

# **QUARTERLY PROGRESS REPORT**

## **FIRST QUARTER 2002**

**FORMER TAYLOR INSTRUMENTS SITE**  
**ROCHESTER, NEW YORK**

*PREPARED FOR:*

**COMBUSTION ENGINEERING**  
501 MERRITT 7  
NORWALK, CT 06851

*PREPARED BY:*

**HARDING ESE, INC.**  
1400 CENTERPOINT BOULEVARD, SUITE 158  
KNOXVILLE, TN 37932

**April 2002**



**Harding ESE, Inc.**  
1400 Centerpoint Blvd., Suite 158  
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(865) 531-1922

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First Quarter 2002  
Former Taylor Instruments Site  
Rochester, New York

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## LIST OF ACRONYMS

µg/L	micrograms per liter
CO <sub>2</sub>	carbon dioxide
1,1-DCE	1,1-dichloroethylene
cis-1,2-DCE	cis-1,2-dichloroethylene
trans-1,2-DCE	trans-1,2-dichloroethylene
DO	dissolved oxygen
DPVE	dual-phase vacuum extraction
EPA	Environmental Protection Agency (United States)
mg/L	milligrams per liter
mL/min	milliliters per minute
MS	matrix spike
MS/MSD	matrix spike/matrix spike duplicate
MSD	matrix spike duplicate
NYSDEC	New York State Department of Environmental Conservation
O&M	Operation and Maintenance
ORP	oxidation-reduction potential
PARCC	precision, accuracy, representativeness, completeness, and comparability
QC	quality control
%R	percentage of recovery
RPD	relative percent difference
SQL	sample quantitation limit
System	dual-phase vacuum extraction and groundwater remedial treatment system
TCE	trichloroethylene
VOC	volatile organic compound

## **1.0 INTRODUCTION**

This report summarizes the activities and results for the first quarterly sampling event for the year 2002, which was conducted in March 2002, following implementation of the dual-phase vacuum extraction and groundwater remedial treatment system (System). A summary of the first, second, third, and fourth quarterly sampling event results are also included. These activities occurred at the former Taylor Instruments Site – New York State Department of Environmental Conservation (NYSDEC) Site #828028a located at 95 Ames Street in Rochester, New York (Figure 1, Appendix A), pursuant to a Voluntary Cleanup Agreement. An operational summary of the System for the first quarter of operation for the year 2002 is also presented. This monitoring program has been implemented to document remedial progress in reducing contaminants of concern.

## **2.0 SCOPE OF WORK**

### **2.1 MARCH 2002 QUARTERLY SAMPLING EVENT**

Harding ESE personnel performed the March sampling event to provide an inclusive set of groundwater analytical data for the first quarterly period for the year 2002. Forty-four samples were collected and submitted to Test America, Incorporated (Table 2-1). Forty-three samples were submitted for volatile organic analyses by U.S. Environmental Protection Agency (EPA) Method 8260B. Of the 44 samples collected, 8 were also submitted for natural biodegradation parameters which include nitrate by Method 353.2; sulfate by Method 9038; chloride by Method 325.3; total organic carbon by Method 415.1; sulfide by Method 376.1; ferrous iron by Method 3500D; methane, ethane, and ethene by Method RSK175M; carbon dioxide by Method SM4500CO2C; and alkalinity by Method 310.1M. One sample was submitted for selected natural biodegradation parameters, which were alkalinity, chloride, and carbon dioxide.

Thirty-eight of the samples were environmental samples collected from monitor wells located on the Site. Twelve of the forty-four samples were associated with quality control efforts. All environmental samples, including field duplicates and matrix spike/matrix spike duplicate (MS/MSD) samples, were collected using low-flow peristaltic pumps at flow rates <400 milliliters per minute (mL/min). A summary of analytical results for the extraction, overburden, and bedrock monitor wells is presented in Tables 3-1, 3-2, and 3-3 and Figures 2 and 3, respectively. Laboratory reports and sample chain-of-custody forms for all samples are located in Appendix B and C, respectively. Field measurements of pH, conductivity, temperature, turbidity, oxidation reduction potential, and dissolved oxygen (DO) were collected during purging. Purge and sample data are presented on the field data records located in Appendix D.

### **2.2 TREATMENT SYSTEM OPERATION AND MAINTENANCE (O&M)**

Harding ESE provides full-scale O&M services for the System at the subject site. The System is monitored remotely on a daily basis via telemetry. Key operational data and alarms are accessed through the programmable logic controller via phone line which allows Harding ESE to determine the status of the System and quickly contact local O&M personnel, if necessary, thus maximizing System runtime. Routine O&M activities are conducted monthly and major activities are conducted quarterly. These activities include the following:

- Monthly
  - Collecting System operational data including line pressures, equipment runtime, flow rates, vacuum levels, and other pertinent data.

**Table 2-1**  
**Samples and Analysis,**  
**March 2002 Sampling Event**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample ID	Sample Date	VOCs <sup>1</sup> Analysis	Natural Biodegradation Parameter Analysis <sup>2</sup>	Description
QATB01	03/05/02	X		Trip Blank
QAFB01	03/05/02	X		Field Blank
QARB01	03/05/02	X		Rinsate Blank
W-2	03/05/02		X <sup>3</sup>	Environmental Sample
TW-04	03/05/02	X	X	Environmental Sample
TW-17	03/05/02	X	X	Environmental Sample
TW-20	03/06/02	X	X	Environmental Sample
TW-07	03/06/02	X	X	Environmental Sample
TW-09	03/06/02	X	X	Environmental Sample
OB-09	03/06/02	X	X	Environmental Sample
OB-07	03/07/02	X	X	Environmental Sample
OB-07 (MS)	03/07/02	X		Matrix Spike
OB-07 (MSD)	03/07/02	X		Matrix Spike Duplicate
W-5	03/07/02	X	X	Environmental Sample
W-5 (DUP)	03/07/02	X		Duplicate
W-4	03/08/02	X		Environmental Sample
TW-13	03/08/02	X		Environmental Sample
OB-06	03/08/02	X		Environmental Sample
BR-08	03/08/02	X		Environmental Sample
BR-17	03/08/02	X		Environmental Sample
BR-03	03/08/02	X		Environmental Sample
BR-14	03/09/02	X		Environmental Sample
BR-01	03/09/02	X		Environmental Sample
BR-02	03/09/02	X		Environmental Sample
QATB02	03/09/02	X		Trip Blank
QAFB02	03/09/02	X		Field Blank
QARB02	03/09/02	X		Rinsate Blank

See notes at end of table.

**Table 2-1 (Continued)**  
**Samples and Analysis,**  
**March 2002 Sampling Event**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample ID	Sample Date	VOCs <sup>1</sup> Analysis	Natural Biodegradation Parameter Analysis <sup>2</sup>	Description
BR-06	03/09/02	X		Environmental Sample
BR-06 (MS)	03/09/02	X		Matrix Spike
BR-06 (MSD)	03/09/02	X		Matrix Spike Duplicate
W-6	03/09/02	X		Environmental Sample
BR-16	03/10/02	X		Environmental Sample
BR-07	03/11/02	X		Environmental Sample
BR-07 (DUP)	03/11/02	X		Duplicate
BR-12	03/11/02	X		Environmental Sample
BR-13	03/11/02	X		Environmental Sample
BR-15	03/11/02	X		Environmental Sample
BR-10	03/11/02	X		Environmental Sample
OB-04	03/12/02	X		Environmental Sample
BR-04	03/12/02	X		Environmental Sample
BR-05	03/12/02	X		Environmental Sample
BR-09	03/12/02	X		Environmental Sample
OB-08	03/12/02	X		Environmental Sample
BR-11	03/13/02	X		Environmental Sample

<sup>1</sup> VOCs analyzed by Method 8260B.

<sup>2</sup> Natural biodegradation parameters include nitrate by Method 353.2, sulfate by Method 9038, chloride by Method 325.3, total organic carbon by Method 415.1, sulfide by Method 376.1, ferrous iron by Method 3500D, methane by Method RSK175M, ethane by Method RSK175M, ethene by Method RSK175M, carbon dioxide by Method SM4500CO2C, and alkalinity by Method 310.1M.

