.01	6.52	21081	"	19.6	-25.67
"	1530	"	"	3	21.98	6.51	20432	"	—	-32.30
"	1533	"	"	3.5	22.05	6.51	20275	"	18.4	-32.72

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: HOSE ~~HAS~~ A PURPLE/GRAY TINT. PID @ Wellhead
D.O. ~~R~~ Probe appears to be nonfunctional. 0.3 ppm

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample time: 1535

Well ID: UAW14-10

Sample ID: 110901254 Duplicate ID:

Sample Depth: 13.5

Project and Task No.: 7689.A

Project Name: Morton Reading FT

Date: 11/9/01

Sampled By: JS, CY

Method of Purging: Grundfos pump

Method of Sampling: Micropurge

Initial Depth to Water: 8.81'

Depth to Water after Sampling: 11.90

Total Depth of Well: 15.95'

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~8.5 gal

H_2O Level BTOC	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min.	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	D.O. (mg/L)
10.71'	15:15	~~31.5~~ 13.5'	850		18.32	5.22	811.0	clear (NTU) 7.3	49.59
10.82'	15:18	"	"		18.60	5.13	815.0	clear 6.5	44.90
10.95'	15:21	"	"		18.81	5.10	816.0	clear 4.8	44.39
11.23'	15:24	"	"		18.80	5.09	815.0	clear 4.0	42.90
11.39'	15:27	"	"		18.68	5.08	814.0	clear 3.6	43.35
11.39'	15:30	"	"		18.75	5.05	815.0	clear 3.0	42.70
	1535	Sample time.							
	SPLIT SAMPLES WITH TODD QUILLEN - TECHLAW								

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: OVM Readings: Breathing Zone

15:15 0.0 PPM

15:30 0.0 PPM

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1705

Well ID: JAW 15-20

Sample ID: 1111 01264 Duplicate ID:

Sample Depth: 13.5

Project and Task No.: 7689A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: JS/cy

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 11.00'

Depth to Water after Sampling: 12.92'

Total Depth of Well: 19.10'

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~8 gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	sediment)
	1640								(NTU)	(mg/L)
11.65'	~~1440~~ gs	13.5'	650		20.79	7.03	5104.00	clear	11.7	34.60
12.05'	1643 ~~1443~~ gs	"	"		21.40 ~~21.04~~ gs	7.34	4223.00	clear	7.5	36.77
12.31'	1647 ~~1447~~ gs	"	"		21.70	7.34	4023.00	clear	8.1	36.00
12.45'	1650 ~~1450~~ gs	"	"		21.87	7.33	3885.00	clear	11.6	35.25
12.61'	1653 ~~1453~~ gs	"	"		21.81	7.34	3747.00	clear	11.3	34.70
12.74'	1656 ~~1456~~ gs	"	"		21.96	7.31	3685.00	clear	9.4	33.47
12.81'	1659 ~~1459~~ gs	"	"		22.05	7.33	3668.00	clear	7.0	32.17
12.86'	1702 ~~1502~~ gs	"	"		22.14	7.32	3705.00	clear	5.2	31.07

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1805

Well ID: ~~VAW15-80gs~~ VAW15-50

Sample ID: 111101265 Duplicate ID:

Sample Depth: 44.0

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: JS/cy

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 24.37'

Depth to Water after Sampling: 28.18

Total Depth of Well: 46.49'

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~9.5 gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
25.62'	1745	44.0	700		17.94	8.01	3091.00 ~~3995~~	clear	13.8	18.13
24.62'	1748	"	"		17.92	7.99	3073.00	clear	12.8	18.76
25.84'	1751	"	"		18.44	7.97	3024.00	clear	11.0	19.21
25.91'	1754	"	"		18.74	7.96	3034.00	clear	10.0	24.60
25.91	1757	"	"		18.89	7.97	3039.00	clear	10.0	23.46
26.10	1800	"	"		19.12	7.96	3046.00	clear	10.3	23.12

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1540

Well ID: UAW16-1D
Sample ID: 111301281 Duplicate ID:
Sample Depth:
Project and Task No.: 7689 A
Project Name: Morton Reading FI
Date: 11/13/01
Sampled By: SS/RM
Method of Purging: Grundfos Pump
Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 9.44'
Depth to Water after Sampling: 9.44'
Total Depth of Well: 14.1'
Well Diameter: 4"
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~6 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color, turbidity, and sediment)	Remarks (NTU)	D.O. (mg/L)
~~9~~	1512	12'	500	0-5	21.10	6.60	13,555	~~gray~~ cloudy	39.8	0.09
9.51'	1516	"	"	1	21.64	6.48	10,009	cloudy	15.7	0.34
"	1520	"	"	1.5	21.98	6.42	8890	"	13.5	0.34
"	1523	"	"	—	22.02	6.41	8377	"	10.9	0.34
"	1527	"	"	3.5	22.06	6.40	8227	"	8.7	0.28
"	1530	"	"	4	22.13	6.40	8314	"	7.1	0.26

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600R 610D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: Black tint to water; stained cuvette
Strong odor [H_2S?]

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sampling Time: 17:38

Well ID: VAW17-40

Sample ID: 110901255 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading PI

Date: 11/9/01

Sampled By: JS, CY

Method of Purging: Grundfos pump

Method of Sampling: micropurge

Initial Depth to Water: 12.22'

Depth to Water after Sampling: 12.22'

Total Depth of Well: 41.25'

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~8 gal

Hydro level BTOC	Time	Intake Depth BTOC	Rate ~~(gpm)~~ mL/min.	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and ~~sediment~~)	(NTU)	D.O. (mg/L)
12.22'	17:05	33.5'	700		16.37	5.38	746.0	clear	56.8	3.66
12.22'	17:08	"	"		16.51	5.42	750.0	clear	46.1	1.39
12.22'	17:11	"	"		16.51	5.40	750.0	clear	47.1	1.49
12.22'	17:14	"	"		16.40	5.41	756.0	clear	45.5	1.52
12.22'	17:17	"	"		16.46	5.39	760.0	clear	42.1	1.51
12.22'	17:20	"	"		16.44	5.41	761.0	clear	29.9	1.80
12.22'	17:23	"	"		16.45	5.40	761.0	clear	31.6	2.02
12.22'	17:26	"	"		16.40	5.40	762.0	clear	31.2	2.08
12.22'	17:29	"	"		16.40	5.42	762.0	clear	24.4	2.46
12.22'	17:32	"	"		16.42	5.41	762.0	clear	23.6	2.71
12.22'	17:35	"	"		16.41	5.41	762.0	clear	22.1	

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 P 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: OVM Readings Breathing Zone

17:05 0.0 PPM

17:30 0.0 PPM

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1015

Well ID: UAW18-20

Sample ID: 11301278 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: JS/EAM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-Flow~~ Micropurge

Initial Depth to Water: 11.02'

Depth to Water after Sampling: 11.02'

Total Depth of Well: 17.1'

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~5 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
11.15	1002	15'	900	1 gal.	21.22	6.98	18,532	clear	13.4	-1.22
"	1005	"	"	2 gal.	22.21	7.17	17,447	clear	6.9	0.02
"	1008	"	"	2.5 gal	22.55	7.12	16,810	clear	4.1	0.29
"	1011	"	"	3 gal	22.72	7.07	16,472	clear	2.7	0.39
"	1014	"	"	3.5 gal	22.76	7.05	16,323	clear	2.1	0.43

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600 R 610 D

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 0955

Well ID: UAW19-80
Sample ID: 11201267 Duplicate ID:
Sample Depth:
Project and Task No.: 7689 A
Project Name: Morton Reading FE
Date: 11/11/01 & 11/12/01
Sampled By: JS/ERM
Method of Purging: Groundfos Pump
Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 43.87'
Depth to Water after Sampling:
Total Depth of Well: 78.8'
Well Diameter: 4"
1 Casing/Borehole Volume =
(Circle one)
4 Casing/Borehole Volumes =
(Circle one)
Total Casing/Borehole Volumes Removed: ~14 ~~12~~ gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
~~0~~ 43.92	0930	70'	600		13.30	5.83	1130.00	~~light tan~~ cloudy	113.0	~~26~~.23
43.92	0933	"	"		15.70	5.38	1276.00	lt. cloudy	67.5	29.92
43.92	0936	"	"		16.39	5.41	1279.00	clear	38.5	29.20
43.92	0939	"	"		16.78	5.39	1278.00	clear	27.5	30.17
43.92	0942	"	"		16.66	5.43	1286.00	clear	23.5	30.57
43.92	0945	"	"		16.60	5.43	1285.00	clear	~~18~~ 17.14	30.02
43.92	0948	"	"		16.63	5.44	1280.00	clear	15.20	29.08
43.92	0951	"	"		16.72	5.46	1281.00	clear	12.65	28.57
~~—~~	~~1015~~	~~"~~	~~"~~		~~16.89~~	~~3.90~~	~~1311.00~~	~~clear~~		~~35.75~~ JS
43.92	1020	"	"	10 gal.	16.95	5.21	1309.00	clear	8.2	29.42

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 600D 600R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1640

Well ID: VAW20-60

Sample ID: 111401287 Duplicate ID: 111401283 *(0935)

Sample Depth: 52.5'

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-14-01

Sampled By: JS/EM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 58.71'

Depth to Water after Sampling:

Total Depth of Well: 61.2'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~15 GALLONS

(BTOC) ~~PGS~~ DGP Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and (NTU)	D.O. ~~sediment~~) (mg/L)
	1600	52.5	800	1	16.96	5.87	5424	CLEAR	4.2	-8.01
	1605	52.5	800	2	17.58	6.52	5518	CLEAR	2.8	-8.54
	1609	"	"	3	17.67	6.43	5612	"	4.2	-7.44
	1612	"	"	3.5	17.80	6.43	5658	"	5.8	-6.34
	1615	"	500	4.0	18.06	6.44	5673	"	9.2	-4.83
05	1618	"	500	5.0	18.22	6.44	5611	"	10.8	-3.95
	1622	"	500	6.0	18.26	6.44	5608	"	10.5	-3.16
	1625	"	500	6.5	18.33	6.43	5601	"	8.9	-2.70
	1632	"	700	7	18.60	6.43	5699	"	9.2	-1.86
	1635	"	700	7.5	18.75	6.43	5788	"	11.2	-1.98
	1638	"	700	8	17.87	6.43	5876	"	8.9	-1.76

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: * – BLIND DUPLICATE – (ARTIFICIAL TIME) 0935 – ACTUAL TIME WAS

– D.O. METER IS MALFUNCTIONING

– NUMEROUS BUBBLES ON INNER WALLS OF TUBING THROUGHOUT THE PURGING PROCESS

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1100

Well ID: UAW21-80

Sample ID: 111101260 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: JS/CY

Method of Purging: Grundfos Pump

Method of Sampling: ~~Low~~ Micropurge

Initial Depth to Water: 29.54'

Depth to Water after Sampling:

Total Depth of Well: 76.90'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~10.5 gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	D.O. sediment) (mg/L)
									(NTU)	
29.88	1026	70.0'	920		15.51	7.68	919.0	clear	41.0	32.84
29.99	1032	"	"		15.86	7.56	921.0	clear	28.0	36.00
29.99	1036	"	"		16.16	7.50	919.0	clear	24.0	37.00
30.03	1039	"	"		16.10	7.50	926.0	clear	20.2	37.30
30.06	1042	"	"		16.36	7.49	928.0	clear	19.1	39.79
30.08	1046	"	"		16.35	7.52	935.0	clear	15.9	38.60
30.15	1049	"	"		16.31	7.58	934.0	clear	13.1	~~32.65~~ 37.71
30.15	1054	"	"		16.16	7.46	955.0	clear	12.4	39.44
30.15	1057	"	"		16.27	7.45	932.0	clear	11.9	40.02

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION

KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1545

Well ID: VAW 21-30 Hand Bailed

Sample ID: 111101263 Duplicate ID:

Sample Depth: 25.0

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/11/01

Sampled By: JS/CY

Method of Purging: Groundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 24.64

Depth to Water after Sampling: 27.16

Total Depth of Well: 28.62

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
25.0	1545			6.0	Bailed	DRY !		Cloudy	>200.	—

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

Purge WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time:

Well ID: UAW-22-20

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/12/01

Sampled By: C. YOUNG

Method of Purging: Grundfos Pump

Method of Sampling: ~~LP~~ Micropurge

Initial Depth to Water: 11.86

Depth to Water after Sampling: _____

Total Depth of Well: 18.87

Well Diameter: 4"

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: Purged dry

Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and sediment) (NTU)	D.O. (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: Black water Removed 8 GAllons

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1200

Well ID: UAW-22-20

Sample ID: 111301275 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: Charles Young

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 11.88

Depth to Water after Sampling:

Total Depth of Well:

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

20 Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1300

Well ID: ~~UAW25-20~~ UAW23-20
Sample ID: 111401284 Duplicate ID: MS/MSD
Sample Depth:
Project and Task No.: 7689 A
Project Name: Morton Reading FI
Date: 11/14/03
Sampled By: JS/ERM
Method of Purging: Grundfos Pump
Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 22.14'
Depth to Water after Sampling: 22.17'
Total Depth of Well: 24.3'
Well Diameter: 2"
1 Casing/Borehole Volume = (Circle one)
4 Casing/Borehole Volumes = (Circle one)
Total Casing/Borehole Volumes Removed: ~9 gal

H_2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and sediment) (NTU)	D.T. (mg/L)
22.25'	1240	23'	750	0.5	16.86	6.40	6021	cloudy	30.0	0.47
"	1243	"	"	~~0.75~~ 1	17.71	6.44	6073	cloudy	36.3	0.71
"	1246	"	"	1.5	18.18	6.46	6061 ~~1610~~	cloudy	18.7	0.79
"	1249	"	"	2.5	18.28	6.47	6093	clear	~~14~~ 13.5	0.84
"	1252	"	"	3.5	18.29	6.49	6056	clear	9.7	0.84
"	1255	"	"	4.5	18.25	6.53	6010	clear	4.7	0.81
"	1258	"	"	5	18.30	6.53	6007	clear	3.5	0.88

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL ~~SAMPLING~~ AND/OR DEVELOPMENT RECORD

Sample Time: 1010

Well ID: UAW 24-70

Sample ID: 111501285 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11-15-01

Sampled By: JS/RM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo~~ Micropurge

Initial Depth to Water: 39.39

Depth to Water after Sampling:

Total Depth of Well: 72.6

Well Diameter: 4"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~6 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and ~~sediment~~) (NTU)	D.O. (mg/L)
~~0945~~	0945	68'	500	0.5	15.82	9.02	1592.	clear	12.2	10.93
40.39	0949	"	"	1	16.67	8.24	1620	clear	9.8	6.95
—	0952	"	"	1.5	17.26	7.92	1620	clear	10.2	5.95
41.20	0955	"	"	2	17.75	7.75	1615	clear	9.8	5.34
—	0958	"	500	2.5	17.87	7.69	1611	clear	9.1	4.90
.88	1001	"	"	3	18.03	7.67	1625	clear	9.0	4.57
—	1004	"	900	3.5	17.73	7.66	1630	clear	9.7	4.53

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes: numerous bubbles in discharge tube

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Sample Time: 1725

Well ID: VAW25-20

Sample ID: 111301282 Duplicate ID:

Sample Depth:

Project and Task No.: 7689 A

Project Name: Morton Reading FI

Date: 11/13/01

Sampled By: JS / SRM

Method of Purging: Grundfos Pump

Method of Sampling: ~~Lo-Flow~~ Micropurge

Initial Depth to Water: 17.26'

Depth to Water after Sampling:

Total Depth of Well: 19.9'

Well Diameter: 2"

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: ~ 8 gal

H2O Level (BTOC)	Time	Intake Depth (BTOC)	Rate ~~(gpm)~~ mL/min	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	(color,	Remarks turbidity, and	sediment) (NTU)	D.O. (mg/L)
17.31'	1652	19'	500	0.5	18.36	6.09	5216	clear		17.4	-6.70
"	1655	"	"	1	19.48	6.29	5713	clear		—	-3.36
"	1658	"	"	—	19.82	6.33	5977	clear		22.1	-2.26
17.38	1701 ~~1695~~	"	"	1.5	19.77	6.40	5899	clear		5.8	-1.55
"	1704	"	"	2	19.62	6.42	5954	clear		7.6	-1.04
"	1707	"	"	2.5	19.61	6.45	5985	clear		7.4	-0.58
"	1710	"	"	5	19.89	6.47	5951	clear		7.6	-0.38
"	1713	"	"	5.5	20.00	6.48	5928	clear		—	-0.23
"	1716	"	"	6	20.01	6.48	5912	clear		6.4 ~~7.19~~	-0.16

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.: YSI 610 D 600 R

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.: "

Notes:

Forms(PF) 003 (Revised 12/95)

Sample Control Logs and Chain of Custody Records

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452 — 7443

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Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
8/21/01	0930	082101175	029269	Geotech	STR 11 - 10Z'	8/22/01	TPJ
8/22/01	1655	082201176	029269	CLP	UAW16-10 @ 2'	8/22/01	TPJ
8/22/01	1715	082201177	029269	CLP	UAW16-10 - 5.5'	8/22/01	TPJ
8/23/01	0820	082301178	~~029269~~ 031857	CLP-TAL	UAW18-20 -1'	8/23/01	TPJ
8/23/01	0835	082301180	031857	CLP	UAW18-20 -15'	8/23/01	TPJ
8/23/01	1445	082301179	031857	CLP	EQUIP. BLANK	8/23/01	TPJ
9/5/01	0845	090501181	031858	CLP	UAW22-20 @ 2'	9/5/01	TPJ
9/5/01	0855	090501182	031858	CLP	UAW22-20 @ 11'	9/5/01	TPJ
10/9/01	0835	100901183	029270	BKG	B01-1.5'	10-9-01	ERM
10/9/01	0850	100901184	029270	BKG	B01-11.5'	10-9-01	ERM
10/9/01	0930	100901186	029270	BKG	B02-1.5'	10-9-01	ERM
10/9/01	0940	100901187	029270	BKG	B02-11.5'	10-9-01	ERM
10/9/01	1015	100901188	029270	BKG	B03-1.5'	10-9-01	ERM
10/9/01	1025	100901189	029270	BKG	B03-11.5'	10-9-01	ERM
10/9/01	1105	100901190	029270	BKG	B04-1.5'	10-9-01	ERM
10/9/01	1105	100901191	029270	BKG	B04-1.5' BLIND DUP	10-9-01	ERM
10/9/01	1120	100901192	029270	BKG	B04-11.5' +MS/MSD	10-9-01	ERM
10/9/01	1150	100901193	029270	BKG	B05-1.5'	10-9-01	ERM
10/9/01	1200	100901194	029270	BKG	B05-11.5'	10-9-01	ERM
10/9/01	0915	100901185	~~031859~~ 029270	BKG	EQUIPMENT BLANK	10-9-01	ERM

STOPPED

SKIPPED 185

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

Page 1 of ____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
10-9-01	1335	100901195	031859	BKG-	B06 - 1.5'	10-9-01	ERM
10-9-01	1400	100901196	031859	BKG	B06 - 11'	10-9-01	ERM
10-9-01	1420	100901197	031859	BKG	B07 - 1'	10-9-01	ERM
10-9-01	1435	100901198	031859	BKG	B07 - 9'	10-9-01	ERM
10-9-01	1500	100901199	031859	BKG	B08 - 2'	10-9-01	ERM
10-9-01	1510	100901200	031859	BKG	B08 - 9'	10-9-01	ERM
10-9-01	1530	100901201	031859	BKG	B09 - 2'	10-9-01	ERM
10-9-01	1540	100901202	031859	BKG	B09 - 10'	10-9-01	ERM
10-9-01	1600	100901203	031859	BKG	B10 - 2'	10-9-01	ERM
10-9-01	1615	100901204	031859	BKG	B10 - 11'	10-9-01	ERM
10-10-01	1345	101001205	031860	~~CLP~~ VOC PCB	GW - ~~TA~~ UAW01-80 (resample)	10-10-01	ERM
10-10-01	1545	101001206	078493/031860	CLP-GW	UAW05-20 " Bailed	10-10-01	ERM
~~10-10~~		~~101001207~~		~~CLP~~	Sample # Skipped		
10-10-01	1630	101001208	031860	CLP	UAW~~05~~-20 (resample) Bailed	10-10-01	ERM
10/11/01	0755	101101209		S/S-TAL	Seep Sample @ SS-1		
10-11-01	0825	101101210		S/S-TAL	Seep Sample @ SS-5		
10-11-01	1305	101101211		S/S-TAL	SS-1 Sed Sample		
10-11-01	1315	101101225		Geotech	SS-1 Geotech (225)		
10-11-01	1335	101101212		SS-TAL	SS-2 SED. SAMPLE (212)		
10-11-01	1410	101101213		SS-TAL	S 3 SED. SAMPLE		

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL – NORTH CANTON, OH

Project and Task No.: 6452

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Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
10-11-01	1430	101101218		S/S-TAL	Sed Sample SS-4 (216)		
10-11-01	1440	101101214		S/S-TAL	Sed Sample SS-5 (~25' South)		
10-11-01	1440/Blind	101101215		S/S-TAL	Blind Dup @ SS-5 "		
10-11-01	1455	101101217		S/S-TAL	Sed Sample @ SS-6		
10-11-01	1510	101101218		S/S-TAL	Sed Sample @ SS-7		
10-11-01	1525	101101219		S/S-TAL	Sed. Sample @ SS-8		
10-11-01	1535	101101220		S/S-TAL	Sed Sample @ SS-9		
10-11-01	1550	101101221		S/S-TAL	Sed Sample @ SS-10		
10-11-01	1600	101101222		S/S-TAL	Sed Sample @ SS-11		
10-11-01	1615	101101223		S/S-TAL	Sed. sample @ SS-12 w/MS/MSD		
10-13-01	~~0945~~ 1145	101301224		~~S/S-TAL~~ App IX	LAW12-60		
10-12-01	1125	101201226	029276	CLP	UAW23-20	10-12-01	TRJ
10-12-01	1215	101201227		CLP	Equipment Blank		
10-12-01	1430	101201228		CLP	UAW10-80 (Bailed)		
10-12-01	1520	101201229		CLP	UAW10-50 (Bailed)		
10-12-01	1725	101201230		CLP	UAW16-10		
10-12-01	1725 Blind	101201231		CLP	UAW16-10 Blind Dup		
10-12-01	1855	101201232		CLP	UAW18-20 + MS/MSD		
10-13-01	0900	101301233		CLP	UAW24-70		
10-13-01	1030	101301234		CLP	UAW22-20 (Bailed)		

Sample w/same #

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

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Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
10-13-01	1410	101301235		CLP	UAW25-20		
11-8-01	1040	~~110801236~~ 110801236	076403	APP-IX	T-1-4'	11/8/01	ERM
11-8-01	11:45	110801237	076403	App IX	T-1-6'	11/8/01	ERM
11-8-01	14:20	110801238	076403	App IX	T-2-3'	11/8/01	ERM
11-8-01	14:40	110801239	076403	App IX	T-2-9'	11/8/01	ERM
11-8-01	16:10	110801240	076403	App IX	T-3-3'	11/8/01	ERM
11-8-01	16:22	110801241	076403	App IX	T-3-11'	11/8/01	ERM
11-9-01	1130	110901242	076408	App IX	T-4-9'	11/9/01	ERM
11-9-01	1140	110901243	076408	App IX	T-4-3'	11/9/01	ERM
11-9-01	1600	110901244	076408	APP IX	T-5-3'	11/9/01	ERM
11-9-01	1620	110901245	076408	APP IX	T-5-9'	11/9/01	ERM
11-9-01	1755	110901246	076408	CLP	DP29-5'	11/9/01	ERM
11-10-01	1400	111001247	076412	APP IX	T-6-3'	11/10/01	ERM
11-10-01	1510	111001248	076412	APP IX	T-6-10'	11/10/01	ERM
11-11-01	1030	111101249	029287 & ~~029288~~ 029288	APP IX	T-6-7.5' (SOIL/SLUDGE)	11/12/01	ERM
~~11-11-01~~	~~1525~~						
~~11-11-01~~	~~1100~~	~~1111~~					

ERM 11-12-01

JS 11-12-01

Forms(PF).006 ...sed 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

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Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
11/8/01	16:41	110801250	076401 ~~076600~~ JS	CLP	UAW01-30	11/8/01	JS/CY
11/8/01	17:41 ~~16:JS~~	110801251	076401	CLP	Equipment Blank @ UAW01-30	11/8/01	JS/CY
11/9/01	09:35	110901252	076407 076406 (VOC)	CLP	UAW09-20	11/9/01	JS/CY
11/9/01	13:20	110901253	076407 076406 (VOC)	CLP	UAW09-60	11/9/01	JS/CY
11/9/01	15:35	110901254	076413 076406 (VOC)	CLP	UAW14-10	11/9/01	JS/CY
11/9/01	17:38	110901255	076413 076406 (VOC)	CLP	UAW17-40	11/9/01	JS/CY
11/10/01	0935	111001256 & MS/MSD	076409	CLP	UAW02-40 & MS/MSD	11/10/01	JS/CY
11/10/01	1130	111001257	076410	CLP	UAW02-20	11/10/01	JS/CY
11/10/01	1425	111001258	076410	CLP	UAW11-10	11/10/01	JS/CY
11/11/01	0930 ~~0920~~ JS	111101259	076421 & 029287 (VOCs) & 029288	~~CLP~~ JS	Equipment Blank @ UAW11-10	11/12/01	JS/~~[illegible]~~ CY
11/11/01	1100	111101260	076421 & 029287 (VOCs) & 029288	CLP	UAW21-80	11/12/01	JS/CY
11/11/01	1345	111101261	076422 & 029287 & 029288 (VOC)	CLP	UAW03-20	11/12/01	JS/CY
11/11/01	1445	111101262	"	CLP	UAW04-20	11/12/01	JS/CY
11/11/01	1545	111101263	076423 & 029287 & 029288	CLP	UAW21-30 (Hand Bailed)	11/12/01	JS/CY
11/11/01	1705	111101264	076420 & 029287 & 029288	CLP	UAW15-20	11/12/01	JS/CY
11/11/01	1805	111101265	076423 & 029287 & 029288	CLP	UAW15-50	11/12/01	JS/CY
1805 11/12/01	~~1805~~ ~~0955~~ JS	111201266	076419 & 029287 (VOCs) & 029288	CLP	UAW19-80 - Blind Dup	11/12/01	JS/ERM
11/12/01	0955 ~~1455~~ JS	111201267	076419 & 029287 (VOCs) & 029288	CLP	UAW19-80	11/12/01	JS/ERM
11/12/01	1455	111201268	076424 & 029287 (VOCs) & 029288	CLP	UAW11-40	11/12/01	JS/ERM
11/12/01	1700	111201269	076424 & 029287 (VOCs) & 029288	CLP	UAW01-80	11/12/01	JS/ERM

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

Page 15 of ____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
11-12-01	1740	111201270	076420 & 029287 & 029288	CLP	UAW05-20 (Hand Bailed)	11/12/01	CY
11-11-01	1505	111101271	029287 & 029288	APP IX	T-8-3'	11/12/01	ERM
11-11-01	1525	111101272	029287 & 029288	AP IX	T-8-9' EM 11-11-01	11/12/01	ERM
11-13-01	1025	111301273	076416 (VOCs) ~~& 076417~~ JS	APP IX	UAW ~~07~~ 08-20 (Hand Bailed)	11/13/01	CY
11-13-01	1110	111301274	076416 (VOCs) &	CLP	UAW ~~07~~ 06-20 (Hand Bailed)	11/13/01	CY
11-13-01	1200	111301275	076416 (VOCs) & 029289	CLP	UAW22-20 (Hand Bailed)	11/13/01	CY
11-13-01	1340	111301276	076416 (VOCs) & 076417	CLP	UAW10-80 (Hand Bailed)	11/13/01	CY
11-13-01	1420	111301277	076416 (VOCs) & 076417	CLP	UAW10-50 (Hand Bailed)	11/13/01	CY
11-13-01	1015	111301278	076416 (VOCs) & 029291	CLP	UAW18-20	11/13/01	JS/ERM
11-13-01	1140	111301279	076416 (VOCs) & 029291	CLP	MW-EPA-4	11/13/01	JS/ERM
11-13-01	1415	111301280	076416 (VOCs) &	CLP	MW-EPA-3	11/13/01	JS/ERM
11-13-01	1540	111301281	076416 (VOCs) &	CLP	UAW16-10	11/13/01	JS/ERM
11-13-01	1725	111301282	076416 (VOCs) & 029289	CLP	UAW25-20	11/13/01	JS/ERM
11-14-01	*0935	111401283	076425 & 076426	CLP	Blind Dup @ UAW ~~02~~ 20-60 JS	11/14/01	JS/ERM
11-14-01	1300	111401284 + MS/MSD	076425 & 076427	CLP	UAW-23-20 + MS/MSD	11/14/01	JS/ERM
11-14-01	1530	111401285	076425	CLP	Equipment Blank @	11/14/01	JS/ERM
11-14-01	1505	111401286	076425 & 076428	CLP	MW-EPA-2	11/14/01	JS/ERM
11-14-01	1640	111401287	076425 & 076429	CLP	~~UAW02-60~~ JS UAW20-60 ~~UAW02-40~~ JS	11/14/01	JS/ERM
11-15-01	1010	111501288	076430 & 076432	CLP	UAW24-70	11/15/01	JS/ERM
11-15-01	1110	111501289	076430 & 076432	CLP	MW-EPA-1	11/15/01	JS/ERM

Forms(PF):006 ... ed 12/95)

→ * - FALSE TIME FOR BLIN DUP

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

Page 16 of ____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	SAMPLER
11-15-01	1220	111501290	076432	App IX	UAW07-20	11-15-01	JS/ERM
11-15-01	1540	111501291	076433	App IX	UAW 13-20	11-15-01	JS/ERM
11-15-01	1620	111501292	076434	App IX	UAW 12-20	11-15-01	JS/ERM
11-16-01	1020	111601293	076435	App IX	LAW 12-60	11-16-01	JS/ERM
12-5-01	0955	~~120501~~ 120501294	031875	APP IX	DP31-15'	12-5-01	ERM
12-5-01	1155	120501295	031875/031880	APP IX	EQUIPMENT BLANK	12-5-01	ERM
12-5-01	1200	120501296	031875	APP IX	DP37-19' (BLIND DUP) FALSE TIME	12-5-01	ERM
12-5-01	1540	120501297	031875	APP IX	DP37-19'	12-5-01	ERM
12-5-01	1430	120501298	031875	APP IX	DP36-19'	12-5-01	ERM
12-5-01	1620	120501299	031875	APP IX	DP38-14.5' + MS/MSD	12-5-01	ERM

Forms(PF).006 (Revised 12/95)

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-11-01	Chain of Custody Number: 031874
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512) 494-0334	Lab Number	Page 1 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ERIK MANSEN	Lab Contact: ALICIA DANFORD	
Project Name and Location (State): MORTON READING OHIO	Carrier/Waybill Number: 8292 3716 9121		
Contract/Purchase Order/Quote No.: 1493 C			

Analysis (Attach list if more space is needed): SS-TAL VOC; SS-TAL SVOC; SS-TAL METALS; SS-TAL OC-PESTICIDES

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	SS-TAL VOC	SS-TAL SVOC	SS-TAL METALS	SS-TAL OC-PESTICIDES	Special Instructions/ Conditions of Receipt
101101211	10-11-01	1305					4						X	X	X	X	
101101212	10-11-01	1335					4						X	X	X	X	
101101213	10-11-01	1410					4						X	X	X	X	
101101214	10-11-01	1440					4						X	X	X	X	
101101215	10-11-01	—					4						X	X	X	X	
101101216	10-11-01	1430					4						X	X	X	X	
101101217	10-11-01	1455					4						X	X	X	X	
101101218	10-11-01	1510					4						X	X	X	X	
101101219	10-11-01	1525					4						X	X	X	X	
101101220	10-11-01	1535					4						X	X	X	X	
101101221	10-11-01	1550					4						X	X	X	X	
101101222	10-11-01	1600					4						X	X	X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-11-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain o
Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-11-01	Chain of Custody Number: 031879
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code) Fax Number: (512) 494-0333 (512) 494-0334	Lab Number	Page 2 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ALESIA DANFORD; Lab Contact: K. MANSELL (SITE)		
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9121		
Contract/Purchase Order/Quote No.: 7943C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	SS VOC	SS SVOC	SS METALS	SS OC-PESTS	GEOTECH	Special Instructions/ Conditions of Receipt
101101223 + MS/MSD	10-11-01	1615				X	14						X	X	X	X		
101101225	10-11-01	1315				X	5										X	(101101225)
101101209	10-11-01	0755		X						2			X					SEE ALESIA
101101210	10-11-01	0825		X						2			X					DANFORD RE:
TRIP BLANK	10-11-01	—		X						1			X					LIMITED SAMPLE
																		VOLUMES

Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-11-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-11-01	Chain of Custody Number: 029273
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0332 (512) 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL	Lab Contact: ALESIA DANFORD	
Project Name and Location (State): MORTON RE	Carrier/Waybill Number: 8272 3716 9121		
Contract/Purchase Order/Quote No.: 7443 C			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	SS - SVOC	SS - METALS	SS - OC PEST	GROUNDWATER	TOTAL/DIS METALS	TSS ALK TDS Cl FT 2O4 Fe Mn	T PHOS NO2/NO3 NH3	Special Instructions/ Conditions of Receipt
10110209	10-11-01	0755		X			5	1					X	X	X		X	X	X	SEE ALESIA
10110240	10-11-01	0825		X			5	1					X	X	X		X	X	X	DANFORD RE:
																				REDUCED VOLUME

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-11-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

SHEET 1 of 2

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: ECOMATRIX	Project Manager: M. HEMINGWAY	Date: 10-10-01	Chain of Custody Number: 031860
Address: 1214 W. SIXTH. #201	Telephone Number (Area Code)/Fax Number: (512) 444-0333 (512) 444-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSEN	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8292 3716 9143		
Contract/Purchase Order/Quote No.: 7473C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP-VOC	CLP-SVOC	CLP-METALS	CLP-PCBs	CLP-OC-PES	CLP-CYANIDE	CLP-SULFIDE	TOC	TOC MOD/DISS	TOC+FLK+DISS FE+SO4	T PHOS MO2+03		Special Instructions/ Conditions of Receipt
101001205	10-10-01	1345		X			1		X	3	X	X		X			X									CLP-VOC PCB ONLY
101001206	10-10-01	1545		X						3				X												
101001208	10-10-01	1630		X			1	2	X	3	1	1		X	X	X	X	X	X	X	X	X	X	X		
TRIP BLANK	10-10-01	—		X						1				X												

NOTE: CLP METALS, TOTAL & DISSOLVED METALS UNPRESERVED WILL REQUIRE FILTERING

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-10-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

SHEET 2 of 2

STL-4124 (1200)

Client	Project Manager	Date	Chain of Custody Number
GEOMATRIX	M. HEMINGWAY	10-10-01	078443
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1214 W. SIXTH # 201	512-494-0333 512-494-0334		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
AUSTIN / TX / 78703	E. MANSELL		
Project Name and Location (State)	**Carrier/Waybill Number**		
MORTON READING, OHIO	8272 3716 9143		
Contract/Purchase Order/Quote No.			
7443C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC	CLP-METALS	CLP-PCBS	CLP-PESTICIDES	CLP-CYANIDE	CLP-SULFIDE	TOC	TOT MET/DISS METALS	TSS, ALK, TPS, Cl, F, SO4, NO2, NO3	TPHs			Special Instructions/ Conditions of Receipt
10100206	10-10-01	1545					8	3			1	1	X	X	X	X	X	X	X	X	X	X			NOTE: CLP METALS DISSOLVED & TOTAL METALS ARE NOT PRESERVED, REQUIRE LAB FILTER
				X																					

NOTE

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	10-10-01	1900	1.		
2.			2.		
3.			3.		

Comments

DISTRIBUTION: WHITE - Stays with the Sample, CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

(SHUTTLE 2 OF ?)

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-9-01	Chain of Custody Number: 029271
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: 512 494-0333 512 494-0334	Lab Number	Page 1 of 1
City: AUSTIN State: TX Zip Code: 78703	Site Contact: E. MANSELL	Lab Contact: ALESIA DANFORD	
Project Name and Location (State): MORTON READINGTON, OHIO	Carrier/Waybill Number: 82723716 9154		
Contract/Purchase Order/Quote No.: 7443 C			

Analysis (Attach list if more space is needed): BKG TAL SVOC; BKG TAL OC PEST; BKG TAL PCBs; BKG TAL METALS

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/ NaOH		BKG TAL SVOC	BKG TAL OC PEST	BKG TAL PCBs	BKG TAL METALS								
100901185	10-9-01	0915		X				4		1		1	1		X	X	X	X								

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10-9-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

(SHUTTLE 1 of 2)

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: ROHM & HAAS C/O GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-9-01	Chain of Custody Number: 029270
Address: 1214 W. SIXTH ST. # 201	Telephone Number (Area Code)/Fax Number: 512 494-0333 512-494-0334	Lab Number:	Page 1 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: MANSELL; Lab Contact: ALESIA DANFORD		
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9154		
Contract/Purchase Order/Quote No.: 7443 C			

Matrix / Containers & Preservatives / Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	BKG-TAL VOC	BKG-TAL SVOC	BKG-TAL METALS	BKG-TAL PCBS	BKG-TAL OC-PEST	Special Instructions/ Conditions of Receipt
100901183	10-9-01	0835				X	4						X	X	X	X	X	
100901184	10-9-01	0850				X	4						X	X	X	X	X	
100901185	10-9-01	0915		X						3			X	X	X	X	X	EM 10-9-01 (VOC'S ONLY IN THIS SHUTTLE)
100901186	10-9-01	0930				X	4						X	X	X	X	X	
100901187	10-9-01	0940				X	4						X	X	X	X	X	
100901188	10-9-01	1015				X	4						X	X	X	X	X	
100901189	10-9-01	025				X	4						X	X	X	X	X	
100901190	10-9-01	1105				X	4						X	X	X	X	X	
100901191	10-9-01	BLIND				X	4						X	X	X	X	X	
100901192 + MS/MSD	10-9-01	1120				X	8						X	X	X	X	X	
100901193	10-9-01	1150				X	4						X	X	X	X	X	
100901194	10-9-01	1200				X	4						X	X	X	X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-9-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

SHUTTLE (0: 2)

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 10-9-01	Chain of Custody Number: 031859
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: 512 494 0333 494 0334	Lab Number:	Page 2 of 2
City: AUSTIN State: TX Zip Code: 78703	Site Contact: MANSELL Lab Contact: ALESIA DANFORD		
Project Name and Location (State): PORTON READING, FI OHIO	Carrier/Waybill Number: 8272 3716 9154		
Contract/Purchase Order/Quote No: 7993 C			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	3KG TAL VOC	3KG TAL SVOC	3KG TAL METALS	3KG TAL VC PEPS	3KG TAL PEPS	Special Instructions/ Conditions of Receipt
100901195	10-9-01	1335				X	4						X	X	X	X	X	
100901196	10-9-01	1400				X	4						X	X	X	X	X	
100901197	10-9-01	1420				X	4						X	X	X	X	X	
100901198	10-9-01	1435				X	4						X	X	X	X	X	
100901199	10-9-01	1500				X	4						X	X	X	X	X	
100901200	10-9-01	1510				X	4						X	X	X	X	X	
100901201	10-9-01	1530				X	4						X	X	X	X	X	
100901202	10-9-01	1540				X	4						X	X	X	X	X	
100901203	10-9-01	1600				X	4						X	X	X	X	X	
100901204	10-9-01	1615				X	4						X	X	X	X	X	
TRIP BLANK	10-9-01	—		X						1			X					

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-9-01	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 10-12-01	Chain of Custody Number: 029283
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: 512-494-0333 512-494-0334	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: [illegible]	Lab Contact: ALESIA D.	
Project Name and Location (State): MORTON RD., OHIO	Carrier/Waybill Number: 8272 3716 9110		
Contract/Purchase Order/Quote No.: 7443C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC	CLP-OC-PEST	CLP-PCBs	CLP-METALS	CLP-CYANIDE	CLP-SULFIDE	TOC	TOT-MET/DISS	TSS, ACIDITY, TDS, CL, F, BR, PO4, NO2/NO3	T PHOS		Special Instructions/ Conditions of Receipt
101201230	10-12-01	1725		X			5	3	3		1	1	X	X	X	X	X	X	X	X	X	X		
101201231	10-12-01	—		X			2	2				1		X	X			X	X		X			

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-12-01	2030	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Geomatrix	Project Manager: M. Hemingsway	Date: 10-12-01	Chain of Custody Number: 029275
Address: 121 W. 6th St. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / (512) 494-0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: T. Jennings	Lab Contact: A. Dearford	
Project Name and Location (State): Marion / Ohio	Carrier/Waybill Number: Fed Ex 827237169110		
Contract/Purchase Order/Quote No.: 7143 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-SVOC	CLP-PCBs	CLP-Pesticides	CLP-Sulfide	CLP-Cyanide	CLP-Metals	TOC	Tot/Diss Metals	Est. Hits Tox Pest	Phos, NO3/NO2, NH3			Special Instructions/ Conditions of Receipt
10/201229	10-12-01	1520		X				5	3	~~X~~	~~X~~	1	1	X	X	X	X	X	X	X	X	X	X			Metals not Regomed - filter in Lab.

Analysis (Attach list if more space is needed)

Matrix: Air, Aqueous, Sed., Soil

Containers & Preservatives: Unpres., H2SO4, HNOS, HCl, NaOH, ZnAc/NaOH

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 10-12-01	Time: 2050	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Geomatrix	Project Manager: M. Henningway	Date: 10-12-01	Chain of Custody Number: 029274
Address: 1214 W. 6th St. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / (512) 494-0331	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: T. Jennings	Lab Contact: H. Bailford	
Project Name and Location (State): Morton FI / Ohio	Carrier/Waybill Number: 8272 3716 9110 Fed Ex		
Contract/Purchase Order/Quote No.: 7443A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH		CLP SVOC/BNA	CLP Metals	CLP PCB	CLP-OC PEST	CLP-Sulfide	CLP-Cyan.	TOC	TSTmet/Diss Met	TSS/Air Tox/POH Fe+2	T. Phos/NO3/NO2			Special Instructions/ Conditions of Receipt
																											CLP w/VOC/TGW
10120226	10-12-01	1125		X				5	3	3	X	1	1		X	X	X	X	X	X	X	X	X	X			13 bottles total
10120227	10-12-01	1215		X				4	X	1	X	1	1		X	X	X	X	X	X							CLP w/VOC

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-12-01	2030	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Geomatrix	Project Manager: M. Heningway	Date: 10-12-01	Chain of Custody Number: 029276
Address: 1214 W. 6th St. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / (512) 494-0334	Lab Number:	Page 1 of 1
City: Austin TX; State: TX; Zip Code: 78703	Site Contact: T. Jennings; Lab Contact: A. Danford		
Project Name and Location (State): Morton FJ / Reading OH	Carrier/Waybill Number: FedEx 8272 3716 9110		
Contract/Purchase Order/Quote No.: 7413			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP VOC	CLP SVOC	CLP-PCB	CLP-OC Pest	CLP Metals	CLP-Sulfide	CLP-Cyanide	TOC	Tot/Dis Met.	TSS, Alk, TDS, PO4, Fe+3	T. Phos, NO3/NO2, NH3		Special Instructions/ Conditions of Receipt
101201226	10-12-01	1125		X						3			X												
101201227	↓	1215		X						3			X												
101201228	↓	1430		X						3			X												
101201229	↓	1520		X						2			X												Note: only 2 VOAs for VOCs
101201230	↓	1725		X						3			X												
101201231	↓	Blind		X						3			X												
101201232	↓	1855		X	X		7	3	3	6	1	1	X	X	X	X	X	X	X	X	X	X	X	X	MS/MSD
Trip Blank	10-12-01	–		X	D					1			X												

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: E. [signature]	10-12-01	2030	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEO MATRIX	Project Manager: M. HEMINGWAY	Date: 10-12-01	Chain of Custody Number: 029281
Address: 1214 W. SIXTH ST. #201	Telephone Number (Area Code)/Fax Number: 512 494 0333 512-494-0334	Lab Number	Page 1 of
City: AUSTIN State: TX Zip Code: 78703	Site Contact: E. MANSELL	Lab Contact: ALESIA DAMFORD	
Project Name and Location (State): MARION READING, OHIO	Carrier/Waybill Number: 8272 3716 9110		
Contract/Purchase Order/Quote No.: 1443 C			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC	CLP-OC-PEST	CLP-PCBs	CLP-METALS	CLP-CYANIDE	CLP-SULFIDE	TOC	TOT MET. (ICP)	TSS, TDS, Cl, F	T PHOS, NO2/NO3			Special Instructions/ Conditions of Receipt
101201228	10-12-01	1430		X			8	3	3		1	1	X	X	X	X	X	X	X	X	X	X			
101201231	10-12-01	—		X			3	1	3		1	2 EM	X			X	X			X		X			

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. EM	10-12-01	2030	1.		
2.			2.		
3.			3.		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-13-01	Chain of Custody Number: 029286
Address: 1214 W. SIXTH ST. #201	Telephone Number (Area Code)/Fax Number: 512-494-0333 512-494-0334	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSED; Lab Contact: ALESIA D.		
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9100		
Contract/Purchase Order/Quote No.: 7443			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOC	APP-IX VOC	APP-IX SVOC	APP-IX METALS	APP-IX PCBs	APP-IX OCPESTS	APP-IX DIOXIN	CYANIDE/SULFIDE	TOC	TOT/DISS METALS	TSS ALK, TDS, Fe^{2+}, Fe^{3+}, PO_4	T Phos NO_2, NO_3, NH_3	Special Instructions/ Conditions of Receipt
101301224	10-13-01			X			7	3	3	3	1	1		X	X	X	X	X	X	X	X	X	X	X	
101301233	10-13-01			X						3			X												
101301234	10-13-01			X						3			X												
101301235	10-13-01			X						3			X												
TRIP BLANK	10-13-01	—		X						1				X											

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other PER CONTRACT

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-13-01	1630	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 10-13-01	Chain of Custody Number: 029285
Address: 1214 W. SIXTH 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512) 494-0334	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ERIK MANCELL; Lab Contact: ALESIA D.		
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9100		
Contract/Purchase Order/Quote No.: 1443			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP SVOC	CLP METALS	CLP PCBs	CLP OC PEST	CLP CYANIDE	CLP SULFIDE	CLP-TOC	TOT/DIS METALS	TSS ALK TDS FECL3 PO4	T PHOS NO2 NH3	Special Instructions/ Conditions of Receipt
101301234				X			4	2			1	1			X	X	X	X	X	X			NOTE: 101301234 - NO PRESERV. REQUIRES LAB FILTER
101301235				X			5	3	3		1	1	X	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-13-01	1630	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: TE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEO MATRIX	Project Manager: MARK HEMINGWAY	Date: 10-13-01	Chain of Custody Number: 029282
Address: 1214 W. SIXTH 201	Telephone Number (Area Code)/Fax Number: (512) 494-0332 (512) 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: G. MANSER	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9100		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP-SVOC	CLP-METALS	CLP-PCBS	CLP-PESTS	CLP-CYANIDE	CLP-SULFATE	TOC	TOT MET/DISS METALS	TSS	TDS	Nitrate		
101301233	10-13-01	0900		X				5	3	3		1	1		X	X	X	X	X	X	X	X	X	X			
101301234	10-13-01	1030		X				5							X	X							X	X			

Special Instructions/ Conditions of Receipt

NOTE: 101301234 – METALS HAS NO PRESERV. REQUIRES LAB FILTER

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-13-01	1630	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: Mark Hemingway	Date: 11/8/01	Chain of Custody Number: 076401
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512)494-0333 / 494-0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 18703	Site Contact: Erik Mansell	Lab Contact: Alesia Danford	
Project Name and Location (State): ~~7689 A~~ Austin Reading FI, Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 9095		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	HNO3	CLP - VOC	CLP - SVOC BNA	CLP - PEST/PCB	CLP - Cyanide	CLP - Sulfide	CLP - Metals	Tot Metals, Diss. Metals	TOC	TDS, TSS, pH, K, Cl, PO4, Fe2+, Fe	NH3, NO2, NO3, PO4			Special Instructions/ Conditions of Receipt
110801250	11/8/01	16:41		X				5	3		3	1	1	3	3	2	2	1	1	1	2	2	1	1			~~60~~ 8 - 40 mL VOA
110801251	11/8/01	17:41		X				4			3	1	1	1	3	2	2	1	1	1							8 - 1 L amber
Trip Blank	11/8/01	—		X							1				1												2 - 250 mL poly
																											4 - 500 mL poly
																											4 - 1L poly

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Julie So	11/8/01	18:40	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report: PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: Mark Hemingway	Date: 11/8/01	Chain of Custody Number: 076403
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell	Lab Contact: A. Danford	
Project Name and Location (State): Merlin Reading FI; Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 9095		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH		App IX - VOC (Florida Full Scan)	App IX - Semi-VOC (Florida Full Scan)	App IX - Metals (Florida Full Scan)	OC Pest.									Special Instructions/ Conditions of Receipt
110801236	11/8/01	10:40				X		8							3	1	4										18 - Encores
110801237	11/8/01	11:45				X		5							3	1	1										10 - ~~120 mL~~ 4 oz. jars
110801238	11/8/01	14:20				X		5							3	1	1										5 - ~~500 mL~~ 16 oz. jars
Trip Blank	11/8/01	—		X							1				1												
110801239	11/8/01	14:40				X		5							3	1	1										
110801240	11/8/01	16:10				X		5							3	1	1										
110801241	11/8/01	16:22				X		5							3	1	1										

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	11-8-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 11/9/01	Chain of Custody Number: 076413
Address: 1214 W. 6TH ST	Telephone Number (Area Code)/Fax Number: 512-494-0333/0334	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): MORTON FI READING OH	Carrier/Waybill Number: Fedex 8272 3716 9084		
Contract/Purchase Order/Quote No.: 7689A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	HNO3	CLP-SVOC BNA	CLP-Pest/PCB	CLP-Cyanide	CLP-Sulfide	CLP-Metals	Tot Metals Diss Met	TOC	TDS, TSS, Alk, Cl, Fe2, Fe3	NH3, NO3, NO2, PO4				Special Instructions/ Conditions of Receipt
110901254	11/9/01	15:35		X			5	3		3	1	1	3	2	2	1	1	1	2	2	1	1				8 - 1 L amber
110901255	11/9/01	17:38		X			5	3		3	1	1	3	2	2	1	1	1	2	2	1	1				2 - 250 mL poly
																										6 - 500 mL poly
																										6 - 1 L poly

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11/9/01	19:30	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: 'TE - Stays with the Sample, CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 11/9/01	Chain of Custody Number: 076407
Address: 1214 W 6th St. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334(F)	Lab Number:	Page 1 of 1
City: AUSTIN 1 / State: TX / Zip Code: ~~78751~~ 78703 AMH	Site Contact: E. MANSELL	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING FI, READING, OH	Carrier/Waybill Number: Fedex 8272 3716 9084		
Contract/Purchase Order/Quote No.: 7689A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	HNO3	CLP-SVOC BNA	CLP-Pest/PCB	CLP-Cyanide	CLP-Sulfide	CLP-Metals	Tot Metals Diss Metals	TOC	TDS, TSS, Alk, Cl, Fe2, Fe3	NH3, NO3, NO2, PO4				Special Instructions/ Conditions of Receipt
110901252	11/9/01	09:35		X			5	3		~~3~~	1	1	3	~~3~~ 5	2	1	1	1	2	2	1	1				8 - 1 L amber
110901253	11/9/01	13:20		X			5	3		~~3~~	1	1	3	~~3~~ 2	2	1	1	1	2	2	1	1				2 - 250 mL poly
																										6 - 500mL poly
																										6 - 1 L poly

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Julie So	11/9/01	19:30	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix Consultants	Project Manager: M. Hemingway	Date: 11/9/01	Chain of Custody Number: 076406
Address: 1214 W. 6th St., Ste. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number:	Page 1 of 2
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading, FI; Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 9084		
Contract/Purchase Order/Quote No.: 7689. A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOC	Special Instructions/ Conditions of Receipt
110901252	11/9/01	09:35		X						3			3	12 - 40 mL VOAs
110901253	11/9/01	13:20		X						3			3	15 - Encores
110901254	11/9/01	15:35		X						3			3	40 ~~5~~ - 4 oz. jar
110901255	11/9/01	17:38		X						3			3	5 - 16 oz. jar
Trip Blank	11/9/01	—		X						1			1	1 - Trip Bl
														Total in Cooler
														COCs: 076406 076408

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Julie So	11/9/01	19:30	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: V[illegible]E - Stays with the Sample, CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS INC	Project Manager: MARK HEMINGWAY	Date: 11/9/01	Chain of Custody Number: 076408
Address: 1214 W 6th STREET STE 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334 (F)	Lab Number:	Page 2 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): MORTON READING FI, READING OH	Carrier/Waybill Number: Fedex 8272 3716 9084		
Contract/Purchase Order/Quote No.: 7689 A			

Matrix / Containers & Preservatives / Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	App. IX - VOC	App. IX - Dioxins, Furans	App. IX - Inorganics, SVOCs, PCBs, OC Pes	CLP - VOC	CLP - Inorganics, SVOCs, PCB, OC Pest.	Special Instructions/ Conditions of Receipt
110901242	11/9/01	1130				X	5						3	1	1			15 - Encores
110901243	11/9/01	1140				X	5						3	1	1			4 ~~5~~ gs - 4 oz. jar
110901244	11/9/01	1600				X	5						3	1	1			5 - 16 oz. jar
110901245	11/9/01	1620				X	5 gs						3	1	1			12 - 40 mL VOAs
110901246	11/9/01	1755			4	~~X~~	~~5~~ 4					gs	~~3~~	~~1~~	~~1~~	3	1	1 Trip B1

Total in Cooler

COCs: 076406
076408

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature] So	11/9/01	19:30	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix Consultants	Project Manager: M. Hemingway	Date: 11/10/01	Chain of Custody Number: 076412
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton - Reading Ohio	Carrier/Waybill Number: Fedex 8272 3716 9073		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): App. IX - VOC	App. IX - Dioxins/Furans	App. IX - Inorganics, Sulfides, PCB, CC Post	CLP - VOC	CLP - Inorganics, Sulfides, PCB, CC Post	Special Instructions/ Conditions of Receipt
Amit Ø 111001247	11/10/01	1400				X	6						3	2	1			6-ENCORES
111001248	11/10/01	1510				X	5						3	1	1			2-2oz
TRIP BLANK				X						1								1-4oz
																		2-AMBER/SOIL
																		1-TRIP BLANK
																		☆SEE COMMENTS

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jackie So	11/10/01	1620	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: NOTE ENCORE/VOC SAMPLE TIME → 48 HR TO EXTRACTION

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS INC	Project Manager: M. HEMINGWAY	Date: 11/10/01	Chain of Custody Number: 076409
Address: 1211 W. 6TH, Ste. 201	Telephone Number (Area Code)/Fax Number: 512-494-0332 / 0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: A. DANFORD	Lab Contact: E. MANSELL	
Project Name and Location (State): MORTON - ELYRIA, OHIO	Carrier/Waybill Number: Fedex 8272 3716 9073		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	HNO3	CLP - VOCs	CLP - Semi (BNA)	CLP - Pest/PCBs	CLP - Cyanide	CLP - Sulfide	CLP - Metals	Diss. Metals	TSS, TDS, Chloride	Poly Nitrate	TOC	Special Instructions/ Conditions of Receipt
1111L125L	11/10/01	1935		X			5	2		3	1	1	3	3	2	2	1	1	1	2	1	1	2	8 - 1 L amber
1111L125L MS/MSD	11/10/01	1935		X			5	2		3	1	1	3	3	2	2	1	1	1	2	1	1	2	6 - 500 mL poly
Trip Blank	11/10/01	—		X						1				1										2 - 250 mL poly
																								6 - 1 L poly
																								10 - 40 mL VOAs
																								1 - Trip Blank
																								* ~~Rush VOC~~
																								~~extraction~~
																								~~for Holding Time~~
																								* Filter samples to
																								Run Dissolved Metals

Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11/10/01	1620	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS INC	Project Manager: MARK HEMINGWAY	Date: 11/10/01	Chain of Custody Number: 076410
Address: 1214 W. 6th St. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): MORTON READING FI, READING OH	Carrier/Waybill Number: Fedex 8272 3716 9773		
Contract/Purchase Order/Quote No.: ~~7687.A~~ ~~Morton Reading FI, Reading OH~~ 95			

Matrix / Containers & Preservatives / Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	HNO3	CLP - SVOC BNA	CLP - Pest-PCB	CLP - Cyanide	CLP - Sulfide	CLP - Metals	Tot Metals / Diss Metals*	TSS, Alk, TDS	Cl, Fe2+, Fe3+	PO4, NO3, NO2, NH3	TOC	Special Instructions/ Conditions of Receipt
111001257	11/10/01	1130		X			5	3			1	1	3	2	2	1	1	1	2	1	1	2		8 - 1 L amber
111001258	11/10/01	1125		X			5	3			1	1	3	2	2	1	1	1	2	1	1	2		6 - ~~250~~ 500 mL poly
																								2 - 250 mL poly
																								6 - 1 L poly
																								4 - 40 mL VOAs
																								* Filter samples to run Dissolved Metals

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11/10/01	1620	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11/12/01	Chain of Custody Number: 076422
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333/494-0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI; Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 8673		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC (BNA)	CLP-Pest/PCB	CLP-Cyanide	CLP-Sulfide	CLP-Metals	Tot Metals, Diss Metals	TOC	Alk, TDS, TSS, Cl, Fe, Fe2, NH3, NO3, NO2				Special Instructions/ Conditions of Receipt
111101261	11-11-01	1100		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X			
111101262	11-11-01	1345		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X			

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11/12/01	Chain of Custody Number: 076419
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Milton Reading FI; Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 8673		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP - SVOC (BNA)	CLP - Pest/PCB	CLP - Cyanide	CLP - Sulfide	CLP - Metals	TOT Pass Metals, Metals	TOC	Alk, TDS, TSS, Cl, F, 21, F, 34	NH3, NO2, NO3, PO4	Special Instructions/ Conditions of Receipt
111201266	11-12-01	0805		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	
111201267	11-12-01	0955		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11/12/01	Chain of Custody Number: 076423
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Milton Reading FI, Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 8673		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC (BNA)	CLP-Pest/PCB	CLP-Cyanide	CLP-Sulfide	CLP-Metals	Tot Metals, Diss Metals	TOC	TDS, TSS, Alk, Cl, FeS, FeS	NH3, NO3, NO2, PO4	Special Instructions/ Conditions of Receipt
111101263	11-11-01	1545		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	
111101265	11-11-01	1805		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geometrix	Project Manager: M. Hemingway	Date: 11/12/01	Chain of Custody Number: 076420
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0323 / 494-0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Marsell	Lab Contact: A. Danford	
Project Name and Location (State): Morton Reading II; Reading, OH	Carrier/Waybill Number: Fedex 8272 3616 8673		
Contract/Purchase Order/Quote No.: 7287 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP-SVOC (GA)	CLP-Pest/PCB	CLP-Organic	CLP-Sulfide	CLP-Metals	TCLP Metals, Metals	TOC	Alk, TDS, Cl, Fe2+, Fe3+	NH3, NO3/NO2, PO4			
111101264	11-11-01	1705		X			6	3	2		1	1		X	X	X	X	X	X	X	X	X			
111201270	11-12-01 ~~11-11-01~~	1740		X			6	3	2		1	1		X	X	X	X	X	X	X	X	X			

Special Instructions/ Conditions of Receipt

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn-Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11/12/01	Chain of Custody Number: 076424
Address: 1214 W. 6th St., Ste. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI; Reading, OH	Carrier/Waybill Number: Fedex 8272 3716 8673		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		~~CLP-VOC~~	CLP-SVOC BNA	CLP-Pest/PCB	CLP-Cyanide	CLP-Sulfide	CLP-Metals	Tot Metals, Diss Metals	TOC	TDS, TSS, Alk, Cl, Fe2, Fe3	NH3, NO3, NO2, PO4			Special Instructions/ Conditions of Receipt
111201268	11-12-01	1455		X				6	3	2		1	1			X	X	X	X	X	X	X	X	X			
111201269	11-12-01	1700		X				6	3	2		1	1			X	X	X	X	X	X	X	X	X			

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

* VOC - 48-HOUR *

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 11-12-01	Chain of Custody Number: 029287
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333	Lab Number:	Page 1 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): WOPTON READING FI	Carrier/Waybill Number: 8272 3716 8673		
Contract/Purchase Order/Quote No.: 1689			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	APP-IX VOCs	APP-IX SVOC	APP-IX METALS	APP-IX OCPE	APP-IX PCBs	3 IOXIN/FURAN	CLP-VOCs	APP-IX/CLP VOC	Special Instructions/ Conditions of Receipt
* 111101249 *	11-11-01	1030				X	5						X	X	X	X	X	X			* EXTRACT
111101271	11-11-01	1505				X	6						X	X	X	X	X	X			UPON RECEIPT*
111101272	11-11-01	1528				X	6						X	X	X	X	X	X			- SAMPLES WILL
111101259	11-11-01	0930		X						3									X		BE CLOSE TO
111101260	11-11-01	1100		X						3									X		48 HOUR HOLDING
111101261	11-11-01	1345		X						3									X		TIME
111101262	11-11-01	1445		X						3									X		
111101263	11-11-01	1545		X						3									X		
111101264	11-11-01	1705		X						3									X		
111101265	11-11-01	1805		X						3									X		
111201266	11-12-01	0805		X						3									X		
111201267	11-12-01	0955		X						3									X		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11/12/01	Chain of Custody Number: 076421
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-1334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI, Reading, IH	Carrier/Waybill Number: 8272 3716 8673		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP - SVOC (BNA)	CLP - Pest/PCB	CLP - Cyanide	CLP - Sulfide	CLP - Metals	Tot Metals, Diss Metals	TOC	Alk, TDS, TSS, Cl, Fe2, Fe3	NH3, NO3, NO2, PO4	Special Instructions/ Conditions of Receipt
111101259	11-11-01	0930		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	
111101260	11-11-01	1100		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: INFOMATRIX	Project Manager: M. HEMINGWAY	Date: 11-12-01	Chain of Custody Number: 029288
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: (512) 494-0333	Lab Number	Page 2 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSEL	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING FI	Carrier/Waybill Number: 8272 3716 8673		
Contract/Purchase Order/Quote No.: 7689			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-VOC'S	CLP-VOC'S	Special Instructions/ Conditions of Receipt
11101268	11-12-01	~~1740~~ 1455		X						3			X		
11101269	11-12-01	1700		X						3			X		
11101270	11-12-01	1740		X						3			X		
TRIP BLANK	11-11-01	—		X						1				X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-12-01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 12-5-01	Chain of Custody Number: 031875
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512) 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ERIK MANSELL	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING E1	Carrier/Waybill Number: 8272 3716 9051		
Contract/Purchase Order/Quote No.: 1089			

Analysis (Attach list if more space is needed): APP-1X SVOC; APP-1X VOC; APP-1X METALS; APP-1X PCB; APP-1X OC PESTICIDES; APP-1X DIOXINS

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	APP-1X SVOC	APP-1X VOC	APP-1X METALS	APP-1X PCB	APP-1X OC PESTICIDES	APP-1X DIOXINS	Special Instructions/ Conditions of Receipt
120501299 + MS/MSD	12-5-01	1620				X	11						X	X	X	X	X	X	
120501298	12-5-01	1430				X	5						X	X	X	X	X	X	
120501297	12-5-01	1540				X	5						X	X	X	X	X	X	
120501296	12-5-01	1200				X	6						X	X	X	X	X	X	
120501295	12-5-01	1155		X			~~5~~			3				X					
120501294	12-5-01	0955				X	5						X	X	X	X	X	X	
TRIP BLANK	12-5-01	—		X						1				X					

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☑ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	12-5-01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

STL-4124 (0700)

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 12-5-01	Chain of Custody Number: 031880
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / (512) 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E MADSEN	Lab Contact: A. DANFORD	
Project Name and Location (State): MOBIL TRADING F1	Carrier/Waybill Number: 8272 3716 9051		
Contract/Purchase Order/Quote No.: 1689			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): APP-IX SVOC	APP-IX 8260	APP-IX OC PEST	APP-IX DRIN/MEPA	APP-IX MEPA	APP-IX CANCEL	APP-IX SUBM	Special Instructions/ Conditions of Receipt
12050129S	12-5-01	1155		X			6		1		1	1	X	X	X	X	X	X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	12-5-01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-14-01	Chain of Custody Number: 076426
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FII, Reading, OH	Carrier/Waybill Number: 8272 3716 8695		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC (BNA)	CLP-PCB/Pest.	CLP-Metals	CLP-Cn, Sulfide	Cd, Gs	Alk, TSS, TDS, Fe2, Fe3, Cl, Al	NH3, NO3, NO2, PO4	TOC	Tot Diss Metals, Metals	Special Instructions/ Conditions of Receipt
111401283	11-14-01	0935		X			6	3	2		1	1	X	X	X	X		X	X	X	X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-14-01	2015	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-14-01	Chain of Custody Number: 076427
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0334 / 0333	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell	Lab Contact: A. Danford	
Project Name and Location (State): Morton Reading II	Carrier/Waybill Number: 8272 3716 8695		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP - SVOC (Ext)	CLP - PCB/Pest.	CLP - Metals	CLP - Cn, Sulfide	Alk, TDS, Fl, Cl, SO4, Br, NO2	NH3, NO3, PO4	TOC	Diss. Metals, Total Metals					Special Instructions/ Conditions of Receipt
111401284	11-14-01	1300		X				6	3	2		1	1		X	X	X	X	X	X	X	X					
111401284 MS/MSD	11-14-01	1300		X				6	3	2		1	1		X	X	X	X	X	X	X	X					

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 11-14-01	Time: 2015	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample, CANARY - Returned to Client with Report, PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 11-13-01	Chain of Custody Number: 029289
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): MORTON READING FI	Carrier/Waybill Number: 8272 3716 8684		
Contract/Purchase Order/Quote No.: 7689			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Cal - SVOC	Cal - PCBs/Pest.	Cal - Cyanide	Cal - Sulfide	Cal - Metals	Tot Metals, Diss Metals	TDC	Alk, TDS, SS, Cl, F, Fe, 3	NH3, NO3, NO2, PO4	Special Instructions/ Conditions of Receipt
111301282	11-13-01	1725		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	
111301275	11-13-01	1200		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Julie So	11-13-01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: 'TE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain o
Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 11-13-01	Chain of Custody Number: 029291
Address: 1214 W. SIXTH 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): MORTON READING F1	Carrier/Waybill Number: 8272 3716 8284		
Contract/Purchase Order/Quote No.: 7689			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP SVOC	CLP METALS	CLP OC-PEST	CLP PCBs	CLP CN, SULF	GWQ DISMETALS	GWQ TOT METALS	TOC	Alk, TDS, TSS, Cl, FCl, FS	NH3, NO3, NO2, PO4	Special Instructions/ Conditions of Receipt
111301278	11-13-01	1015		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	X	
111301279	11-13-01	1140		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-13-01	2500	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 11-13-01	Chain of Custody Number: 076414
Address: 1214 W 6th St, Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0353 / -0334 (F)	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: C. MANSELL	Lab Contact: A. TANFORD	
Project Name and Location (State): MORTON READING OH II	Carrier/Waybill Number: 8272 3716 8684		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP - SVOC	CLP - PCB/Pest	CLP - Inorganic	CLP - Sulfide	CLP - Metals	Total Metals	TPC	Alk, TDS, Cl, SO4	NH3, NO3/NO2, TKN				Special Instructions/ Conditions of Receipt
111301274	11-13-01	1110		X				6	3	2		1	1		X	X	X	X	X	X	X	X	X				

Analysis (Attach list if more space is needed)

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-13-01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: ~~Morton~~ Amth GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: ~~11/9~~ 11/13/01	Chain of Custody Number: 076418
Address: 1214 W. 6th St. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / -0334 (F)	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL; Lab Contact: A. DANFORD		
Project Name and Location (State): MORTON READING FI, READING OH	Carrier/Waybill Number: 8272 3716 8684		
Contract/Purchase Order/Quote No.: 7689 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-SVOC	CLP-Pest./PCBs	CLP-Cyanide	CLP-Sulfide	CLP-Metals	Tot Metals, Hg	TOC	Alk, TDS, TSS, Cl, Fe2+, Fe3+	NH3, NO3, NO2, PO4	Special Instructions/ Conditions of Receipt
111301280	11-13-01	1415		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	
111301281	11-13-01	1540		X			6	3	2		1	1	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other PER CONTRACT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11/13/01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client	Project Manager	Date	Chain of Custody Number
Geomatrix	M. Hemingway	11-13-01	076417
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 29 of 29**
1211 W. 6th St., Ste 201	(512) 494-0333 / 0334		

City	State	Zip Code	Site Contact	Lab Contact
Austin	TX	78703	K. Mansell	A. Danford

Project Name and Location (State)	Carrier/Waybill Number
Morton Reading FI; Reading, OH	8272 3716 8684

Contract/Purchase Order/Quote No.: 7689 A

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP - SVOC	CLP - Pesticides	CLP - Cyanide	CLP - Sulfide	CLP - Metals	Total Metals	TPC	Alk, Cl, Fl, Br, NO3, NO2, PO4	NH3, NO2/NO3				Special Instructions/ Conditions of Receipt
~~111301273~~	11-13-01	102																									
111301276	11-13-01	1340		X				6	3	2		1	1		X	X	X	X	X	X	X	X	X				
111301277	11-13-01	1420		X				6	3	2		1	1		X	X	X	X	X	X	X	X	X				

Analysis (Attach list if more space is needed)

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jackie So	11-13-01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

STL-4124 (1200)

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-13-01	Chain of Custody Number: 076416
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333/0334	Lab Number:	Page 1 of 21
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI; Reading, OH	Carrier/Waybill Number: 8272 3716 8684		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-VOC	App IX-VOC	CLP/App IX-VOC	App IX-SVOC	App IX-Pex/PCBs	App IX-Cyanide	App IX-Sulfide	App IX-Metals	Tot Metals, Diss Metals	TOC	TDS, TSS, Alk, Cl, Fe2, Fe3	NH3, NO3, NO2, PO4	Dioxins, Furans	Special Instructions/ Conditions of Receipt
111301273	11-13-01	1025		X			6	3	2	3	1	1		X	X	X	X	X	X	X	X	X	X	X	X	
111301274	11-13-01	1110		X						3			X													
111301275	11-13-01	1200		X						3			X													
111301276	11-13-01	1340		X						3			X													
111301277	11-13-01	1420		X						3			X													
111301278	11-13-01	1015		X						3			X													
111301279	11-13-01	1140		X						3			X													
111301280	11-13-01	1415		X						3			X													
111301281	11-13-01	1540		X						3			X													
111301282	11-13-01	1725		X						3			X													
Trip Blank	11-13-01	—		X						1					X											

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-13-01	2000	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Subject TRENCH-1 PLAN

Project No. 7689

By

Checked By

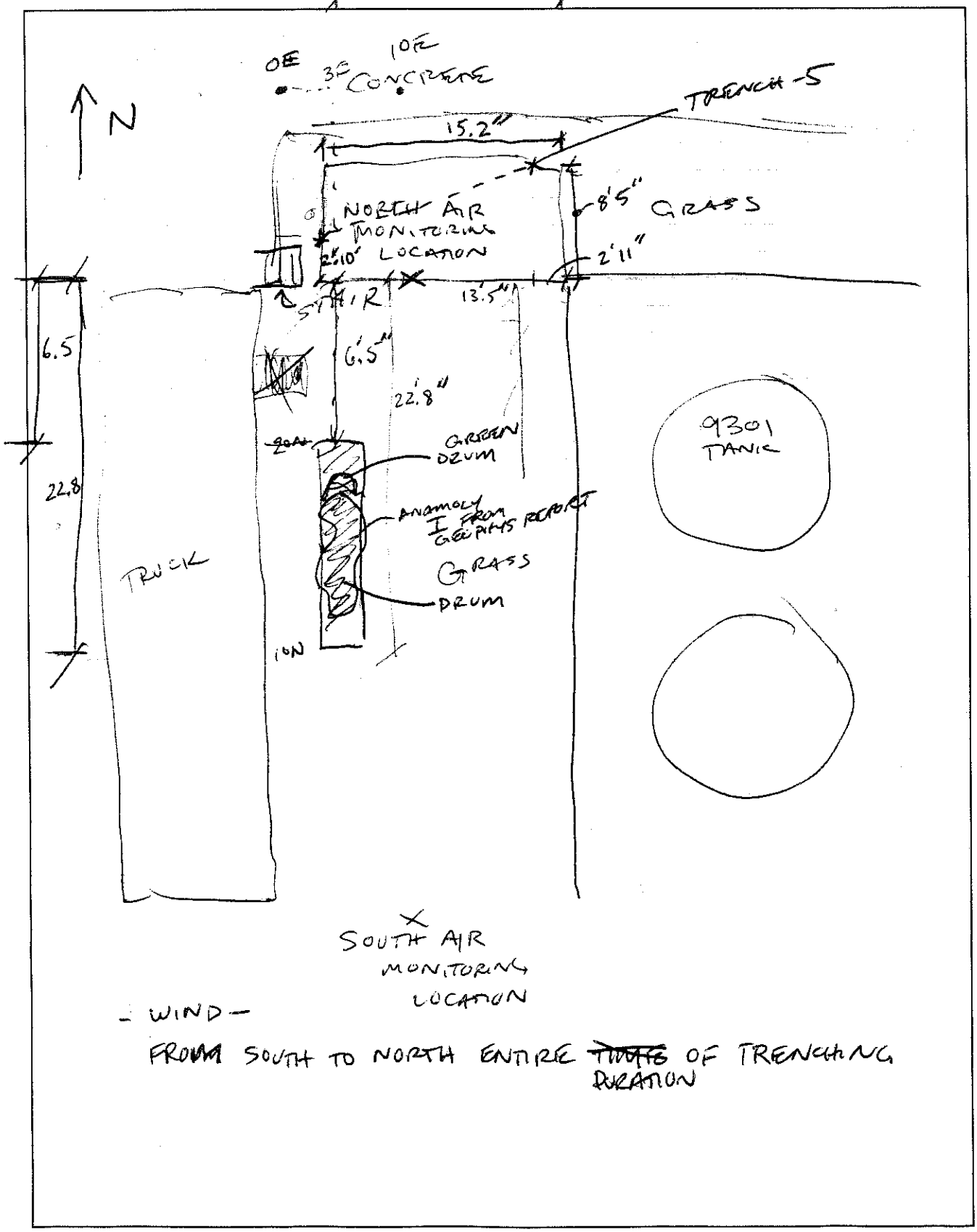
Task No.

File No.

Date 11-8-01 / 11-9-01

Date 13.5

Sheet ____ of ____



Subject TRENCH -2

Project No. 7689

Task No.

File No.

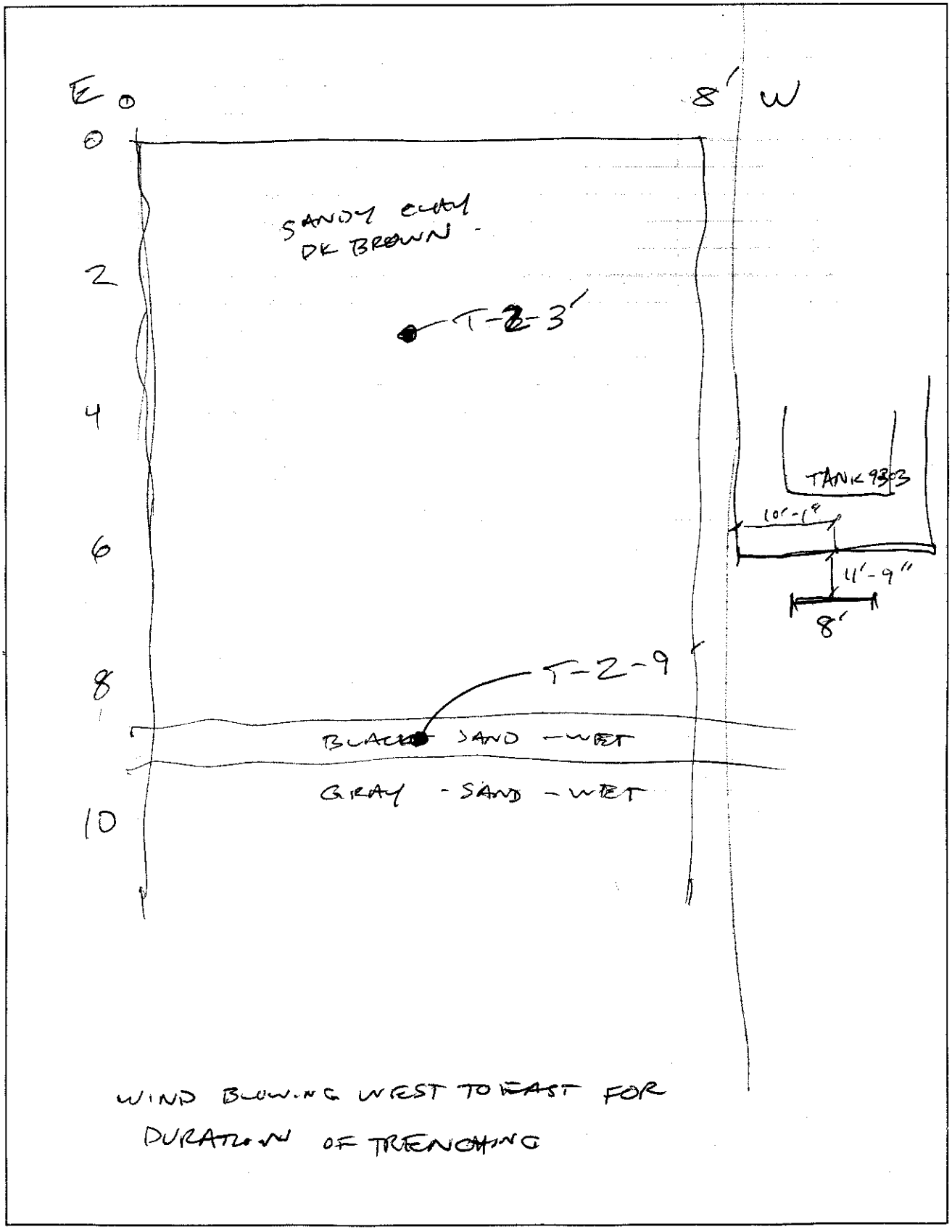
By

Checked By

Date 11-8-01

Date

Sheet 1 of



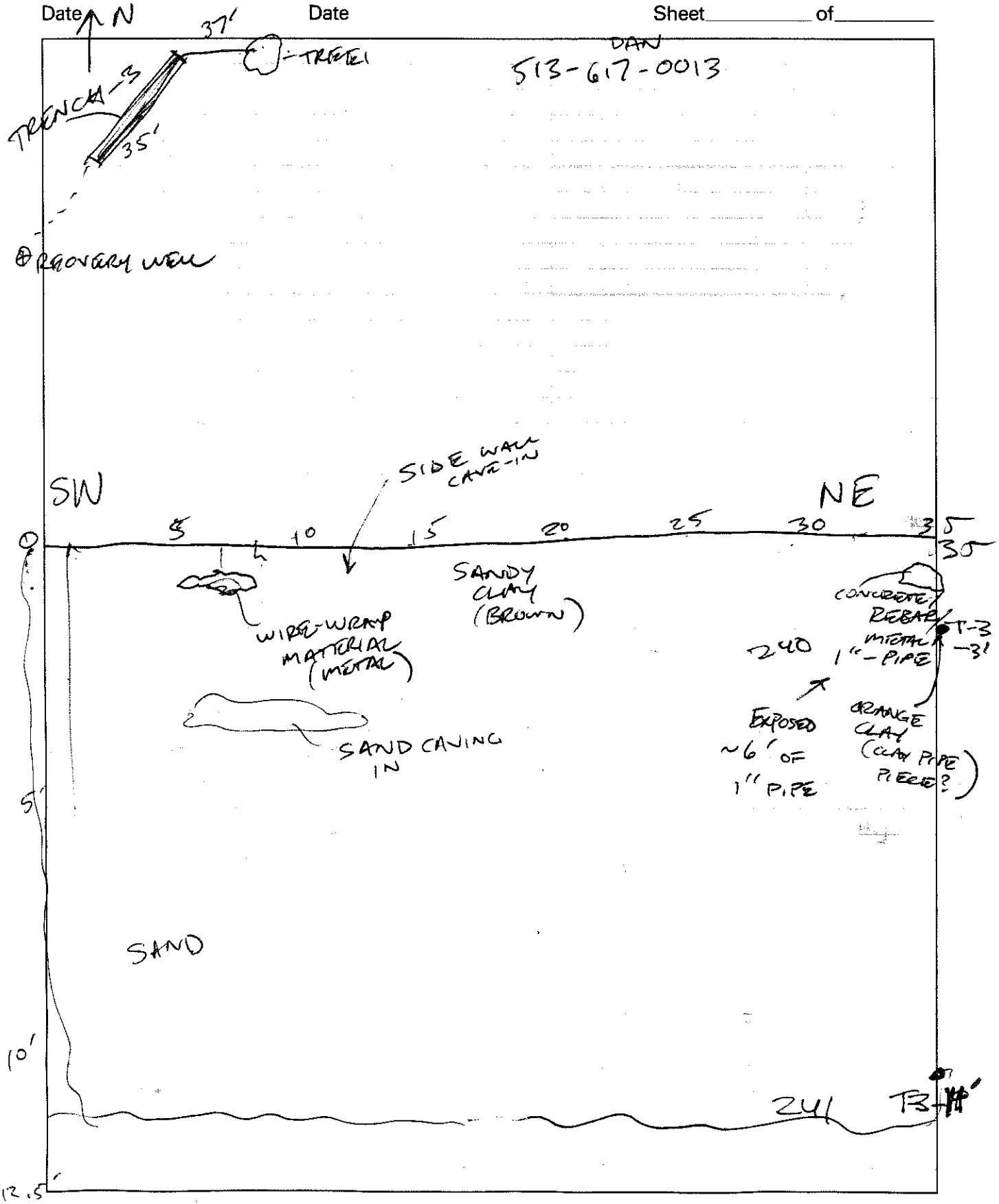
GEOMATRIX CONSULTANTS

Subject TRENCH-3 READING, OHIO Project No. 7689

By ERM 11-8-01 Checked By ANAMOLY "E" Task No.

File No.