<sup>3</sup> Analyzed for alkalinity by Method 310.1M, chloride by Method 325.3, and carbon dioxide by Method SM4500CO2C.

Notes:  
 DUP = duplicate  
 ID = identification  
 MS = matrix spike  
 MSD = matrix spike duplicate  
 VOC = volatile organic compound

- Checking operation of all equipment for vibration or unusual noise, leaks, and unusual operation.
  - Collecting water levels from site monitor wells.
  - Checking filters, operating fluid levels, and cleanliness of vacuum and transfer pumps and groundwater treatment components.
  - Collecting System performance samples. Performance samples are collected from each vacuum pump and air stripper exhaust stack, and the influent and effluent of the air stripper.
- Quarterly
  - Completing all monthly activities.
  - Checking pump motors for wear.
  - Checking all electrical components for proper operation.
  - Cleaning groundwater treatment equipment.
  - Collecting System compliance samples.
  - Collecting compliance samples from the effluent of the System prior to discharge to the Monroe County Pure Waters Sewer System.

The O&M manual for the System contains the above information and full details of all equipment and components (Harding ESE, 2001).

### **3.0 SUMMARY OF RESULTS**

The wells sampled during the first quarterly (March 2002) event are divided into four categories. These categories are (1) the North and South Trichloroethylene (TCE) Source Areas; (2) Upgradient, which includes wells upgradient of the source areas; (3) Downgradient Perimeter, which includes wells downgradient of the source areas; and (4) Deep Bedrock, which includes BR-08 and BR-14. Well construction information is provided in Appendix E.

A summary of wells sampled and the analyses performed are found in Table 2-1. The sample results for the March 2002 sampling event are summarized in Tables 3-1, 3-2, and 3-3. These tables present only positive (i.e., detected) volatile organic compound (VOC) results. Sample VOC results are also presented in "flag boxes" in Appendix A, Figures 2 and 3, representing overburden monitor wells and bedrock monitor wells. TCE concentration trend graphs for both overburden and bedrock monitor wells are provided in Appendix F. These graphs present data from the Baseline, March 2001, June 2001, September 2001, December 2001, and March 2002 sampling events. Natural biodegradation results for the March 2002 event are summarized in Table 3-4 (see Section 3.6). Comprehensive results can be found in the laboratory reports located in Appendix B.

#### **3.1 NORTH AND SOUTH TCE SOURCE AREAS**

##### Overburden Monitor Wells

Monitor wells OB-04 and OB-06 are both located within the South TCE Source Area while OB-07 is within the plume. Results in OB-04 were lower than December 2001 results, with TCE decreasing from 74,500 micrograms per liter ( $\mu\text{g/L}$ ) to 65,600  $\mu\text{g/L}$ , cis-1,2-dichloroethylene (cis-1,2-DCE) falling significantly, from 56,000 to 1,640  $\mu\text{g/L}$ . Daughter products trans-1,2-dichloroethylene (trans-1,2-DCE), 1,1-dichloroethylene (1,1-DCE), and vinyl chloride also declined to 16.6  $\mu\text{g/L}$ , 3.8  $\mu\text{g/L}$ , and non-detection, respectively. OB-06 also displayed a decrease in TCE concentration from past events, with TCE being detected at 526  $\mu\text{g/L}$ , down from 637  $\mu\text{g/L}$ . Also, cis-1,2-DCE was detected at 7.8  $\mu\text{g/L}$ . OB-07 exhibited only 4.2  $\mu\text{g/L}$  of TCE, which is consistent with past detections (21.8  $\mu\text{g/L}$  in December and 17  $\mu\text{g/L}$  in September). No daughter products were detected.

Monitor wells OB-05 and OB-08 are both located within the North TCE Source Area while OB-09 is within the plume. OB-05 was dry during the March sampling event and, therefore, was not sampled. TCE concentrations in OB-08 returned to consistent levels with detections of 15,750  $\mu\text{g/L}$  in March and

**Table 3-1**  
**Summary of Extraction Well VOC Results for the**  
**Baseline Sampling Event**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
EW-N-1*	11/10/00	2,400	93	28 J	--	--
EW-N-2*	11/10/00	7,200	1,100	--	--	--
EW-N-3*	11/10/00	13,000	490 J	--	--	--
EW-N-4*	11/11/00	840	31	--	--	--
EW-N-5*	11/11/00	640	--	--	--	--
EW-N-6*	11/11/00	6,800	130 J	--	--	--
EW-S-1S*	11/10/00	160	16 J	--	--	--
EW-S-1S (DUP)*	11/10/00	170	18 J	--	--	--
EW-S-1D*	11/10/00	200,000	11,000	--	--	--
EW-S-2*	11/08/00	360	180	18	180	4.5 J
EW-S-3*	10/27/00	1,100	60	--	--	--
EW-S-4*	10/26/00	60,000	36,000	--	--	--
EW-S-5*	10/27/00	590,000	--	--	--	--
EW-S-6*	10/27/00	13,000	1,200	--	--	--
EW-S-7*	11/08/00	130,000	1,900 J	--	--	--
EW-S-8*	10/27/00	570,000	--	--	--	--
EW-S-9*	11/08/00	16,000	460 J	--	--	--
EW-S-10*	11/09/00	--	--	--	--	--
EW-S-11*	11/08/00	--	--	--	--	--
EW-S-12*	11/08/00	--	--	--	--	--
EW-S-13*	11/09/00	--	--	--	--	--
EW-S-14*	11/09/00	--	--	--	--	--
EW-S-15*	11/09/00	--	--	--	--	--
EW-S-16*	11/09/00	--	--	--	--	--
BREW-N-1*	11/19/00	1,000	53	1.5 J	--	--
BREW-S-1*	11/19/00	250	140	3.1 J	--	--

Notes: -- = no detections

\* = unique sampling event

µg/L = micrograms per liter

1,1-DCE = 1,1-dichloroethylene

cis-1,2-DCE = cis-1,2-dichloroethylene

DUP = duplicate

ID = identification

J = estimated value

TCE = trichloroethylene

trans-1,2-DCE = trans-1,2-dichloroethylene

VOC = volatile organic compound

**Table 3-2**  
**Summary of Overburden VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

Quarterly Progress Report  
First Quarter 2002  
Former Taylor Instruments Site  
Rochester, New York

Sample ID	Date Sampled	TCE ( $\mu\text{g/L}$ )	cis-1,2-DCE ( $\mu\text{g/L}$ )	trans-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	Vinyl Chloride ( $\mu\text{g/L}$ )
OB-04	11/19/00	70,000	2,900	--	--	--
OB-04	03/24/01	150	3.2 J	--	--	--
OB-04	06/18/01	39,000	21,000	--	--	--
OB-04	9/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-04	12/17/01	71,500	56,000	170	108	10.2
OB-04	03/12/02	65,600	1,640	16.6	3.8	--
OB-05	11/19/00	25,000	4,600	--	--	350
OB-05	03/25/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-05	06/14/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-05	9/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-05	12/01	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-05	3/02	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)
OB-06	11/17/00	2,600	60	--	--	--
OB-06 (DUP)	11/17/00	3,300	80 J	--	--	--
OB-06	03/21/01	540	--	--	--	--
OB-06	06/15/01	720	12 J	--	--	--
OB-06	9/13/01	5,600	240	9.0 J	--	--
OB-06	12/13/01	637	13.7	--	--	--
OB-06	03/08/02	526	7.8	--	--	--
OB-07	11/16/00	--	--	--	--	--
OB-07	03/28/01	7.5	--	--	--	--
OB-07	06/17/01	10 J	--	--	--	--
OB-07	9/17/01	17	1.8 J	--	--	--
OB-07	12/17/01	21.8	7	--	--	--
OB-07	03/07/02	4.2	--	--	--	--
OB-08	11/16/00	40,000	390 J	--	--	--
OB-08	03/20/01	29,000	390 J	--	--	--
OB-08	06/19/01	15,000	240 J	--	--	--
OB-08	9/18/01	27,000	560 J	--	--	--
OB-08	12/18/01	500	9.3	--	--	--
OB-08	03/12/02	15,750	208	8.6	2.7	--

See notes at end of table.

**Table 3-2 (Continued)**  
**Summary of Overburden VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

Quarterly Progress Report  
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Sample ID	Date Sampled	TCE ( $\mu\text{g/L}$ )	cis-1,2-DCE ( $\mu\text{g/L}$ )	trans-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	Vinyl Chloride ( $\mu\text{g/L}$ )
OB-09	11/16/00	180	14	--	--	--
OB-09	03/26/01	150	16	--	--	--
OB-09	06/17/01	150	17	--	--	--
OB-09	9/15/01	180	23	3.5 J	--	--
OB-09	12/15/01	141	20.5	2.3	--	--
OB-09	03/06/02	117	12	--	--	--
TW-01	10/24/00	--	--	--	--	--
TW-01*	03/01	NS	NS	NS	NS	NS
TW-01*	06/01	NS	NS	NS	NS	NS
TW-01*	9/01	NS	NS	NS	NS	NS
TW-01*	12/01	NS	NS	NS	NS	NS
TW-01*	3/02	NS	NS	NS	NS	NS
TW-04	10/24/00	42	79	--	--	--
TW-04	03/22/01	14	16	--	--	--
TW-04	06/15/01	--	--	--	--	--
TW-04	9/14/01	27	38	--	--	--
TW-04	12/13/01	51.1	19.4	--	--	--
TW-04	03/05/02	51	3.7	--	--	--
TW-07	10/25/00	28	7.2	28	--	--
TW-07	03/29/01	--	--	1.2 J	--	--
TW-07	06/16/01	27	3.9 J	13	--	--
TW-07	9/15/01	74	11	18	--	--
TW-07	12/15/01	42.6	7.7	21.4	--	--
TW-07	03/06/02	18.7	2.6	6.4	--	--
TW-09	10/24/00	230	36	--	--	--
TW-09	03/27/01	120	1.9 J	--	--	--
TW-09	06/16/01	200	7.4	--	--	--
TW-09	9/16/01	150	9.6	--	--	--
TW-09	12/15/01	110	4	--	--	--
TW-09	03/06/02	55.4	2	--	--	--

See notes at end of table.

**Table 3-2 (Continued)**  
**Summary of Overburden VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample ID	Date Sampled	TCE ( $\mu\text{g/L}$ )	cis-1,2-DCE ( $\mu\text{g/L}$ )	trans-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	Vinyl Chloride ( $\mu\text{g/L}$ )
TW-13	11/16/00	--	--	--	--	--
TW-13	03/20/01	--	--	--	--	--
TW-13	06/14/01	--	--	--	--	--
TW-13	9/12/01	--	--	--	--	--
TW-13	12/12/01	--	--	--	--	--
TW-13	03/08/02	--	--	--	--	--
TW-17	11/17/00	1,000	7.9 J	--	--	--
TW-17	03/23/01	530	--	--	--	--
TW-17	06/16/01	490	--	--	--	--
TW-17	9/14/01	740	--	--	--	--
TW-17	12/14/01	515	--	--	--	--
TW-17	03/05/02	339	--	--	--	--
TW-20	10/25/00	5.2	--	--	--	--
TW-20	03/27/01	12	--	--	--	--
TW-20	06/16/01	2.9 J	--	--	--	--
TW-20	9/14/01	--	--	--	--	--
TW-20	12/14/01	3.1	--	--	--	--
TW-20	03/06/02	2.4	--	--	--	--
W-2	10/21/00	--	--	--	--	--
W-2*	03/29/01	NS	NS	NS	NS	NS
W-2*	06/15/01	NS	NS	NS	NS	NS
W-2*	9/11/01	NS	NS	NS	NS	NS
W-2*	12/01	NS	NS	NS	NS	NS
W-2*	3/02	NS	NS	NS	NS	NS
W-4	11/17/00	--	--	--	--	--
W-4	03/22/01	1.6 J	--	--	--	--
W-4	06/15/01	1.1 J	--	--	--	--
W-4	9/13/01	--	--	--	--	--
W-4	12/12/01	--	--	--	--	--
W-4	03/08/02	--	--	--	--	--

See notes at end of table.

**Table 3-2 (Continued)**  
**Summary of Overburden VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample ID	Date Sampled	TCE ( $\mu\text{g}/\text{L}$ )	cis-1,2-DCE ( $\mu\text{g}/\text{L}$ )	trans-1,2-DCE ( $\mu\text{g}/\text{L}$ )	1,1-DCE ( $\mu\text{g}/\text{L}$ )	Vinyl Chloride ( $\mu\text{g}/\text{L}$ )
W-5	11/16/00	--	27	11	--	--
W-5	03/23/01	120	25	8.1	--	--
W-5	06/18/01	62	23	9.6	--	--
W-5	9/17/01	64	9.1	6.5	--	--
W-5 (DUP)	9/17/01	62	11	7.3	--	--
W-5	12/17/01	1,435	39.5	9	--	--
W-5 (DUP)	12/17/01	1,780	36.2	8.5	--	--
W-5	03/07/02	737	21.6	3.5	--	--
W-5 (DUP)	03/07/02	607	23.2	3.9	--	--
W-6	10/24/00	--	--	--	--	--
W-6**	03/01	NS	NS	NS	NS	NS
W-6**	06/01	NS	NS	NS	NS	NS
W-6	9/13/01	--	--	--	--	--
W-6	12/12/01	--	--	--	--	--
W-6	03/09/02	--	3	--	--	--

Notes: -- = no detections  
 \* = will not be sampled during quarterly events.  
 \*\* = W-6 was not sampled due to obstruction.  
 $\mu\text{g}/\text{L}$  = micrograms per liter  
 1,1-DCE = 1,1-dichloroethylene  
 cis-1,2-DCE = cis-1,2-dichloroethylene  
 DUP = duplicate

ID = identification  
 J = estimated value  
 NS = not sampled  
 TCE = trichloroethylene  
 trans-1,2-DCE = trans-1,2-dichloroethylene  
 VOC = volatile organic compound

**Table 3-3**  
**Summary of Bedrock VOC Results for the**  
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Sample ID	Date Sampled	TCE ( $\mu\text{g/L}$ )	cis-1,2-DCE ( $\mu\text{g/L}$ )	trans-1,2-DCE ( $\mu\text{g/L}$ )	1,1-DCE ( $\mu\text{g/L}$ )	Vinyl Chloride ( $\mu\text{g/L}$ )
BR-01	11/17/00	180	550	4.3 J	--	3.5 J
BR-01	03/21/01	320	34	2.2 J	--	--
BR-01 (DUP)	03/21/01	320	35	2.4 J	--	--
BR-01	06/16/01	270	59	4.4 J	--	--
BR-01	9/14/01	31	170	16	--	--
BR-01	12/14/01	63.8	77.5	2	--	--
BR-01	03/09/02	47.3	5.5	1.6	--	--
BR-02	11/18/00	1,800	540	31 J	--	--
BR-02	03/21/01	1,200	95	--	--	--
BR-02	06/17/01	1,000	94	27 J	--	--
BR-02	9/15/01	7,000	1,500	63	31 J	--
BR-02	12/15/01	6,500	1,830	59.8	30.3	19.6
BR-02	03/09/02	588	79.6	20.8	1.2	--
BR-03	11/18/00	440	99	1.2 J	2.2 J	--
BR-03	03/22/01	810	12 J	--	3.2 J	--
BR-03	06/15/01	500	20 J	--	--	--
BR-03	9/14/01	330	7.8 J	--	--	--
BR-03	12/13/01	780	7.6	--	2.2	--
BR-03	03/08/02	599	9.8	--	2.1	--
BR-04	11/19/00	10,000	600	140	17 J	25 J
BR-04	03/24/01	9,000	400	95 J	--	--
BR-04	06/19/01	4,300	320	61 J	--	--
BR-04	9/17/01	5,000	420	100 J	--	--
BR-04	12/17/01	5,700	430	79.9	9	27.4
BR-04	03/12/02	5,750	384	77	8.1	23.4
BR-05	11/19/00	4,800	1,200	130	--	160
BR-05	03/25/01	5,800	850	120 J	--	160
BR-05	06/19/01	4,300	1,600	130	37 J	290
BR-05 (DUP)	06/19/01	3,700	1,500	--	--	270
BR-05	9/18/01	2,500	1,800	150	38 J	420
BR-05	12/18/01	3,420	2,480	153.5	41.5	290.5
BR-05	03/12/02	3,050	1,734	164	40.2	326

See notes at end of table.