Date Date Sheet of



GEOMATRIX CONSULTANTS

AIR MONITORING

Project Name: Morton Reading FI
Reading, Ohio

Date:

Trench Location: TRENCH 1 – WEST OF TANK
TRENCH 2

Time	Location TRENCH – 1	PID Reading (ppm)	H2S	LEL (%)	O2 (%)
1025	NORTH (N)	0.0	0.0	0.0	20.8
1025	SOUTH (S)	0.0			
1025	TRENCH (T)	0.0			
1100	N	0.0			
1100	S	0.0			
1100	T	0.0			
1120	N	0.0			
1120	S	0.0			
1120	T	0.0			
1140	N	0.0	0.0	0.0	20.8
1140	S	0.0			
1140	T	0.0			
1415	TRENCH – 2	0.0	0.0	0.0	20.8
1430	"	0.0	0.0	0.0	20.8
1440	"	0.0	0.0	0.0	20.8

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading OHIO	C. YOUNG
Date 11/8/01	Contractor/Representative GMX only		Time Arrived 0840
Day of Week Thursday	Client MORTON	Observations Reported to Peter Palena	Time Departed 1930
Daily Field Report No.	Geomatrix Project Manager MARK Hemingway	Weather Cool Clear	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0840 arrive on site.
Julie So & Erik Nemsell on site.
915 Depart the site to pick up supplies.
11:15 Back on site.
unloaded the supplies.
1:40 Went to lunch (Julie and Charles)
12:40 Back on site.
Start preparing the sample bottles for GW/mon.
1340 Still preparing the Bottle sets.
1530 Prepared DECON H2O and loaded the generator — Deconed the pump & E-line.
1550 Went out side to VAW01-30 and took the H2O level.
1555 Installed the pump & E-line.
1620 Started micro purging the well.
Information recorded on the Well Sampling and development record.
16:38 Ready to Sample.
16:41 Collected the Sample. — Deconed the Equip and prepared for the Equip blank.
1641 Collect the Equip Blank using the lab DI H2O, pouring it over the pump and collecting the H2O in the sample containers.
1930 Depart the site.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

Charles Young
GEOMATRIX REPRESENTATIVE

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DR101 (rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING F1	READING, OHIO	E. MANSEL
Date	**Contractor/Representative**		**Time Arrived**
11-9-01	EQUIPT		0700
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
FRI	ROHM & HAAS	PETER PALENA	1950
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. HEMINGWAY	SUNNY — 45°	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☒ Other(s) TRENCH DIAGRAMS TRENCH-4 TRENCH-5

Unresolved Tests/Issues:

Observations/Remarks: 0700 ARRIVE ONSITE

0730 - TODD QUILLEN TERRALON ONSITE, RON LANZKY ROHM & HAAS ONSITE

0800 - GET READY FOR TRENCHING, CALL JOHN L. ABOUT ANAMOLY I

0900 - LOOK AT ADDITIONAL ANAMOLIES ADJACENT TO ANAMOLY I - DISCUSS POSSIBLE ADDITIONAL TRENCHING WITH RON L.

1000 - DAN DICARLO ONSITE

1025 - SET UP ON TRENCH-4 (ANAMOLY D) - FORMER SWALE

1030 - WIND DIRECTION - NORTH TO SOUTH - MILD WIND.

1045 - H_2S = 0.0 PID 0.0 AT TRENCH LEL = 0.0%

1250 - FINISH TRENCH-4 ~27' 12'-13' DEEP

- CONTINUOUS AIR MONITORING — 0.0 ppm PID, 0.0 H_2S, 0.0 LEL

1345 - BACKFILL TRENCH WITH NATIVE MATERIAL

1400 - LUNCH

1530 - SET UP TO TRENCH AREA NORTH OF ANAMOLY I - FOUND A LARGE BOLT DIRECTLY BELOW WEST ANAMOLY, FOUND AN OLD 1" DIA ~ 1 FOOT IRON PIPE BENEATH EAST ANAMOLY (TRENCH-5)

1700 SET UP AT DP-29 5' (TANK) VAW-19 DP 29-5' GRAVEL 5' EAST OF MIDDLE EAST EDGE OF TANK VAULT

DP-29 - ~~4.9~~ 11-9-01 BGS - 3.9 ppm PID AT TOP OF HOLE, 0.0 ppm IN BREATHING SPACE - SAMPLE WET - HIGH PLASTIC, ABUNDANT GRAVEL

1755 - SAMPLE DP-29-5' (11090246) 1950 LEAVE FOR FED EX

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GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

Subject TRENCH-4 (GEOPHYSICAL ANAMOLY -D)

Project No. 7689

By

Checked By

Task No.

File No.

Date 1-9-01

Date

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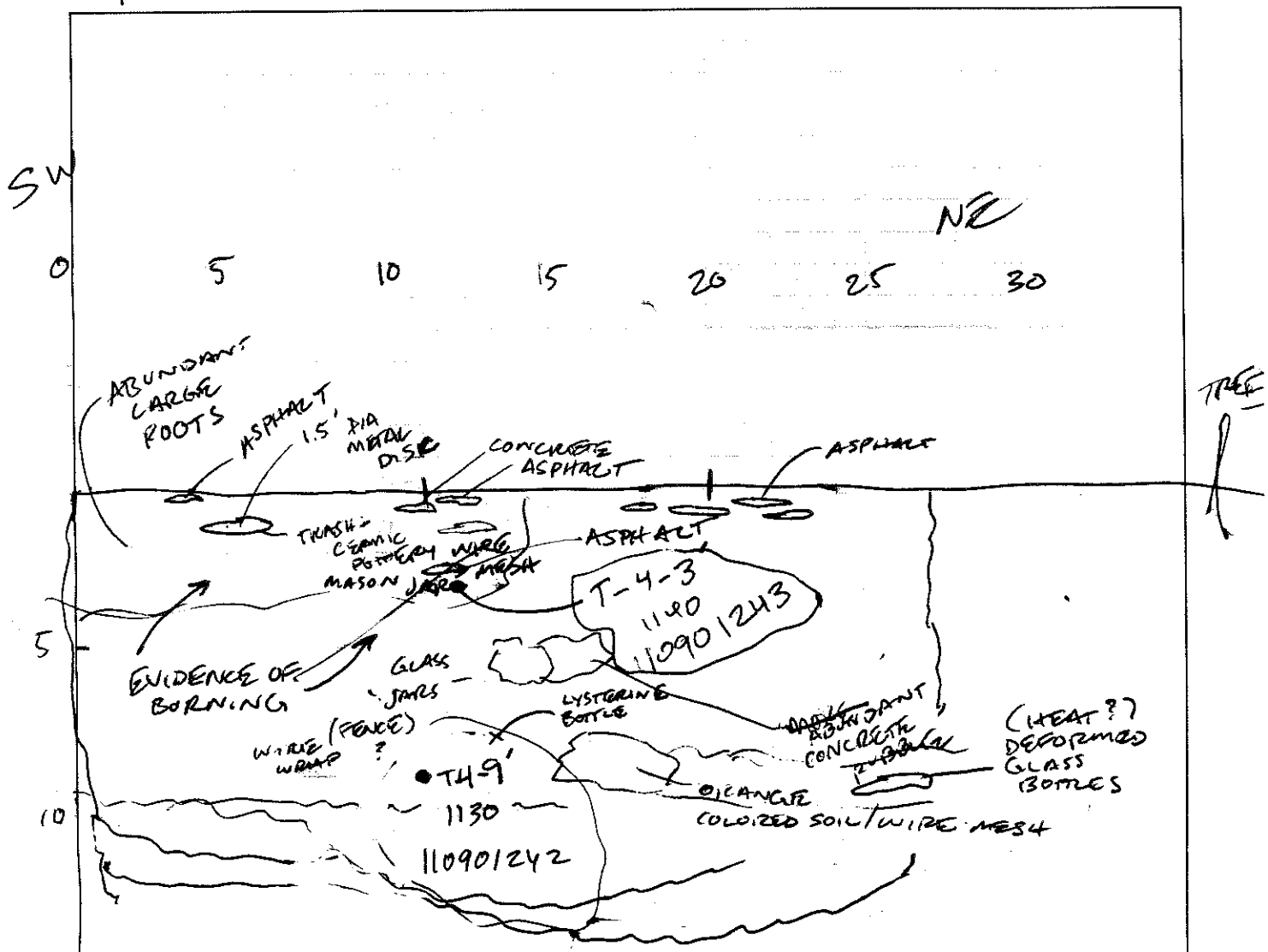


GEOMATRIX CONSULTANTS

Subject TRENCH -5

Project No.

Task No.

By

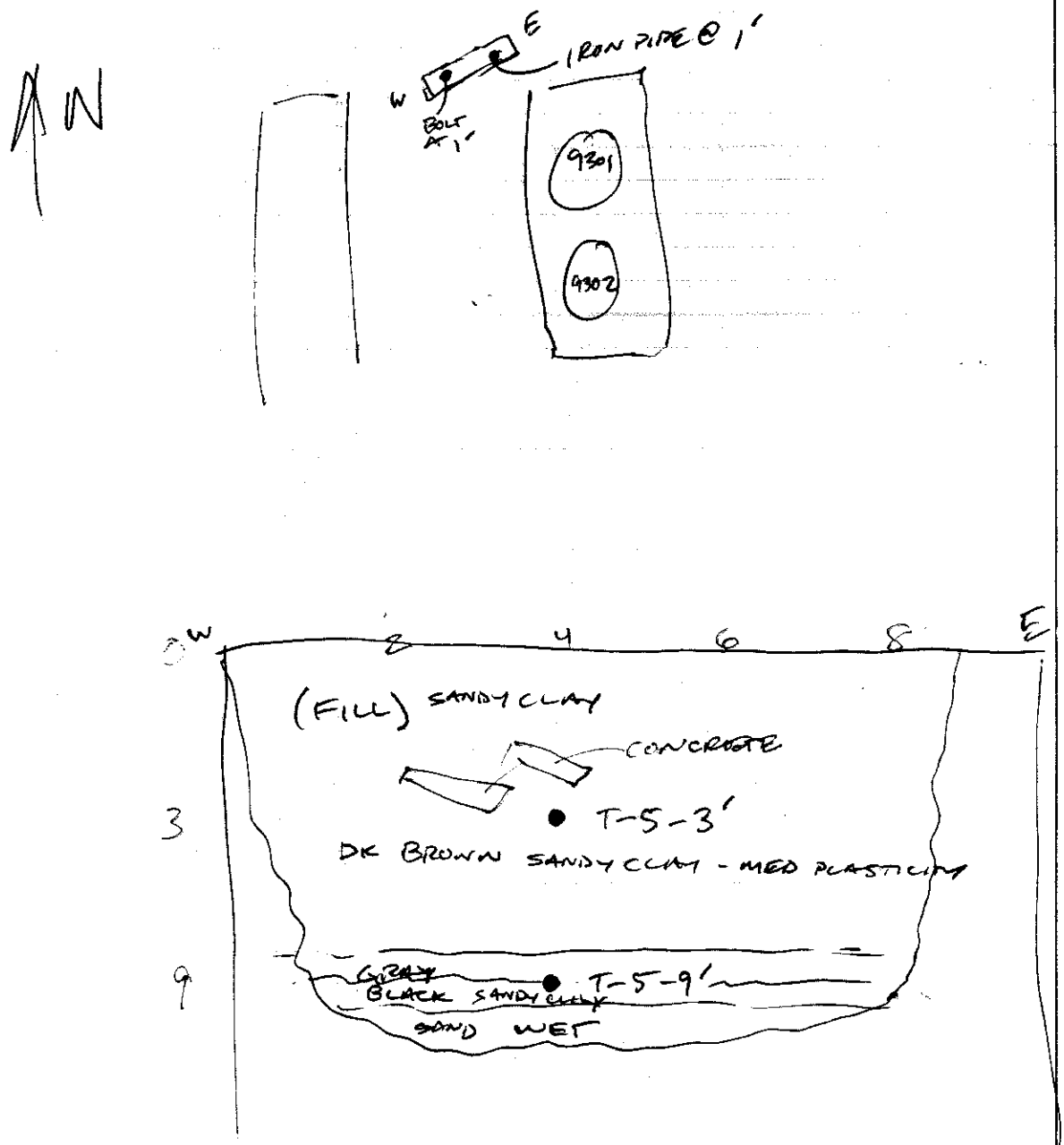
Checked By

File No.

Date 11-9-01

Date

Sheet of



GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading OHIO	C. Young
Date	**Contractor/Representative**		**Time Arrived**
11/9/01	GMX only		730
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
FRIDAY	MORTON	Peter Palena	
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	Mark Hemingway	Cold - Clear	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0730 on site.
Calibrate Equipment - YSI-610D and 2 OVM's
0850 Setting up at VAW09-20
0915 Start micro purging the well.
0935 Sample VAW09-20.
015 Deconed Equip - moved to VAW09-60
1100 having trouble maintaining a steady flow.
- Shut down and pulled the pump.
1115 Checked it out appears to be OK.
Replace tubing and try again.
1200 Still not working correctly. - pulled the pump & Called Mark Hemingway and told him about our status. Said to Rent another pump and Controll Box.
1220 go to lunch.
1240 Back on site.
1255 found the problem - bad connection in the pig tail Elect cord on the controll box.
- now purging water (micro purging at VAW09-60.
1315 ~~have~~ The pump has been working good.
Ready to collect the Sample.
1320 Collected the Sample.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	11/9/01

Observations/Remarks (continued): 1335 Deconned the Equipment, and loaded the truck. - Went to the trailer and repaired the flow thru cell, (Replaced the O-Ring) and put the Sample Chest inside the trailer.
1400 Re Calibrated the YSI 610-D -
1420 Went to Shipping & Receiving to see if our PPE arrived
1430 Not there - go to UAW 14-10.
1445 Began Micro purging.
1455 Stopped Because the YSI went dead.
1510 Preparing to micro purge.
1515 Start pump at UAW-14-10,
1520 going well -
1535 Collect the sample. all Parameters were Stable.
1555 Still filling Sample containers.
15 ~~amber~~ amber Jars and 5 Voas are The EPA Rep's - he has departed and asked us to fill them for him. he has gone to have Eric collect a soil Sample from the trench work. 1620 Decon Equipment.
1630 ANNE Hinkola on site. We went to dispose of the H_2O Waste.
1700 Start micro purging UAW-17-40
1738 Collect the H_2O Sample - no problems
1750 Decon the pump & E line.
1800 Load the Truck and go dispose of the H_2O.
1820 arrive at the trailer and start preparing the Samples for Shipment.

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Charles E Young
GEOMATRIX REPRESENTATIVE

☑ Continued on Next Page

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	11/9/01

Observations/Remarks (continued): 1900 Still preparing the Sample Coolers.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

Charles E. Gray
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading Ohio	C. Young
Date 11/10/01	Contractor/Representative		Time Arrived
Day of Week Saturday	Client	Observations Reported to Peter Palena	Time Departed
Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 on site. Calibrate Equipment.
0900 arrive at UAW-02-40 - Decon Equipment,
H2O level from TOC is 14.23
9:10 Set up and now micro purging.
9:15 OVM of Breathing Zone is 0.0 PPM
9:25 still purging - 950 ml PM.
9:35 Collect the Sample 11001256 and 11001256 MS-MSD.
1015 - all bottles are filled and preserved - put on ice -
1025 Took the Samples to the trailer and went to UAW-2-20,
Deconed the Equipment.
1050 Setting up to micro purge. OVM Reading per our Breathing Space is 0.2 PPM.
11:10 Start Micro purging UAW-2-20.
1125 all parameters are stable.
1130 Collect 11001257
1155 all Samples labeled and on ice.
1200 Took the Cooler to the trailer and locked it up. Went to lunch.
1215 Guard not there to let us out.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

Chuck E. Young
GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	11/10/01

Observations/Remarks (continued): 1235 departed for lunch.
1305 back on site - decon Equip very well and prepared 2 bottle sets.
1325 arrive at VAW-11-10 and opened it. took the H_2O level - on the well sampling sheet.
1355 Started micro purging the well. OVM Reading is 0.0 PPM - High Wind.
1430 Collect the sample. (Correction - 1425)
Note: Initally the water was light purple but cleared. always had a low turbidity.
1435 Ron W/ R & H, Todd - EPA, Eric Marsell and Anne Hiakoku are here observing.
Julie and I are sampling.
1600 We are at the trailer preparing the sample coolers and chain of custody sheets.
1700 have turned all samples over to Fed ex.
1720 Back at the Plant.
1735 Depart for Home Depot to get Plywood to cover the trench.
1810 Back on site with the plywood.
1830 Covered the trench.
Depart the site.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

Charles E. Young
GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

GEOMATRIX

DAILY FIELD REPORT

Page 1 of 1

Project Number	Project Name	Location	Engineer/Technician
1689	MORTON READING F1	READING, OHIO	E MANSELL
Date: 11-10-01	Contractor/Representative: EQUIPT		Time Arrived: 0700
Day of Week: SAT	Client: GEOMATRIX	Observations Reported to: PETER PALENA	Time Departed: 1900
Daily Field Report No.	Geomatrix Project Manager: M HEMINGWAY	Weather: PT CLOUDY - 40's - 50's	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☒ Other(s) TRENCH DIAGRAMS TRENCH-6 TRENCH-7

Unresolved Tests/Issues: (CONTINUOS AIR MONITORING AT TRENCH LOCATIONS IN BREATHING ZONE 0.0 ppm PID, 0.0 ppm H_2S, 0.0% LEL)

Observations/Remarks: 0700 ARRIVED ONSITE

0710 - CHARLES HOLDS H/S MTG

0720 - CALIBRATE PID # 2599 HAZCO — 104.6 ppm (100 ppm isobutylene)

0820 - START DIGGING TOP OF ASPHALT IN

0840 - PULLING BACK ASPHALT STARTING AT NORTHWEST CORNER OF TRENCH-6 (NW CORNER OF PARKING LOT)

0900 - MILD WIND OUT OF NORTH - CONTINUOS AIR MONITORING 0.0 ppm PID 0.0 ppm H_2S 0.0% LEL

0910 - WIND OUT OF NW

0955 - BACKHOE DOWN - NEEDS HYDRAULIC FLUID.

1005 - ERIK/ANNE FLAG TRENCH LOCATIONS

1010-1050 - REMOVE ASPHALT ENTIRE LENGTH OF T-6

1055 - BEGIN (RESUME) TRENCHING T-6

1130 - SOME COLLAPSE OCCURED AT ~22'-30' ON NORTH WALL (~1' THICK)

- TALK WITH RON & ANNE, DECIDE TO BACKFILL THE FIRST 30'-35' OF TRENCH TO PREVENT FURTHER COLLAPSE

1215 - BEGIN BACKFILL, 12" LIFTS BETWEEN COMPACTION

1255 - STOP BACKFILL - BACKHOE LEAKING HYDRAULIC OIL

1400 - RESUME TRENCHING, COLLECT SAMPLE 111001247 T-6-3' (THIS SAMPLE WAS AT INTERSECTION OF TWO TRENCHES)

1510 - COLLECT SAMPLE 111001248, T-6-10' - PID = 13.9 ppm IN BUCKET (TODD - EPA) SPLIT SAMPLE

1530 - BEGIN BACKFILL AND COMPACTION OF T-6 (30'-50') FROM NW SIDE

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

1600 GIVE SAMPLES TO ANNE FOR FED EX SHIPMENT (JULIE/CHARLES)

1730 FINISH BACKFILL TO SURFACE, CHARLES JULIE - COMES FOR PLYWOOD

1900 LEAVE SITE

Subject TRENCH – 6

Project No.

Task No.

By

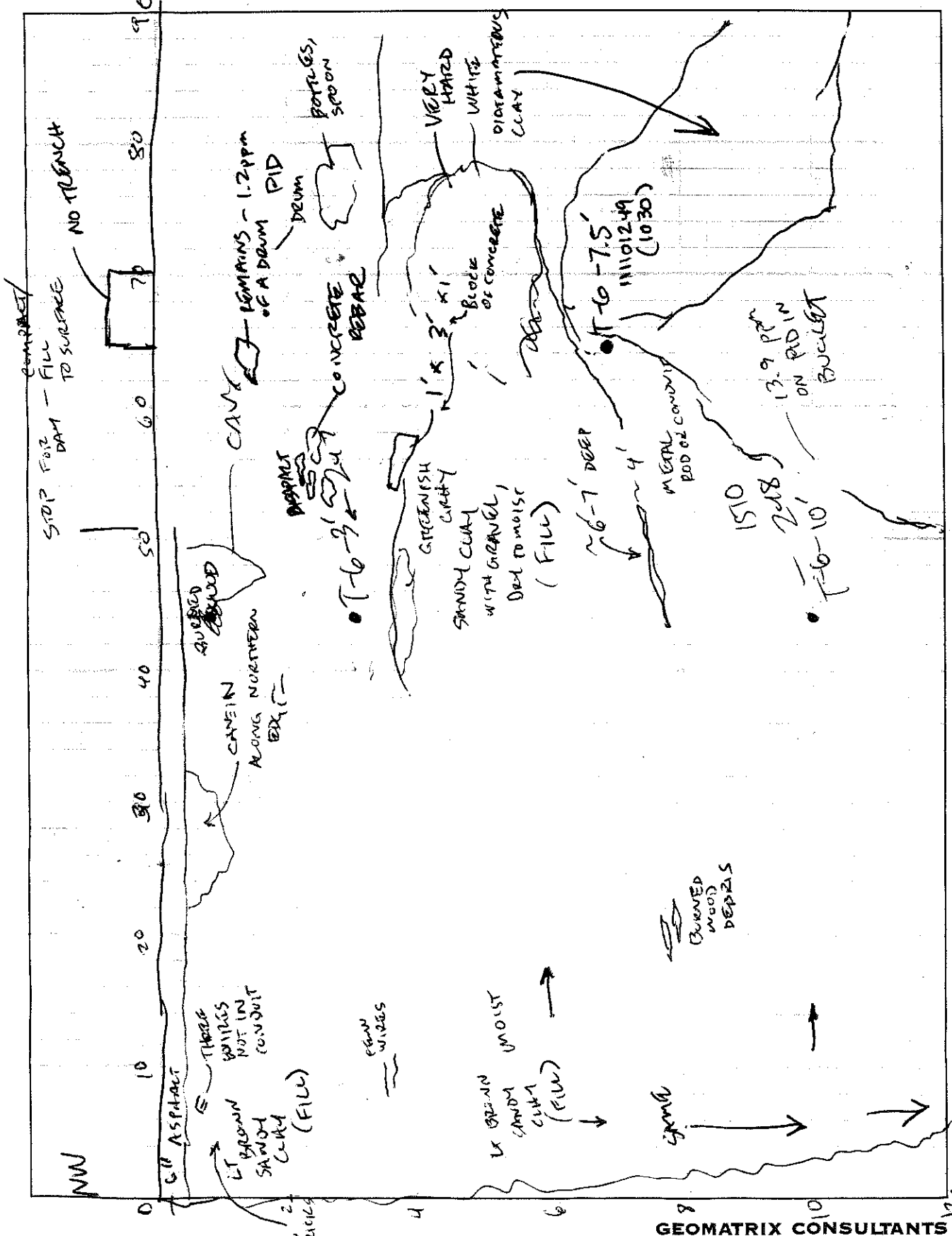
Checked By

File No.

Date 11-10-01

Date

Sheet of



TRENCH 6

GEOMATRIX CONSULTANTS

13.5

Project No. 7689

Task No. TRENCH 7

File No.

Sheet ____ of ____

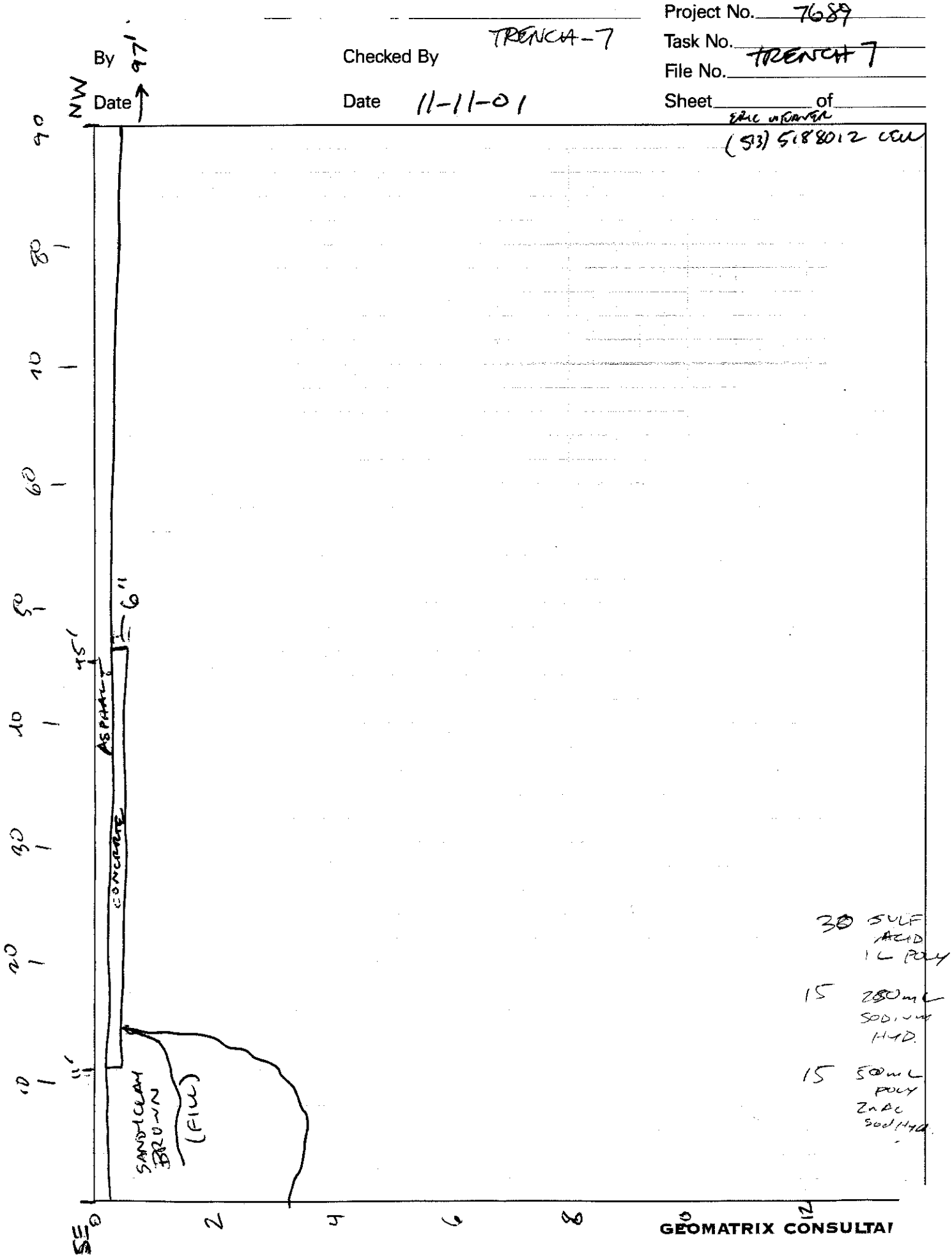
By

Date

Checked By TRENCH-7

Date 11-11-01

ERIC WURNER
(513) 5188012 CELL



GEOMATRIX CONSULTAI

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading OHIO	C. YOUNG
Date: 11/11/01	Contractor/Representative		Time Arrived: 740
Day of Week: Sunday	Client: MORTON	Observations Reported to: Peter Palena	Time Departed: 1900
Daily Field Report No.	Geomatrix Project Manager: MARK Heming Way	Weather: Cold, clear	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No / Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0740 arrive on site.
calibrate the instruments & Decon the Equipment.
0915 at UAW-11-80 preparing to collect the Equip blank.
0930 collect the Equip blank.
950 Finished collecting the blank.
go to the trailer and look at the 2 quarter work plan for information on UAW 21-30.
1000 arrive at UAW21-80 - Take H_2O level and install the pump at 69.0 feet.
1025 Start micropurging the well. OVM = 0.0 PPM
1100 collect the Sample. while Julie collects the Sample I have deconed the E-line.
Took the H_2O level from UAW-21-30 it was 24.64 bottom 28.62
1108 Start Bailing UAW 21-30 w/ a new 4" Plastic Bailer.
1120 Collected the bottled Sample.
1130 Put all samples on ice in the ice chest.
1135 Decon the pump & E-line.
1150 Dump H_2O waste in the sump.
1215 Depart for lunch
1240 Back on site. Prepare a Sample set.

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Chuck E Young
GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	11/11/01

Observations/Remarks (continued): 1310 Take H_2O level at VAW-3-20
1320 lower the pump on E-line.
1325 started micro purging the well.
1345 Sample time.
1405 filled all jars.
1415 Deconing Equipment. Julie making a sample set.
1426 Start micro purging VAW 4-20
1445 Collect the Sample.
1501 filled all jars. Put on ice.
1505 begin Deconning the Equipment.
1515 Julie making more sample sets.
1520 Put the samples in the trailer -
1530 Picked up Equip - all Clean.
1535 arrive at VAW-21-30
1545 start collecting the sample. Bailed Sample.
1610 finish collection
1615 Put sample on ice and place cooler in trailer.
1620 go to VAW15-20 Take H_2O level - 11.00
19.0 to bottom.
set up Equipment.
1940 Start micropurging the well.
1702 finish purging
1705 Collect the Sample.
1720 collected all bottles - put on ice.
1725 Decon Equipment
1740 Take H_2O level at VAW 15-30.
24.37 to H_2O, 46.49 to bottom.
1800 finish purging.
1805 Collect the Sample.
1820 filled all jars and put on ice.
1830 loaded the truck.
1840 unload truck.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

Chuck E. [signature]
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689 A	Rohm and Haas	11/11/01

Observations/Remarks (continued): 1900 Depart the site.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

Charles E Young

GEOMATRIX REPRESENTATIVE

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GEOMATRIX

11-11-01
SUNDAY

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	MORTON READING FI	11-11-01

Observations/Remarks (continued): 0700 ERIK/JULIE ARRIVE ONSITE. EQUIPT DOWN FOR ONE HOUR (7-8) TO FIX TIRE ON BACKHOE

0800 - BRING SECOND BACKHOE - CHARLIE/RANDY WILL USE THIS TO BREAK PAVEMENT - CALIBRATE PID HAZCO 25PM 102.6 ppm - 100 ppm ISOBUT

0830 - CHARLIE AND RANDY WORKING ON PARKING LOT IN VICINITY OF ANAMOLY "3" (REINFORCED CONCRETE)

0855 - RESUME T-6 @ 50' FROM NW SIDE OF TRENCH

0900 - WIND OUT OF SOUTH - 0915 PID 0.0 - LEL 0.0

0930 - PULLED EMPTY DRUM FROM ~3' BGS (T-6) ~62' FROM NW SIDE OF TRENCH
- DRUM CONTAINED SMALL BOTTLE WITH REDISH/BROWN LIQUID (~2 oz.)
- ALSO A FEW MASON JARS - APPEARS TO BE A MOLASSES LIKE LIQUID IN THE JARS -

1015 - FOUND BLACK WASTE WITH YELLOWISH BROWN LIQUID - STRONG ODOR, STOP TRENCHING - MOVE WASTE MATERIAL (1045) TO ROLLOFF

1030 - SAMPLE BLACK/YELLOWISH BROWN WASTE MATERIAL - 65' FROM NW SIDE OF TRENCH ~7.5' BGS 111101249 -

1120 - SMALL GAS SPILL IN TRENCH-7 WHILE CUTTING CONCRETE (NW END OF CONCRETE) ~~THRE~~ PUT DOWN VERMICULITE AND SHOVELED OUT

1200 - FINISH TRENCH-6 - DISCUSS BACKFILLING WITH RON & JOHN

1230 - LUNCH

1330 - BEGIN REMOVING CONCRETE FROM T-7 -

1430 - SET UP AT T-8 (SOUTH OF ANAMOLY I)

1500 (0'-1' - 0.0 ppm PID) - @ 2' BGS - ~1.5' ANGLE IRON ROD (LIKELY ANAMOLY)

↳ START TRENCHING - 1505 SAMPLE 111101271

1525 - SAMPLE T-8 -9' 111101272 PID = 0.0 ppm 1505 T-8-3' (PID = 0.0 ppm)

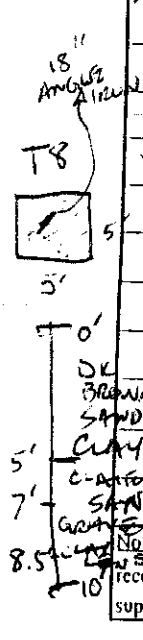
1535 - T-8 - TD = 10' 1545 - RON LANZKY LEAVES SITE

1600 - FILL T-8 - TAMP DOWN WITH BACKHOE

1630 - EQUIPT FINISHES FILLING TRENCHES IN PARKING LOT

1700 - EQUIPT LEAVES SITE - ERIK HELPS JULIE & CHARLIE GROUNDWATER SAMPLE

1900 LEAVE SITE



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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING F1	READING, OHIO	E. MANSELL
Date 11-12-01	**Contractor/Representative** —		**Time Arrived** 0700
Day of Week MONDAY	**Client** ROLM	**Observations Reported to** PETER PALENA	**Time Departed** 1930
Daily Field Report No.	**Geomatrix Project Manager** M. HEMINWAY	**Weather** SUNNY - 55°	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0700 ARRIVED ONSITE - PREPARE BOTTLES FOR SAMPLES
0800 - CHARLES HOLDS H&S MEETING
0915 - SET UP ON UAW19-80 - SAMPLE
0955 - SAMPLE UAW19-80 — 111201267
1035 - MOVED TO MW-EPA-3 - DECONED EQUIPMENT -
1105 - BEGAN PURGING - WELL HAS TOO MUCH SILT - COULD NOT ~~CONT~~ SUSTAIN CONSTANT FLOW RATE, WATER LEVEL DROPPED. REMOVED APPROXIMATELY 25 GALLONS - PUMPED DRY SEVERAL TIMES
1315 - STOPPED - PICKED UP EQUIPMENT -
1335 - CHARLES GOES OUT TO PICK UP LUNCH
1400 - SET UP ON UAW11-40 -1403 START PURGING.
1500 - CHARLES HAND BAILED UAW05-20, UAW06-20, UAW10-50, UAW10-80, UAW08-20, UAW22-20 - BAILED DRY
1455 - ERIC-JULIE SAMPLED UAW11-40 111201268 - AND ALSO COLLECTED BLIND DUPLICATE 111201266 - PUT FALSE SAMPLE OF 0805
1545 - PICKED UP EQUIPMENT AT UAW11-40 - MOVED TO UAW01-80
1615 - JULIE MAKES TWO MORE BOTTLE SETS
1630 - DECON EQUIPMENT - 1645 BEGIN PURGING UAW01-80
1700 - COLLECT SAMPLE AT UAW01-80 - 111201269
1720 - DECON EQUIPMENT - MOVE TO UAW05-20

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	MORTON READING FI	11-12-01

Observations/Remarks (continued): 1740 - COLLECTED SAMPLE WITH BAILER AT UAW05-20 - 111201270 -

1800 - BEGIN PREPARING SAMPLES FROM SUNDAY AND MONDAY FOR FEDEX SHIPPMENT (TOTAL OF 7 COOLERS) -

1930 - LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING	READING OHIO	EMANSELL
Date: 11-13-01	Contractor/Representative: —		Time Arrived: 0700
Day of Week: TUESDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 2000
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: SUNNY – 60°	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0700 ARRIVE ONSITE
0800 H&S MEETING – CHARLES, JULIE, ERIK – MAKE BOTTLE SETS
0930 ERIK & JULIE SET UP ON UAW18-20 – BEGIN PURGING @ 1000
1015 COLLECT SAMPLE 111301278 – UAW18-20
1030 MOVE TO MW-EPA-4 · DECON · EQUIPMENT – SET UP TO BEGIN MICROPURGE
1110 BEGIN PURGING MW-EPA-4 – SAMPLE 111301279 @ 1140
1215 – LUNCH (GROUNDWATER HIGH TURBIDITY)
1330 – SET UP ON MW-EPA-3 SAMPLE 111301280 @ 1415
1445 – SET UP ON UAW16-10 SAMPLE 111301281 @ 1540
1615 – SET UP ON UAW-25-20 – 1650 START PURGING
1725 – SAMPLE – 111301282
1740 – START PACKING COOLERS (6) FOR FED EX
2000 – LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number: 7689	Project Name: MORTON READING F1	Location: READING, OHIO	Engineer/Technician: E MANSELL
Date: 11-14-01	Contractor/Representative: —		Time Arrived: 0730
Day of Week: WEDNESDAY	Client: ROHM & HAAS	Observations Reported to: PIETER PALENA	Time Departed:
Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0700 - GO TO IGA FOR ICE / SUPPLIES
0730 - ARRIVE AT PLANT -
0800 - H&S MEETING - BEGIN MAKING BOTTLE SETS FOR TODAY AND TOMORROW - BAIL MW-EPA-2 DRY (5-GALLONS)
0930 - GO TO GRAINGER FOR SUPPLIES.
1020 - GET BACK TO PLANT - FINISH BOTTLE SETS FOR GW SAMPLES
1230 - SET UP ON UAW23-20 - 1240 BEGIN PURGING
1300 - UAW23-20 SAMPLE - 111401284 + MS/MSD
1320 - GO TO LUNCH
1350 - DECON EQUIPMENT, SET UP TO SAMPLE UAW20-60, MW-EPA-2
1505 - SAMPLE MW-EPA-2 (111401286)
1530 - TAKE EQUIPMENT / FIELD BLANK BETWEEN MW-EPA-2 & UAW20-60 - 111401285
1600 - START PURGING UAW20-60 - SAMPLE @ 1640
1730 - ERIC WALKER STOPS BY, SAID HE FOUND A FEW BOTTLES OF ACID PRESERVATIVE IN A DUMPSTER WITH ACID STILL IN THE BOTTLES. I TOLD HIM WE ONLY PUT EMPTY BOTTLES IN THE DUMPSTERS, AND APOLOGIZED FOR OUR OVERSITE AND WE TOLD HIM IN THE FUTURE WE WILL TRIPPLE RINSE ALL PRESERVATIVE BOTTLES AND DISPOSE OF THEM IN THE ROHM & HAAS LAB.
1800 - DUMP WATER
1900 - 2015 PACK SAMPLES

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E Mansell
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING F/	READING, OHIO	EMANUEL
Date: 11-15-01	Contractor/Representative:		Time Arrived: 0700
Day of Week: THURSDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1930
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: 65° - SUNNY	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 ARRIVE ONSITE - JULIE CALIBRATES YSI

0740 HEALTH & SAFETY MEETING

0830 - TRY TO CHANGE FLIGHT FROM TODAY TO TOMORROW (LEAVES 4:15 pm)

0915 - SET UP ON UAW24-70 -

1010 - SAMPLE UAW24-70 - CLP (111501288)

1020 - SET UP ON MW-EPA-1, DECON EQUIPMENT

1110 - SAMPLE MW-EPA-1 - CLP (111501289)

1120 - SET UP ON UAW07-20, DECON EQUIPMENT

1220 - SAMPLE UAW07-20 - APP IX (111501290)

1245 - LUNCH

1345 - SET UP TO SAMPLE LAW12-60, DECON EQUIP.

1418 - BEGIN PURGING LAW12-60 - pH IS HIGH, WILL RETURN LATER WITH LARGER TANK AND PUMP LARGER VOLUME OF WATER TO BRING THE pH DOWN

1430 - ERIK LEAVES SITE TO GET 2" HOSE FROM CENTRAL TOOL, JULIE SETS UP ON UAW13-20, DECONS EQUIPMENT

1540 - SAMPLE UAW13-20 - APP-IX (111501291)

1545 - SET UP ON UAW12-20 - APP-IX - SAMPLE @ 1620 (111501292)

1630 - SET UP TO PUMP LAW12-60 - PUMPING ~ 1.5 - 3 gpm, PUMPED DRY - ADJUST FLOWRATE TO ~1 GALLON PER MINUTE

- ~~PUMPED~~ ON 11-15-01 - JULIE PREPARE SAMPLES FOR FED EX

1830 - PUMPED ~200 GALLONS H_2O FROM LAW12-60 - pH IS AT 7.84

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	MORTON READING F1	11-15-01

Observations/Remarks (continued): 1845 - EMPTY TANK INTO SUMP THROUGH 2" HOSE

1850 HELP JULIE WITH SAMPLES,

1930 LEAVE FOR FED EX

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING FI	READING, OHIO	E MAYSELL
Date: 11-16-01	Contractor/Representative: —		Time Arrived: 0730
Day of Week: FRIDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1400
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: ~68° SUNNY	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0730 - ARRIVE ONSITE -

0800 - SET UP ON LAW12-60 - BEGIN PURGING - PURGED ~10 GALLONS AT ~2L/MIN - PH IS DOWN TO 7.63 - WATER LEVEL IS DOWN TO 26.22 -

0825 - GO START WATER LEVEL MEASUREMENTS AND WAIT FOR LAW12-60 TO RECOVER

1000 - WATER LEVEL @ LAW12-60 IS 19.62' BTOR, BEGIN MICRO PURGING FOR SAMPLE

1020 - SAMPLE LAW12-60 APP-IX - (111601293)

1030 - JULIE BEGINS PACKING SAMPLES, RENTAL EQUIPMENT, AND FIELD EQUIPMENT

1130-1305 - ERIK COLLECTS REMAINGING H_2O LEVELS

1310 - HELP JULIE FINISH PACKING

1400 - LEAVE SITE (CENTRAL TOOL & FED EX)

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GEOMATRIX REPRESENTATIVE

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WATER LEVEL MONITORING RECORD

GEOMATRIX

Project Name: Morton Reading FI Project and Task Number: 7689 A

Date: 11-16-01 Measured by: JS / ERM Instrument Used: Solinst

Note: For your convenience, the following abbreviations may be used.

P = Pumping I = Inaccessible D = Dedicated Pump
ST = Steel Tape ES = Electric Sounder MP = Measuring Point WL = Water Level

Well No.	Time	MP Elevation (feet)	Water Level Below MP (feet)	Water Level Elevation (feet)	Previous Water Level Below MP	Remarks
VAW21-30	0904		24.70			stick up
VAW21-80	0906		29.71			stick up
VAW01-30	0909		25.69			stick up
VAW01-80	0910		26.99			stick up
VAW25-20	0915		17.31			flush
VAW09-20	0924		21.60			stick up
VAW09-60	0927		21.92			stick up
VAW14-10	0932		9.13			stick up
VAW17-40	0934		12.57			stick up
VAW24-70	0939		39.05			flush
VAW19-80	0943		44.15			stick up
MW-EPA-3	0947		10.04			flush
VAW10-50	0951		40.83			flush
VAW10-80	0953		42.38			flush
VAW02-20	1136		12.60			FLUSH
VAW02-40	1134		14.68			FLUSH
VAW04-20	1142		13.35			FLUSH
VAW03-20	1145		13.07			FLUSH
VAW05-20	~~1153~~	1200	~~11.26~~	12.69		FLUSH
VAW06-20	1153		11.26			FLUSH
MW-EPA-1	1204		11.58			FLUSH
VAW08-20	1207		10.23			FLUSH
VAW07-20	1210		11.03			FLUSH
VAW12-20	1213		9.76			FLUSH
VAW13-20	1214		9.74			FLUSH
LAW12-60	~~19.07~~	11-15-01	19.07			FLUSH - NOT FULLY RECOVERED 11-16-01
VAW23-20	1222		22.31			FLUSH
VAW22-20	1225		11.93			FLUSH

ERM 11-26-01

(512) 293-5737

Forms(PF).007 (Revised 12/95)

WATER LEVEL MONITORING RECORD

GEOMATRIX

Project Name: MORTON READING, PA Project and Task Number: 7689 A

Date: 11-16-01 Measured by: JS/ERM Instrument Used: SOLINST

Note: For your convenience, the following abbreviations may be used.

P = Pumping I = Inaccessible D = Dedicated Pump
ST = Steel Tape ES = Electric Sounder MP = Measuring Point WL = Water Level

Well No.	Time	MP Elevation (feet)	Water Level Below MP (feet)	Water Level Elevation (feet)	Previous Water Level Below MP	Remarks
VAW15-50	1230		24.85			FLUSH
VAW15-20	1233		11.03			FLUSH
VAW18-20	1237		11.09			FLUSH
VAW16-10	1240		9.51			FLUSH
VAW11-40	1246		17.75			FLUSH
VAW11-10	1249		8.12			FLUSH
MW EPA-2	1255		10.02			FLUSH
VAW20-60	1257		38.95			FLUSH
MW EPA-4	1302		15.66			FLUSH

Forms(PF).007 (Revised 12/95)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading OHio	C. Young
Date 12/4/01	Contractor/Representative		Time Arrived 12:30
Day of Week Tuesday	Client Morton	Observations Reported to Peter Palena	Time Departed 1830
Daily Field Report No.	Geomatrix Project Manager Mark Hemingway	Weather Cloudy - wet.	Travel Time (hours) —
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 1230 arrived on site. C.A. Stempfley Contractor, Inc. is on site - 3 People - Spreading asphalt into the trenchs. the asphalt is going over The computed subbase - the asphalt is about 2" thick. Rick Stempfley said it wont be ready to drive over until tommorrow. There is a pile of gravel and two roll off boxes located at the Eastern end of the parking lot. I asked Rick about the Gravel. He said Erik Walker said to put the Gravel where it is now. Erik said it would have to be tested before it could be hauled off. 1330 Contacted Erik Walker. he did not know that the gravel was Clean. It was brought here to fill the trenches with. Erik asked if we could have it hauled to the gravel area just North of the decon pad. I told him I would see about getting it moved.
1400 The back hoe has already been demoted. Spoke with Chris Shocker w/ Eqmp, Inc. - he said he could have a front end loader here tomorrow to move and spread the gravel.
The workers put cones around the trenches and departed the site.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	12/4/01

Observations/Remarks (continued): 1500 The 1000 Gallon poly Tank has been delivered. 1530 Erik Mansell on site.
- have put the stream guage together - Mounted on a 2X 6 X 10 Treated board.
1600 Cleaning the trailer and disposing of Cardboard Boxes.
1830 Depart the site.

Charla E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING F1	READING, OHIO	EMANSELL
Date	**Contractor/Representative**		**Time Arrived**
12-5-01	H.C. NUTTING		0645
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
WEDNESDAY	ROHM	PETER PALENA	1945
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. HEMINGWAY		
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0645 ARRIVE ONSITE - PLACE CONES AROUND LOCATIONS IN PARKING LOT.

0730 - CHARLES DOES H&S MEETING

0810 - SET UP AT DP30 - 20' TD

0915 - FINISH DP30 - HOLE OPEN TO 17' BGS - FILL WITH BENT CHIPS

0920 - SET UP AT DP31 - 18' - TD

0955 - SAMPLE DP31-15' 120501294

1020 - SET UP ON DP32

1100 - SET UP ON DP33

1155 - EQUIPMENT BLANK APP-1X (SET UP ON DP-34)

1245 - LUNCH

1330 - SET UP ON DP35

1400 - SET UP ON DP36 -

1430 - SAMPLE DP36 @ 19' BGS (120501298)

1500 - SET UP ON DP37

1540 - SAMPLE DP37-19' + BLIND DUPLICATE (120501297) (120501296)

1545 - SET UP ~~ON SAMPLE PURGE~~ EMA 12-5-01 DP38

1620 - SAMPLE DP38 @ 14.5' BGS + MS/MSD (120501299)

1740 - FINISH PATCHING HOLES WITH ASPHALT PATCH

1800 - PACK SAMPLES FOR FED EX

1945 - LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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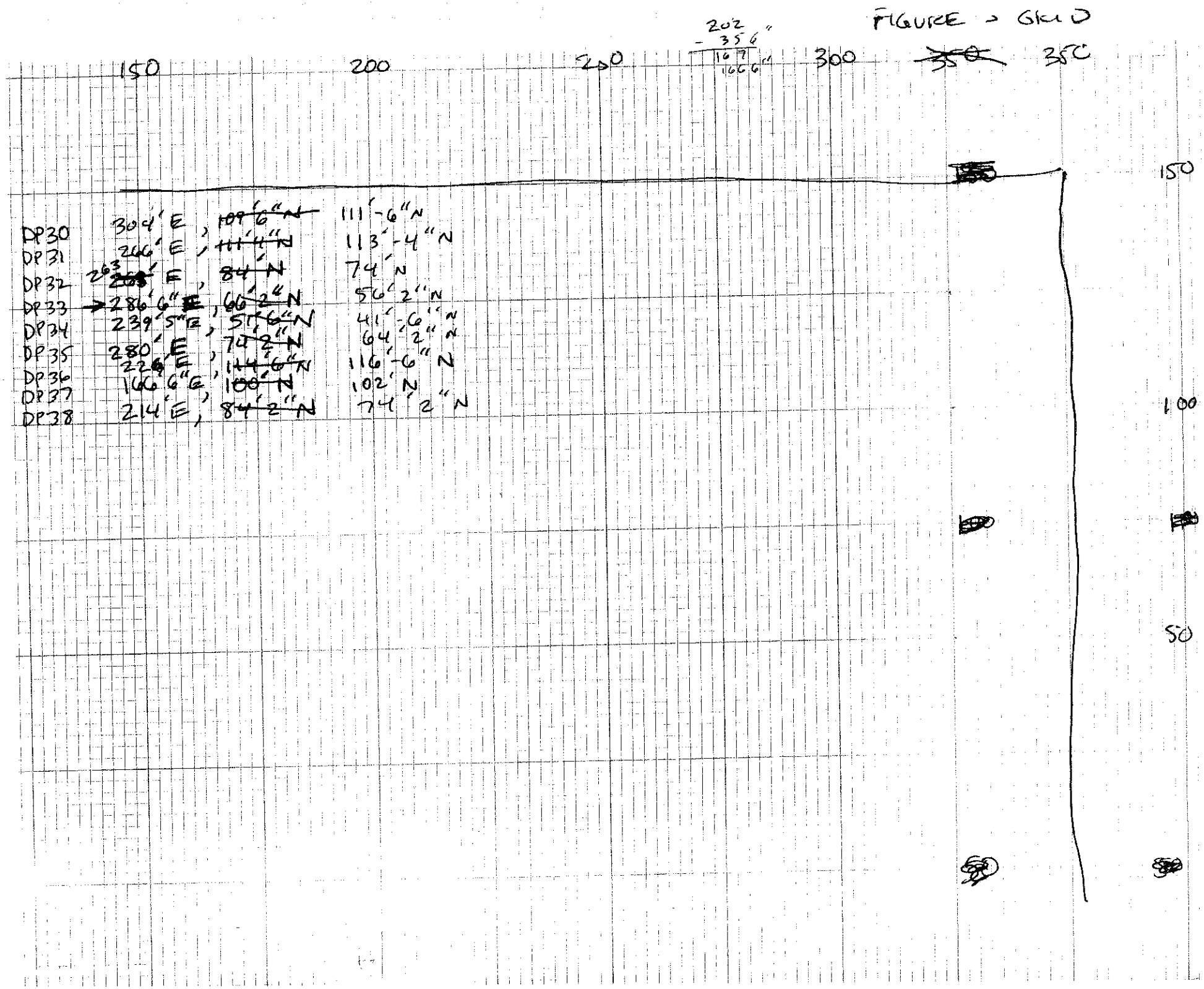
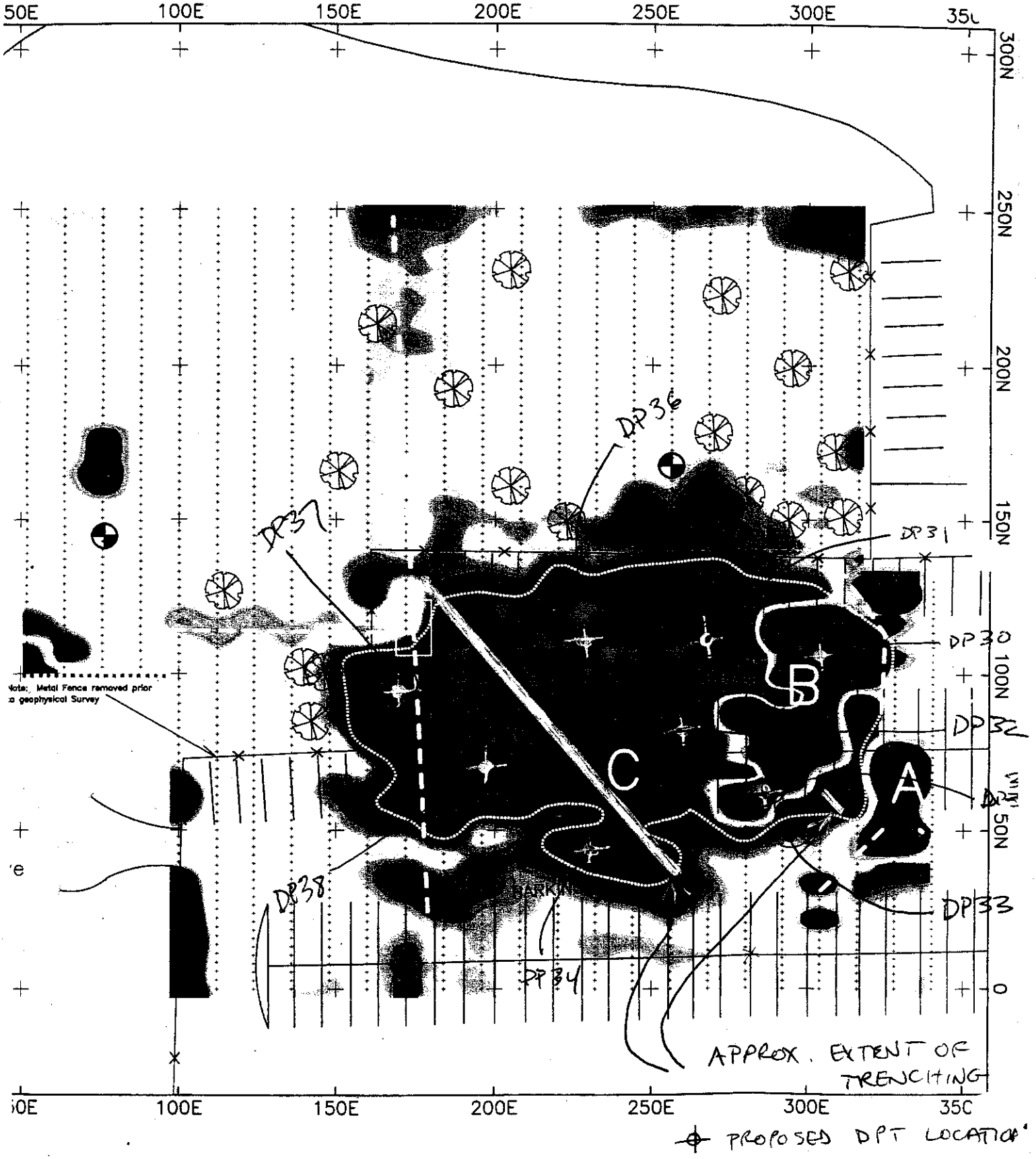
FIGURE → GRID



DP30	304' E,	~~109' 6" N~~	111'-6" N
DP31	266' E,	~~111' 4" N~~	113'-4" N
DP32	263' ~~265'~~ E,	~~84' N~~	74' N
DP33	→ 286' 6" E,	~~66' 2" N~~	56' 2" N
DP34	239' 5" E,	~~51' 6" N~~	41'-6" N
DP35	280' E,	~~74' 2" N~~	64' 2" N
DP36	226' E,	~~114' 6" N~~	116'-6" N
DP37	166' 6" E,	~~100' N~~	102' N
DP38	214' E,	~~84' 2" N~~	74' 2" N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C
A
Note: Metal Fence removed prior to geophysical Survey
APPROX. EXTENT OF TRENCHING
PROPOSED DPT LOCATION

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading OHio	C. Gong
Date: 12/5/01	Contractor/Representative: HC Nutting		Time Arrived: 6:45
Day of Week: WED	Client	Observations Reported to: Peter Palena	Time Departed
Daily Field Report No.	Geomatrix Project Manager: Mark Hemingway	Weather: Pt. Cloudy - dry - 55°F	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0645 arrive on site. - filled out the tailgate Safety meeting form.
0715 HC Nutting on site. 2 - men both for Geoprobe.
0730 Had Steve Vaught sign a Hot work permit.
0740 Erik Mansell and HC Nutting depart for the parking lot to start the Geoprobe work.
0815 Went to the Hardware Store to get fittings for the flow totalizer.
0922 Erik Weaver on site w/ HC Nutting to start the Drawdown tests.
10:00 Have opened the two Wells at UAW-02-20 and UAW-02-40 and took the Static H_2O levels.
UAW-02-20 is - 11.73 from toc.
UAW-02-40 is - 14.31 from toc.
Erik Weaver is looking a Gate Valve to the Green 350 poly tank. Rolled the 1800 Gal poly tank over to the work area.
1035 Have lowered the pump into UAW-02-20.
1040 The cord wont plug into the generator because of the wrong plug.
10:50 Erik W. departed the site to get the right Generator.

Charles E. Gong
GEOMATRIX REPRESENTATIVE

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	12/5/01

Observations/Remarks (continued): Called Equip Inc. to check on the front end loader - Cris Shocker said it should be here soon.
1350 HC Nutting back on site w/ the New generator - set up Equip.
1423 Start pumping at 2.0 GPM.
1522 Stepped the pump up to 5.0 GPM and began 2nd step of the draw-down.
1525 adjusted the flow to 5.0 GPM using a 5 Gallon bucket and timing the totalizer meter.
1623 finished Step 2 now adjusting the flow to 10 GPM.
1626 Correction: adjusted the flow to 9.5 GPM using a 5 Gal bucket and timing the totalizer meter.
1725 finished the step 3 and unplugged the pump and turned the generator off.
1726 Started Step 4 - Recharge readings.
1735 Eric Weaver has departed the site.
1824 finished Step 4.
1915 in trailer finishing up work - Erik is packing samples and doing the Chain of Custody.
all Equipment has been deconed and set aside untill morning.

Charles E. Gory
GEOMATRIX REPRESENTATIVE

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INFLUENCE WELL
UAW-02-40

12/5/01

STEP- DRAWDOWN TABLE

Well ID	Pumping Time	Actual Time	Water Level	Flow Rate	Comments
UAW 02-20	1	14 :23	11 .73	2.0 GPM	14.19
Step-1	2	14 :24	12 .11	" GPM	
	3	14 :25	12 .18	" GPM	
	4	14:26	12 .19	" GPM	
	5	14 :27	12 .19	" GPM	
	6	14 :28	12 .19	2.0 GPM	
	7	14 :29	12 .20	" GPM	
	8	14 :30	12 .20	" GPM	
	9	14 :31	12 .20	" GPM	
	10	14 :32	12 .20	" GPM	14.19
	12	14 :34	12 .20	2.0 GPM	
	14	14 :36	12 .21	" GPM	
	16	14 :38	12 .21	" GPM	
	18	14 :40	12 .21	" GPM	
	20	14 :42	12 .21	" GPM	14.19
	25	14 :47	12 .21	2.0 GPM	
	30	14 :52	12 .21	" GPM	
	35	14 :57	12 .21	" GPM	14.19
	40	15 :02	12 .21	" GPM	
	50	15 :12	12 .22	" GPM	14.19
	60	15 :22	12 .22	2.0 GPM	14.19
Step-2	1	15 :24	12 .97	5.0 GPM	14.19
	2	15 :25	12 .98	" GPM	
	3	15 :26	12 .98	" GPM	
	4	15 :27	12 .99	" GPM	
	5	15 :28	12 .99	" GPM	
	6	15 :29	12 .99	5.0 GPM	14.19
	7	15 :30	12 .99	" GPM	
	8	15 :31	12 .99	" GPM	
	9	15 :32	13 .0	" GPM	
	10	15 :33	13 .0	" GPM	
	12	15 :35	13 .01	" GPM	14.19
	14	15 :37	13 .01	5.0 GPM	
	16	15 :39	13 .01	" GPM	
	18	15 :41	13 .02	" GPM	14.19
	20	15 :43	13 .02	" GPM	
	25	15 :48	13 .04	" GPM	"
	30	15 :53	13 .04	" GPM	"
	35	15 :58	13 .05	" GPM	
	40	16 :03	13 .05	5.0 GPM	"
	50	16 :13	13 .07	" GPM	14.19
	60	16 :23	13 .09	" GPM	14.19
Step 3	1	16 :26	14 .29	~~10.0 GPM~~	9.5 GPM
	2	16 :27	14 .33	" GPM	
	3	16 :28	14 .35	" GPM	
	4	16 :29	14 .37	" GPM	
	5	16 :30	14 .39	GPM	

17,54

STEP- DRAWDOWN TABLE

UAW 02-40

Well ID	Pumping Time	Actual Time	Water Level	Flow Rate	Comments
UAW-2-20	6	16 :31	14 .40	9.5 GPM	14.19
Step-3	7	16 :32	14 .41	" GPM	
	8	16 :33	14 .42	" GPM	
	9	16 : 34	14 .44	" GPM	14.19
	10	16 :35	14 .46	" GPM	
	12	16 :37	14 .48	" GPM	
	14	16 :39	14 .51	9.5 GPM	14.19
	16	16 :41	14 .52	" GPM	
	18	16 : 43	14 .52	" GPM	
	20	16 : 45	14 .53	" GPM	
	25	16 :50	14 .56	GPM	14.56
	30	16 :55	14 .59	9.5 GPM	
	35	17 :00	14 .60	" GPM	14.19
	40	17 :05	14 .63	GPM	
	50	17 :15	14 .70	GPM	
	60	17 :25	14 .74	9.5 GPM	14.19
Step-4	1	17 :25	14 .70	GPM	
Recharge	2	17 :26	12 .01	GPM	
	3	17 :27	11 .97	GPM	11.97
	4	17 :28	11 .95	GPM	
	5	17 :29	11 .92	GPM	
	6	17 :30	11 .90	GPM	
	7	17 : 31	11 .89	GPM	
	8	17 : 32	11 .88	GPM	
	9	17 : 33	11 .86	GPM	
	10	17 : 34	11 .85	GPM	
	12	17 : 36	11 .83	~~GPM~~	Amazing ?
	14	17 : 38	11 .92	GPM	
	16	17 : 40	11 .92	GPM	
	18	17 : 42	11 .92	GPM	
	20	17 : 44	11 .91	GPM	
	25	17 : 49	11 .91	GPM	
	30	17 : 54	11 .90	GPM	
	35	17 : 59	11 .89	GPM	
	40	18 :04	11 .89	GPM	
	50	18 :14	11 .87	GPM	
	60	18 :24	11 .85	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	MORTON READING, F1	READING, OHIO	E. MANSELL
Date 12-6-01	**Contractor/Representative** H.C. NUTTING		**Time Arrived** 0655
Day of Week THURSDAY	**Client** ROHM & HAAS	**Observations Reported to** PETER PALENA	**Time Departed**
Daily Field Report No.	**Geomatrix Project Manager** M. HEMMINGWAY	**Weather** RAIN	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0655 - ARRIVE ONSITE

0710 - CHARLES HAS H&S MEETING IN TRAILOR WITH H.C NUTTING

0800 - CLEAN UP TRAILOR

1100 - ERIK, CHARLES, JAY (H.C. NUTTING) GO INSTALL STREAM GAUGE ON MILL CREEK, WEST BANK (ADJACENT TO NW CORNER OF PLANT)

1130 - STREAM GAUGE → 1.2 ft. (CURRENTLY RAINING)

1200 - LUNCH

1300 - ERIK MEASURES DPT LOCATIONS IN PARKING LOT BASED ON JOHN L.'S GEOPHYSICAL GRID

DP30 – 304'E, 111'-6"N
DP31 – 266'E, 113'-4"N
DP32 – 263'E, 74'N
DP33 – 286'-6"E, 56'-2"N
DP34 – 239'5"E 41'-6"N
DP35 – 280'E 64'-2"N
DP36 – 226'E, 116'-6"N
DP37 – 166'6"E 102'N
DP38 – 214'E, 74'2"N

1530 - READ STREAM GAUGE - 2.3 ft - TAKE PHOTOGRAPH

1630 - ERIK LEAVES SITE - AIRPORT

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7689	Rohm and Haas	Reading OHIO	C. YOUNG
Date: 12/6/01	Contractor/Representative: HC NUTTING		Time Arrived: 655
Day of Week: Thurs	Client: MORTON	Observations Reported to: Peter Palena	Time Departed: 1920
Daily Field Report No.	Geomatrix Project Manager: MARK Hemingway	Weather: RAIN	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 655 on site. 715 held Tail Gate Safety meeting.
730 go out to VAW-02-40 and begin prepping Equip — Static H_2O level at VAW-02-40 is 14.20.
Static H_2O level at VAW-02-20 is 11.90.
8:10 Start Step 1 of the pump test. Flow Rate is 4.0 GPM
9:08 finished Step 1 — light Rain.
9:09 Start Step-2. Turned the flow rate up to 8.0 GPM.
922 Stopped the test due to hard rain — began Removing the pump and E-lines. VAW-02-20 is capped — The vaught is filling w/ H_2O — Run off from the Parking lot.
926 The pump is Stuck in VAW-02-40. not able to Remove it — Run off H_2O is entering the Well. — Forced the Well Cap on to the Well over the Water Hose and Elect Cords. did not Stop the water but did slow it down.
940 Erik is going to get some pipe So we Can Section it Together and try to push the pump down some and try to free it up.
1005 Erik back on site with the Steel ½ Galv. Pipe —

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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1645 Erik departed Site.

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	12/6/01

Observations/Remarks (continued): 10:10 Sectioned the pipe together and dislodged the pump. 1020 Removed the pump and Closed the Well. Will come back and Pump the Well after the rain quts And the water pond resuds.
1130 Have deconed the eqing And we are now going to install the stream guage in mill Creek.
1215 Back on site. going to lunch.
1330 Back on site. Start Moving Equipment to VAW20-60.
1415 all Set up. Static H_2O level in VAW20-60 is 38.29. Static at EPA Well -2 is 8.97. - HC nutting went to get the gas Can to fill the generator.
1435 Start the Drawdown test
1535 The flow was increased from 2.0 GPM to 5.0 GPM. - The Valve is Very hard to turn and it is hard to adjust for a small increase.
1541 The H_2O has drawn down to fast. ~~Shut the~~ adjusted the flow down to 2.5 GPM and Shut the pump off to let the H_2O level recover. - Called Phil and told him about the Well Pumping off so fast. he Said to Continue pumping at ~2.5 GPM.
1622 Started Pumping at 2.5 H_2O level is 47.10
1721 Started Step-3 and adjusted the flow to 3.0 GPM.
1731 The H_2O is drawing down fast.
1742 The Well ran dry. - Started the Recovery Step. 1822 It is Raining again and H_2O has begun flowing into the Vaught. topped the test and removed

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Charles E Gu[illegible]
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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7689	Rohm and Haas	12/6/01

Observations/Remarks (continued): The Pump and capped the Well.
No Run off entered the Well.
1855 decoded the equip - now moving everything to the decon pad.
1920 Depart the Site.

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GEOMATRIX REPRESENTATIVE

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12/6/01

STATIC H_2O – 11.80
INFLUENCE WELL
UAW-02-20

STEP- DRAWDOWN TABLE

Well ID	Pumping Time	Actual Time	Water Level	Flow Rate	~~Comments~~
UAW-2-40	1	STATIC –	14.20	4.0 GPM	11.90
	2	8:10	14.44	GPM	
	3	8:11	14.36	GPM	
	4	8:12	14.37	GPM	
	5	8:13	14.37	4.0 GPM	
	6	8:14	14.38	GPM	
	7	8:15	14.38	GPM	
	8	8:16	14.38	GPM	
	9	8:17	14.37	GPM	11.90
	10	8:18	14.36	4.0 GPM	
	12	8:20	14.36	GPM	
	14	8:22	14.36	GPM	11.90
	16	8:24	14.37	GPM	
	18	8:26	14.37	GPM	
	20	8:28	14.37	GPM	
	25	8:33	14.35	4.0 GPM	11.90 RAIN!
	30	8:38	14.34	GPM	
	35	8:43	14.35	GPM	
	40	8:48	14.35	4.0 GPM	11.90
	50	8:58	14.35	GPM	
	60	9:08	14.38	4.0 GPM	11.90
Step-2	1	9:09	14.49	8.0 GPM	11.90
	2	9:10	14.49	GPM	
	3	9:11	14.49	GPM	
	4	9:12	14.49	GPM	
	5	9:13	14.49	8.0 GPM	11.90
	6	9:14	14.49	GPM	
	7	9:15	14.49	GPM	
	8	9:16	14.49	GPM	11.90
	9	9:17	14.49	GPM	
	10	9:18	14.49	GPM	
	12	9:20	14.49	GPM	11.90
	14	9:22	14.49	GPM	Stop test!
	16	9:24	.	GPM	See field
	18	9:26	.	GPM	notes.
	20	9:28	.	GPM	
	25	9:33	.	GPM	
	30	9:38	.	GPM	
	35	9:43	.	GPM	
	40	9:48	.	GPM	
	50	9:58	.	GPM	
	60	10:08	.	GPM	
Step-3	1	:	.	GPM	
	2	:	.	GPM	
	3	:	.	GPM	
	4	:	.	GPM	
	5	:	.	GPM	

Bottom of UAW-2-40 is 45.94

12/6/01

STEP- DRAWDOWN TABLE

EPA-2 Well

Well ID	Pumping Time	Actual Time	Water Level	Flow Rate	Comments
UAW20-60	1	14 :35	38 .29	2.0 GPM	8.97
Step-1	2	14 :36	42.94	2.0 GPM	8.95
Bottom	3	14 :37	42.96	GPM	
15 61.35	4	14 :38	42.95	GPM	
	5	14 :39	42.95	GPM	
	6	14 :40	43.05	GPM	
	7	14 :41	43.12	GPM	
	8	14 :42	43.19	2.0 GPM	8.95
	9	14 :43	43.25	GPM	
	10	14 :44	43.35	GPM	
	12	14 :46	43.48	GPM	
	14	14 :48	43.60	GPM	
	16	14 :50	43.70	GPM	8.93
	18	14 :52	43.81	2.0 GPM	8.92
	20	14 :54	43.90	GPM	8.92
	25	14 :59	44.05	GPM	8.91
	30	15 :04	44 .20	2.0 GPM	8.91
	35	15 :09	44 .41	GPM	8.90
	40	15 :14	44.57	GPM	
	50	15 :24	44.85	2.0 GPM	
	60	15 :34	45.05	GPM	8.90
Step-2	1	15 :35	MISSED	5 GPM	
	2	15 :36	49.35	GPM	8.90
	3	15 :37	51 .04	GPM	
	4	15 :38	52.51	GPM	
	5	15 :39	53.12	GPM	
	6	15 :40	54.45	GPM	
	7	15 :41	56.65	GPM	8.90 — Shut off
Step-2	1	16 :22	47.10	2.5 GPM	
	2	16 :23	47.35	GPM	
	3	16 :24	47.41	GPM	
	4	16 :25	47.51	GPM	
	5	16 :26	47.70	GPM	
	6	16 :27	47.81	GPM	8.90
	7	16 :28	47.96	2.5 GPM	
	8	16 :29	48.13	GPM	
	9	16 :30	48.30	GPM	
	10	16 :31	48.42	GPM	
	12	16 :33	48.78	2.5 GPM	8.89
	14	16 :35	49.02	GPM	
	16	16 :37	49.26	GPM	
	18	16 :39	49.58	GPM	
	20	16 :41	49.75	GPM	
	25	16 :46	50.10	GPM	
	30	16 :51	50.87	GPM	
	35	16 :56	51.26	2.5 GPM	8.89
	40	17 :01	51.88	GPM	

12/6/01

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STEP- DRAWDOWN TABLE

EPA-2 Well

Well ID	Pumping Time	Actual Time	Water Level	Flow Rate	Comments
UAW20-60	50	17 : 11	51.88	2.5 GPM	8.89
	60	17 : 21	52.47	GPM	
Step-3	1	17 : 22	MISSED	3.0 GPM	8.89
	2	17 : 23	53.80	GPM	8.89
	3	17 : 24	54.81	GPM	
	4	17 : 25	55.50	GPM	
	5	17 : 26	55.80	3.0 GPM	8.89
	6	17 : 27	56.30	GPM	
	7	17 : 28	57.02	GPM	
	8	17 : 29	57.80	GPM	
	9	17 : 30	58.34	GPM	
	10	17 : 31	58.89	GPM	
	12	17 : 33	59.22	GPM	8.89
	14	17 : 35	59.24	GPM	
	16	17 : 37	59.24	GPM	
	18	17 : 39	59.24	GPM	
	20	17 : 41	59.24	GPM	
	~~25~~	17 : 42	RAN. DRY	GPM	Pumped off
	30	:	.	GPM	
	35	:	.	GPM	
	40	:	.	GPM	
	50	:	.	GPM	
	60	:	.	GPM	
Step-4	1	17 : 43	missed	GPM	
Recovery	2	17 : 44	missed	GPM	E-Line Tangled up.
	3	17 : 45	MISSED	GPM	
	4	17 : 46	56.0	GPM	8.91
	5	17 : 47	52.84	GPM	
	6	17 : 48	50.70	GPM	
	7	17 : 49	49.70	GPM	
	8	17 : 50	48.48	GPM	
	9	17 : 51	47.60	GPM	8.91
	10	17 : 52	46.84	GPM	
	12	17 : 54	43.90	GPM	
	14	17 : 56	42.50	GPM	
	16	17 : 58	41.49	GPM	
	18	18 : 00	40.65	GPM	8.92
	20	18 : 02	40.19	GPM	
	25	18 : 07	39.30	GPM	
	30	18 : 12	39.0	GPM	
	35	18 : 17	38.88	GPM	8.92
	40	18 : 22	38.65	GPM	
	50	RAIN — water going		GPM	in vaught.
	60	Shut off and pulled		GPM	the pump
		No : Run off entered the		GPM	well
		:	.	GPM	
		:	.	GPM	

GEOMATRIX

DAILY FIELD REPORT

Project Number: 7689	Project Name: Rohm and Haas	Location: Reading OHIO	Engineer/Technician: C. Young
Date: 12/7/01	Contractor/Representative:		Time Arrived: 700
Day of Week: FRIDAY	Client: Rohm and Haas	Observations Reported to: Peter Pelera	Time Departed: 1430
Daily Field Report No.	Geomatrix Project Manager: MARK Hemingway	Weather: DRY - cool -	Travel Time (hours)
Reviewed By: -	Date Reviewed	Contractor Received Copy of This Report: ☐ Yes ☐ No	Contractor Received All Attachments: ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 700 on site. Jon w/ HC Nutting on site. prepare project Health and safety meeting form. 720 finish the safety meeting.
740 Preparing Equip -
8:16 Start the step draw down on UAW-02-40' - put the pump at the bottom and started the test - pumping 3. gpm.
829 No sig - H_2O drop. Readjusted to 6.0 GPM - 835 No significance H_2O drop. adjusted it to 9.5 GPM - Pump is maxed out. No drop. H_2O Started at 14:10 at 3 GPM and Ended at 14:50 at 9.5 GPM. 1 hour later.
940 Stopped the test, But Continue to pump H_2O - want to remove 2000-2500 Gallons of H_2O because of the rain water that entered the well during yesterday's Rain Storm when the pump was stuck in the well.
1430 Have pumped 2700 Gallons of H_2O out of UAW-02-40.
Departed the site. all H_2O has been disposed of - all Equip cleaned and loaded. HC Nutting & GMX departed the site. Charles E Young

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GEOMATRIX REPRESENTATIVE

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2/7/01 (512) 585-1767 (512) 585-7147

STEP- DRAWDOWN TABLE

Pumping Well

H_2O level
VAW-02-20

Well ID	Pumping Time	Actual Time	Water Level	Flow Rate	~~Comments~~
VAW-02-40	1	8 : 16	14.10	3.0 GPM	11.57
	2	8 : 17	14.22	GPM	
	3	8 : 18	14.28	GPM	
	4	8 : 19	14.32	GPM	
	5	8 : 20	14.32	GPM	
	6	8 : 21	14.32	GPM	
	7	8 : 22	14.32	3.0 GPM	11.58
	8	8 : 23	14.32	GPM	
	9	8 : 24	14.32	GPM	
	10	8 : 25	14.32	GPM	
	12	8 : 27	14.32	GPM	
	14	8 : 29	14.32	3.0 GPM	11.58
	1	8 : 30	14.34	6.0 GPM	
	2	8 : 31	14.34	GPM	
	3	8 : 32	14.34	GPM	
	4	8 : 33	14.34	GPM	
	5	8 : 34	14.34	GPM	
	1	8 : 35	14.36	7.5 GPM	
	2	8 : 36	14.36	GPM	
	3	8 : 37	14.36	GPM	
	4	8 : 38	14.36	GPM	11.58
	5	8 : 39	14.36	GPM	
	6	8 : 40	14.36	GPM	
	1	8 : 41	14.39	9.5 GPM	MAX Pump RATE
	2	8 : 42	14.44	GPM	
	3	8 : 43	14.46	GPM	
	4	8 : 44	14.47	GPM	
	5	8 : 45	14.47	GPM	11.59
	6	8 : 46	14.48	GPM	
	7	8 : 47	14.48	9.5 GPM	
	8	8 : 48	14.48	GPM	
	9	8 : 49	14.48	GPM	
	10	8 : 50	14.48	GPM	
	12	8 : 52	14.48	GPM	
	14	8 : 54	14.48	GPM	11.59
	16	8 : 56	14.48	GPM	
	18	8 : 58	14.48	9.5 GPM	
	20	9 : 00	14.48	GPM	
	25	9 : 05	14.48	GPM	
	30	9 : 10	14.48	GPM	
	35	9 : 15	14.49	GPM	
	40	9 : 20	14.49	9.5 GPM	11.60
	50	9 : 30	14.49	GPM	11.60
	60	9 : 40	14.50	GPM	11.60
		:	.	GPM	
		:	.	GPM	
		:	.	GPM	

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-15-01	Chain of Custody Number: 076430
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI ; Reading, OH	Carrier/Waybill Number: 8272 3716 8700		
Contract/Purchase Order/Quote No.: 7689 A			

Matrix / Containers & Preservatives / Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP - SVOC (Ext)	CLP - PCB/Pest	CLP - Cn, Sulfide	CLP - Metals	Tot Metals, Diss Metals	TOC	Alk, TDS, TSS, Cl, Al, Fe, Fe	NH3, NO3, NO2, PO4	Special Instructions/ Conditions of Receipt
111501288	11-15-01	1010		X			6	3	2		1	1	X	X	X	X	X	X	X	X	~~Filter gs~~
111501289	11-15-01	1110		X			6	3	2		1	1	X	X	X	X	X	X	X	X	Dissolved Metals
																					Samples are unfiltered;
																					Please filter in lab.

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-15-01	1915	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-16-01	Chain of Custody Number: 076435
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512)494-0333 / 0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI; Reading, OH	Carrier/Waybill Number: 8272 3716 9062		
Contract/Purchase Order/Quote No.: 7689 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		App IX - VOC	App IX - SVOC (BNA)	App IX - PCB, Pest	App IX - Tr. conn. Fe	App IX - Cn, Sulfide	TDL	App IX - Metals	Diss. Metals*	Tot. Metals, TSS, Alk, Cl, Fe 3+, Al	NH3, NO3, NO2, PO4			Special Instructions/ Conditions of Receipt
111601293	11-16-01	1020		X				8	3	2	3	1	1		X	X	X	X	X	X	X	X	X	X			*Dissolved Metals
Trip Blank	11-16-01	—		X							1				X												Sample is unfiltered.
																											Please Filter in Lab
																											Empty preservative vials returned to lab for disposal.

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-15-01	1345	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-14-01	Chain of Custody Number: 076425
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell	Lab Contact: A. Danford	
Project Name and Location (State): 7687 A; Morton Reading FI	Carrier/Waybill Number: ~~8269~~ 8272 3716 8695		
Contract/Purchase Order/Quote No.: 7687 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): CLP - VOC	CLP-SVOC (BN's)	CLP - PCB/Pest.	CLP - Metals	CLP - Cn	CLP - Sulfide						Special Instructions/ Conditions of Receipt
111401283	11-14-01	0935		X							3				X											
111401284	11-14-01	1300		X							3				X											
111401285	11-14-01	1530		X				4		1	3	1	1		X	X	X	X	X	X						
111401286	11-14-01	1505		X							3				X											
111401287	11-14-01	1640		X							3				X											
Trip Blank	11-14-01	—		X																						

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	11-14-01	2015	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample, CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Chromatrix	Project Manager: M. Hemingway	Date: 11-15-01	Chain of Custody Number: 076434
Address: 1211 W. 6th St, Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333/ 0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: L. Mansell	Lab Contact: A. Danford	
Project Name and Location (State): Motor Reading PI; Reading, OH	Carrier/Waybill Number: 8272 3716 8700		
Contract/Purchase Order/Quote No.: 1687 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): App IX-Sulfide (EPA)	App IX-PCB, Pest	App IX-Dioxins, Furans	App IX-Cn, Sulfide	App IX-Metals	TDS	Dissolved Metals	2 HNO_3, 2 HNO_3, PO	PL	Special Instructions/ Conditions of Receipt
11150129 2	11-15-01	1620		X			8	3	2		1	1	1	X	X	X	X	X	X	X	X	Dissolved Metals Sample is unfiltered. Please filter in lab.

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	11-15-01	1915	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-15-01	Chain of Custody Number: 076433
Address: 1211 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-1337 / 0331	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell	Lab Contact: A. Danford	
Project Name and Location (State): Morton Reading FI; Reading, OH	Carrier/Waybill Number: 8272 3716 8700		
Contract/Purchase Order/Quote No.: 71891 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		App IX-SVOC (Lab)	App IX-Pest.	App IX-Cyanides	App IX-Cn, Sulfide	App IX-Metals	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, Sn, V, Zn	Mg, Na, K, Ca	TOC	Diss. Metals (Lab filtered)				Special Instructions/ Conditions of Receipt
																											Dissolved Metals
111501291	11-15-01	1540		X				8	3	2		1	1		X	X	X	X	X	X	X	X	X				Sample is unfiltered; Please filter in lab.