**Table 3-3 (Continued)**  
**Summary of Bedrock VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

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Sample ID	Date Sampled	TCE ( $\mu\text{g}/\text{L}$ )	cis-1,2-DCE ( $\mu\text{g}/\text{L}$ )	trans-1,2-DCE ( $\mu\text{g}/\text{L}$ )	1,1-DCE ( $\mu\text{g}/\text{L}$ )	Vinyl Chloride ( $\mu\text{g}/\text{L}$ )
BR-06	11/17/00	--	--	--	--	--
BR-06	03/22/01	--	--	--	--	--
BR-06	06/15/01	1.6 J	--	--	--	--
BR-06	9/12/01	--	--	--	--	--
BR-06	12/12/01	--	--	--	--	--
BR-06	03/09/02	--	--	--	--	--
BR-07	11/18/00	7.4	29	10	--	220
BR-07	03/23/01	3.4 J	34	13	--	210
BR-07	06/14/01	2.7 J	33	13	--	200
BR-07 (DUP)	06/14/01	2.2 J	34	12	--	200
BR-07	9/12/01	6.2	32	16	--	180
BR-07 (DUP)	9/12/01	5.0	31	14	--	180
BR-07	12/12/01	4.7	28.5	10.2	--	101
BR-07 (DUP)	12/12/01	4.6	29.3	10.3	--	104
BR-07	03/11/02	--	9	4.3	--	33.6
BR-07 (DUP)	03/11/02	--	8.8	4.4	--	33.7
BR-08 (Deep)	11/19/00	540	44	5.2 J	--	7.0 J
BR-08 (Deep)	03/24/01	1,100	320	6.7 J	--	--
BR-08 (Deep)	06/15/01	720	210	--	--	--
BR-08 (Deep)	9/13/01	830	250	--	--	--
BR-08 (Deep)	12/13/01	649	246	3	--	3.1
BR-08 (Deep)	03/08/02	621	242	3	--	4
BR-09	11/18/00	13,000	190 J	--	--	--
BR-09	03/28/01	9,500	100 J	--	--	--
BR-09	06/19/01	1,500	36 J	--	--	--
BR-09	9/18/01	5,500	68 J	--	--	--
BR-09	12/18/01	6,000	60	2.9	--	--
BR-09	03/12/02	2,420	302	5.4	--	--
BR-10	11/18/00	4,000	450	27 J	--	--
BR-10	03/28/01	4,700	980	110 J	--	--
BR-10	06/18/01	8,500	1,000	--	--	--
BR-10	9/17/01	8,700	1,700	160 J	--	--
BR-10	12/16/01	5,350	1,200	82.8	3.4	5.6
BR-10	03/11/02	3,745	1,090	78.2	3.9	5.5

See notes at end of table.

**Table 3-3 (Continued)**  
**Summary of Bedrock VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

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Sample ID	Date Sampled	TCE ( $\mu\text{g}/\text{L}$ )	cis-1,2-DCE ( $\mu\text{g}/\text{L}$ )	trans-1,2-DCE ( $\mu\text{g}/\text{L}$ )	1,1-DCE ( $\mu\text{g}/\text{L}$ )	Vinyl Chloride ( $\mu\text{g}/\text{L}$ )
BR-11	11/18/00	1,400	320	52	--	13 J
BR-11	03/28/01	44,000	260	120	21	--
BR-11 (DUP)	03/28/01	52,000	270	120	19 J	21
BR-11	06/20/01	39,000	660 J	--	--	--
BR-11	9/18/01	60,000	--	--	--	--
BR-11	12/18/01	140	339	108	2	35.4
BR-11	03/13/02	33,300	370	106	10.9	28.1
BR-12	11/19/00	200	8.1	--	--	--
BR-12	03/25/01	130	21	--	--	--
BR-12	06/17/01	99	26	--	--	--
BR-12	9/15/01	27	37	2.1 J	--	--
BR-12	12/16/01	--	3	--	--	--
BR-12	03/11/02	7.4	15.3	--	--	--
BR-13	11/19/00	2.5 J	--	--	--	--
BR-13	03/25/01	3,200 J	150	14	1.7 J	1 J
BR-13	06/18/01	3,100	160	--	--	--
BR-13	9/16/01	2,600	160	--	--	--
BR-13	12/16/01	156	14.6	--	--	--
BR-13	03/11/02	132	23.7	--	--	--
BR-14 (Deep)	11/19/00	--	1.2 J	--	--	--
BR-14 (Deep)	03/23/01	1.2 J	--	--	--	--
BR-14 (Deep)	06/16/01	--	--	--	--	--
BR-14 (Deep)	9/13/01	--	--	--	--	--
BR-14 (Deep)	12/14/01	2.2	--	--	--	--
BR-14 (Deep)	03/09/02	--	--	--	--	--
BR-15	11/19/00	2,700	54 J	--	--	--
BR-15 (DUP)	11/19/00	2,700	49 J	--	--	--
BR-15	03/26/01	2,500	33 J	--	--	--
BR-15	06/18/01	2,300	49 J	--	--	--
BR-15	9/16/01	4,800	110 J	--	--	--
BR-15	12/16/01	6,590	189	28.2	2	1.1
BR-15	03/11/02	5,500	172	36.6	2.2	--

See notes at end of table.

**Table 3-3 (Continued)**  
**Summary of Bedrock VOC Results for the**  
**Baseline, 2001, and March 2002 Sampling Events**

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Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)
BR-16	11/19/00	6.0	3.8 J	--	--	--
BR-16	03/25/01	1.2 J	--	--	--	--
BR-16	06/17/01	--	--	--	--	--
BR-16	9/15/01	--	--	--	--	--
BR-16	12/16/01	--	--	--	--	--
BR-16	03/10/02	--	--	--	--	--
BR-17	11/18/00	840	160	84	3.6 J	--
BR-17	03/24/01	6,900	360	93	9.4 J	52
BR-17	06/15/01	5,200	260	68 J	--	46
BR-17	9/13/01	4,100	220	60 J	--	57 J
BR-17	12/13/01	3,840	248	44	4.7	33.4
BR-17	03/08/02	2,600	208	56.5	5.1	57

Notes: -- = no detections

µg/L = micrograms per liter

1,1-DCE = 1,1-dichloroethylene

cis-1,2-DCE = cis-1,2-dichloroethylene

DUP = duplicate

ID = identification

J = estimated value

TCE = trichloroethylene

trans-1,2-DCE = trans-1,2-dichloroethylene

VOC = volatile organic compound

past detections of 27,000 µg/L in September, and 15,000 µg/L in June. December 2001 TCE levels were 500 µg/L. Also, cis-1,2-DCE was detected at a concentration of 208 µg/L, down from 560 J µg/L in September 2001. OB-09 remained consistent with past concentrations of TCE, with levels at 117 µg/L (concentrations of 141 µg/L in December and 180 µg/L in September). OB-09 also displayed a concentration of cis-1,2-DCE at 12 µg/L.

In addition to these detections, toluene was detected at 3.4 µg/L in OB-04. Since toluene was not determined to be a contaminant of concern for this site and has not been detected historically in on-site monitor wells, this contamination is not considered representative of site groundwater conditions.

### Bedrock

Bedrock monitor wells BR-04, BR-09, BR-10, BR-11, and BR-17 are located within the South TCE Source Area. The TCE concentration in BR-04 was 5,750 µg/L, and the breakdown products cis-1,2-DCE and trans-1,2-DCE were 384 and 77 µg/L, respectively. Also in BR-04, 1,1-DCE and vinyl chloride were detected at 8.1 µg/L and 23.4 µg/L. BR-09 exhibited a decline in TCE, while exhibiting an increase in daughter product concentrations. TCE was detected at 2,420 µg/L (down from 6,000 µg/L in December), while cis-1,2-DCE was detected at 302 µg/L (up from 60 µg/L in December), and trans-1,2-DCE was detected at 5.4 µg/L (up from 2.9 µg/L in December). TCE concentrations continued to drop (8,700 µg/L in September 2001; 5,350 µg/L in December 2001; and 3,745 µg/L in March 2002) in well BR-10. Daughter products were also detected in BR-10 consisting of cis-1,2-DCE at 1,090 µg/L; trans-1,2-DCE at 78.2 µg/L; 1,1-DCE at 3.9 µg/L; and vinyl chloride at 5.5 µg/L. BR-11 TCE concentrations were detected at 33,300 µg/L, while daughter products cis-1,2-DCE (370 µg/L), trans-1,2-DCE (106 µg/L), 1,1-DCE (10.9 µg/L), and vinyl chloride (28.1 µg/L) were also detected. In well BR-17, TCE concentrations continued to drop (from 5,200 in June, 4,100 µg/L in September, 3,840 µg/L in December, to 2,600 µg/L in March 2002). Daughter products (cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and vinyl chloride) were also detected at 208, 56.5, 5.1, and 57 µg/L, respectively.

BR-05, BR-12, BR-15, and BR-16 are located in the North TCE Source Area. BR-05 recorded TCE levels at 3,050 µg/L, cis-1,2-DCE levels at 1,734 µg/L, trans-1,2-DCE levels at 164 µg/L, 1,1-DCE levels at 40.2 µg/L, and vinyl chloride at 326 µg/L. BR-12 remained consistently low in TCE concentrations, with a March 2002 detection of 7.4 µg/L. Also, cis-1,2-DCE was detected at 15.3 µg/L. BR-15 showed a decrease in TCE concentrations from the December 2001 (6,590 µg/L) event to the March 2002 (5,500 µg/L) event. Daughter products remained consistent were recorded at cis-1,2-DCE at 172 µg/L, trans-

1,2-DCE at 36.6 µg/L, 1,1-DCE at 2.2 µg/L, and vinyl chloride was not detected. BR-16 remained at nondetect levels.

In addition to these detections, benzene was detected at 11.6 µg/L in BR-05. Since benzene was not determined to be a contaminant of concern for this site and has not been detected historically in on-site monitor wells, this contamination is not considered representative of site groundwater conditions.

### **3.2 UPGRAIDENT MONITOR WELLS**

#### Overburden Monitor Wells

W-2 and W-6 are southwest of the source areas and are considered to be upgradient. W-2 is not sampled as part of the quarterly sampling program, but displayed no VOC detections during the Baseline event. W-6 VOC results were all non-detections, with the exception of cis-1,2-DCE having a result of 3 µg/L. W-4 is located west of the source areas and is also considered upgradient. Concentrations in W-4 remained at non-detect levels.

#### Bedrock Monitor Wells

BR-06 and BR-07 are also upgradient wells, located southwest and west of the source areas. BR-06 displayed no detectable TCE or daughter product concentrations for the March 2002 sampling event. There was no detection of TCE in BR-07. Daughter product concentrations in BR-07 declined, with 9 µg/L (cis-1,2-DCE) and 4.3 µg/L (trans-1,2-DCE).

In addition to this detection, acetone and benzene were detected in BR-07 at 488 µg/L and 3 µg/L respectively. Since neither acetone nor benzene were determined to be contaminants of concern for this site and have not been detected historically in on-site monitor wells, this contamination is not considered representative of site groundwater conditions.

### **3.3 PERIMETER DOWNGRADIENT MONITOR WELLS**

#### Overburden Monitor Wells

Downgradient well TW-13 showed no VOC detections. TW-04 displayed detections of TCE and breakdown product cis-1,2-DCE at 51 µg/L and 3.7 µg/L, respectively. TCE in TW-20 was detected at 2.4 µg/L, while daughter product concentrations remained at non-detect levels. Concentrations of TCE in

TW-17 dropped to 339 µg/L from 515 µg/L in December and 740 µg/L in September, while daughter products remained at non-detect levels. Measured concentrations in TW-07 were 18.7 µg/L of TCE, 2.6 µg/L of cis-1,2-DCE, and 6.4 µg/L of trans-1,2-DCE. In TW-09, TCE concentrations continued to fall from 150 to 110 to 55.4 µg/L in March 2002, as well as cis-1,2-DCE dropping from 9.6 µg/L to 4 µg/L to 2 µg/L. Concentrations in W-5 continued declining, with TCE concentrations of 737 µg/L, and cis-1,2-DCE and trans-1,2-DCE concentrations of 21.6 and 3.5 µg/L, respectively.

#### Bedrock Monitor Wells

The perimeter downgradient bedrock monitor wells are BR-01, BR-02, BR-03, and BR-13. Concentrations of TCE in BR-01 were 47.3 µg/L, while daughter products cis-1,2-DCE and trans-1,2-DCE were 5.5 µg/L and 1.6 µg/L, respectively. Concentrations in BR-02 dropped significantly, with TCE levels going from 6,500 µg/L during December sampling activities to 588 µg/L in the March 2002 sampling event, while daughter products displayed a similar trend (cis-1,2-DCE at 1,830 µg/L in December to 79.6 µg/L in March; trans-1,2-DCE at 59.8 µg/L in December to 20.8 µg/L in March; 1,1-DCE at 30.3 µg/L in December to 1.2 µg/L in March; and vinyl chloride going from 19.6 µg/L in December to non-detect). BR-03 levels remained consistent, with 599 µg/L of TCE, 9.8 µg/L of cis-1,2-DCE, and 2.1 µg/L of 1,1-DCE. Concentrations in BR-13 also remained consistent, with TCE going from 156 µg/L in December to 132 µg/L in March, and cis-1,2-DCE going from 14.6 µg/L in December to 23.7 µg/L in March.

#### **3.4 DEEP BEDROCK MONITOR WELLS**

BR-08 is the deep bedrock well located in the South TCE Source Area, while BR-14 is located in the North TCE Source Area. BR-08 concentrations of TCE-related products remained consistent from the December event with TCE decreasing from 649 to 621 µg/L, cis-1,2-DCE concentrations lowering from 246 to 242 µg/L, trans-1,2-DCE concentrations remaining constant at 3 µg/L, and vinyl chloride concentrations rising from 3.1 µg/L to 4 µg/L. BR-14 had no detections of TCE related products.

In addition to these detections, there were several other compounds detected. BR-08 displayed detections of acetone (612 µg/L), benzene (2.8 µg/L), toluene (8.6 µg/L), 1,2,4-trimethylbenzene (1.5 µg/L), and total xylenes (9 µg/L). BR-14 had detections of acetone (309 µg/L), 2-hexanone (12.3 µg/L), and toluene (6.4 µg/L). Since none of these compounds were determined to be contaminants of concern for this site and have not been detected historically in on-site monitor wells, this contamination is not considered representative of site groundwater conditions.

### **3.5 POTENTIOMETRIC SURFACE**

A potentiometric surface map was generated to depict groundwater elevations for the overburden groundwater. Surfer™ (Version 7.0), a Windows-based program, was used to plot the potentiometric surface map in Appendix A, Figure 4. This program mathematically calculates contours based upon groundwater elevation measurements collected in the field.

The March 2002 map was based upon water level information collected during the course of sampling activities on the subject site. Overburden potentiometric surface mapping for the March 2002 event agrees with past mapping, which indicates that groundwater flow is being directly affected by pumping conditions.