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-15-01	1915	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report. PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-15-01	Chain of Custody Number: 076432
Address: 1211 W. 6th St, Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0373 / 0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell	Lab Contact: A. Danford	
Project Name and Location (State): Morton Reading FI, Reading, OH	Carrier/Waybill Number: 8272 3716 8700		
Contract/Purchase Order/Quote No.: 71187 A			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		CLP-VOC	App IX-VOC	App IX-Sval (BMS)	App IX-PCB, Pest	App IX-Cn, Sulfide	App IX-Metals	Diss. Metals	Diss. TSS, Cl, F, Alk	NH_3, NO_3, NO_2, SO_4	TOC	App IX-Dioxin Furans	CLP/APP IX-VOC	Special Instructions/ Conditions of Receipt
111501288	11-15-01	1010		X							3				X												Dissolved Metals
111501289	11-15-01	~~1010~~ 1110		X							3				X												Sample is unfiltered.
111501290	11-15-01	1220		X				8	3	2	3	1	1			X	X	X	X	X	X	X	X	X	X		Please filter in lab.
111501291	11-15-01	1540		X							3					X											
111501292	11-15-01	1620		X							3					X											
Trip Blank	11-15-01	—		X							1															X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-15-01	1915	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-14-01	Chain of Custody Number: 076428
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E. Mansell; Lab Contact: A. Danford		
Project Name and Location (State): ~~7689 A~~ Morton Reading FI	Carrier/Waybill Number: 8272 3716 8695		
Contract/Purchase Order/Quote No.: 7689			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC (BNA)	CLP-PCB, Pest.	CLP-Metals	CLP-Cn, Sulfide	Alk, TDS, TSS, Fe2+, Fe3+, N, Al	NH3, NO3, NO2, PO4	TOC	Tot Metals, Diss Metals	Special Instructions/ Conditions of Receipt
111401286	11-14-01	1505		X			6	3	2		1	1	X	X	X	X	X	X	X	X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per Contract

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-14-01	2015	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 11-14-01	Chain of Custody Number: 076429
Address: 1214 W. 6th St., Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: E Mansell; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading FI, Reading, OH	Carrier/Waybill Number: 8272 3716 8695		
Contract/Purchase Order/Quote No.: 7687 A			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP - SVOC (BNA)	CLP - PCB, Post.	CLP - Metals	CLP - Cn, Sulfide	Alk, TDS, TSS, Cl, FC2, FC3, AT	NH3, NO2, NO3, PO4	Total Metals, Dissolved Metals	TOC	Special Instructions/ Conditions of Receipt
111401287	11-14-01	1640		X			6	3	2		1	1	X	X	X	X	X	X	X	X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other Per Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	11-14-01	2015	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Summary of Soil and Groundwater Analytical Results Tables

TABLE 1
PHASE 2-SOIL ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	Volatile Organic Compounds (mg/kg)																
		2-Butanone	Acetone	Acrylonitrile	Benzene	Carbon disulfide	Chlorobenzene	Chloromethane	Dichlorodifluoro-methane	Ethylbenzene	Isopropylbenzene	Methyl acetate	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Xylenes (total)
DP01-2'	7/24/2001	0.64 J	15	na	<1.4	<1.4	<1.4	<2.8	<1.4	5.7	0.24 J	<2.8	1.3 J	<1.4	<1.4	<1.4	<1.4	50
DP01-9.5'	7/24/2001	<1	<1	na	<0.26	<0.26	<0.26	<0.52	<0.26	0.16 J	<0.26	<0.52	<0.52	0.086 J	<0.26	<0.26	<0.26	1.4
DP02-2'	7/24/2001	<0.018	0.015 J	na	<0.0044	<0.0044	<0.0044	<0.0088	<0.0044	<0.0044	<0.0044	<0.0088	<0.0088	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088
DP02-9.5'	7/24/2001	<0.022	0.0093 J	na	<0.0055	<0.0055	0.013	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
DP03-2'	7/24/2001	<0.019	<0.019	na	<0.0047	<0.0047	<0.0047	<0.0093	<0.0047	<0.0047	<0.0047	<0.0093	<0.0093	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093
DP03-8.5'	7/24/2001	<0.018	<0.018	na	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	<0.0045	<0.0045	<0.009	<0.009	<0.0045	<0.0045	<0.0045	<0.0045	<0.009
DP05-1'	7/25/2001	<0.018	<0.018	na	<0.0046	<0.0046	<0.0046	<0.0091	<0.0046	<0.0046	<0.0046	<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091
DP05-8.5'	7/25/2001	<0.017	<0.017	na	<0.0044	<0.0044	<0.0044	<0.0087	<0.0044	<0.0044	<0.0044	<0.0087	<0.0087	<0.0044	<0.0044	<0.0044	<0.0044	<0.0087
DP07-9'	7/26/2001	<0.018	<0.018	na	<0.0046	<0.0046	<0.0046	<0.0091	<0.0046	<0.0046	<0.0046	<0.0091	<0.0091	<0.0046	<0.0046	<0.0046	<0.0046	<0.0091
DP08-6'	7/26/2001	<0.023	0.007 J	na	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.011
DP08-11'	7/26/2001	<0.02	<0.02	na	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049	<0.0049	<0.0098	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098
DP09-12'	7/27/2001	<0.019	4.1	na	<0.0048	0.2	<0.0048	<0.0095	<0.0048	<0.0048	<0.0048	0.07	<0.0095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095
DP10-2'	7/27/2001	0.0037 J	0.0091 J	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	na	na	na	<0.0048	<0.0048	0.00056 J	<0.0048	<0.0095
DP10-10'	7/27/2001	0.17 J B	<1.1	<5.3	<0.27	0.18 J	<0.27	<0.27	<0.27	0.13 J	na	na	na	<0.27	<0.27	2.4	<0.27	0.32 J
DP10-10' Blind Dup	7/27/2001	0.17 J B	<1.1	<5.3	<0.27	0.095 J	<0.27	<0.27	<0.27	0.084 J	na	na	na	<0.27	<0.27	3.8	<0.27	0.2 J
DP12-1.5'	7/28/2001	<0.016	0.0019 J	na	<0.004	<0.004	<0.004	<0.008	<0.004	<0.004	<0.004	<0.008	<0.008	<0.004	<0.004	<0.004	<0.004	<0.008
DP12-9'	7/28/2001	<0.021	<0.021	na	<0.0052	<0.0052	<0.0052	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.0052	<0.01
DP13-3'	7/29/2001	na	0.0085 J	<0.11	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	na	na	na	<0.0053	<0.0053	<0.0053	<0.0053	<0.011
DP13-11'	7/29/2001	na	<21	<110	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	na	na	na	5.7 B	<5.3	16	<5.3	<11
DP14-3'	7/29/2001	na	<0.89	<4.5	<0.22	1.5	<0.22	<0.22	<0.22	<0.22	na	na	na	0.18 J B	<0.22	0.076 J	<0.22	<0.45
DP14-9'	7/29/2001	na	<1	<5.2	<0.26	0.89	<0.26	<0.26	<0.26	<0.26	na	na	na	0.23 J B	<0.26	0.76	<0.26	<0.52
DP15-2'	7/29/2001	na	0.01 J	<0.097	0.0017 J	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	na	na	na	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097
DP15-9'	7/29/2001	na	<1.2	<6.2	<0.31	0.22 J	<0.31	<0.31	<0.31	<0.31	na	na	na	0.7 B	<0.31	0.44	<0.31	<0.62
DP16-2.8'	7/30/2001	na	<0.022	<0.11	<0.0055	<0.0055	0.0043 J	<0.0055	<0.0055	<0.0055	na	na	na	0.0014 J B	<0.0055	<0.0055	<0.0055	<0.011
DP16-12.5'	7/30/2001	na	<49	<250	<12	<12	1.5 J	<12	<12	6.2 J	na	na	na	11 J B	<12	150	<12	24 J
DP17-3'	7/30/2001	na	<1	<5.2	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	na	na	na	0.27 B	<0.26	0.063 J	<0.26	0.045 J
DP17-13'	7/30/2001	na	0.52 J	1.1 J	0.67 J	0.95 J	0.81 J	<1.5	<1.5	1.7	na	na	na	0.41 J B	<1.5	35	<1.5	9.1
DP18-2'	7/30/2001	na	<0.02	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0099	<0.0099	<0.005	<0.005	<0.005	<0.005	<0.0099
DP18-14.5'	7/30/2001	na	<0.019	na	<0.0049	<0.0049	0.00053 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0097	<0.0097	0.0015 J B	<0.0049	<0.0049	<0.0049	<0.0097
DP19-2'	7/30/2001	na	0.02 J	na	<0.0059	<0.0059	<0.0059	<0.0059	0.0032 J	<0.0059	<0.0059	0.0024 J	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.012
DP19-13'	7/30/2001	na	<0.023	na	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.011
DP20-2'	7/30/2001	na	<0.02	na	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0019 J	<0.0099	<0.005	<0.005	<0.005	<0.005	<0.0099
DP20-14.5'	7/30/2001	na	<1	na	<0.26	<0.26	0.079 J	<0.26	<0.26	<0.26	<0.26	<0.52	<0.52	0.25 J B	<0.26	<0.26	<0.26	<0.52
DP23-2.5'	8/1/2001	<0.025	<0.025	na	<0.0062	<0.0062	<0.0062	<0.012	<0.0062	<0.0062	<0.0062	<0.012	<0.012	<0.0062	<0.0062	<0.0062	<0.0062	<0.012
DP23-9'	8/1/2001	<0.021	<0.021	na	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011
DP25-2.5'	8/7/2001	<0.021	0.0045 J	na	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.011
DP25-2.5' Blind Dup	8/7/2001	<0.019	0.0032 J	na	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047	<0.0047	<0.0094	<0.0094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094
DP25-7.5'	8/7/2001	<0.018	0.0025 J	na	<0.0044	<0.0044	<0.0044	<0.0089	<0.0044	<0.0044	<0.0044	<0.0089	<0.0089	<0.0044	<0.0044	<0.0044	<0.0044	<0.0089
STR11-2'	8/20/2001	<0.019	<0.019	na	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048	<0.0048	<0.0096	<0.0096	<0.0048	0.0026 J	<0.0048	<0.0048	<0.0096
STR11-9'	8/20/2001	<0.018	<0.018	na	<0.0045	<0.0045	<0.0045	<0.0089	<0.0045	<0.0045	<0.0045	<0.0089	<0.0089	<0.0045	<0.0045	<0.0045	<0.0045	<0.0089

TABLE 1
PHASE 2-SOIL ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	Volatile Organic Compounds (mg/kg)																
		2-Butanone	Acetone	Acrylonitrile	Benzene	Carbon disulfide	Chlorobenzene	Chloromethane	Dichlorodifluoro-methane	Ethylbenzene	Isopropylbenzene	Methyl acetate	Methylcyclohexane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Xylenes (total)
STR11-9' Blind Dup	8/20/2001	<0.019	<0.019	na	<0.0047	<0.0047	<0.0047	<0.0093	<0.0047	<0.0047	<0.0047	<0.0093	<0.0093	<0.0047	0.0016 J	<0.0047	<0.0047	<0.0093
UAW16-10-2'	8/22/2001	0.0039 J	0.013 J	na	<0.0057	<0.0057	0.0092	<0.011	<0.0057	<0.0057	<0.0057	<0.011	0.00082 J	<0.0057	<0.0057	<0.0057	<0.0057	<0.011
UAW16-10-5.5'	8/22/2001	0.0035 J	0.013 J	na	<0.0061	<0.0061	0.032	<0.012	<0.0061	<0.0061	<0.0061	<0.012	0.0028 J	<0.0061	<0.0061	<0.0061	<0.0061	<0.012
UAW18-20-1'	8/23/2001	<1	1.3	na	<0.26	<0.26	<0.26	<0.52	<0.26	<0.26	<0.26	<0.52	<0.52	<0.26	<0.26	<0.26	<0.26	<0.52
UAW18-20-15'	8/23/2001	<0.019	0.0029 J	na	<0.0047	0.0018 J	0.014	<0.0095	<0.0047	<0.0047	<0.0047	<0.0095	<0.0095	<0.0047	<0.0047	0.0015 J	<0.0047	<0.0095

J - Estimated result. Result is less than the reporting limit.

B - Estimated result. Result is less than the reporting limit.

na - Not analyzed

SAMPLE LOCATION - Direct Push (DP), Soil Boring (STR) or Monitoring Well (UAW) Identification Number and Depth (feet) Below Ground Surface

TABLE 2
PHASE 2-SOIL ANALYTICAL RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS, PCBs, and PESTICIDES
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	*Semivolatile Organic Compounds (mg/kg)*																	
		1,2-Dichlorobenzene	1,4-Dichlorobenzene	3-Methylphenol	4-Methylphenol	Acenaphthene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Ethylhexyl) phtha	Chrysene	Di-n-octyl phthalate	Diethyl phthalate	Fluoranthene	Fluorene
DP01-2'	7/24/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP01-9.5'	7/24/2001	<1.5	<1.5	na	<1.5	<1.5	na	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP02-2'	7/24/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.07 J	<0.38	<0.38	<0.38	<0.38	<0.38
DP02-9.5'	7/24/2001	<0.41	<0.41	na	<0.41	<0.41	na	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
DP03-2'	7/24/2001	<0.39	<0.39	na	<0.39	<0.39	na	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP03-8.5'	7/24/2001	<0.35	<0.35	na	<0.35	<0.35	na	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
DP05-1'	7/25/2001	<0.39	<0.39	na	<0.39	<0.39	na	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP05-8.5'	7/25/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP07-9'	7/26/2001	<0.39	<0.39	na	<0.39	<0.39	na	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP08-6'	7/26/2001	<0.42	<0.42	na	<0.42	<0.42	na	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
DP08-11'	7/26/2001	<0.39	<0.39	na	<0.39	<0.39	na	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP09-12'	7/27/2001	0.13 J	sv	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.072 J	<0.38	<0.38	<0.38	<0.38	<0.38
DP10-2'	7/27/2001	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	0.16 J	<0.37	<0.37	<0.37	<0.37	<0.37
DP10-10'	7/27/2001	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP10-10' Blind Dup	7/27/2001	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	0.89 J	<1.5	<1.5	<1.5	<1.5	<1.5
DP12-1.5'	7/28/2001	<0.34	<0.34	na	<0.34	<0.34	na	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
DP12-9'	7/28/2001	<0.41	<0.41	na	<0.41	<0.41	na	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
DP13-3'	7/29/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	0.07 J	<0.39	0.086 J	<0.39	<0.39	0.16 J	0.076 J	<0.39	<0.39	0.14 J	<0.39
DP13-11'	7/29/2001	<0.39	<0.39	<0.39	<0.39	0.069 J	<0.39	0.18 J	0.46	0.45	0.49	0.25 J	0.23 J	0.26 J	0.47	<0.39	<0.39	1.1	0.063 J
DP14-3'	7/29/2001	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	6.5 J	<35	<35	<35	<35	<35
DP14-9'	7/29/2001	<1.5	<1.5	<1.5	<1.5	<1.5	0.25 J	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
DP15-2'	7/29/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	0.23 J	0.064 J	0.29 J	<0.38	0.13 J	<0.38
DP15-9'	7/29/2001	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
DP16-2.8'	7/30/2001	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
DP16-12.5'	7/30/2001	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	26	<19	<19	<19	<19	<19
DP17-3'	7/30/2001	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
DP17-13'	7/30/2001	21 J	<22	5.4 J #	5.4 J #	<22	3.9 J	<22	<22	<22	<22	<22	<22	26	<22	<22	<22	<22	<22
DP18-2'	7/30/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	0.16 J	0.19 J	0.25 J	0.12 J	0.097 J	<0.38	0.2 J	<0.38	<0.38	0.37 J	<0.38
DP18-14.5'	7/30/2001	<0.36	<0.36	na	<0.36	<0.36	na	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
DP19-2'	7/30/2001	<0.4	<0.4	na	<0.4	<0.4	na	<0.4	0.11 J	0.12 J	0.2 J	0.089 J	0.078 J	0.46	0.14 J	<0.4	<0.4	0.27 J	<0.4
DP19-13'	7/30/2001	<0.36	<0.36	na	<0.36	<0.36	na	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.062 J	<0.36
DP20-2'	7/30/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	0.1 J	0.085 J	0.11 J	<0.38	<0.38	<0.38	0.099 J	<0.38	<0.38	0.25 J	<0.38
DP20-14.5'	7/30/2001	0.15 J	0.062 J	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
DP23-2.5'	8/1/2001	<0.42	<0.42	na	<0.42	<0.42	na	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
DP23-9'	8/1/2001	<0.43	<0.43	na	<0.43	<0.43	na	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
DP25-2.5'	8/7/2001	<0.41	<0.41	na	<0.41	<0.41	na	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
DP25-2.5' Blind Dup	8/7/2001	<0.37	<0.37	na	<0.37	<0.37	na	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37

TABLE 2
PHASE 2-SOIL ANALYTICAL RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS, PCBs, and PESTICIDES
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	*Semivolatile Organic Compounds (mg/kg)*																	
		1,2-Dichlorobenzene	1,4-Dichlorobenzene	3-Methylphenol	4-Methylphenol	Acenaphthene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	bis(2-Ethylhexyl) phtha	Chrysene	Di-n-octyl phthalate	Diethyl phthalate	Fluoranthene	Fluorene
DP25-7.5'	8/7/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
STR11-2'	8/20/2001	<0.4	<0.4	na	<0.4	<0.4	na	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
STR11-9'	8/20/2001	<0.39	<0.39	na	<0.39	<0.39	na	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
STR11-9' Blind Dup	8/20/2001	<0.39	<0.39	na	<0.39	<0.39	na	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
UAW16-10-2'	8/22/2001	<0.38	<0.38	na	<0.38	<0.38	na	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
UAW16-10-5.5'	8/22/2001	<0.36	<0.36	na	<0.36	<0.36	na	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.13 J	<0.36	<0.36	<0.36	<0.36	<0.36
UAW18-20-1'	8/23/2001	<0.4	<0.4	na	<0.4	<0.4	na	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
UAW18-20-15'	8/23/2001	<0.41	<0.41	na	<0.41	<0.41	na	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41

TABLE 2
PHASE 2-SOIL ANALYTICAL RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS, PCBs, and PESTICIDES
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	*Semivolatile Organic Compounds (mg/kg)*				*PCBs (mg/kg)*		*Pesticides (mg/kg)*								
		Indeno(1,2,3-cd)pyrene	Phenanthrene	Phenol	Pyrene	Aroclor 1254	Aroclor 1260	beta-BHC	gamma-Chlordane	Chlorobenzilate	4,4'-DDE	4,4'-DDT	Endosulfan sulfate	Endrin aldehyde	Endrin ketone	Methoxychlor
DP01-2'	7/24/2001	<0.38	<0.38	<0.38	<0.38	<0.038	<0.038	<0.02	<0.02	na	<0.02	<0.02	<0.02	<0.02	<0.02	<0.038
DP01-9.5'	7/24/2001	<1.5	<1.5	<1.5	<1.5	<0.039	0.016 J	<0.0099	<0.0099	na	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.019
DP02-2'	7/24/2001	<0.38	<0.38	<0.38	<0.38	0.038	<0.038	<0.0039	<0.0039	na	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0076
DP02-9.5'	7/24/2001	<0.41	<0.41	<0.41	<0.41	<0.041	<0.041	<0.0021	<0.0021	na	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0041
DP03-2'	7/24/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
DP03-8.5'	7/24/2001	<0.35	<0.35	<0.35	<0.35	<0.035	<0.035	<0.0018	<0.0018	na	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0035
DP05-1'	7/25/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
DP05-8.5'	7/25/2001	<0.38	<0.38	<0.38	<0.38	<0.038	<0.038	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0038
DP07-9'	7/26/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
DP08-6'	7/26/2001	<0.42	<0.42	<0.42	<0.42	<0.042	<0.042	<0.0022	<0.0022	na	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	0.0017 J
DP08-11'	7/26/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
DP09-12'	7/27/2001	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.0039	<0.0039	na	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0076
DP10-2'	7/27/2001	<0.37	<0.37	<0.37	<0.37	<0.037	<0.037	<0.0019	na	<0.0037	<0.0019	<0.0019	<0.0019	<0.0019	na	<0.0037
DP10-10'	7/27/2001	<1.5	<1.5	<1.5	<1.5	<3.8	<3.8	<0.2	na	<0.38	<0.2	<0.2	<0.2	<0.2	na	<0.38
DP10-10' Blind Dup	7/27/2001	<1.5	<1.5	<1.5	<1.5	<0.38	<0.38	0.0038 J	na	<0.0075	<0.0039	<0.0039	<0.0039	<0.0039	na	<0.0075
DP12-1.5'	7/28/2001	<0.34	<0.34	<0.34	<0.34	<0.034	<0.034	<0.0035	<0.0035	na	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0068
DP12-9'	7/28/2001	<0.41	<0.41	<0.41	<0.41	<0.041	<0.041	<0.0021	<0.0021	na	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0041
DP13-3'	7/29/2001	<0.39	<0.39	<0.39	0.13 J	<0.039	<0.039	<0.002	<0.002	<0.39	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
DP13-11'	7/29/2001	0.22 J	0.61	<0.39	0.85	<3.9	<3.9	<2	na	<0.39	<2	<2	<2	<2	na	<3.9
DP14-3'	7/29/2001	<35	<35	<35	<35	<69	<69	<0.89	na	<1.7	<0.89	<0.89	<0.89	<0.89	na	<1.7
DP14-9'	7/29/2001	<1.5	<1.5	<1.5	<1.5	<75	<75	<0.39	na	<0.75	<0.39	<0.39	<0.39	<0.39	na	<0.75
DP15-2'	7/29/2001	<0.38	0.21 J	0.075 J	0.11 J	<1.9	<1.9	<0.39	na	<0.76	<0.39	<0.39	<0.39	<0.39	na	<0.76
DP15-9'	7/29/2001	<1.6	<1.6	<1.6	<1.6	<40	<40	<0.02	na	<0.04	<0.02	<0.02	<0.02	<0.02	na	<0.04
DP16-2.8'	7/30/2001	<0.35	<0.35	<0.35	<0.35	<0.035	<0.035	<0.0018	na	<0.35	<0.0018	<0.0018	<0.0018	<0.0018	na	<0.0035
DP16-12.5'	7/30/2001	<19	<19	<19	<19	<19	<19	<0.99	na	<1.9	<0.99	0.78 J	<0.99	<0.99	na	4.5 PG
DP17-3'	7/30/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	na	<0.39	0.0018 J	<0.002	<0.002	<0.002	na	<0.0039
DP17-13'	7/30/2001	<22	<22	4.7 J	<22	<22	<22	<1.1	na	<2.2	<1.1	<1.1	<1.1	<1.1	na	<2.2
DP18-2'	7/30/2001	0.12 J	0.14 J	<0.38	0.29 J	<0.038	<0.038	<0.0039	<0.0039	na	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0075
DP18-14.5'	7/30/2001	<0.36	<0.36	<0.36	<0.36	<0.036	<0.036	<0.0019	<0.0019	na	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0036
DP19-2'	7/30/2001	<0.4	0.1 J	<0.4	0.2 J	<0.04	0.021 J	<0.0021	<0.0021	na	0.0017 J	<0.0021	<0.0021	<0.0021	<0.0021	<0.004
DP19-13'	7/30/2001	<0.36	<0.36	<0.36	<0.36	<0.036	<0.036	<0.0038	<0.0038	na	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0073
DP20-2'	7/30/2001	<0.38	0.19 J	<0.38	0.19 J	0.047	<0.038	<0.0019	<0.0019	na	0.0037	0.0081	<0.0019	<0.0019	<0.0019	<0.0038
DP20-14.5'	7/30/2001	<0.38	<0.38	<0.38	<0.38	<0.038	<0.038	<0.0019	<0.0019	na	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0038
DP23-2.5'	8/1/2001	<0.42	<0.42	<0.42	<0.42	<0.042	<0.042	<0.0022	<0.0022	na	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0042
DP23-9'	8/1/2001	<0.43	<0.43	<0.43	<0.43	<0.043	<0.043	<0.0022	<0.0022	na	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0043
DP25-2.5'	8/7/2001	<0.41	<0.41	<0.41	<0.41	<0.041	<0.041	<0.0021	<0.0021	na	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0041
DP25-2.5' Blind Dup	8/7/2001	<0.37	<0.37	<0.37	<0.37	<0.037	<0.037	<0.0019	<0.0019	na	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0037

TABLE 2
PHASE 2-SOIL ANALYTICAL RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS, PCBs, and PESTICIDES
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	*Semivolatile Organic Compounds (mg/kg)*				*PCBs (mg/kg)*		*Pesticides (mg/kg)*								
		Indeno(1,2,3-cd)pyrene	Phenanthrene	Phenol	Pyrene	Aroclor 1254	Aroclor 1260	beta-BHC	gamma-Chlordane	Chlorobenzilate	4,4'-DDE	4,4'-DDT	Endosulfan sulfate	Endrin aldehyde	Endrin ketone	Methoxychlor
DP25-7.5'	8/7/2001	<0.38	<0.38	<0.38	<0.38	<0.038	<0.038	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0038
STR11-2'	8/20/2001	<0.4	<0.4	<0.4	<0.4	0.37	<0.04	<0.002	0.0025 PG	na	0.0041 PG	<0.002	0.0028 PG	0.0032 PG	0.0017 J	<0.004
STR11-9'	8/20/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
STR11-9' Blind Dup	8/20/2001	<0.39	<0.39	<0.39	<0.39	<0.039	<0.039	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0039
UAW16-10-2'	8/22/2001	<0.38	<0.38	<0.38	<0.38	<0.038	<0.038	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0038
UAW16-10-5.5'	8/22/2001	<0.36	<0.36	<0.36	<0.36	<0.036	<0.036	<0.0018	<0.0018	na	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0036
UAW18-20-1'	8/23/2001	<0.4	<0.4	<0.4	<0.4	<0.04	<0.04	<0.0021	<0.0021	na	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.004
UAW18-20-15'	8/23/2001	<0.41	<0.41	<0.41	<0.41	<0.041	<0.041	0.0023	<0.0021	na	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0041

J - Estimated result. Result is less than the reporting limit.

PG - The percent difference between the original and confirmation analyses is greater than 40%.

na - Not analyzed.

SAMPLE LOCATION - Direct Push (DP), Soil Boring (STR) or Monitoring Well (UAW) Identification Number and Depth (feet) Below Ground Surface

TABLE 3
PHASE 2-SOIL ANALYTICAL RESULTS
INORGANIC COMPOUNDS
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	Inorganic Compounds (mg/kg)																							
		Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Sodium	Acid-insoluble Sulfide	Acid-Soluble Sulfide	Thallium	Tin	Vanadium	Zinc
DP01-2'	7/24/2001	7090	5.7	51.5	0.44 B	0.25	21600	8.4	5 B	13.3	11100	22.6	7180	302	0.012 B	10.8	569 B	0.68	<581	na	<58	<1.2	na	14.9	37.2
DP01-9.5'	7/24/2001	8580	7.2	55.3	0.5 B	0.84	10400	15.4	6.1	20.4	16400	36.7	3000	430	0.022 B	15.8	648	0.68	<585	na	64	<1.2	na	19.4	84
DP02-2'	7/24/2001	7260	6	62.6	0.47 B	0.4	29900	11	5.7 B	18.5	11900	25.8	8390	265	0.052 B	11.3	642	0.63	<576	na	63	<1.2	na	16.1	56
DP02-9.5'	7/24/2001	11800	9.2	72.8	0.67	0.52	8390	16.6	10.4	23.2	25300	18.2	4290	484	0.023 B	25.1	1110	0.87	112 B	na	<63	<1.3	na	23	69
DP03-2'	7/24/2001	6390	5.4	51.3	0.41 B	0.21 B	16100	9	5.8	10	11500	11.5	2880	533	0.026 B	9.6	666	0.49 B	<584	na	64	<1.2	na	14.6	39.6
DP03-8.5'	7/24/2001	4640	8	57.4	0.44 B	0.42	107000	8.2	10.3	11	16900	13.4	21000	1120	0.012 B	9.7	506 B	0.52 B	101 B	na	<53	<1.1	na	16.2	29.2
DP05-1'	7/25/2001	9420 J	8.1	56.9	0.56 B	0.33	38100	12.8	5.8 B	15.4	16900	19.9	13200	322	0.025 B	14.3	1050 J	0.66	<592	na	<59	<1.2	na	19.5	52.6
DP05-8.5'	7/25/2001	8990 J	7.5	85.9	0.51 B	0.47	64000	12.2	8.6	16.5	19500	9.3	22000	472	0.016 B	19.2	1670 J	0.68	92.3 B	na	54 B	<1.1	na	17.9	50.9
DP07-9'	7/26/2001	8220 J	4.4	44	0.46 B	0.4	102000	10.6	6.6	14.5	16800	8.1	20800	325	<0.12	14.6	1560 J	0.37 B	146 B	na	170	<1.2	na	15.4	43.7
DP08-6'	7/26/2001	14100 J	10.2	92.8	0.73	0.4	12700	16.3	9.7	21.5	25500	15.1	6140	429	0.026 B	20.6	1290 J	0.69	<640	na	180	<1.3	na	28.8	59.2
DP08-11'	7/26/2001	8070 J	5	40.9	0.55 B	0.17 B	6140	11.6	6.3	9.7	12800	11.6	2970	306	0.015 B	8.7	587 B J	0.68	<593	na	180	<1.2	na	23.4	28.3
DP09-12'	7/27/2001	2290 J	1.2	9 B	0.13 B	0.18 B	112000	5.5	3.1 B	6.4	5890	3.8	27600	350	<0.11	6.3	364 B J	<0.57	158 B	na	610	<1.1	na	7.5	29.4
DP10-2'	7/27/2001	na	4.3	26.3	0.27 B	0.95	na	6.6	3.8 B	9.9	na	7.7	na	na	<0.11	9.2	na	<0.56	na	na	<56	<1.1	27.2	10.7	31.7
DP10-10'	7/27/2001	na	0.74 B	13.9 B	0.091 B	0.25	na	7.9	3.7 B	5.3	na	2.9	na	na	0.09 B	7.8	na	<0.58	na	na	1400	<1.2	531	5.7 B	100
DP10-10' Blind Dup	7/27/2001	na	1.2	8.2 B	0.1 B	0.18 B	na	6.9	3.4 B	6.8	na	2.7	na	na	0.046 B	7.8	na	<0.57	na	na	820	<1.1	273	6.5	49.1
DP12-1.5'	7/28/2001	4930 J	7.1	56.2	0.33 B	0.42	111000	7.5	8.4	17	9380	12.9	8980	510	0.018 B	8.1	520 J	0.38 B	596	na	<51	<1	na	11.7	39.8
DP12-9'	7/28/2001	11600 J	8.4	47.7	0.41 B	0.2 B	1910	11.4	5 B	14.1	18300	10.1	1780	292	0.014 B	12.4	762 J	0.82	432 B	na	<63	<1.3	na	24.3	46.8
DP13-3'	7/29/2001	na	5.4	51.1	0.37 B	0.35	na	7.8	4.7 B L	11.2	na	11.4 L	na	na	<0.12	10.2 L	na	<0.6	na	160	na	<1.2	17	12.5	40.5 L
DP13-11'	7/29/2001	na	1.4	3.1 B	0.096 B	0.17 B	na	2.3	1 B	9.9	na	5.9	na	na	0.024 B	5.6	na	<0.59	na	310	na	<1.2	887	1.6 B	8.9
DP14-3'	7/29/2001	na	14.3	125	0.7	1.3	na	9.9	10	13.1	na	39.8	na	na	0.049 B	13.9	na	<0.52	na	290	na	<1	78.6	20	66.1
DP14-9'	7/29/2001	na	2.1	10.9 B	0.32 B	0.16 B	na	14.9	1.8 B	11.2	na	7.8	na	na	0.082 B	9.4	na	<0.57	na	600	na	<1.1	299	14.8	58.4
DP15-2'	7/29/2001	na	5.8	84.2	0.72	0.31	na	11.3	9.2	14	na	29.9	na	na	0.045 B	16.2	na	<0.58	na	190	na	<1.2	46.2	16.2	62.4
DP15-9'	7/29/2001	na	1.5	4.9 B	0.37 B	1.1	na	12.3	82.8	7.5	na	52.2	na	na	<0.12	14.1	na	<0.6	na	370	na	<1.2	283	13.9	110
DP16-2.8'	7/30/2001	na	3.3	16.3 B	0.19 B	0.15 B	na	4.9	3.4 B	6.5	na	3.5	na	na	<0.11	8	na	<0.53	na	89	na	<1.1	2.5 B	6.4	23.3
DP16-12.5'	7/30/2001	na	4.7	20.3 B	0.18 B	0.31	na	7.1	4.1 B	7	na	11.9	na	na	0.028 B	9	na	<0.58	na	1100	na	<1.2	2250	7	70
DP17-3'	7/30/2001	na	6.7	85.1	0.57 B	0.29	na	13.2	6.4	19.2	na	31.2	na	na	0.046 B	17.9	na	<0.59	na	150	na	<1.2	2.4 B	19.1	61.2
DP17-13'	7/30/2001	na	6.5	691	0.39 B	1.3	na	55.2	54.9	42.8	na	57.6	na	na	0.57	21.1	na	<0.67	na	990	na	<1.3	4150	11.4	289
DP18-2'	7/30/2001	7890	7.2	49.4	0.45 B	0.49	59200	9.7	5.3 B	10.9	13000	14.4	18200	539	0.025 B	11.3	610	<0.57	373 B	<57	na	<1.1	na	17.2	61
DP18-14.5'	7/30/2001	1560	2.6	9.6 B	0.15 B	0.16 B	157000	3.5	1.7 B	7.1	5750	2.6	48900	502	<0.11	5.1	321 B	<0.55	165 B	100	na	<1.1	na	5.4 B	16.4
DP19-2'	7/30/2001	8850	7.7	119	0.73	0.47	13800	18.6	7.5	18.5	15200	29.8	6780	709	0.057 B	14.9	1540	<0.61	1030	270	na	<1.2	na	16.9	77
DP19-13'	7/30/2001	2570	3.1	11.3 B	0.22 B	0.15 B	91600	5.5	2.5 B	7.2	7240	3.4	33700	302	<0.11	7.3	401 B	<0.55	295 B	110	na	<1.1	na	9	24.9
DP20-2'	7/30/2001	7480	8.3	65.8	0.53 B	0.38	37100	11.1	6.6	18.2	14500	25.9	9230	529	0.08 B	14.5	659	<0.57	<569	<57	na	<1.1	na	15.6	58.1
DP20-14.5'	7/30/2001	1380	2	8.2 B	0.17 B	0.13 B	107000	3.1	2.1 B	6.3	3500	2.8	50100	261	<0.11	5.3	243 B	<0.57	217 B	170	na	<1.1	na	5.4 B	16.7
DP23-2.5'	8/1/2001	12900 L	14.2	106 L	0.75	0.098 B	13800 L	19.9 L	16.8 L	22.1 L	29900 L	21.6 L	4740 L	1730 L	0.03 B	25.9 L	1200	0.79	192 B	na	<130	4.7	na	29.6 L	67 L
DP23-9'	8/1/2001	13100	12.7	112	0.76	<0.26	39800	19.6	14.4	26.5	32900	16.9	13900	652	0.018 B	33.2	2120	1.1	204 B	na	<130	2.9	na	26.1	76.5
DP25-2.5'	8/7/2001	14100	8.8	100	0.55 B	6.5	2690	15	7.6	16.2	20100	10.2	2290	297	0.024 B	15.4	890	0.53 B	574 B	na	<62	1.5	na	25.8	54.6
DP25-2.5' Blind Dup	8/7/2001	6530	6.1	49.4	0.27 B	0.33	110000	9.6	6.3	13.9	15900	6.9	27900	404	<0.11	15.8	1160	0.66	428 B	na	<56	2.7	na	12.2	39.9
DP25-7.5'	8/7/2001	9050	6	75.1	0.35 B	2	103000	12.2	7.3	16	17300	7.6	23700	575	<0.12	16.8	2050	0.49 B	465 B	na	<58	3.1	na	17	46.4
STR11-2'	8/20/2001	10000	8.8	44.3	0.29 B	<0.24	810	10.3	6.8	13.3	16700	10.2	1570	386	0.022 B	14.7	632	0.38 B	<599	na	<120	<1.2	na	21.2	48.1
STR11-9'	8/20/2001	10200	19.4	54.7	0.51 B	0.15 B	35400	15	14.8	23.9	36200	12.1	12600	317	0.012 B	36.1	1890	0.57 B	<586	na	<120	<1.2	na	20.9	79.1
STR11-9' Blind Dup	8/20/2001	10200	11.8	56.9	0.57 B	0.29	54500	14.4	10	21.4	25300	13.1	14400	279	<0.12	28.4	1960	0.42 B	72.5 B	na	<120	<1.2	na	21.5	65

TABLE 3
PHASE 2-SOIL ANALYTICAL RESULTS
INORGANIC COMPOUNDS
Morton Facility
Reading, Ohio

SAMPLE LOCATION	SAMPLE DATE	Inorganic Compounds (mg/kg)																							
		Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Sodium	Acid-insoluble Sulfide	Acid-Soluble Sulfide	Thallium	Tin	Vanadium	Zinc
UAW16-10-2'	8/22/2001	9160	6.3	53.3	0.49 B	0.11 B	4430	12.8	5.3 B	11.3	19500	11.6	1880	367	0.019 B	16	891	0.49 B	133 B	na	<120	<1.2	na	20.3	40
UAW16-10-5.5'	8/22/2001	1960	2.6	8.4 B	<0.54	0.059 B	104000	4.7	2.5 B	6.6	5650	4.1	38800	371	<0.11	6.5	390 B	<0.54	154 B	na	<110	1.2	na	6.5	19.1
UAW18-20-1'	8/23/2001	7790	4	72.1	0.39 B	0.29	21600	15.2	6.9	11.2	13900	14.2	7400	505	0.048 B	13.2	948	0.79	737	na	<60	0.71 B	na	15	47.2
UAW18-20-15'	8/23/2001	1980	3.1	12.6 B	<0.61	0.076 B	135000	4.6	2.7 B	6.8	7670	4	37000	295	<0.12	7	408 B	<0.61	792	na	<61	2.1	na	6.4	21.7

J - Estimated result. Result is less than the reporting limit.

B - Estimated result. Result is less than the reporting limit.

L - Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.

na - Not analyzed

SAMPLE LOCATION - Direct Push (DP), Soil Boring (STR) or Monitoring Well (UAW) Identification Number and Depth (feet) Below Ground Surface

Field Activity Daily Logs

GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: Rohm and Haas	Location: Reading OHIO	Engineer/Technician: C. Young
Date: 7/23/01	Contractor/Representative: Conx		Time Arrived: 1600
Day of Week: MONDAY	Client: Morton Int.	Observations Reported to: Peter Palma	Time Departed: 1745
Daily Field Report No.	Geomatrix Project Manager: Mark Henninger	Weather: Pt. Cloudy - 95 °F.	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report: ☐ Yes ☐ No	Contractor Received All Attachments: ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 1600 arrive on site. opened the trailer and noticed the air conditioner is not working.
1610 Took the map and went to the ~~tra~~ plant to look at DPT locations.
1635 back at the trailer and contacted Rodney with Satellite Shelters. he said he would have someone out tomorrow to fix the AC.
1650 Contacted Home City Ice and spoke with Jason D.
Note: We found 5 out of 6 of our 55 gallon drums - they had floated away during the Heavy rains and flooding that occured 2 weeks ago. also 1 - 300 gallon poly tank ½ full of drilling mud has floated away from the circle area and is resting at the fence on the far west side near the EPA Well #1.
* also we siphoned off ~~water that was~~ a pocket of rain water from the tarp over the Red X Roll off Box. The Roll off box itself also has a lot of rain water in it. The other Box has some water but not as much as the Red X Box.

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Charles E. Young
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DFHH (rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

MEETING W/ JOHN STACY

Project Number	Project Name	Date
7443	Rohm & Haas	7/24/01

Observations/Remarks (continued):

Bldg 30 – Wearhouse – Storage glass – etc.
" 25 – Reclaim H_2O System.
" 16 – Packaging bldg. – solid material.
" 17 – Makes Nitrogen – (Pressure saving absorbion unit)
" No outflow of Chemicals.
" 1 – Wax Manufacture 280° t. wax (bis Stryl mid wax stric acid & EDA)
" 2 – TN 181 – Tin Solution, anonia & ESTERS.
" 3A – 4 & 4A – Ester manufacture unit
" 2 Ethel Xl thilate Batch Process
" Tin Stabelizer.
" 2 Ethyl Hexyl Thiolate – will destroy rubber.
" from bldg – 3A.
" 10 – Boiler house bldg.
" 9 – Computer bldg.
" 5 – Testing bldg. – dry chemicals. other side is a service bldg.
" 6 – Makes Phosphonium Compounds – (Poisinous solids).
" 7 – Wearhouse – Breakroom.
" 15 Wearhouse
" 14 maintenance Shop.
" 11 Tin intermediate packing units.
" 12 " " " "

SEWERS ~ 50% HCL.

20, 21 & 22 – Wearhouses.

" 29 – Wearhouse – Chemicals waste – ~~[illegible]~~
No Sewers.
" 24. – Tote Cleaning facility
" 18 office bldg.

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[signature]
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19 - admin and laboratory.

26 - Weahouse.

27 - ~~Protet~~ Pilot Plant - development area.

24 - B compressor house

32 - sewage treatment - ph ajuster.

backside of bldg 3A is where The H_2S comes from.

2 - 3A uses silfen compounds.

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Rohm and Haas	Reading Ohio	C. Young
Date	**Contractor/Representative**		**Time Arrived**
7/24/01	TeleVAC		0700
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
Tuesday	Morton Int.	Peter Palena	
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. Hemingway	Hot – 100°F	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 arrive on site. H.C. Nutting on site 2 men – a third man is on the way. 730 The third man is here and Televac is on site. – Held the tailgate safety meeting.
800 Went to the shipping and receiving dock and picked up coolers and DI H_2O. Our PID S and the H_2S meter not here yet. –
830 Contacted Sattellite trailers and spoke with Kathleen to have a A/C Repairman come out and repair the A/C in the trailer. Also contacted David at Home City Ice.
1000 Met with John Stacy and got information about the type of processes in each building.
1030 John had another meeting – We finished our meeting and have good knolodge of the processes and outflows –
1100 The PID's and the H_2S meter on site.
1115 made copies of the Sewer plan and made another call to Satellite Shelters. Repairman should be here at 1:00 PM.
Home City Ice came out and replaced the freezer and filled it w/ Ice.

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Charles E Young
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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/24/01

Observations/Remarks (continued): 1140: Started work at Manhole #20 (MH-20) It is grated - put the Pid down through the grating and got 2.0 PPM. Then put the H_2S meter in and got 2.0 CO No H_2S 0.0 lel and 20.8 O_2.
Clear to proceed - opened the manhole and installed the Camera. - going downstream (southward) from MH 20 which is at the N/E corner of bldg 25.
1150 Had to stop at 43.6 feet due to debris buried up in the 15" clay pipe (VCP) Vitrified clay pipe - Removed the camera and are now going to reinstall it and will head north bound (upstream) also 15" (VCP) towards building #16. which contains packaged material (Solids) No known spills of chemicals in the past - only solids are stored there.
1159 The camera has gone 8' and is in very heavy debris. at 19' we are at a manhole which is called MH-21. which appears to be buried under crushed shell and gravel. There is also a lot of buildup and debris in the 15" pipe. - Reset the footage to 0. and resume. have gone 7' and are back in heavy debris.
11:12 have come to a box area with 3 tie ins and a manhole above - MH #22 - Remove Camera.
1115 The OVM reading is 1.0 PPM H_2S = 0.0 lel = 0.0 O_2 = 20.8 and CO is 0.0 (← Air monitoring measurements)
1126 Same manhole now proceeding due east. from 0 to 10 feet in a 15" pipe it appears that the bottom has been destroyed. at 12.6 there is a broken peice of concrete pipe that had broken off of the top of the pipe.

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Chuck E. Young
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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/24/01

Observations/Remarks (continued): 1134 Not able to go past the piece of broken pipe – also ~~appear~~ appears that there is a void section at that location along the bottom.
1200 arrive back at the Job Trailer – Ak mana has not been here yet.
1230 Depart for lunch.
1330 Back on site.
1345 ~~Arrive~~ Arrive at storm Inlet # 5. Began air monitoring and the OVM read 371 PPM The H_2S Monitor read 22 - 45 - 71 and then went overrange. CO was 9.0 ~~&~~ Lel was 0.0 and O_2 was 20.8. The Steel grating was covered with a steel plate but was only partially covered. At our Meeting with John Stacy, he said that we would probably encounter H_2S gas in the sewer line behind buildings 2 and 3.
1410 Took a short B/R Break.
1430 arrive at manhole # 24 and perform air Monitoring The OVM Registered 15.4 PPM – NO H_2S 0.0 lel 20.8 O_2 and 4.0 CO.
1437 Installed the Camera. 0. to 8.0 feet Heavy debris. going North which is actually downstream at 13.0 feet there is a tap at 2:30 Clock position. at 27 feet there is exposed rebar, at 64 feet getting into heavy debris. brak in Tap Right at 78 feet. at 92 feet there is no bottom in the pipe – lots of buildup and debris. 104 feet the pipe is getting more deteriorated. exposed rebar. at 123 feet there is an extreamly large buildup of debris.

Charles E. Gray
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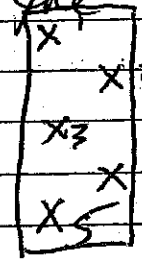
GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/24/01

Observations/Remarks (continued): at 124 feet We encountered a hole in the Concrete pipe at the top.
We saw 130 feet but had to Stop due to a large Chunk of debris that would not let the Camera go by.
1530 arrive at MH #23 and performed air monitoring $H_2S = 0.0$ $CO = 0.0$ LEL 0.0 and O_2 is 20.8
There is alot of steam Coming out of the opening and the OVM is registering 105 PPM - I believe it is a false reading due to the Steam.
1538 Installed the Camera heading West.
1541 major build up ~~because of too much debris in the line to get by~~, in the line. have to remove the Camera.
1600 Stop Camera Work for today.
Have to do supply run.
1650 depart the Site to get a Post hole digger. (PHD)
1720 Back on Site
1725 decon the PHD and go to the Circle to take Samples.
1740 Took a 5 Part Composite from the Poly tanks - 1 grab from each tank using the PHD and deconing it between tanks.
1750 Collect a 5 Part Composite from the Non Red X Roll off Box.
1840 Depart the Site.



← Non Red X Roll off Box

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING	READING, OHIO	E. MANSELL
Date 7-24-01	**Contractor/Representative** H.C. NUTTING		**Time Arrived** 0645
Day of Week TUESDAY	**Client** ROHM & HAAS	**Observations Reported to** PETER FALENA	**Time Departed** 1840
Daily Field Report No.	**Geomatrix Project Manager** M. HEMINGWAY	**Weather** HOT/HUMID	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 CALL ERIC WALKER ABOUT PLANT SAFETY TRAINING, LEAVE VOICEMAIL

0705-0730 HC NUTTING ARRIVES ONSITE: MIKE MILCAR, ERIC WEAVER, RONALD PETRIN - GO THROUGH GMX SAFETY MEETING, SHOW HC NUTTING HOSPITAL LOCATION ON MAP, GMX H&S PLAN

0830 - BRING HC NUTTING OVER TO ERIC WALKERS OFFICE FOR PLANT SAFETY TRAINING

0930 - ERIC WEAVER LEAVES SITE

1020 - GET HOT WORK PERMIT FROM STEVE VAUGHT

1030 - SETUP AT DP01 N. OF BLDG 5, BREATHING SPACE 0.0 ppm - CHARLES TAKES PID TO BE CALIBRATED, NO REGULATOR, RETURNS WITH DIFF PID - APPEARS TO BE GIVING ANAMOLOUS READINGS (MALFUNCTIONING)

1040 - COLLECT SAMP 07240122 AT DP01 - 2'

1100 - COLLECT SAMPLE 07240123 AT DP01 - 9.5'

1130 - HC NUTTING GO TO LUNCH

1150 - CALL ANNE HAIKOLA, TELL HER ABOUT BAD COVER ON ROLLOFF, WATER IN ROLL OFF, POSSIBLE PROBLEMS WITH HOLE CAVE-INS ON DPT RIG, ICE MACHINE HAS ARRIVED, A/C NOT WORKING IN TRAILER, - ANNE SUGGESTED WE GET A TRASH PUMP TO TRY AND PUMP WATER OUT OF ROLL-OFF BIN AND TO GET SOMEONE TO FIX THE COVER

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING	7-24-01

Observations/Remarks (continued):

1230 — HC NUTTING BACK ONSITE

1255 - SET UP ON DP02 SAMPLE 072401124 - ~~25~~ 2' BGS - 1305 (SM 7/24/01)
072401125 - 9.5' BGS - 1320

1335 - SET UP ON DP03 - SAMPLE 126 - 2'
127 - 8.5'

1345 - RECEIVED FUNCTIONING PID FROM C. YOUNG, BREATHING SPACE 0.0 ppm

1445 - TALKED TO DAVE IN SHIPPING FOR LOCATIONS AROUND BLDG 5, SET UP AT DP04
DAVE SAID THIS AFTERNOON WOULD BE O.K. - TOMORROW MORNING O.K. AS WELL

1500 - ERIC WEAVER HC NUTTING ONSITE TO DELIVER MATERIALS

1525 - E. WEAVER LEAVES SITE (DP04)

1608 - CALLED ANNE ABOUT 25' HOLES, SHE SUGGESTED GOING TO THE DUAL TUBE METHOD OF DPT SO WE CAN GROUT THE HOLE

1620 - TRIED TO GET ACCESS TO DPT LOCATION IN VICINITY OF UAW19, TOLD THAT WE WOULD HAVE TO WAIT UNTIL TOMORROW

1630 - HC NUTTING DECON PAD - DISPOSE OF DECON WATER AND CUTTINGS IN 55-GALLON DRUM (SUPPLIED BY HC NUTTING)

1720 - HC NUTTING LEAVES FOR DAY

1740 - CHARLES GETS COMPOSITE SAMPLE 072401129 POLY TANKS

1750 - CHARLES COLLECTS COMPOSITE SAMPLE 072401128 FROM ROLLOFF BIN WITHOUT THE REDX

1840 - LEFT FOR DAY

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GEOMATRIX REPRESENTATIVE

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DAILY FIELD REPORT

GEOMATRIX

Project Number: 7443	Project Name: Rohm and Haas	Location: Reading OHIO	Engineer/Technician: C. Young
Date: 7/25/01	Contractor/Representative:		Time Arrived: 630
Day of Week: Wednesday	Client:	Observations Reported to: Peter Palma	Time Departed:
Daily Field Report No.	Geomatrix Project Manager: Mark Hemingway	Weather: Hot - overcast in AM	Travel Time (hours):
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours):

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 6:30 arrive on site.
7:15 HC Putting on site. 2 men. Held Safety meeting
740 Televac on site.
750 Held Safety meeting for Televac.
755 Televac in a different Van - The supervisor is going to do some set up before we go to work.
& Edwards Mechanical on site.
0900 arrive at MH 25 NW area of the Plant see the drawing.
0910 The OVM has registered 24 PPM and the CO is 4.0, 0.0 H_2S, 0.0 LEL and 20.8 on O_2.
935 Not able to install the Camera due to deposits around the opening of the 12" Pipe.
940 moved to MH #26 and performed air monitoring OVM read 15.0 PPM O_2 Read 20.7, CO=4.0 PPM, H_2S=0.0 and lel = 0.0. We opened And Removed the manhole lid and observed the pipe opening at the bottom was over ½ filled with gravel. Not able to get the Camera in the line.
0950 move to MH-27 and checked the atmosphere. CO was 4.0 PPM O_2 was 20.8 H_2S = 0.0 lel = 0.0 and the OVM = 27

Charles E. Young
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DAILY FIELD RECORD (continued)

GEOMATRIX

Project and Task Number: 7443 Date: 7/25/01

Time	Description of Work Performed
0955	opened the manhole and observed the line is ½ blocked in the western direction and fully blocked in the eastern direction.
1000	Televac went to take a R/R Break.
1015	Went to Manhole #28 just west of bldg. 30 the OVM Reading was over range. The lel was 0.0, O2 was 20.7 PPM, H_2S was 0.0 and CO. was 77 PPM.
1025	Move to another location. — Ran into Eric Mesell and he requested that we locate 2 areas near the west side of bldg. 27. and the other just south of bldg. # 19 S/E Corner. — Went to the N/W area just west of bldg 30 and Marked another location.
1130	Televac — Taking a break
1140	arrive at the alley way behind bldg 3A. which is the east side of bldg. 3A. Performed air monitoring at a Retangular storm inlet #6. OVM = 1.8 PPM CO = 1.2 PPM H_2S = 0.0 PPM O_2 = 20.7 PPM and lel = 0.0 — had to move due to workers moving the S-Steel Vessels in and out.
1200	Went to lunch.
1245	Back on site. prepare to resume Camera survey.
1300	Back at SI-6 Took air monitoring Measurements. OVM = 2.0, H_2S = 0.0 lel = 0.0 O_2 was 20.7 and CO was 2.0
1320	Inserting the Camera. Heading North up the line.
1328	The line is to dirty and ½ full of H_2O. The Camera would no go further than 7 feet.
1330	Turned the Camera around in SI-6 going South towards MH #29.

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/25/01

Observations/Remarks (continued): 1340 The Camera propelled itself in to 11 feet when it dropped off into a low area and stopped moving. The lense is under water and the picture is obscured.
1350 Removed the Camera and sloshed the H_2O onto the Concrete. 1 worker from the facility came out and used some soap and H_2O to clean the concrete as it was a slip hazard.
1355 Moving to MH #29 See the MAP!
1400 The atmosphere at MH 29 is as follows: OVM Went overrange 9999 PPM. H_2S = 0.0, CO = 0.0, O_2 = 20.7 and lel = 0.0.
1405 Went to MH # 30 See the MAP.
Monitored the atmosphere through the lifting eye same as the others. OVM = 9999. overrange CO = 0.0, O_2 = 20.8, lel = 0.0 and H_2S = 0.0 PPM.
departed the area to call Mark H.
1415 Talking with Mark, & told him about the OVM readings and the H_2S Reading at MH 28. Also talked about the clogged sewer lines that we were not able to Camera.
* Mark said to proceed with the other areas and he would address the mentioned problems a little later.
- departed the office and went back out into the plant when Larry McHally called and requested to speak to me - (Larry is with telerac.) He asked me to Contact Anne and tell her he was not interested in building the drop pad. Went back to the trailer and Eric Walker (Rohm & Haas) contacted me and said NOW would be a good time to go see the Excavation in the Employee parking lot.

Charles E. Gex
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/26/01

Observations/Remarks (continued): Manhole and looked inside. The line coming North from the south side of bldg. 19 does not go through.
1550 Removed the Hose and brought the truck to MH # 33 and installed the hole in the line going due north towards MH 30 and 29.
1615 flushing the line. only sludge appears to be washing back. The water is going out to the west. OVM = 0.0 in breathing space. 0.0 H_2S, 0.0 Cl, 0.0 CO and 20.8 O_2.
1625 Now pulling the hose out - Pete is preparing the Camera.
1635 Have installed the Camera at MH 29 going north to SI-6 - deposite at 14 feet at 9:00. at 20 feet there is a crack at the top.
1638 large hole at the top 21' feet. The crack at the top - continues and also seepage is observed at 27'. at 31 feet more seepage.
1645 have gone to SI-6 and the Crack went from 20' to 32'. Removed the Camera.
1650 Reinserted the Camera in MH29 now going towards MH 30. at 16.0 feet there is a crack in the joint on the east side.
34 feet observed a crack with seepage coming in.
1700 at 42' feet the Camera quit moving and had dipped into a lower section of pipe or possible an area where there is no bottom.
1705 Removed the Camera, and moved to MH 30. Checked the air in the Man hole and it is OK. OVM = 3.6 PPM, LEL = 0.0 CO = 0.0 H_2S = 0.0 and O_2 20.8.

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Charles E. Fox
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GEOMATRIX

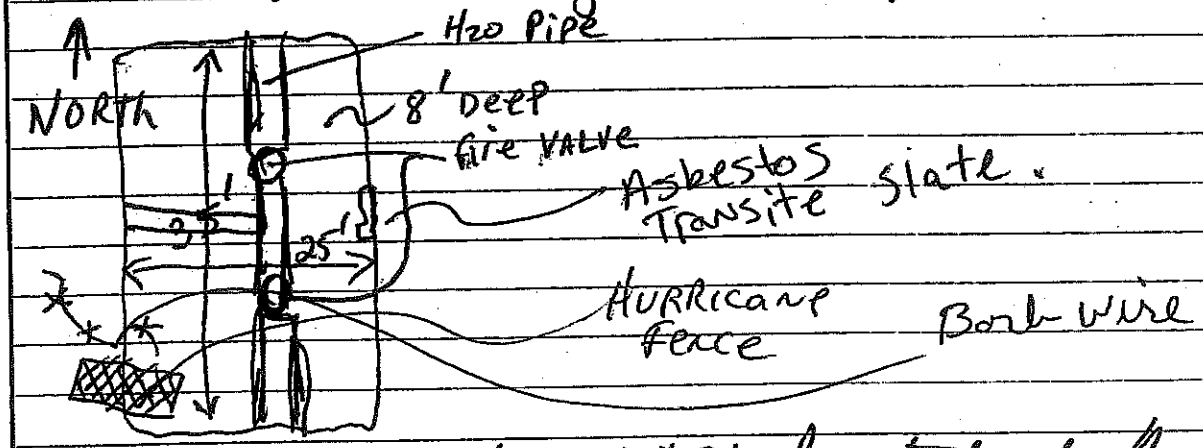
DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/25/01

Observations/Remarks (continued): The Excavation is from Geiler Construction – going to Rehab the Fire mains. – Contacted Anne – She put me on Conference with mark and She wanted to readdress the manholes that had the high OVM Readings. Mark said for us to get a copy of the Plants procedure for such a situation – Contingency plan developed when we were exposed to H2S during the 1st phase of the project. Anne let Mark Go and told me to resume work and go to the Next area to camera.

– Went to the Parking lot and met with Rick Scardina with Geiler Company. I observed a Very small pocket of Asbestos containing transite material. less than 1 ft. also saw general demolition debris – such as a Section of steel Hurricane fence, barbaire fence and wood debris. – No odors – no soil staining, no liquids. Took several Photographs of the area.

Below is a rough Sketch of the excavation.



1545 arrived at MH #31 located at the North end of the plant by bldg # 1. N/W Corner in the road,

★ Took air monitoring measurements through the lifting edge of the Man

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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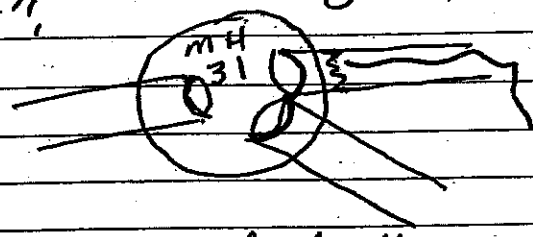
GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/25/01

Observations/Remarks (continued): hole. The OVM WAS 0.0 PPM, H_2S = 0.0, CO = 0.0, lel = 0.0, and O_2 = 20.8 Televac opened the M/H and I observed alot of sediments and gravel right away. also The Plan Shows the sewer pipes different as they are. The plan Shows 1 pipe going West from the M/H and 1 going S/E. Which are correct however in addittion there is another pipe going IN a most Easterly direction. The pipe diameter is 15".



7/27/01 – Dead END! see Field Notes 7/27/01

1548 installed the camera into the Western 15" pipe and began Visual inspection. lots of mud and debris Covering 1/2 of the pipe
1552 Have Seen 68' of the pipe and the Camera has stopped due to the build up and debris. the Next man hole opening is almost able to see MH32. No problems observed with the upper half of the pipe.
1602 The generator ran out of fuel.
The Workers had to retract the Camera by hand.
1620 Not able to get the trucks generator running.
1630 Televac has departed the site.
1700 Daniel DI Carlo with Equipt Inc. is on site. I escorted him to the H&S office Where Becky will give him the Orientation.
1710 Both Becky and Dan met me at the lunch room and Said they were ready to go out to look at the drillers decon Pad.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/25/01

Observations/Remarks (continued): Becky told me that She did not do the orientation to Dan because he said he personally would not be comming back out to this site. So She is here as an escort.

1715 I showed Dan the containment pad. We talked about him presenting 2 types of Plans 1 with a sump and 1 without. We agreed that the Back wall and the first 8 foot of the sides that are attached to the Back wall should be 6-8 feet High, to retain the splash. it should have a Plywood floor and Very heavy poly should totaly line it. he said ~ 40 mil Poly - HDPE should do the job. The Back will be 20' Wide The sides will be 24' deep With a 1' high berm along the entrance for the Vac Truck to back over. The pad with the sump is for, Just incase the plant wont let us dump over a Man Hole such as we did before. The sump will Contain the liquids and a pump can be used to pump and containerize. or the other type of pad could be erected over the area we last duped at over a Man hole Where the liquids can be filtered out of the solids and the solids can be drumed.

1735 We walked over to the last dump area. The Man hole is in a depressed area. Dan Said his men Could build something Very rigid either way in 1 - to 1½ Days. He would also need to Mob a backhoe if a sump is Needed. I told him that the pad would have to be rigid No matter what.

1750 Dan departed the site.

Charles E. Guy
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/25/01

Observations/Remarks (continued): Don Said he would send the dump pad plans to Anne. He in Austin, also With the plans Will be the Cost for construction and a schedule. He said he would get the plan - cost and schedule to Anne by Thursday 7/26/01 because he would not be available on Friday. He Also said his men Could start as early as Monday if the plan gets approved.
1835 Eric Came to the trailer to get bucket lids to Containerize grout. dropped off his Samples - I will Start preparation after I get the field drawings in order.
1950 Waiting on the guard to let us out of the plant.

Charles E. Jones
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING	READING, OHIO	E. MANSELL
Date: 7-25-01	Contractor/Representative: H.C. NUTTING		Time Arrived: 0635
Day of Week: WEDNESDAY	Client: Rohm & HAAS	Observations Reported to: PETER PALENA	Time Departed: 2000
Daily Field Report No.	Geomatrix Project Manager: M HEMINGWAY	Weather: HOT / HUMID	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0635 ARRIVE ONSITE

0658 MET WITH ERIC WALKER AT BLDG 3. TO TALK ABOUT POSSIBLY MOVING SOME DPT LOCATIONS DUE TO CLOSE PROXIMITY OF ELECTRICAL LINES UNDERGROUND

0725 CHARLES HELD TAILGATE FOR H.C. NUTTING

0840 SET UP AT DP05 — NEAR VAN 19 - BREATHING SPACE 0.0ppm

0855 SAMPLE 072501130 @ 1'

0915 SAMPLE 072501131 @ 8.5'

0945 CALLED MARK ABOUT GROUTING DPT'S — SAID TO USE A BENTONITE GROUT MIXTURE WITH AT LEAST 30% SOLIDS ALSO, GO BACK TO HOLES WITH SIGNIFICANT COLLAPSE FROM PREVIOUS DAY AND GROUT TO SURFACE

1025 SET UP AT DP06 BREATHING SPACE 0.0ppm

1035 HIT SOMETHING HARD AT 5' BGS — DID NOT ATTEMPT TO HAMMER THROUGH, PULLED OFF HOLE — MOVE FORWARD ~3 FEET (TOWARD NORTH) - HAD CHARLES LOCATE DPT'S 5' OFF SEWER LINES

1130 BEGIN USING DUAL-TUBE DPT METHOD AT 16' BGS ON DP06 DUE TO HOLE CAVEIN / COLLAPSE - STOP TO LOCATE PART FOR DUAL TUBE ACETATE ADAPTER

1150 RESUME DRILLING, DRILLING IS SLOW BECAUSE OF TIGHT CLAYS

1215 AT APPROX 21' BGS ON DP06

1240 AT 25' BGS DP06

1330 LUNCH

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GEOMATRIX REPRESENTATIVE

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DFR11 (rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING F1	7-25-01

Observations/Remarks (continued): 1430 SETUP GROUT MACHINE AT DP06

1440 ADVANCE TREMIE TO 24' BGS AT DP06

1500 HAVING PROBLEMS WITH GROUT MIX - QUICK SETTING BENTONITE GEL IS NOT WORKING - DRILLER'S TRYING TO LOCATE CORRECT BENTONITE GEL; ERIK SUGGESTS WYOMING BENTONITE GEL FROM AMERICAN COLLOID CO.

1510 DRILLERS REFILL WATER TANK ON RIG, TRY TO CONTACT JOHN STACEY ABOUT GETTING UTILITY LOCATER CO. BACK OUT TO SITE

1540 MIXING GROUT AT DP06 - USING PORTLAND CEMENT BENTONITE SLURY MIXTURE - ~50 lbs CEMENT, 5 GALLONS H_2O, GROUT PUMP HAVING PROBLEMS.

1740 GIVEN UP GROUTING TODAY - W

1800 CALLED OFFICE - SPOKE TO CHARLIE & PHIL ABOUT GROUTING ISSUES - MAYBE TRY A THINNER GROUT TOMORROW

1815 DRILLERS DECON - BENTONITE CHIP DP06 TO SURFACE

1905 HC NUTTING OFFSITE

1920 CHARLES / ERIK PACK SAMPLES FOR DELIVERY

1950 WAITING FOR GAURD TO LET US OUT OF PLANT

2000 LEAVE FOR DAY

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Rohm and Haas	Reading, Ohio	C. Young
Date: 7/26/01	Contractor/Representative: Televac		Time Arrived
Day of Week: Thursday	Client	Observations Reported to	Time Departed
Daily Field Report No.	Geomatrix Project Manager	Weather: Moderate 87° DRY pt Cloudy	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ File Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 700 arrive on site.
0705 Televac on site.
0710 HC Nutting on site.
0715 Prepare safety meeting.
0730 held the Pail gate safety meeting.
0745 one OVM is Dead - was charged over night
0750 Calibrated the other OVM - 106 PPM,
will have to share it untill we get another one
0800 Erik left to get Started DPT.
0815 Went to borrow the OVM - Getting fluctuating readings 0 PPM to 499 PPM,
Called Anne Hi left a message
930 Anne Called said to suspend sewer work untill we get a OVM. Erik can go ahead but to work in areas known to have a clean atmosphere.
1000 Contacted Total Safety - They will courier out 2 OVMS. - depart the site to go to Cincinnatti glove and Supply. - Anne Called Error.
1045 back on site. still waiting on the OVMS.
1110 Talked to John Stacy about the high VOC Readings in the Manhole behind Bldg 4. he said there is only organic material there. and that if we cannot see the line

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
1443	Rohm and Haas	7/26/01

Observations/Remarks (continued): With the Camera we should flush it out. He said when we flush it out the atmosphere in the manholes #29 and 30 will clear up.
1115 Televac person Stave Ward left the site to get the Water Rodder truck to flush the lines. John said there will not be any solids in the line only sludge — ok to flush it out.
1130 Arrive back at the trailer.
1200 go to lunch.
1240 Back to work.
1305 the OVMS are on site.
1310 The H_2O Truck is on site.
1315 Went to fill the TANKS W/ H_2O
1340 Ready to start, but am now helping Erik locate the anomalies in the parking lot in front of bldg 40 and in the grassy circle area.
1400 located the H_2O Rodder truck over SI-6 and took atmospheric measurements.
OVM = 0.0 ppm — lel = 0.0 — O_2 = 20.7 %
CO = 0.0 and H_2S = 0.0.
1405 began cleaning the line from SI-6 to SI-7.
1430 The line has been flushed out and several large pieces of the White Waxie Stuff came out. The Workers picked them out and set them on the concrete.
1440 Installed the Camera and began Visual inspection from SI-6 to SI-7.
1450 Reached SI-7 - 89' from SI-6 The line is 98% Clear and looks good. No Breaks or cracks observed. Now Removing the Camera. Air atmosphere in our Breathing zone

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/26/01

Observations/Remarks (continued): is OK. 0.0 on the OVM.
H_2S = 0.0 CO = 0.0 O_2 = 20.8 and lel = 0.0
1500 Saw Erik Walker and he wanted a procedure for sampling the roll off boxes. I Requested from Erik a open top Drum to Contanerize the Sewer wax waste. - Went to the lab w/ Erik and he gave me a waste lable.
1505 One Worker Brought me a 55 Gallon drum to put the waste in.
1510 put the waste in the drum and monitored MH 29 - OVM = 11.0 PPM, H_2S = 0.0, CO = 0.0, lel = 0.0, O_2 = 20.6
1512 opened the manhole - and Telvac wanted to go back to the Next manhole - lots of Sludge.
1519 at MH # 30 - OVM = 8.2 PPM, lel = 0.0 CO = 4.0, H_2S = 0.0 and O_2 = 20.6
opened the Manhole and it too has a lot of Sludge in it. - Proceeded to a manhole at the front of bldg # 19 and ~~then~~ began air monitoring at MH # 4. OVM was 0.0 lel was 0.0 CO - 2.0 PPM O_2 was 20.7
1535 installed the high pressure hose and began flushing the line.
1540 it dead ended at the MH # 33 which is at the concrete steps located at the North of Bldg. 19, looked at the print and it appeares on the print to go through, however the line dead ends there at the steps.
* performed air monitoring at MH 32. OVM 10.0 PPM LEL = 0.0, O_2 = 20.6, CO = 4.0 H_2S = 0.0. Opened the

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/26/01

Observations/Remarks (continued): 1710 Not able to put the Camera into MH 30 due to the sludgy water that is just standing there. The Camera lense keeps getting dirty. Not able to see.
1720 The Workers have removed the Camera and are preparing to depart.
- Went to field office.
1730 Televac Departed the site.
Help Erik and also did some work in the trailer.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING	READING, OHIO	E. MANSEK
Date 7-26-01	**Contractor/Representative** H.C. NUTTING		**Time Arrived** 0700
Day of Week THURSDAY	**Client** ROHM & HAAS	**Observations Reported to** PETER DALENA	**Time Departed**
Daily Field Report No.	**Geomatrix Project Manager** M. HEMINGWAY	**Weather** OVERCAST / WARM	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 - ARRIVE ONSITE, GET HOT WORK PERMITS FROM STEVE VAUGHT

0730 - CHARLES HOLDS H&S MEETING FOR H.C. NUTTING AND TENAC

0840 - SETUP AT DP07 - 5' EAST OF SEWER ADJACENT TO BLDG 19
- SEWER BOTTOM AT 3.5' AT MANHOLE - LOWER AT LOCATION, TAKE BORING TO 9' AND SAMPLE

0900 - DP07 - BREAK THROUGH ASPHALT

0920 - HIT SOMETH HARD AT 4' - MOVE -3' EAST - PID IS NOT FUNCTIONING PROPERLY, TOLD CHARLES TO GET HAZCO

0930 TO DELIVER TWO MORE PID'S

0940 TOTAL DEPTH AT DP07 = 10', COLLECT 072601132 - DP07 @ 9'

0955 MOVE TO DP08 - WEST OF BLDG 27 SEWER, BOTTOM OF ADJACENT MANHOLE IS 6' - WILL SAMPLE AT 11' BGS

1010 - COLLECT SAMPLE 072601133 DP08 - 6'

1030 - COLLECT SAMPLE 072601134 DP08 - 11'

DP08 HOLE COLLAPSED, BOULDER AT 2' - BENTONITE CHIP TO SURFACE, WILL RETURN WITH GROUT AT LATER TIME

1050 TRY TO FIND STEVE VAUGHT TO TELL HIM WE ARE MOVING TO WEST SIDE OF PLANT

1105 FIND STEVE V. - OK'S THE MOVE TO DPT ON WEST SIDE

1120 SET UP ON ~~DP09~~ (FS) SOUTH PORTION OF FRENCH DRAIN - PLUG AT 4' (NO DRAIN)

1148 GO SEE PICTURES OF FRENCH DRAIN AT JOHN STACEY'S OFFICE, GET LUNCH

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING	7-26-01

Observations/Remarks (continued): 1300 - ERIK, CHARLES LOCATE GEOPHYSICAL ANAMOLIES N. OF BLDG 40 - USE EXISTING GRID AND J. LUTTINGER'S REPORT TO LOCATE ANAMOLIES F, G, & H

1315 - HC NUTTING FIXING THEIR GROUT PUMP - ERIC WEAVER DROPPED OFF PARTS FOR PUMP @ APPROX. 1250

1430 - MET WITH RICK SCARDINA (UTILITY LOCATOR), WENT OVER TO LOCATIONS THAT HAVE CHANGED SINCE HIS LAST SURVEY,

1500 - BROUGHT MIKE FROM HC NUTTING WITH RICK TO LOOK AT ACCESS ABILITY

1520 - WORK ON GROUT MACHINE WITH HC NUTTING, COULD POSSIBLY BE RELATED TO POOR HYDRALICS ON RIG

1630 - MOVE TO NORTH PORTION OF FRENCH DRAIN (FN) = FRENCH DRAIN NORTH

0'-4' - FILL MATERIAL - VERY DK GRAY, ODOR

4'-8' - BLACK MATERIAL A 7'-8' - ODOR - DOESN'T APPEAR TO BE FRENCH DRAIN

1700 - MOVE EAST ~2' - GO TO 8' BGS - SAME RESULT

1713 - MOVE EAST - 2' (MORE) - 0'-3' - CONCRETE/FILL - 3'-4' BLACK MATERIAL, 4'-8' MORE BLACK MATERIAL, ODOR - WILL MOVE TO DIFFERENT AREA TOMORROW - NEED MORE HISTORICAL INFORMATION TO PROCEED

1730 - PUT BENTONITE CHIPS IN ALL THREE PILOT HOLES - MIX CONCRETE FOR TWO HOLES ADVANCED IN CONCRET, PATCH WESTERN MOST HOLE WITH ASPHALT PATCH

1800 - HC NUTTING OFFSITE

1830 - PACKAGING SAMPLES, SENDING IN TIMESHEETS

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Rohm and Haas	Reading, OHio	C. YOUNG
Date 7/27/01	**Contractor/Representative** Televac		**Time Arrived** 700
Day of Week FRIDAY	**Client** Morton Int	**Observations Reported to** Peter Palene	**Time Departed**
Daily Field Report No.	**Geomatrix Project Manager**	**Weather** Nice ~85°f Pt. Cloudy	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 arrive on Site. Televac is on site.
0710 HC Nutting on site.
0715 held the Tailgate safety meeting.
0730 Calibrated the 2 OVM's
0800 The Televac crew is filling their flush truck w/ H_2O
0815 arrive at MH 31 - 15" line. OVM = 0.0 - H_2S = 0.0
lel = 0.0, CO = 0.0 and O_2 = 20.7.
Removed the MH cover and there is standing water in the line.
825 The camera is in at 6' - heavy debris. going S/E to MH # 34. at 19' there is a crack at the top of the pipe. at 23' there is a radial crack on the left side.
0828 at manhole #34 there is two intersections of pipe - 1 going N/E and 1 going due South.
0834 Remove the Camera and reinsert it into the East direction going through MH # 35.
0840 Correction the line does Not connect. it is a dead end at MH # 31.
0850 Performed atmosphere tests in MH 35. all OK. OVM ~ 0.0, lel 0.0, O_2 - 20.6, CO. 0.0 and H_2S 0.0.
0851 Inserted the Camera and are going due West.

Charles E Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/27/01

Observations/Remarks (continued): Observed a crack in the top of the line - some deposits.
Pat 26' very heavy debris. going towards MH #34.
@ 856, went a total of 28' and the Camera stopped due to high amounts of build up and debris.
0858 Removed the Camera and turned it around heading due East to MH #36.
at ~07' there is a crack in the line. no seepage observed. at 11 feet the bottom of the line has some deterioration and there is a good size crack at 1:00 or upper Right side wall. Also cracks at the top of the line.
0904 More cracks at 20 feet, Also the pipe changes from Concrete to Clay and it decreases in size. at 23' there is a hole in the pipe at ~ 5:00 position and seepage is observed.
0910 The Camera would not go through the area where the pipe changed to Clay. - Removed the Camera.
0920 The Crew said the gears on the motor drive are stripped out - need to repair the Camera.
0930 at the trailer - working on the Camera.
I am generating a new progress map.
1110 The Supervisor said we are ready to resume work. The Camera is up and running.
1115 at MH # 36 OVM = 0.0 H_2S = 0.0 Lel = 0.0
CO = 0.0, O_2 = 20.8 - Grated Manhole.
1117 Installed the Camera and is headed West toward MH 35

Charles E. Grey
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/27/01

Observations/Remarks (continued): The pipe is pass shapped with a longitudinal crack at the bottom sides and top (Clay VCP). at 58 feet we have reached the area where we left off before the camera broke. at 55 feet there is a hole in the side wall with seepage entering the pipe.

1130 Removed the Camera and reinserted it going due South towards MH 37. at 91' the bottom is gone - also lots of debris and some cracks observed. at 124' we reached MH # 37.

1145 Removed the Camera and departed for the field office.

1200 Faxing the inspection reports to Anne H.

1245 Go to lunch.

1315 Back on site.

1320 Talked with Anne

1335 Resume work.

1340 Arrive at MH #4 - Perfomed atmosphere monitoring OVM = 0.0, H_2S = 0.0, lel = 0.0, CO = 0.0, O_2 = 20.8

1345 Having trouble inserting the Camera.

1350 The Camera is in the line - Start the inspection

1355 have gone in 10 feet and had to Stop due to a Top on the Right Side. Saw one crack in the line at 33'. the line appears to be in good condition.

1405 move to the outside Storage area to survey a 15" line.

1410 The line is under water. Move to MH 38 which is just north of bldg 29, going from Manhole 38 to MH # 39 which is Westward and down Stream.

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GEOMATRIX REPRESENTATIVE

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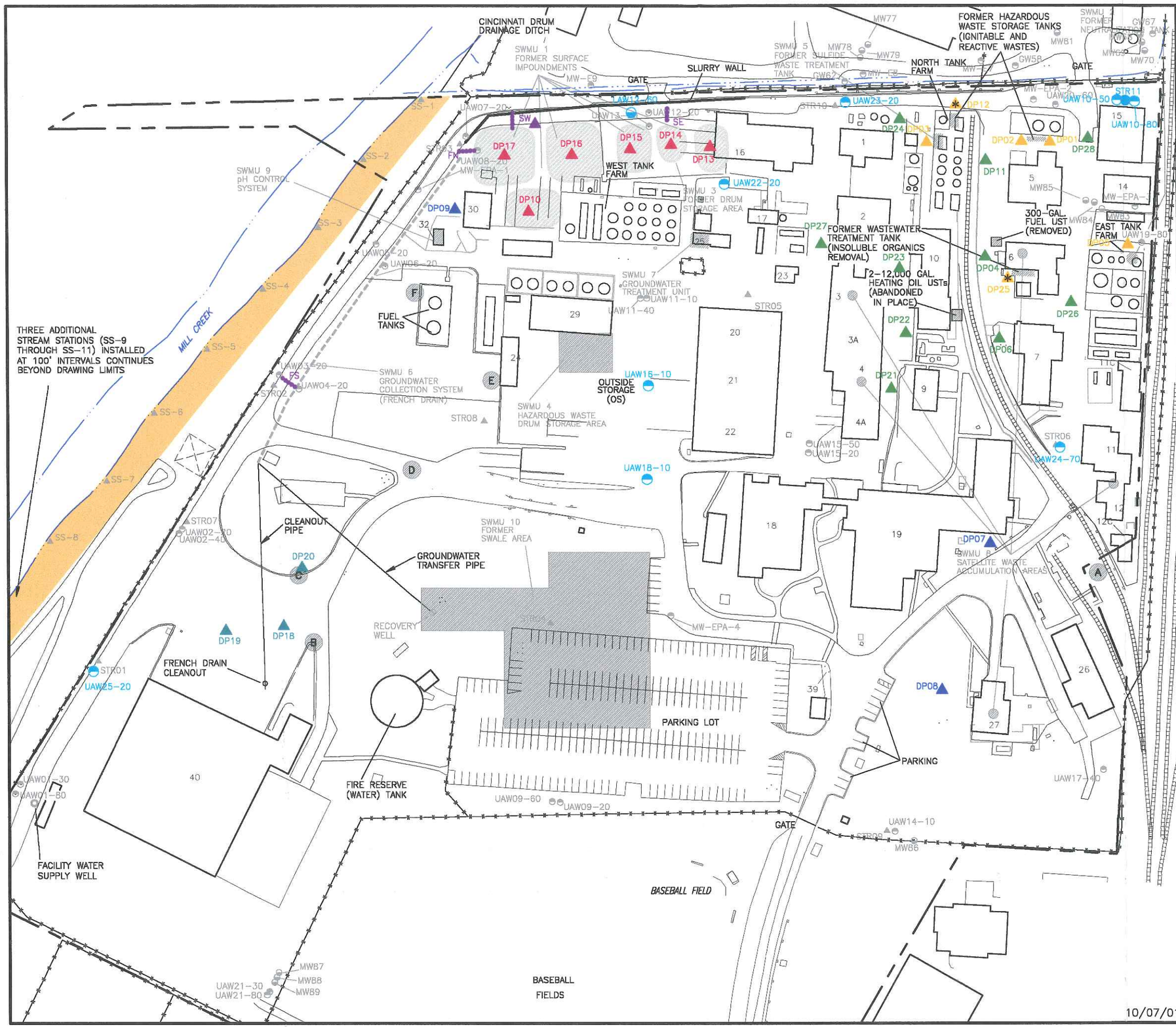

Base Map Source: Abercombie & Associates, Inc.
May 2001

0 60 120
APPROXIMATE SCALE (FEET)

-N-

EXPLANATION

- DIRECT PUSH – NO GEOCHEMICAL (<25')
- DIRECT PUSH – SWMU, (<15'*)
  * – BORING ADVANCED TO 25'
- DIRECT PUSH – IMPOUNDMENT, APPENDIX IX (<15')
- DIRECT PUSH – GEOPHYSICAL ANOMALY, (<15')
- DIRECT PUSH – SEWER, (OFF-SET 5' FROM SEWER, 5' BELOW INVERT, 15' MIN.)
- DIRECT PUSH – FRENCH DRAIN AND SLURRY WALL LOCATION CONFIRMATION
- PHASE 2 STRATIGRAPHIC BORING LOCATION
- PHASE 2 UPPER AQUIFER WELL
- PHASE 2 LOWER AQUIFER WELL
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- RECONNAISSANCE OF MILL CREEK AND TESTING FOR OPTICAL BRIGHTENER AT STREAM STATIONS
- UAW21-B0 — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (MAY 2001)
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER (MAY 2001)
- SS-2 — STREAM STATION LOCATION (JUNE 2001)
- PLUGGED AND ABANDONED (MAY 2001)
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- MORTON FACILITY PROPERTY BOUNDARY
- A — LOCATION OF REPORTED WASTE BURIAL
- RECOVERY WELL LOCATION (APPENDIX IX ANALYSIS)
- GW50 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

NOTES:
1. BASED ON FIELD INDICATIONS OF CHEMICAL IMPACT, TWO SAMPLES FROM DP23 WERE SUBMITTED FOR GEOCHEMICAL ANALYSIS
2. ALL ANALYTICAL PARAMETERS WERE IN ACCORDANCE WITH THE CONTRACT LABORATORY PARAMETERS (CLP) LIST, UNLESS OTHERWISE INDICATED

PHASE 2 ACTIVITIES – JULY TO SEPTEMBER 2001 SHOWN IN COLOR (LOCATIONS ARE APPROXIMATE)

PROGRESS REPORT FOR
FACILITY INVESTIGATION–PHASE 2
MORTON INTERNATIONAL, INC.
READING, OHIO
USEPA I.D. No. OHD 000 724 138
THIRD QUARTER – JULY TO SEPTEMBER 2001

GEOMATRIX	Project No. 7443	FIGURE	7443B03.DWG

GEOMATRIX

Progress Report for Facility Investigation
Morton International Inc.