Attempts were made to contour the bedrock potentiometric surface, but the bedrock water level data cannot readily be plotted due to the large variation in elevation heads. These variations are due to the fractured bedrock system. The head data appears to be bi-modally distributed possibly reflecting differing elevations of water bearing fractures. The absence of contaminants at the southwest corner of the site (BR-06) and their presence in wells along the north and east site perimeter also support a supposition that bedrock flow is generally towards the north. Bedrock water level elevations are presented in Figure 5 in Appendix A.

### **3.6 NATURAL BIODEGRADATION**

During the March 2002 sampling event, natural biodegradation parameters were collected from nine monitor wells including background well W-2 and perimeter wells TW-04, TW-07, TW-09, TW-17, TW-20, and W-5. Samples were also collected from OB-07 and OB-09, which are located within the TCE source areas. Table 3-4 shows a comparison between the natural biodegradation parameters in nine monitor wells and the values given in the EPA screening protocol as favorable for natural biodegradation of chlorinated solvents (EPA, 1998). Shaded values in the table show values favorable for natural biodegradation. W-2 data is provided for background values.

Table 3-4 shows that TCE daughter products were detected in four out of the eight perimeter and source area monitor wells. Several other parameters measured in each of these monitor wells containing TCE daughter products were indicative that natural biodegradation is occurring. Daughter products were not detected in TW-17, TW-20, OB-07, and OB-09. Values for the following parameters from TW-17 indicated conditions conducive to natural biodegradation: nitrate, pH, and carbon dioxide (CO<sub>2</sub>). TW-20,

**Table 3-4**  
**Summary of Natural Biodegradation Results,**  
**March 2002 Sampling Event<sup>1</sup>**

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Parameter	Value Favorable for Natural Biodegradation	TW-04	TW-07	TW-09	TW-17	TW-20	W-5	OB-07	OB-09	W-2 (background)
DO (mg/L)	<0.5	0.54	2.45	0.76	6.40	2.49	5.05	5.60	0.00	5.09
Nitrate (mg/L)	<1	0.13	35.80	1.30	0.11	2.29	<0.10	3.27	4.99	NA
Iron II (mg/L)	>1	0.428	0.330	<0.100	0.100	<0.100	0.584	<0.100	0.174	NA
Sulfate (mg/L)	<20	259.0	371.0	362.0	82.5	58.6	78.2	200.0	359.0	NA
Sulfide (mg/L)	>1	<2	<2	<2	<2	<2	<2	<2	<2	NA
Methane (mg/L)	>0.5	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	NA
ORP (mV)	<50	8	65	28	63	54	-54	133	-7	152
pH	5<pH<9	6.99	6.57	7.07	7.17	6.98	6.93	8.78	7.01	7.69
TOC (mg/L)	>20	<1.00	2.26	<1.00	<1.00	<1.00	<1.00	2.10	<1.00	NA
Temperature (°C)	>20	4.58	9.03	8.37	4.46	6.42	8.18	7.05	10.76	6.52
CO <sub>2</sub> (mg/L)	Note 1	48.8	93.3	20.4	43.7	47.3	32.9	<3.0	45.1	17.4
Alkalinity (mg/L)	Note 1	265.0	324.0	163.0	270.0	322.0	354.0	69.1	288.0	224.0
Chloride (mg/L)	Note 1	10.60	38.40	9.45	13.20	10.60	6.67	31.20	11.90	17.00
BTEX (mg/L)	>0.1	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	NA
Ethene (mg/L)	>0.01	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	NA
Ethane (mg/L)	>0.01	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	NA
Daughter Products Detected	Any detection of daughter products	Yes	Yes	Yes	No	No	Yes	No	No	NA

See notes at end of table.

**Table 3-4 (Continued)**  
**Summary of Natural Biodegradation Results,**  
**March 2002 Sampling Event<sup>1</sup>**

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<sup>1</sup> W-2 is the background well; other wells are perimeter wells.

Note: A value greater than two times the background value is considered favorable for natural biodegradation. The W-2 value is the background value.

Reference: EPA. 1998. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water* EPA/600/R-98/128 (September).

Shading indicates parameters supportive of natural biodegradation.

µg/L = micrograms per liter

BTEX= benzene, toluene, ethylbenzene, and xylene

°C = degrees Celsius

CO<sub>2</sub> = carbon dioxide

DCE = dichloroethylene

DO = dissolved oxygen

EPA = Environmental Protection Agency (United States)

J = estimated

mg/L = milligrams per liter

mV = millivolt

NA = not applicable

ORP = oxygen reduction potential

TCE = trichloroethylene

TOC = total organic compound

VOC = volatile organic compound

having two parameter readings favorable for natural biodegradation, is at the northeast corner of the property. OB-07 displayed a favorable pH reading, while OB-09 exhibited favorable reading in DO, oxidation-reduction potential (ORP), pH, and CO<sub>2</sub>. Concentrations of daughter products may be present in the vicinity of the four wells at concentrations less than the sample quantitation limits (SQLs) or daughter products may have completely degraded to non-toxic end products, such as CO<sub>2</sub>, water, and chloride.

Due to analysis method constraints, samples analyzed for ferrous iron were analyzed outside of holding time. The results for this parameter should not vary significantly if they had been analyzed within holding time.

In summary, values for various natural biodegradation parameters and the presence of TCE daughter products indicate that natural biodegradation is occurring.

### **3.7 TREATMENT SYSTEM PERFORMANCE**

The System was fully operational on January 6, 2001. Since then, it has operated 97 percent of available hours through March 2002. The system has operated 99 percent of available hours through the first quarter of operation in 2002 from January to March. The limited downtime during the first quarter of operation is attributed to routine O&M. Table 3-5 provides a summary of monthly System operational data. The System is currently extracting soil vapor and groundwater from 23 dual-phase vacuum extraction (DPVE) wells: EW-S-1 through EW-S-16 and EW-N-1 through EW-N-6, and groundwater from two bedrock extraction wells BREW-S-1 and BREW-N-1 (see Figure 1, Appendix A). The vapor extracted from the dual-phase operation is discharged through the effluent piping manifold of the three vacuum pumps. The groundwater collected from both the DPVE wells and from the bedrock extraction wells is combined in an equalization tank prior to treatment via the tray air stripper. The system has extracted approximately 16.7 million gallons of groundwater through March 2002.

During the first quarter of operation in 2002, 3.03 million gallons of groundwater was extracted with an average flow rate of 24 gallons per minute, and a total of 145 pounds of VOCs were removed from the subsurface (see Figures 6 and 7, Appendix A). A total of 1,979 pounds of contaminants have been removed since startup of the system. The majority of VOCs are still being removed from the overburden through the vapor phase and stripped from groundwater during the vacuum extraction process. During

**Table 3-5**  
**System Operational Summary,**  
**January 2001 – March 2002**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Parameter	2001						
	January	February	March	April	May	June	July
System Up-time (%)	97	76	93	99.9	99.9	99.9	100
Average System Vacuum <sup>1</sup>							
South Source Area (in. Hg)	18	18	20	17	16	16	16
North Source Area (in. Hg)	14	14	18	18	20	15	16
Average System Groundwater Flowrates <sup>2</sup>							
Total System (gpm)	23	27	29	26	26	25	25
Dual Phase Extraction (gpm)	5	8	11	8	7	7	7
Bedrock Extraction (gpm)	18	19	18	18	19	18	18
Average System Vapor Flowrates <sup>1</sup>							
Dual Phase Extraction	189	157	137	168	180	180	180
South Source Area (CFM)	112	117	123	110	110	120	180
Dual Phase Extraction North Source Area (CFM)							
System Mass Removal Rate (lbs./hr) <sup>3</sup>	0.33	0.13	0.06	0.08	0.05	0.03	0.03
System Mass Removed (lbs.) <sup>3</sup>	387	383	136	245	145	53	94
Cumulative Mass Removed (lbs.) <sup>3</sup>	387	770	906	1,151	1,296	1,349	1,442
Air Stripper Removal Efficiency (%) <sup>3</sup>	99.6	99.6	99.6	99.6	99.6	99.6	99.3
Cumulative Groundwater Recovered (gallons) <sup>2</sup>	1,546,559	2,637,226	3,833,248	4,999,392	6,141,936	7,178,379	8,369,973
See notes at end of table.							