Reading, Ohio

Prepared for:

Morton International, Inc.

Reading, Ohio

Third Quarter – July to September 2001

Project No. 7168

Geomatrix Consultants

DRAFT

TABLE 4
PHASE 2-GROUNDWATER ANALYTICAL RESULTS
Morton Facility
Reading, Ohio

SAMPLE LOCATION	Recovery Well
SAMPLE DATE	7/29/2001
Volatile Organic Compounds(µg/L)	
Acetone	1600
Chlorobenzene	8.7 J
1,2-Dichlorobenzene	2.4 J
Semivolatile Organic Compounds (µg/L)	
Aniline	4.6 J
Inorganics (µg/L)	
Arsenic	39.6
Barium	328
Cadmium	8.6
Chromium	264
Cobalt	11.1
Copper	4640
Lead	405
Nickel	311
Sulfide, total	2700
Tin	1650
Vanadium	76
Zinc	1100
Total Organic Carbon (mg/L)	
Total Organic Carbon	10

J - Estimated result. Result is less than the reporting limit.
µg/L - micrograms per liter
mg/L - milligrams per liter

PROJECT: Morton FI

Log of Well No. UAW10-80

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
32						
33						
34						
35					Clay as above	
36						4" Riser
37						
38						8" hole
39					38.7-39: Sandy Clay (CL); grsh brn; wet Soft; sly Plastic; w/50% fn Snd 39-41.4: Clay (CH); yellowish br; damp; v stiff, v plastic	
40						Grout
41					41.4-43.5: Sandy Gravely Clay (CL); yellwsh brn; stiff; mod plastic; w/~20% fn-med Sand and 10% fn gravel (≤ 1/4")	
42						
43						
44					43.5-47.9: Sand (SP); br; wet-saturated; Loose; fn-med grnd	
45						
46						
47					47.9-49: Sandy Gravely Clay (CL); br; wet; Stiff; mod Plastic; w/~10% fn Snd; & 5% fn gravel (≤ 1/4")	
48						

WELL_OVM M4132.GPJ (6/98)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/27/01

Observations/Remarks (continued):

1452 Reached MH#39 at 157 feet, 1 Radial crack at 127 feet (hair line crack)
1457 Retract the Camera and turn it around and Camera towards MH#40 Which is easterly and up stream.
1505 Televac went to get the flush truck to flush the line up stream due to high amounts of sludge.
1530 have flushed the line and are preparing to Camera the line.
1545 The camera lens keeps getting dirty when trying to install it into the sewer.
1550 Televac is quitting for the day.
1620 Contacted Rick Hemingway he said since we have done most all of what we could do to go ahead and Contact Televac and tell them not to come back out untill notified.
* Contacted Pete and he said he would contact Larry McCally and tell him.
1800 Depart the site - go get lumber for the roll off box to keep the tarp from leaking.

Charles E. Yon
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING	READING, OHIO	E. MANSEL
Date	**Contractor/Representative**		**Time Arrived**
7-27-01	HC NUTTING		0700
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
FRIDAY	ROHM & HAAS	PETER PALENA	1800
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. HEMINGWAY	MILD - HIGH 82°	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 - ARRIVE ONSITE - GO GET HOT WORK PERMITS

0720 - CHARLES CONDUCTS H&S MEETING FOR TERVAC, HC NUTTING

0725 - HC NUTTING TRYING TO GET GROUT PUMP TO WORK, THE TALKED TO GEOPROBE AND THEY WERE TOLD THE POSSIBLY HAVE AN AIR-LOCK IN THEIR HYDRAULIC LINE

0810 - HC NUTTING READY TO TRY GROUT PUMP - DECIDE TO MOVE TO DP01 AND TRY TO GROUT - HC NUTTING GETTING WATER FOR GEOPROBE RIG

0830 - SET UP ON DP01 TO GROUT - PUSH TO 15'
- GROUT MIX - 2 gallons H_2O, 12 lbs PORTLAND CEMENT, 1 lbs BENTONITE GEL (AQUAGEL, GOLD SEAL) 16.6 lbs H_2O, - GROUTED UP TO 2½' BGS WILL TOP OFF LATER

0910 - TRY AND GET ACCESS TO DP04 & DP06 - WILL HAVE TO WAIT UNTIL LATER

0915 - SET UP ON DP08 FOR GROUTING - PUSH TO 12' BGS
3 GALLONS OF H_2O - 30 lbs PORTLAND, 2 lbs BENT GEL, - MADE 4.5 GAL. GROUTED UP TO 2' BGS - TOPPED OFF WITH GROUT ~12.5 lbs/gal

1010 - MOVE TO DP05 FOR GROUTING
20 lbs PORTLAND, 2 GALLONS H_2O, 1.5 lbs BENTONITE ~3 gallons GROUT

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GEOMATRIX REPRESENTATIVE

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DfcH11(rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7493	MORTON REDING	7-27-01

Observations/Remarks (continued): 1030 - SPOKE WITH GEIGER (RICK) ABOUT LOCATING UTILITIES, ONLY PAINTED ONE NEW GREEN (SEWER) UTILITY IN WHOLE NORTHWEST PORTION OF PLANT HE ALSO MOVED OVER TO GEOPHYSICAL ANAMOLY AREAS F, G, H TO REMARK FADED ELECTRICAL LINES, SAID HE COULD NOT GET TO AREAS ON EAST SIDE OF PLANT UNTIL NEXT WEEK. (TOO SHORT OF NOTICE)

1035 - PUMPING GROUT MIXTURE DOWN DP05 - HIGH PRESSURE HOSE ADAPTER THAT CONNECTS TO GEOPROBE ROD IS PLUGGED UP, FOUND OBSTRUCTION, CONTINUE GROUTING

1050 - GROUTED UP TO SURFACE

1100 - MOVE OVER TO DP04 - SET UP FOR GROUT (PUSH PROBE TO 24' BGS). OUT OF WATER REFILL WATER

1150 - SET BACK UP ON DP04 FOR GROUTING - MIX GROUT 2 gallons H_2O, 20 lbs PORTLAND, 1.5 lbs BENTONITE POWDER ~3 gallons grout ≈ 12.5 lbs/gallon + 1/2 BATCH OF SAME

1315 - FINISHED GROUTING TO SURFACE, HAD SOME PROBLEMS PUMPING GROUT AGAIN - WILL ASK MARK IF WE CAN GO WITH A THINNER MIXTURE

1330 - HC NUTTING GETTING WATER FOR RIG

1345 - HC NUTTING BECON

1415 - HC NUTTING LUNCH

1515 - TOP OFF WATER AT DP09 - FIND CHARLES AND GET H_2S METER FOR WORK AROUND SEWER

1545 - CORE THROUGH CONCRETE

1615 - COLLECT SAMPLE DP09-12' 072701135 + MS/MSD

1625 - FILL HOLE WITH BENT. CHIPS, PATCH HOLE WITH QUICK-SET CONCRETE

1640 - MOVE TO DP10 - CORE CONCRETE

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GEOMATRIX REPRESENTATIVE

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1650 SAMPLE AT DP10 – 2' 072701137 APP-1X
1700 SAMPLE AT DP10 – 10' 072701138 – 072701136 (BLIND DUP)
1720 ACETATE LINER STUCK IN MACRO TOOL APP-1X
1730 CALL ANNE, ASK IF WE CAN USE BENTONITE CHIPS (HOLE OPEN TO 7' BGS) – SHE SAID MARK WOULD PROBABLY WANT IT GROUTED
1800 ADVANCE GROUTING TOOL (SP15 – GROUNDWATER SAMPLER, OUTER SLEEVE ONLY). DOWN TO 15' – PULL UP TO 14' AND LEAVE "SINGLE USE POINT" AT 15' SO GROUT CAN BE RELEASED THROUGH BOTTOM OF THE SP15 APPARATUS
GROUT MIXING TOOL IS BROKEN AFTER ADDING BENTONITE GEL – HAND MIX UNTIL NO CLUMPS. 2 gallons H_2O 18 lbs PORTLAND
1 lb. BENT. GEL
1835 GROUT UP TO 2' BGS –
1840 HC NUTTING DECON. – ERIK BACK TO TRAILER TO PACK SAMPLES FOR SATURDAY MORNING DELIVERY
1930 HC NUTTING OFF SITE
2000 LEAVE TO FIND GUARD TO LET US OUT OF PLANT

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Rohm and Haas	Reading, OHIO	C. Young
Date: 7/28/01	Contractor/Representative: HC Nutting		Time Arrived: 0800
Day of Week: Saturday	Client: Morton	Observations Reported to: Peter Palena	Time Departed: 1900
Daily Field Report No.	Geomatrix Project Manager: Mark Hemingway	Weather: Cool - wet	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0800 arrive on site -
HC Nutting on site.
0810 Held the tailgate safety meeting
0830 HC Nutting - Erik went to work.
I went to the roll off Box to pump it out.
0900 Raining Hard.
1000 The pump will not push the H_2O up the 10-12' incline into the Baker tank.
1030 Contacted Prime Rental - Steve the Emergency Person said the 2" pump was not designed to pump up hill.
11:00 begun pumping H_2O into drums placed close to the Baker tank.
1200 Went to lunch. Still raining.
1300 Back on site. Resume pumping H_2O from the Red X Rolloff Box into the 655 Gallon drums.
1500 have filled the six drum and the H_2O in the red X Box is down to ~ 6" but will not pump because it is mostly mud. Was using a strainer made from a 5 Gallon Bucket w/ holes in it. H_2O quit flowing

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Charles E. Young
GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/28/01

Observations/Remarks (continued): into it.
1535 moved the pump to the 6 55 Gallon drums and Began transfering the H_2O into the Baker tank.
1610 The pump is working but is a little slow.
- Stopped to prepare Sample for Erik.
1630 Depart the site for fed ex.
all Samples are on ice alot of ice.
Temp and field Blank are included.
1720 Back on site.
resume pumping H_2O into the Baker tank.
1800 Have moved all the water I can possible do with the pump. - all six drums are empty.
1810 Start working on the roll off Box By putting 2X4 lumber across the top where the tarp supports are damaged.
- then decked over the 2X4 with plywood.
1830 put the tarp over the wood and it looks good - will now shed H_2O off of it and it will not Collect and leak into the Container.
1900 Depart the site.

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GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: MORTON READING FI	Location: READING, OHIO	Engineer/Technician: E. MANSELL
Date: 7-28-01	Contractor/Representative: HC NUTTING		Time Arrived: 0800
Day of Week: SATURDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1645
Daily Field Report No.	Geomatrix Project Manager: M HEMINGWAY	Weather: 80° – RAIN	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report: ☐ Yes ☐ No	Contractor Received All Attachments: ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0800 ARRIVE ONSITE - HC. NUTTING ARRIVES ONSITE
0815 - CHARLES CONDUCTS H/S MEETING
0850 - SET UP ON DP06 TO GROUT - ADVANCE PROBE TO 24'
0905 - START MIXING GROUT - ~3 gallons H_2O, ~27 lbs PORTLAND, 1.5 lbs BENTONITE GEL - MADE ~4.5 gallons GROUT
0935 - FINISHED GROUTING TO SURFACE
1000 - CLEAN UP AND GET WATER
1005 - HELP CHARLES WITH TRASH PUMP - START PUMPING LIQUIDS OFF FROM RED-X ROLL-OFF INTO BAKER TANK, BAKER TANK IS AROUND 3'OR 4 FEET FROM BEING FILLED TO CAPACITY
1025 - SET UP ON DP11 - STRAT BORING WEST OF BLDG 5
1030 - CORE THROUGH CONCRETE, PID NOT WORKING PROPERLY DUE TO MOIST CONDITIONS IN THE AIR
- BREATHING SPACE: 0% LEL, 0 ppm CO, 21.4% O_2, 0 ppm H_2S
1128 - REACH TOTAL DEPTH OF DP11
1135 - DECON GEOPROBE RODS - SET UP FOR GROUTING
1200 - MIX GROUT 3 GAL H_2O, 27 lbs PORTLAND, 2 lbs GEL → 4½ GAL GROUT
1215 - FINISH GROUTING - BEGIN CLEANING UP AREA AROUND DP11
1315 - GMX, HC NUTTING LEAVE FOR LUNCH
1415 - GMX, HC NUTTING ONSITE
1420 - COLLECT EQ BLANK

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING FI	7-28-01

Observations/Remarks (continued): 1420 CONT. – EQ BLANK THROUGH ACETATE LINER & SHOE 072801139

1430 – SET UP AT DP12

1440 – NO RECOVERY FROM 0'-4' – MOVE OVER 6" AND TRY AGAIN

1450 – COLLECT SAMPLE 072801140 – DP12 – 1.5'

1530 – BRING SAMPLES TO CHARLES SO HE CAN PREPARE SAMPLES FOR FED EX, DPT RIG HAVING PROBLEMS WITH MACRO TOOL, HOLE (DP12) KEEPS CAVING IN & TOTAL DEPTH 2 SWITCH TO DUAL TUBE METHOD, OUTER CASING WILL NOT ADVANCE DEEPER THAN 18' BGS, 1600 WILL TRY TO GET A SAMPLE FROM 18'-22'

1600 PID ACTING STRANGELY, BUT 14' BGS HEAD SPACE SAMPLE WAS 1,405 ppm AFTER RECALIBRATION – AFTER THIRD RECALIBRATION 14' BGS HEAD SPACE 0.0 ppm.

1615 DUAL TUBE REFUSAL AT 18' BGS (DP12), PULL OUTER TUBE, GET READY FOR GROUTING

1630 ADVANCE GROUT RODS (SP15 GROUNDWATER SAMPLER W/O SCREEN AND LEAVE EXPENDABLE POINT AT 19' – PUMP DOWN 4½ GALLONS GROUT – 3 gall H_2O, 27 lbs bent, 2 lbs GEL

1700 GROUT APPARATUS PLUGGED, DISASSEMBLE TO CLEAN OUT DEBRIS, MIX ⅓ BATCH SURFACE POUR TO 1' BGS (WAS APPROX 3' BGS).

1815 HAVE BEEN WORKING ON GROUT MACHINE – DOES NOT WORK, APPEARS TO BE AN ELECTRICAL PROBLEM

1830 CHARLES LEAVES SITE TO DROP OFF SAMPLES AT FED EX

1830 HC NUTTING LEAVES SITE

1845 GEOMATRIX LEAVES FOR THE DAY

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7443	Rohm and Haas		C. YOUNG
Date 7/29/01	Contractor/Representative		Time Arrived
Day of Week Sunday	Client	Observations Reported to	Time Departed
Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) ___

Unresolved Tests/Issues: ___

Observations/Remarks: 0800 arrive on Site.
0815 HC Nutting on site.
0825 Held the Tailgate Safety meeting.
0835 went to get the Hot work permit.
0915 arrive back at the French drain area w/ the production supervisor — he wanted to see the area where we are working before signing the permit.
0930 all ok — Sign the permit.
0945 went to the job trailer to clean up, and organize sample jars and coolers.
1130 went to assist w/ geoprobe.
1210 went to lunch.
1310 Back on site.
Cleaned up the circle area — moved the 55 Gallon drum and rolled the Centrifugal pump hoses up, and put the pump with the hoses. Ready to be picked up.
1400 prepare sample labels for CLP on the french drain and the recovery well.
1450 Collect the Recovery well sample 072901142 Dark H_2O w/ a sulfer odor. All put on ice. also there is White suspended paper like particles in the H_2O.

Charles E. Young
GEOMATRIX REPRESENTATIVE

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DFR1011 (rev 01/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Rohm and Haas	7/29/07

Observations/Remarks (continued): 1545 prepare a sampling device made from a new 1 liter poly sample container on fishing twine.
1635 With Erik's assistance we collected sample # 072901143 French drain.
Before sampling we ~~cleared~~ checked the atmosphere using the H_2S lel O_2, CO, and OVM meters all OK, were 0.0 except for the O_2 which was 20.6 PPM.
Put all samples on ice.
1715 Depart the site.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING FI	READING, OHIO	E. MANSELL
Date: 7-29-01	Contractor/Representative: H.C. NUTTING		Time Arrived: 0800
Day of Week: SUNDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1715
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: OVERCAST, SHOWERS 89°	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0800 - GMX ONSITE

0817 - HC NUTTING ONSITE

0830 - CHARLES CONDUCTS H&S MEETING

0900 - HC NUTTING FILL WATER TANK ON RIG

0915 - SET UP TO FIND TS (TRENCH DRAIN SOUTH) - ALONG EAST SIDE OF PERIMETER ROAD, BETWEEN WELL UAW03 & UAW04

0925 - ADVANCE PROBE THROUGH ASPHALT (12.8' WEST OF UAW04-20')

0-4' - BASE MATERIAL, CLAYEY SAND - SANDY CLAY - DK GREY - ODOR

4-8' - SAME AS ABOVE - 8'-10' SAME AS ABOVE, 10'-12' - MED SAND BLACK MATERIAL AT 12'

TS 1st HOLE COLLAPSED UP TO 7.2' - CHIPPED - 2ND HOLE ~11' WEST OF UAW04-20'

TS 2ND HOLE: 0-4' - GRAVEL BASE, SANDY CLAY DK GRAY

4-8' - SAME AS ABOVE, BLACK STAINING AT 8'

8-12' - 8-10' SAME AS ABOVE, 10-12' - MED SAND, GRAVEL AT 12' - BLACK

12-16' - SAND GRAVE (BLACK) TO 13.5'.

13.5' - 16' - SANDY CLAY CLAY [TILL]

HOLE COLLAPSED UP TO 9.5' BGS - CHIPPED UP TO SURFACE.

TS 1015 - 3RD HOLE: 1.6' EAST (TOWARD UAW04) OF 2ND HOLE (9.45' - W. OF UAW04)

0-4' - GRAVEL - APPEARS TO BE FILL MATERIAL

PROBE PUSHED IN EASY TO 12' 4-8' - 6" RECOVERY - SAND AND TRACE GRAVEL [FILL]

HOLE COLLAPSED WITH LITTLE USE 8-12' - 1.5' RECOVERY, MED SAND, WET

.0' BGS OF HAMMER 12'-16' - 12-14 SAND, 14'-16' - TILL HARD

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GEOMATRIX REPRESENTATIVE

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→ BENTONITE CHIPS UP TO SURFACE

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READ	7-29-01

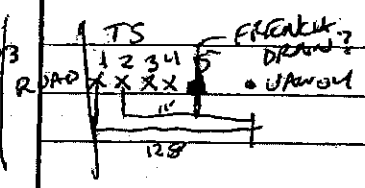
Observations/Remarks (continued): 1048 4TH (TS) HOLE - MOVE TO 6.25' W. OF UAWOU

N

4TH HOLE: 0-4' GRAVEL FILL

4'-8' 2' RECOVERY, GRAVEL 1"-2" MIXED WITH FILL

8'-12' 6" RECOVERY - GRAVEL WITH CLAY FILL



MATERIAL - PUSHED DOWN WITH NO HAMMER (SLOUGH)

HOLE CAVED IN TO 10.5' BGS - BENTONITE CHIPS UP TO SURFACE (8.05' WEST OF UAWOU)

1100 - MOVE PROBE OVER FOR FIFTH HOLE

0-4' GRAVEL, FILL MATERIAL -- 2' RECOVERY

4'-8' 6" RECOVERY, FILL AND GRAVEL [PEA GRAVEL?]

8-12' 2' RECOVERY, SIMILAR GRAVEL (TO 4'-8') GRAVEL CHIPS 0'-10'

10.5'-12' - CLAY, SOFT - DK GRAY (6.25' W. OF UAWOU)

1140 - HC NUTTING DECON, GET WATER FOR RIG

1210 - ERIK M., CHARLES Y., RON (H.C NUTTING) LEAVE FOR LUNCH

1310 - RETURN FROM LUNCH (ERIC WEAVER H.C NUTTING STAYED ONSITE TO WORK ON RIG).

1330 - SET UP ON DP13 (W. BLDG 16 IN LOADING BAY) B.S. = 0 ppm

~1340, 1350 144, 145 RESP.

1415 - SET UP ON DP14 (W. OF DP13) 1425 - 146 1430 - 147

1506 - SET UP ON DP15 (N. OF W. TANK FARM) 1510 - 148 1525 - 149

1550 - CLEAN UP AROUND LOCATION - ADD BENTONIT CHIPS TO SURFACE

1630 - HC NUTTING LEAVES FOR DAY - TELL THEM TO START AT 0800 IN MORNING - ERIK HAS TO BRING CHARLES TO THE AIRPORT

1635 - ERIK AND CHARLES COLLECT GROUNDWATER SAMPLE FROM FRENCH DRAIN

1700 - FINISH PREPARING SAMPLES, PUT ON CUSTODY SEALS FOR TONIGHT, WILL SEND WITH TOMORROWS SHIPMENT.

1715 - ERIK & CHARLES LEAVE FOR THE DAY

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING	READING, OHIO	E. MAKSELL

Date	Contractor/Representative	Time Arrived
7-30-01	H.C. NUTTING	0730

Day of Week	Client	Observations Reported to	Time Departed
MONDAY	ROHM & HAAS	PETER PALENA	1915

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
		WARM, SUNNY	

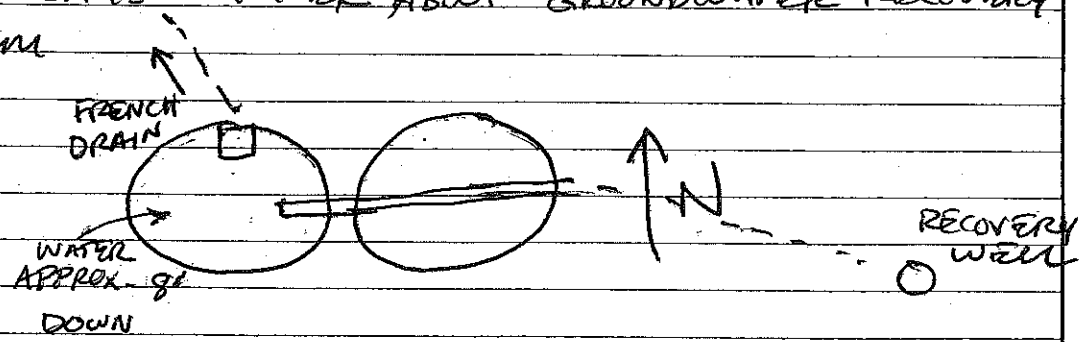
Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0730 - ARRIVE ONSITE - GET HOT WORK PERMIT FROM STEVE VAUGHT

0750 - TALK TO CHRIS WALKER ABOUT GROUNDWATER RECOVERY SYSTEM



ERIK WALKER SAID CHRIS WALKER HAS THE MOST KNOWLEDGE ABOUT THE GROUNDWATER RECOVERY SYSTEM

0810 HC NUTTING ONSITE - ERIK CONDUCTS H&S MEETING

0900 CALIBRATE PID - 100 ppm ISOBUYLENE GAS → 99.2 ppm

0905 SET UP ON DP16 - BREATHING SPACE = 0.0 ppm

HC NUTTING GETTING WATER, - DP10 DOWN TO 2.3' BGS, CHIP UP TO 1.5' BGS, PUT CONCRETE PATCH IN PLACE

0915 SETUP ON DP16 (HC NUTTING)

0935 SAMPLE DP16 - 2' 073001150

0955 SAMPLE DP16 - 12.5' 073001151

1015 ERIC WEAVER H.C. NUTTING ONSITE DROP OFF SUPPLIES

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING FI	7-30-01

Observations/Remarks (continued): 1025 - SETUP ON DP17 - N. OF W. TANK FARM

1030 - ERIC WEAVER LEAVES SITE - CORE CONCRETE AT DP17

1035 - COLLECT DP17 - 3' 073001152

1055 - COLLECT DP17 - 13' 07301153

1110 - CONCRETE PATCH DP17

1130 - TAKE PICTURES OF GROUNDWATER TREATMENT SYSTEM AND RECOVER WELLS

1145 - HC NUTTING LEAVE TO GET DIESEL FOR RIG AND LUNCH

1200 - CALLED LAB TO MAKE SURE SAMPLES (ENCORE VOC'S) GET EXTRACTED BEFORE 48 hour HOLDING TIME EXPIRES, THEY SAID THE SAMPLES WILL BE EXTRACTED IN TIME

1305 - SET UP ON DP18 (BLDG 40, GEOPHYS ANOM. G)

1355 - SET UP ON DP19 (N. BLDG 40 GEOPHYS ANOM. E)

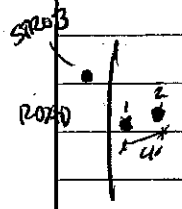
1440 - SET UP ON D20 (IN CIRCLE NORTH OF BLDG 40)

1530 - SET UP TO FIND NORTH END OF TRENCH DRAIN (TN)

HOLE 1 : 0-4 CONCRETE - GRAY CLAY - SOFT

4'-8' - CLAY 6'-8' BLACK, ODOR, SOME GRAVEL

8'-12' - CLAY 8'-9', SAND 9'-10' - GRAVEL/SAND 10'-12' BLACK THROUGHOUT



- HOLE STAYED OPEN TO 11' BGS, BENT CHIP TO SURFACE

HOLE 2 : 0'-4' - CONCRETE 6" - CLAY BASE 0.5'-4', DK GRAY

4'-8' - CLAY 4'-7.5' - 7.5'-8' GRAVEL/CLAY

8'-12' - BLACK THROUGHOUT BLACK - 6'-8' GRAVEL/CLAY 10'-12'

CLAY 8'-12' STRONG ODOR, WET

1630 → HOLE STAYED OPEN TO 9.5', BENT CHIP TO SURFACE

1635 HOLE 3 0'-4' - CONCRETE ≈0.5' CLAY BASE 0.5'-4'

4'-8' - CLAY 4'-7' - GRAVEL CLAY 7'-8' (BLACK 7'-12')

8'-12' - CLAY GRAVEL/CLAY 9'-12'

CHIPS 0'-11' 8'-9'

1715 PATCH 3 HOLES WITH CONCRETE

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GEOMATRIX REPRESENTATIVE

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1730 - 1830 PREP SAMPLES FOR DELIVERY

1915 - LEAVE SITE

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON	READING, OHIO	E. MANSELL

Date	Contractor/Representative	Time Arrived
7-31-01	HC NUTTING	0700

Day of Week	Client	Observations Reported to	Time Departed
TUESDAY	ROHM & HAAS	PETER PALENA	1745

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	M. HEMINGWAY	91° HOT, HUMID	

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 ARIVE ONSITE, GEYER HAS TAKEN, MOVED GMX DUMPSTER

0715 HC NUTTING ONSITE

0720 ERIK CONDUCTS H&S MEETIN

0740 ERIK GETS HOT WORK PERMIT SIGNED BY MACK

0820 SET UP ON TN — TRENCH DRAIN NORTH, HAZCO 11804

0830 HOLE 4: PID MALFUNCTIONING — CALIBRATED, CAL GAS 100ppm ISOBUT 115ppm

~4' EAST OF 3 0'-4' — CONCRET-6", BASE, CLAY FILL TO 4'

4'-8' — CLAY → 7', 7'-8' - GRAVEL, SAND BLACK 7'-12

8'-12' — CLAY - 8'-9' - GRAVELY CLAY 9'-12'

OPEN TO 11.5' BGS STRONG ODOR

HOLE 5: BENT-CHIP TO SURFACE

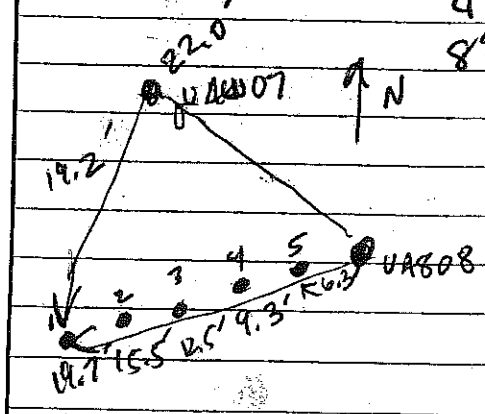
~4' EAST OF 4 0'-4' — FILL - 3.8', 3.8'-4' - RED BRICK, WOOD MATERIAL, CEMENT

4'-8' — RED BRICK AT 4', CLAY FILL ? → 7', 7'-8' GRAVEL SAND, BLACK

8'-12' — 8'-10' — SAND GRAVEL, BLACK, ODOR REFUSAL AT 10', TRY AGAINST

10'-12' — BLACK LIQUID RUNNING OUT OF SAMPLE PROBE INTO BUCKET

10'-12' — SAND GRAVEL, BLACK STRONG ODOR HOLE OPEN TO 11.5' BGS, BENTONITE CHIP UP TO SURFACE, CONCRET PATCH BOTH HOLES 4 & 5.



0945 - MOVE TO SLURRY WALL - 4' ON 1ST HOLE, ASPHALT, CLAY FILL TO 4'

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING F1	7-31-01

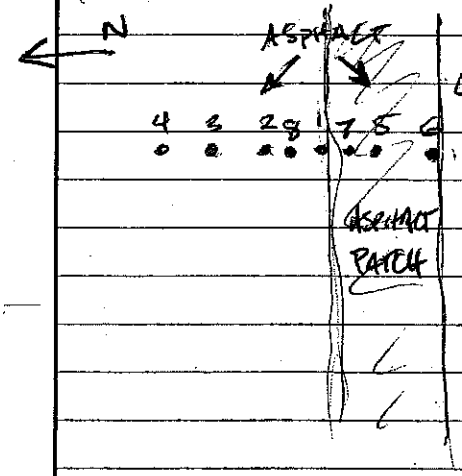
Observations/Remarks (continued): 1000 - CALL LAB (VARIANCE) APP IX - 072901142 - FROM CLP

1030 MOVE TO SLURRY WALL EAST (ADJACENT TO BLDG 16)

~~VARIANCE~~

1045 - CALL MARK - MARK SAID TO FIND CLEANOUT TO GROUND WATER SYSTEM NEXT TO BLDG 40, ALSO FIND MATT DIMASEN FOR MORE DATA ON GROUND WATER SYSEM,

1050 SLURRY WALL EAST 0-4' - BASE/CLAY DIGGING - HOLE 1



0-4' - BASE/CLAY - HOLE 2 2' N. HOLE 1

0-4' - BASE/CLAY - HOLE 3 2' N. HOLE 2

0-4' - BASE/CLAY - HOLE 4 2' N. HOLE 3

0-4' - 6" RECOVERY, BROWN CLAY HOLE 5 2' S. HOLE 1

0-4' - BASE, CLAY - HOLE 6 2' S. HOLE 5

0-4' - BASE SAND, CLAY - HOLE 7 1' S. HOLE 1

0-4' - BASE SAND, CLAY HOLE 8 1' N. HOLE 1

- FILL ALL HOLES WITH BENTONITE CHIPS
- PLACE ASPHALT PATCHES

1130 ERIC WEAVER ON SITE - HC NUTTING SUPPLIES

1145 ERIC W. OFFSITE, WILL RETURN WITH MORE SUPPLIES

1200 - MANHOLE - FOR GROUND WATER TREATMENT SYSTEM SUMP
- DEPTH BELOW MANHOLE COVER - 23.25 - TD
11.60 - DTW
- MANHOLE COVER ~.75' ABOVE GROUND SURFACE

1210 - ATTEMPT TO REMOVE MANHOLE COVER FOR GROUNDWATER TREATMENT SYSTEM CLEANOUT, WILL NEED TO GET A CROW-BAR

1220 - ATTEMPT TO CONTACT MATT DIMASEN - NOT IN OFFICE

1230 - GET LUNCH

1315 - HC NUTTING FIXING GROUT MACHINE, GETTING WATER FOR RIG

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GEOMATRIX REPRESENTATIVE

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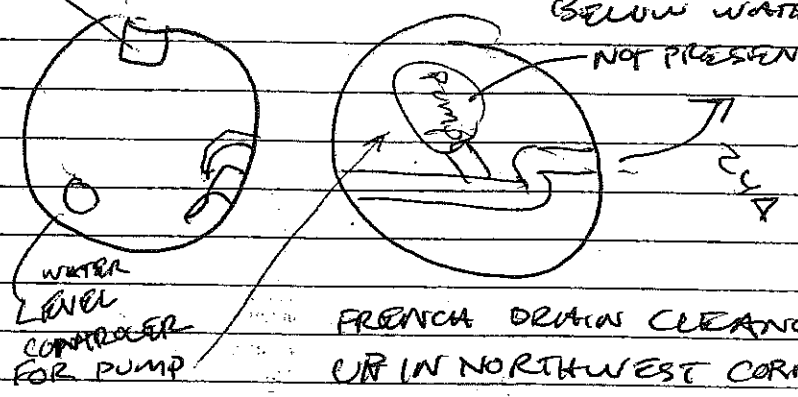
GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING F1	7-31-01

Observations/Remarks (continued): 1345 MET WITH MATT DIMASSEN, DISCUSSED GROUNDWATER RECOVERY SYSTEM, FRENCH DRAIN INLET PROBABLY BELOW WATER LEVEL IN SUMP



FRENCH DRAIN CLEANOUT ← PROBABLY UP IN NORTHWEST CORNER OF PLANT

1355 START ON DP21 – E. BLDG 4, W. OF BLDG 9

1500 TD=24' ON DP21 – HOLE WENT A LITTLE SLOW BECAUSE OF EXPANSIVE CLAYS AND GROUNWATER COMING UP INTO UPPER RODS

1525 PREPARE GROUT – ADVANCE GROUT (SP15) DEVICE DOWN TO 24' BGS – MIX GROUT 3 gallons H_2O
27 lbs. PORTLAND
– GROUT TO SURFACE 2 lbs BENT. GEL → 4 1/2 gal. GROUT

1553 – CALLED LAB – SPOKE WITH AMBER IN SAMPLE RECEIVING, SHE SAID THEY HAD ENOUGH QUANTITY TO RUN FULL APRIX FROM THE CLP GROUNDWATER SAMPLE (07290142 – RECOVERY WELL). – LOG AS VARIANCE

1605 – MIKE (HC NUTTING) & ERIK SCOPE LOCATIONS AND ACCESS ABILITY FOR DPT LOCATIONS BETWEEN BUILDINGS 3 & 10

1615 – CLEAN UP DP21 LOCATION

1700 – HC NUTTING DECONNING

1730 – HC NUTTING LEAVES FOR DAY

1745 – ERIK LEAVES SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING, OHIO	E. MANSELL
Date 8/1/01	Contractor/Representative HC NUTTING		Time Arrived 0650
Day of Week WEDNESDAY	Client ROHM & HAAS	Observations Reported to PETER PALENA	Time Departed 1540
Daily Field Report No.	Geomatrix Project Manager M. HEMINGWAY	Weather 92° SUNNY, MUGGY	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0650 ARRIVE ONSITE

0710 ERIK CONDUCTS H&S MEETING WITH HC NUTTING

0740 HC NUTTING GETTING WATER, WILL MOVE TO DP22

0820 SET UP ON DP22 — TIGHT ACCESS, REQUIRES A LOT OF MANEUVERING

0830 THROUGH CONCRETE — CALIBRATE PID — 99.0 ppm TO HAZCO — 11804 100 ppm ISOBUTYLENE

0905 DP22 - SAMPLE 12'-16' IS STUCK IN MACRO TOOL — ONCE IN GROUNDWATER, SAND WEDGES ITSELF BETWEEN OUTER PORTION OF ACETATE LINER AND INNER PORTION OF MACRO TOOL

DUAL TUBE — LINER — 1 1/4" Ø — 1 1/2" ID OD 2 1/8"

MACRO CORE — OD 2 1/8" 1-7/8" ID ~~2"~~ LINER - 1-3/4"

1" RODS

0942 - COLLECT FINAL SAMPLE (20'-24') OF DP22

1010 — BEGIN GROUTING — SET BOTTOM OF TREMIE AT 24' — 4 1/2 GALLONS GROUT — 3 gal H_2O ~27 lbs PORTLAND ~2 lbs GEL

1025 - GROUT UP TO GROUND SURFACE

1035 - HC NUTTING DECON

1100 - LUNCH

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING FT	8-1-01

Observations/Remarks (continued): 1145 HC NUTTING FINISH DECON, GET WATER FOR RIG

1210-1225 SET UP ON DP23 BETWEEN BLDG 3 & 10

1235-1250 DECIDE TO SUBMIT CLP-GEOCHEM ON THIS STRAT BORING — STRONG SWEET CHEMICAL ODOR IS PROMINENT THROUGHOUT BORING

1345 - GROUT FROM 24' TO SURFACE THROUGH TREMIE USING EXPENDABLE POINT, 4½ GALLONS GROUT, 3 GALL. H2O (DP(23)) ~27 lbs PORTAND ~2 lbs GEL

1410 — CLEAN UP AREA AROUND DP23

1430 — PREPARE SAMPLES FOR DELIVERY — 080101160-DP23-25'
HC NUTTING DECON RIG — 080101161-DP23-9'

1500 — PICK UP TRAILER

1540 — LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

MARK CELL - (512) 585 7132

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
	MORTON READING F1	READING, OHIO	E. MANSELL
Date 8/6/01	**Contractor/Representative** H.C. NUTTING		**Time Arrived** 1300
Day of Week MONDAY	**Client** ROHM & HAAS	**Observations Reported to** PETER PALENA	**Time Departed**
Daily Field Report No.	**Geomatrix Project Manager** M. HEMINGWAY	**Weather** HOT, HUMID, SUNNY 90°	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) ____

Unresolved Tests/Issues: ____

Observations/Remarks: 1300 - ARRIVE ONSITE

1330 HC NUTTING ONSITE - ERIK CONDUCTS H&S MTG, GETS HOT WORK PERMIT FOR DRILLING, CALIBRATE PID, 100ppm ISO BUTYLENE - PID READS 102.1 ppm 580 B HAZCO 10763

1420 SET UP ON DP24 NE. BLDG 1

1520 TOTAL DEPTH DP24 - 24' HOLE OPEN TO 23' BGS, BENTONIT CHIP UP TO SURFACE

1550 SET UP ON DP16 TO GROUT - 2 GALLONS H_2O
ADVANCE TREMIE TO 15' BGS, ~20lbs PORTLAND
GROUT TO SURFACE (2' BGS) ~1.5 lbs BENT. = 3 gallons GROUT
WILL COME BACK LATER AND TOP OFF 4 GALLON BATCH

1630 SET UP TO GROUT DP15 - TREMIE @ 15' BGS
3 GALLONS H_2O ~30lbs PORTLAND 2 lbs GEL

1645-1710 - GROUT HOSE PLUGGED, CONTINUE GROUTING
AT 1710 - PID NOT FUNCTIONING - CALL HAZCO, WILL SEND OUT NEW ONE IN MORNING

1720 - GROUT DP15 TO SURFACE

1738-1800 - DECON GROUT PUMP, HOSES, RODS, CLEAN UP AROUND DP15

1815 - HC NUTTING OFF SITE

1820 - ERIK LEAVES FOR DAY

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GEOMATRIX REPRESENTATIVE

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DR[1] (rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING, OHIO	E. MANSEN
Date: 8-7-01	Contractor/Representative: H.C. NUTTING		Time Arrived: 0630
Day of Week: TUESDAY	Client: ROHM & HAAS	Observations Reported to: PETER	Time Departed:
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: HOT, HUMID, 93°	Travel Time (hours):
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours):

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0630 - ERIK ARRIVES ONSITE, GET HOT WORK PERMIT SIGNED FROM STEVE VAUGHT FOR DPT ACTIVITIES

0720 - HC NUTTING ONSITE

0730 - ERIK CONDUCTS H&S MEETING

0740 - HC NUTTING GETTING WATER FOR RIG, ERIK LOCATING TS BORINGS 2 & 3 TO GROUT. SET TREMIE AT 16' BGS, GROUT TS 2,3 TO SURFACE, ~6 GALLONS H_2O, ~56 lbs PORTLAND, 4 lbs BENT GEL

0840 HC NUTTING DECON GROUT EQUIPMENT, ERIK WALKS OVER TO RECEIVING TO GET NEW PID

0900 CALIBRATE PID - HAZCO 580B - 3399 10.6 eV BULB
100 ppm ISOBUTYLENE - PID READS 97.7 ppm

0915 TAKE EQUIPMENT BLANK NEAR TS - TRENCH DRAIN SOUTH, POUR D.I. WATER THROUGH ACETATE LINER AND SAMPLE SHOE - 080701162

0935 HC NUTTING FILL RIG WITH WATER

0955 SET UP ON DP25 - BLDG 6 LOADING DOCK

1105 BREATHING SPACE - 0.0 ppm - SWITCH TO DUAL TUBE DPT

1145 TD = 24' WITH DUAL TUBE, GROUT THROUGH DUAL TUBE OUTER CASING - DP25

1230 CLEAN AREA AROUND DP25

1315 BMX HC NUTTING GET LUNCH

1400 HC NUTTING GET WATER FOR RIG

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING P1	8/7/01

Observations/Remarks (continued): 1430 SET UP ON DP26 W. OF EAST TANK FARM

1515 POWER OUT ON PID -

1605 GROUT PUMP IS DOWN AGAIN -

1635 HC NUTTING CALLS GEOPROBE, ORDERS PARTS FOR GROUT PUMP. PULL - MACRO TOOL GROUTING RODS.

1740 FINISH GROUTING DP26 WITH OUTER DUAL TUBE FROM 0'-24' -

1800 HC NUTTING DECON, CLEAN UP AROUND DP26, TOP OFF DP - ON NORTH ROAD

1810 PACK SAMPLES FOR FED EX

1850 GMX, HC NUTTING LEAVE SITE, GMX TAKES SAMPLES TO FED EX

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING FI	READING, OHIO	E. MANSELL
Date: 8/8/01	Contractor/Representative: HC NUTTING		Time Arrived: 0630
Day of Week: WEDNESDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1900
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: HOT, HUMID 91°	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0630 - ERIK ARRIVES ONSITE, GET HOT WORK PERMIT FOR DPT WORK

0715 - HC NUTTING ONSITE, ERIK CONDUCTS H&S MTG

0750 - SETUP ON DP27 - HC NUTTING INSTALLING NEW VICE ON DPT RIG - WEST OF BLDG 2

0810 - CALIBRATE PID - 5808 TOTAL SAFETY 3399 - 10.6eV 100ppm ISOBUTYLENE - INST. READS 104.7ppm, BREATHING SPACE 0.0ppm

0813 - START DPT, ADVANCE HOLE PUNCH THROUGH ASPHALT, WILL USE DUAL TUBE ON THIS HOLE BECAUSE GROUT MACHINE IS NOT FUNCTIONING,

0835 - COLLECT SAMPLE 080801166 DP27-5' - BLACK STAIN, ODOR

0840 COLLECT SAMPLE 080801167 DP27-11' - BLACK STAIN, ODOR

0910 - HAVING PROBLEMS AT 17' BGS, VERY HARD TILL

NOTE: SAMPLING WITH DUAL TUBE YIELDS LESS SAMPLE PER LINEAR FOOT - SAMPLES CONTAIN SOIL 1/2 FOOT ABOVE AND ONE FOOT BELOW NOTED DEPTH (I.E. DP27-5' = 4'-6'), FOR MACRO CORE, SAMPLES CONTAIN SOIL APPROXIMATELY 1/2 FOOT ABOVE AND BELOW NOTED DEPTH

0918 - MOVE TRAFFIC CONES OUT OF ROAD TO ALLOW ACCESS FOR AIR PRODUCTS NITROGEN TRUCK

1045 - TALKED TO MARK, HE SAID NOT TO SUBMIT SAMPLES 166, 167 FOR ANALYSIS

1100 - SET UPON DP28 - WEST BLDG 15

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING F1	8/8/01

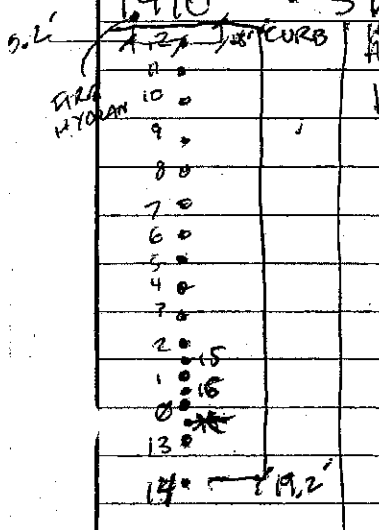
Observations/Remarks (continued): 1105 - SET UP ON DP28 - WEST OF BLDG 15

1230 - TD=24' - GROUT TO SURFACE THROUGH OUTER DUAL TUBE CASING

1250 - LUNCH

1350 - SET UP AT SLURRY WALL - HC NUTTING GETTING WATER FOR RIG

1410 - SW



HOLE - 0 - DK OLIVE GRAY - ODOR 0'-4'

HOLE - 1 - DK OLIVE GRAY - ODOR 0'-4'

HOLE - 2 - SAME AS ABOVE

HOLE - 3 - SAME AS ABOVE (HOLES 1-12) ASPHALT

HOLE - 4 - SAME

HOLE - 5 - SAME

HOLE - 6 - SAME - LESS ODOR

HOLE - 7 - SAME - LESS ODOR

HOLE - 8 - SAME - LESS ODOR

HOLE - 9 SAME - 3.5'-4' BROWN - LESS ODOR

HOLE - 10 SAME - 3.5'-4' BROWN - LESS ODOR

HOLE - 11 SAME - 3'-4' BROWN - LESS ODOR

HOLE - 12 SAME " " NO ODOR

17 - HOLES SEARCHING FOR SLURRY WALL, DID NOT FIND

HOLE - 13 (SOUTH OF HOLE 1) - CONCRETE - DK OLIVE GRAY, BLACK ODOR

HOLE - 14 - CONCRETE, BLACK 3'-4' STRONG ODOR (BLACK LIQUID 2'-3'

HOLE - 15 - BTWN HOLE 1 & HOLE 0 - SAME AS HOLE 1

HOLE - 16 - DK OLIVE GRAY 0-3.5' - 3.5'-4', BLACK

HOLE - 15 - 4'-8' - OLIVE GRAY 4'-5.5', BLACK 5.5'-8'

- BENTONITE CHIP ALL HOLES TO SURFACE, ASPHALT PATCH AND CONCRETE PATCH ALL HOLES

1640 - RON OF HC NUTTING TAKING 10 MINUTE BREAK IN A/C TRUCK

- ERIK PAINTING LOCATIONS, LOOKING FOR HOLES TO PATCH

1650 - MIKE & ERIK PATCH HOLES, RON DECON

1730 - CLEAN UP AROUND SW LOCATIONS

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING FI	8/8/01

Observations/Remarks (continued): 1755 - LABEL ALL DPT LOCATIONS WITH PAINT

* 1810 - PACK SAMPLES (080701162 - CLP-VOC's - EQUIPMENT BLANK) FROM PREVIOUS DAY. THIS SAMPLE WAS TAKEN YESTERDAY, BUT WAS NOT SENT WITH YESTERDAYS FED EX SHIPMENT. THE SAMPLE WAS PRESERVED ON ICE, AND REPACKED WITH A NEW CHAIN-OF-CUSTODY # 010741 - WILL LOG AS VARIANC

1850 HC NUTTING LEAVES SITE - WILL RETURN IN SEPTEMBER FOR OFFSITE DPT WORK

1900 ERIK LEAVES FOR FED EX.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING, OHIO	E MANSELL
Date 8/9/01	Contractor/Representative		Time Arrived 0800
Day of Week	Client	Observations Reported to	Time Departed
Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0800 ARRIVE ONSITE - FIND ERIC WALKER AND HAVE HIM MOVE RACKS OVER SUSPECTED LOCATION FOR FRENCH DRAIN CLEANOUT ON NORTH-WEST PORTION OF PLANT PROPERTY

0900 - OPEN SOUTH FRENCH DRAIN CLEANOUT NEAR BLDG 40, TAKE PICTURES (USE BORROWED CROWBAR FROM MAINTENANCE)

0920 - FIND STEVE VAUGHT TO BORROW H_2S METER, NORTH FRENCH DRAIN CLEANOUT HAS BOLTED MANHOLE COVER, PICK UP H_2S METER FROM BLDG 16

0950 GO TO HARDWARE STORE TO PICK UP TOOLS

1030 BACK ON SITE, GO TO NORTH FRENCH DRAIN CLEANOUT, UNBOLT MANHOLE COVER, CHECK FOR H_2S, O_2, CO_2, LEL, APPEARS TO BE OXYGEN DEPRIVED ENVIRONMENT (NO H_2S).

1040 PROCEED IN REMOVING MANHOLE COVER - TAKE PICTURES OF FRENCH DRAIN CLEAN OUT - PUT COVER BACK ON MANHOLE - BOLT DOWN (ONLY 3-BOLTS)

1100 RETURN CROWBAR TO MAINTENANCE, RETURN H_2S METER TO BLDG 16

1110 CLEAN UP TRAILER - DEMOB

1300 MEET ERIC WALKER IN HIS OFFICE

1305 LEAVE SITE

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton-Reading FI	Reading OH	T. Jennings
Date: 8/20/01	Contractor/Representative		Time Arrived: 0600
Day of Week: Monday	Client: Rohm & Haas	Observations Reported to: Peter Polena	Time Departed: 1930
Daily Field Report No.: 1	Geomatrix Project Manager: M. Hemingway	Weather: Ptly Cloudy Warm ~80° F	Travel Time (hours): .5
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours): 14.0

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0600 Arrived at Plant Prepping to begin Phase II of the Morton FI. -
0730 Drillers Arrive - saftly meetings and project orientation
0900 Moving to decon and get loader
0903 Begin draing Frac tank
0930 Drillers getting supplies and deconing
1130 Meeting w/ Eric Walker - Receiving Empty roll offs - picking up full roll offs -
1350 Rigging up on STR11 located in NE corner of plant
1415 Duart Flow meter start reading 1179.79
1440 Begining drilling & Sampling of STR11
- Collected MS/MSD @ 2' Sample ; Collected Blind Dup @ 9' Sample
1800 Stopped drilling for day @ PD of 75'
1830 Packing samples - Eric Shipped Samples
1930 Left Site for day - went to buy supplies

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GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: MORTON READING FI	Location: READING, OHIO	Engineer/Technician: E. MANSFIELD
Date: 8-21-01	Contractor/Representative:		Time Arrived: 0630
Day of Week: TUESDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1910
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: SUNNY, WARM	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report: ☐ Yes ☐ No	Contractor Received All Attachments: ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0630 ARRIVE ONSITE
0700 HELP TIM AT SONIC RIG, STR11
0900 CHECK ON FRAC TANK, WATER STILL FLOWING TO SUMP
1000 CHECK FOR ACCESS POINTS TO MILL CREEK
1200 LUNCH
1400 LEAVE SITE FOR MILL CREEK RECON
1430-1700 CLEAR PATH ALONG MILL CREEK TO ACCESS WELL POINTS AND STREAM SAMPLING LOCATIONS, TAKE PICTURES
1730 - BACK ONSITE - TALK TO TIM - WILL GO BACK DOWN TO MILL CREEK TOMORROW (8/22/01) TO COLLECT SORBENT PADS FOR OPTICAL BRIGHTNER ANALYSIS;
1910 - LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7443A	Manton FI Phase II	Reading OH	T. Jennings
Date	**Contractor/Representative**		**Time Arrived**
8/20/01	Bart Longyear		0630
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
Tuesday	Rohm & Haas	Peter Polena	0930
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. Aeningway	Ptly Cloudy Warm (~80°)	0.5
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No / **Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)** 13.5

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0630 Arrive at Plant - getting HWP and preping for safety meeting

0700 Held Safety meeting w/ Drillers

0730 Resuming drilling on STR11 - PD 75'

0940 Completed Drilling STR11 - Preping to grout.
Water Usage - Meter Reading 1180.084 — 1179.700 / 1180.084 = 384 gal used - 120 gal Returned ~264 gal lost -
& water used
Will Install 2 wells
→ ~~UAW~~ Well at this location will be UAW10-50 (Screen from 47-57) and UAW10-80 (Screen from 76-86)

1050 Weight on grout mixture is 13 lbs/gal

1215 Completed Grouting STR-11 - Moving IDW (cuttings & water) to decon pad and deconing equipment.

1415 Moving rig and preping to Drill UAW10-80 located In NE corner of Plant ~5' East of STR11

1545 Began Drilling UAW10-80 - Starting Reading on Water Meter = 1180.700

1815 Began blowing fluid out STR11; PD is 60' - will back fill w/ Hole Plug to 57' and install UAW10-50 tomorrow -

1930 Left Site for Duty

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: Morton FI - Phase II	Location: Reading OH	Engineer/Technician: T. Jennings
Date: 8/22/01	Contractor/Representative: Boart Longyear		Time Arrived: 0630
Day of Week: Wed.	Client: Rohm & Haas	Observations Reported to: Peter Polena	Time Departed: 1915
Daily Field Report No.	Geomatrix Project Manager: M. Hemingway	Weather: Cloudy off & on Rain ~80°	Travel Time (hours): 0.5
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0630 Arrived at Plant - got hot work permit - preping for safety meeting

0715 Held Safety meeting and Reviewed Waste Handling Procedure

0800 Ending water usage for UAW10-50 - Reading = 1180680

0815 Began Installation of UAW10-50. Returned 280 gal. Started @ 1180100 - 580 used

0820 Measured well materials - 1 - 10' screen (4" - 0.020) SS; 4-4" x 10' PVC Riser joints - all flush thread.

0945 Completed installing Filter Pack 57.5 - 45 used 7 sks of 16-30 Silica Sand. and well seal 45-41 used one sack of Pure Gold Bentonite Chips

1015 Mixing grout for UAW10-50 - 12.75 lbs/gal.

1020 Grouting UAW10-50 using 1" tremie

1045 Had to stop grouting due to lightning

1145 Resumed Grouting

1200 Completed Grouting UAW10-50 - Cleaning location and going to decon. Used 70 gal. of grout

→ Returned 280 gal of water - Gallons Lost = 360 gal

*Note This well cluster and the new well at STR01 were planned above grade completions - Since these well are in a traffic area and the one at STR01 will have to be in the edge of the drive - all wells this phase must be flush completions

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443 A	Morton Reading FI	8/22/01

Observations/Remarks (continued):

1300 Deconning all Equipment - and Managing Waste from UAW10-50
/ Cleaned and Leveled location at STR11 & UAW10-50
1610 Rigging up on location in front of Receiving Dock - West of Bldg 21 - UAW16-
1645 Began drilling UAW16
1730 Completed UAW16-10 to 15' (Drilling)
Prepping to Install well - used no water - Eric took Samples to pack
1850 Install Well Used - 1-10' SS Screen (4" 0.02 slot); 1-10'-4" Sch 40 PVC Riser; 7 Bags of 16-30 Filter Sand; 3/4 bag Bentonite chips - Hydrated
1840 Finished Constructing UAW16-10 - Rigging Down.
1915 Left Site for Day

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING FI	READING, OHIO	E. MANSEN
Date	**Contractor/Representative**		**Time Arrived**
8-22-01	EQUIPT - SKIP		0635
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
WEDNESDAY	GEOMATRIX	PETER PALENA	
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. HEMINGWAY	RAIN	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0635 - ARRIVE ONSITE

0715 - SKIP WITH EQUIPT ARRIVES ONSITE, CALL ERIC WALKER FOR HIS SAFETY ORIENTATION

0820 - OPEN FRAC TANK PORTAL, THERE IS APPROX 2½ FEET OF SLUDGE - CALL FISHBURN - BOONE -
- CAN'T PICK TANK UP
- NEED VAC TRUCK - WATER SUPPLY TRUCK
- NO MORE 2" ON BOTTOM -
- CLEAN HARBORS, OR HERITAGE REMEDIATION
- METROPOLTAN ENV. HILLIARD

1030 - EQUIPT (DAN DICARLO AND SKIP LEAVE FOR THE DAY), CANNOT CONTINUE SOLIDIFYING SLUDGE BECAUSE OF THE RAIN

1230 - LEAVE SITE - GO TO MILL CREEK TO ~~GET~~ COLLECT SORBENT PAD SAMPLES, PUT IN INDIVIDUAL ZIPLOCK BAGS

1240 - COLLECT SS-13 (ENTER WITH SOUTHERN PROPERTY LINE)

1247 - COLLECT SS-12 - ENTER AT CULVERT HEADWALL ON CITY PARK PROPERTY

1258 - COLLECT SS-11

1311 - COLLECT SS-10 (BLACK, STRONG ODOR)

1335 - COLLECT SS-9

1344 - COLLECT SS-8

1355 - COLLECT SS-7

1415 - CAN NOT LOCATE WELL POINT AT SS-6

(NOTE: ~~LABEL ALL STREAM STATIONS~~ WITH BLACK SHARPIE)

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING FL	8/22/01

Observations/Remarks (continued): 1431 - COLLECT SS-5

1438 - COLLECT SS-4

1455 - FIND SS-3 (@ 100ft SOUTH OF NORTH PROPERTY LINE)

1510 - COULD NOT LOCATE STREAM STATION ON NORTH PROPERTY LINE - COULD NOT FIND PRESENCE ON ANY SEEPS IN THIS AREA (ALSO, THERE WERE NO EVIDENCE OF SEEPS IN PREVIOUS AREAS STARTING FROM THE SOUTH PROPERTY BOUNDARY).

1530 - TOOK PID READINGS OF ALL ZIPLOCK BAGS; (SEPARATELY) ALL HEADSPACE = 0.0ppm

1600 - PREPARE SAMPLES FOR QUALITATIVE OPITICAL BRIGHTNER ASSESSMENT. - TOOK READINGS OF WET PADS - 7,8,9,10 ALL HAD EVIDENCE OF OPTICAL BRIGHTNER.

1740 LABELED WITH NON OPTICAL BRIGHTNER CONTAINING MATERIAL AND HUNG EACH SAMPLE OVERNIGHT TO DRY IN A DARK ROOM

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443 A	Morton FI Phase II	Reading OH	T. Jennings

Date	Contractor/Representative	Time Arrived
8/23/01	Boart Longyear	0600

Day of Week	Client	Observations Reported to	Time Departed
Thursday	Rohm & Haas	Peter Polena	1905

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	M. Hemingway	Clear Warm ~ 85%	0.5

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0600 Arrived at Field trailer - preping for day
0700 Held Safety meeting w/ drillers
0715 Calibrating PID - Start 105 - W/ 100 ppm Iso - PID reading 124.5
0730 Rigging up on UAW18 Final Reading 1180 730
0810 Began drilling UAW18 - Beginning Water meter = 1180645
0855 Completed drilling UAW18 to 25' - will install well to 18'
~~used No water~~ Had to use water to clean up hole -
0905 Reaming w/ 8" Casing to 18' - backfilled from 18-25' w/ Bentonite Chips
→ Water usage = 85 gals → Returned ~ 30 gals Lost ~ 55 gal.
0945 Began Installing UAW18-20 → Used 1-10'x4" 0.020 wire wraped Stainless Steel Screen; 2-4"x10 Sch 40 PVC Risers (one for const. of well only); 8 Bags of Sand; 1.44 bags of Bentonite Chips
1045 Rigging down and moving equipment to decon/Laydown area; Rig is requiring adjustments to the drill head; Loading water truck w/ Water
1145 Found that bushings are out in top head drive on Rig It will Require repairs - waiting for driller to decide What needs to be done.
1230 Rig is being taken off site for repairs - will not return until after Labor Day - Will Demob Boart will Build pads on 3 wells

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
9443A	Morton FI	8/23/01

Observations/Remarks (continued):

1300 Board is deconing and preparing to demob before construction of well surface completions on UAW10-5, UAW16-10 and UAW18-20

1415 Meeting w/ Dan DeCarlo about Phase I Sludge solidification Sludge is not reacting w/ lime - will have to use portland and it will be set up by Tomorrow -

1430 Preparing to collect equipment blank from ~~core br~~

1445 Collect Equipment blank - lab water poured through one of the 6" core barrels used drilling UAW16

1500 Dan DeCarlo is assesing other options for waste mgt. - we will use a pneumatic pump to transfer as much liquid as possible to frac tank. then use portland to thicken remaining mud.

1700 Drillers left site - will return tomorrow to build well surface completions

1745 "Equipt" personell leave site after securing open tanks in case of rain

1750 Packing samples and preparing to leave for day

1900 Left site for day going to Fed Ex

2115 Scanning stream monitoring pads ~~with white light~~ Optical Brightner

Using Criteria outlined in "Optical Brightner Handbook"

Stream Results of Pad OB Tests

Stations 7, 8, and 10 were Positive
Stations 4, 5, 11, 12 and 13 were Negative
Station 9 was uncertian (retest) - edges glowed -
Station 1 was not sampled stations 2, 3, & 6 were not retrieved.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING, OHIO	E MANSELL
Date: 8/23/01	Contractor/Representative		Time Arrived: 0700
Day of Week: THURSDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1400
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0700 ARRIVE ONSITE - TAILGATE SAFETY MTG
0730 - HELP TIM AT UAN18
0800 - ROBERT FROM EQUIPT (SKIP) ARRIVES ONSITE - GIVE HIM H&S PLAN TO REVIEW - HE IS WAITING FOR LYME TO ARRIVE, SHOULD BE AROUND 0930
1000 - LYME FOR EQUIPT. ARRIVES TO SITE
1010 - CALL JERRY GLASER - CITY OF READING, ARRANGE TO MEET WITH HIM TOMORROW MORNING TO LOCATE OFFSITE DPT LOCATIONS. WILL CALL HIM AT 0700
1015-1030 PUT 10 BAGS OF LYME IN ONE POLY TANK - WILL NEED MORE LYME
1100-1115 WAIT TO SOLIDIFY
1130 - WAITING ON MORE LYME - ROBERT LEAVES FOR LYME
1225 ROBERT (EQUIPT) BACK ONSITE ADDING MORE TO POLY -
1250 ADDED 10 MORE BAGS
1300 - ADD 23RD BAG - + TWO BAGS (25)
1400 - LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FI	Reading OH	T. Jennings
Date: 8/24/01	Contractor/Representative: Bowtlongyear / Equipt		Time Arrived: 0630
Day of Week: Friday	Client: Rohm & Haas	Observations Reported to: Peter Polena	Time Departed: 2000
Daily Field Report No.	Geomatrix Project Manager: M Hemingway	Weather: Cloudy Warm ~80°	Travel Time (hours): .5
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours): 13

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0630 Arrived at Plant - Preping for Safety meeting and getting hot work permit

0700 Held Safety meeting w/Drillers - they will be building surface completions on the three wells we have completed

0830 Met w/ Rick Strapenski w/ City of Reading to look at boring locations at the N. well Field -
There is an old trail cut along property line w/ Cinci Drum all other areas are seriously grown over. - Should be adequate for four locations spaced along the trail. May need to have this "bush Hogged" before we go in.

0900 Met Jerry Glaser w/ City of Reading on background locations south of the plant, He said these are fine - to just do work in morning.
I also talked to Jerry about access to creek areas for wells - he said to call after we figure out what we want to do - having area between fence and creek mowed is no problem - just let him know

0915 Held Safety meeting w/ Equipt guys - they are resuming solidification and consolidation activities.

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443 A	Morton FI	8/24/01

Observations/Remarks (continued):

0945 Eric Walker asked that I look at a drain situation within.

→ The Building is B-24A located West of Receiving - This building is used to wash out and clean the inside of totes.

A downspout drain from the roof drains onto the grand on the west side of the building the liquid is milky - looks like soap used in washing totes. A steam vent on top of the building is likely the source of the milky water - which could potentialy contain organics.

- Milky water is also leaking under the west wall, down the slab and puddling on the grand in another area along the west side of the building.

- An area of dead grass is located near the ~~North~~ Southwest corner along the west side of the building. It is beneath a heat vent and is likely the result of heat discharge from the vent.

→ Recommended Action - I told Eric I will see if any DPT work was done in the area - He and Becky sampled liquid from downspout to look for soap and other organic spikes - I suggested to Eric that if the EPA Inspection turns this up, that he tell them it is being investigated as part of the Phase II Investigation

→ I also recomended that they design a project to pave and route runoff from this to the sewer system

Exhaust Vent on roof may need to be sampled?

GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443A	Morton FI	8/24/01

Observations/Remarks (continued):

1600 - Equipt crew has mixed Portland Cement in 3 remaing poly tanks #s 3, 4 and 5
These 3 tanks have taken 30 bags of Portland - will set overnight
→ First 500 gal poly took 41 bags of lime and ~10 bag of portland into Tanks 1 & 2 → These are in roll off
Pump was also rented to pump water to frac tank and compress, water tank & pressure washer for decon
1620 Remaining material will be placed in roll off and area cleaned tomorrow
1630 Equipt crew leaving for day
- Boart crew is returning rented equipment and preparing to pour concrete on UAW18 surface pad (last of 3 well completed).
1830 Driller/Boart leaving for day - will return on Sept. 4.
1900 Left Plant for the day

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GEOMATRIX REPRESENTATIVE

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DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7443	Morton FI	Reading, OH	T. Jennings
Date: 8/25/01	Contractor/Representative: Equipt		Time Arrived: 0645
Day of Week: Saturday	Client: Rhom & Haas	Observations Reported to: Peter Polera	Time Departed: 1730
Daily Field Report No.	Geomatrix Project Manager: M. Haningway	Weather: Pty Cloudy - ~70° Am / ~85° pm	Travel Time (hours): 0.5
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0645 Arrived at Plant - getting hot work Permit & prepirg for safety meeting

0715 Equipt Crew arrived on site held Safety meeting

0730 Using backhoe to shovel solidified material from 3 remaining poly tanks to Rolloff.

0835 Cutting up poly tanks to place in roll off - Material in bottom of 500gal tank is still wet - will add another 4 bags of portland after it is in the rolloff and mix -

1100 All material and cut up poly tanks are in rolloff - Cleaned Concrete Pad - going to load water to decon backhoe an complete cleanup.

1145 Decontaining Backhoe and final site cleanup.

1315 Equipt Completed clean up and left site. They left a water trailer and backhoe on site that need to be picked up on Monday.

1340 Left Plant to get supplies for west Alex

1500 Returned to Plant - copying paperwork and cleaning up note from this week.

1730 Left Plant - will return tomorrow to check rolloff and prepare for west Alex.

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GEOMATRIX REPRESENTATIVE

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DFr[1] (rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: Morton FI	Location: Reading OH	Engineer/Technician: T. Jennings
Date: 8/26/01	Contractor/Representative: Equipt		Time Arrived: 0700
Day of Week: Sunday	Client: Rohm & Haas	Observations Reported to: Peter Polena	Time Departed: 1500
Daily Field Report No.	Geomatrix Project Manager: M. Hemingway	Weather: Cloudy a 75°-80°	Travel Time (hours): 05
Reviewed By	Date Reviewed	Contractor Received Copy of This Report: ☐ Yes ☐ No	Contractor Received All Attachments: ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0700 - Going to store to by supplies for West Alex DPT tomorrow
0850 - Arrived at Plant - Filled out Safety meeting form
0900 - Checked condition of drilling mud in roll off - w/ Portland added - it has solidified enough to go to Landfill
1230 Preparing for West Alex Sampling tomorrow
1500 Leaving Plant for day - will pick remaining supplies needed for tomorrow

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GEOMATRIX REPRESENTATIVE

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DAILY FIELD REPORT

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Project Number	Project Name	Location	Engineer/Technician
7443 A	Morton Reading FI	Reading, OH	T. Jennings
Date: 9/4/01	Contractor/Representative: Boart Longyear / Charles Carroll		Time Arrived: 1515
Day of Week: Tuesday	Client: Rhom & Haas	Observations Reported to: Peter Polerac	Time Departed: 1930
Daily Field Report No.	Geomatrix Project Manager: M. Hemingway	Weather: Pt/cy Cloudy Warm ~ 85°	Travel Time (hours): 7
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0930 left Austin for Cincinnati.

1515 Arrived at Plant - Safety meeting and getting Hot work permits.

1600 Began drilling pilot hole for surface casing at LAW well # LAW12- -. will drill to 40' w/ 6" core barrel and 8" casing.

1830 Completed pilot hole on LAW12 to 40' - used no water.

1845 Reviewing work plan issues for dev. & Std. Sampling -

1930 Left Plant - went to get supplies.

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

GEOMATRIX REPRESENTATIVE

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DFR111 (rev 11/96)

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING, OHIO	E. MANSEL
Date: 9-5-01	Contractor/Representative: BART LONGYEAR		Time Arrived: 0640
Day of Week: WEDNESDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1700
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: 80° SUNNY	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0640 ARRIVE ONSITE - HELP TIM GET READY FOR DRILLING

0730 - GET HOT WORK PERMIT FOR DRILLING

0830 - ORDER EQUIP FROM TOTAL SAFETY - HORIBA U10 WATER QUAL. METER, NITRILE GLOVES, HARD HAT SWEAT BAND - ORDER CONF. # 401038

- DANIEL/CHRIS HARRISON BOART LONGYEAR - SAFETY ORIENTATION WITH ERIC WALKER

0855 - ERIK M. CONDUCTS TAILGATE SAFETY MTG. WITH CHRIS & DANIEL

0900 - BOART DECON HSA RIG - 15

- AUGER FOR OUTER CASING LAW-12 15½" OD 10¼" ID

0940 - SETUP HSA RIG FOR OUTER CASING AT LAW 12

PILOT HOLE OPEN TO 10' BGS -

- CHECKED OUT MICRO MAX #3 FROM STEVE VAUGHT, HOTWORK 5827

STEVE SAID IT WAS O.K. TO ADD WELDING TO HOTWORK PERMIT

1010 - AT 5' BGS - PID AT HOLE 0.0 ppm, BREATHING SPACE 0.0 ppm

1053 - AT 25' BGS - PID AT HOLE 0.0 ppm, BREATH SP. 0.0 ppm

1125 - AT 30' BGS - 15 MINUTE DOWNTIME - WAIT FOR BOBCAT

1145 - MIKE MAGNIN ARRIVES WITH CASING - 39.5' SCH 40 BLACK STEEL 8" ID 8-5/8" OD

1245 BREAK FOR LUNCH - DRILLING AT 33' BGS - WILL CONTINUE

1300 BART LONGYEAR BREAK FOR LUNCH

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING F1	9-5-01

Observations/Remarks (continued): 1330 - BEGIN DRILLING AT LAW12 (HSA) @ 35'
- DRILLING IS SLOW - CLUTCH ON DRIVE SHAFT IS SLIPPING - STOP @ 35'
1415 - MOVE TO MW-6 (GERAGHTY & MILLER - 1980) - 1-1/2" DIA.
ATTEMPT TO PULL WELL, CASING WILL NOT COME OUT,
WAIT FOR CLUTCH TO COOL DOWN TO ATTEMPT REPAIR
1450 - LOCATE MW-7, CHIP OUT SURFACE GROUT -
GROUT IS 5.8' BGS MW-7 2' BGS MW-6

1600 - HSA RIG BROKEN DOWN, BOART WILL DRIVE BACK TO INDIANAPOLIS
TONIGHT - PARTS FOR CLUTCH WILL BE AT BOART'S SHOP
AT 1000 ON 9-6-01, SHOULD BE ABLE TO START ON
LAW12 (35'-40') TOMORROW AFTERNOON
1615 - ERIK PACKS SAMPLES FOR FED EX
1700 - LEAVE FOR FEDEX

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443 A	Morton FI Phase II	Reading, OH	T. Jennings

Date	Contractor/Representative	Time Arrived
9/5/01	Boart Longyear / Charles Carroll	0640

Day of Week	Client	Observations Reported to	Time Departed
Wednesday	Rhom & Haas	Peter Polena	2000

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	M. Hemingway	Clear warm on 80°	0.5

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	14

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0640 Arrived @ Plant - Preping for Safety Meeting and getting hot work permit.
0700 Safety meeting
0720 Preping to Decon - then will drill & Sample UAW22 immediately S. of building 16.
0800 Rigging up on UAW22 located S. of Building 16
0830 Began drilling UAW22 - cored dry - used water (lost 100g)
0915 - to wash down 8" casing to 21' - used 150 gal. recovered 50 gal.
0930 - Installing well @ UAW22-20 - Screen 10'-20'; used 6 Sks of 15/30 Sand; 2 Sks Bent; ~10 gal grout from UAW10-80 slurry.
1045 Completed Installing UAW22-20 - preping to move to UAW10-80
1100 Rigging up on UAW10-80 located ~6' east of UAW10-50 in NE corner of Plant
Boart Auger rig w/ 2 man crew arrived on site @0800 - Began Reaming for casing @ UAW120 - 0930 - Eric M is watching and recording on Seperat Field Log
1130 Breaking for lunch before starting UAW10-80
1210 ~~Resumed~~ To 9/5/01 Drilling Began drilling UAW10-80 - Initial Water meter reading = 1180800
1350 Clutch began slipping on rig must shut down and allow to cool so it can be adjusted - Present depth 55'

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	Morton FI	9/5/01

Observations/Remarks (continued):

1400 -Current water usage = 350 gal ⇒ 250 gal recovered and pump to frac tank (heavy in solids)

1615 Drilling mud is blowing out from soils near well bore PD ≈ 70' - Packing off w/Ben seal.

1700 Going in hole w/6" Core barrel to Core from 75-87. Had lots of trouble w/Large Cobbles in Till from 65-75 (inside Casing) Which is down to 75' and from

1920 75 to ~80 - recovered 1.5' of gravely Clay app. from ~76.5-78.' bottom 2' of core barrell was empty will stop here for day - PD = 80'. Target Sand should be ~82-86'.

2000 Left Plant for day.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING, OHIO	E. MANSELL
Date	**Contractor/Representative**		**Time Arrived**
9-6-01	BOART LONGYEAR		0640
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
THURSDAY	ROHM & HAAS	PETER PALENA	1740
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. HEMINGWAY	84° PT. CLOUDY	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0640 ARRIVE ONSITE - GET HOT WORK PERMIT FROM STEVE VAUGHT - CHECK OUT O_2/LEL/ H_2S METER #3 FROM STEVE

0700 TM CONDUCTS HEALTH & SAFETY MTG

0725 - SET UP ON MW-6 FOR PLUG & ABANDONMENT - CME-50 - GERAGHTY & MILLER, 1980 1½" DIA. PVC - TOTAL DEPTH = 17.5'

0750 - START DRILLING

0810 - DRILLING SLOW - 1' BGS, ~2½' - 0825

0925 - DOWN TO ~4.8' BGS - SLOW DRILLING, APPEARS TO BE CEMENT IN BOREHOLE

CASING ASTM A53/B 8X28.58#

1000 - STILL AT 4.8'

1100 - AT ~4.9'-5' - STOP TO LET RIG COOL DOWN

1140 - MOVE TO MW-7

1215 - GEOMATRIX, BOART BREAK FOR LUNCH

1305 - DANIEL HARRISON ARRIVES ONSITE WITH CME-75 RIG (NEW CLUTCH) SETS UP ON LAWN - SCH40 CASING 21.15'

1410 - REACH 40' BGS WITH 15½" AUGERS 18.4'

LAWN - 39.55'

1436 - USE MICROMAX #3 S/N 06570 - CALIBRATED 9-6-01 O_2 = 20.9% LEL = 0% CO = 0% H_2S = 0% PRIOR TO WELDING CASING

1530 - FINISHED WELDING CASING; WELD BROKE APART, GRIND AND RETRY

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING P1	9-6-01

Observations/Remarks (continued): 1640 - TRY NEW WELD; APPEARS TO BE HOLDING CASING TOGETHER, WILL STRENGTHEN TO BE SURE

1730 - ERIK TURNS OVER DAILY LOG TO TIM, LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	Morton FI	Reading, OH	T. Jennings
Date	**Contractor/Representative**		**Time Arrived**
9/6/01	Boart Longyear / Charles Carroll		0640
Day of Week	**Client**	**Observations Reported to**	**Time Departed**
Thursday	Rohm & Haas	Peter Polena	
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
	M. Hemingway	Clear Warm ~85	
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0640 - Arrived at Plant - getting work Permit and Prepping for Safety Meeting
- Water usage in UAW10-80 - starting water meter reading 1180800 from 9/5/01 → Starting today is 1181500

0700 Held Safety meeting

0730 Resumed drilling UAW10-80 - Water usage thus far is 700 gallons with ~400g. recovered.
Final meter reading 1181720 = 920 gallons used and recovered total of ~500gal. ⇒ ≈420 gal. lost.

0800 Finished drilling UAW10-80 - Prepping to Install well

0910 Installing well @ UAW10-80 ⇒ 10' of SS 0.020 wire wrapped screen 86.0 - 86.0 (w/ 0.5' SS end cap) 76' of Sch 40 PVC Riser → 5 Centalizers in mid. of screen and @ 27' BGS
Used 6 sks of 15/30 Sand; 1½ 50lb bags of medium Bentonite Chips.
~100 gallons of grout slurry @ ~13lbs/gal.

1120 Completed Grouting UAW10-80 -
Going to Collect Stream Sed Samples while Drillers Clean location and decon. 7 Sed Sampling Postponed until Sept. 18.

1300 Auger Rig back onsite to complete Surface Casing Installat. at LAW12

1500 Still Cleaning location → @ UAW10

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443A	Morton FI	9/6/01

Observations/Remarks (continued):

1500 (cont) After moving rig found that mud from "blowouts" around hole ~~was~~ is worse than expected - having driller use bobcat loader to scoop up mud and gravel from spill area - will notify Eric Walker ~~in the~~ of this and that this area will require fresh fill mtl.

1505 Met with Maint. Personnel about getting trailer moved from dock area of bldg 7. - Someone should be coming to move it.

1645 Rigging up on UAW24 - Initial water meter Reading Is. ⇒ 1181740

1730 Eric Mar is preping to leave site for ~~family~~ TJ Personal matters - Auger Rig is still welding casing for LAW12 - will install and cement today - 2 shallow wells to be plugged in this area have begun over drill, but very hard drilling w/ CMEST.

1745 Began drilling UAW24 located in dock ramp TJ South of building 7. Adjacent to Strat Boring STR06 target sand is from 75' - 81.5' - plan to set well @ 82'

1915 TJ Shut down sonic rig on UAW24 ⇒ PD = 35' @ LAW12

1850 Finally completed installing casing - sticking up ~0.5' too high will try to drive down as augers are pulled - preping to grout.

1920 Began grouting thru tremie - first slurry weight TJ 12.6 lbs/gal - 55 gallons
Note: grout is leaking through weld ⇒ it will be very tight drilling this out and it looks like the ~~other~~ TJ 8" casing is going to fill on the inside at least up to 21.5'

2000 Pumped 2nd Slurry (12.5 lbs/gal) - Pulled Augers up to 15'

2050 Pumped Slurry 3 weight 12.6 lbs/gal - 55 gal

2055 Pulled Remaining 15' of Augers

55 gal

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443A	Morton FS	9/6/01

Observations/Remarks (continued):

2055 cont' Grout is at ~ 6' BGC after pulling all augers grout on inside of casing did not rise above weld @ ~~21.5~~ 19.5'

2100 Cleaning location and moving to Decon/ Laydown area

2150 Left Site for Day

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FI	Reading OH	T. Jennings

Date	Contractor/Representative	Time Arrived
9/7/01	Boart Longyear / Charles Carroll	0645

Day of Week	Client	Observations Reported to	Time Departed
Friday	Rohm & Haas	Peter Polena	

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	M. Hemingway	Ptly Cloudy Warm ~85°	

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0645 Getting hot work permit and preping for safety meeting

0700 Had safety meeting

0730 Resumed drilling UAW24 at Bldg 7 - initial water meter reading was 118740

0830 Completed overdrill of MW6 preparing to mix grout

0900 Grouting MW7 - One slurry - 55 gallons 6 sks (~7 lbs) & ~25 lbs of Bent. gel. ~~weight~~ TJ ~45 gals of water weight is 12.2 lbs/gal

0920 Completed Grouting (Plugging) MW6 - Rigging down to move to MW7 to Plugg -
- Also topped off grout on Casing of LAW12

0945 Began coring UAW24 @ 68' - Target Sand is 75-82

1010 While overdrilling MW7 - drilling got very hard @ 15' Pulled augers - had 5' of 4" steel casing wedged in end of augers - (came from 15-20) TJ ~~the casing~~ there was no record of the casing on the log we have - drilled back to 20' - found no sign of addition well materials - will grout from 20 to surface ~~Appen.~~ TJ Is Saturated below 10' > Going to decon

1035 Completed Coring UAW24 from 70 - to 82 - Core revieled separation in sands from 72.5 to 79.6' will screen ~~lower San~~ TJ Upper Sand.

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443A	Morto FI	9/7/01

Observations/Remarks (continued):

1100 Began installing MAW24 - Back filled hole w/ Bentonite Chips from 73 to 82; Screen is from 63'-73'.

1130 Operator of Auger Rig complete decon of Both auger rigs and equipment. Left w/one of auger rigs - his helper will be here early afternoon to begin well development.

1300 Filter Pack and Bentonite Seal installed in MAW24 - Break for lunch → used 7sks Sand; 1½ Sacks Bent. Chips

1345 Returned from Lunch - Preping to grout MAW24 Slurry 1 = 5-47 bags portland; ½ 50lb bag gel ~70gal water weight = 12.8lbs/gal / Slurry 2 Same approx. mix ⇒ 12.9lbs/gal

1500 Completed grouting MAW24 - Final water meter reading is 1182730 from 1181740 ⇒ Used 990 gallons - recovered ~300 gallons → lost ~700

1530 Moving to Decon area and Cleaning MAW24-70 local.

1600-1700 Rain delay

1805 Finished decon and Moving to MAW25 located ~10' NW of STR01 near NW corner of Building 40 next to West fence line.

1830 Began drilling MAW25 - Initial water meter reading.

1910 Completed drilling MAW25 - will install well tomorrow - @ 21'

1920 Have developed ~50 gal. from MAW18 will resume development in the morning.

1940 Left Plant for day.

GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443A	Morton FI	Reading, OH	T. Jennings

Date	Contractor/Representative	Time Arrived
9/8/01	Boart Longyear / Charles Carroll	0645

Day of Week	Client	Observations Reported to	Time Departed
Saturday	Rohm & Haas	Peter Polena	1840

Daily Field Report No.	Geomatrix Project Manager	Weather	Travel Time (hours)
	M. Hemingway	Cloudy Warm ~80° - Intem. Rain	

Reviewed By	Date Reviewed	Contractor Received Copy of This Report	Contractor Received All Attachments	Total Time (hours)
		☐ Yes ☐ No	☐ Yes ☐ No	

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks:

0645 Arrived @ Plant - getting hot work Permit and preping for Safety meeting
0710 Held Safety meeting
0730 Resumed installation of UAW25
0830 Completed Installing UAW → No Water Used
0840 Review Development details w/ Developers - Continuing development of UAW18-20 → Calibrated "Horiba U-10" Water Qual Meter
0850 Rigging up on UAW23 located adjacent to (Wap) STR10 - near the NW Corner of Bldg 1.
0940 Completed Drilling UAW23-20 TD25' - Screen 15-25
1020 Completed Installing UAW23-20 - Screen 15-25 - 6sks Sand to 13'; 1.5 Sacks Bent. Chips to 10 Grout Slurry for UAW23 and UAW25 - 5 SKs port.; 1/2 sk Bent. Gel - 70 gal. Water weight = 13 lbs/gal
1015 Completed Development of UAW18-20 total of ~160 gal Removed.
1030 Rigging Down @ UAW23 - Moving to Decon
1035 Observing development @ UAW16
1050 Completed development of UAW16 and → moving to UAW22
1140 Began drilling LAW12 - had <10' of grout in Casing - Also began Dev. UAW22 - pumped off after 10 min - Changing to lower flowrate

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443A	Morton FJ	9/18/01

Observations/Remarks (continued):

1205 Grout in Casing appears to be ~80% Set up after 2 days with Some water inside the casing - Grout outside casing is likely well Setup.