**Table 3-5 (Continued)**  
**System Operational Summary,**  
**January 2001 – March 2002**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Parameter	2001					2002		
	August	September	October	November	December	January	February	March
System Up-time (%)	98	98	99.9	99.9	99.9	99.5	99.4	98.9
Average System Vacuum <sup>1</sup>								
South Source Area (in. Hg)	17	16	16	19	16	14	21	18
North Source Area (in. Hg)	17	16	18	17	13	14	21.5	15
Average System Groundwater Flowrates <sup>2</sup>								
Total System (gpm)	24	24	25	23	27	24	21	26
Dual Phase Extraction (gpm)	6	6	7	5	9	7	6	9
Bedrock Extraction (gpm)	18	18	18	18	18	18	16	17
Average System Vapor Flowrates <sup>1</sup>								
Dual Phase Extraction South Source Area (CFM)	180	180	185	145	170	230	115	155
Dual Phase Extraction North Source Area (CFM)	175	170	130	100	150	120	100	120
System Mass Removal Rate (lbs./hr) <sup>3</sup>	0.04	0.04	0.03	0.06	0.003	0.005	0.05	0.03
System Mass Removed (lbs.) <sup>3</sup>	88	107	87	100	10	11	77	57
Cumulative Mass Removed (lbs.) <sup>3</sup>	1,530	1,637	1,724	1,824	1,834	1,845	1,922	1,979
Air Stripper Removal Efficiency (%) <sup>3</sup>	99.5	99.2	99.2	99.3	99.6	99.8	99.6	99.6
Cumulative Groundwater Recovered (gallons) <sup>2</sup>	9,431,598	10,454,171	11,489,759	12,514,776	13,711,132	14,773,808	15,606,639	16,748,105

<sup>1</sup> Instantaneous.

<sup>2</sup> Continuous.

<sup>3</sup> Calculated.

Notes: in. Hg = inches of mercury  
 CFM = cubic feet per minute  
 lbs./hr = pounds per hour

gpm = gallons per minute  
 lbs. = pounds

the first quarter of operation in 2002, approximately 128 pounds (88 percent) of VOCs were removed by the vacuum extraction process and the remaining 17 pounds (12 percent) was removed by air stripping of the collected groundwater. Table 3-6 summarizes groundwater sample results from the equalization tank and vapor sampling results from the effluent of three vacuum pumps and air stripper. As indicated by the results, the total monthly mass of VOCs extracted by the treatment system has decreased during the first quarter of operation in 2002, which is expected since there is both less VOC mass to extract and it is expected that the more loosely bound and easily extracted VOCs were extracted first. This decrease in VOC mass can also be generally seen in the groundwater monitoring results discussed earlier in this report.

**Table 3-6**  
**System Analytical Data,**  
**January 2001 – March 2002**

Quarterly Progress Report  
First Quarter 2002  
Former Taylor Instruments Site  
Rochester, New York

Sample Location	Date	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride
<b>Vapor Analytical Results<sup>1</sup> (mg/m<sup>3</sup>)</b>					
Vacuum Pump #1 (South TCE Source Area)	1/6/01	<25	<25	914.00	<25
	2/7/01	2.70	<1.0	371.00	<1.0
	3/6/01	<5.0	<5.0	129.00	<5.0
	4/17/01	1.60	<1.0	215.00	<1.0
	5/16/01	1.20	<1.0	120.00	<1.0
	6/7/01	1.20	<1.0	110.00	<1.0
	7/13/01	<1.0	<1.0	80.00	<1.0
	8/7/01	<1.0	<1.0	90.00	<1.0
	9/12/01	1.10	<1.0	97.00	<1.0
	10/11/01	<1.0	<1.0	76.00	<1.0
	11/9/01	1.4	<1.0	160.00	<1.0
	12/14/01	<0.5	<0.5	10.90	<0.5
	1/8/02	<0.5	<0.5	9.25	<0.5
	2/18/02	2.10	<1.0	170.00	<1.0
	3/8/02	1.40	<1.0	90.00	<1.0
Vacuum Pump #2 (South TCE Source Area)	1/6/01	<25	<25	963.00	<25
	2/7/01	<12.5	<12.5	425.00	<12.5
	3/6/01	<5.0	<5.0	140.00	<5.0
	4/17/01	2.30	<1.0	247.00	<1.0
	5/16/01	1.20	<1.0	110.00	<1.0
	6/7/01	NS	NS	NS	NS
	7/13/01	<1.0	<1.0	78.00	<1.0
	8/7/01	<1.0	<1.0	89.00	<1.0
	9/12/01	1.2	<1.0	110.00	<1.0
	10/11/01	<1.0	<1.0	76.00	<1.0
	11/9/01	1.30	<1.0	170.00	<1.0
	12/14/01	<0.5	<0.5	7.75	<0.5
	1/8/02	<0.5	<0.5	8.61	<0.5
	2/18/02	2.10	<1.0	190.00	<1.0
	3/8/02	1.40	<1.0	86.00	<1.0

See notes at end of table.

**Table 3-6 (Continued)**  
**System Analytical Data,**  
**January 2001 – March 2002**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample Location	Date	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride
<b>Vapor Analytical Results<sup>1</sup> (mg/m<sup>3</sup>)</b>					
Vacuum Pump #3 (North TCE Source Area)	1/6/01	<1.0	<1.0	41.00	<1.0
	2/7/01	1.40	<1.0	38.00	<1.0
	3/6/01	<1.0	<1.0	35.00	<1.0
	4/17/01	1.10	<1.0	42.00	<1.0
	5/16/01	2.20	<1.0	95.00	<1.0
	6/7/01	<1.0	<1.0	26.00	<1.0
	7/13/01	<1.0	<1.0	31.00	<1.0
	8/7/01	<1.0	<1.0	28.00	<1.0
	9/12/01	<1.0	<1.0	21.00	<1.0
	10/11/01	<1.0	<1.0	28.00	<1.0
	11/9/01	<1.0	<1.0	22.00	<1.0
	12/14/01	<0.5	<0.5	1.73	<0.5
	1/8/02	<0.5	<0.5	2.81	<0.5
	2/18/02	1.50	<1.0	35.00	<1.0
	3/8/02	<1.0	<1.0	52.00	<1.0
Air Stripper Effluent	1/6/01	1.20	<1.0	32.00	<1.0
	2/7/01	1.20	<1.0	17.00	<1.0
	3/6/01	2.10	<1.0	25.00	<1.0
	4/17/01	4.00	<1.0	40.00	<1.0
	5/16/01	4.90	<1.0	26.00	<1.0
	6/7/01	4.50	<1.0	17.00	<1.0
	7/13/01	4.90	<1.0	17.00	<1.0
	8/7/01	3.90	<1.0	14.00	<1.0
	9/12/01	3.20	<1.0	11.00	<1.0
	10/11/01	5.00	<1.0	18.00	<1.0
	11/9/01	3.90	<1.0	15.00	<1.0
	12/14/01	<0.5	<0.5	0.74	<0.5
	1/8/02	0.76	<0.5	2.60	<0.5
	2/18/02	5.3	<1.0	30.00	<1.0
	3/8/02	3.7	<1.0	14.00	<1.0

See notes at end of table.