1230 Breaking for lunch and to repair "teeth" in pipe jaws.

1345 Resumed drilling ~~DA~~ LAW12 ← No water used thus far and development on UAW22

1445 Preparing to wash 8" down to Lower Aq. - Initial water meter reading: 1182740

1540 Sampled to 65 - clean LA sand - will set well @ 65' -

1545 Completed Drilling LAW12-60 - preping to install well

1 - Also ~~TD~~ H-measured water level in UAW22-20 - back up to 12.2'

1530 LAW12-60 → TD 66'; Screen 55-60; Sand 53-66.0 (used 7 sks) Bent. Chips 49.5-53 (used 1 3/4 SKS); Grout - Slurry 1 - 13.5 lbs/gal

1805 Grout is up inside Surface Casing - Beginning to lightning will top-off tomorrow. - Final water meter reading 1182910 = 170 gal. used and ~80 gal returned ⇒ ~80 gal lost @ ~4' BGC

1810 Preping to Rig down and Clean location

1840 Left Plant for Day

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING FI	READING, OH	E. MANSELL
Date: 9-9-01	Contractor/Representative: BOART LONGYEAR		Time Arrived: 0655
Day of Week	Client: ROAM & HAAS	Observations Reported to: PETER PALENA	Time Departed: 1910
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather	Travel Time (hours)
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours)

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: CHARLES - 812-240-3729 (BOART)

Observations/Remarks: 0700 TIM CONDUCTS HEALTH & SAFETY MTG IN TRAILOR
0730 ERIK & TIM GOOKER TRENCHING STRADEGY FOR NEW ATCA, AND WELL DEVELPMENT PROTOCOLS
0900 UNNAMED ANAMOLY IN AREA 'E', 12' SOUTH OF ORANGE MARK ON SECONDARY CONTAINMENT
0930 ANAMOLY "T" - 13.8' WEST OF ORANGE MARK ON SECONDARY CONTAINMENT
1030-1230 — STATION 2 - (UNLABELED) - INSTALLED WELL POINT (SEEP)
- RETURN LATER TO INSTALL WELL POINT (WELL)
- STATION 6-7 WELL POINT (WELL)
- STATION 6 - WELL POINT (SEEP)
- STATION 5 - GET SEDIMENT SAMPLE NORTH OF WELL POINT
- STATION 10-11 - SET WELL POIN (WELL)
1300 - LUNCH
1400 - TIM JENNINGS LEAVES FOR AIRPORT
1430 - UAW10-50 - PUMPED DRY - LET RECHARGE GO TO UAW10-80
1535 - DEVELOPED UAW10-50 AND UAW10-80 THROUGHOUT AFTERNOON - TOTALS FOR DAY - UAW10-50 - 85 GALLONS
UAW10-80 - 35 GALLONS

1800 - CHARLES JERRY FROM BOART LEAVE SITE FOR TREMIE TO PUMP SILT FROM UAW10-80 - PUMPED OUT 2-3 GALLONS
910 - LEAVE SITE

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GEOMATRIX REPRESENTATIVE

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING FI	READING, OH	E. MANSELL
Date 9-10-01	**Contractor/Representative** BOART LONGYEAR		**Time Arrived** 0645
Day of Week MONDAY	**Client** ROAM & HAAS	**Observations Reported to** PETER PALENA	**Time Departed** 1915
Daily Field Report No.	**Geomatrix Project Manager**	**Weather**	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ File Driving Records ☐ Other(s) _____

Unresolved Tests/Issues: _____

Observations/Remarks: 0645 - ARRIVE ONSITE - GET HOTWORK PERMIT FOR WELL DEVELOPMENT & WELL PAD CONSTRUCTION

0710 - CONDUCT HEALTH & SAFETY MEETING WITH CHARLES AND TERRY OF BOART LONGYEAR - RUSS IS NOT GOING TO BE HERE TODAY - HAD TO LEAVE EARLY THIS MORNING FOR ANOTHER JOB

0730 - TERRY PUMPING WATER AT UAW10-50 - HAVE TO KEEP A FLOW RATE OF ABOUT 0.1 GAL/MIN TO KEEP FROM PUMPING WELL DRY

0800 - CHARLES LEAVES FOR SUPPLIES (WELL VAULTS & SURGE BLOCK MATERIALS)

0855 - UAW10-50 PUMPED DRY - STOP TO LET RECHARGE (TOTAL ~20 GAL.)

0905 - BAIL/SURGE UAW10-80 (5 GALLONS)

0920 - MET WITH ERIC WALKER - SHOWED HIM AREA OF PARKING LOT THAT WILL NEED TO BE BLOCKED OFF FOR TRENCHING, ALSO GOT SPECIFICATIONS FOR ASPHALT REPAVING

0940 - CALLED RICK CONRAD (513) 733-9173 - HE SAID HE SPOKE WITH ANNE ON FRIDAY REGARDING OWNERSHIP ON CREEK

0945 - CALLED JERRY GLASER CITY OF READING (513) 615-9498, TOLD HIM WE WILL BE CLEARING ROAD ON CITY PROPERTY NORTH OF CONC. DRUM ON SEPT 17

E. Mansell
GEOMATRIX REPRESENTATIVE

Note: This report is a field record only. Test results, pass/fail indications, and/or recommendations contained in this report may not have been reviewed by Geomatrix supervisory staff and should be considered preliminary and subject to change.

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GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING F1	9-10-01

Observations/Remarks (continued): -1010 - CHARLES LEAVES SITE - GOES BACK TO SHOP TO DELIVER SPLIT BARREL TO MIKE, WILL PROBABLY BE 4 HOURS

1010 - TERRY PUMPS ~5 GALLONS OFF OF UAW10-80

1020 - HAVING PROBLEMS WITH PUMP - REBUILD PUMP

1110 - ATTEMPT TO PUMP UAW10-80

1140 - PUMPED ~5 GALLONS UAW10-80 — PUMPED DRY - ?

1300 - PUMPED ~10 GALLONS UAW10-50 — PUMPED DRY

1350 - WL @ UAW10-50 = 42.1' BGS WL @ UAW10-80 = 81' BGS

1400 - BAIL UAW23 DRY (1.5 GALLONS)

1408 - 16.6' BTOC WL (UAW25-20) TD = 20' BGS

- 1.4 GAL/FT

3.4' = 15 GALLONS

15 G
4.20
01.76

1437 - BAILED 20 GALLONS / SURGED & FALSE BAILED OUT OF UAW25-20 pH 9.42 (pH MALFUNCTION) COND. 4370 µS/cm, TURBIDITY 62 NTU, DO 1.37 mg/L TEMP = 19.5 C - WILL PUMP MORE VOLUME TO CLEAR TURBIDITY LATER

1515 - MET ERIC WALKER AND WALKED AROUND TO TRENCH LOCATIONS

1535 - SET UP TO PUMP UAW24-70 TD = 72' WL = 53.5' BTOC BEFORE DEV.

1550 - START PUMPING UAW24-70 ~1 gpm - PUMPED OUT ~20 GALLONS - CHARLES BUILDS PAD FOR MW25-20

1650 - STOPPED PUMPING, PULL PUMP

1710 - USE SURGE BLOCK ON UAW24-70

1800 - CHARLES INSTALLS UAW22-20 WELL PAD (3'x3') FLUSH

1800-1950 - TERRY PUMPS UAW24-70 DRY TWO MORE TIMES ~15 GALLONS

1945 - LEAVE SITE

GEOMATRIX REPRESENTATIVE

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263-0081

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Location	Engineer/Technician
7443	MORTON READING F1	READING F1	E. MANSELL
Date 9-11-01	**Contractor/Representative** BOART LONGYEAR		**Time Arrived** 0650
Day of Week TUESDAY	**Client** ROHM & HAAS	**Observations Reported to** PETER PALENA	**Time Departed** 1730
Daily Field Report No.	**Geomatrix Project Manager** M. HEMINGWAY	**Weather** SUNNY - 78°	**Travel Time (hours)**
Reviewed By	**Date Reviewed**	**Contractor Received Copy of This Report** ☐ Yes ☐ No	**Contractor Received All Attachments** ☐ Yes ☐ No	**Total Time (hours)**

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

0700 HOLD H&S MTG IN TRAILER, GET HOT WORK PERMIT

Observations/Remarks: UAW24-70 WL = ~53' BTOC WL WATER NOT FUNCTIONING

0720 - START PUMPING UAW24-70

WL LEVELS = UAW25-20 16.73' = WL 19.93' = TD BTOC - NEEDS J-PLUG, SOME SILT ON BOTTOM, VERY LITTLE

0835 LAW12-60 19.23' = WL ~~59.82~~ 59.8' = TD BTOC - NEEDS J-PLUG, TOP OFF GROUT

0840 UAW23-20 22.61' = WL 24.36' = TD BTOC

0845 UAW22-20 11.11' = WL 18.79' = TD BTOC SILT ON BOTTOM - SURGE?

0849 UAW10-50 41.00' = WL 55.6' = TD BTOC

0852 UAW10-80 59.75' = WL 87.6' = TD BTOC SOFT BOTTOM

0900 UAW18-20 10.17' = WL 17.15' = TD BTOC

0908 UAW16-10 8.65' = WL 14.1' = TD BTOC

0915 — PUMPED UAW24-70 DRY THREE TIMES SO FAR ~40 GALLONS

0942 UAW24-70 - PUMPED DRY - ~50 GALLONS TODAY SO FAR

TALKED TO TIM, HE SAID HE WOULD CALL MIKE FROM BOART TO TRY AND GET A RIG OUT HERE BEGINNING OF NEXT WEEK (SEPT 17 OR 18) TO DEVELOP ALL WELLS GREATER THAN 50' DEEP. CONCENTRATE ONLY ON SHALLOW WELLS

1025 - SET UP TO PUMP UAW25-20 - PUMPED OUT 60 GALLONS WATER APPEARS CLEAR TO THE EYE

1130 - JERRY BAILING UAW23-20 BAILED 18 GALLONS TODAY - (TOTAL 21)

1200 - WL @ UAW23-20 22.61' BTOC

1340 - SURGE BLOCK USED ON UAW22-20

1400 - UAW22-20 - PUMPED DRY TWO TIMES - ~7 GALLONS

GEOMATRIX REPRESENTATIVE

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Continued on Next Page

GEOMATRIX

DAILY FIELD REPORT

Project Number	Project Name	Date
7443	MORTON READING FL	9-11-01

Observations/Remarks (continued): 1408 WL @ UAW22-20 = 15' BTOC

1422 WL @ UAW22-20 = 14.5' BTOC

1452 PUMP UAW22-20 DRY - 2 GALLONS WL @ 15.8' PRIOR TO PUMPING

1500 MOVE TO UAW23-20 TO ATTEMPT PUMPING

- PUMP OUT 45 GALLONS

1600 - PUMP OFF 300 GALLONS FROM POLY TANK INTO FRAC TANK

1630 - TOP OFF GROUT IN LAW12, PUT ON U-PLUG

1705 - BOATT LEAVES SITE - WILL BE BACK AT 0700 TO CLEAN UP & DEMOB

1730 LEAVE SITE

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GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

GEOMATRIX

DAILY FIELD REPORT

Project Number: 7443	Project Name: MORTON READING FT	Location: READING OHIO	Engineer/Technician: E. MANSEAU
Date: 9-12-01	Contractor/Representative: BOART LONGYEAR		Time Arrived: 0650
Day of Week: WEDNESDAY	Client: ROHM & HAAS	Observations Reported to: PETER PALENA	Time Departed:
Daily Field Report No.	Geomatrix Project Manager: M. HEMINGWAY	Weather: PT CLOUDY, 80°	Travel Time (hours):
Reviewed By	Date Reviewed	Contractor Received Copy of This Report ☐ Yes ☐ No	Contractor Received All Attachments ☐ Yes ☐ No	Total Time (hours):

Attachments: ☐ Density Test Results ☐ Pile Driving Records ☐ Other(s) _____

Unresolved Tests/Issues:

Observations/Remarks: 0650 ARRIVE ONSITE

0700 CHARLES & JERRY FROM BOART ARRIVE ONSITE — RECON BOBCAT AND LEAVE TO RETURN BOBCAT

0825 CHARLES & JERRY RETURN

0845 CHARLES & JERRY TAKE SONIC RIG BACK TO INDIANAPOLIS

0900 ERIK MARKS OUT TRENCH LOCATIONS WITH ORANGE PAINT (APPROXIMATELY LOCATED USING JOHN LUTTINGER'S REPORT)

1030 CALL ERIC WALKER ABOUT DOING SEWER INLET SURVEY. HE SAID CALL HIM LATER (1300)

1200 MAKE TABLE FOR DOING SEWER INVENTORY

1400 ERIC WALKER WILL NOT BE ABLE TO DO SURVEY OF SEWER INLETS TODAY WILL TRY AND GET TO IT END OF NEXT WEEK (9-20 OR 9-21-01).

1530 DO BOTTLE INVENTORY FOR GROUNDWATER SAMPLE — CALL STL — ALESHA DANFORD AND ORDER MORE BOTTLES

1330 JERRY & BILL FROM BOART COME BACK FROM IND. TO PICK UP MORE OF THEIR EQUIPMENT AND SUPPLIES. LEAVE SITE APPROX. 1530 = WILL RETURN 9-18-01 - 7 AM

1615 PACK UP HARIBA WATER QUALITY METER TO SEND BACK TO FOR SAFETY

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GEOMATRIX REPRESENTATIVE

☐ Continued on Next Page

Field Boring Logs and Monitoring Well Construction Logs

PROJECT: Morton FI Phase II	Log of Boring No. STR 11
BORING LOCATION: NE corner of Plant	ELEVATION AND DATUM: ~~Ground level~~
DRILLING CONTRACTOR: Boart Long Year	DATE STARTED: 8/20/01 — DATE FINISHED: 8/21/01
DRILLING METHOD: Roto Sonic	TOTAL DEPTH: 120' — MEASURING POINT: Ground Level
DRILLING EQUIPMENT: Gusbeck Sonic	DEPTH TO WATER: FIRST Sand 43.5' — COMPL. ?
SAMPLING METHOD: 10' Roto Sonic Core	LOGGED BY: T. Jennings
HAMMER WEIGHT: — DROP:	RESPONSIBLE PROFESSIONAL: — REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					0-0.3 ~~Asphalt~~ Fill Material	
					0.3-6.5: Clayey Sand (SC); wet; dk br; loose - sl firm; few cal pebs. ~10% clay w/ poorly graded fine sand ~5% pebs	
1						
	166 w/ ms/			0.0		
2						
3				0.0		
4						
5						
6	169			0.0	6.5-8.5: Sandy Gravelly Clay (CL); lt br; damp; w/~20% med sd; ≤5% gravel; sl plastic	
7				0.0		
8				0.0	8.5-10.5: Clay (CH); grsh br; damp; stiff; plastic sl mottled w/dk gr clay	
9	170					
	169					
	168					
10				0.0	10.5-38.7: Clay (CH): As above but becomes gr, w/ slight HC odor (maybe ambient - No PID Hit)	
11						
12						
				0.0		
13						
14						
				0.0		
15						

Foot ec-
ple
ind
Dup

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: Mortar Reading FI

Log of Boring No. STR 11

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16						
17				0.0		
18						
19						
20						
21						
22				0.0		
23						
24						
25					Gp Clay as above w/No Odor	
26						
27						
28				0.0		
29						
30						
31						
32						
33				0.0		

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: Morton FI Phase II

Log of Boring No. STR 11

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol); color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
34						
35					clay as above	
36						
37						
38				0.0	38.7-39: Sandy Clay (CL); grsh br; wet; soft ~~sdy~~ plastic; w/~ 50% fn sand	
39					39-41.4: Clay (CH) yellowish br; damp vstiff; v plastic	
40						
41						
42					41.4-43.5: Sandy Gravy Clay (CL); yellowish br; stiff; mod plastic; w/~ 20% fn-med Sand ~ 10% fn (≤ 1/4") gravel	
43				0.0		
44					43.5-47.9; Sand (SP); ~~fn gr~~ br; wet; saturated loose fn-med grnd;	
45					47.9-49; Sandy, gravly clay (CL); br; wet; stiff; mod plastic: ~ 10% fn sd; & 5% fn grnd: ~~gravly~~	
46						
47				0.0		
48						
49					49-56: Gravely Sand (SW); br-dk br; sat; loose; fn-med grn w/~ 10% fn-v coarse grnd (up to ~ 1/4" diam.	
50						
51						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: Morton FJ

Log of Boring No. STR 11

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
52				0.0		
53	171 Geotech					
54						
55						
56					56 - 64 : Sandy Gravel Clay (CL); grnish gry to dkgrn; dry - damp; v stiff; non-slly plastic; v hard; w/~ 20% vfn - crs grnd sand and ~10% gravel - locly ≤ 4" diam (granitic) - Glacial till?	v hard - slow Drilling
57						
58				0.0		
59						
60						
61						
62						
63	172 Geotech			0.0		
64					64 - 82.1 : Silty Clay (CL) dkgr; wet - sat; locly stiff - locally friable; sl plastic, ~30-40% silt.	
65						
66						
67						
68						
69						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: Morton FI

Log of Boring No. 5/R11

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
70				0.0		
71						
72						
73						
74						
75						
76						
77	173 Geo Chem					
78						
79						
80						
81						
82				0.0	82.1 - 86': Sand (SP); br; saturated; loose to Mod compact; vfn - med grnd ~~and~~ well bedded w/silt laminea locly.	Note: Run 85-95 recovered only 4' - likely washed out loose sand 85-90
83	174 Gate					
84						
85						
86					86 - 88.8: Sandy Gravly Clay (CL); gr; wet; stiff mod plastic, w/ ~10% fn crs grained sand and ~10% crs gravel (≤ 2")	
87						

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: Morton FJ

Log of Boring No. ST-11

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol); color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
88						
89					88.8-92: Silty Clay (CL): gr wet; mod loose; soft; mod plastic.	
90					92-120: Sand (SP): br, sat.; loose-sl compact; fn-med grnd	
91					Top Lower sat. zone @ 90'	
92						
93						
94						
95						
96						
97						
98						
99						
100						
101				0.0		
102						
103						
104						
105						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: Morton FI

Log of Boring No. STR 11

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
					Same As Above	No Recovery from 105-120 in loose Sand Base on driller
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120					TD 120' in Lower Saturated Zone	
					3 Batches of Grout all 12.75-12.8 lbs	

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: Morton Reading FI - Phase II		Log of Well No. UAW10-5c	
BORING LOCATION: NE Corner of Plant		TOP OF CASING ELEVATION: ft	DATUM: Ground Level
DRILLING CONTRACTOR: Boart Longyear		DATE STARTED: 8/21/01	DATE FINISHED: 6/22/01
DRILLING METHOD: Roto Sonic		TOTAL DEPTH: 60'	SCREEN INTERVAL: 47-57'
DRILLING EQUIPMENT: Gusbach		DEPTH TO WATER: FIRST ~43' COMPL.	CASING: —
SAMPLING METHOD: 10' Roto Sonic Core		LOGGED BY: T. Jennings	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					0-0.3 Fill material 0.3-6.5: Clayey Sand (SC): dk br; wet; loose; sl firm; few cal. pebs; w/~10% clay and poorly graded fn-med Sand ~5% pebs.	8" Nominal Bore Hole
2				0.0		
3				0.0		
4						Grout
5						
6				0.0		
7				0.0	6.5-8.5: Sandy Gravelly Clay (CC): lt br; damp w/~20% med Sand; ~5% gravel sl plastic	4" Sch 40 PVC Riser
8				0.0	8.5-10.5: Clay (CH): grsh brn; damp; stiff; plastic; sl mottled w/dk grey clay	
9						
10				0.0	10.5-38.7: Clay (CH): As Above but becomes grey w/sl HC odor (may be kerosene - No PID Activity)	
11						
12				0.0		
13				0.0		
14						

WELL_OVM BORING.GPJ (10/99)

Project No.	Geomatrix Consultants	Figure

PROJECT: Morton FI

Log of Well No. UAW10-50

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ 6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15				0.0		
16						
17						
18				0.0		55 Centralizer
19						
20						
22						
23				0.0		
24						
25					Gr Clay As Above	
26						
27						
28				0.0		
29						
30						
31						

WELL_OVM M4132.GPJ (6/98)

Project No. | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FI

Log of Well No. UAW10-50

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
32						
33						8" Nominal Borehole
34				0.0		
35					Clay As Above	Grout
36						
37						
38				0.0	38.7-39: Sandy Clay (CL): grsh br; wet, Sft; slly, plastic; w/~50% fn Sand,	Sch 40 4" PVC Riser
39					39-41A: Clay (CH); yellowish br; damp; v stiff v plastic	
40						
41					41.4-43.5: Sandy Gravely Clay (CL); yellowish brn; stiff; mod plastic; w/ 20% fn-med Sand and 10% fn (≤ 1/4") gravel	Top Bentonite Seal @ 41'
42						
43				0.0	~~43.5-47~~	
44					43.5-47.9: Sand (SP); br; wet to sat.; loose; fn-med grnd	
45						Top Sand Pack @ 45'
46						
47				0.0	47.9-49: Sandy gravely Clay (CL): br, wet, stiff, mod plastic; w/ ~10% fn Snd, and ~5% fn gravel	Top Screen 47'
48						

WELL_OVM M4132.GPJ (6/98)

PROJECT: Morton FI

Log of Well No. UAW10-50

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
49					49-56: Gravelly Sand (SW): br-dkbr; Sat. loose; fn-med grned w/~10% fn-vCrs gravel (≤~4" diam)	4" - 0.020 Slot SS screen
50						
51						
52				0.0		Stainless steel Centralizer
53						
54						16-30 Sand
56					56-60: Sandy Gravelly Clay (CL); greenish grey to dkgreen; dry-damp; v stiff non-sl/y plastic; v hard; w/~20% vfn-crs grnd Sand and ~10% gravel locally ≤4" diam (granitic) - Glacial Till?	
57						SS 6" end cap
58				0.0		
59						Bentonite Hole Plug
60					TD 60'	

Grout wt. 38 strokes = 13 lb/gal

WELL_OVM M4132.GPJ (6/98)

Project No.

Geomatrix Consultants

Figure (cont.)

PROJECT: Morton Reading FI Phase II	**Log of Well No.** UAW10-~~80~~
BORING LOCATION: NE Corner of Plant; ~6' E of UAW10-50	TOP OF CASING ELEVATION: ft / DATUM: GL
DRILLING CONTRACTOR: Boart Longyear	DATE STARTED: ~~9/5/01~~ 9/5/01 / DATE FINISHED: 9/6/01
DRILLING METHOD: Roto Sonic	TOTAL DEPTH: 87' / SCREEN INTERVAL: 76-86
DRILLING EQUIPMENT: Gusbech Sonic Rig	DEPTH TO WATER: FIRST 44' COMPL. ~~[illegible]~~ / CASING: NA
SAMPLING METHOD: 10' Roto Sonic core	LOGGED BY: T. Jennings
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter. — Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					0-0.3 Fill Material (Gravel)	
1					0.3-6.5: Clayey Sand (SC); dk br; wet; base to silty firm; ~10% clay; Sand is fn-med grned w/to 5% calc pebbles.	Cored 0-15'
2				0.0		Washed 8" casing 15' to 75'
						Cored 75' to 87'
3						
4						
5		—				4" Sch 40 PVC Riser
6						
7				0.0	6.5-8.5: Sandy Gravelly Clay (CL): lt br, damp; sl plastic w/20% med sand & 50% gravel (≤1")	
8						
9					8.5-10.5: Clay (CH); greysh br; damp; st. stiff, plastic, sl mottled w/dk gr clay.	Grout
10			—			8" hole
11					10.5-38.7: Clay (CH): As Above becoming gr.	
12						
13				0.0		
14						

WELL_OVM BORING.GPJ (10/99)

Project No. | Geomatrix Consultants | Figure

PROJECT: Mortar Reading FI - Phase II

Log of Well No. UAW10-80

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15						
16						
17						8" hole
18				0.0		
19						
20						4" Riser
21						
22						Grout
23				0.0		
24						
25					Grey Clay as above	
26						SS Centralizer
27						
28				0.0		
29						
30						
31						

WELL_OVM M4132.GPJ (6/98)

Project No. | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FI

Log of Well No. 4AW10-80

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
49					49-56: Gravelly Sand (SW); br-dk br; Saturated; loose; fn-med grnd w/10% fn-v crs gravel (up to 1/4")	
50						
51						
52						
53						
54						
5						4" Riser
56					56-64: Sandy Gravelly Clay (CL); greenish gray to dk green; dry-damp; v stiff; non to slly plastic; v hard; w/~20% vfn to crs grnd Sand and w/10% gravel (≤ ~ 1/4" diam locally) - granitic gravel - Glacial Till poss.	8" hole
57						
58						Grout
59						
60						
61						
62						
63					Very larg cobbles 65-75 up to and > than 6" diam.	
64					64-82.1: Silty Clay (CL); dr kgr; wet-Saturated; localy stiff-localy friable; sl plastic; ~30-40% silt	
65						

PROJECT: Morton FI

Log of Well No. UAW10-80

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Silty Clay As Above	
66						
67						Grout
68						
69						4" Sch. 40 PVC Riser
70						
71						Top Seal @ 71'
						3/4" Bentonite Chips
73						8" Bore Hole
74						Top Sand Pack @ 74'
75					as above	
76						
77						
78						15/30 Sand
79						4" 0.02 Screen
80						
81						SS Centralizer
82						

WELL_OVM M4132.GPJ (6/98)

Project No.

Geomatrix Consultants

Figure (cont.)

PROJECT: Morton FI

Log of Well No. UAW10-80

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					82.1-86: Sand (SP): br; Sat; loose to mod ~~plastic~~ Compact ~~w/ ~10% fn grnd~~ vFn - mod grnd; well bedded w/ silt laminea localy	8" Bore Hole; 15/30 Sand; 4"-0.02 SS-wirewraped Screen
83						
84						
85			~~[illegible]~~			
86					86-87: Sandy Gravity Clay	0.5' SS End Cap.; Caved Fm mtl.
87					TD 87'	
88					Grout 2 Surries	
89					1-@ ~400lbs portland ~25 lbs gd. wieght = 13lbs/gal	
90					1-@ ~300lbs portland ~15lbs = 13.1 lbs/gal.	

W-2 (12/95)

Project No.	Geomatrix Consultants	Figure

PROJECT: Morton-Reading FI	Log of Well No. LAW12-60 to ~~UAW12-20~~	
BORING LOCATION: ~7' West of UAW12-20	ELEVATION AND DATUM: Grandhead	
DRILLING CONTRACTOR: Boart Longyear	DATE STARTED: 9/4/01	DATE FINISHED: 9/8/01
DRILLING METHOD: Roto Sonic	TOTAL DEPTH: 66'	SCREEN INTERVAL: 55'-65'
DRILLING EQUIPMENT: Gussbach Sonic	DEPTH TO WATER: FIRST 52.1' COMPL.	CASING: 40'
SAMPLING METHOD: 6"x 10' Core - Sonic	LOGGED BY: T. Jennings	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					0-18': See Log From UAW12-20	
1						18" hole
2						
3						8"ID, 8 5/8" OD Carbon Steel Casing
4						
5						
6						grout
7						Grout Grout
8						4" Sch 40 PVC Riser
9						
10						
11						
12						
13						
14						
15						

W-1 (12/95)

Figure

PROJECT: Morton Reading FI

Log of Well No. AW12-60

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16					14.5–18: Clay (CL); dkgr-blk; damp; ~10% fn-med sand; ~10% gravel ≤2"; 80% clay; v stiff; mod plastic.	
17						
18					18-21.3; Gravelly Sand (SP); blk; Saturated; w/~30% gravel ≤2"; ~70% fn-crs sand; loose, hvy chem odor	
19						18" hole
20						
21						8" Steel Casing
22					21.3-26.5; Clay (CL); dkgr; damp; v stiff; mod plastic.	4" Riser
23						Grout
24						
25						8 casing
26					26.5-35.5: Sandy Gravelly Clay: (CH); dk greenish gry; damp; w/~20% fn-med Sand ~10% gravel (≤1½"). 70% clay, stiff; v plastic	Grout
27						Grout
28						
29						
30						
31						
32						
33						

W-2 (12/95)

Project No. | Geomatrix Consultants | Figure

PROJECT: Morton Reading FI

Log of Well No. LAW12-60

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34						15½" Auger hole (10¼ ID Augers)
35						8" ID/8⅝" OD steel casing
36					35.5-36.5; ~~Gravelly~~ Sandy Gravel (GP) dkgr-rdshbr; Saturated; w/~30% fn-crs Sand; ~70% gravel (≤2"); loose	
37						8" outer casing to 25'
38					36.5-~~43.5~~ 43.5 TJ: Silty Clay (CL); rdsh br, becomes grshbr below 39.'; damp; soft-very stiff; breaks in concoidial pattern localy; mod plastic	6" core hole to 40' as pilot hole
39						
40						Reamed w/15" OD 12⅝ ID Augers
41						
42				0.0		
43						±8" hole
44					43.5-52.1: Clayey Silt (ML); greenish gry; wet; w/≤20% clay; compact; sl plastic.	Grout
45						4" PVC Riser
46					v clayey w/ Lg Cobbles 45-47 Localy Iron stained 47-52	
47						
48				0.0		Grout
49						
50						Top Bent 49.5

Grout

Grout

WELL_OVM M4132.GPJ (6/98)

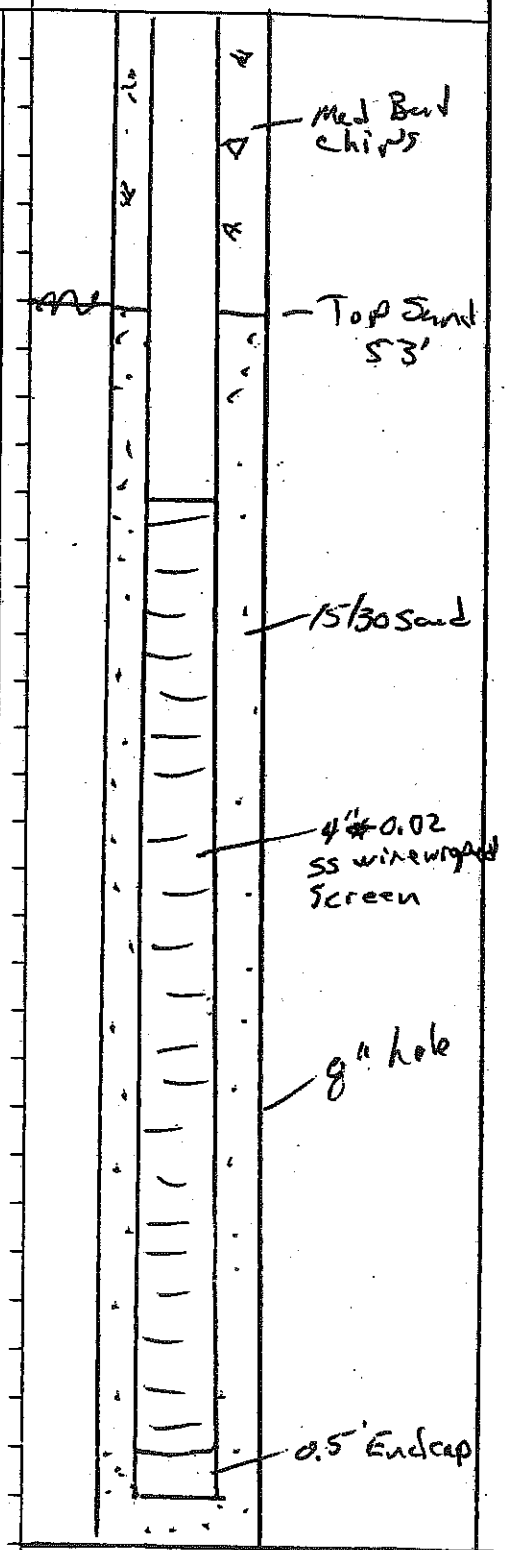
Project No. | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FJ

Log of Well No. LAW12-60

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.
51					
52					Top of lower Aquifer @ 52.1'
53				0.0	52.1-66' : Sand (SP); rdish br; Sat.-wet; f fn-med grnd; loose
54					
55					
56					
58					
59					
60					
61					
62					
63					
64					
65					Grout Slurry 1 - 7-47 lb sks portland; 1½ sk/gal weight = 13½ lbs/gal
66					TD 66'
67					

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



WELL_OVM M4132.GPJ (6/98)

PROJECT: Morton FI - Phase II		Log of Well No. GAW16-10	
BORING LOCATION: Reading OH		TOP OF CASING ELEVATION: ft	DATUM: Ground Level
DRILLING CONTRACTOR: Boart Longyear		DATE STARTED: 8/22/01	DATE FINISHED: 8/22/01
DRILLING METHOD: Roto Sonic		TOTAL DEPTH: 15'	SCREEN INTERVAL: 5'-15'
DRILLING EQUIPMENT: Gusbeck Sonic Rig		DEPTH TO WATER: FIRST 5.7 COMPL.	CASING: —
SAMPLING METHOD: 10' Core Barrel		LOGGED BY: T. Jennings	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

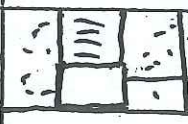
DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					0-0.5: Concrete 0.5-1.0: Caliche fill 1.0-3.2: Clayey Gravelly Sand (SC): dk br; ~30% clay plastic; ~10% fn gravel (≤½"); 60% fn-md sand moist.	concrete Top Bent. seal 1'
1						
2	176			0.5		med. Bentonite Chips
3					3.2-5: Sandy Clay (CH): lt br-br; wet; soft, v plastic	
4				0.5		Top Sand Pack 3.5'
						4" Sch 40 PVC Riser
5				0.5	SW/SC 5-5.7: Clay Sand (~~SC~~); tn-dk br; damp w/~10% gr clay interbeds and rip up clasts; 90% fn-crs sand loose; mod HC odor	Top screen 5'
6	177					
7				1.7 3.9	5.7-12.1: Gravelly Sand (SW); blk; saturated w/~10% fn gravel (≤½"); clay as above down to 6.2'; and 90% sand fn-crs grnd; loose; hv HC odor - poss free hydrocarbon in intense blk staining.	16-30 Sand Pack
8						8" hole
9				2.4		
10						5S Centralizer
11				52.6		
						4" - 0.020 SS Screen
12					12.1-15: Sandy Gravelly Clay (CL); dk gr; damp ~20% fn-crs sand; ~20% gravel (≤2"): 60% gr clay; v stiff; mod plastic; HC staining locally along small fractures (poss DNAPL) or br silt frags?	
13				38.5 28.5		
14						

WELL_OVM BORING.GPJ (10/99)

Project No.	Geomatrix Consultants	Figure

PROJECT: Morton Reading Phase II

Log of Well No. UAW16-CO

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
				11.3		 ← 8" Nominal Hole ← 6" End Cap
15.5 ↓					TD 15.5	15.5

WELL_OVM M4132.GPJ (6/98)

Project No. | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FI	**Log of Well No. UAW 18-20**
BORING LOCATION: Near SW Corner Bldg 22	TOP OF CASING ELEVATION: ft / DATUM: Ground Level
DRILLING CONTRACTOR: Boart Longyear	DATE STARTED: 8/23/01 / DATE FINISHED: 8/23/01
DRILLING METHOD: Rotn Sonic	TOTAL DEPTH: 25' / SCREEN INTERVAL: 7.5-17.5
DRILLING EQUIPMENT: Gustbech Sonic Rig	DEPTH TO WATER: FIRST: 10 COMPL. / CASING: na
SAMPLING METHOD: 10' Sonic Core	LOGGED BY: T. Jennings
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.) — Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1	178			20.4	0-0.3: Concrete 0.3-0.5: Base/fill mtl. 0.5-5.9: Sandy Gravelly Clay (CL); br; wet; ~30% fn-crs Sand; ~10% fn gravel; soft; mod plastic.	Concrete
2						Top Bent. 2.5'
3						med bent. chips
4				0.7		
5					5.9-8: Gravelly Sand (SW); br-gr; wet; w/~30% gravel (≤2"); loose unconsolidated	Top Sand 5.5'
6						
7						8" Nominal Bore
8				4.8	8-10: Sand (SW); br; sat; wet; fn-crs grained; loose	#16-30 Silica Sand
9						
10					10-13.9: Sand (SW) as above but Black w/ mod H2S odor	
11						
12				7.5		
13						
14						

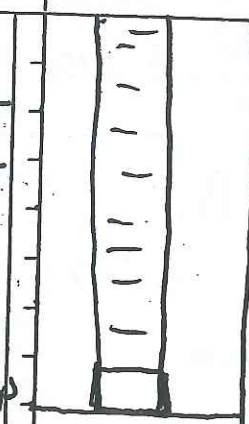
WELL_OVM BORING.GPJ (10/99)

Project No.	Geomatrix Consultants	Figure

PROJECT: Morton FI

Log of Well No. UAW18-20

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15	180				13.9-15.5: Clay (CH); gr; damp; vstiff; vplastic	
16					15.5-18: Sand (SW): dkbr-blk; wet; loose.	
17						
18					18-20.4: Sandy Gravelly Clay (CL); gr; damp ~20% fn-crs sand; ~20% gravel (≤2"); mod stiff	
19					19-25:	
20					20.4-25: Gravelly Clay (CL); gr-grnsh gry; damp; vstiff; mod plastic; w/ small green clasts and ≤5% small (≤¼") clay gravel.	Filled w/ Hole plug
22						
23						
24						
25					TD 25'	
26						
27						
28						
29						
30						
31						



Project No.

Geomatrix Consultants

WELL_OVM M4132.GPJ (6/98)

PROJECT: Morton FI	Log of Well No. UAW22-20	
BORING LOCATION: S. of Building 16	TOP OF CASING ELEVATION: ft	DATUM: GL
DRILLING CONTRACTOR: Boart Longyear	DATE STARTED: 9/5/01	DATE FINISHED: 9/5/01
DRILLING METHOD: Roto Sonic	TOTAL DEPTH: 25'	SCREEN INTERVAL: 10-20
DRILLING EQUIPMENT: Gusspatch Sonic	DEPTH TO WATER: FIRST 12.5 COMPL.	CASING:
SAMPLING METHOD: 6"x10' Sonic Core	LOGGED BY: T. Jennings	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation:	Flush Compl.
1				0.0	0-1.7: clayey, Gravelly, Sand (SP); redish brn; wet; ~10% red clay, stiff plastic; ~30% gravel (≤1.5"); ~60% fn-crs sand; loose	concrete
2	181					Grout
3				0.0	1.7-7.6: Sandy Gravelly Clay (CL), gr-grsh br; damp; ~20% fn-med sand; ~10% gravel (≤4"); stiff; mod plastic.	4" Sch. 40 PVC Riser
4						
5				0.0		
6						3/4" Bentonite Chips 5-8.5
7				0.1		
8					7.6-13.2: Gravelly Sand (SP); black; wet; ~30% gravel (≤1") decreasing in vol. downward; ~70-80% sand fn-med; loose, mod chem odor	
9				0.0		
10					becomes Saturated @ ~12.5'	15/30 Sand 8.5'-20.5'
11	182			0.9		
12						Screen 10-20'
13				0.0	13.2-15.1: Clay (CL); dkgrn; damp; stiff mod plastic	
14						9" hole

WELL_OVM BORING.GPJ (10/99)

Project No. | Geomatrix Consultants | Figure

PROJECT: Morton FI

Log of Well No. UAW22-20

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ 6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15				0.1	15.1-20.5: Gravelly Sand (SP); black; Saturated; ~30% gravel (≤1") fining and dec. downward ~70-80% Sand, fn-med; loose	4" SS wirewrapped 0.020 screen
16						
17						
18				0.9		15/30 Sand
19						8" Hole
20						sand
21				0.4	20.5-25: Sandy Gravelly Clay (CL); dk gray, damp-wet; ~10% fn-med sand ~5% gravel (≤1"); thin sand bed @ 21.5 and 23.8; stiff; med plastic (~25% Clay)	6" End Cap
22						3/4" Bent. Chips
23						
24						
25					TD 25'	
26						
27						
28						

WELL_OVM M4132.GPJ (6/98)

Project No.

Geomatrix Consultants

Figure (cont.)

PROJECT: Morton FI	**Log of Well No.** NAW23-20
BORING LOCATION: ~5' W. of STR10 / Near NW Corner Bldg	TOP OF CASING ELEVATION: ft / DATUM:
DRILLING CONTRACTOR: Boart Longyear	DATE STARTED: 9/8/01 / DATE FINISHED: 9/8/01
DRILLING METHOD: Rotasonic	TOTAL DEPTH: 28' / SCREEN INTERVAL: 15-25
DRILLING EQUIPMENT: Guesbeck Sonic	DEPTH TO WATER: FIRST 15' COMPL. / CASING: NA
SAMPLING METHOD: 10'x6" Core Barrel	LOGGED BY: T. Jennings
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS: Flush Comp.
					See log for STR10	
1						
				0.7		
2						
3						8" hole
4				0.0		Grout
5		—				4" Sch 40 PVC Riser
6						
				0.1		
7						8" hole
8						
9				0.4		Top Bent. @ 9.5'
10						
11						med. Bent chips
				1.0		
12						Top Sand @ 12.5'
13				0.1		
14						

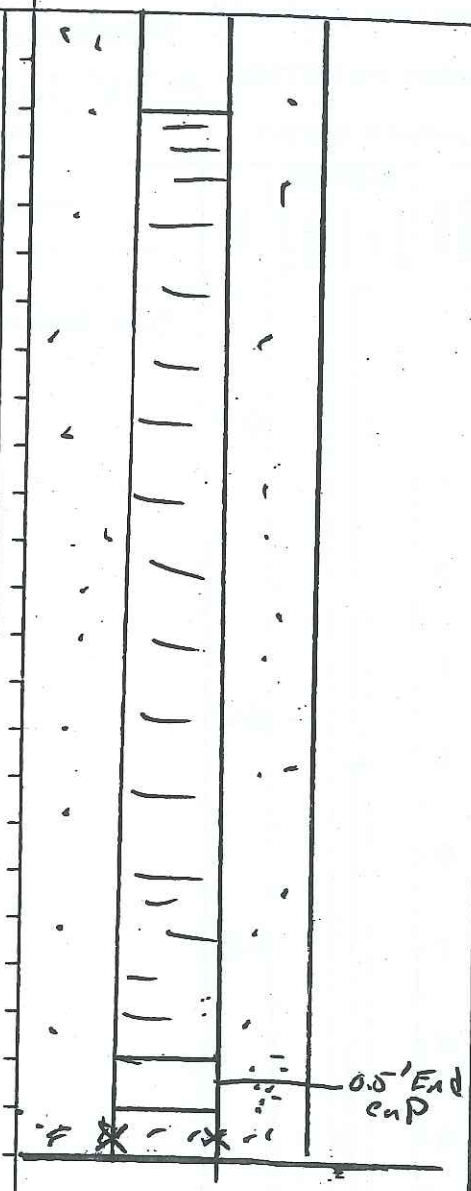
WELL_OVM BORING.GPJ (10/99)

Project No.	Geomatrix Consultants	Figure

PROJECT: Morton FI

Log of Well No. UAW23-20

DEPTH (feet)	SAMPLES Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
				0.4	See log from STR10	
15		—			~80% Sand - fn-med grained @ 15-15.5'	
16						
17						
18						
19						
20						
2						
22				1.2		
23						
24				1.0		
25	X				TD 25	0.5' End cap
26	—				Pure Grout Slurry @ 13 lbs/gal	
7						
3						
1						
1						
71						



WELL_OVM M4132.GPJ (6/98)

PROJECT: Morton FI	**Log of Well No.** UAW25-20
BORING LOCATION: West of Bldg 40; Adj to STR01	TOP OF CASING ELEVATION: ft / DATUM:
DRILLING CONTRACTOR: Boat Longyear	DATE STARTED: 9/7/01 / DATE FINISHED: 9/8/01
DRILLING METHOD: Rotasonic	TOTAL DEPTH: 25' / SCREEN INTERVAL: 11-21
DRILLING EQUIPMENT: Grassbeck Sonic	DEPTH TO WATER: FIRST 16.5 COMPL. / CASING:
SAMPLING METHOD: 10'x6" Sonic Core	LOGGED BY: T. Jennings
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.) — Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS: Flush Prof.
					See Description from STR01	
1				0.0		Grout
2						
3						4" Sch40 PVC Riser
4				0.0		
5						Top Bent. Seal @ 5.5'
6						
7				0.0		8" hole
8						Med. Bent. chips
9						Top Sand 8.5'
10				0.0		
11						Screen 11-21
12						
13				0.0		
14						

WELL_OVM BORING.GPJ (10/99)

Project No. | Geomatrix Consultants | Figure

PROJECT:

Log of Well No.

DEPTH (feet)	SAMPLES Sample No.	Sample	Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15						
16						
17				0.0	Saturated @ ~16.5	4" - 0.02 SS Screen
18						15/30 Sand
19						
20						
21				2.4		0.5' End Cap, 11-21
22					Top of "Sandy Lean Clay (CL)" @ 20.5'	
23						Bent. Chips
24				0.0		
25					TD 25'	
26					Cone Grout Slurry @ 13 lbs/gal	
27						Sand 8½
28						Bent 3'
29						
30						
31						

WELL_OVM M4132.GPJ (6/98)

Project No. 7169 | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FI		Log of Well No. 4AW24-70	
BORING LOCATION: Supply Warehouse (Bldg 7) Ramp - Next to STR06		TOP OF CASING ELEVATION: ft	DATUM: GL
DRILLING CONTRACTOR: Boart Longyear		DATE STARTED: 9/6/01	DATE FINISHED: 9/7/01
DRILLING METHOD: Rotsa Sonic		TOTAL DEPTH: 82'	SCREEN INTERVAL: 63-73
DRILLING EQUIPMENT: Gusobeck Sonic		DEPTH TO WATER: FIRST NM / COMPL. NM	CASING: NA
SAMPLING METHOD: 10"X6" Sonic Core		LOGGED BY: J. Jennings	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					See Log From STR06 4AW24 is ~ 6' NE of STR06.	Flush completion
1						concrete
2						
3						4" Sch 40 PVC Riser
4						
5						Grout
6						
7						
8						
9						
10						
11						
12						
13						
14						

WELL_OVM BORING.GPJ (10/99)

Project No. | Geomatrix Consultants | Figure

PROJECT: Morton FI

Log of Well No. UAW24

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					See Log for STR06	
15						
16						
17						8" Sch 40 PVC Riser
18						
19						Grout
20						8" hole
2						
22						
23						
24						SS cevalizer
25						
26						
27						
28						
29						
30						
31						

WELL_OVM M4132.GPJ (6/98)

Project No. | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FI

Log of Well No. UAW 24

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					See Log for STR06	
32						
33						
34						4" Riser
35						PDan 9/6/01 @ 1915 = 35'
36						cont. @ 35' - 9/7/01 @ 0730
37						
38						
39						Grout
40						
41						8" hole
42						
43						
44						
45						
46						
47						
48						

WELL_OVM M4132.GPJ (6/98)

PROJECT: Norton FI

Log of Well No. UAW24

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6 inches	OVM (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					See log from STR06	
49						Grout
50						
51						8" hole
52						
53						
54						4" Sch 40 PVC Riser
55						4" hole
56						Grout
57						
58						Top chips To 58'
59						medium Bent chips 58'-61'
60						
61						Top sand @ 61'
62						
63						SS Centralizer @ 63'-64' Top screen @ 63'
64						
65						

WELL_OVM M4132.GPJ (6/98)

Project No. | Geomatrix Consultants | Figure (cont.)

PROJECT: Morton FI

Log of Well No. NAW 24

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/ 6 inches	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Down To 70' See STR 06	
66						
67					Began Coring @ ~~68~~ 70'	4" - 0.020 slot SS Screen
68						
69						8" hole
70					70 - 72.5: Sand (SP); br; saturated; fn-med grnd; locally bedded. w/thin silt laminae; Sand is loose.	15/30 Sand
71						
72						
73					72.5 - 73.9: Sandy Clay (CL); grsh br; damp; w/~20% fn sand; ~80% clay, stiff mod plastic.	6" End Cap
74					73.9 - 78.5: Silt (ML); lt br; Snt. w/~20-30% fn Snd; loose to sl compact.	
75						
76						Medium Bentonite Chips 73 - 82'
77						
78					78.5 - 79.6: Silty Clay (CL); grsh br, damp, stiff; mod plastic	4½ bags chips
79					79.6 - 82: Gravelly Sand (SP); grsh br, wet; w/~30% gravel (≤ 1") fining downward; ~70% fn-crs Snd; loose	
80						
81						
82					TD 82'	

Grout Slurry 1 - 12.8 lbs/gal. 60 gals
Slurry 2 - 12.8 lbs/gal

WELL_OVM M4132.GPJ (6/98)

Project No. | Geomatrix Consultants | Figure (cont.)

SOIL HEADSPACE SCREENING

Project Name: Morton Reading FI
Reading, Ohio

Date:

Boring Location: STR11 - N. BLDG 15

Sample Depth	Time Collected	Time Analyzed	PID Reading (ppm)	Comments
3'	8/20/01		0.0	
6'			0.0	
8'			0.0	
10'			0.0	
12'			0.0	
15'			0.0	
17'			0.0	
23'			0.0	
28'			0.0	
33'			0.0	
39'			0.0	
43'			0.0	
47'			0.0	
52'			0.0	
58'			0.0	
63'			0.0	
70'			0.0	

SOIL HEADSPACE SCREENING

Project Name: Morton Reading FI
Reading, Ohio

Date: 8/28/01

Boring Location: STR 11

Sample Depth	Time Collected	Time Analyzed	PID Reading (ppm)	Comments
8 2	0800	0935	2.8	
10 1	0930	1000	1.6	

SOIL HEADSPACE SCREENING

Project Name: Morton Reading FI
Reading, Ohio
Date: 8/22/01
Boring Location: MAW16-10

Sample Depth	Time Collected	Time Analyzed	PID Reading (ppm)	Comments
2.5	1700	1800	0.0	
4.0	1715	1800	0.0	
5.5	1715	1800	0.5	
7	1715	1800	1.7	
9	1715	1800	2.4	
11	1715	1800	52.6	
13	1715	1800	38.5	
15	1715	1800	11.3	

SOIL HEADSPACE SCREENING

Project Name: Morton Reading FI
Reading, Ohio

Date: 8/23/01

Boring Location: UAW18-20

Sample Depth	Time Collected	Time Analyzed	PID Reading (ppm)	Comments
1'	0820	0910	20.4	
3'	0820	0910	0.0	
5'	0830	0910	0.0	
8	0830	0910	8.7	
10	0830	0910	0.2	
12	0830	0910	0.0	
15	0830	0910	1.7	
18	0845	1000	1.4	
21	0845	100	0.1	

SOIL HEADSPACE SCREENING

Project Name: Morton Reading FI
Reading, Ohio
Date: 9/5/01
Boring Location: UAW 22

Sample Depth	Time Collected	Time Analyzed	PID Reading (ppm)	Comments
1'	0840	0930	0.0	
3'	0840	0930	0.0	
5'	0840	0930	0.0	
7'	0900	0930	0.1	
9'	0900	0930	0.0	
11'	0900	0930	0.9	
13'	0900	0930	0.6	
15	0900	0930	0.1	
18'	0910	0950	0.9	
21'	0910	0950	0.4	

PROJECT: MORTON READING	**Log of Boring No.** DP01
BORING LOCATION: N - BLDG 5	ELEVATION AND DATUM:
DRILLING CONTRACTOR: HC NUTTING	DATE STARTED: 7-24-01 / DATE FINISHED: 7-24-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15' / MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
					GRAVEL/FILL	
1						
2	072401122 1040			29	BLACK DISCOLORATION	
3					CLAYEY SAND (SP): DK GRAY (5Y 4/1), MOIST, ~80% MED. SAND, ~20% MED PLAST. FINES, FIRM	
4				220	SAME AS ABOVE	
5						
6				110		
7						
8					SAME AS ABOVE	PID
9	072401123 1100					
10				200		
11					SANDY CLAY (CL): DK GRAY, MOIST, ~80% HIGH PLAST. FINES, 20% FINE SAND, SOFT	
					~~SAN~~ HARDER THAN ABOVE, YELLOWISH BROWN, [TILL]	
12						
13					13-13.5' SAND LENS, WET	HOLE CAVED IN TO 8' BGS, FILL W/ BENTONITE CHIPS TO SURFACE
14					SILT (ML): GRAY, MOIST, ~95% ~~HIGH~~ SM 7/24/01, MED PLAST FINES, ~5% FINE SAND, FIRM	
15					TD=15' @ 1115	

Project No. 7443 | Geomatrix Consultants | Figure

B-1 (12/95)

B-1 (Blank)

~~TD=15' 1115~~ SM 7/24/01

PROJECT: MORTON READING FI	Log of Boring No. DP02	
BORING LOCATION:	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-24-01	DATE FINISHED: 7-24-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: ACETATE LINER / MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					GRAVEL / FILL	
1						
2	1305 0724 01124				BLACK DISCOLORATION, CLAYEY SAND (SP): DK GRAY (5Y 4/1), moist, ~60% MED PLAST FINES, ~20% FINE SAND, FIRM	
3						
4					SAME AS ABOVE	
5					DK BROWN DISCOLORATION AT 5-5.5'	
6						
7						
8						
9	1320 0724 01125					
10					SANDY CLAY (CL):	
11						
12						
13					12.5'-13.5' CLAYEY SAND (SP): DK GRAY, WET SANDY CLAY (CL): GRAYISH BROWN, ~95% HIGH PLAST. FINES, ~5% SAND, FIRM	HOLE CAVE IN UP TO 12' BGS BENTONITE CHIPS UP TO SURFACE
14						
15					TD=15' @ 1325 SILT (ML):	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

MORTON READING FI

Log of Boring No. DP03

BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-24-01 / DATE FINISHED: 7-24-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15' / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter.) Surface Elevation:	REMARKS
0	072401126 1355				GRAVEL/FILL	
1						
2				0.0	SANDY CLAY (CL): YELLOWISH BROWN, ~80% LOW PLAST. FINES, ~20% MED SAND, TRACE FINE GRAVEL, SOFT, MOIST	
3						
4				0.0		
5						
6				0.0	HARDER THAN ABOVE, INCREASE IN GRAVEL CONTENT	
7						
8	072401127 1410				POORLY GRADED SAND (SP): BROWN, ~90% MED SAND, ~10% FINES, TRACE GRAVEL, MOIST	
9					SAME AS ABOVE	
10					INCREASE IN GRAVEL CONTENT (1"-2")	
11						
12					SANDY CLAY (CL): LT BROWN, ~90% MED PLAST FINES, ~10% SAND AND GRAVEL	
13						
14					POORLY GRADED SAND (SP): LT BROWN, ~95% MED SAND, ~5% GRAVEL. MOIST	
15					TD=15'	14.8' HOLE COLLAPSE BENTONITE CHIPS TO SURFACE

Project No.

Geomatrix Consultants

B-1 (12/95)

Figure

-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP04	
BORING LOCATION: W. BLDG 6	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-24-01	DATE FINISHED: 7-24-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 25'	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: ACETATE LINER - MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. — Surface Elevation:	REMARKS
					ASPHALT / FILL 5"	
1						
2				0.0		
3						
4					WL @ 3.8' BGS.	
5					SANDY LEAN CLAY (CL) [TILL]: DK GRAY, MOIST, ~85% MED-HIGH PLAST. FINES, ~15% SAND, TRACE GRAVEL, SOFT - FIRM, MOIST	
6				0.0		
7						
					HARDER THAN ABOVE	
8					SAME AS ABOVE, HARD	
9						
10				0.0	REDISH BROWN	
11					GRAY LENS AT 11', LESS GRAVEL	
12					SAME AS ABOVE, ~12-12.5' SAND/GRAVEL LENS, WET	(SLOUGH?)
13						
14				0.0		
15					1/2" GRAY LENS AT 15'	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP04

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
15					SANDY LEAN CLAY (CL) CONT.	
16					SOFTER THAN ABOVE., WET	
17					~~CLAYEY SILT (ML)~~ SM 7/24/01 ~~SILTY CLAY (ML)~~ : GRAY, MOIST, ~95% LOW PLAST FINES, ~5% FINE SAND, SOFT-FIRM	
18						
19						
20					CLAY (CL): DK GRAY, ~~WET~~ SM 7/24/10 >100 HIGH PLAST FINES, WET, SOFT	
21						
22						
23						HOLE SWELLED SHUT 5/1 ? BGS BENTONITE UP TO SURFACE
24					TD=24'	
25						

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP05	
BORING LOCATION: N. EAST TANK FARM	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-25-01	DATE FINISHED: 7-25-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					GRAVEL/FILL	
1	072401130 0855				SAND CLAY (CL): YELLOWISH BROWN, MOIST, ~80% LOW PLAST FINES, ~20% FINE-MED SAND, SOFT-FIRM	
2						
3				0.0	3.5' - MORE PLASTIC THAN ABOVE	
4					SAME AS ABOVE 4.0'-4.6' - FEW DK BROWN (1/8") LAMINATIONS, NO ODOR	
5						
6				0.0	5.8'-6.0' - GRAVEL LENS	
7					SANDY LEAN CLAY (CL) [TILL]: OLIVE BROWN, ~MOIST, ~40% HIGH PLAST FINES, ~10% FINE GRAVEL, TRACE SAND, SOFT	
8	072401131 0910				SAME AS ABOVE	
9				0.0	HARD	
10						
11					1" LT GRAY LENS AT 11'	
12				0.0		
13					DK GRAY, ABUNDANT GRAVEL, FOSSILS - 13'-13.5'	HOLE COLLAPSED UP TO 5' BGS
14					2" LT BROWN SAND SEAM AT 14'	
15					TD=15'	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP06	
BORING LOCATION: NW BLDG 7	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-25-01	DATE FINISHED: 7-25-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TUBE / DUAL TUBE > 16'	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					GRASS/FILL MATERIAL	
1					FEW ROOTS.	
2					SANDY CLAY (CL) (FILL): YELLOWISH RED (5YR4/6), ~70% LOW PLAST FINES, ~30% MED SAND, MOIST, SOFT, FIRM	
3				0.0		
4						
5					FEW ROOTS, 5'-6'	
6				0.0		
7					SANDY CLAY (CL) [TILL]: YELLOWISH BROWN (10YR 5/4), MOIST, ~80% MED PLAST FINES, ~20% FINE SAND, TRACE GRAVEL, HARD	
8					AS ABOVE	
9				0.0	INCREASE IN GRAVEL CONTENT	
10						
11						
12					AS ABOVE	
13						
14				0.0	AS ABOVE	
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP06

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15					SANDY CLEAN CLAY (CL) [TILL] CONT. DK GRAY AT 15.5' (5Y 4/1)	
16						MOVE TO DUAL TUBE METHOD AT 16' BGS
17					SM 7/24/01 ~~SANDY~~ CLEAN CLAY (CL): 1" PIECE WOOD AT 17.2' GRAY (10YR 5/1), MOIST-WET,	
18				0.0	~90% MED PLAST. FINES, ~10% FINE SAND, HARD	
19					CLAYEY SAND (SC): GRAY (10YR 5/1), WET, ~80% FINE SAND, ~20% LOW PLAST. FINES	
20					SANDY CLAY (CL): GRAY (10YR 5/1), WET ~80% LOW PLAST FINES, ~20% SAND, SOFT SAME AS ABOVE, ABUNDANT BLACK LAMINATIONS	
21				0.0	20-21', NO ODORS	
					21'-21.3' - SILTY SAND SEAM, WET	
22					21.3' - CLAY (CL): DK GRAY (5Y 4/1), MOIST, ~100% HIGH PLAST FINES, SOFT-FIRM, HOMOGENEOUS	
23						
24					SAME AS ABOVE	
25					TD = 25'	ATTEMPTED TO USE BENTONITE CHIPS DOWN OUTER TUBE - BRIDGED AT BOTTOM, PULLED OUT OUTER TUBE, WILL COME BACK AND GROUT WITH MACRO TOOL 7-25-01 - GROUTING UNSUCCESSFUL - HOLE COLLAPSED UP TO 10' BGS, COVER WITH BUCKET FOR THE NIGHT, BENTONITE CHIP TO SURFACE

1 2
8.34 lbs/gal
× 5 gal
2
41.70 lbs
× .3
12.510 lbs gel per 5 gallons → 13 lbs

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP07	
BORING LOCATION: SEWER BLDG 19	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-26-01	DATE FINISHED: 7-26-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 10'	MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					GRASS/FILL	PID NOT FUNCTIONING
2						
3						
4		X			SANDY CLAY (CL): YELLOWISH BROWN (10YR 5/4), ~MOIST, ~70% LOW PLAST FINES, ~30% SAND/GRAVEL, FIRM-HARD	
5						
6						
7					WOOD MATERIAL AT 7'	
8	072601132				SAME AS ABOVE, WET	
9	0940					BENTONITE CHIPS TO SURFACE, ZERO CAVE
10					TD = 10'	
11						
12						
13						
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP08
BORING LOCATION: AWEST OF BLDG 27 (SEWER)	ELEVATION AND DATUM: GROUND SURFACE
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-26-01 / DATE FINISHED: 7-26-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 12' / MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
					GRASS/FILL	
1						
2						
3						
4					SAME - SAND GRAVEL/FILL	
5					SANDY CLAY (CL): DK GRAYISH BROWN, BLACK MATERIAL THROUGH OUT, SLIGHT ODOR, ~85% MED PLAST FINES, ~15% SAND, TRACE GRAVEL, MOIST TO WET	
6	07260133 1010					
7						
8					SAME AS ABOVE	
9						
10						
11	07260134 1030				SOME BLACK MATERIAL, NO ODOR	
					CLAY (CL): VERY DK GRAY, ~100% MED PLAST FINES, TRACE SAND, MOIST, HARD, HOMOGENEOUS	CAVED IN 2' BENT. BGS CHIPED TO SURFACE, WILL RETURN FOR GROUT LATER
12					TD=12'	
13						
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP09
BORING LOCATION: W. BLDG 30	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-27-01 / DATE FINISHED:
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 12' / MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.) Surface Elevation:	REMARKS
0					CONCRETE/FILL	
1						
2					SANDY CLAY (CL) [fill material]: DK BROWN, ~70% LOW PLAST FINES, ~30% MED SAND, MOIST, SOFT-FIRM	
3				0.0		
4					SAME AS ABOVE	
5					GRAVEL [SLOUGH?] 3" THICK	
6						
7					CLAY (CL): DK GRAY (5Y 4/1); MOIST, ~100% HIGH PLAST. FINES, TRACE SAND, HOMOGENEOUS	
8					SAME AS ABOVE	
9					POORLY GRADED SAND (SP): DK BROWN, WET, ~90% MED SAND & GRAVEL, ~10% LOW PLAST FINES	
10	072701135 MS/MSD 1615			23.0	~~BLACK~~ MATERIAL (10'-12')	
11						
12					TD=12'	HOLE COLLAPSED TO 10' BGS, BENT. CHIP TO SURFACE
13						
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP10	
BORING LOCATION: E. OF BLDG 30	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-27-01	DATE FINISHED: 7-27-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
					CONCRETE/FILL	
1						
2	072701137 1650				CLAYEY SAND (SC): VERY DARK GRAYISH BROWN (2.5Y 3/2), MOIST, ~80 MED SAND/GRAVEL, ~20% FINES, SOFT, ODOR	
3						
4					SAME AS ABOVE	
5					BLACK DISCOLORATION, STRONG ODOR 5'–15' ~~[PROP~~ CM 7/27/01	
6						
7						
8					SAME AS ABOVE	
9	072701136 BLIND 072701138 TO 1700					
10						
11						
12						
13						
14					SANDY LEAN CLAY (CL) [TILL]: BLACK, WET, ~80% MED PLAST. FINES, 20% MED SAND, TRACE GRAVEL, STRONG ODOR	
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

TD=15' @ 1705

PROJECT: MORTON READING FI	Log of Boring No. DP11	
BORING LOCATION: EAST OF BLDG 5	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-28-01	DATE FINISHED:
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 24'	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD:	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. — Surface Elevation:	REMARKS
					CONCRETE/FILL	PID NOT FUNCTIONING
1					SAND/GRAVEL BASE MATERIAL	
2					SANDY CLAY (CL) [FILL?]: DK YELLOWISH BROWN (10YR 3/4), MOIST, ~80% MED PLAST FINES, ~20% SAND, SOFT	
3						
4					SAME AS ABOVE	
5					SANDY LEAN CLAY (CL) [FILL]: DK YELLOWISH BROWN (10YR 4/4), MOIST, ~80% MED-HIGH PLAST FINES, ~20% MED SAND, TRACE FINE GRAVEL, FIRM	
6						
7					6' - OLIVE GRAY (5Y 5/3)	
8					SAME AS ABOVE	
9				DEPTH 9.2	SILT LENS (8.8'-9.2')	
10					CLAY (CL): OLIVE (5Y 4/3), MOIST, ~95% HIGH PLAST. FINES, 5% FINE SAND, FIRM	
11					1" SAND LENS AT 10.5' WET	
12					SILTY SAND (SM): OLIVE (5Y 4/3), WET, 80% FINE SAND, ~20% LOW PLAST. FINES	
13					SAME AS ABOVE - SATURATED	
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP11

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/6"	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15					SILTY SAND (SM): CONT.	
16					SAME AS ABOVE	
17				DEPTH 17.2'	CLAY (CL): DK GRAY (5Y 4/1), MOIST, ~100% HIGH PLAST FINES, TRACE FINE SAND, SOFT, HOMOGENEOUS	
18						
19					SAME AS ABOVE – ZERO SAND	
20						
21						
22					SAME AS ABOVE, VERY SOFT	
23						
24					TD = 24' @ 1125	HOLE COLLAPSED UP TO 11.5' BGS.
25						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP12	
BORING LOCATION: N. TANK FARM (NORTH END)	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-28-01	DATE FINISHED: 7-28-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 20'	MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
1	072801140 1450				ASPHALT / BASE MATERIAL	PID NOT FUNCTIONING PROPERLY?
2						
3						
4					SANDY CLAY (CL): DK YELLOWISH BROWN (10YR 3/4), MOIST, ~80% HIGH PLAST FINES, ~20% SAND, TRACE GRAVEL, SOFT-FIRM	
5				0.0		
6						
7						
8	072801141 1500				SAME AS ABOVE, WET	
9						
10					8-10.2' - MED. GRAVEL LENS 10.2'	
11					CLAYEY SAND (SC): DK YELLOWISH BROWN (10YR 3/4), WET, ~60% SAND/GRAVEL, ~40% MED. PLASTICITY FINES, FIRM	
12				0.0	SAME AS ABOVE	
13					SANDY LEAN CLAY (CL) [TILL]: YELLOWISH BROWN (10YR 5/4), MOIST, ~80% MED PLAST FINES, ~20% MED SAND, TRACE GRAVEL, FIRM TO HARD QUARTZ-LIKE HARD MATERIAL (14-14.1')	PID MOVES UP VERY SLOWLY.
14				0.0 64 OVM 7-28-01		PID ACTING STRANGE RECALIBRATE, 14'
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

1,405 ppm
3RD RECALIBRATE = 0.0 ppm

PROJECT: MORTON READING FI

Log of Boring No. DP12

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15		X			[GLACIAL OUTWASH]	
16					~~SAME AS ABOVE~~ CLAYEY SAND (SC) [TILL]: DK YELLOWISH BROWN (10YR 4/4), DAMP-DRY,	
17				0.0	60% MED. SAND, 20% LOW PLAST FINES, ~~TRACE~~ 20% GRAVEL GM/1/28/01	
18					SANDY CLAY (CL) [TILL]:	
19		X				GROUT FROM 19' TO 1' BGS.
20					TD=20'	
21						
22						
23						
24						
25						

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP13	
BORING LOCATION: W. BLDG 16	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-29-01	DATE FINISHED: 7-29-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT: GROUND
DRILLING EQUIPMENT: MACRO TOOL GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO CORE	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

230

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					CEMENT / FILL	
1						
2					SANDY CLAY (CL) [FILL?] - VERY DK BROWN (10YR 2/2), MOIST, ~70% LOW PLAST FINES, ~30% SAND, SOFT, BLACK MATERIAL AT 3'	RECALIBRATE PID, ACTING STRANGE
3	07901144 1340			0.0		
4					CLAY ~~SAND~~ WITH GRAVEL (GC) [FILL] - YELLOW (10YR 7/6), 70% GRAVEL (1-2"), 30% LOW PLAST FINES, ODOR	
5						
6				OUT OF RANGE		
7						
8					CLAYEY SAND (SC) - DK BROWN, 80% MED SAND, 20% LOW PLAST FINES, TRACE FINE GRAVEL, PUTRID ODOR (SOUR), WET	
9				125		
10						
11	07901145 1350				BLACK AT 11.5' - 13.5' DISCOLORATION	
12				109	SAME AS ABOVE	1/2 BAG
13				13.5'	SANDY LEAN CLAY (CL) [FILL]: DK GRAY (5Y 4/1), ~MOIST, 80% LOW-MED PLAST FINES, ~20% SAND TRACE GRAVEL, HARD	HOLE CAVED IN TO 12.2' BGS, BENTONITE CHIP TO SURFACE
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP14	
BORING LOCATION: W. OF BLDG 16 (W. OF DP13)	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-29-01	DATE FINISHED: 7-29-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, %, by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
			WM		CONCRETE / FILL	
1					SANDY CLAY (CL) [FILL]: DK GRAY (5Y 4/1), MOIST, ~80% LOW PLAST FINE, ~20% SOFT-FIRM	
2	0729 0146		0.0			
3	1425				BLACK MATERIAL 3'-3.5' - ODOR	
4			37.9		CLAY WITH GRAVEL (GC): YELLOWISH BROWN (10YR 6/4), DRY-MOIST, ~60% 1-2" GRAVEL, ~40% LOW PLAST FINES	
5						
6				23		
7			82.8		BLACK MATERIAL	
8					SAME AS ABOVE	
9	0729 0147 1430			3	BLACK MATERIAL 9.5'-10.5' CLAYEY SAND (SC), OLIVE GRAY (5Y 4/2), MOIST-WET, ~80% MED SAND, ~20% LOW PLAST FINES, TRACE GRAVEL	
10			10.2			
11						
12					BLACK MATERIAL 12'-14.5' - STRONG ODOR	1/2 BAG
13			15.9			HOLE COLLAPSED TO 13' BGS, BENT. CAP TO SURFACE
14						
15					SANDY LEAN CLAY (CL) [FILL] - SEE DP13	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

TD=15'

PROJECT: MORTON READING FI	Log of Boring No. DP15
BORING LOCATION: N. OF W. TANK FARM	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-29-01 / DATE FINISHED: 7-29-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15' / MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
0–2	072901148 1510				CONCRETE / FILL	THIS BORING HARDER TO DRIVE THAN DP13, DP14
2–5					CLAYEY GRAVEL (SEE DP 14)	
5–8				23	SANDY CLAY (CL): DK GRAY, MOIST, ~75% LOW PLAST FINES, 25% SAND, FIRM, ODOR	
8–15	072901149 1525			36	CLAYEY SAND (SC): DK GRAY, ~80% MED SAND, 20% FINES, WET, ODOR BLACK MATERIAL 9.5'–15'	
12				15	SAME AS ABOVE	
13					STRONG ODOR	1/3 BAG
14						HOLE COLLAPSED TO 8' BGS, BENTONITE CHIPS TO SURFACE
15					TD = 15'	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP16
BORING LOCATION: N. ~~NORTH~~ WEST TANK FARM	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-30-01 / DATE FINISHED: 7-30-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15' / MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
0–2					CONCRETE SANDY CLAY [FILL]	
2–4	073001150 0935			12	WELL GRADED SAND (SW): BROWN (10YR 4/3), WET, ~100% SAND, TRACE FINES SAME AS ABOVE	
6				14.2		
7	073001151 EW 7/30/01				BLACK STAINING AT 7' - ODOR (BLACK STAINING 7'-13.5')	
8					SAME AS ABOVE, STRONG ODOR	
9	073001151 0945			9.0		
12	073001151 0955			421	SAME AS ABOVE, VERY STRONG ORGANIC ODOR SOME GRAVEL	HOLE COLLAPSED UP TO 7' BGS, BENT. CHIP TO 6" BGS, CONCRETE PATCH
13					SANDY LEAN CLAY (CL) [TILL]: SEE DP13	
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP 7	
BORING LOCATION: N. OF W. TANK FARM	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-30-01	DATE FINISHED: 7-30-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					CONCRETE / BASE MATERIAL	
1					SANDY CLAY (CL) FILL: VERY DK GREY (2.5Y 3/1), ~80% MED PLAST FINES, ~20% SAND, TRACE GRAVEL, SOFT-FIRM	
2						
3	073001152 1035			0	DK BROWN STAINING SOME GRAVEL AT 4'	
4					SAME AS ABOVE	
5						
6				0		
7						
8						
9				1.7	POORLY GRADED SAND WITH CLAY (SC): ~80% MED BROWN SAND, 20% LOW PLAST FINES, TRACE GRAVEL, WET, BLACK MATERIAL AT (10' TO 14')	
10						
11						
12	073001153 1055			120		
13					SANDY CLAY (CL) (TILL) - SEE DP 13	HOLE COLLAPSED TO 13', BENT. CHIP UP TO SURFACE, CEMENT GROUT
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

TD=16'

16

PROJECT: MORTON READING FI	Log of Boring No. DP18	
BORING LOCATION: N BLDG 40 (GEOPHYS. G)	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-30-01	DATE FINISHED: 7-30-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15'	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					ASPHALT - 12" THICK	
1					GRAVEL BASE MATERIAL	
2	073001154 1320				SANDY CLAY (CL) [FILL?]: VERY DK GRAYISH BROWN (2.5Y 3/2), MOIST, 75% LOW PLAST FINES, 25% SAND, TRACE GRAVEL FIRM	
3				2.0		
4					SAME AS ABOVE: BROWN (10YR 4/3), NO GRAVEL	
5						
6				0.0		
7						
8					SAME AS ABOVE	
9				0.0		
10					WELL GRADED SAND (SW):	10.0
					SILT (ML):	10.5
11					WELL GRADED SAND (SW): (OLIVE BROWN 2.5Y 4/4), ~100% SAND, TRACE FINES, TRACE FINE GRAVEL	11.3
12				0.0	SAME AS ABOVE	
13	073001155 1335				BECOMES MORE COARSE WITH DEPTH, WET	HOLE COLLAPSED TO 13' BGS, BENTONITE CAP UP TO SURFACE
14						
15					TD=15'	

Project No.	Geomatrix Consultants	Figure

B-1 (12/95)

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP 19
BORING LOCATION: N. BLDG 40 (GEOPHYS F)	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-30-01 / DATE FINISHED: 7-30-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15 / MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl. geo. inter. Surface Elevation:	REMARKS
					ASPHALT – 12"	
1					GRAVEL BASE	
2	073001156 1400				SANDY CLAY (CL): VERY DK GRAY (2.5Y 3/1), MOIST, 80% FINES MED PLAST, 20% SAND, SOFT/FIRM	
3				0.0		
4					SAME AS ABOVE	
5					DK GRAYISH BROWN (2.5Y 4/2), FIRM/HARD	
6				0.0		
7						
8						
9				0.0		
10						
11					SAND/GRAVEL	
					SILT (ML):	
12				0.0	WELL GRADED SAND (SW): SAME AS ABOVE	
13	073001157 1415					
14						HOLE OPEN TO 14.8' – BENT. CHIP TO SURFACE ASPHALT PATCH
15					TD=15'	

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	**Log of Boring No.** DP20
BORING LOCATION: CIRCLE (GEOPHYS ANOM H)	ELEVATION AND DATUM:
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-30-01 / DATE FINISHED: 7-30-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 15' / MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL.
SAMPLING METHOD: MACRO CORE	LOGGED BY: E MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					GRASS	
1					GRAVEL BASE	
2	073001158 1445					
3					SANDY CLAY (CL): DK YELLOWISH BROWN (10YR 3/6), ~80% LOW PLAST FINES, ~20% SAND, SOFT	
4				0.0	SAME AS ABOVE	
5						
6					POORLY GRADED SAND (SP): DK YELLOWISH BROWN (10YR 4/4), ~90% MED SAND, ~10% FINES MOIST - 6.5'-7' - GRAVEL/CLAY LAYER	
7				0.0		
8					30% GRAVEL, TRACE FINES	
9						
10						
11						
12				0.0	SAME AS ABOVE	
13						HOLE OPEN TO 12.8' BGS. BENT. CHIP TO SURFACE
14	073001159 1500				14.5-15' MED SAND - BLACK - ODOR	
15						

B-1 (12/95)

Project No.	TD=15'	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP21	
BORING LOCATION: W. BLDG 9	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 7-31-01	DATE FINISHED: 7-31-01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 24	MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					CONCRETE.	
1					SANDY CLAY (CL): (2.5Y 5/4) LT OLIVE BROWN ~80% MED PLAST. FINES, ~20% SAND, TRACE GRAVEL, HARD, MOIST	
2						
3						
4					SAME AS ABOVE	
5						
6						
7						
8					SAME AS ABOVE	
9					SILT (ML) & GRAVEL (1") 9'-9.3'	
10					DK GRAYISH BROWN, ~95% HIGH PLAST FINES, ~5% SAND	GROUND WATER 9.8' BGS
11					½" GRAY LAMINATIONS 11'-12', ~100% HIGH PLAST. FINES	
12					SAME AS ABOVE, WET SOME SAND AND GRAVEL. AT 12' (COULD BE SLOUGH)	
13					13'-14' - CLAYEY SAND, WET, ~70% MED-COARSE SAND, 40% MED PLAST. FINES (SC)	
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure 1 of 2

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP21

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.)	REMARKS
					SANDY CLAY (CL) CONT.	GROUNDWATER WATER APPEARS TO BE UNDER PRESSURE, BOIL UP TO SURFACE, PUSHED PROBE BACK UP 2' (20'-24') PROBE
15					VERY DK GRAYISH BROWN AT 15'-16' (2.5Y 3/2)	
16					CLAYEY SAND (SC): LT OLIVE BROWN (2.5Y 5/6), SATURATED, ~70% MED SAND, ~30% FINES	
17					17.5'-18' – COARSE SAND, ~30% FINES	
18						
19						
20					CLAY (CL): LT. OLIVE BROWN (2.5Y 5/4), WET, ~100% HIGH PLAST. FINES, TRACE FINE SAND, FIRM	
21						
22						
23						
24					TD=24'	HOLE COLLAPSED 16.4' BGS, WILL GROUT TO SURFACE
25						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure 2 of 2

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP22	
BORING LOCATION: BRWN BLDG 3A, 1B	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 8/1/01	DATE FINISHED: 8/1/01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 24'	MEASURING POINT: GROUND SURFACE
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL
SAMPLING METHOD: MACRO TOOL	LOGGED BY: E MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. — Surface Elevation:	REMARKS
					CONCRETE ~12"	
1					CLAY(CL) DK YELLOWISH BROWN (10YR 4/4), ~90% MED PLAST FINES, ~10% FINE SAND, TRACE GRAVEL, MOIST, FIRM	
2						
3				0.0		
4					4'-4.7' - ~~CLAYEY SAND~~ SANDY CLAY(CL): ~60% LOW PLAST FINES, ~40% WELL GRADED SAND & GRAVEL	
5					4.7'-7' - CLAY(CL) - SAME AS ABOVE	
6				0.0		
7					YELLOWISH BROWN (10YR 5/4), ~100% MED-HIGH PLAST. FINES, TRACE SAND, GRAVEL [TILL]	
8					SAME AS ABOVE - FINE GRAY LAMINATIONS, 8.5'-9', WEAK BEDDING	
9				0.0	9'-9.8' - SANDY SILT (ML): ~70% LOW PLAST FINES, 30% FINE SAND, SATURATED, WET	
10					10.8'-11' - SANDY SILT LENS	
11					CLAY(CL): DK GRAYISH BROWN (2.5Y 4/2), MOIST, ~100% HIGH PLAST FINES, TRACE FINE SAND	
12					SATURATED SAND GRAVEL CLAY 12'-16', APPEARS TO BE UNDER PRESSURE - ZERO RECOVERY	
13						
14						
15						

B-1 (12/95)

Project No. 7443	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP22

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistancy, structure, cemantation, react. w/HCl, geo. inter.	REMARKS
15						
16					CLAY (CL): GRAY (2.5Y 5/1), MOIST, 100% HIGH PLASTICITY FINES, HOMOGENEOUS, FIRM-SOFT	
17						
18				0.0		
19						
20					SAME AS ABOVE	
21						
22						
23						
24						
25					TD=24' 0942	

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP23	
BORING LOCATION: BTWN 10 & 3 BLDG	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 8/1/01	DATE FINISHED: 8/1/01
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 24'	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROB 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO CORE	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SANDY (CL) CLAY [FILL]: OLIVE BROWN (2.5Y 4/3), MOIST, ~75% LOW PLAST FINES, ~25% SAND GRAVEL, SOFT-FIRM, ODOR	
2	080101160 1235					
3				0.0		
4					CLAY (CL): LT OLIVE BROWN (5Y 5/4) / OLIVE GRAY (LAMINATIONS) (5Y 4/2), ~100% MED PLAST FINES, TRACE SAND, HARD, ODOR	
5						
6				0.0		
7						
8					SAME AS ABOVE	
9	1250 080101161			0.0		
10						
11						
12					SAME AS ABOVE	
13				0.0	13-13.4' — CLAYEY SAND & GRAVEL, WET, ODOR	
14					13.5 DK GRAY (2.5Y 4/1), HOMOGENEOUS	
15						

B-1 (12/95)

Project No.	Geometrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DB23

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
15					CLAY (CL) CONT.	
16						
17					CLAYEY SAND (SC): LT OLIVE BROWN (2.5Y 5/4), SATURATED, ~70% COARSE SAND, ~30% FINES, STRONG CHEMICAL ODOR	
18				0.0	18.8'	
19					CLAY (CL): GRAY (2.5Y 5/1), ~MOIST-WET, ~100% HIGH PLAST. FINES, SOFT, HOMOGENEOUS ODOR	
20					SAME AS ABOVE, ODOR	
21						
22					22.5' 1" SAND LENS, WET	
23						
24					TD=24'	
25						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure 2 of 2

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP24	
BORING LOCATION: NE BLDG 1	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: HC NUTTING	DATE STARTED: 8-6-01	DATE FINISHED: 8-6-01
DRILLING METHOD: GEO PROBE	TOTAL DEPTH: 24'	MEASURING POINT:
DRILLING EQUIPMENT: 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO CORE	LOGGED BY: E. MANSEN	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					CONCRETE	
1					SANDY CLAY (CL) [FILL]: DK YELLOWISH BROWN (10 YR 3/4), MOIST, ~70% LOW PLAST FINE, ~30% SAND/GRAVEL, SOFT-FIRM	
2						
3				0.0		
4					SAME AS ABOVE	
5					POORLY GRADED SAND (SP): LT OLIVE BROWN (2.5Y 5/4), MOIST, ~100% MED SAND, TRACE FINES, TRACE GRAVEL	
6				0.0		
7						
8					SAME AS ABOVE	
9				0.0	2" COBBLE AT 9'	
10					SANDY CLAY (CL) [FILL]: LT OLIVE BROWN (2.5Y 5/4), MOIST, ~90% MED PLAST FINES, ~10% SAND, TRACE GRAVEL	
11					11.1'	
12				0.0	POORLY GRADED SAND (SP): DK YELLOWISH BROWN (10YR 4/4), MOIST, ~80% MED SAND, ~10% FINES, TRACE FINE GRAVEL	11.1'
13					→ SAME AS ABOVE, 28% FINES 13.8' 1"-2" GRAVEL	
14						
15				0.0		

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FL

Log of Boring No. DP24

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
15					POORLY GRADED SAND (SP): CONT.	
16					SAME AS ABOVE	
17						
18					SANDY CLAY (CL): DK YELLOWISH BROWN (10YR 4/4), MOIST-WET, ~80% FINES, ~20% SAND, TRACE GRAVEL, FIRM	
19				0.2	19-19.5' POORLY GRADED SAND (SP):	
20					19.5'-20' 1/2" - 1 1/2" GRAVEL & SAND WET POORLY GRADED SAND (SP): BROWN (10YR 4/3), ~70% MED SAND, ~20% FINE GRAVEL, ~10% FINES, MOIST	
21						
22						
23					CLAY 23-23.5'	HOLE OPEN TO 23' BGS, BENT. CHIPS. UP TO SURFACE,
24					TD = 24'	
25						

B-2 (12/95)

Project No.	Geomatrix Consultants	Figure

B-2 (Blank)

PROJECT:	Log of Boring No. DP25
BORING LOCATION: BLDG 6 LOADING DOCK	ELEVATION AND DATUM:
DRILLING CONTRACTOR: HC NUTTING	DATE STARTED: 8-7-01 / DATE FINISHED: 8-7-01
DRILLING METHOD: DPT	TOTAL DEPTH: 24' / MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST / COMPL
SAMPLING METHOD: MACRO CORE / DUAL TUBE >16'	LOGGED BY: E. MANSELL
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
					ASPHALT – 8" –	
1	080701C3+MS/MSD				SANDY CLAY (CL): DK GREENISH GRAY (10Y 4/1), BLACK LAMINATIONS, ~90% MED PLASTICITY FINES, ~10% SAND, SOFT TO FIRM, ODOR	
2	1005			0.2		
3						
4					SAME AS ABOVE, TRACE GRAVEL, WET, ODOR	
5				0.2		WATER CAME UP TO ~14" BGS @ 4'-8' SAMPLE INTERVAL
6	1015					
7	080701C4					
8	080701C5					
9	BLIND DUP			0.1		
10					SANDY CLAY (CL) CONT., YELLOWISH BROWN, [TILL] (10YR 5/6)	
11					FIRM	
12				0.3	SAME AS ABOVE	
13						
14				0.2	14.5' – 1" SAND GRAVEL LAYER, WET, ODOR GRAY	
15						

B-1 (12/95)

Project No. 7-443 | Geomatrix Consultants | Figure 1 of 2

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP25

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.	REMARKS
15					SAND CLAY CONT. (GRAY)(10YR 5/1)	
16					SILT (ML): GRAY (10YR 5/1), MOIST, 100% LOW PLAST FINES, TRACE FINE SAND, FIRM	HOLE COLLAPSED AT 16' TWICE, MOVE TO DUAL TUBE @ 16' – BENT ROD AT 16'
					SAME AS ABOVE, ~10% SAND	
17			0.2	5	17.5'-18.5' – FINE BLACK LAMINATIONS	
18					18.5'-18.8' – SILTY SAND, WET	
19					SILTY CLAY (CL): DK GRAY (10YR 4/1), MOIST, ~90% LOW PLAST FINES, ~10% FINE SAND, FIRM	
20					CLAY (CL): GRAY (2.5Y 5/1), MOIST, ~100% HIGH PLAST FINES, SOFT, HOMOGENEOUS	
21						
22						
23						
24					TD=24'	~~HOLE~~ OUTER CASING TO 24', WATER @ 22' BGS POUR GROUT THROUGH OUTER CASING
					2X MADE ~9 TOTAL GALLONS GROUT (GROUT 0'-24')	3 gallons H_2O, 28 lbs PORTLAND 2 lbs, BENT GEL

Project No. 7443

Geomatrix Consultants

Figure 2/2

B-2 (12/95)

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP26	
BORING LOCATION: W. of EAST TANK FARM	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 8/7/01	DATE FINISHED:
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH: 24'	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: MACRO CORE	LOGGED BY: E. MANSELL	
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION — NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter. — Surface Elevation:	REMARKS
		X			ASPHALT 8", FILL	
1					SANDY CLAY (CL): DK OLIVE GRAY (5Y 3/2),	
2					~80% LOW PLAST. FINES, ~20% SAND, MOIST,	
3					2.8' SOFT – BROWN (10YR 4/3)	
					95% FINES ~5% FINE SAND	
4					SAME AS ABOVE	
5					LT OLIVE BROWN [TILL] (2.5Y 5/4), TRACE FINE GRAVEL	
6						
7					7.5' OLIVE (5Y 5/4), WET ~70% FINES, ~30% SAND, TRACE GRAVEL	
8					~90% FINES, ~10% SAND, TRACE GRAVEL, HARD, MOIS	
9					LT OLIVE BROWN (2.5Y 5/4)	
10					10.2'–10.4' 1"–2" GRAVEL	
11					11.5'–11.7' – SILT (ML) (YELLOWISH BROWN 10YR 5/6)	
12					SAME AS ABOVE	
13						
14						
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING PI

Log of Boring No. DP26

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15					15.3'-15.5' - YELLOWISH BROWN (10YR 5/6) - CLAYEY SAND DK GRAY (5Y 4/1)	PID - BATTERY NEEDS CHARGER
16					SAME AS ABOVE, HARD	
17						
18						
19					19.2' - 19.3' - SAND, GRAVEL LENS	
20					SAME AS ABOVE -	
21						
22						
23						HOLE OPEN TO 4½' BGS, WILL GROUT
24					TD=24' @ 1535	USE DUAL TUBES TO GROUT
						4 GALLONS H_2O ~38 lbs PORTLAND 3 lbs BENTONITE

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: MORTON READING FL	Log of Boring No. DP27	
BORING LOCATION: W. BLDG 2	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 8/8/01	DATE FINISHED:
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT:
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: DUAL TUBE	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

ART DRILLING 8/13

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION (NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl, geo. inter.) Surface Elevation:	REMARKS
1					ASPHALT/GRAVEL BASE	
2					SAND/GRAVEL FILL MATERIA	
3	NOT SUBMITTED 10/8/01			0.0	SANDY CLAY (CL): VERY DK GRAY (2.5Y 3/1), MOIST, ~80% LOW PLAST FINES, ~20% SAND, TRACE GRAVEL, HARD	
4					SAME AS ABOVE, BLACK STAINING, ODOR (4'-6')	
5						
6						
7						
8	NOT SUBMITTED 10/8/01			2.10	SAME AS ABOVE, SOFT, ZERO GRAVEL, STRONG ODOR, BLACK STAINING (LAMINATIONS 8'-12'), WET	
9						
10						
11						
12				2.18	HARDER THAN ABOVE	
13					12.5'-13' DK BROWN (10YR 3/3), DRY, MOIST	13'
14				0.0	SANDY LEAN CLAY (CL) [TILL]: DK GREENISH GRAY (5GY 3/1), MOIST, ~80% MED PLAST FINES, ~20% MED-FINE SAND, TRACE GRAVEL, 13'-14' DK BROWN LAMINATIONS HARD	
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP27

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15					SANDY LEAN CLAY (CL) [TILL]: CONT.	
16					SAME AS ABOVE	
17						
18				0.0		18.2' BECOMES WET
19					CLAYEY GRAVEL (GC): DK GREENISH GRAY (5GY 4/1), WET-SATURATED, ~80% FINE GRAVEL/COARSE SAND, ~20% FINES	
20					SAME AS ABOVE, SATURATED	
21				0.4	?	
22					?	
23					SAND LEAN CLAY (CL) [TILL] - AS ABOVE	
24					TD = 24'	4 GALLONS H_2O 40 lbs PORTLAND 3 lbs GEL 6 GALLONS GROUT
25						

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

PROJECT: MORTON READING FI	Log of Boring No. DP28	
BORING LOCATION: W. BLDG 15	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: H.C. NUTTING	DATE STARTED: 8/8/01	DATE FINISHED:
DRILLING METHOD: DIRECT PUSH	TOTAL DEPTH:	MEASURING POINT: GROUND
DRILLING EQUIPMENT: GEOPROBE 5400	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: DUAL TUBE	LOGGED BY: E. MANSELL	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL: REG. NO.

1108

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION: NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
					ASPHALT	
1					SANDY CLAY (CL) [FILL]: DK BROWN (10YR 3/3), MOIST, ~70% FINE, ~30% SAND, SOFT	
2				0.0		
3					3.3' – DK YELLOWISH BROWN (10YR 4/4)	
4					SAME AS ABOVE	
5						
6				0.0		
7					SANDY LEAN CLAY (CL) [FILL]: LT OLIVE BROWN (2.5Y 5/4) w/ GRAY LAMINATIONS, MOIST, ~85% FINES, ~15% SAND, TRACE GRAVEL, FIRM TO HARD	6.8'
8					→ SAME AS ABOVE	
9				0.0	9'-9.3' – 1"-2" GRAVEL, WET, DK BROWN (2.5YR 3/3) FINES	
10						
11						
12				0.0	SAME AS ABOVE 12.3'-12.9' – POORLY GRADED SAND (SP), SATURATED	
13					12.9'-13.5' – CLAY (CL) DK YELLOWISH BROWN (10YR 3/4)	
14					SILT (ML): DK GRAY (10YR 4/1), WET, ~100% COW PLAST FINES, TRACE FINE SAND, SOFT-FIRM	
15						

B-1 (12/95)

Project No.	Geomatrix Consultants	Figure

B-1 (Blank)

PROJECT: MORTON READING FI

Log of Boring No. DP28

DEPTH (feet)	SAMPLES: Sample No.	Sample	Blows/Foot	OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight., plast., consistency, structure, cementation, react. w/HCl. geo. inter.	REMARKS
15				0.3	SILT (ML): CONT.	
16					SAME AS ABOVE 16.3'-17' - SILTY SAND (SM) SATURATED	
17						
18						
19				0.4	19'-19.7' - BLACK LAMINATIONS	
20					SILTY CLAY (CL): DK GRAY (10YR 4/1), MOIST, ~100% HIGH PLAST. FINES, FIRM	
21						
22						
23						GROUT THROUGH OUTER CASING OF DUAL TUBE SET AT 24' BGS
24					TD=24'	
25						
						5.5 gallons GROUT 3.5 gallons WATER 75 lbs PORTLAND 3 lbs GEL

B-2 (12/95)

Project No. | Geomatrix Consultants | Figure

B-2 (Blank)

Monitoring Well Sampling and Development Logs

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW10-50

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: _____

Project Name: _____

Date: _____

Sampled By: _____

Method of Purging: _____

Method of Sampling: _____

Initial Depth to Water: _____

Depth to Water after Sampling: _____

Total Depth of Well: _____

Well Diameter: 4" PVC

1 Casing/Borehole Volume = _____ (Circle one)

4 Casing/Borehole Volumes = _____ (Circle one)

Total Casing/Borehole Volumes Removed: _____

.12
.8
.6 gal
.75 sec.
.15 = .8

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) DO
9-9-01	1030	—	BAILED	15 GALLONS			—	
	1340	—	PUMPED	15 GALLONS				
	1520	~56'		55				
	1740	~56'		75 + 10 = 85 gallons				
9-10-01	0814	~56'	~0.1	95	19.3	8.66	1570	570 NTU / 9.65 mg/L
				125				

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: 1340 – 1520 – ADJUSTING FLOW RATES FROM 1-2 gal/min, WELL KEEPS PUMPING DRY
1535 – MOVE TO UAW10-80

Forms(PF).003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

32.25 - 9-9-01

Well ID: UAW10-80

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 9-9-01, 9-10-01

Sampled By: —

Method of Purging: 2" SUBMERSIBLE PUMP/ BAILER

Method of Sampling: —

Initial Depth to Water: 37.1-9-10-01

Depth to Water after Sampling:

Total Depth of Well:

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1100	—	—	BAILED 15 GALLONS	—			
1540			35				
1-10-01 —	—	—	50	—	—	—	SEE DAILY FIELD NOTES

pH CALIBRATION (choose two)					Model or Unit No.:
Buffer Solution	pH 4.0	pH 7.0	pH 10.0		
Temperature °C					
Instrument Reading					

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION				Model or Unit No.:
KCL Solution (µS/cm = µmhos/cm)				
Temperature °C				
Instrument Reading				

Notes: 1535 - START PUMPING - PUMP STOPS AFTER 20 GALLONS - TAKE PUMP OUT, PUMP IS COVERED IN SILT & MUD, CLEAN PUMP MOVE BACK TO UAW10-50 - 1710
1705 - CHARLES & JERRY (BOART) GO TO LOWES TO GET TREMIE PIPE, WILL ATTEMPT TO USE TRASH PUMP TO CLEAN UP WELL - PUMPED ~8 GALLONS WITH TRASH PUMP - 1841 - CAN'T OVERCOME HEAD

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW16-10
Sample ID: — Duplicate ID: —
Sample Depth: —
Project and Task No.: 7443
Project Name: MORTON READING F1
Date: 9-8-01
Sampled By: —
Method of Purging: BAILER / 2" GRUNDFOS
Method of Sampling: —

Initial Depth to Water: 10.2
Depth to Water after Sampling:
Total Depth of Well:
Well Diameter: 4" PVC
1 Casing/Borehole Volume = ~14g. (Circle one)
4 Casing/Borehole Volumes = ~56g. (Circle one)
Total Casing/Borehole Volumes Removed: ~45

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1010	~7'	~3gpm	10	23.3	9.6	11.5	Turb=58 ; DO 8.8 mg/l
1035	~10'	~3gpm	~50	23.8	9.59	9.6	Turb=5.0 ; DO=9.11 mg/l
1045	~10'	~3gpm	~70	23.8	9.6	10.2	Turb=5.0 ; DO=9.37

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:

Water is black at start and after clears up turns black in Sun - Hvy H2S Odor

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW18-20

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 9-8-01

Sampled By:

Method of ~~Purging~~ Development: BAILER / 2" PUMP

Method of Sampling:

Initial Depth to Water: 12.2

Depth to Water after Sampling:

Total Depth of Well: 18'

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

~~4 Casing/Borehole~~ 3 Lost water Volumes = 142 (Circle one)

Total ~~Casing/Borehole~~ Water Volumes Removed: ~160 g

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
0930	10	~3gpm	8.98 #40	21.5C	9.3		Turb=7; DO=9.53
0945	12	~3gpm	8.7 150	21.3	9.3		Turb=6; DO=9.4
0955	16	~3gpm	7.05 170	21.5	9.4		Turb=6; DO=9.6

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes:
Bailed & Surged w/3" bailer ~15gals; pumped w/2" 12v. pump
~~TJ/160 ga~~ 145 gal.

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW22-20

Sample ID: _____ Duplicate ID: _____

Sample Depth: _____

Project and Task No.: MORTON 7443

Project Name: MORTON READING FI

Date: 9-10-01

Sampled By: —

Method of Purging: BAILER

Method of Sampling: _____

Initial Depth to Water: 12.10

Depth to Water after Sampling: _____

Total Depth of Well: 20'

Well Diameter: 4"

1 Casing/Borehole Volume = _____

(Circle one)

3 Casing/Borehole Volumes = 300g

(Circle one)

Total Casing/Borehole Volumes Removed: _____

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) NTU	DO mg/L
1-8-01	— BAILED 5 GALLONS								
9-9-01	— BAILED 3 GALLONS								
9-9-01	1430	— BAILED 5 GALLONS							
9-11-01	1422		~~20~~	23	25.1°	8.85	5180	DK GRAY 99	9.87
9-11-01	1454	—	—	25	—				

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: _____

Forms(PF) 003 (Revised 12/95)

GEOMATRIX

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: UAW23-20

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 9-10-01

Sampled By: —

Method of Purging: BAILER

Method of Sampling: —

Initial Depth to Water: 22.9'

Depth to Water after Sampling:

Total Depth of Well:

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed: 21 GALLONS

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)	DO mg/l
9-9-01	—			1½	—			BAILED DRY	
9-10-01	—			3	—			BAILED DRY	
9-11-01	1135	—	—	18	17.6°	9.75	3170	TAN, CLOUDY 84 NTU,	13.77
				21					
START 1500 PUMPING	1513	23'	1.5	25	19.1°	8.66	3070	CLOUDY 84 NTU	14.30
	1520	23'	1.5	38	19.4°	7.17	3000	CLOUDY/CLEAR 6 NTU	11.73
	1526	23'	1.5	48	17.9°	7.20	3090	CLEAR 3 NTU	11.21
	1531	23'	1	60	18.4°	7.32	3080	CLEAR 2 NTU	10.61

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: pH MALFUNCTION
— RECALIBRATE – pH OK ON 9-11-01 — 1520

Forms(PF).003 (Revised 12/95)

GEOMATRIX

WELL ~~SAMPLING~~ AND/OR DEVELOPMENT RECORD

Well ID: UAW24-70

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING F1

Date: 9-10-01

Sampled By: —

Method of Purging: BAILER / 2" SUBMERSIBLE

Method of Sampling: GRUNDFOS

Initial Depth to Water: 53.5' BTOC

Depth to Water after Sampling:

Total Depth of Well:

Well Diameter: 4" PVC

1 Casing/Borehole Volume = (Circle one)

4 Casing/Borehole Volumes = (Circle one)

Total Casing/Borehole Volumes Removed:

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) (NTU) DO:
1645	~71'	1	20				
1720	~71'	<1	25	23.6°	9.73	1550	TAN, CLOUDY 115 10.56 mg/L
1730	~71'	<1	30 —	1820 —	45 gallons	—	1900 — 55 gallons
1928	~71'	1.5	58	20.7°	9.84	918	TAN CLOUDY 78 11.57 mg/L
1938	~71'	1.5	70	20.7°	9.89	910	CLOUDY 84 10.20 mg/L

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: PA MALFUNCTION — PUMPED DRY 1730 — TAKES APPROXIMATELY 6 MIN. TO RECOVER 1 FOOT

Forms(PF).003 (Revised 12/95)

GEOMATRIX

WELL ~~SAMPLING~~ AND/OR DEVELOPMENT RECORD

Well ID: UAW25-20

Sample ID: — Duplicate ID: —

Sample Depth: —

Project and Task No.: 7443

Project Name: MORTON READING FI

Date: 9-10-01

Sampled By: —

Method of Purging: BAIL / 2" PUMP

Method of Sampling: —

Initial Depth to Water: 16.6' BTOC 16.73' 9-11-01

Depth to Water after ~~Sampling~~ DEVELOP: 16.75' 9-11-01

Total Depth of Well: 20' BTOC

Well Diameter: 4" PVC

1 Casing/Borehole Volume = ~5 GALLONS (Circle one)

~~4~~ 3 Casing/Borehole Volumes = ~15 GALLONS (Circle one)

Total Casing/Borehole Volumes Removed:

	Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment) DO
9-10-01	1437	20'	—	20 BAIL	19.5°	9.42	4370	CLOUDY 62NTU, 11.37mg/L
9-11-01	1059	19'	+	60	20.7°	9.82	4340	CLEAR 15NTU, 13.23 mg/L
	1104	19'	2.5	70	19.9°	9.77	4350	CLEAR 5NTU 13.45 mg/L
	1109	19'	2.5	80	20.2°	9.61	4400	CLEAR 3NTU 13.09 mg/L

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm = µmhos/cm)			
Temperature °C			
Instrument Reading			

Model or Unit No.:

Notes: pH NOT FUNCTIONING

Forms(PF) 003 (Revised 12/95)

Sample Control Logs

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

Page 7 of ____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info., etc.)	Date Sent to Lab	[redacted] SAMPLER
05-8-01	1150	050801113	035523	CLP	MW-EPA-1	5-8-01	ERM
05-8-01	1400	050801114	035524	CLP	MW-EPA-2 (Bailed)	5-8-01	ERM
5-8-01	1525	050801117	035524	CLP	MW-EPA-4	5-8-01	ERM
5-8-01	1700	050801118	035525	CLP	UAW11-40	5-8-01	ERM
5-8-01	1800	050801120	035525	CLP	UAW11-10	5-8-01	ERM
5-9-01		050901121	035526	TCLP-RCI	Sewer Sludge	5-9-01	CEY
7-24-01	1040	072401122	029280	CLP	DP01 - 2'	7-24-01	ERM
7-24-01	1100	072401123	029280	CLP	DP01 - 9.5'	7-24-01	ERM
7-24-01	1305	072401124	029280	CLP	DP02 - 2'	7-24-01	ERM
7-24-01	1320	072401125	029280	CLP	DP02 - 9.5'	7-24-01	ERM
7-24-01	1355	072401126	029280	CLP	DP03 - 2'	7-24-01	ERM
7-24-01	1410	072401127	029280	CLP	DP03 - 8.5'	7-24-01	ERM
7-24-01	1750	072401128	029280	TCLP/RCI	ROLL OFF WITHOUT RED X COMPOSITE	7-24-01	CEY
7-24-01	1740	072401129	029280	TCLP/RCI	POLY TANK COMPOSITE.	7-24-01	CEY
7-25-01	0855	072501130	031863	CLP	DP05 - 1'	7-25-01	ERM
7-25-01	0915	072501131	031863	CLP	DP05 - 8.5	7-25-01	ERM
~~7-25-01~~		~~072501132~~	~~031863~~	~~CLP~~	~~Charlie~~		
7-26-01	0940	072601132		CLP	DP07 - 9'	7-26-01	ERM
7-26-01	1010	072601133		CLP	DP08 - 6'	7-26-01	ERM
7-26-01	1030	072601134		CLP	DP08 - 11'	7-26-01	ERM

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452

Page 8 of ____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
7/27/01	1615	072701135	031861	CLP	DP09 - 12' EMS/MSD	7/27/01	ERM
7/27/01	1700	072701136	031861	APP IX	BLIND DUP DP10-10'	7/27/01	ERM
7/27/01	1650	072701137	031861	APP IX	DP10 - 2'	7/27/01	ERM
7/27/01	1700	072701138	031861	APP IX	DP10 - 10'	7/27/01	ERM
7/28/01	1420	072801139	031864	CLP	EQUIPMENT BLANK	7/28/01	ERM-cy
7/28/01	1450	072801140	031864	CLP	DP12-1.5'	7/28/01	ERM
7/28/01	1500	072801141	031864	CLP	DP12-9'	7/28/01	ERM
7/29/01	1450	072901142	031865	~~CLP~~ APP IX	Recovery Well	7/30/01	CEY
~~7/29/01~~	~~1635~~	~~072901143~~	~~031865~~	~~CLP~~	~~FRENCH DRAIN~~	~~7/29/01~~	~~CEY~~
7/29/01	1340	072901144	076065 ~~076071~~	~~CLP~~ APP IX	DP13-3'	7/30/01	ERM
7/29/01	1350	072901145	076065 ~~076071~~	~~CLP~~ APP IX	DP13-11'	7/30/01	ERM
7/29/01	1425	072901146	076065	~~CLP~~ APP IX	DP14-3'	7/30/01	ERM
7/29/01	1430	072901147	076065	~~CLP~~ APP IX	DP14-9'	7/30/01	ERM
7/29/01	1510	072901148	076065	~~CLP~~ APP IX	DP15-2'	7/30/01	ERM
7/29/01	1525	072901149	076065	APP IX	DP15-9'	7/30/01	ERM
7/30/01	0935	073001150	076065	APP IX	DP16-2.5'	7/30/01	ERM
7/30/01	0955	073001151	076065	APP IX	DP16-12.5'	7/30/01	ERM
7/30/01	1035	073001152	076065	APP IX	DP17-3'	7/30/01	ERM
7/30/01	1055	073001153	076065	APP IX	DP17-13'	7/30/01	ERM
7/30/01	1320	073001154	076065	CLP ~~CLP~~	DP18-2'	7/30/01	ERM

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452/7169/7443

Page 9 of ____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
7/30/01	1335	073001155	076071	CLP	DP18 - 14.5'	7/30/01	ERM
7/30/01	1400	073001156	076071	CLP	DP19 - 2'	7/30/01	ERM
7/30/01	1415	073001157	076071	CLP	DP19 - 13'	7/30/01	ERM
7/30/01	1445	073001158	076071	CLP	DP20 - 2'	7/30/01	ERM
7/30/01	1500	073001159	076071	CLP	DP20 - 14.5'	7/30/01	ERM
8/1/01	1235	080101160	029267	CLP	DP23 - 2.5'	8/1/01	ERM
8/1/01	1250	080101161	029267	CLP	DP23 - 9'	8/1/01	ERM
8/7/01	0915	080701162	076066 010741-VOC	CLP	EQUIPMENT BLANK	8/7/01, 8/8/01 VOC	ERM
8/7/01	1005	080701163	076066	CLP	DP25 - 2.5' & MS/MSD	8/7/01	ERM
8/7/01	1015	080701164	076066	CLP	DP25 - 7.5' (BLIND DUP)	8/7/01	ERM
8/7/01	1015	080701165	076066	CLP	DP25 - 7.5'	8/7/01	ERM
8/20/01	1450	082001166	031867	CLP	STR11 - 2' & MS/MSD	8-20-01	TPJ
8/20/01	1505	082001167	031867	CLP	STR11 - 9' (BLIND DUP)	8/20/01	TPJ
8/20/01	1505	082001168	031867	CLP	STR11 - 9'	8/20/01	TPJ
8/20/01	1510	082001169	031867	GEOTECH	STR11 - 6'	8/20/01	TPJ
8/20/01	1515	082001170	031867	GEOTECH	STR11 - 9'	8/20/01	TPJ
8/20/01	1635	082001171	031867	GEOTECH	STR11 - 53'	8/20/01	TPJ
8/20/01	1720	082001172	031867	Geotech	STR11 - 63'	8/20/01	TPJ
8/21/01	0805	082101173	029269	Geotech	STR11 - 77'	8/22/01	TPJ
8/21/01	0900	082101174	029269	Geotech	STR11 - 83'	8/22/01	TPJ

Forms(PF).006 (Revised 12/95)

SAMPLE CONTROL LOG

GEOMATRIX

Project Name: ROHM & HAAS READING, OH

Laboratory: STL - NORTH CANTON, OH

Project and Task No.: 6452 — 7443

Page _____ of _____

Sampling Date	Sampling Time	Sample Number (ID)	C.O.C. Number	Analyses Requested	Turnaround Time, Sample Location, Handling Notes, Chain-of-Custody Remarks, et. (Duplicate, blank info, etc.)	Date Sent to Lab	[redacted] SAMPLER
8/21/01	0930	082101175	029269	Geotech	STR 11 - 10Z'	8/22/01	TPJ
8/22/01	1655	082201176	029269	CLP	UAW16-10 @ 2'	8/22/01	TPJ
8/22/01	1715	082201177	029269	CLP	UAW16-10 - 5.5'	8/22/01	TPJ
8/23/01	0820	082301178	~~029269~~ 031857	CLP-TAL	UAW18-20 - 1'	8/23/01	TPJ
8/23/01	0835	082301180	031857	CLP	UAW18-20 - 15'	8/23/01	TPJ
8/23/01	1445	082301179	031857	CLP	EQUIP. BLANK	8/23/01	TPJ
9/5/01	0845	090501181	031858	CLP	UAW22-20 @ 2'	9/5/01	TPJ
9/5/01	0855	090501182	031858	CLP	UAW22-20 @ 11'	9/5/01	TPJ

Forms(PF).006 (Revised 12/95)

Sample Chain of Custody Records

Chain of Custody Record

SEVERN TRENT SERVICES

1 OF 1 SHUTTLE

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 9/5/01	Chain of Custody Number: 031858
Address: 1214 W. 6th Str. Ste 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / (512) 494-0334	Lab Number	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: T. Jennings; Lab Contact: M. Dunford		
Project Name and Location (State): Morton FI / Reading, OH	Carrier/Waybill Number: 8272 3716 9165 FedEx		
Contract/Purchase Order/Quote No.: 7473H			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-VOC	CLP-Inorganic	CLP-Organics	CLP-PCBs	CLP-SVOCs	Special Instructions/ Conditions of Receipt
090501181	9/5/01	0845				X	4						X	X	X	X	X	
090501182	9/5/01	0855				X	4						X	X	X	X	X	
Trip Blank	9/5/01	—		X						1			X					

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months) PER M. HEMINGWAY

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	9-5-01	1715	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

Shuttle 1 of 1

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: Geomatrix	Project Manager: M. Hemingway	Date: 8/23/01	Chain of Custody Number: 031857
Address: 1214 W. 6th St. Ste. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333/(512) 494-0334	Lab Number:	Page 1 of 1
City: Austin; State: TX; Zip Code: 78703	Site Contact: T. Jennings; Lab Contact: A. Danford		
Project Name and Location (State): Morton Reading Phase II FI	Carrier/Waybill Number: 8272 3716 9198/Fed Ex		
Contract/Purchase Order/Quote No.: 7443			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOCs	CLP-SVOCs	CLP-Inorganics	CLP-OCPest	CLP-PCBs	CLP-Sulfide	CLP-Cyanide	CLP-Metals	Special Instructions/ Conditions of Receipt
TJ 8/23/01 ~~0825~~ 082301178	8-23-01	0820				X	4						X	X	X	X	X				
082301180	8-23-01	0835				X	4						X	X	X	X	X				
082301179	8-23-01	1445		X			4		1	3	1	1	X	X		X	X	X	X	X	3-40ml VOA; 4-Liter Amber 1-500ml; 1-liter; 1-250ml Poly
Trip Blank	8-23-01	-		X						1			X								

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	8/23/01	1930	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 8-22-01	Chain of Custody Number: 029269
Address: 1214 W. 8TH ST. 201	Telephone Number (Area Code)/Fax Number: (512)494-0333 (512)494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: T. JENNINGS	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING FI, OHIO	Carrier/Waybill Number: FEDEX 8272 3716 9202		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP - VOC	CLP - SVOC	CLP - INORGANICS	CLP - OC - PESTS	CLP - PCBS	ATTERBERG LIMITS	MOISTURE CONTENT	GRAIN SIZE	pH, CEC	TOC	Special Instructions/ Conditions of Receipt
082101173	8-21-01	0800				X	2											X	X	X	X	X	
082101174	8-21-01	0900				X	2											X	X	X	X	X	
082101175	8-21-01	0930				X	2											X	X	X	X	X	
082201176	8-22-01	1655				X	4						X	X	X	X	X						
082201177	8-22-01	1715				X	4						X	X	X	X	X						
TRIP BLANK	8-22-01	—		X						1													

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months) — AS PER M. HEMINGWAY

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 8-22-01	Time: 1900	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 8-20-01	Chain of Custody Number: 031867
Address: 1214 W. SIXTH ST. #201	Telephone Number (Area Code)/Fax Number: (512)494-0333 (512)494-0334	Lab Number	Page 1 of 1
City: AUSTIN State: TX Zip Code: 78703	Site Contact: T. JENNINGS	Lab Contact: A. DANFORD	
Project Name and Location (State): MORTON READING FI, REMEDIAL OHIO	Carrier/Waybill Number: 8272 3716 9213		
Contract/Purchase Order/Quote No.: 1443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOCS	CLP-SVOCS	CLP-INORGANICS	CLP-OC-PESTS	CLP-PCBs	ATTERBERG	MOISTURE CONTENT	CEC, pH	GRAIN SIZE	TOC	Special Instructions/ Conditions of Receipt
082001166	8-20-01	1450		8/20/01		X	4						X	X	X	X	X						
082001166 MS/MSD	8-20-01	~~1450~~ 1450				X	4						X	X	X	X	X						(MS/MSD)
082001167	8-20-01	BLIND				X	4						X	X	X	X	X						
082001168	8-20-01	1505				X	4						X	X	X	X	X						
082001169	8-20-01	1510				X	2											X	X	X	X	X	
082001170	8-20-01	1515				X	2											X	X	X	X	X	
082001171	8-20-01	1635				X	2											X	X	X	X	X	
082001172	8-20-01	1720				X	2											X	X	X	X	X	
TRIP BLANK	8-20-01	—		X						1			X										

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

PER MARK HEMINGWAY

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 8-20-01	Time: 1845	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 8-8-01	Chain of Custody Number: 010741
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: 512-494-0333 512-494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL	Lab Contact: ALISIA DAMFORD	
Project Name and Location (State): MORTON READING FI SCIOTO, OHIO	Carrier/Waybill Number: 8272 3716 9224		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-VOC	Special Instructions/ Conditions of Receipt
080701162	8-7-01	0915		X						3			X	HELD FROM YESTERDAYS SHIPMENT (ON ICE)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	8/8/01	1850	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

SHUTTLE 1 OF 1

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 8-7-01	Chain of Custody Number: 076066
Address: 1214 WEST SIXTH #201	Telephone Number (Area Code)/Fax Number: 512-494-0333 512-494-0334	Lab Number	Page 1 of 1
City: AUSTIN State: TX Zip Code: 78703	Site Contact: ERIK MANSELL	Lab Contact: ALESIA DANFORD	
Project Name and Location (State): MORTON RENING OHIO FI	Carrier/Waybill Number: 8272 3716 9235		
Contract/Purchase Order/Quote No.: 1443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOC	CLP-SVOC	CLP-PCBS	CLP-INORG	CLP-OC-PES	CLP-CYANIDE	CLP-SULFIDE	Special Instructions/ Conditions of Receipt
080701162	8-7-01	0915		X			4		1	3	1	1	X	X	X	X	X	X	X	
080701163	8-7-01	1005				X	4						X	X	X	X	X			
080701163 MS/MSD	8-7-01	1005				X	4						X	X	X	X	X			
080701164	8-7-01	—				X	4						X	X	X	X	X			
080701165	8-7-01	1015				X	4						X	X	X	X	X			
TRIP BLANK	8-7-01	—		X					1	1			X							

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: PER MARK HEMINGWAY ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 8-7-01	Time: 1850	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: M. HEMINGWAY	Date: 8-1-01	Chain of Custody Number: 029267
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512) 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ERIK MANSSEN	Lab Contact: ACESIA DANFORD	
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9246		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): CLP-SVOC	CLP-VOC	CLP-INORG	CLP-OC-PES	CLP-PCBs	Special Instructions/ Conditions of Receipt
080101160	8-1-01	1235				X		4							X	X	X	X	X	
080101161	8-1-01	1250				X		4							X	X	X	X	X	
TRIP BLANK	8-1-01	—														X				

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months) PER M. HEMINGWAY

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	8/1/01	1600	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

SHUTTLE 2 = 2

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS	Project Manager: M. HEMINGWAY	Date: 7-30-01	Chain of Custody Number: 076071
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: 512-494-0333	Lab Number	Page 2 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E MANSELL	Lab Contact	
Project Name and Location (State): MORTON, READING OHIO	Carrier/Waybill Number: 8215 3511 8117		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-VOC	CLP-SVOC	CLP-INORG	CLP-OC-PEST	CLP-PCBS	APP IX-VOCs	Special Instructions/ Conditions of Receipt
073001155	7-30-01	1335				X	4						X	X	X	X	X		
073001156	7-30-01	1400				X	4						X	X	X	X	X		
073001157	7-30-01	1415				X	4						X	X	X	X	X		
073001158	7-30-01	1445				X	4						X	X	X	X	X		
073001159	7-30-01	1500				X	4						X	X	X	X	X		
TRIP BLANK -CLP	7-29-01	—		X						1			X						
TRIP BLANK -APP IX	7-29-01	—		X						1								X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-30-01	1845	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

* EXTRACT AS SOON AS POSSIBLE *

SHUTTLE 201 ?

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS	Project Manager: M. HEMINGWAY	Date: 7-29-01	Chain of Custody Number: 076065
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: 512-494-0333 512-494-0334	Lab Number	Page 1 of 2
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: EMMANSELL	Lab Contact	
Project Name and Location (State): MORTON, READING OHIO	Carrier/Waybill Number: 8215 3511 8117		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOC	CLP-SVOC	CLP-INORG.	CLP-OC-PEST	CLP-PCBs	APPIX-VOC	APPIX-SVOC	APPIX-INORG	APPIX-OC-PEST	APPIX-PCBs	APPIX-DIOXIN FURANS	CLP-TOC	Special Instructions/ Conditions of Receipt
072901142	7-29-01	1450		X				1	2		3			X											X	
072901144	7-29-01	1340				X		5											X	X	X	X	X	X		*
072901145	7-29-01	1350				X		5											X	X	X	X	X	X		*
072901146	7-29-01	1425				X		5											X	X	X	X	X	X		*
072901147	7-29-01	1430				X		5											X	X	X	X	X	X		*
072901148	7-29-01	1510				X		5											X	X	X	X	X	X		*
072901149	7-29-01	1525				X		5											X	X	X	X	X	X		*
073001150	7-30-01	0935				X		5											X	X	X	X	X	X		
073001151	7-30-01	0955				X		5											X	X	X	X	X	X		
073001152	7-30-01	1035				X		5											X	X	X	X	X	X		
073001153	7-30-01	1055				X		5											X	X	X	X	X	X		
073001154	7-30-01	1320				X		4						X	X	X	X	X								

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-30-01	1845	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

1 OF 1

STL-4124 (1200)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 7/29/01	Chain of Custody Number: 076069
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: (512)494-0333 (512)494-0334	Lab Number:	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ERIK MANSEN; Lab Contact:		
Project Name and Location (State): 7443	Carrier/Waybill Number: 8215 3511 8117		
Contract/Purchase Order/Quote No.: MORTON READING OHIO			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-SVOC BNA	CLP-PEST-PCB's	CLP-CYANIDE	CLP-SULFIDE	CLP-METALS	TOT MET/DISS MET	TSS, ALK, TDS, Cl, PO4, FeO2	T. PHOS, NO3, NO2	Special Instructions/ Conditions of Receipt
072901142	7/29/01	1450		X			5	1	3		[redacted]	1	2	2	1	1	1	2	1	1	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7-30-01	1845	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

1 of 1

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 7/28/01	Chain of Custody Number: 031864
Address: 1214 W. Sixth #201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512) 494-0334	Lab Number:	Page 1 of 1
City: AUSTIN State: TX Zip Code: 78703	Site Contact: ERIC MANSELL Lab Contact: ALESIA OANFORD		
Project Name and Location (State): MORTON-Reading (OHIO)	Carrier/Waybill Number: 8272 3716 9257		
Contract/Purchase Order/Quote No.: 7445 C			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	CLP-VOC	CLP-INORGANICS	CLP SVOC (BNA)	CLP-PCB'S	CLP-OC PEST	CLP-METALS	CLP-SULFIDE	CLP CYANIDE	Special Instructions/ Conditions of Receipt
072801139	7/28/01	1420		X			4		1	3	1	1	X	X	X	X	X	X	X	X	3-40 ML-VOA/4-1L-Amber 1L Poly-1500 ML Poly 1-250 ML Poly 3-Encore
072801140	7/28/01	1450											X	X	X	X	X				1-500 ML - W/M
072801141	7/28/01	1500											X	X	X	X	X				" " "
TRIP BLANK	7/28/01	—		X						1			X								1-40 ML-VOA

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: AS PER MARK HEMINGWAY ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Charles E. Young	7/28/01	1610	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

1 OF 1

STL-4124 (0700)

Client: GEOMATRIX	Project Manager: MARK HEMINGWAY	Date: 7-27-01	Chain of Custody Number: 031861
Address: 1214 W. SIXTH ST. 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 / 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: E. MANSELL	Lab Contact: ALESIA DANFORD	
Project Name and Location (State): MORTON READING, OHIO	Carrier/Waybill Number: 8272 3716 9268		
Contract/Purchase Order/Quote No.: 7443 C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	CLP-VOC	CLP-SVOC	CLP-INORG	CLP-PEST (Inc)	CLP-PCBS	APPIX-VOC	APPIX-SVOC	APPIX-INORG	APPIX-α-PCB	APPIX-PCB₂	APPIX-DIOXIN	Special Instructions/ Conditions of Receipt
072701135	7-27-01	1615				X	4				*		X	X	X	X	X							
072701135 MS/MSD	7-27-01	1615				X	4						X	X	X	X	X							
072701136	7-27-01	BLIND				X	5											X	X	X	X	X	X	
072701137	7-27-01	1650				X	5											X	X	X	X	X	X	
072701138	7-27-01	1700				X	5											X	X	X	X	X	X	
TRIP BLANK CLP-TAL	7-27-01	—		X						1			X											
TRIP BLANK APPIX-	7-27-01	—		X						1								X						

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 7-27-01	Time: 1940	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

1 of 1

STL-4124 (0700)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 7/26/01	Chain of Custody Number: 031862
Address: 1214 W. Sixth #201	Telephone Number (Area Code)/Fax Number: (512)494-0333 (512)494-0334	Lab Number	Page 1 of 1
City: AUSTIN State: TX Zip Code: 78703	Site Contact: ERIK MANSELL	Lab Contact: ALESIA DANFORD	
Project Name and Location (State): MORTON - Reading OHIO	Carrier/Waybill Number: 8272 3116 9279		
Contract/Purchase Order/Quote No.: 1443 C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-VOC	CLP-SVOC	CLP-INORGANICS	CLP-PCB	CLP-OC Pes	Special Instructions/ Conditions of Receipt
072601132						X	4	X						X	X	X	X	X	
072601133						X	4	X						X	X	X	X	X	
072601134						X	4	X						X	X	X	X	X	
TRIP BLANK				X			1				X			X					

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other ____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 7-26-01	Time: 1840	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

[redacted]

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK Hemingway	Date: 7/25/01	Chain of Custody Number: 031863
Address: 1214 W. Sixth # 201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512)494-0334	Lab Number	Page 1 of 1
City: AUSTIN State: TX Zip Code: 78703	Site Contact: ERIK MANSELL	Lab Contact: ALESIA DANFORD	
Project Name and Location (State): MORTON - Reading, OHIO	Carrier/Waybill Number: 8212 3714 9280		
Contract/Purchase Order/Quote No.: 7473 C			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-VOC	CLP-SVOC	CLP INORGANICS	CLP-PCB's	CLP-OCPESTS	Special Instructions/ Conditions of Receipt
072501130	7/25/01	0855				X	7						X	X	X	X	X	
072501131	7/25/01	0915				X	7						X	X	X	X	X	
~~072501132 CEY~~	~~7/25/01~~			X														
TRIP BLANK	7/25/01	—		X			1			1			X					

Per Mark Hemingway

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☑ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 7/25/01	Time: 1935	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: GEOMATRIX CONSULTANTS	Project Manager: MARK HEMINGWAY	Date: 7-24-01	Chain of Custody Number: 029280
Address: 1214 W. SIXTH #201	Telephone Number (Area Code)/Fax Number: (512) 494-0333 (512) 494-0334	Lab Number	Page 1 of 1
City: AUSTIN; State: TX; Zip Code: 78703	Site Contact: ERIK MANSELL	Lab Contact: ALISA DANFORD	
Project Name and Location (State): MORTON - READING, OHIO	Carrier/Waybill Number: 8272 3716 9305		
Contract/Purchase Order/Quote No.: 7443			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNOS	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): CLP-VOC	CLP-SVOC (BNA)	CLP-Inorganics	CLP-PCBs	CLP-OC Pest	TCLP	RCI	Special Instructions/ Conditions of Receipt
07240122	7-24-01	1040				X	4	*					X	X	X	X	X			
07240123	7-24-01	1100				X	4						X	X	X	X	X			
07240124	7-24-01	1305				X	4						X	X	X	X	X			
07240125	7-24-01	1320				X	4						X	X	X	X	X			
07240126	7-24-01	1355				X	4						X	X	X	X	X			
07240127	7-24-01	1410				X	4						X	X	X	X	X			
07240128	7-24-01	1750				X	1											X	X	RUSH TURNAROUND
07240129	7-24-01	1740				X	1											X	X	RUSH TURNAROUND
TRIP BLANK	7-24-01	—		X						1			X							—

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

FOR MARK HEMINGWAY

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☒ Other 07240128 07240129 RUSH

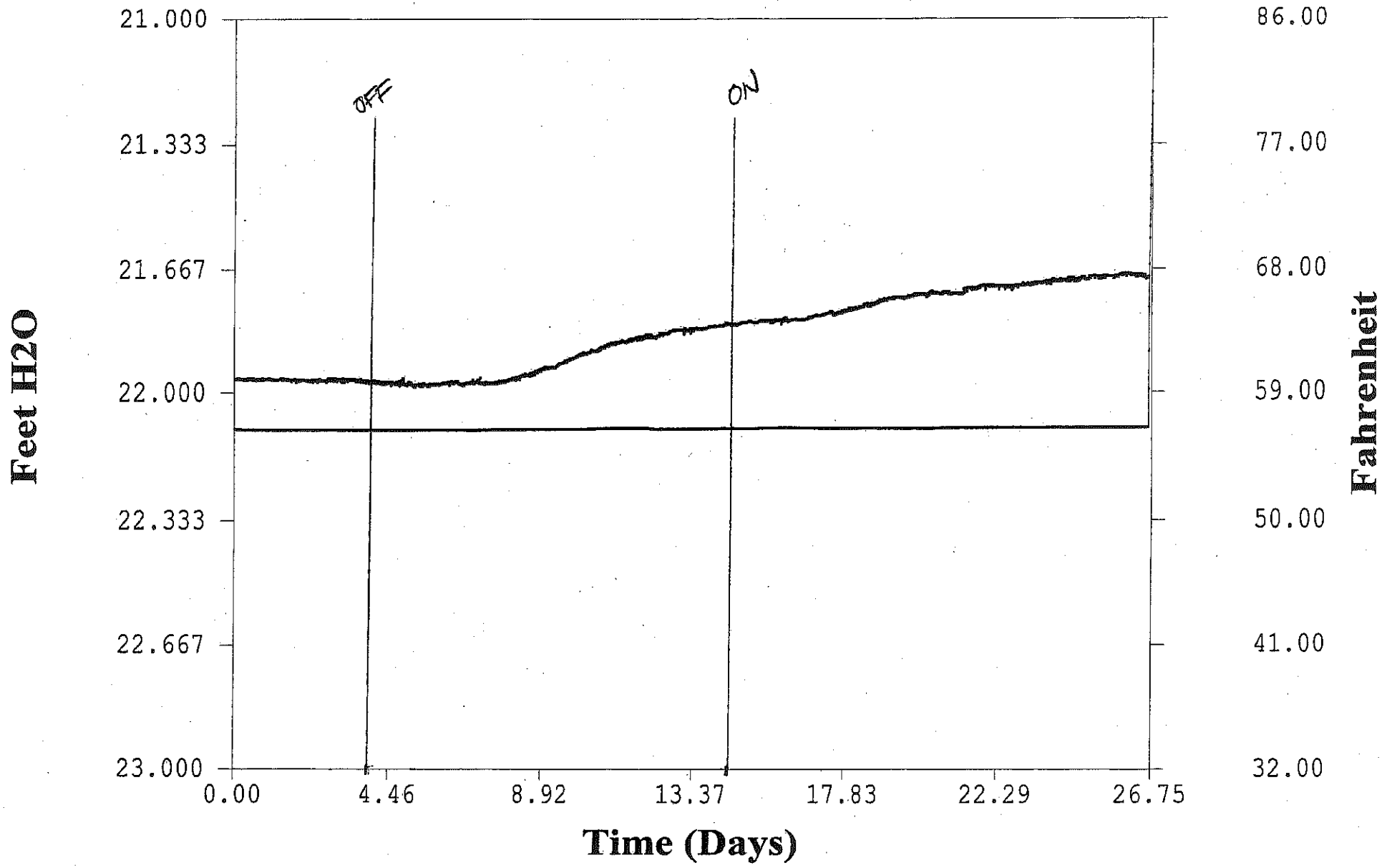
QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 7-24-01	Time: 1830	1. Received By	Date	Time
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

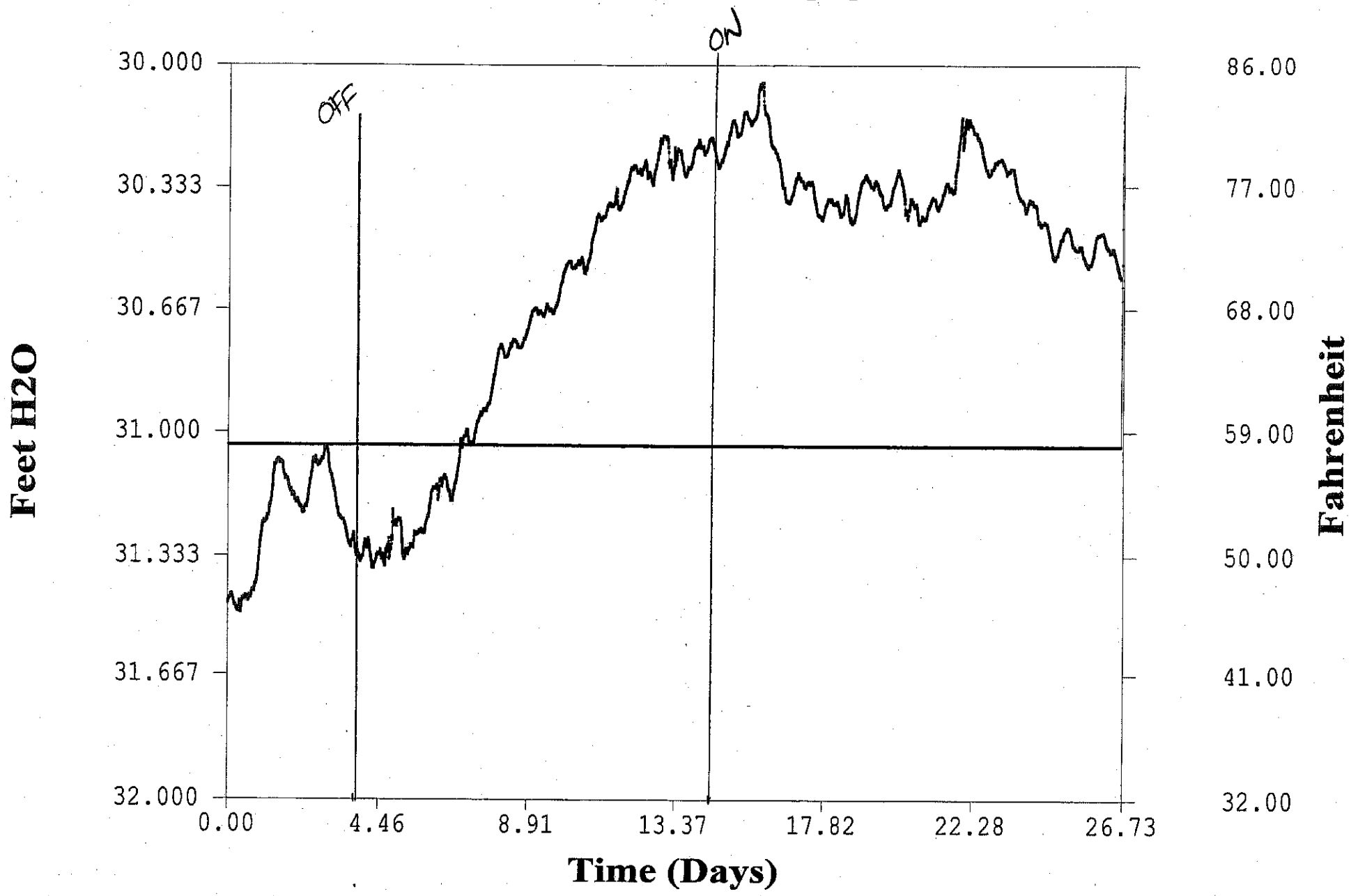
DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

UAW09-20



· [2] - OnBoard Pressure · [1] - OnBoard Temp

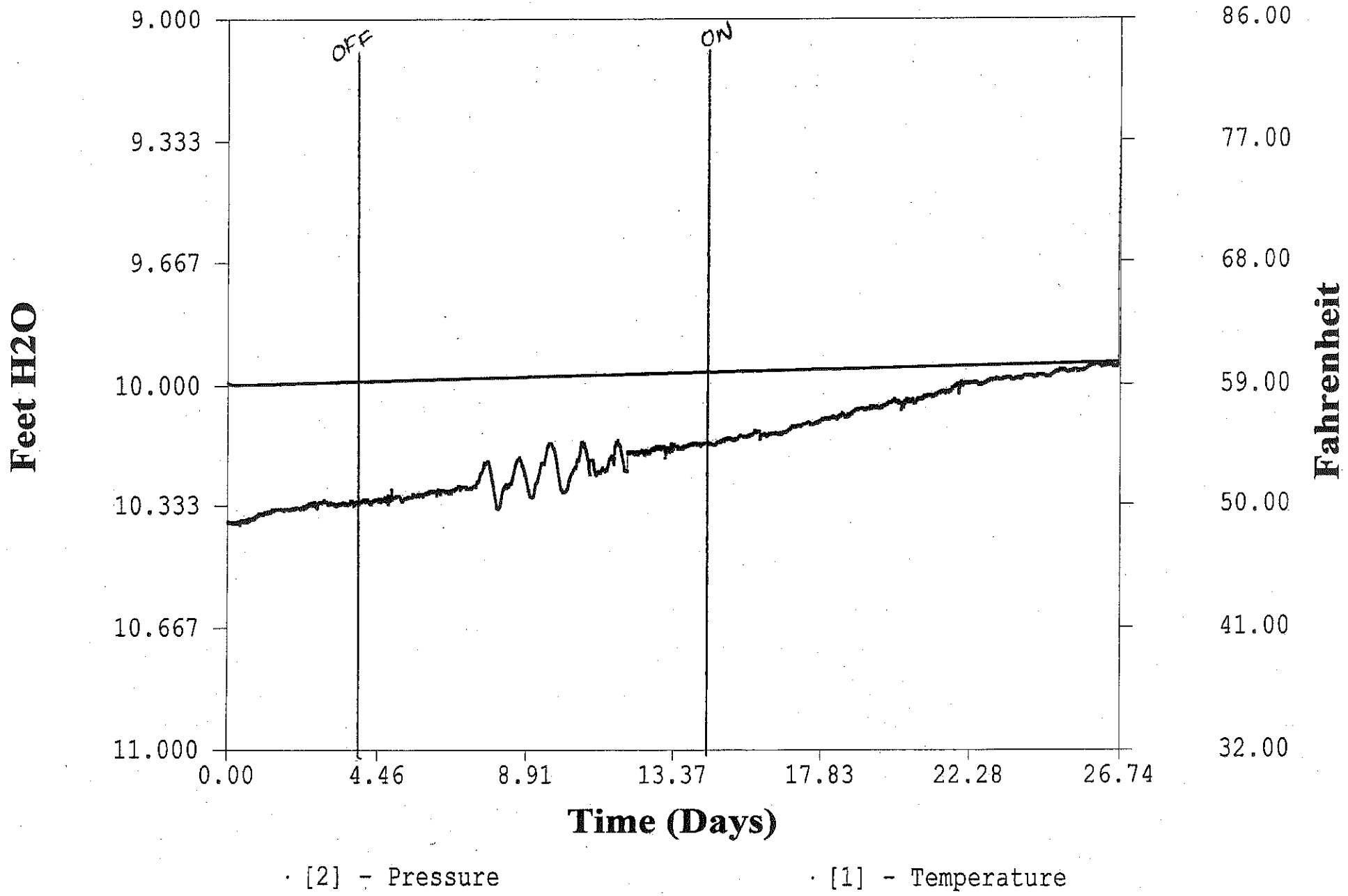
UAW09-60



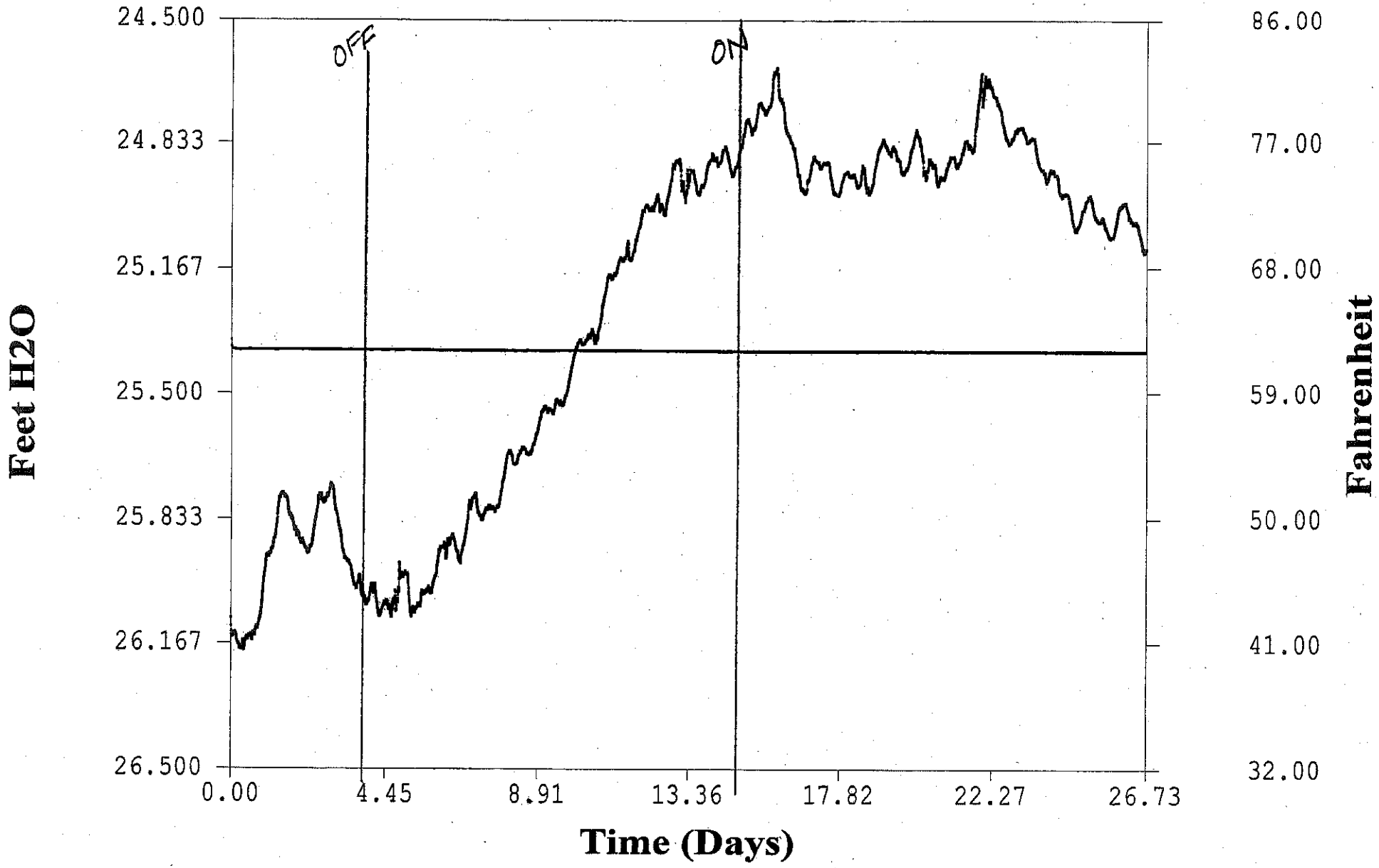
· [2] - Pressure

· [1] - Temperature

UAW13-20

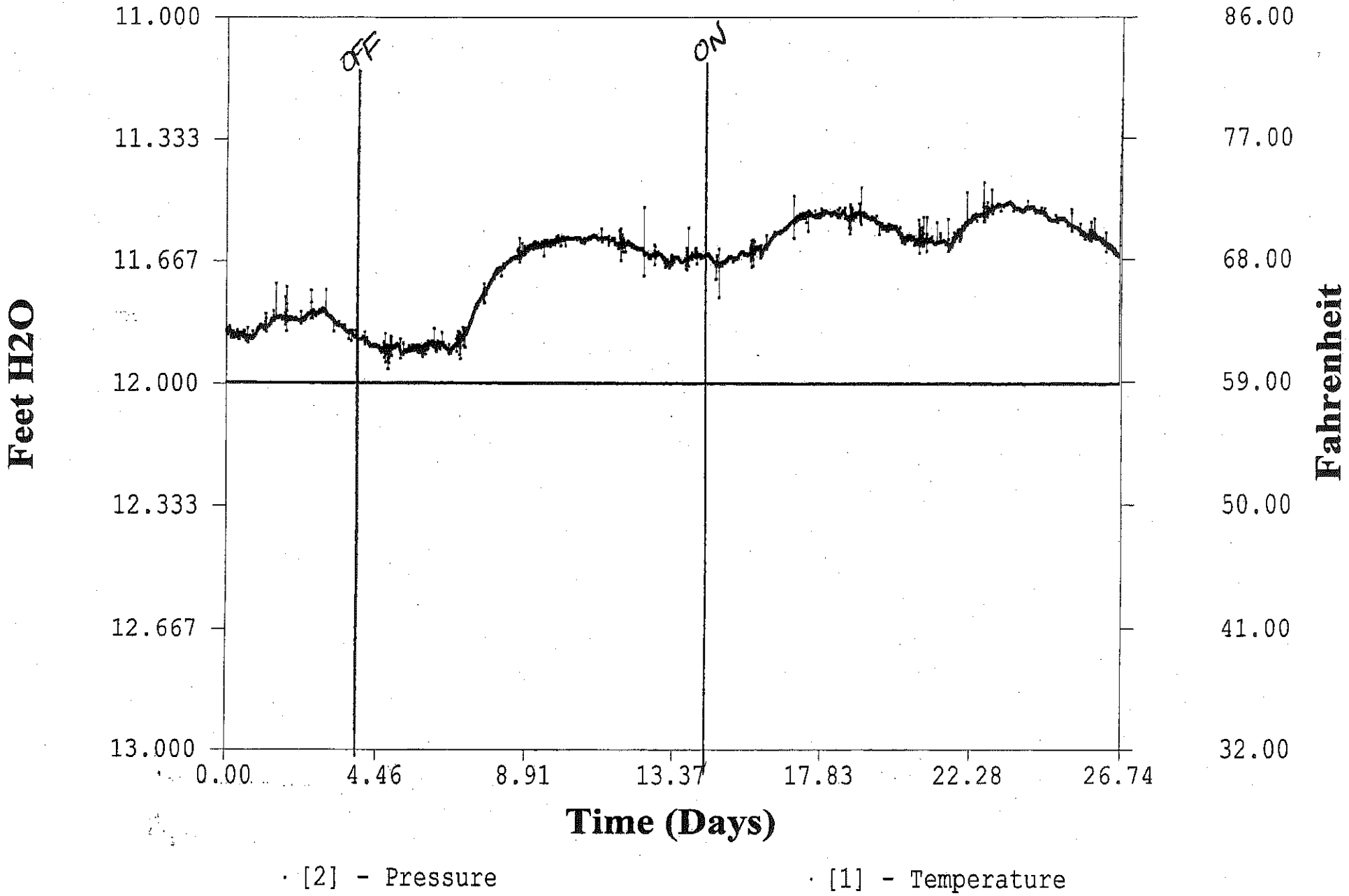

OFF
ON
9.000
9.333
9.667
10.000
10.333
10.667
11.000
Feet H2O
86.00
77.00
68.00
59.00
50.00
41.00
32.00
Fahrenheit
0.00
4.46
8.91
13.37
17.83
22.28
26.74
Time (Days)
[2] - Pressure
[1] - Temperature

UAW15-50

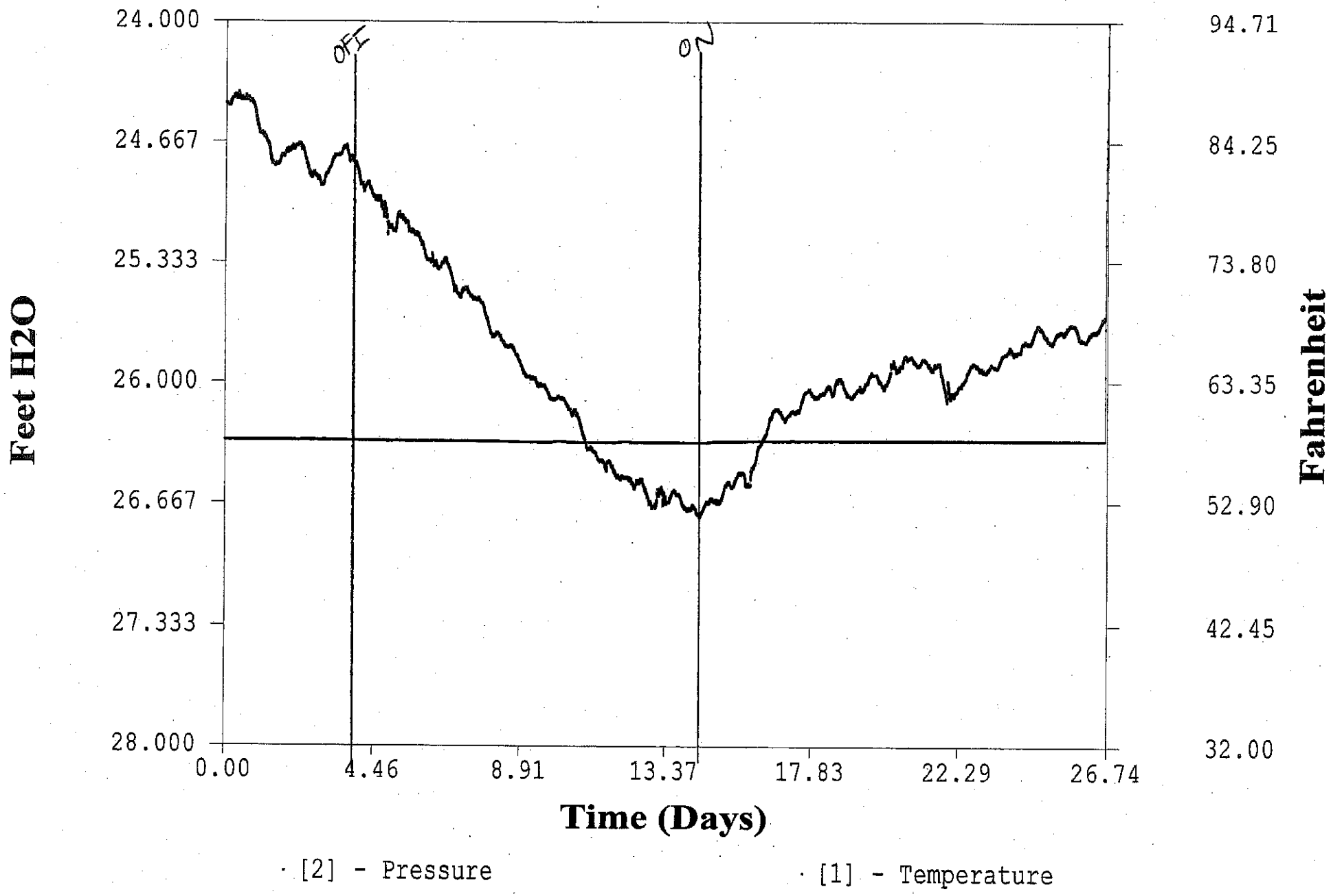


· [2] - Pressure · [1] - Temperature

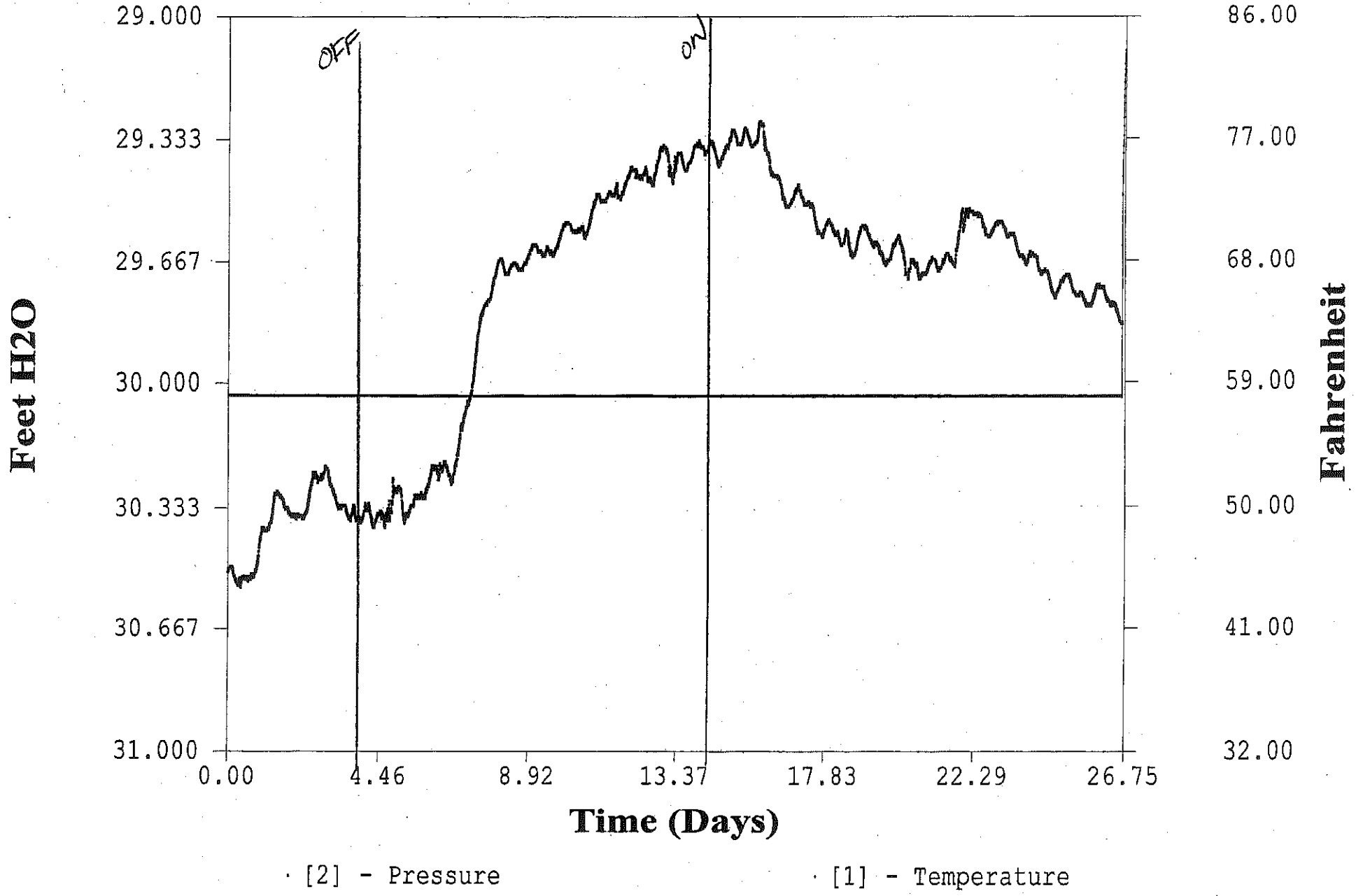
UAW17-40


11.000
11.333
11.667
12.000
12.333
12.667
13.000
Feet H2O
86.00
77.00
68.00
59.00
50.00
41.00
32.00
Fahrenheit
OFF
ON
0.00
4.46
8.91
13.37
17.83
22.28
26.74
Time (Days)
[2] - Pressure
[1] - Temperature

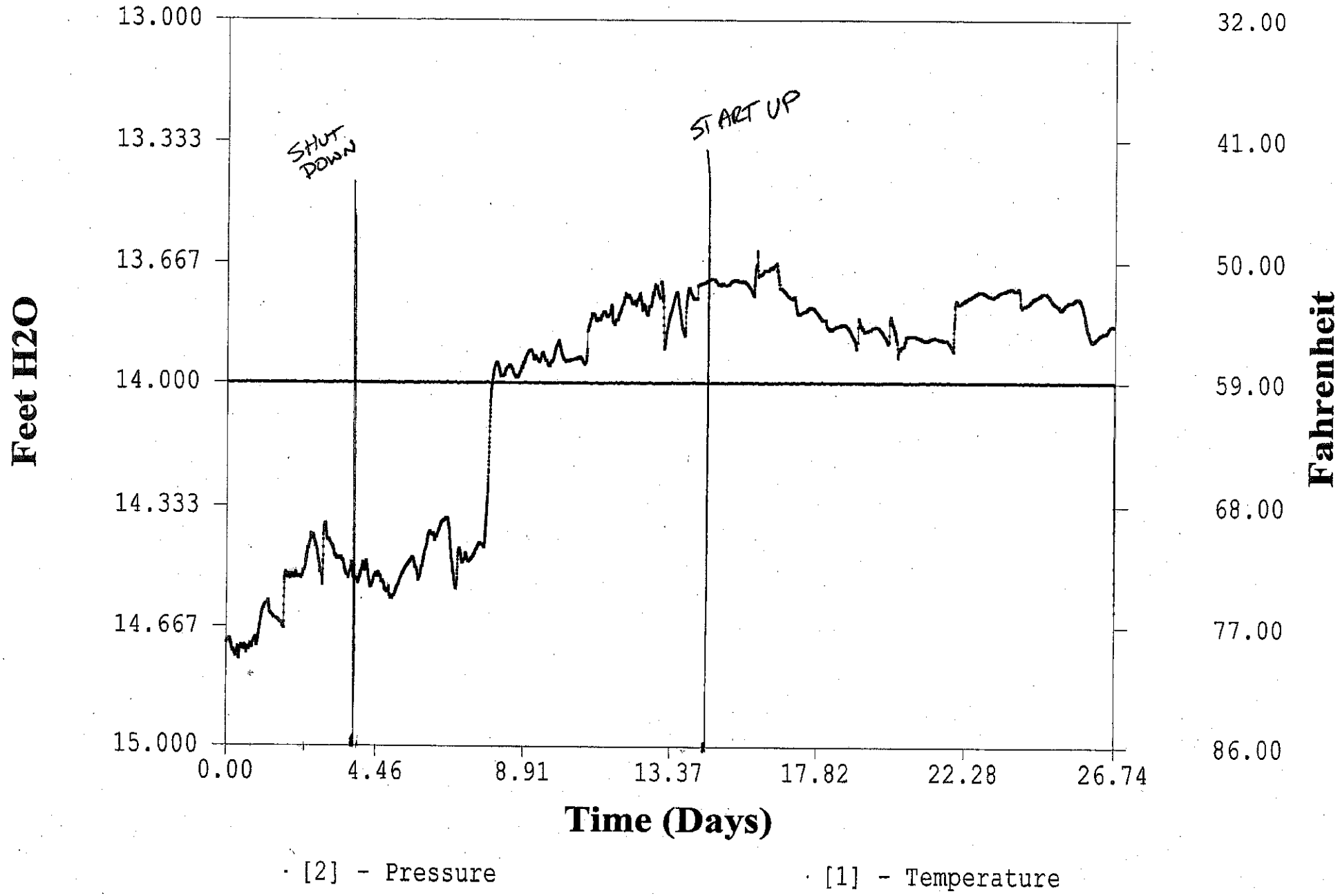
UAW19-80


24.000
24.667
25.333
26.000
26.667
27.333
28.000
Feet H2O
94.71
84.25
73.80
63.35
52.90
42.45
32.00
Fahrenheit
OFF
ON
0.00
4.46
8.91
13.37
17.83
22.29
26.74
Time (Days)
[2] - Pressure
[1] - Temperature

UAW21-80


29.000
29.333
29.667
30.000
30.333
30.667
31.000
Feet H2O
86.00
77.00
68.00
59.00
50.00
41.00
32.00
Fahrenheit
OFF
ON
0.00
4.46
8.92
13.37
17.83
22.29
26.75
Time (Days)
[2] - Pressure
[1] - Temperature

UAW02-40


13.000
13.333
13.667
14.000
14.333
14.667
15.000
Feet H2O
32.00
41.00
50.00
59.00
68.00
77.00
86.00
Fahrenheit
SHUT DOWN
START UP
0.00
4.46
8.91
13.37
17.82
22.28
26.74
Time (Days)
[2] - Pressure
[1] - Temperature

Aquifer Testing – Transducer Logs

Combined Sewer System Inspection

16

TELEVAC ENVIRONMENTAL
7611 EASY ST
MASON OH, 45040
Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION REPORT

7/24/01

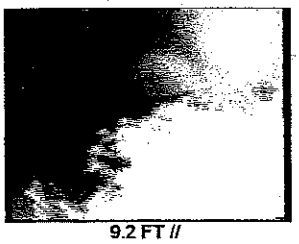
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
~~07/25/2001~~		SUNNY, DRY	P.KELLUM	13	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	1350

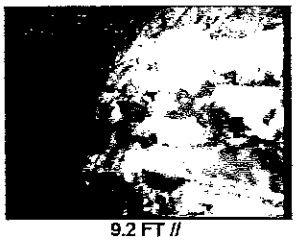
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	53.6 FT
STREET:	Bldg.25	MAP #2:		MH:	20
LOCALE:		TAPE #:	001	MH:	SI 5

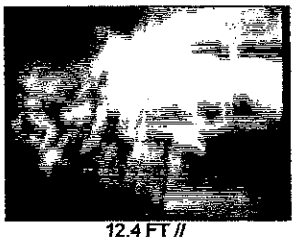
INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"	
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP	JT LGTH:
AREA:	Rohm Haas	LINING:		
		RSRVD:		

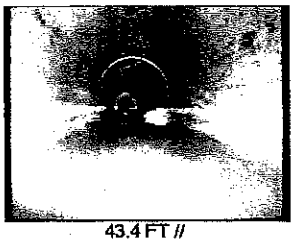
REMARK:

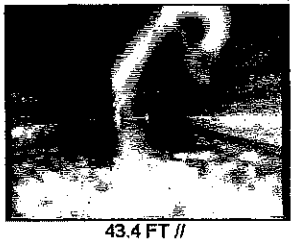
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at upstream manhole, START
9.20		*debris*
12.40		***scale/mineral deposits light from 09 to 03 o´clock***
24.00		*debris*
37.70		*debris*
43.40		*debris Too heavy to get by!!!!!!!!!!!!*
53.60		inspection ends at downstream manhole, END Storm Inlet #5


9.2 FT //


9.2 FT //


12.4 FT //


43.4 FT //


43.4 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.25	~~07/25/2001~~ 7-24-01	13	

IMAGE: 14_2a, TAPE #: 001
debris

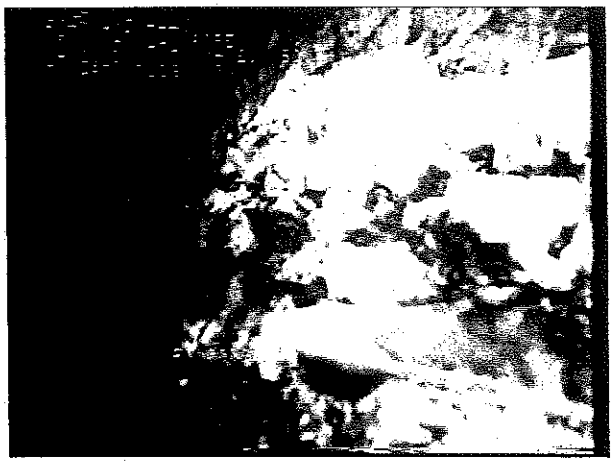

IMAGE: 14_2b, TAPE #: 001
debris

IMAGE: 14_3a, TAPE #: 001
scale/mineral deposits light from 09 to 03 o´clock

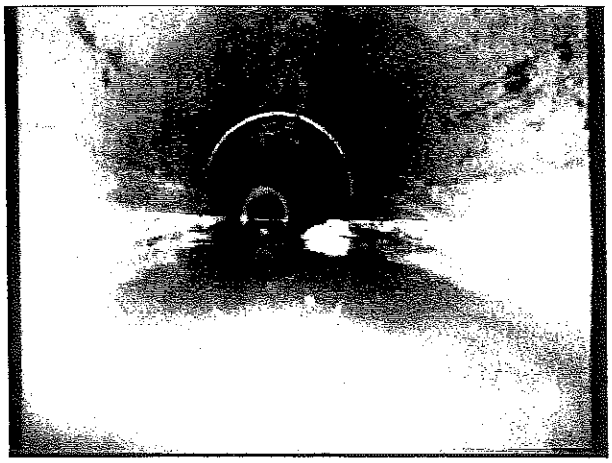

IMAGE: 14_6a, TAPE #: 001
debris Too heavy to get by!!!!!!!!!!!

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.25	~~07/25/2001~~	13	

7-24-01

IMAGE: 14_6b, TAPE #: 001
debris Too heavy to get by!!!!!!!!!!!!

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INSPECTION REPORT

7-24-01

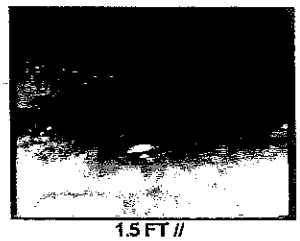
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
~~07/25/2001~~		SUNNY, DRY	P.KELLUM	14	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	620

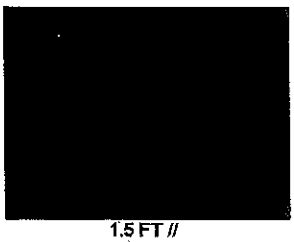
CITY: Rohm Haas	MAP #1:	TV'D LGTH: 19.9 FT
STREET: Bldg. 25	MAP #2:	MH: 20
LOCALE:	TAPE #: 001	MH: 21

INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 15"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH:
AREA: Rohm Haas	LINING:
	RSRVD:

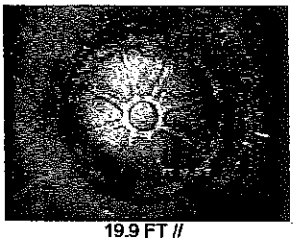
REMARK:

1:1000POSITION	OBSERVATION
0.00 S1	inspection begins at downstream manhole, START
1.50	*debris Heavy!!!!!!!*
8.10	*debris Heavy!!!!!!!!!*
19.90	inspection ends at upstream manhole, END MH is Buried!!!!!!! Tap Left in MH


1.5 FT //


1.5 FT //

19.9 FT //


19.9 FT //

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MASON OH, 45040
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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 25	~~07/25/2004~~	14	

7-24-01

IMAGE: 15_2a, TAPE #: 001
debris Heavy!!!!!!!

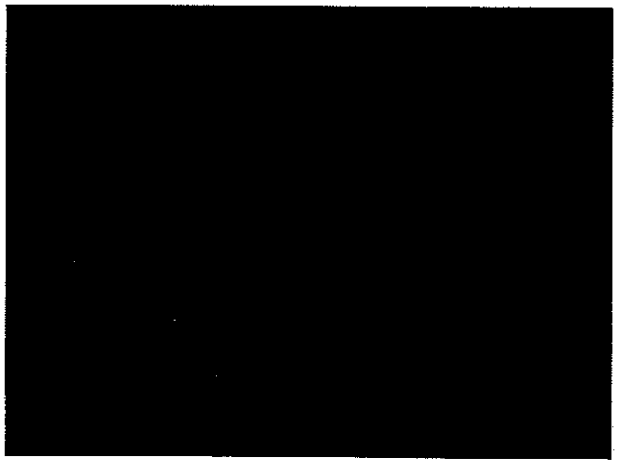

IMAGE: 15_2b, TAPE #: 001
debris Heavy!!!!!!!

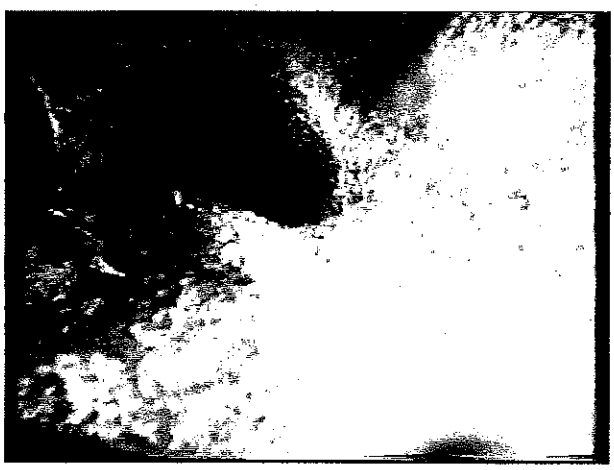

IMAGE: 15_4a, TAPE #: 001
inspection ends at upstream manhole, END MH is Buried!!!!!!! Tap Left in MH

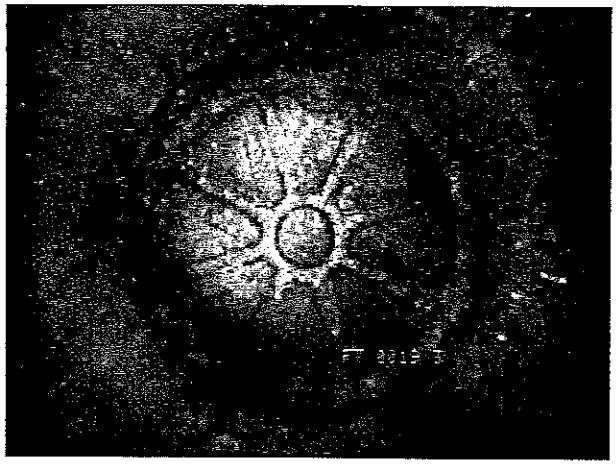

IMAGE: 15_4b, TAPE #: 001
inspection ends at upstream manhole, END MH is Buried!!!!!!! Tap Left in MH

TELEVAC ENVIRONMENTAL
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MASON OH, 45040
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INSPECTION REPORT

7-24-01

DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
~~07/26/2001~~		SUNNY, DRY	P.KELLUM	15	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	310

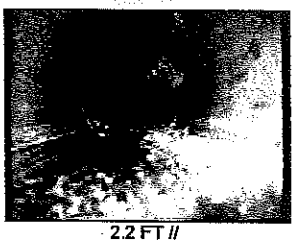
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	30.7 FT
STREET:	Bldg. 25	MAP #2:		MH:	21
LOCALE:		TAPE #:	001	MH:	22

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH:
AREA:	Rohm Haas	LINING:	
		RSRVD:	

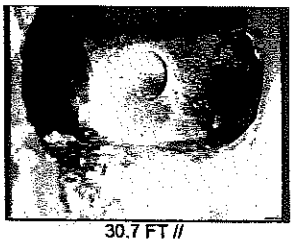
REMARK:

1:1000POSITION		OBSERVATION
21	0.00 S1	inspection begins at downstream manhole, START
	2.20	*debris Very Heavy!!!!*
22	30.70	inspection ends at upstream manhole, END

2.2 FT //


2.2 FT //

30.7 FT //


30.7 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 25	~~07/25/2001~~	15	

7-24-01

IMAGE: 16_2a, TAPE #: 001
debris Very Heavy!!!!

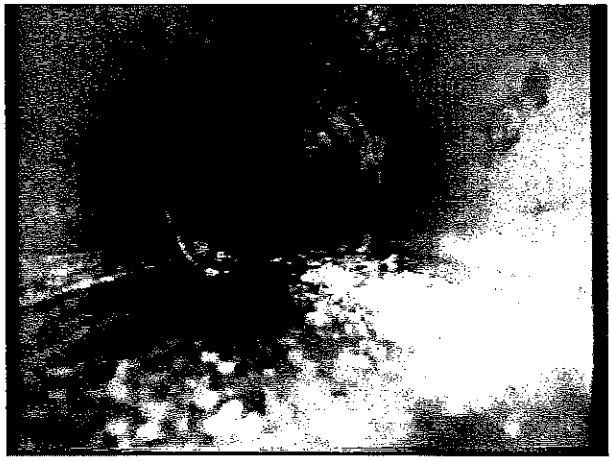


IMAGE: 16_2b, TAPE #: 001
debris Very Heavy!!!!

IMAGE: 16_3a, TAPE #: 001
inspection ends at upstream manhole, END

IMAGE: 16_3b, TAPE #: 001
inspection ends at upstream manhole, END

TELEVAC ENVIRONMENTAL
7611 EASY ST
MASON OH, 45040
Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION REPORT

7-24-01

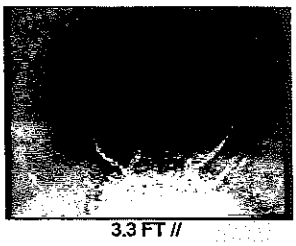
DATE: ~~07/25/2001~~	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 16	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 500

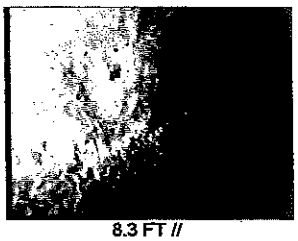
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	12.7 FT
STREET:	Bldg. 25	MAP #2:		MH:	20
LOCALE:		TAPE #:	001	MH:	23

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"	
SECTION TYPE:	WASTEWATER	MATERIAL:	CONCRETE	JT LGTH:
AREA:	Rohm Haas	LINING:		
		RSRVD:		

REMARK:

1:1000POSITION	OBSERVATION
0.00	inspection begins at downstream manhole
3.30	*pipe Broken, at 06 o'clock*
8.30	*pipe Broken, at 06 o'clock*
10.30	*pipe Broken, at 06 o'clock*
12.50	*obstruction Piece of Pipe on Bottom!!!!!*
12.70	inspection abandoned, END Could not get past Pipe!!!!!!!!-Needs Cleaned!!!!!!


3.3 FT //


8.3 FT //

12.5 FT //

12.5 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 25	~~07/25/2001~~ 7-24-01	16	

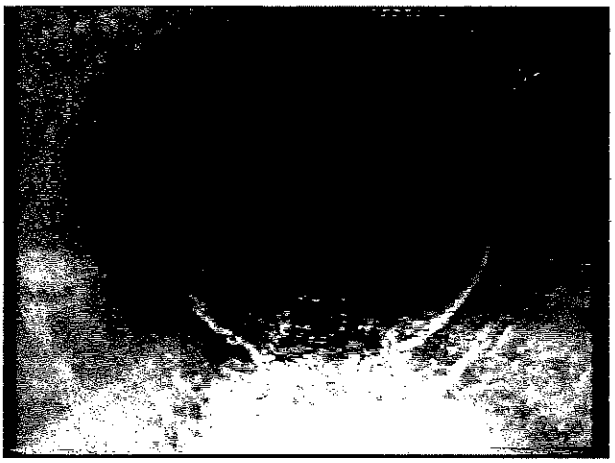

IMAGE: 18_2a, TAPE #: 001
pipe Broken, at 06 o´clock

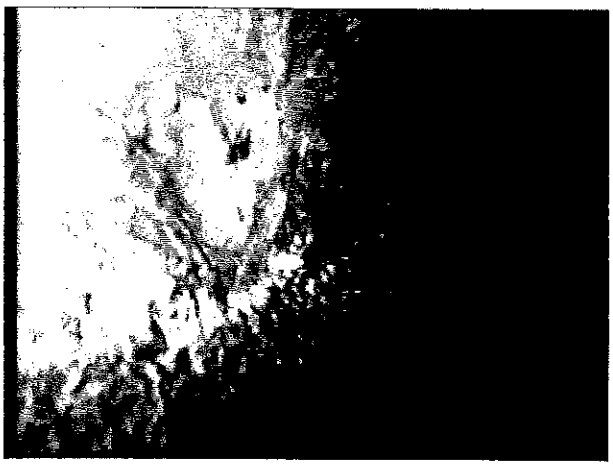

IMAGE: 18_3a, TAPE #: 001
pipe Broken, at 06 o´clock

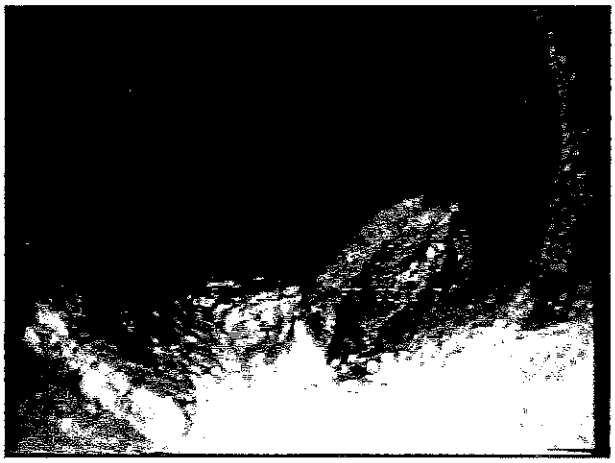

IMAGE: 18_5a, TAPE #: 001
obstruction Piece of Pipe on Bottom!!!!!

IMAGE: 18_5b, TAPE #: 001
obstruction Piece of Pipe on Bottom!!!!!

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INSPECTION REPORT

7-24-01

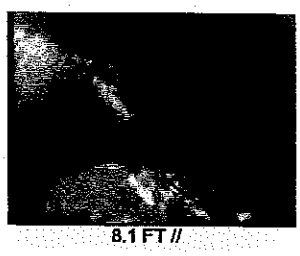
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
~~07/25/2004~~		SUNNY, DRY	P.KELLUM	17	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	1090

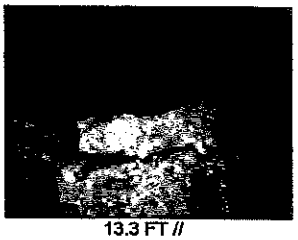
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	130.7 FT
STREET:	Bldg. 22	MAP #2:		MH:	24
LOCALE:		TAPE #:	001	MH:	S1 #5

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"		
SECTION TYPE:	WASTEWATER	MATERIAL:	CONCRETE	JT LGTH:	
AREA:	Rohm Haas	LINING:			
		RSRVD:			

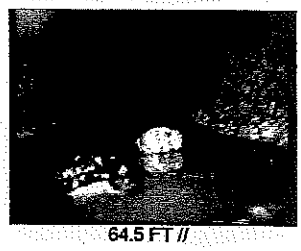
REMARK:

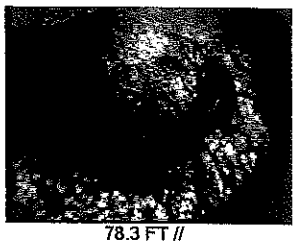
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at upstream manhole, START
8.10		*debris 0-8' - hEAVY dEBRIS!!!!!!!-Needs Cleaned*
13.30		service connection, at 03 o´clock
27.70		***pipe deformed- Exposed Rebar!!!***
64.50		*debris Very Heavy!!!!-Needs Cleaned*
78.30		***break-in-connection, at 03 o´clock***
99.00		*pipe Broken, at 06 o´clock*
101.40		*pipe Broken, at 06 o´clock No Bottom!!!!!!!!*
104.70		*Hole in pipe at 06 o´clock No Bottom!!!!!! also exposed Rebar!!!!!!*
123.40		*scale/mineral deposits heavy from 08 to 09 o´clock*
126.60		service connection, at 03 o´clock
127.30		*debris Very Heavy!!!!!!*
130.70		inspection abandoned Debris to heavy to pass- Needs Cleaned!!!!!!


8.1 FT //


13.3 FT //

27.7 FT //


64.5 FT //


78.3 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 22	~~07/25/2001~~	17	

7-24-01

IMAGE: 19_2a, TAPE #: 001
debris 0-8' - hEAVY dEBRIS!!!!!!!-Needs Cleaned

IMAGE: 19_3a, TAPE #: 001
service connection, at 03 o´clock

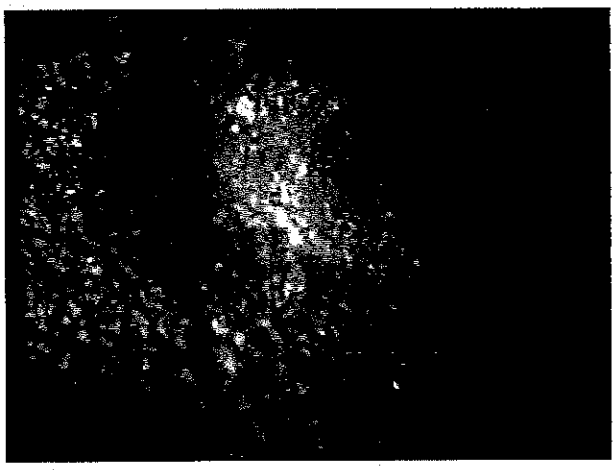

IMAGE: 19_4a, TAPE #: 001
pipe deformed- Exposed Rebar!!!

IMAGE: 19_5a, TAPE #: 001
debris Very Heavy!!!!-Needs Cleaned

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 22	~~07/25/2001~~ 7-24-01	17	

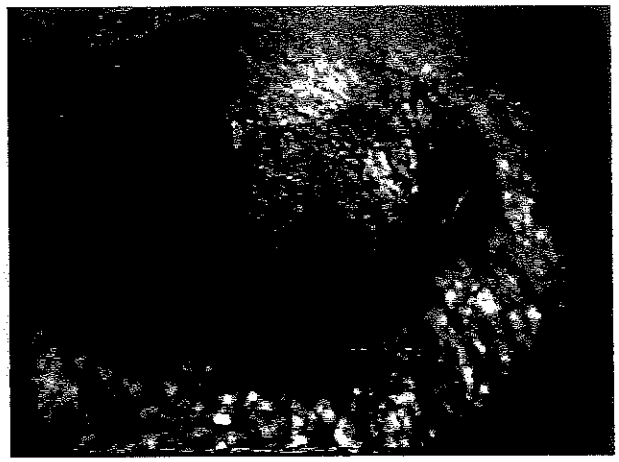

IMAGE: 19_6a, TAPE #: 001
break-in-connection, at 03 o´clock

IMAGE: 19_7a, TAPE #: 001
pipe Broken, at 06 o´clock

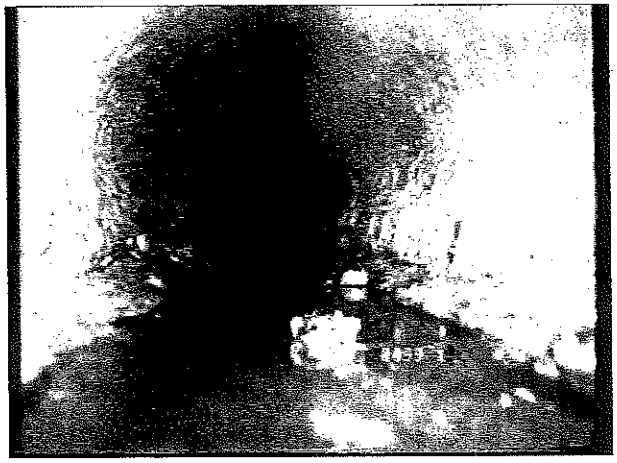

IMAGE: 19_7b, TAPE #: 001
pipe Broken, at 06 o´clock

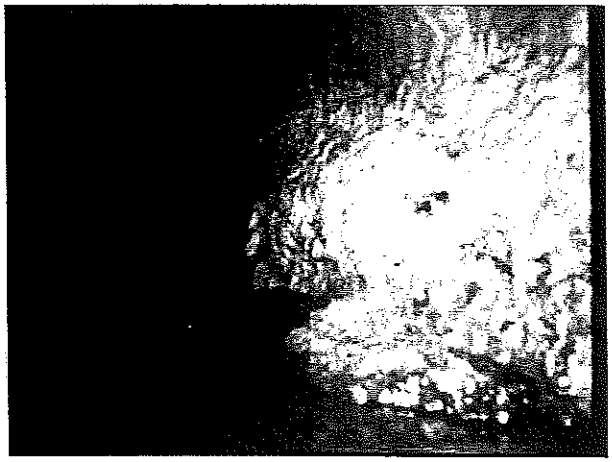

IMAGE: 19_8a, TAPE #: 001
pipe Broken, at 06 o´clock No Bottom!!!!!!!

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 22	~~07/25/2001~~	17	

7-24-01

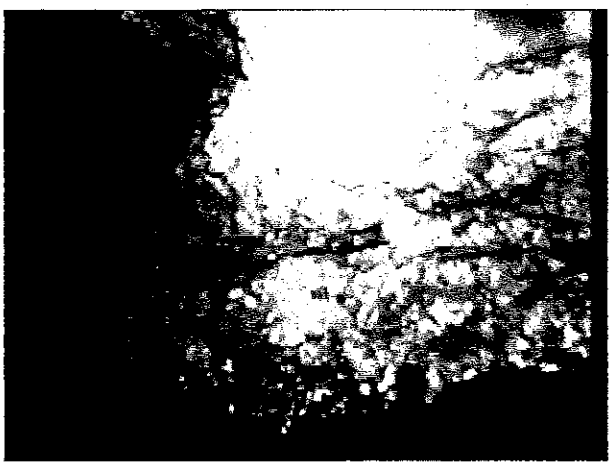

IMAGE: 19_9a, TAPE #: 001
Hole in pipe at 06 o´clock No Bottom!!!!!! also exposed Rebar!!!!!!

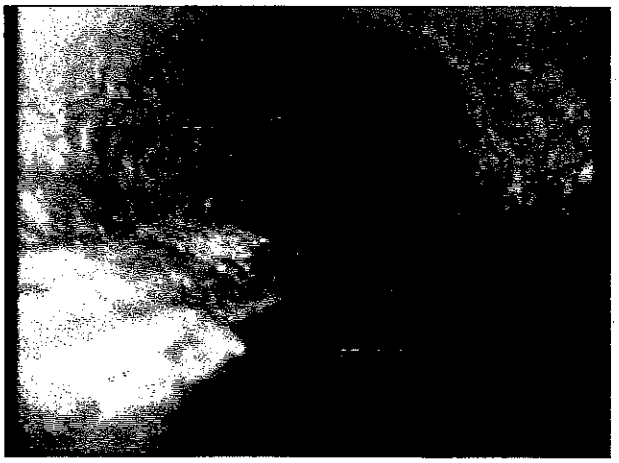

IMAGE: 19_10a, TAPE #: 001
scale/mineral deposits heavy from 08 to 09 o´clock

IMAGE: 19_10b, TAPE #: 001
scale/mineral deposits heavy from 08 to 09 o´clock

IMAGE: 19_11a, TAPE #: 001
service connection, at 03 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. 22	~~07/25/2001~~	17	

7-24-01

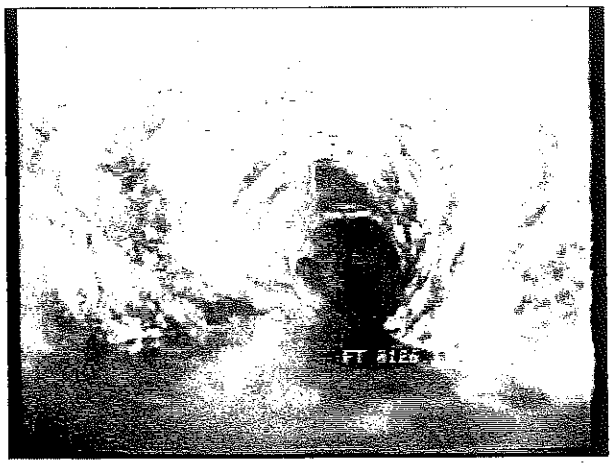

IMAGE: 19_11b, TAPE #: 001
service connection, at 03 o´clock

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INSPECTION REPORT

7-24-01

DATE: ~~07/25/2001~~	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 18	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	8.7 FT
STREET:	Bldg. 10	MAP #2:		MH:	23
LOCALE:		TAPE #:	001	MH:	20

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"	
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP	JT LGTH:
AREA:	Rohm Haas	LINING:		
		RSRVD:		

REMARK:

1:1000POSITION		OBSERVATION
23 0.00	S1	inspection begins at upstream manhole, START
3.30		*debris 0-8' Verey Heavy Debris!!!!!!!1*
8.70		inspection abandoned Could not pass-Needs Cleaned!!!!!!!!!!

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION LENGTH	PIPE SIZE
1	07/24/2001	Rohm Haas	Bldg.25	20	SI 5	53.6	15"
2	07/24/2001	Rohm Haas	Bldg. 25	20	21	19.9	15"
3	07/24/2001	Rohm Haas	Bldg. 25	21	22	30.7	15"
4	07/24/2001	Rohm Haas	Bldg. 25	20	23	12.7	15"
5	07/24/2001	Rohm Haas	Bldg. 22	24	SI #5	130.7	15"
6	07/24/2001	Rohm Haas	Bldg. 10	23	20	8.7	15"
						256.3 FT	

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INSPECTION REPORT

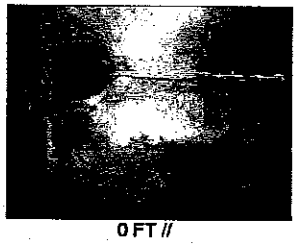
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/25/2001		SUNNY, DRY	P.KELLUM	19	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	0

CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	1.1 FT
STREET:	West Tank Farm-Northwest area of Plant	MAP #2:		MH:	25
LOCALE:		TAPE #:	001	MH:	26

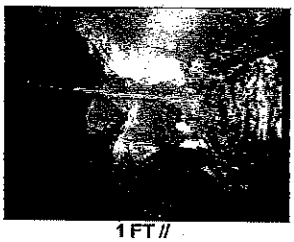
INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	12"	
SECTION TYPE:	WASTEWATER	MATERIAL:	CONCRETE	JT LGTH: 5'
AREA:	Rohm Haas	LINING:		
		RSRVD:		

REMARK:

1:1000POSITION	OBSERVATION
0.00 S1	inspection begins at upstream manhole, START
1.00	*scale/mineral deposits heavy from 07 to 06 o´clock*



0 FT //



1 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	West Tank Farm-Northwest area of Plant	07/25/2001	19	

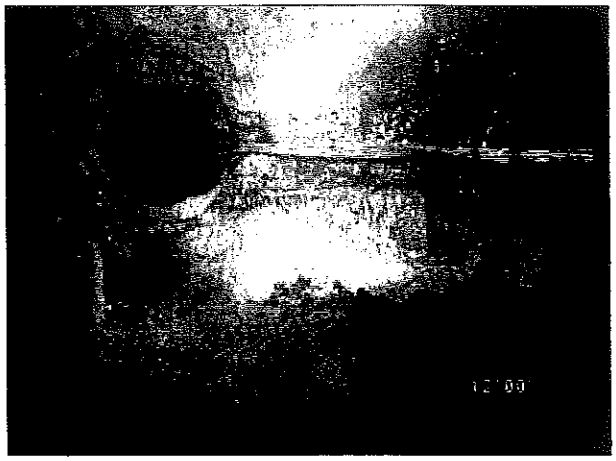

IMAGE: 21_1a, TAPE #: 001
inspection begins at upstream manhole, START

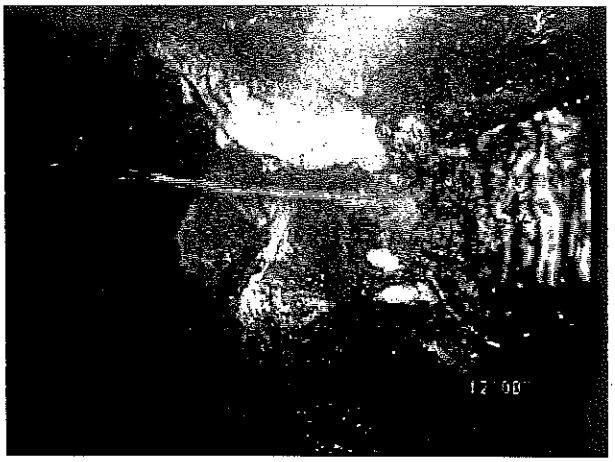

IMAGE: 21_2a, TAPE #: 001
scale/mineral deposits heavy from 07 to 06 o´clock

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INSPECTION REPORT

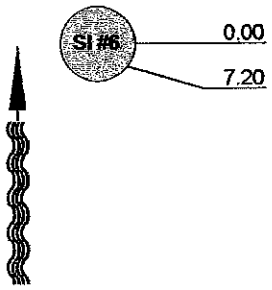
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/25/2001		**SUNNY, DRY**	**P.KELLUM**	**20**	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	**PAN/TILT**		**NO**	**0**

CITY:	**Rohm Haas**	MAP #1:		TV'D LGTH:	**7.2 FT**
STREET:	**Bldg. 3A**	MAP #2:		MH:	**SI #6**
LOCALE:		TAPE #:	**001**	MH:	**SI # 7**

INSPECT REASON:	**CUSTOMER COMPLAINT**	PIPE SIZE:	**12"**
SECTION TYPE:	**WASTEWATER**	MATERIAL:	**VCP** JT LGTH: **5'**
AREA:	**Rohm Haas**	LINING:	
		RSRVD:	

REMARK:

1:1000POSITION	OBSERVATION
0.00 **S1**	inspection begins at downstream manhole, START Storm Inlet
7.20	inspection abandoned, END too dirty -needs cleaned!!!!!!!!



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INSPECTION REPORT

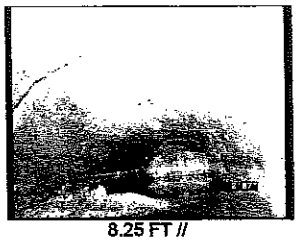
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/25/2001		SUNNY, DRY	P.KELLUM	21	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	0

CITY: Rohm Haas	MAP #1:	TV'D LGTH: 12.03 FT
STREET: Bldg. 3A	MAP #2:	MH: SI # 6
LOCALE:	TAPE #: 001	MH: MH 29

INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 12"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

REMARK:

1:1000POSITION	OBSERVATION
0.00 S1	inspection begins at upstream manhole, START
8.25	service connection, at 03 o´clock
12.03	inspection abandoned, END too dirty needs cleaned!!!!!!!!!!!!


8.25 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	**Bldg. 3A**	**07/25/2001**	**21**	

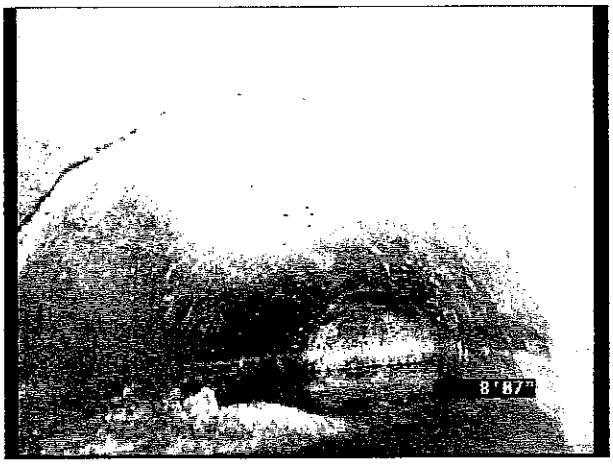

IMAGE: 23_2a, TAPE #: 001
service connection, at 03 o´clock

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INSPECTION REPORT

DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/25/2001		SUNNY, DRY	P.KELLUM	22	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	0

CITY: Rohm Haas	MAP #1:	TV'D LGTH: 2.98 FT
STREET: West Tank Area	MAP #2:	MH: 25
LOCALE:	TAPE #: 001	MH: 27

INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 12"
SECTION TYPE: WASTEWATER	MATERIAL: CONCRETE JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

REMARK:

1:1000POSITION	OBSERVATION
27 0.00 S1	inspection begins at upstream manhole, START

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INSPECTION REPORT

DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/25/2001		**SUNNY, DRY**	**P.KELLUM**	**23**	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	**PAN/TILT**		**NO**	**0**

CITY: **Rohm Haas**	MAP #1:	TV'D LGTH: **1.49 FT**
STREET: **Bldg 3A**	MAP #2:	MH: **29**
LOCALE:	TAPE #: **001**	MH: **30**

INSPECT REASON:	**CUSTOMER COMPLAINT**	PIPE SIZE:	**12"**
SECTION TYPE:	**WASTEWATER**	MATERIAL:	**VCP** JT LGTH: **5'**
AREA:	**Rohm Haas**	LINING:	
		RSRVD:	

REMARK:

1:1000POSITION	OBSERVATION
29 0.00 **S1**	inspection begins at upstream manhole, START
1.49	inspection abandoned, END too dirty to TV

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INSPECTION REPORT

DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/25/2001		SUNNY, DRY	P.KELLUM	24	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	2170

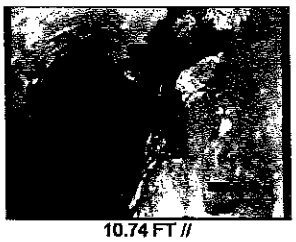
CITY: Rohm Haas	MAP #1:	TV'D LGTH: 81.62 FT
STREET: Bldg1	MAP #2:	MH: 31
LOCALE:	TAPE #: 001	MH: 32

INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 12"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

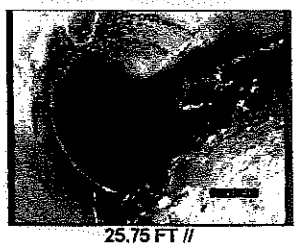
REMARK:

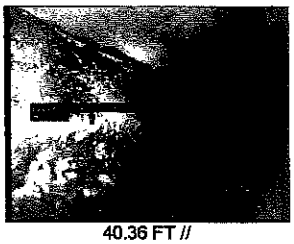
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at upstream manhole, START
6.50		*debris*
8.15		*debris*
10.74		*debris*
17.69		*debris*
25.75		*debris*
40.36		*scale/mineral deposits heavy from 08 to 09 o´clock*
53.08		*scale/mineral deposits heavy from 04 to 05 o´clock*
61.44		*debris HEAVY!!!!!!!!!!*
75.45		*debris HEAVY!!!!!!!!!*
81.62		inspection abandoned, END Could not pass-Needs Cleaned!!!!!!!!!

8.15 FT //


10.74 FT //

17.69 FT //


25.75 FT //


40.36 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg1	07/25/2001	24	

IMAGE: 27_3a, TAPE #: 001
debris

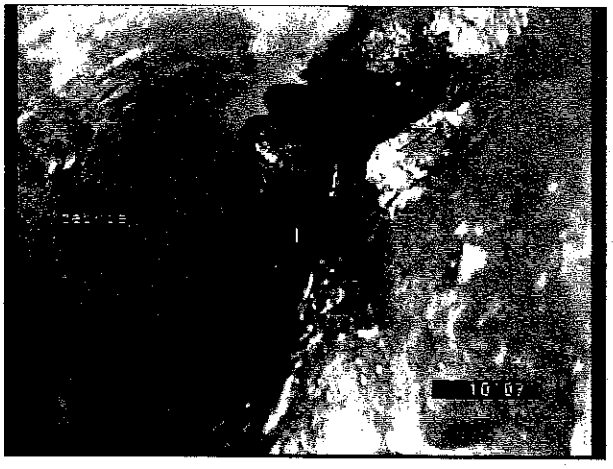

IMAGE: 27_4a, TAPE #: 001
debris

IMAGE: 27_5a, TAPE #: 001
debris

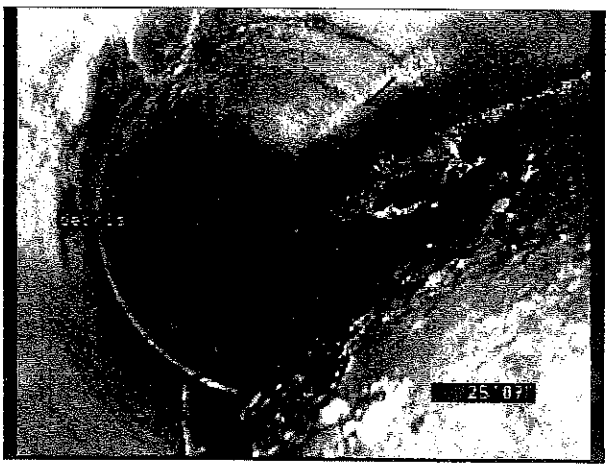

IMAGE: 27_6a, TAPE #: 001
debris

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg1	07/25/2001	24	

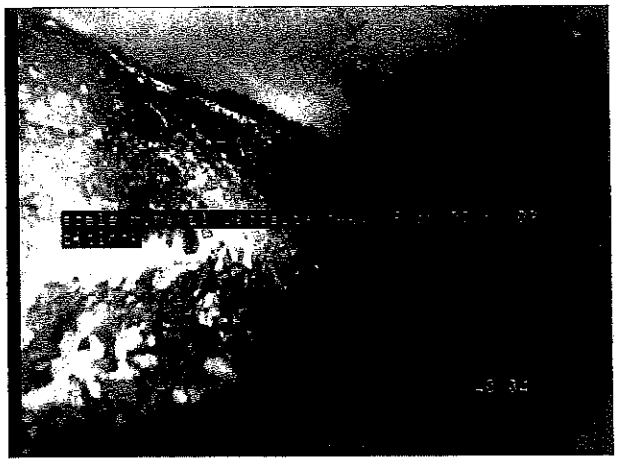

IMAGE: 27_7a, TAPE #: 001
scale/mineral deposits heavy from 08 to 09 o´clock

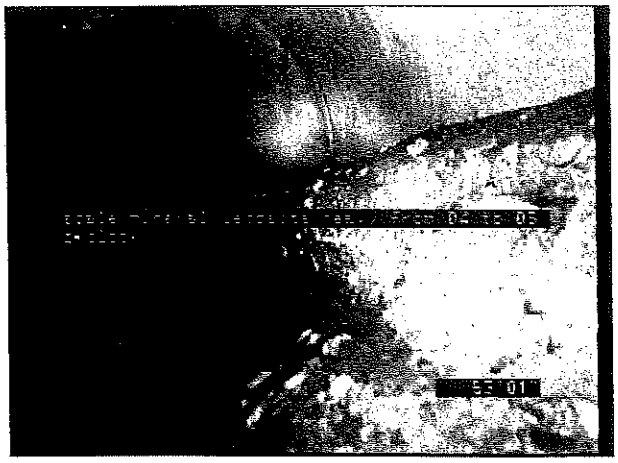

IMAGE: 27_8a, TAPE #: 001
scale/mineral deposits heavy from 04 to 05 o´clock

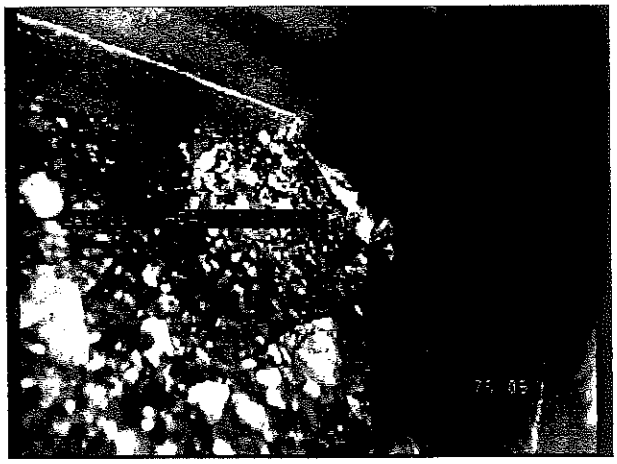

IMAGE: 27_10a, TAPE #: 001
debris HEAVY!!!!!!!!!

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION LENGTH	PIPE SIZE
1	07/25/2001	Rohm Haas	West Tank Farm-Northwest area of Plant	25	26	1.1	12"
2	07/25/2001	Rohm Haas	Bldg. 3A	SI #6	SI # 7	7.2	12"
3	07/25/2001	Rohm Haas	Bldg. 3A	SI # 6	MH 29	12.03	12"
4	07/25/2001	Rohm Haas	West Tank Area	25	27	2.98	12"
5	07/25/2001	Rohm Haas	Bldg 3A	29	30	1.49	12"
6	07/25/2001	Rohm Haas	Bldg1	31	32	81.62	12"
						106.42 FT	

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INSPECTION REPORT

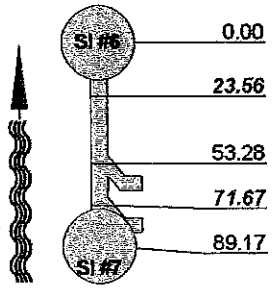
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/26/2001		SUNNY, DRY	P.KELLUM	25	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	310

CITY: Rohm Haas	MAP #1:	TV'D LGTH: 89.17 FT
STREET: Bldg.3A	MAP #2:	MH: SI #6
LOCALE:	TAPE #: 001	MH: SI #7

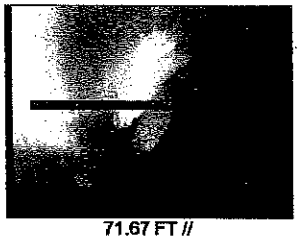
INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 12"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

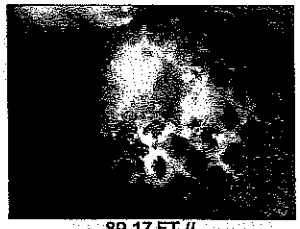
REMARK:

1:1000POSITION	OBSERVATION
0.00 S1	inspection begins at downstream manhole, START
23.56	*offset joint, slight*
53.28	service connection, at 09 o´clock
71.67	***break-in-connection, at 09 o´clock***
89.17	inspection ends at upstream manhole, END



23.56 FT //


71.67 FT //


89.17 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.3A	07/26/2001	25	

IMAGE: 28_2a, TAPE #: 001
offset joint, slight

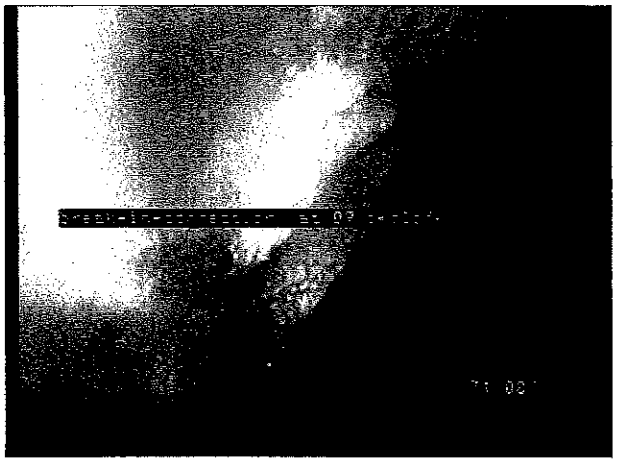

IMAGE: 28_4a, TAPE #: 001
break-in-connection, at 09 o´clock

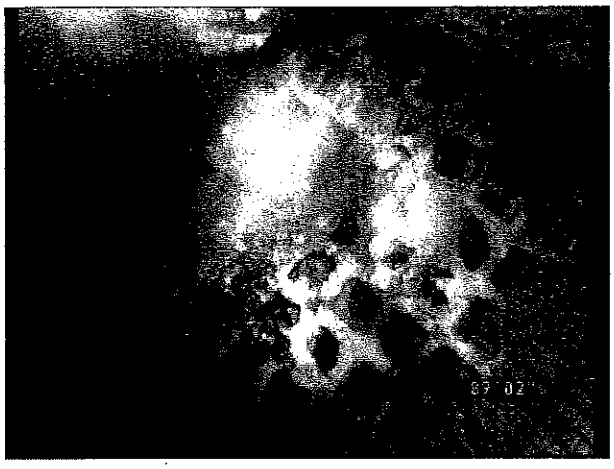

IMAGE: 28_5a, TAPE #: 001
inspection ends at upstream manhole, END

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INSPECTION REPORT

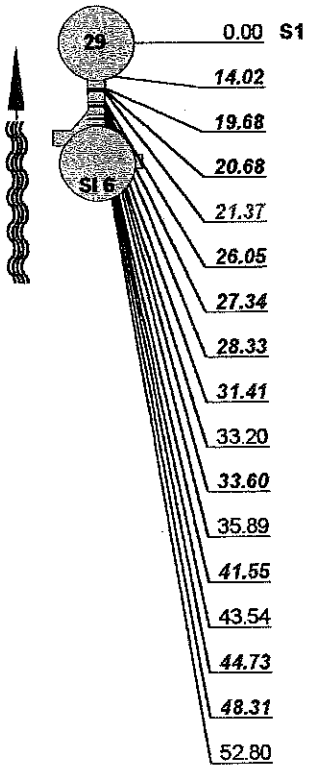
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/26/2001		SUNNY, DRY	P.KELLUM	26	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	1310

CITY: Rohm Haas	MAP #1:	TV'D LGTH: 52.8 FT
STREET: Bldg.3A	MAP #2:	MH: 29
LOCALE:	TAPE #: 001	MH: SI 6

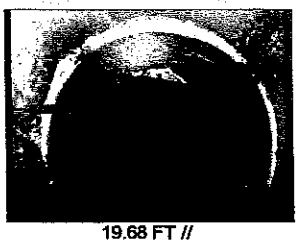
INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 12"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

REMARK:

1:1000POSITION	OBSERVATION
0.00 S1	inspection begins at downstream manhole, START
14.02	*scale/mineral deposits light from 08 to 09 o´clock*
19.68	*offset joint, slight*
20.68	*Longitudinal Crack, at 12 o´clock*
21.37	*Hole in pipe at 12 o´clock*
26.05	*offset joint, slight*
27.34	*Longitudinal Crack, at 12 o´clock w/Infiltration*
28.33	*offset joint, slight*
31.41	*Infiltration Running at 11 o´clock*
33.20	service connection capped, at 03 o´clock
33.60	*offset joint, slight*
35.89	service connection capped, at 09 o´clock
41.55	*offset joint, slight*
43.54	service connection, at 09 o´clock
44.73	*separated joint slight*
48.31	*offset joint, slight*
52.80	inspection ends at upstream manhole, END



14.02 FT //


19.68 FT //

20.68 FT //

21.37 FT //

26.05 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.3A	07/26/2001	26	

IMAGE: 29_2a, TAPE #: 001
scale/mineral deposits light from 08 to 09 o´clock

IMAGE: 29_3a, TAPE #: 001
offset joint, slight

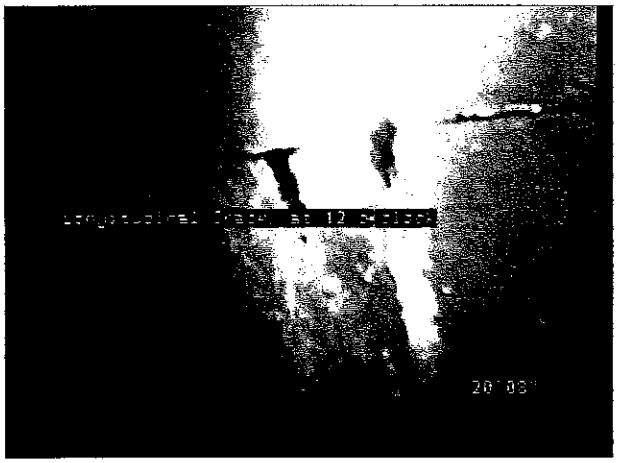

IMAGE: 29_4a, TAPE #: 001
Longitudinal Crack, at 12 o´clock

IMAGE: 29_5a, TAPE #: 001
Hole in pipe at 12 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.3A	07/26/2001	26	

IMAGE: 29_6a, TAPE #: 001
offset joint, slight

IMAGE: 29_7a, TAPE #: 001
Longitudinal Crack, at 12 o´clock w/Infiltration

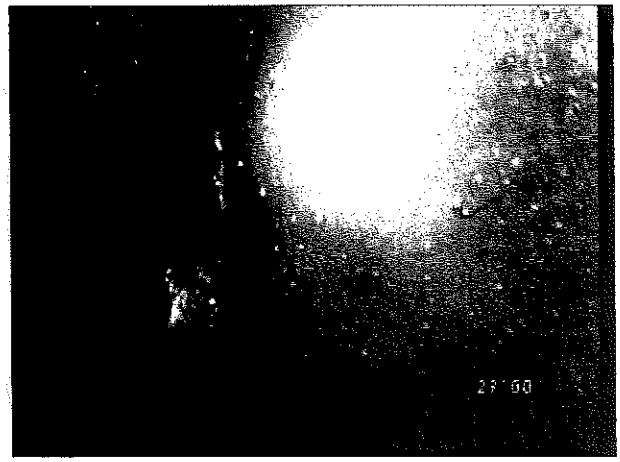

IMAGE: 29_8a, TAPE #: 001
offset joint, slight

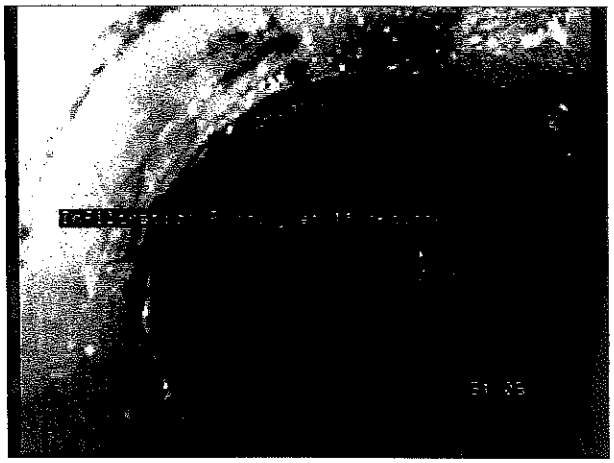

IMAGE: 29_9a, TAPE #: 001
Infiltration Running at 11 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.3A	07/26/2001	26	

IMAGE: 29_10a, TAPE #: 001
service connection capped, at 03 o´clock

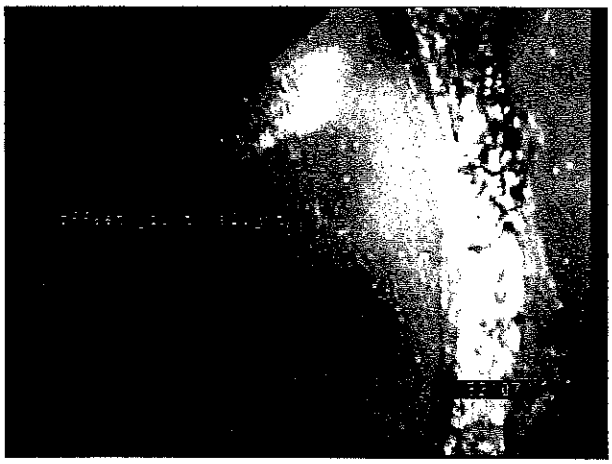

IMAGE: 29_11a, TAPE #: 001
offset joint, slight

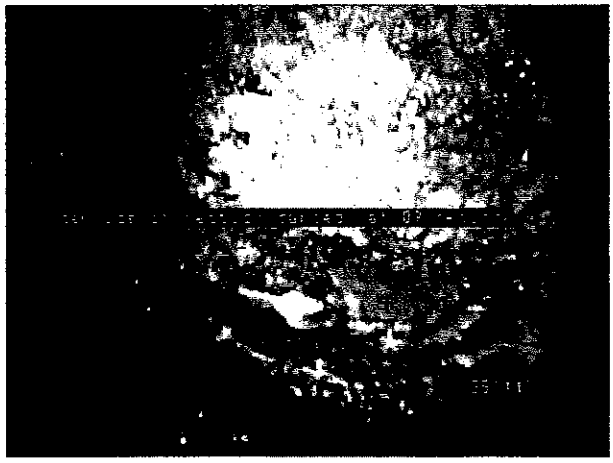

IMAGE: 29_12a, TAPE #: 001
service connection capped, at 09 o´clock

IMAGE: 29_13a, TAPE #: 001
offset joint, slight

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.3A	07/26/2001	26	

IMAGE: 29_14a, TAPE #: 001
service connection, at 09 o´clock

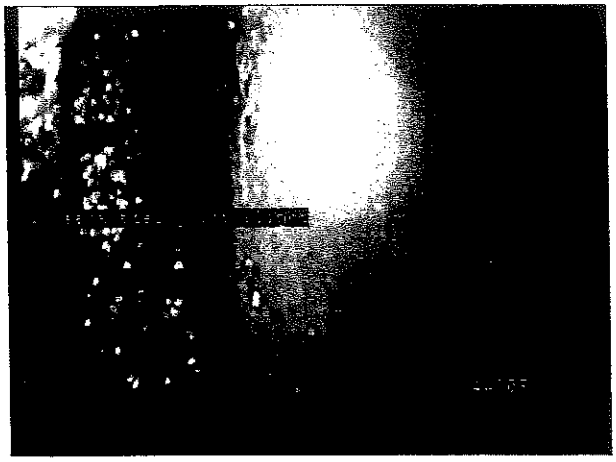

IMAGE: 29_15a, TAPE #: 001
separated joint slight

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INSPECTION REPORT

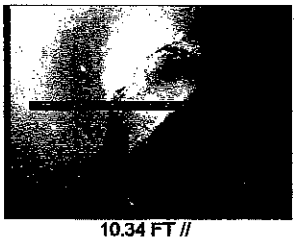
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/26/2001		**SUNNY, DRY**	**P.KELLUM**	**27**	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	**PAN/TILT**		**NO**	**420**

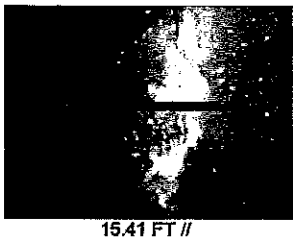
CITY:	**Rohm Haas**	MAP #1:		TV'D LGTH:	**42.85 FT**
STREET:	**Bldg.3A**	MAP #2:		MH:	**29**
LOCALE:		TAPE #:	**001**	MH:	**30**

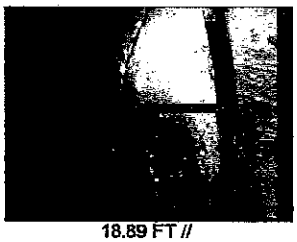
INSPECT REASON:	**CUSTOMER COMPLAINT**	PIPE SIZE:	**12"**
SECTION TYPE:	**WASTEWATER**	MATERIAL:	**VCP** JT LGTH: **5'**
AREA:	**Rohm Haas**	LINING:	
		RSRVD:	

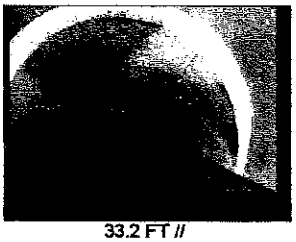
REMARK:

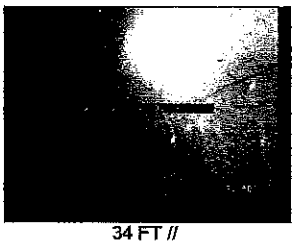
1:1000POSITION		OBSERVATION
0.00	**S1**	inspection begins at upstream manhole, START
10.34		***break-in-connection, at 10 o´clock***
15.41		***scale/mineral deposits light from 10 to 11 o´clock***
18.89		***Circumferential Crack, from 03 to 05 o´clock***
33.20		***offset joint, slight***
34.00		***Longitudinal Crack, at 02 o´clock w/infiltration!!!!!!!***
42.85		inspection abandoned, END No Bottom?


10.34 FT //


15.41 FT //


18.89 FT //


33.2 FT //


34 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.3A	07/26/2001	27	

IMAGE: 30_2a, TAPE #: 001
break-in-connection, at 10 o´clock

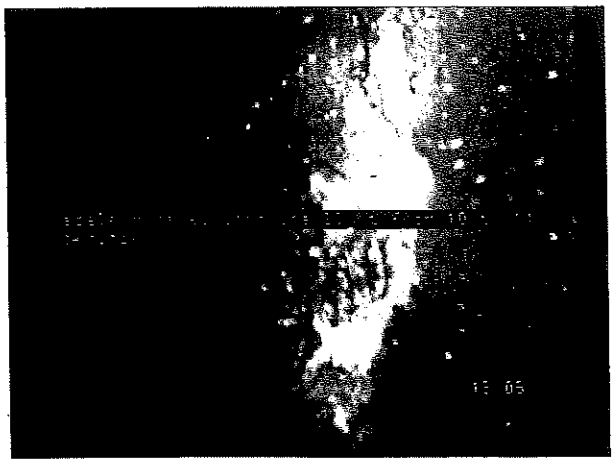

IMAGE: 30_3a, TAPE #: 001
scale/mineral deposits light from 10 to 11 o´clock

IMAGE: 30_4a, TAPE #: 001
Circumferential Crack, from 03 to 05 o´clock

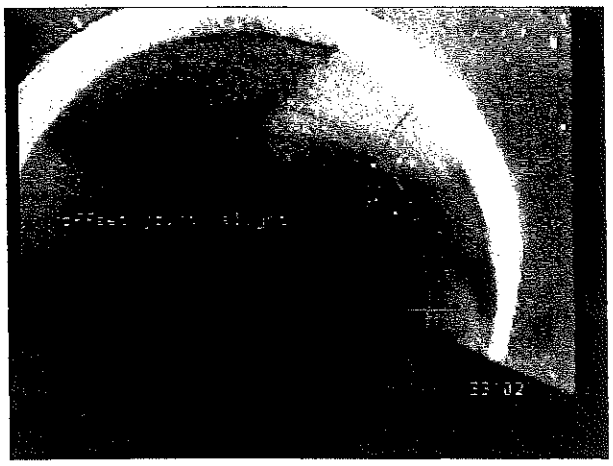

IMAGE: 30_5a, TAPE #: 001
offset joint, slight

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	**Bldg.3A**	**07/26/2001**	**27**	

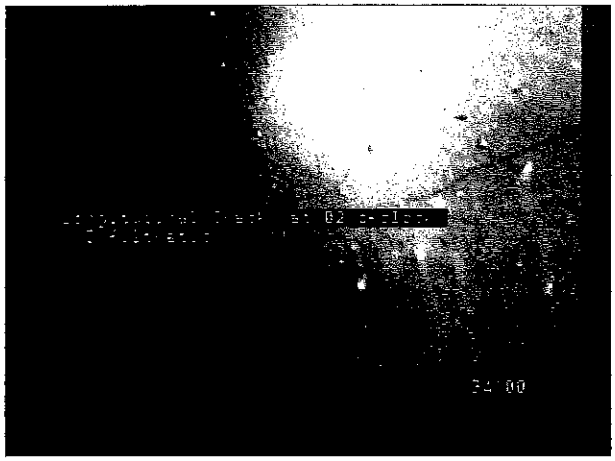

IMAGE: 30_6a, TAPE #: 001
Longitudinal Crack, at 02 o´clock w/Infiltration!!!!!!!

	AREA	STREET	DATE	FROM MANHOLE	TO MANHOLE	SECTION	PIPE SIZE	CLEANED
1	Rohm Haas	Bldg.3A	07/26/2001	SI #6	SI #7	89.17	12"	NO
2	Rohm Haas	Bldg.3A	07/26/2001	29	SI 6	52.8	12"	NO
3	Rohm Haas	Bldg.3A	07/26/2001	29	30	42.85	12"	NO
4	Rohm Haas	Bldg.3A	07/26/2001	30	29	10.94	12"	NO
						195.76 FT		

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INSPECTION REPORT

DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	28	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	620

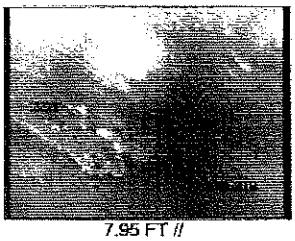
CITY: Rohm Haas	MAP #1:	TVD LGTH: 26.24 FT
STREET: Bldg. #1	MAP #2:	MH: 31
LOCALE:	TAPE #: 001	MH: 34

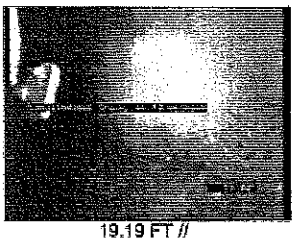
INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 15"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

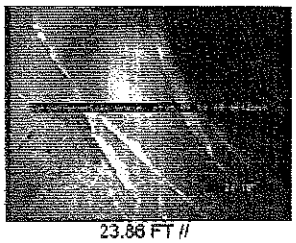
REMARK:

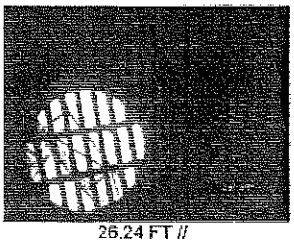
1:1000POSITION		OBSERVATION
31	0.00 S1	inspection begins at downstream manhole, START
	4.00	*debris HEAVY!!!!!*
34	7.95	*debris*
	19.19	*Longitudinal Crack, at 12 o'clock*
	23.86	*Circumferential Crack, from 09 to 10 o'clock*
	26.24	inspection ends at upstream manhole, END

4 FT //


7.95 FT //


19.19 FT //


23.86 FT //


26.24 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. #1	07/27/2001	28	

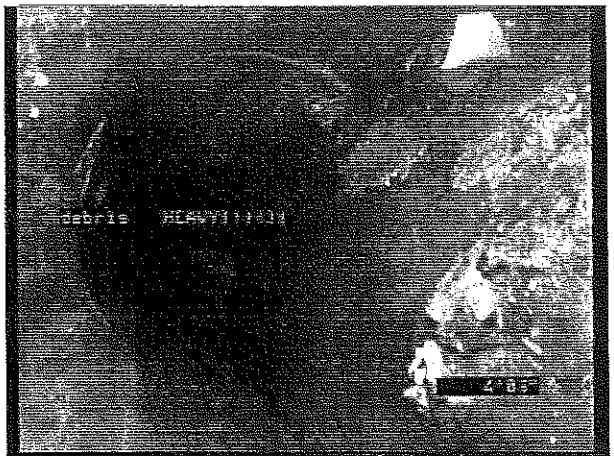

IMAGE: 32_2a, TAPE #: 001
debris HEAVY!!!!!!

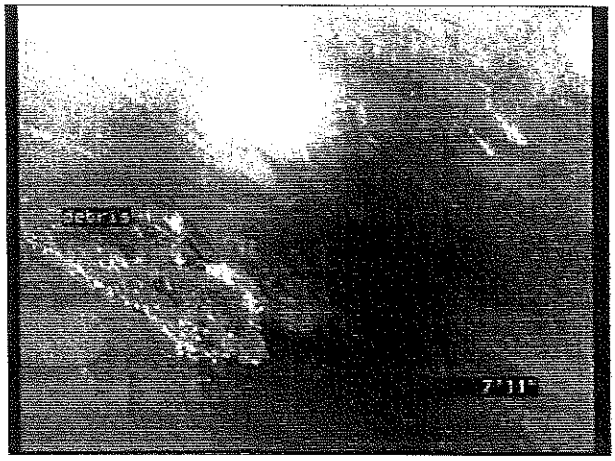

IMAGE: 32_3a, TAPE #: 001
debris

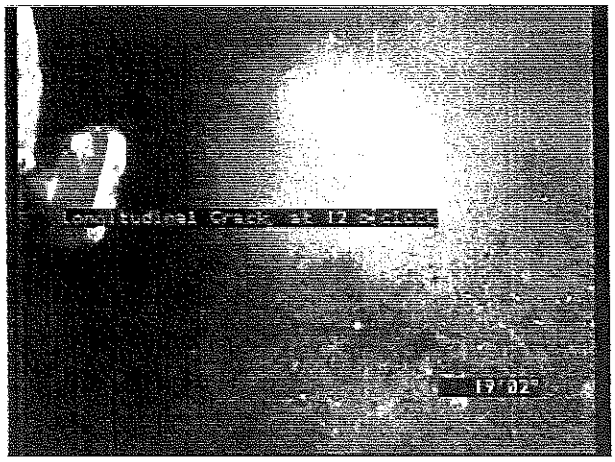

IMAGE: 32_4a, TAPE #: 001
Longitudinal Crack, at 12 o'clock

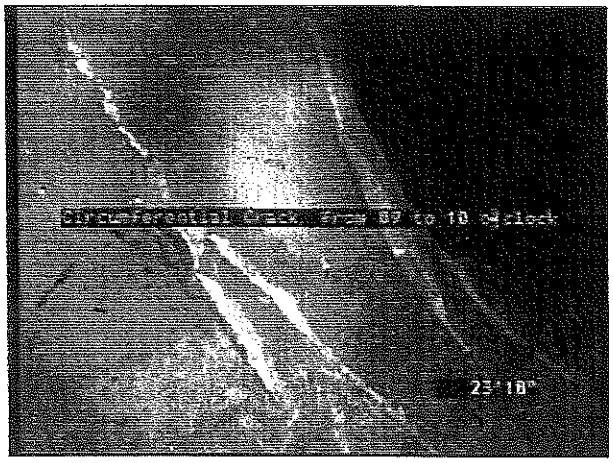

IMAGE: 32_5a, TAPE #: 001
Circumferential Crack, from 09 to 10 o'clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. #1	07/27/2001	28	

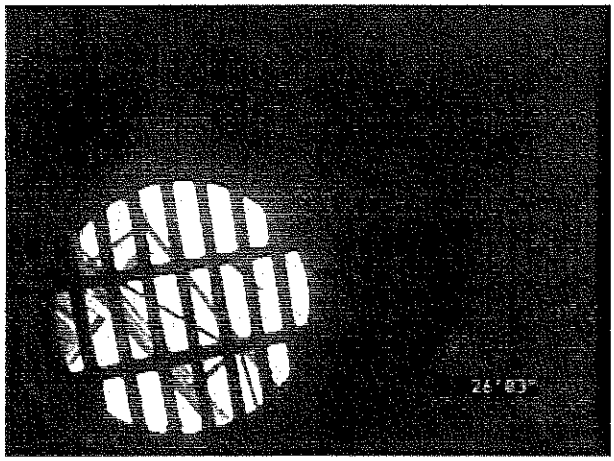

IMAGE: 32_6a, TAPE #: 001
inspection ends at upstream manhole, END

IMAGE: 32_6b, TAPE #: 001
inspection ends at upstream manhole, END

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INSPECTION REPORT

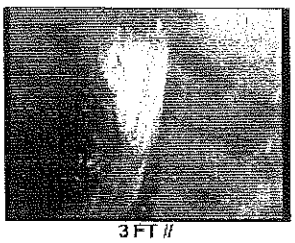
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	29	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	0

CITY: Rohm Haas	MAP #1:	TVD LGTH: 11.83 FT
STREET: Bldg. #1	MAP #2:	MH: 31
LOCALE:	TAPE #: 001	MH: Dead End

INSPECT REASON: CUSTOMER COMPLAINT	PIPE SIZE: 15"
SECTION TYPE: WASTEWATER	MATERIAL: VCP JT LGTH: 5'
AREA: Rohm Haas	LINING:
	RSRVD:

REMARK:

1:1000 POSITION		OBSERVATION
31	0.00 S1	inspection begins at downstream manhole, START
	3.00	inspection abandoned does not exist


3 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg. #1	07/27/2001	29	

IMAGE: 33_2a, TAPE #: 001
inspection abandoned does not exist

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INSPECTION REPORT

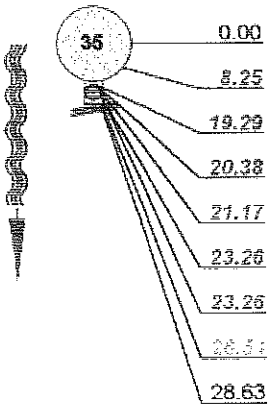
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	30	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	S11	PAN/TILT		NO	680

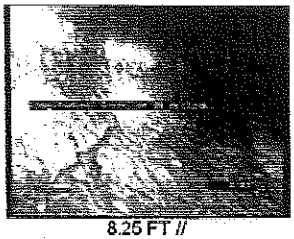
CITY:	Rohm Haas	MAP #1:		TVD LGTH:	28.63 FT
STREET:	North Tank Farm	MAP #2:		MH:	35
LOCALE:		TAPE #:	001	MH:	34

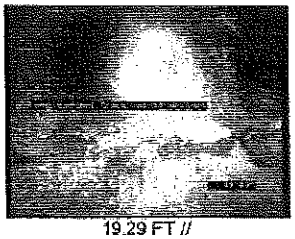
INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH: 5'
AREA:	Rohm Haas	LINING:	
		RSRVD:	

REMARK:

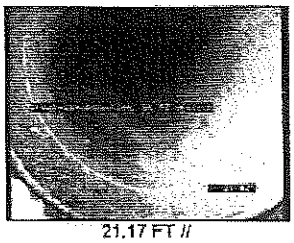
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at upstream manhole, START
8.25		*Longitudinal Crack, at 06 o'clock*
19.29		*Longitudinal Crack, at 11 o'clock*
20.38		*Longitudinal Crack, at 12 o'clock*
21.17		*break-in-connection, at 12 o'clock*
23.26		*mortar missing medium from 08 to 09 o'clock*
23.26		*sag begins*
28.5[illegible]		*debris Heavy!!!!!!!Needs Cleaned*
28.63		inspection abandoned, END too dirty to pass!!!!!!!1

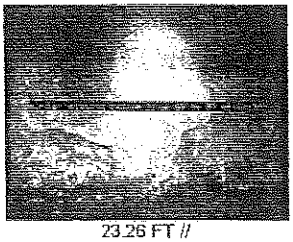



8.25 FT //


19.29 FT //

20.38 FT //


21.17 FT //


23.26 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	30	

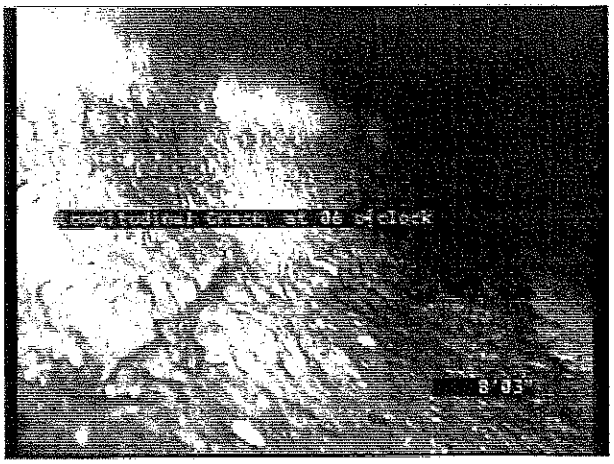

IMAGE: 34_2a, TAPE #: 001
Longitudinal Crack, at 06 o´clock

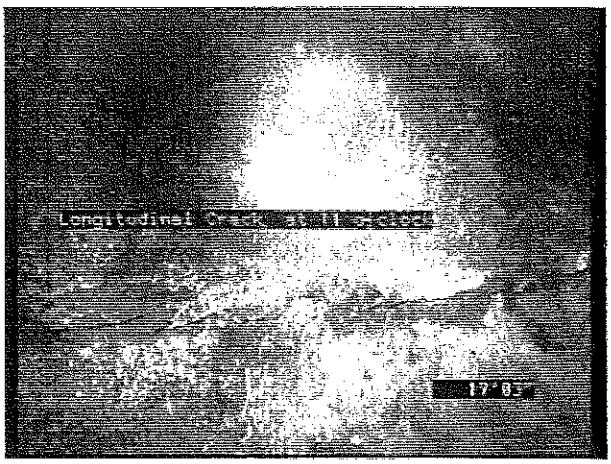

IMAGE: 34_3a, TAPE #: 001
Longitudinal Crack, at 11 o´clock

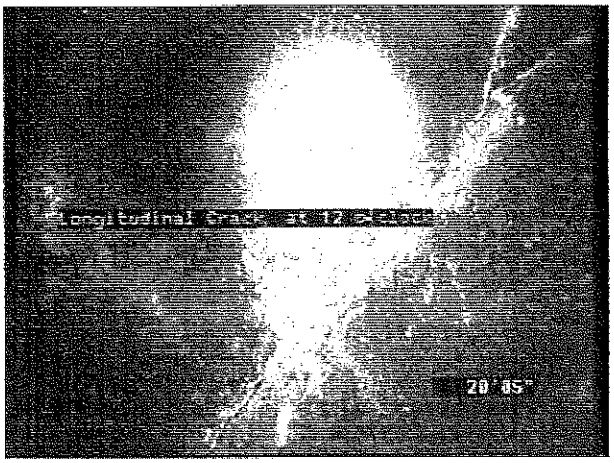

IMAGE: 34_4a, TAPE #: 001
Longitudinal Crack, at 12 o´clock

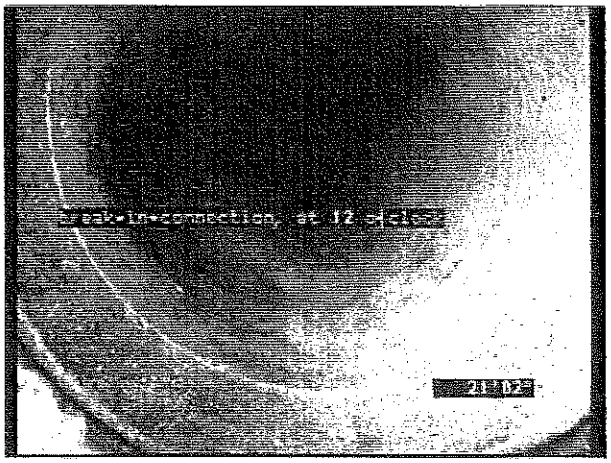

IMAGE: 34_5a, TAPE #: 001
break-in-connection, at 12 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	30	

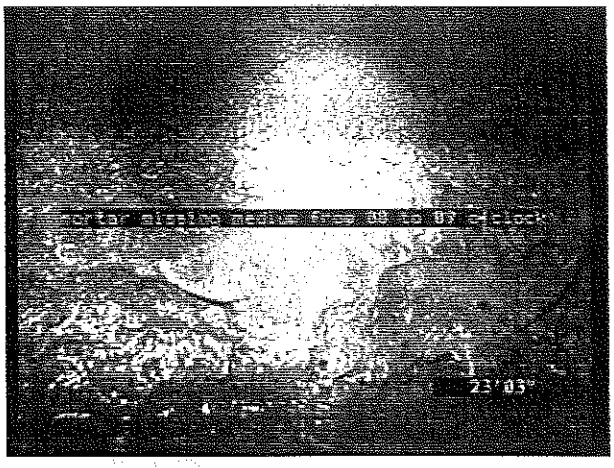

IMAGE: 34_6a, TAPE #: 001
mortar missing medium from 08 to 09 o´clock

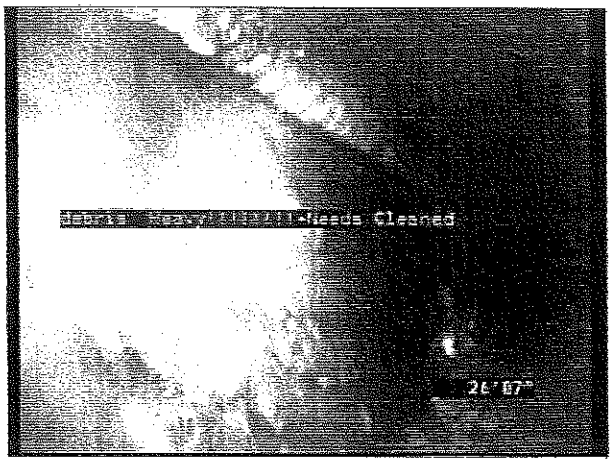

IMAGE: 34_8a, TAPE #: 001
debris Heavy!!!!!!!!-Needs Cleaned

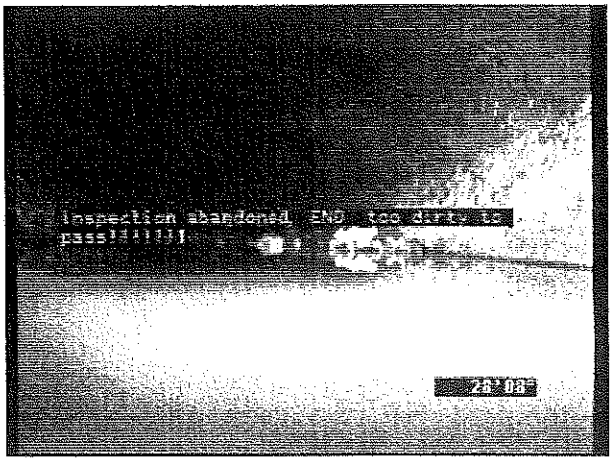

IMAGE: 34_9a, TAPE #: 001
inspection abandoned, END too dirty to pass!!!!!!1

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INSPECTION REPORT

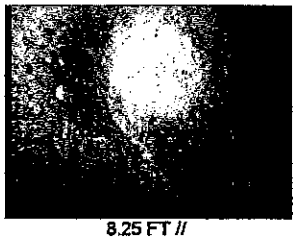
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	31	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	380

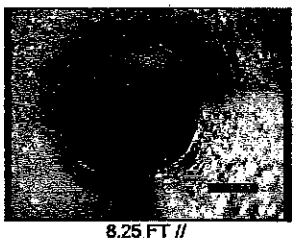
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	24.26 FT
STREET:	North Tank Farm	MAP #2:		MH:	35
LOCALE:		TAPE #:	001	MH:	36

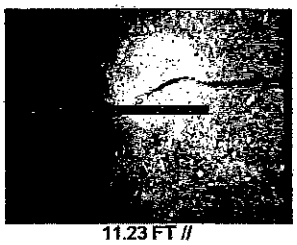
INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"	
SECTION TYPE:	WASTEWATER	MATERIAL:	CONCRETE	JT LGTH: 5'
AREA:	Rohm Haas	LINING:		
		RSRVD:		

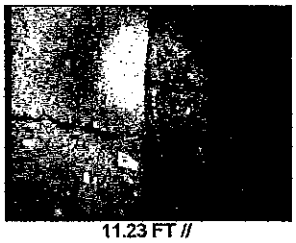
REMARK:

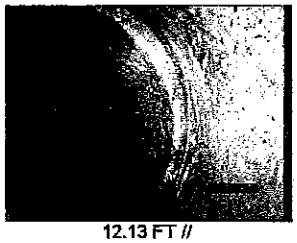
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at downstream manhole, START
8.25		*Circumferential Fracture, from 09 to 10 o´clock*
8.25		***erosion medium***
11.23		***Longitudinal Crack, at 01 o´clock***
12.13		***offset joint, slight***
14.51		*Circumferential Fracture, from 08 to 11 o´clock*
14.51		***Longitudinal Crack, at 12 o´clock***
14.51		***Longitudinal Crack, at 10 o´clock***
17.30		service connection, at 02 o´clock
19.29		***Circumferential Crack, from 10 to 11 o´clock***
20.88		pipe size decreases CHANGES TO 12"
20.88		pipe material changes at this point to VCP
23.56		*Hole in pipe at 05 o´clock*
24.26		inspection abandoned, END COULD NOT GET PAST OFFSET JT.


8.25 FT //


8.25 FT //


11.23 FT //


11.23 FT //


12.13 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	31	

IMAGE: 35_2a, TAPE #: 001
Circumferential Fracture, from 09 to 10 o´clock

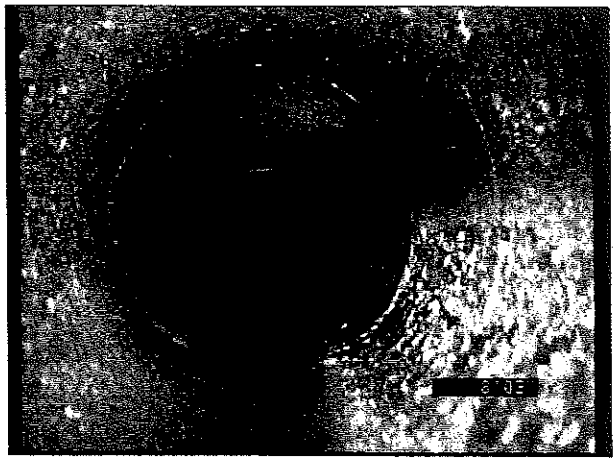

IMAGE: 35_3a, TAPE #: 001
erosion medium

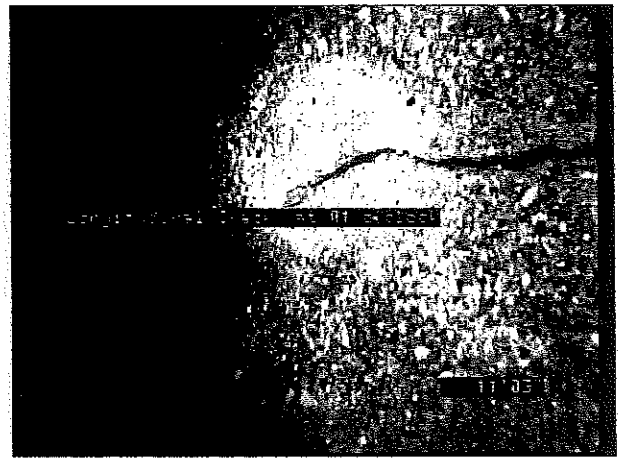

IMAGE: 35_4a, TAPE #: 001
Longitudinal Crack, at 01 o´clock

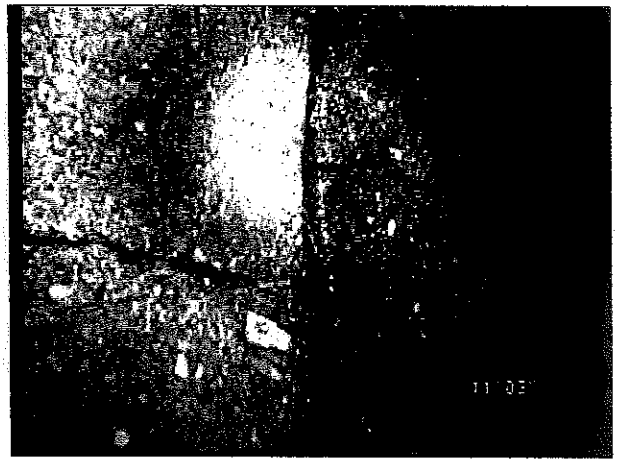

IMAGE: 35_4b, TAPE #: 001
Longitudinal Crack, at 01 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	31	

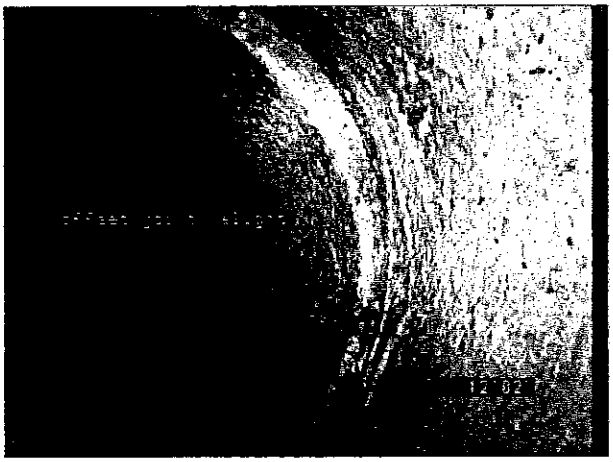

IMAGE: 35_5a, TAPE #: 001
offset joint, slight

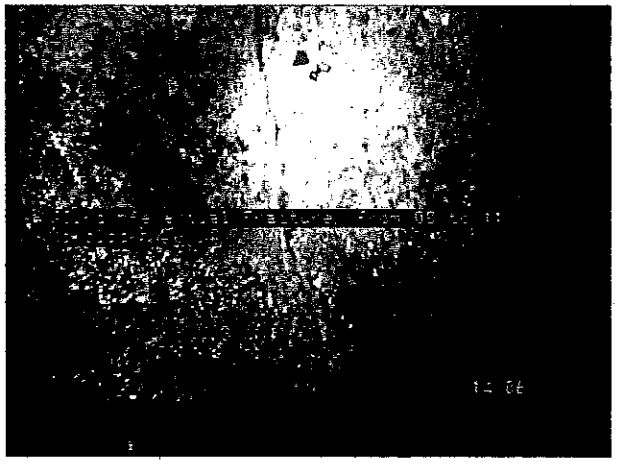

IMAGE: 35_6a, TAPE #: 001
Circumferential Fracture, from 08 to 11 o´clock

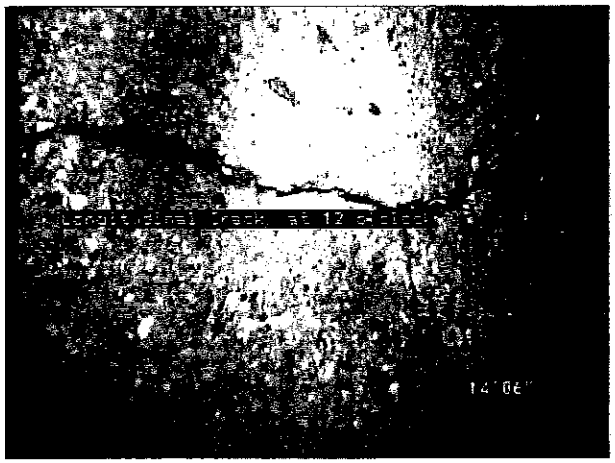

IMAGE: 35_7a, TAPE #: 001
Longitudinal Crack, at 12 o´clock

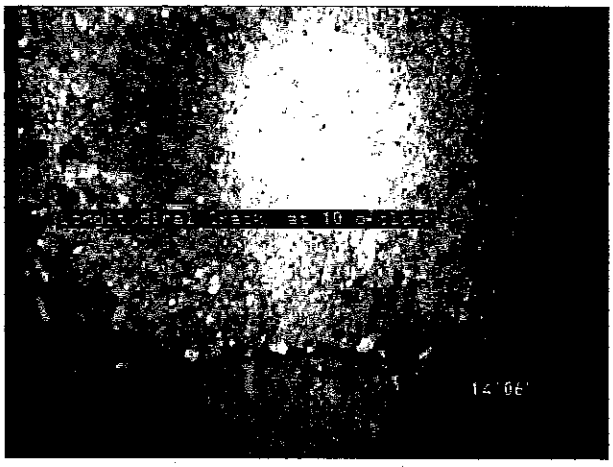

IMAGE: 35_8a, TAPE #: 001
Longitudinal Crack, at 10 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	31	

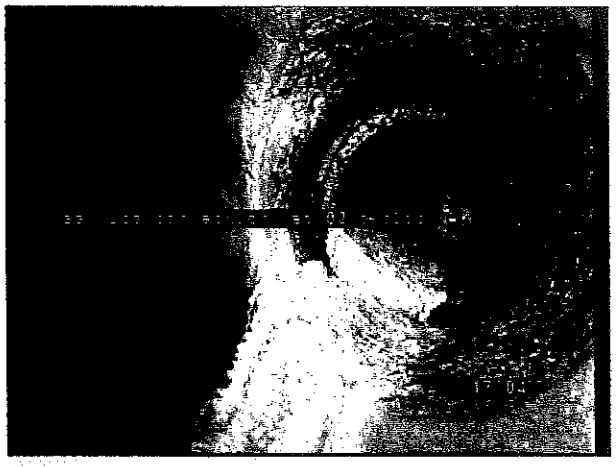

IMAGE: 35_9a, TAPE #: 001
service connection, at 02 o´clock

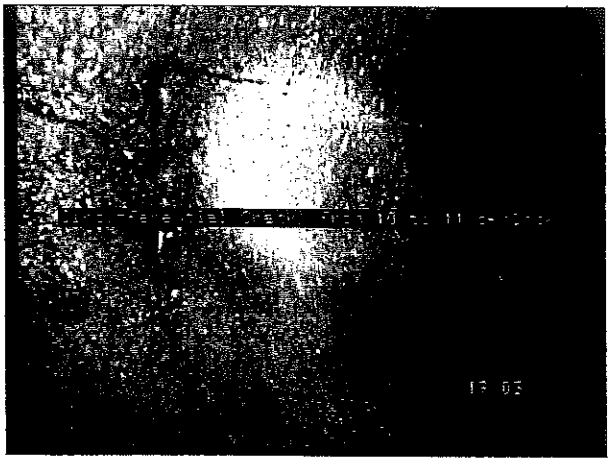

IMAGE: 35_10a, TAPE #: 001
Circumferential Crack, from 10 to 11 o´clock

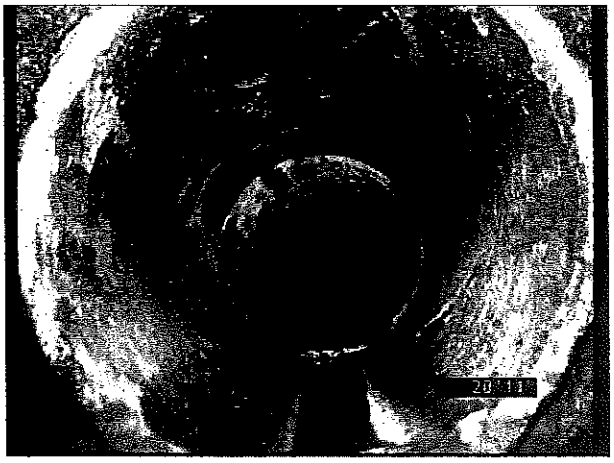

IMAGE: 35_11a, TAPE #: 001
pipe size decreases CHANGES TO 12"

IMAGE: 35_13a, TAPE #: 001
Hole in pipe at 05 o´clock

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INSPECTION REPORT

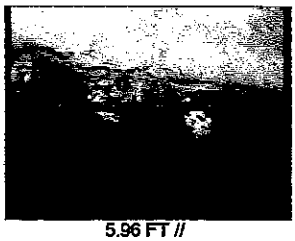
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	32	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	0

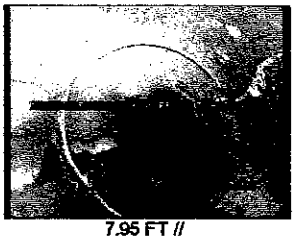
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	58.15 FT
STREET:	North Tank Farm	MAP #2:		MH:	36
LOCALE:		TAPE #:	001	MH:	35

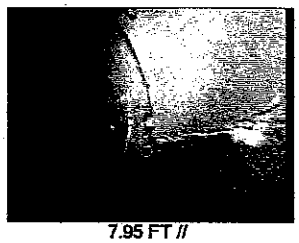
INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	12"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH: 5'
AREA:	Rohm Haas	LINING:	
		RSRVD:	

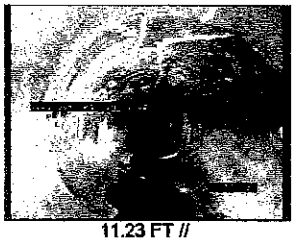
REMARK:

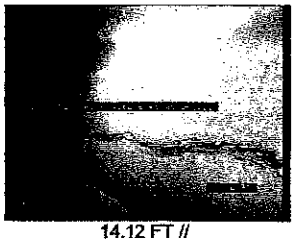
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at upstream manhole, START
5.96		***Longitudinal Crack, at 06 o´clock***
7.95		*Multiple Fractures from 09 to 07 o´clock*
11.23		***pipe deformed Egg shaped***
14.12		*Longitudinal Fracture at 06 o´clock*
16.40		*Multiple Fractures from 07 to 09 o´clock*
19.78		***Longitudinal Crack, at 08 o´clock***
27.74		*Multiple Fractures from 09 to 12 o´clock*
39.27		***Longitudinal Crack, at 10 o´clock 4 Pt. Crack***
56.07		*Hole in pipe at 07 o´clock*
57.06		*Hole in pipe at 02 o´clock*
58.15		inspection abandoned, END End of Reversal!!!!!! @ transition


5.96 FT //


7.95 FT //


7.95 FT //


11.23 FT //


14.12 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	32	

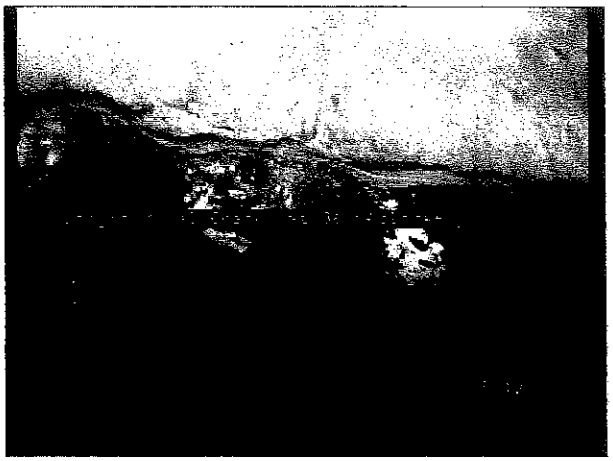

IMAGE: 36_2a, TAPE #: 001
Longitudinal Crack, at 06 o´clock

IMAGE: 36_3a, TAPE #: 001
Multiple Fractures from 09 to 07 o´clock

IMAGE: 36_3b, TAPE #: 001
Multiple Fractures from 09 to 07 o´clock

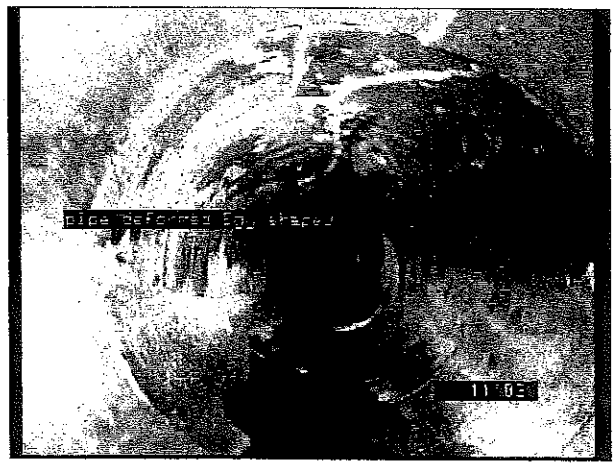

IMAGE: 36_4a, TAPE #: 001
pipe deformed Egg shaped

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	32	

IMAGE: 36_5a, TAPE #: 001
Longitudinal Fracture at 06 o´clock

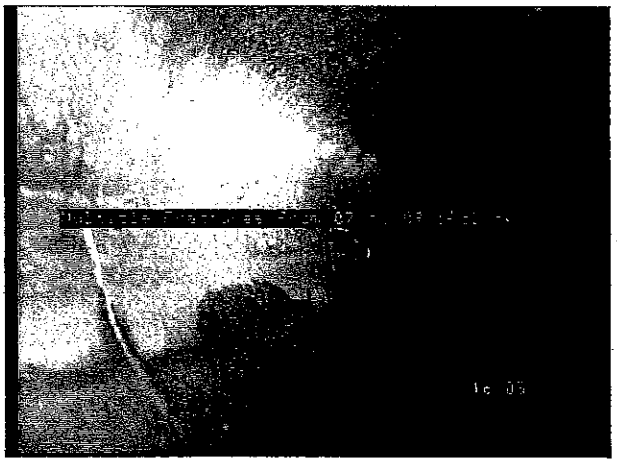

IMAGE: 36_6a, TAPE #: 001
Multiple Fractures from 07 to 09 o´clock

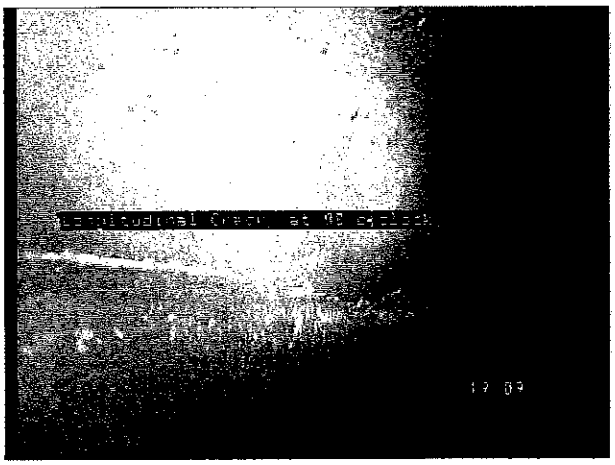

IMAGE: 36_7a, TAPE #: 001
Longitudinal Crack, at 08 o´clock

IMAGE: 36_8a, TAPE #: 001
Multiple Fractures from 09 to 12 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	32	

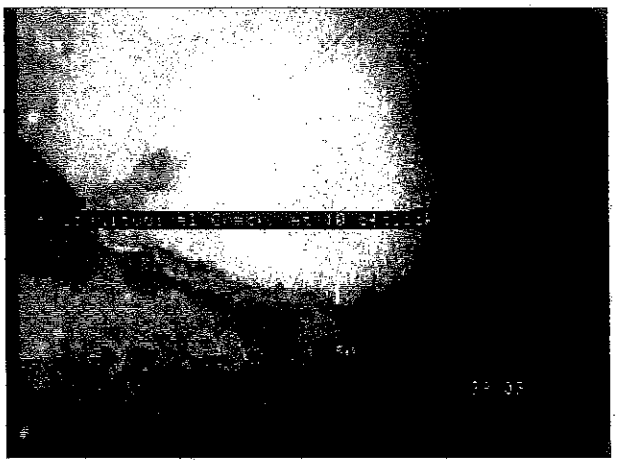

IMAGE: 36_9a, TAPE #: 001
Longitudinal Crack, at 10 o´clock 4 Pt. Crack

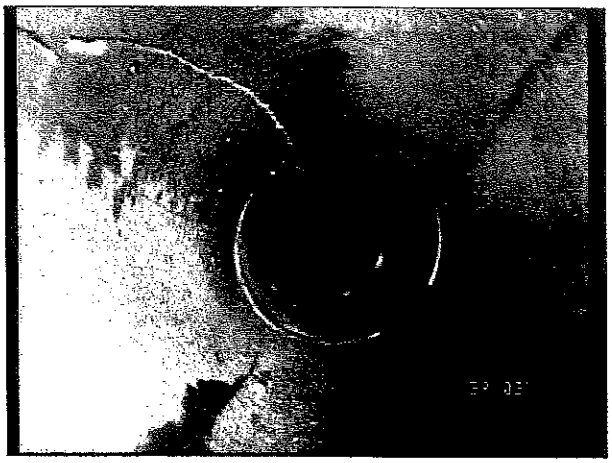

IMAGE: 36_9b, TAPE #: 001
Longitudinal Crack, at 10 o´clock 4 Pt. Crack

IMAGE: 36_10a, TAPE #: 001
Hole in pipe at 07 o´clock

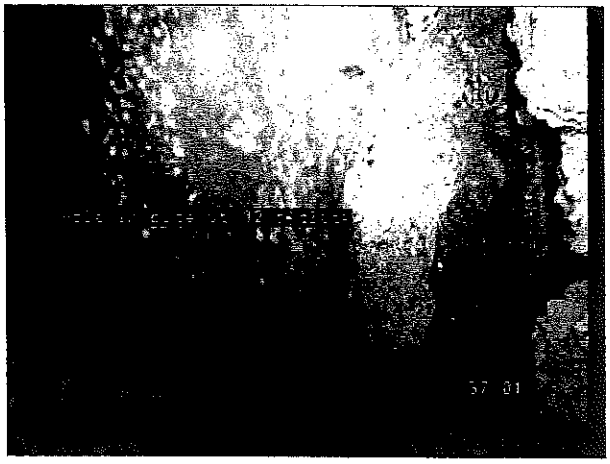

IMAGE: 36_11a, TAPE #: 001
Hole in pipe at 02 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	**North Tank Farm**	**07/27/2001**	**32**	

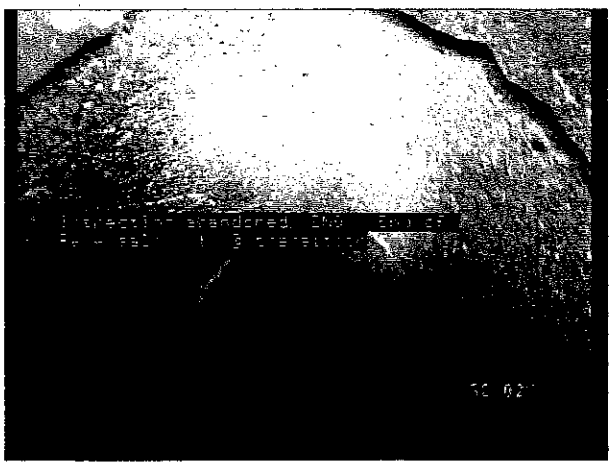

IMAGE: 36_12a, TAPE #: 001
inspection abandoned, END End of Reversal!!!!!!
@ transition

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INSPECTION REPORT

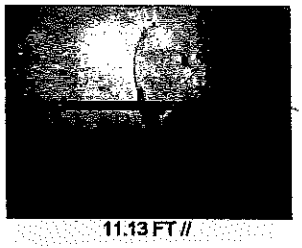
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	33	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	1460

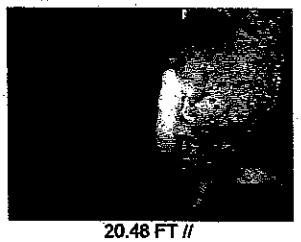
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	124.26 FT
STREET:	North Tank Farm	MAP #2:		MH:	36
LOCALE:		TAPE #:	001	MH:	37

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	12"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH: 5'
AREA:	Rohm Haas	LINING:	
		RSRVD:	

REMARK:

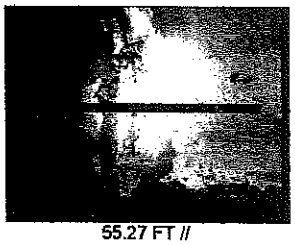
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at downstream manhole, START
11.13		*Circumferential Crack, from 08 to 10 o´clock*
20.48		*debris*
50.30		*Longitudinal Crack, at 09 o´clock evidence of infiltration*
51.49		service connection, at 09 o´clock
55.27		*sag begins*
55.27		*scale/mineral deposits light from 03 to 04 o´clock*
56.07		*mortar missing medium from 09 to 10 o´clock*
64.12		*Longitudinal Crack, at 09 o´clock*
76.45		*Longitudinal Crack, at 09 o´clock w/infiltration*
78.93		*mortar missing medium from 07 to 08 o´clock*
79.43		*Circumferential Crack, from 02 to 03 o´clock*
85.29		*debris*
90.86		*Hole in pipe at 06 o´clock*
92.55		*Longitudinal Crack, at 03 o´clock*
92.95		*debris*
103.29		*Longitudinal Crack, at 09 o´clock*
119.49		service connection, at 09 o´clock
120.58		*Longitudinal Crack, at 03 o´clock*
121.78		service connection, at 03 o´clock
124.26		inspection ends at upstream manhole, END


11.13 FT //


20.48 FT //

50.3 FT //

51.49 FT //


55.27 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	33	

IMAGE: 37_2a, TAPE #: 001
Circumferential Crack, from 08 to 10 o´clock

IMAGE: 37_3a, TAPE #: 001
debris

IMAGE: 37_4a, TAPE #: 001
Longitudinal Crack, at 09 o´clock evidence of infiltration

IMAGE: 37_5a, TAPE #: 001
service connection, at 09 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	33	

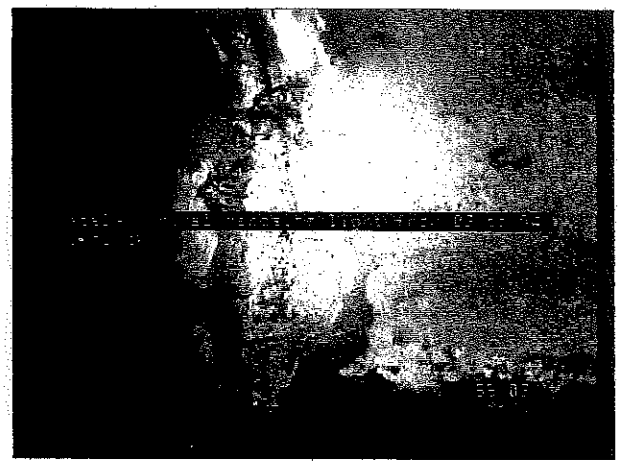

IMAGE: 37_7a, TAPE #: 001
scale/mineral deposits light from 03 to 04 o´clock

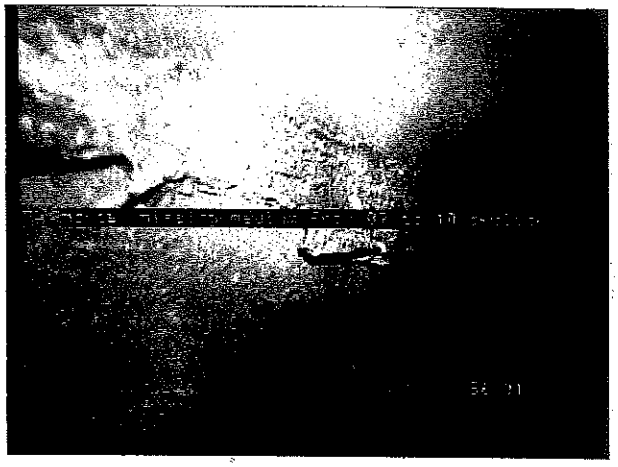

IMAGE: 37_8a, TAPE #: 001
mortar missing medium from 09 to 10 o´clock

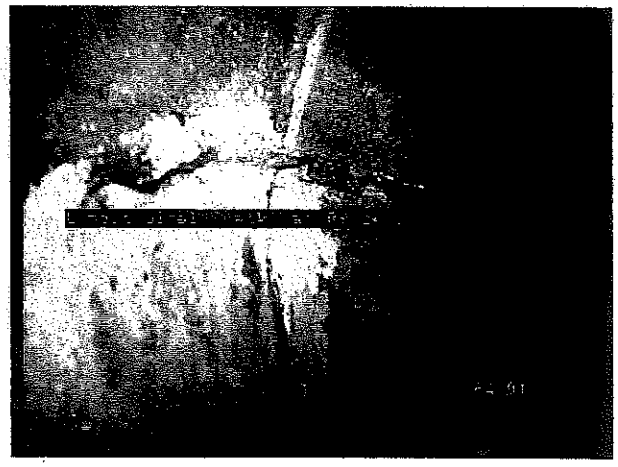

IMAGE: 37_9a, TAPE #: 001
Longitudinal Crack, at 09 o´clock

IMAGE: 37_10a, TAPE #: 001
Longitudinal Crack, at 09 o´clock w/infiltration

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	33	

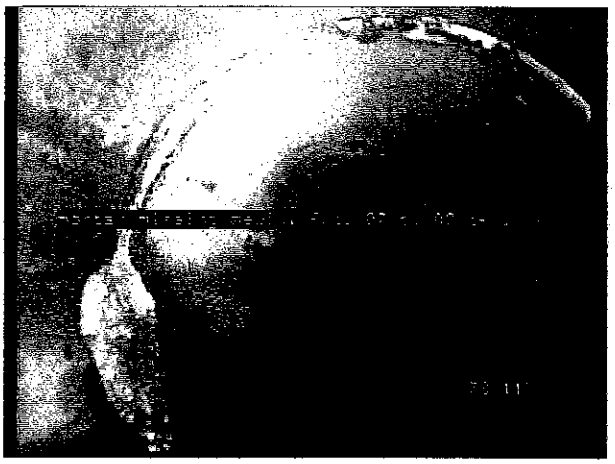

IMAGE: 37_11a, TAPE #: 001
mortar missing medium from 07 to 08 o´clock

IMAGE: 37_12a, TAPE #: 001
Circumferential Crack, from 02 to 03 o´clock

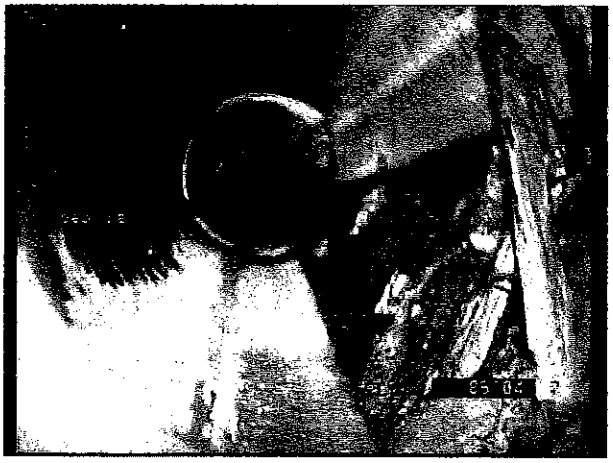

IMAGE: 37_13a, TAPE #: 001
debris

IMAGE: 37_14a, TAPE #: 001
Hole in pipe at 06 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	33	

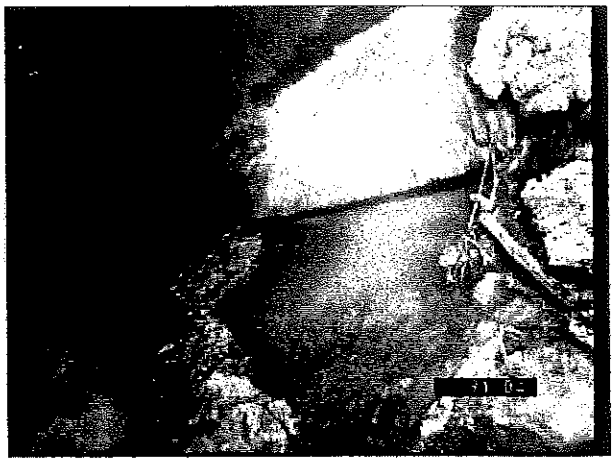

IMAGE: 37_14b, TAPE #: 001
Hole in pipe at 06 o´clock

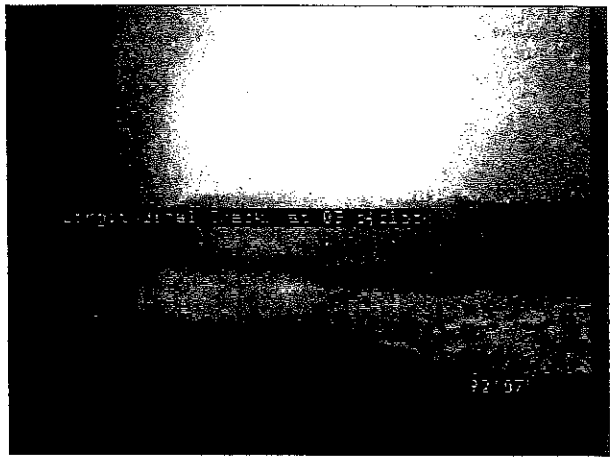

IMAGE: 37_15a, TAPE #: 001
Longitudinal Crack, at 03 o´clock

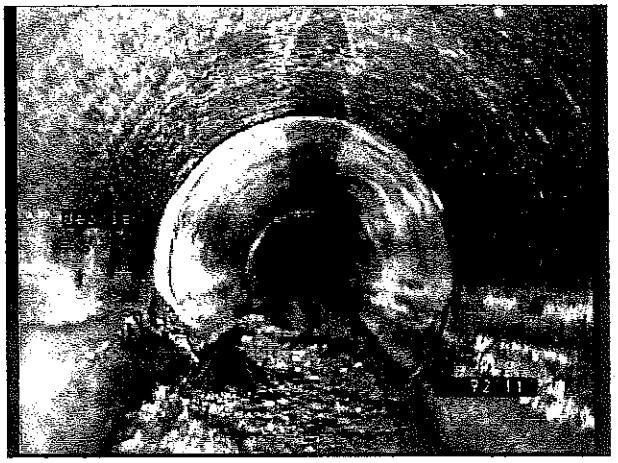

IMAGE: 37_16a, TAPE #: 001
debris

IMAGE: 37_17a, TAPE #: 001
Longitudinal Crack, at 09 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	North Tank Farm	07/27/2001	33	

IMAGE: 37_18a, TAPE #: 001
service connection, at 09 o´clock

IMAGE: 37_19a, TAPE #: 001
Longitudinal Crack, at 03 o´clock

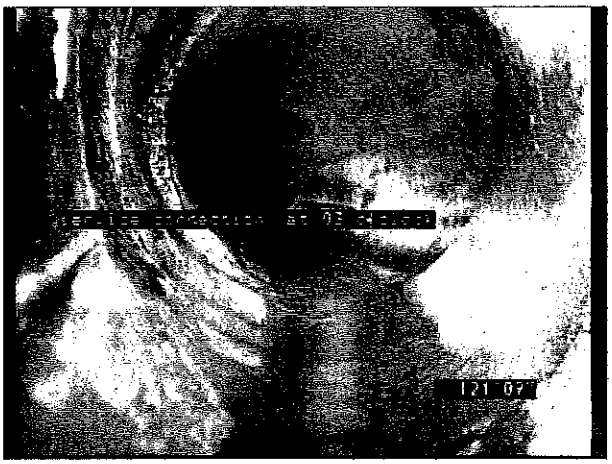

IMAGE: 37_20a, TAPE #: 001
service connection, at 03 o´clock

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INSPECTION REPORT

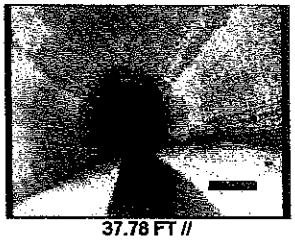
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	35	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	420

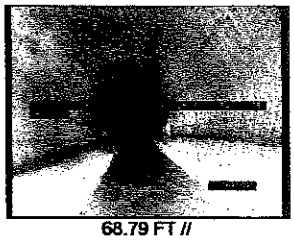
CITY: Rohm Haas	MAP #1:	TV'D LGTH: 157.86 FT
STREET: Bldg.29	MAP #2:	MH: 38
LOCALE:	TAPE #: 001	MH: 39

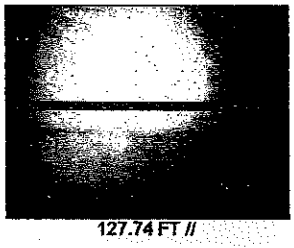
INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH: 5'
AREA:	Rohm Haas	LINING:	
		RSRVD:	

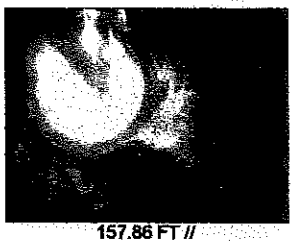
REMARK:

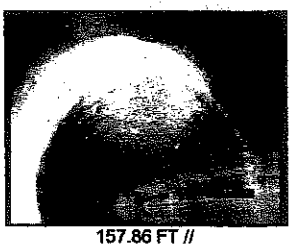
1:1000POSITION		OBSERVATION
38	0.00 S1	inspection begins at upstream manhole, START
	37.78	*scale/mineral deposits medium from 04 to 08 o´clock*
	68.79	*scale/mineral deposits medium from 04 to 08 o´clock*
	127.74	*Circumferential Crack, from 09 to 10 o´clock*
39	157.86	inspection ends at downstream manhole, END


37.78 FT //


68.79 FT //


127.74 FT //


157.86 FT //


157.86 FT //

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.29	07/27/2001	35	

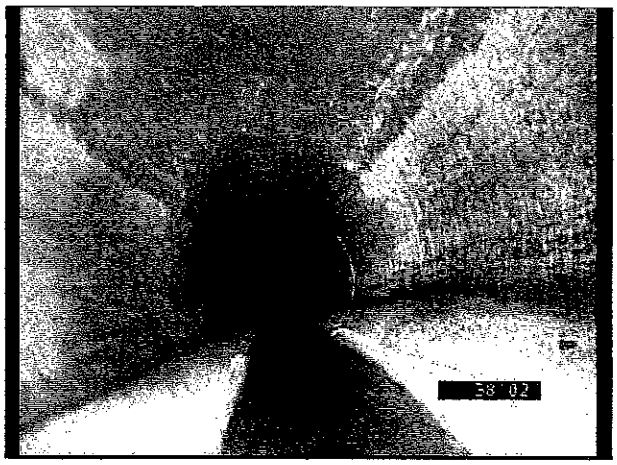

IMAGE: 39_2a, TAPE #: 001
scale/mineral deposits medium from 04 to 08 o´clock

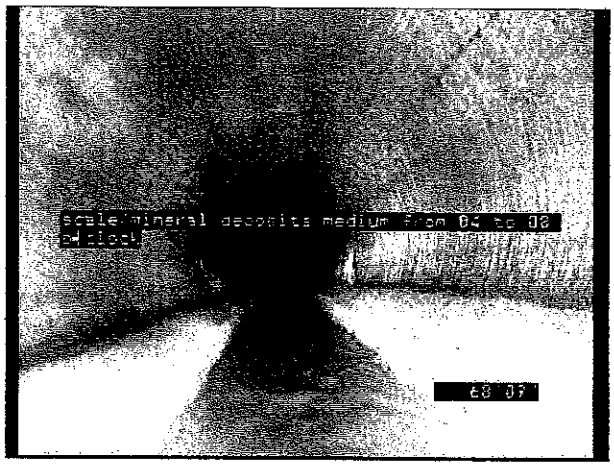

IMAGE: 39_3a, TAPE #: 001
scale/mineral deposits medium from 04 to 08 o´clock

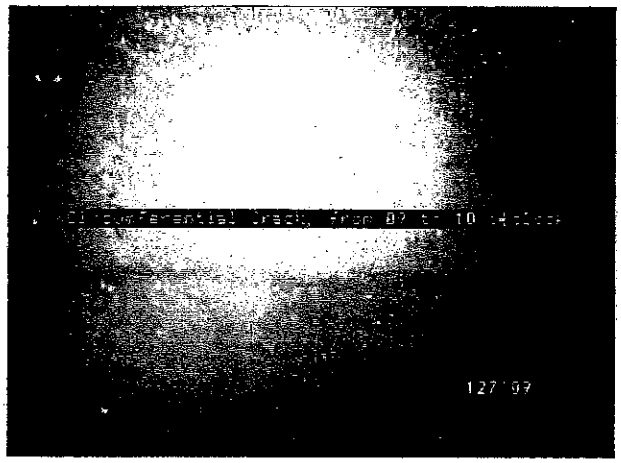

IMAGE: 39_4a, TAPE #: 001
Circumferential Crack, from 09 to 10 o´clock

IMAGE: 39_5a, TAPE #: 001
inspection ends at downstream manhole, END

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	**Bldg.29**	**07/27/2001**	**35**	

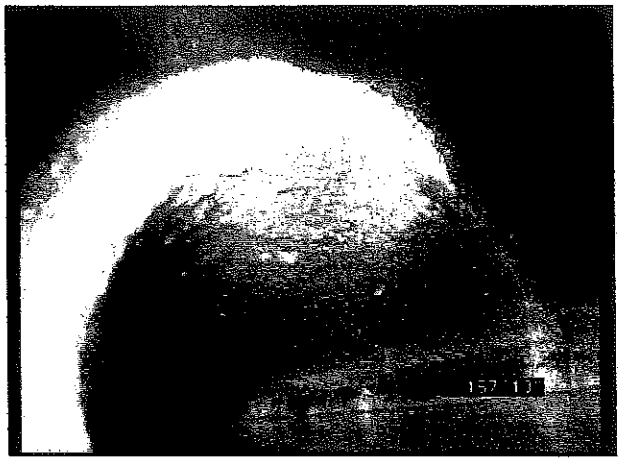

IMAGE: 39_5b, TAPE #: 001
inspection ends at downstream manhole, END

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INSPECTION REPORT

DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	36	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	0

CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	13.02 FT
STREET:	Bldg.29	MAP #2:		MH:	38
LOCALE:		TAPE #:	001	MH:	40

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	15"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH: 5'
AREA:	Rohm Haas	LINING:	
		RSRVD:	

REMARK:

1:1000POSITION	OBSERVATION
13.02 S1	inspection begins at downstream manhole, START

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION LENGTH	PIPE SIZE
1	07/27/2001	Rohm Haas	Bldg. #1	31	34	26.24	15"
2	07/27/2001	Rohm Haas	Bldg. #1	31	Dead End	11.83	15"
3	07/27/2001	Rohm Haas	North Tank Farm	35	34	28.63	15"
4	07/27/2001	Rohm Haas	North Tank Farm	35	36	24.26	15"
5	07/27/2001	Rohm Haas	North Tank Farm	36	35	58.15	12"
6	07/27/2001	Rohm Haas	North Tank Farm	36	37	124.26	12"
7	07/27/2001	Rohm Haas	Bldg.18	4	?	101.8	12"
8	07/27/2001	Rohm Haas	Bldg.29	38	39	157.86	15"
9	07/27/2001	Rohm Haas	Bldg.29	38	40	13.02	15"
						546.05 FT	

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION LENGTH	PIPE SIZE
1	07/27/2001	Rohm Haas	Bldg. #1	31	34	26.24	15"
2	07/27/2001	Rohm Haas	Bldg. #1	31	Dead End	11.83	15"
3	07/27/2001	Rohm Haas	North Tank Farm	35	34	28.63	15"
4	07/27/2001	Rohm Haas	North Tank Farm	35	36	24.26	15"
5	07/27/2001	Rohm Haas	North Tank Farm	36	35	58.15	12"
6	07/27/2001	Rohm Haas	North Tank Farm	36	37	124.26	12"
						273.37 FT	

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INSPECTION REPORT

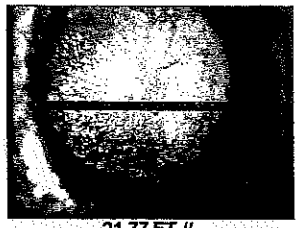
DATE:	work order:	WEATHER:	OPERATOR:	SECTION NR:	SECTION NAME:
07/27/2001		SUNNY, DRY	P.KELLUM	34	
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED:	RATE:
	811	PAN/TILT		NO	160

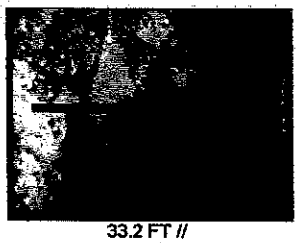
CITY:	Rohm Haas	MAP #1:		TV'D LGTH:	101.8 FT
STREET:	Bldg.~~18~~ 19	MAP #2:		MH:	4
LOCALE:		TAPE #:	001	MH:	?

INSPECT REASON:	CUSTOMER COMPLAINT	PIPE SIZE:	12"
SECTION TYPE:	WASTEWATER	MATERIAL:	VCP JT LGTH: 5'
AREA:	Rohm Haas	LINING:	
		RSRVD:	

REMARK:

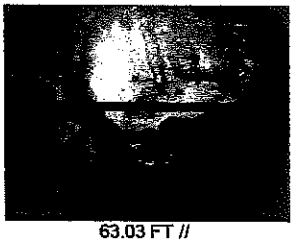
1:1000POSITION		OBSERVATION
0.00	S1	inspection begins at downstream manhole, START
21.77		service connection capped, at 03 o´clock
33.20		***Circumferential Crack, from 12 to 06 o´clock***
37.58		service connection, at 03 o´clock
40.46		service connection, at 03 o´clock
63.03		service connection capped, at 03 o´clock w/infiltration
76.45		service connection, at 03 o´clock
97.22		service connection, at 09 o´clock
99.21		***break-in-connection, at 03 o´clock***
101.80		service connection, at 02 o´clock
101.80		inspection abandoned, END break in tap stopping camera


21.77 FT //


33.2 FT //

37.58 FT //

40.46 FT //


63.03 FT //

TELEVAC ENVIRONMENTAL
7611 EASY ST
MASON OH, 45040
Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg ~~46~~ 19	07/27/2001	34	

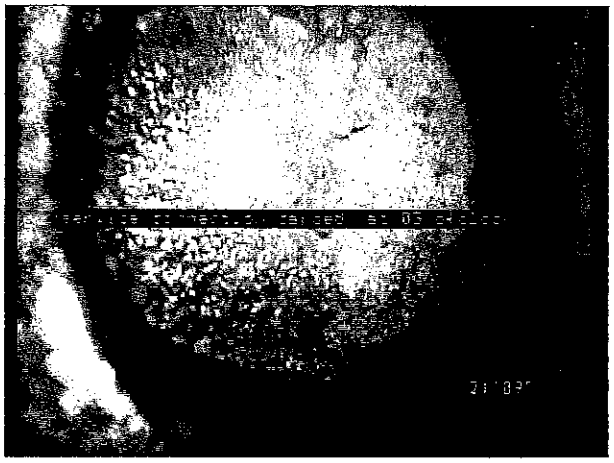


IMAGE: 38_2a, TAPE #: 001
service connection capped, at 03 o´clock

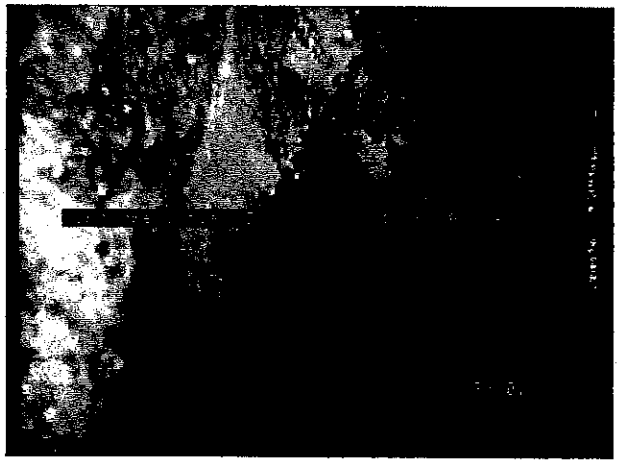


IMAGE: 38_3a, TAPE #: 001
Circumferential Crack, from 12 to 06 o´clock

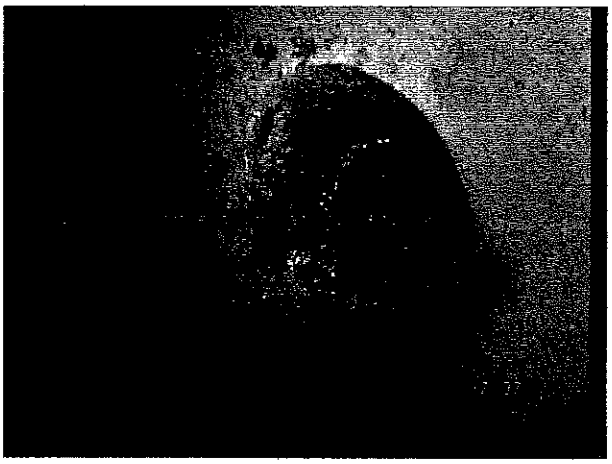


IMAGE: 38_4a, TAPE #: 001
service connection, at 03 o´clock

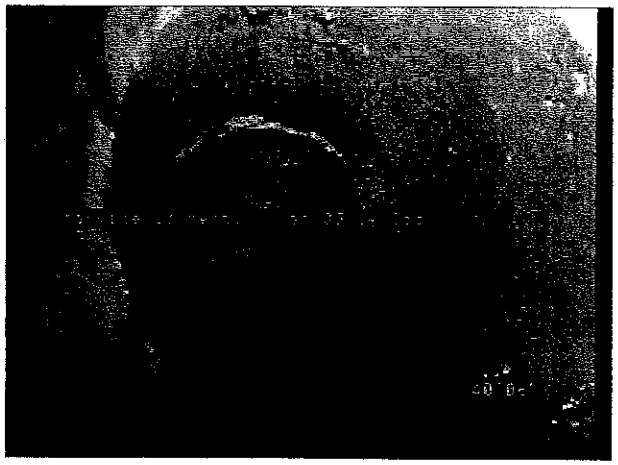


IMAGE: 38_5a, TAPE #: 001
service connection, at 03 o´clock

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INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	~~Bldg.18~~ 19	07/27/2001	34	

IMAGE: 38_6a, TAPE #: 001
service connection capped, at 03 o´clock
w/infiltration

IMAGE: 38_7a, TAPE #: 001
service connection, at 03 o´clock

IMAGE: 38_8a, TAPE #: 001
service connection, at 09 o´clock

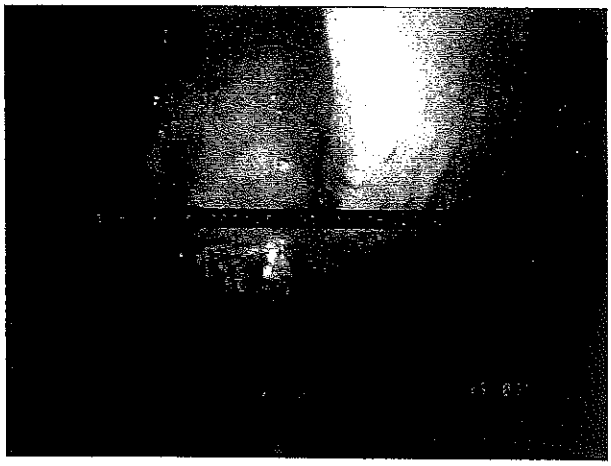

IMAGE: 38_9a, TAPE #: 001
break-in-connection, at 03 o´clock

TELEVAC ENVIRONMENTAL
7611 EASY ST
MASON OH, 45040
Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION IMAGES

CITY:	STREET:	DATE:	SECTION NR:	SECTION NAME:
Rohm Haas	Bldg.~~18~~ 19	07/27/2001	34	

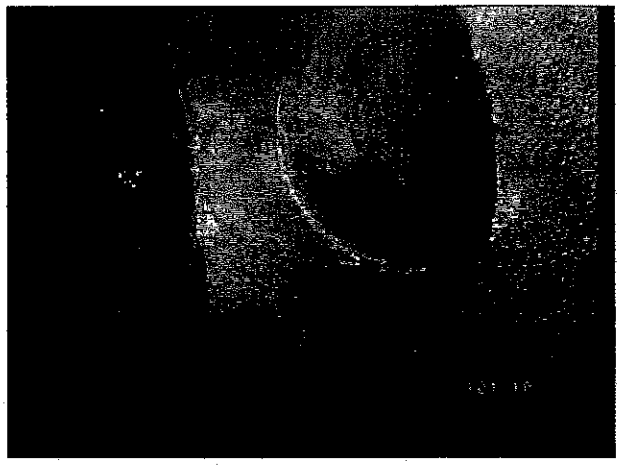

IMAGE: 38_10a, TAPE #: 001
service connection, at 02 o´clock

Draft Ecological Survey

Draft and Preliminary

Transportation
Land Development
Environmental
Services

Vanasse Hangen Brustlin, Inc.

54 Tuttle Place
Middletown, Connecticut 06457
860 632-1500
FAX 860 632-7879

Memorandum

To: Mark Hemingway
Anne Haikola

Date: June 14, 2001

Project No.: 0734600

From: Judy Vangalio

Re: Reading Facility

The purpose of this memorandum is to provide you with my observations on the site and its surroundings.

Cover Types

Four distinct cover types were identified during the May 29th and 30th field reconnaissance. These are described below.

Successional Old Field – A successional old field was found along the western fence line of the property. It was dominated by panic grasses (*Panicum sp.*) and goldenrods (*Solidago sp.*). Other herbs that occur in a lesser abundance include yellow sweet clover (*Melilotus officinalis*), Queen Anne's lace (*Daucus carota*), and teasel (*Dipsacus sylvestris*). This cover type is periodically disturbed, especially near the park, and will likely remain in an early successional state. The successional old fields serve as wildlife openings that provide edge, cover and food. These areas will have songbirds and mammalian species such as goldfinches (*Carduelis tristis*), song sparrows (*Melospiza melodia*), white-footed mice (*Peromyscus leucopus*), and meadow voles (*Microtus pennsylvanicus*) which consume the seeds of grass and forbes. With an abundant prey base, carnivores, such as red fox (*Vulpes vulpes*), may reside in the area.

Riparian Forest - A narrow riparian forest is found along the shore of Mill Creek. The dense canopy is dominated by red maple (*Acer rubrum*), box elder (*Acer negundo*), sycamore (*Platanus occidentalis*), and cottonwood (*Populus deltoides*) trees. The understory varied in density and is dominated by tartarian honeysuckle (*Lonicera tatarica*), and sandbar willow (*Salix interior*). The ground layer was sparse due to the lack of sunlight penetration. Dominant species in the ground layer included reed canary grass, and goldenrods. The riparian corridor provides excellent habitat for many animals because of the seasonal or perennial presence of water. This water is likely used directly for drinking by animals in the general area. In addition, pooled water is essential for breeding populations of amphibians.

Residential Area – A residential area surrounds the south and eastern boundary of the property. It consists of buildings (mainly single family homes) surrounded by maintained lawns (i.e. frequent mowing) and ornamental plantings. The lawns consist of grasses and weed species including English plantain (*Plantago lanceolata*), crab grass (*Digitaria ischaemum*) and dandelion (*Taraxacum*

officinale). Ornamental shrubs and small trees are planted along the foundations of the homes. In addition, larger trees are planted in the yards. Several recreational areas (baseball diamonds and a football stadium) and a cemetery are also found in this cover type. The mowed lawn areas surrounding the residences and constant disturbance from human activity create an environment that is of limited value to wildlife. Species more tolerant of human activity, such as American robins (*Turdus migratorius*) and raccoons (*Procyon lotor*), may typically be present. The ornamental plantings provide nesting sites and cover.

Industrial Area – The site itself and to the north is industrial. Most of these areas are covered with gravel, concrete, asphalt, rubble piles, or a gravel and dirt mixture. This area is sparsely vegetated, with the small weedy patches of grass. The front entrance of the plant is landscaped with grass and trees. In general, however, there is little area for free growth of vegetation or development of wildlife habitats.

Mill Creek

On May 30, 2001, approximately 1500 feet of Mill Creek adjacent to the site was observed via canoe. Mill Creek flows past the western boundary of the site. At the time of the field reconnaissance, the creek contained approximately 24 inches of water in the center and 3 to 6 inches along the banks. Pool areas with over three feet of water were found in several locations. Using field approximations, it was estimated that the creek was flowing at 1 cubic foot per second (cfs). The creek is approximately 25 feet wide with a sand/silt substrate. The earthen banks are steep (25° slope) and are well vegetated with a forested riparian habitat. During the reconnaissance, several municipal outfalls, some of which were combined sewer overflows, were observed entering the stream. A strong sewer odor was associated with this stream. No aquatic fauna were observed in the stream during the survey.

Ohio's water quality standards, set forth in Chapter 3745-1 of the Ohio Administrative Code (OAC) were reviewed to determine the status of Mill Creek. The OAC water quality standards include the designation of beneficial use. Beneficial use designations describe existing or potential uses of waterbodies. They take into consideration the use and value of the water for public water supplies, protection and propagation of aquatic life, recreation in and on water, agriculture, industrial, and other purposes. The beneficial use designations include aquatic life use, recreational use, and public water supply and state resource water. Each use designation is defined in the OAC 3634-1. State-wide chemical-specific numerical or narrative criteria designed to protect and measure attainment of the uses are also presented in the OAC 3634-1.

Mill Creek has been given the following beneficial use designations:

- Aquatic Life – warm-water habitat
- Recreation – primary contact recreation.
- Water Supply – agricultural and industrial

The designation as a warm-water habitat defines the "typical" warm-water assemblage of aquatic organisms for the stream. Primary contact recreation waters are suitable for full body contact recreation (e.g., swimming). To qualify as a primary contact recreation use, a stream must have at least one pool 100 square feet in area and greater than a depth of three feet. The water supply designation indicates Mill Creek may be used for irrigation and livestock watering and industrial and commercial use without treatment.

The OhioEPA conducted a detailed study of Mill Creek and its tributaries (OEPA, 1994). Two of the study areas were near the site: Adjacent to Cincinnati Drum and at West Columbia Rd. This study indicated that currently, Mill Creek is not meeting its aquatic life designated use. Physically, the stream channel is capable of supporting the criteria but due to chemical and biological criteria violations, the designation is not being attained (OEPA, 1994). Mill Creek also exhibited exceedences of the Primary Contact Recreation criteria for fecal coliform and *E. coli* (OEPA, 1994). This study also indicated that Mill Creek near these sites recorded violations of applicable criterion for dissolved oxygen.

Combined sewer outfalls add constituents such as metals, oil and grease, and petroleum products to receiving water bodies. In addition, materials associated with CSOs decrease dissolve oxygen(DO), and increase biological oxygen demand (BOD). Fecal coliform counts and floatable materials are also a problem. These water quality problems cause fish kills and impair aesthetics (Zheng, 1989).

Log of Variance and Nonconformances

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 012 (Number logs sequentially throughout the course of the FI field operations)

Date 7/29/01

Completed by Anne M. Haikola

Purpose of this Log: To document actions which were not specified in the FI Work Plan, including their basis, cause, and impact on project objectives.

This Log addresses a: (Select One)

☐ **Variance**: A deliberate action which varies from the Work Plan, selected based on unanticipated field conditions, identification of an improved approach, or other conscious rationale.

☑ **Nonconformance**: A deviation from Work Plan procedures which was unintended, but occurred due to oversight or miscommunication. Please indicate any corrective action taken under Rationale or Reason for Action or Occurrence, below.

☐ **Clarification**: An action which was generally described in the Work Plan, but which required a decision to be made about how it would be specifically implemented.

Pertinent Section(s) of FI Work Plan or QAPP: 5.6

Relevant Sample(s): 072901142 –Sample from the Recovery Well

Description of Action or Occurrence:
A groundwater sample (072901142) collected on July 29, 2001 was mistakenly sent to the lab for the CLP-TAL analysis suite. This sample should have been sent in for the Appendix IX analysis suite. The laboratory was contacted on July 31, 2001 to change the analyses requested from CLP-TAL analysis, to the Appendix IX analysis. The laboratory changed the analysis requested and had enough sample volume to proceed with the Appendix IX analysis.

Rationale or Reason for Action or Occurrence:
Oversight by the sampling personnel. Corrective Action: Personnel to review the FI Work Plan for analytical requirements.

Impact on FI Data Objectives:
No impact on FI data objectives is anticipated.

Project Manager Signature: _____
Project Name: Phase 2 FI Field Activities
Project Number: 7443

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 013 (Number logs sequentially throughout the course of the FI field operations)

Date 7/11/01

Completed by Anne M. Haikola

Purpose of this Log: To document actions which were not specified in the FI Work Plan, including their basis, cause, and impact on project objectives.

This Log addresses a: (Select One)

- [x] **Variance**: A deliberate action which varies from the Work Plan, selected based on unanticipated field conditions, identification of an improved approach, or other conscious rationale.
- [ ] **Nonconformance**: A deviation from Work Plan procedures which was unintended, but occurred due to oversight or miscommunication. Please indicate any corrective action taken under Rationale or Reason for Action or Occurrence, below.
- [ ] **Clarification**: An action which was generally described in the Work Plan, but which required a decision to be made about how it would be specifically implemented.

Pertinent Section(s) of FI Work Plan or QAPP: 5:13

Relevant Sample(s): Not Applicable

Description of Action or Occurrence:
Based on field conditions encountered during initial work, Geomatrix recommended modifications to the investigation approach of the CSS evaluation. Geomatrix outlined the scope and rationale for the revised CSS evaluation in a letter to the USEPA dated July 11, 2001.

Rationale or Reason for Action or Occurrence:
Camera survey of the sewer was slow and difficult, and it was determined that camera evaluation of the all sewer lines was not an efficient investigation method.

Impact on FI Data Objectives:
No impact on FI data objectives is anticipated. The revised CSS evaluation approach will meet the objectives put forward in the FI Work Plan and the requirements of the Administrative Order.

Project Manager Signature: _____
Project Name: Phase 2 FI Field Activities
Project Number: 7443

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 014 (Number logs sequentially throughout the course of the FI field operations)

Date **10/10/01**

Completed by Anne M. Haikola

Purpose of this Log: To document actions which were not specified in the FI Work Plan, including their basis, cause, and impact on project objectives.

This Log addresses a: (Select One)

☐ **Variance**: A deliberate action which varies from the Work Plan, selected based on unanticipated field conditions, identification of an improved approach, or other conscious rationale.

☑ **Nonconformance**: A deviation from Work Plan procedures which was unintended, but occurred due to oversight or miscommunication. Please indicate any corrective action taken under Rationale or Reason for Action or Occurrence, below.

☐ **Clarification**: An action which was generally described in the Work Plan, but which required a decision to be made about how it would be specifically implemented.

Pertinent Section(s) of FI Work Plan or QAPP: A.10.1.1

Relevant Sample(s): Not applicable

Description of Action or Occurrence:
Section A.10.1.1 states that the Geomatrix QA Officer will conduct an internal audit of field activities at least once every three months.

Rationale or Reason for Action or Occurrence:
Oversight by the management personnel. Corrective Action: Personnel to review the FI Work Plan and Quality Assurance Project Plan. Audit to be scheduled.

Impact on FI Data Objectives:
No impact on FI data objectives is anticipated. While an internal field audit was not performed this quarter, internal Geomatrix staff have reviewed the field documentation from the months of July to September 2001. The daily field records, sampling records, field measurements and other field documentation have been completed in accordance with Quality Assurance protocols.

An internal field audit is scheduled for the November 2001 groundwater sampling.

Project Manager Signature: _____
Project Name: Phase 2 FI Field Activities
Project Number: 7443

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 015 (Number logs sequentially throughout the course of the FI field operations)

Date **10/10/01**

Completed by Anne M. Haikola

Purpose of this Log: To document actions which were not specified in the FI Work Plan, including their basis, cause, and impact on project objectives.

This Log addresses a: (Select One)

☑ **Variance**: A deliberate action which varies from the Work Plan, selected based on unanticipated field conditions, identification of an improved approach, or other conscious rationale.

☐ **Nonconformance**: A deviation from Work Plan procedures which was unintended, but occurred due to oversight or miscommunication. Please indicate any corrective action taken under Rationale or Reason for Action or Occurrence, below.

☐ **Clarification**: An action which was generally described in the Work Plan, but which required a decision to be made about how it would be specifically implemented.

Pertinent Section(s) of FI Work Plan or QAPP: Sections 5.1 and 5.2

Relevant Sample(s): DP04, DP06, DP11, DP21, DP22, DP24, DP26, DP27, and DP28

Description of Action or Occurrence:
Ten borings were completed in the northeastern portion of the plant (DP04, DP06, DP11, DP21, DP22, DP23, DP24, DP26, DP27, and DP28). Two soil samples were collected for geochemical analysis from DP23. The activities were beyond the original scope of work.

Rationale or Reason for Action or Occurrence:
These borings were completed to gain a better understanding of the shallow (<25-foot depth) lithology, particularly the shallow sand in the northeastern portion of the plant. Prior to boring at these locations, the amount of shallow lithologic data in this area was limited.

Soil samples from DP23 were submitted for chemical analysis because of field indications of chemical impact.

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 015 [cont'd]

Impact on FI Data Objectives:
The logged variance will add to the understanding of the lithology and to the total data set, so it should increase the completeness of the data obtained. No negative impacts are anticipated.

Project Manager Signature: _____
Project Name: Phase 2 FI Field Activities
Project Number: 7443

Field Quality Assurance Inspection

FACILITY INVESTIGATION (FI)

Morton International Inc.

Reading, Ohio

QA Field Audit Report
Report #2

Site Visit: November 9 to 11, 2001

Field Audit Conducted by: Anne Haikola

AUDIT REPORT

A site visit was conducted from November 9 to 11, 2001 to audit field activities during the FI at the Rohn and Haas Company, Morton International, Inc. facility in Reading, Ohio. The purpose of the audit was to:

1) Verify that established procedures, including Field Operating Procedures, described in the Quality Assurance Project Plan (QAPP) dated November 2000 are being followed; and
2) Identify the need for corrective actions, if necessary.

The field audit involved: conducting interviews of field staff; identifying field procedures not in conformance with the Work Plan or QAPP; assessing the completeness of daily records; evaluating field equipment calibration records; reviewing sample tracking, chain of custody, and sample security procedures; and assessing the proper frequency of sample field quality control checks.

INTERVIEWS

The following Geomatrix staff were on-site and interviewed during the field audit:

Erik Mansell – Field Team Leader
Charles Young – Sample Collection Team
Julie So– Sample Collection Team

Field activities were observed and each staff member was interviewed to identify non-conformance with field procedures specified with the Work Plan and QAPP.

During the audit, Mr. Ron Lantzy with Rohm and Haas was present and Mr. Todd Quillen of TechLaw, Inc. was providing oversight on behalf of the U.S. Environmental Protection Agency (USEPA).

FI Activities Performed During Audit

Two primary FI activities were ongoing during the field audit.

- The second complete round of groundwater sampling activities was initiated on November 8, 2001 and completed on November 16, 2001. Conformance with sampling procedures presented in the QAPP and satisfaction of data quality objectives were evaluated while observing sampling activities at the following groundwater monitoring wells: UAW17-40, UAW02-40, UAW02-20, UAW11-10, UAW21-80.

- Trenching at geophysical anomalies located in the vicinity of Anomaly "I" and the Former Swale Area. Conformance with trenching procedures and satisfaction of data quality objectives were evaluated while observing trenching activities at T-5, T-6, and T-7.

- Soil samples were collected in conjunction with trenching and facility investigation requirements. Conformance with sampling procedures presented in the QAPP and satisfaction of data quality objectives were evaluated while observing collection of the following soil samples: DP29-5, T-6-3, T-6-7.5, T-6-10,

Completeness of Daily Records

Daily records documenting field activities, equipment calibration records, sample control logs, and chain of custody records were reviewed for completeness. Daily records for the FI were complete.

Corrective Action - None required.

Field Equipment Calibration Records

The following field equipment was in use during the audit: photoionization detector (PID); Oxygen Meter, H_2S gas meter, an electronic water level sounder, and instruments to measure field parameters for groundwater samples (i.e., pH meter, specific conductance meter, dissolved oxygen meter, and turbidimeter). Field equipment calibration records were present for each

day of equipment usage and reviewed. Calibration results were consistent with instrument calibration parameters identified in the equipment operation manuals and maintenance SOPs.

Corrective Action - None required.

Sample Tracking, Chain of Custody and Sample Security and Labeling

The integrity of sample collection during the FI was assessed through evaluating sample tracking and chain of custody records, as well as, sample security and bottle labeling procedures. The sample team maintained up to date sample tracking records, and samples were secured from collection to receipt by the laboratory. Each bottle was clearly labeled, and packed coolers were secured with custody tape. Based on these observations, current procedures are adequate to ensure the integrity of samples collected in the FI.

However, minor errors were found on the chain of custody forms documenting the number of groundwater sample containers. While the correct number and volume of sample containers were provided to the laboratory, the tally of bottles varied and was, therefore, inaccurate throughout the chain-of-custody documentation.

> ***Corrective Actions*** – The sample team should implement a structured inventory check between the sample bottles and the contents of each sample cooler prior to signing the chain of custody form and securing the samples for final shipment. For this groundwater sampling program, three groundwater samples can typically be packed within two sample coolers. If the sample team plans ahead, the contents of each cooler can be pre-determined, thereby streamlining the completion of chain of custody records. To facilitate the procedure, the sample team could complete the chain of custody records at the time of sample collection, then do a final inventory check back in the office trailer, as part of the sample packing procedure. To summarize this three-step approach: 1) plan sampling and sample cooler needs for the day 2) complete chain of custody documentation at the time of sample collection and keep bottle sets organized for final packing. 3) At the end of the day, while re-packing each cooler with fresh ice for final shipment, double-check the number of sample bottles against the chain of custody.
>
> ***Impact on FI Data Objectives*** – The laboratory received the correct number and volume of sample bottles for the required analyses. Therefore, there is no impact to the quality of the data.

Collection of Field Quality Control Checks

Field quality control (QC) samples include the collection of blind duplicate samples, matrix spike (MS) and matrix spike duplicate (MSD) samples, field equipment blanks, and inclusion of trip blanks with each cooler containing samples to be analyzed for VOCs. Logistical coordination for the laboratory dictates that MS/MSD samples be collected for each media (soil or water) within the first day of sampling and at increments of 1 MS/MSD per 20 samples thereafter, so that laboratory batch QC be performed on project samples.

A review of the sample control logs, chain of custody forms, and STL laboratory log-in documentation indicated the following:

- Blind duplicates and field blanks were being collected at the prescribed frequency.

- While trip blanks are regularly included with each cooler containing samples analyzed for VOCs, there was an oversight on the 11/8/01 shipment. The field sampling team did not include a trip blank with the sample cooler, even though it was indicated on the chain-of-custody records. A report of this discrepancy was generated by STL.

- As of 11/9/01, the sample teams had yet to collect an MS/MSD sample for laboratory batch QC. At the direction of the QA auditor, an MS/MSD for groundwater was collected on 11/10/01.

Corrective Action – Regarding the oversight of the trip blank in the 11/8/01 sample shipment: Field personnel to review recommended procedure in the Sample Tracking, Chain of Custody and Sample Security and Labeling discussion above.

Impact on FI Data Objectives – Regarding the oversight of the trip blank in the 11/8/01 sample shipment: The purpose of the trip blank is to determine if a batch of samples is being exposed during sample handling and shipment to volatile organics that might contaminate the environmental samples. Based on the many batches of samples submtited to the laboratory, and the results from the 11/8/01 samples, it does not appear that evaluation of a trip blank would be required to determine if there is cross contamination biasing the sample batch. Therefore, there is no impact to the quality of the data.

FIELD AUDIT CONCLUSION

While there are opportunities to improve field practices, the procedures observed during the QA audit are in conformance with the QAPP and sufficient to achieve project data quality objectives.

Log of Variance and Nonconformances

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 016 (Number logs sequentially throughout the course of the FI field operations)

Date **1/11/02**

Completed by Anne M. Haikola

Purpose of this Log: To document actions which were not specified in the FI Work Plan, including their basis, cause, and impact on project objectives.

This Log addresses a: (Select One)

☑ **Variance**: A deliberate action which varies from the Work Plan, selected based on unanticipated field conditions, identification of an improved approach, or other conscious rationale.

☐ **Nonconformance**: A deviation from Work Plan procedures which was unintended, but occurred due to oversight or miscommunication. Please indicate any corrective action taken under Rationale or Reason for Action or Occurrence, below.

☐ **Clarification**: An action which was generally described in the Work Plan, but which required a decision to be made about how it would be specifically implemented.

Pertinent Section(s) of FI Work Plan or QAPP: Field Operating Procedure – Monitoring Well Development and Groundwater Sampling

Relevant Sample(s): UAW10-50, UAW10-80 and UAW24-70

Description of Action or Occurrence:
Recovery of development water from newly installed wells was less in volume than required by the Work Plan (at least two well volumes plus any volume of water lost during drilling). Wells involved include: UAW10-50, UAW10-80 and UAW24-70.

Rationale or Reason for Action or Occurrence:
The procedure used to install the subject wells involved washing six-inch outer casing from the surface to the target depth. Core samples were not removed because the stratigraphy had already been established by stratigraphic tests at these locations. Thick clay sequences are present at all of these locations – the result is that the high water pressure and stress placed on the formation by this drilling technique fractured the clay and the vast majority of water used in the drilling was lost in the clays – not the sands in which the wells are screened. Some water returns to the surface occurred during drilling

Although some formation damage did likely occur due to introduction of fines from overlying clays, the poor transmissivity of the sands at these locations is contributing to low flow from these wells. This low flow character prevented

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 016 [cont'd]
removal of the prescribed volume of water during development; however, the volume of water lost in the screened sand was less than one half the volume removed during development.

Impact on FI Data Objectives:
Samples from these wells are apparently representative of aquifer waters, based on the behavior of field parameters during development and purging. Given this, there should be no impact on FI data objectives.

Project Manager Signature: _____
Project Name: Phase 2 FI Field Activities
Project Number: 7443

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 017 (Number logs sequentially throughout the course of the FI field operations)

Date **1/11/02**

Completed by Anne M. Haikola

Purpose of this Log: To document actions which were not specified in the FI Work Plan, including their basis, cause, and impact on project objectives.

This Log addresses a: (Select One)

- [x] **Variance**: A deliberate action which varies from the Work Plan, selected based on unanticipated field conditions, identification of an improved approach, or other conscious rationale.
- [ ] **Nonconformance**: A deviation from Work Plan procedures which was unintended, but occurred due to oversight or miscommunication. Please indicate any corrective action taken under Rationale or Reason for Action or Occurrence, below.
- [ ] **Clarification**: An action which was generally described in the Work Plan, but which required a decision to be made about how it would be specifically implemented.

Pertinent Section(s) of FI Work Plan or QAPP: Field Operating Procedure – Monitoring Well Development and Groundwater Sampling

Relevant Sample(s): LAW-12-60

Description of Action or Occurrence:
Development of monitoring well LAW-12 -60– pH levels in development water were elevated, possibly indicative of grout contamination.

Rationale or Reason for Action or Occurrence:
After extensive development pH levels decreased to 7.5, and the well was sampled for Phase 2 while pH levels were in the ambient range. When the well was sampled in Phase 3, pH levels were again elevated, and the well had to be purged extensively in order to lower to the pH to the ambient range.

The likely cause of the elevated pH is communication between the screened interval and the grout annular seal of the well. The mode of this communication is not known, but may include infiltration of grout fluids through the lower portion of the overlying clay stratum. The effect may attenuate naturally with time; in the interim, however, it will be necessary to utilize a modified purging method to obtain representative samples.

LOG OF VARIANCE, NONCONFORMANCE, OR CLARIFICATION

No. 017 (cont'd)

The following procedure should be used as long as elevated pH persists: Start by attempting to follow standard micro-purge procedures. If the pH is elevated, increase flow rate and macro-purge until pH is lowered to the ambient range. When ambient values for pH are obtained, stop the pump, allow the well to recover to static level, then procede with standard micro purge procedures.

Impact on FI Data Objectives:
The Phase 2 and 3 samples from this well are apparently representative of aquifer waters, based on the behavior of field parameters during development and purging. Given this, there should be no impact on FI data objectives

Project Manager Signature: _____
Project Name: Phase 2 FI Field Activities
Project Number: 7443

GEOMATRIX

Progress Report for Facility Investigation
Morton International Inc.

Reading, Ohio

Prepared for:

Morton International, Inc.

Reading, Ohio

Third Quarter – July to September 2001

Project No. 7168

Geomatrix Consultants

1214 West Sixth Street
Suite 201
Austin, TX 78703
(512) 494-0333 • FAX (512) 494-0334

GEOMATRIX

October 12, 2001

Ms. Mirtha Capiro
Project Coordinator
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard, DRE-9J
Chicago, Illinois 60604-3590

RE: Third Quarter - July to September 2001,
Progress Report for Facility Investigation,
Morton International Inc.,
Reading, Ohio
RCRA Docket No. R3013-5-00-001

Dear Ms. Capiro:

At the direction of the Rohm and Haas Co., Geomatrix Consultants, Inc. (Geomatrix) is submitting the referenced Progress Report. This submittal has been prepared to meet the requirements of the Administrative Order Paragraph 57 for progress reports. The content of the Progress Report is in accordance with Section 8.3 of the Facility Investigation Work Plan.

If you have any questions, please feel free to contact me at (512) 494-0333.

Sincerely,
GEOMATRIX CONSULTANTS, INC.

Mark P. Hemingway
Principal Hydrogeologist

cc: Mr. Peter V. Palena, The Rohm and Haas Co. (1 copy)
Mr. Eric Walker, The Rohm and Haas Co. (2 copies)
Mr. Todd Quillen, TechLaw Inc. (1 copy)

Attachments – 3 copies

Mill Creek Evaluation

As mentioned in the second quarter Progress Report, an ecological survey was performed on May 29 and 30, 2001, consisting of a visual evaluation of the Morton Facility vicinity, and of Mill Creek by an ecological risk assessor. A draft memo documenting the findings of this ecological survey is included as an attachment to this Progress Report.

Geomatrix representatives performed a third-quarter reconnaissance of the east bank of Mill Creek. Small seeps were identified near the northwest property corner of the Morton Facility and at a location about 300 feet south of the northwest property corner.

On August 22, 2001 the absorbent well pads were removed from the well points installed along the east bank of Mill Creek. Optical brighteners were identified in absorbent pads located generally west of the southwest portion of the property (i.e., the vicinity of Building 40). Brighteners were not observed in sorbents from other locations, although sorbents from two locations could not be retrieved due to damage from flooding.

Combined Sewer Evaluation (SWMU 11)

The camera survey of the combined sewer system was continued during the third quarter on lines with diameters of 12 inches or greater. Based on difficulties with access to the sewer, the camera survey did not address all targeted lines. The change in the scope of work associated with the camera survey is documented in the attached variance log, Number 13.

As discussed in the Direct Push Boring section above, soil sampling was performed at DPT sampling locations DP07, DP08, and DP09 adjacent to the 22-inch main by the facility entrance.

Aquifer Testing

As mentioned in the Second Quarter 2001 Progress Report, aquifer communication testing was initiated to measure water level responses in eight Upper Aquifer Wells from the shutdown/re-start of the Pristine Superfund Site recovery well systems. Water level changes were measured using pressure transducers and data recorders. The change in water levels over time was plotted for each of the eight wells, and these plots are included as an attachment to this Progress Report. Based on a preliminary evaluation of these plots, the shutdown of the recovery system had an influence on the wells screened in the deeper portions of the upper aquifer. There was no appreciable influence on the wells screened in the shallower portions of the aquifer.

Sampling

One groundwater sample and approximately 40 soil samples were collected for geochemical analyses during this reporting period. In accordance with the FI QAPP, quality assurance/quality control samples were also collected.

PROGRESS REPORT FOR FACILITY INVESTIGATION
MORTON INTERNATIONAL INC.

Reading, Ohio

USEPA I.D. # OHD 000 724 138

Third Quarter – July to September 2001

FACILITY INVESTIGATION FIELD ACTIVITY PROGRESS DURING REPORTING PERIOD

Investigation activities commenced on March 6, 2001, and the summaries of the investigation activities for the first and second calendar quarters of 2001 have been provided in the two previous progress reports. The Facility Investigation Work Plan (FI Work Plan) and Quality Assurance Project Plan (QAPP) outline the scope of work, project objectives, field operating procedures, and quality assurance protocols. This progress report summarizes the activities performed during the time period July to September 2001.

Drilling Borings and Well Installation

Direct Push Boring:

Additional soil borings were advanced and select samples were submitted for laboratory analysis this quarter using direct push methods. These additional borings (shown on attached figure) consist of the following:

- **Ten Exploratory Borings** – These borings were completed to gain a better understanding of the shallow (<25-foot depth) lithology, particularly the shallow sand in the northeastern portion of the plant. Prior to boring at these locations (DP04, DP06, DP11, DP21, DP22, DP23, DP24, DP26, DP27, and DP28), the amount of shallow lithologic data in this area was limited. Two soil samples from DP23 were submitted for chemical analysis because of field indications of chemical impact. These two samples were analyzed for the CLP-Target Analyte List (TAL) (see Table A1-1 of the FI QAPP for the list of target analytes). Since the completion of these borings was beyond the original scope of work, Variance Log Number 15 documents this additional investigation activity.
- **Six Solid Waste Management Unit (SWMU) and Tank borings** – These borings were completed to collect geochemical samples in the vicinity of former SWMUs and existing or former tanks located in the northeastern portion of the plant. DP01, DP02, and DP12 were advanced adjacent to former hazardous waste storage tanks. DP03 was advanced adjacent to SWMU 5. DP05 was advanced just north of the east tank farm, and DP25 was advanced adjacent to the former wastewater treatment tank. All of the samples collected from these locations were analyzed for the CLP- TAL.
- **Six Former Impoundment (SWMU 1) Borings** – These borings were advanced to collect geochemical samples within the former surface impoundment ponds (DP10, DP13, DP14, DP15, DP16, and DP17). Two samples were submitted from each boring and were analyzed for the Appendix IX-TAL (see Table A1-2 of the FI QAPP for the list of target analytes).
- **Three Geophysical Anomaly Borings** – These borings were completed north of Building 40 (DP18, DP19, and DP20). The locations were selected to further

investigate geophysical anomalies F, G, and H identified during the Phase 1 investigation (Geophysical Survey Results, June 2001 Memorandum). These samples were analyzed for the CLP-TAL analytical parameters.

- **Three Combined Sewer System (CSS) Borings** – These borings were completed adjacent to areas of concern in the CSS (DP07, DP08, and DP09). Samples were collected adjacent to the 22-inch sewer main, located by the main facility entrance, at depths of approximately 5 feet below the invert sewer elevation and submitted to the laboratory for CLP-TAL chemical analysis.

Also during this quarter, an attempt to accurately locate the french drain and slurry wall was made, in order to place these features on the surveyed facility map. This effort consisted of exploratory borings to depths of 8 to 16 feet below ground surface (bgs) to locate the french drain, and depths of 4 to 12 feet bgs to locate the slurry wall. The exploratory areas are denoted on the attached figure as FS and FN for french drain north and french drain south, respectively. Similarly, the slurry wall exploratory areas were denoted on the attached figure as SW and SE for slurry wall west and slurry wall east. On the FS exploratory DPT holes there were indications of non-native material (gravel) from 4 to12 feet bgs. Based on the presence of gravel from 4 to 12 feet bgs, the southernmost portion of the french drain (FS on figure) was located (July 29, 2001). Although the northern portion of the french drain was not located, an unmapped cleanout for the northern half of the french drain was located during additional research with facility personnel. Indications of the slurry wall were not observed in SW or SE borings. Based on a review of slurry wall construction photographs, the width of the slurry wall is considerably narrower than the two to three feet spacing between the exploratory direct push holes.

Sonic Drilling:
Boart Longyear was contracted to perform drilling and monitoring well installation using rotasonic-drilling methods. During this quarter the following stratigraphic borings (STR), upper aquifer wells (UAW), and lower aquifer wells (LAW) were installed:

- STR11
- UAW10-50, UAW10-80, UAW16-10, UAW18-10, UAW22-20, UAW23-20, UAW24-80, AND UAW25-20.
- LAW12-60 (double cased well).

Monitoring well development began during the end of the calendar quarter. As of September 30, 2001, well development was complete for UAW16-10, UAW18-20, UAW23-20, and UAW25-20. Well development of the remaining wells will be completed during October 2001.

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One groundwater sample and approximately 40 soil samples were collected for geochemical analyses during this reporting period. In accordance with the FI QAPP, quality assurance/quality control samples were also collected.

Sample Analysis
Severn Trent Laboratories (STL) is performing the analysis of the project samples. Samples were analyzed by STL for the parameters specified in the approved QAPP. During this reporting period, STL provided final results for the Phase 2 soil and groundwater sampling. A tabulated summary of these results is included as an attachment to this report.

Plugging and Abandonment of Existing Wells
Two existing wells, MW-6 and MW-7 were plugged and abandoned on September 7, 2001. These wells were 1-1/2 diameter polyvinyl chloride (PVC), nominally 20 feet deep, and installed in 1980. Both wells were overdrilled to 20-foot depth with 8-inch diameter hollow stem augers, and sealed to the surface with a bentonite-cement grout.

SIGNIFICANT FINDINGS
Although data evaluation is ongoing, the following may be summarized as preliminary findings:

- Based on the absorbent well pad sampling performed along the east bank of Mill Creek, optical brighteners were identified west of the southwest portion of the property (i.e., the vicinity of Building 40). These observations may indicate that the shallow groundwater, which generally flows toward the Mill Creek, contains optical brighteners and is flowing off-site to the creek.
- Based on preliminary evaluations of the transducer logs, the shutdown of the Pristine Superfund Site groundwater recovery system had an influence on the wells screened in the deeper portions of the upper aquifer. There was no appreciable influence on the wells screened in the shallower portions of the aquifer.

CHANGES MADE TO THE FACILITY INVESTIGATION (Variance)
During the reporting period, two variances were logged. This variance is documented in the attached forms entitled "Log of Variance, Nonconformance, or Clarification." It is not anticipated that these variances will affect the project objectives.

PROBLEMS AND REMEDIES IDENTIFIED DURING REPORTING PERIOD (Nonconformance)
During the reporting period, two nonconformances were logged. These nonconformances are documented in the attached forms entitled "Log of Variance,

Nonconformance, or Clarification." It is not anticipated that these noncoformances will affect the project objectives.

QUALITY ASSURANCE FIELD AUDIT REPORT

A quality assurance field audit was not performed during this quarter, as documented in the attached Nonconformance Number 14. The next audit will be performed during the November 2001 groundwater sampling.

SUMMARY OF SIGNIFICANT CONTACTS

Regulatory (USEPA, USEPA Consultants, OEPA)

The following contacts were made:

- Rohm and Haas, Inc. and Geomatrix submitted multiple emails communicating field schedules and schedule changes to the USEPA and TechLaw, Inc.
- Geomatrix submitted a letter to USEPA regarding change in approach for the combined sewer system (CSS) evaluation on July 11, 2001. Due to the slow progress and difficulty encountered during camera surveys of the CSS, it was recommended that the approach to the CSS evaluation be modified. The details of the modified approach are provided as Variance No. 13, which is included as an attachment to this Progress Report. It was also communicated in the July 11, 2001 letter that attempts were being made to contact neighboring property owners regarding access for background soil sampling.
- Geomatrix submitted the list of the analytical parameters for Mill Creek seep and sediment analysis in a letter dated June 29, 2001 and an email on August 2, 2001.
- Rohm and Haas, Inc. notified the USEPA that they were unable to obtain access to the Cincinnati Drum Services and Pristine Superfund Site for groundwater sampling or investigation. The email notification of August 9, 2001 was followed with submittal of the letter from Mr. Jeffrey D. Long, owner of the properties, denying the request for access.
- Geomatrix submitted the August 2001 revisions to FI Work Plan to the USEPA and all report holders on August 15, 2001.
- Geomatrix sent a letter to the USEPA that outlined the proposed background sampling plan on September 10, 2001. Prior to this letter, Rohm and Haas had submitted an email on August 30, 2001 to the USPEA regarding the background sampling program and the screening ecological risk assessment and ecological survey.

Access to Off-Site Property Owners

- Geomatrix made phone inquiries to the following neighboring businesses requesting access to their property for the background soil sampling program:

  - Aluchem, Inc.
  - General Tool, Inc.
  - Reading Feed Mill
  - Rosemont Industries
  - Cavette Company, L.P.C
  - City of Reading

These neighboring businesses were either not interested, requested that our proposal be submitted in writing, or never returned Geomatrix's phone calls. Rohm and Haas followed up with a written request for access to General Tool, Inc. and Rosemont Industries. Both of these businesses denied access to their property for background soil sampling. Only the City of Reading agreed to allow Rohm and Haas access to their properties for the collection of background soil samples.

- Mr. Jeffrey D. Long, owner of Cincinnati Drum Service, Inc., was contacted and agreed to allow Geomatrix to cross their property for purposes of sampling Mill Creek and gaining access to the City of Reading property (former city well field) which shares a property boundary with the Cincinnati Drum Service, Inc. facility.

CHANGES IN KEY PERSONNEL DURING REPORTING PERIOD

There were no changes in key personnel during the reporting period.

PROJECTED WORK FOR NEXT REPORTING PERIOD

- Collection of off-site soil samples for background evaluation.
- Collection of seep and sediment samples.
- Complete well development and sampling of monitoring wells installed during Phase 2.
- Phase 3 groundwater sampling and water level measurements of all wells in November 2001.
- Land survey of new sampling locations and new monitoring wells.
- Trenching at selected geophysical anomalies, including the Former Swale Area (SWMU 10).
- Completion of inventory of inputs to the CSS.
- Classification and removal of investigation-derived waste.
- Performance of a quality assurance audit by the QAO.

- Ongoing laboratory analysis of FI samples by STL.
- Receive data validation report by Environmental Standards, Inc.
- Further evaluation of field and chemical data.

ATTACHED SUPPORTING DOCUMENTATION

- Summary of Soil and Groundwater Analytical Results Tables
- Field Activity Daily Logs
- Field Boring Logs and Monitoring Well Construction Logs
- Monitoring Well Sampling and Development Logs
- Sample Control Log
- Chain of Custody Records
- Aquifer Testing – Transducer Logs
- Combined Sewer System Inspection
- Draft Ecological Survey
- Log of Variance and Nonconformances