**Table 3-6 (Continued)**  
**System Analytical Data,**  
**January 2001 – March 2002**

Quarterly Progress Report  
 First Quarter 2002  
 Former Taylor Instruments Site  
 Rochester, New York

Sample Location	Date	cis-1,2-DCE	trans-1,2-DCE	TCE	Vinyl Chloride
<b>Groundwater Analytical Results<sup>2</sup> (<math>\mu\text{g/L}</math>)</b>					
Air Stripper Influent	1/6/01	210	<130.00	5,000.00	<25.00
	2/7/01	300.00	12.00	4,100.00	1.10
	3/6/01	340.00	<130.00	4,000.00	<25.00
	4/17/01	390.00	12.00	3,500.00	<1.00
	5/16/01	660.00	16.00	3,200.00	<1.0
	6/7/01	750.00	15.00	3,000.00	1.50
	7/13/01	790.00	16.00	2,400.00	1.40
	8/7/01	1,100.00	16.00	3,200.00	<1.0
	9/12/01	660.00	10.00	2,000.00	3.00
	10/11/01	570.00	14.00	2,000.00	1.90
	11/9/01	640.00	12.00	2,300.00	2.20
	12/14/01	696.00	18.40	1,580.00	<2.0
	1/8/02	577.00	8.90	2,040.00	2.30
	2/18/02	427.00	<20	1,910.00	<20
	3/8/02	521.00	11.00	2,150.00	3.20

<sup>1</sup> Vapor Analysis is by EPA Method TO-14 Modified.

<sup>2</sup> Groundwater Analysis is by EPA Method 8260.

Notes:  $\mu\text{g/L}$  = micrograms per liter

DCE = dichloroethylene

EPA = Environmental Protection Agency (United States)

$\text{mg/m}^3$  = milligrams per cubic meter

NS = Vacuum Pump #2 was not sampled because it was shut down due to mechanical problems.

TCE = trichloroethylene

## **4.0 ANALYTICAL PROGRAM**

Overall data quality is assessed by grouping particular data evaluation findings and reviewing them in terms of precision, accuracy, representativeness, completeness, and comparability (PARCC) criteria. Data generated during this monitoring period were evaluated for PARCC criteria after receipt of all analytical data.

### **4.1 PRECISION**

Precision is a quantitative evaluation of the repeatability of a measurement. Precision of analytical measurements is determined by calculating the relative percent difference (RPD) between the two numerical values. For precision, the matrix spike (MS) is performed in duplicate, and the values from both analyses are evaluated. Comparison of results from duplicate field samples may also be indicative of overall precision of a data set. However, field duplicates may be influenced by sampling precision and are not as controlled as laboratory duplicates.

For quality control purposes, a MS and matrix spike duplicate (MSD) were taken for each set of 20 samples with a net result of 2 MS/MSD analyses for the March 2002 sampling event. The evaluation of MS/MSD criteria was used to qualify the data. The evaluations of MS/MSD analyses are presented in the following tables.

**BR-06**

Analyte	MS Value (mg/L)	Recovery (%)	MSD Value (mg/L)	RPD	Control Limits (%)	RPD Limit
Benzene	0.05360	107	0.05340	0.37	70 – 136	21
Chlorobenzene	0.05360	107	0.05340	0.37	70 – 132	25
1,1-Dichloroethylene	0.05540	111	0.05380	2.93	60 – 145	26
Toluene	0.05230	105	0.05200	0.58	69 – 137	22
Trichloroethene	0.05700	114	0.05380	5.78	63 – 149	28
Tetrachloroethene	0.05610	112	0.05470	2.53	60 – 140	24

Note: mg/L = milligrams per liter

## OB-07

Analyte	MS Value (mg/L)	Recovery (%)	MSD Value (mg/L)	RPD	Control Limits (%)	RPD Limit
Benzene	0.05640	113	0.05730	1.58	70 – 136	21
Chlorobenzene	0.05340	107	0.05350	0.19	70 – 132	25
1,1-Dichloroethene	0.05630	113	0.05720	1.59	60 – 145	26
Toluene	0.05540	111	0.05570	0.54	69 – 137	22
Trichloroethene	0.06700	126	0.06220	7.43	63 – 149	28
Tetrachloroethene	0.05600	112	0.05480	2.17	60 – 140	24

These evaluations demonstrate that MS/MSD analyses are within acceptable limits.

Field duplicate sampling followed the same sampling outline as MS/MSD analysis. One duplicate sample was collected for each set of 20 field samples, resulting in 2 duplicate samples for the March 2002 sampling event. Field duplicate precision is presented in the following table.

Sample ID	Analyte	Practical Quantitation Limit	Sample Result ( $\mu\text{g}/\text{L}$ )	Flag	Duplicate Result ( $\mu\text{g}/\text{L}$ )	Flag	RPD
BR-07	Acetone	50	488		491		0.61
	Benzene	2	3		3		0.00
	cis-1,2-Dichloroethene	2	9		8.8		2.25
	trans-1,2-Dichloroethene	2	4.3		4.4		2.27
	Vinyl Chloride	2	33.6		33.7		0.30
W-5	cis-1,2-Dichloroethene	2	21.6		23.2		7.14
	trans-1,2-Dichloroethene	2	3.5		3.9		10.81
	Trichloroethene	20	737		607		19.35

This table demonstrates that field duplicate precision is acceptable.

#### 4.2 ACCURACY

Accuracy is a quantitative measurement of agreement between an analytical result and the true value. Accuracy is determined by comparing known amounts of analytes, which are added to the sample prior to analysis, to the field analytical results. Accuracy is expressed as a percentage of recovery (%R) of the total amount of spiked analyte. For VOC analyses, each sample was spiked with surrogate compounds prior to analysis (and extraction), and chosen samples were spiked (in duplicate) with additional spikes (MS and MSD). Surrogate and MS/MSD recoveries evaluate accuracy and identify interferences from the sample matrix.

Surrogate recoveries were acceptable for VOC analyses for this sampling event.

#### **4.3 REPRESENTATIVENESS**

Representativeness is a qualitative measurement of the degree to which analytical results reflect the true concentrations of analytes that may (or not) be present in a sample. Representativeness of organic analytical results of true site conditions is evaluated using trip blanks, field blanks, method blanks, and rinsates from decontaminated sampling equipment. Target organic compounds in quality control (QC) samples may represent contamination during sampling or transportation of samples to the laboratory. Compliance with holding time and extraction criteria also assures representativeness of results.

Two field blanks for the March 2002 event were analyzed to characterize the water source used during these sampling events. Potable water was used by the field crews for field blanks. A total of three compounds were detected in the two field blanks collected. Dibromochloromethane and bromodichloromethane were detected in QAFB01 at low levels, while chloroform was detected in QAFB02 at a low level. However, no target VOCs were detected above the reporting limit in either field blank.

No target VOCs were detected above the reporting limit in any method blank.

Two trip blanks were analyzed as part of the VOC laboratory QC program. Methylene chloride was detected at a low concentration in QATB02; however, no target VOCs were detected above the reporting limit in either trip blank.

Equipment rinse samples were collected per every 20 production samples, using potable water to rinse field equipment, and analyzed for all target constituents. Two rinsate blanks were collected during the March 2002 sampling event. A total of three compounds were detected in the two rinsate blanks collected. Dibromochloromethane and bromodichloromethane were detected in QARB01 at low levels, while chloroform was detected in QARB02 at a low level. However, no target VOCs were detected above the reporting limit in either rinsate blank.

Representativeness is considered complete due to the lack of target VOC detections in QC efforts.

#### **4.4 COMPLETENESS**

Completeness is a quantitative measurement of the usability of a data set. Completeness is defined as the percentage of data that satisfy validation criteria. Rejected data are not usable. Data qualified as estimated, however, is usable. Completeness goals were 100 percent for this report and are considered to be met.

#### **4.5 COMPARABILITY**

Comparability is a qualitative assessment of the confidence with which different data sets may be used to characterize a site. Comparability is a necessary criteria because sampling is often performed at different times and precision, accuracy, and representativeness are unique to each sampling event. Comparability between data generated at different times at a single site is evaluated by reviewing sample collection and handling procedures, sample matrix, and analytical methods used. Standardization of sampling protocols and analytical methods assures comparability as long as precision and accuracy criteria are satisfied for each data set. The overall analytical performance for this report was evaluated, and should be comparable to previous and future data sets.

## **5.0 CONCLUSIONS**

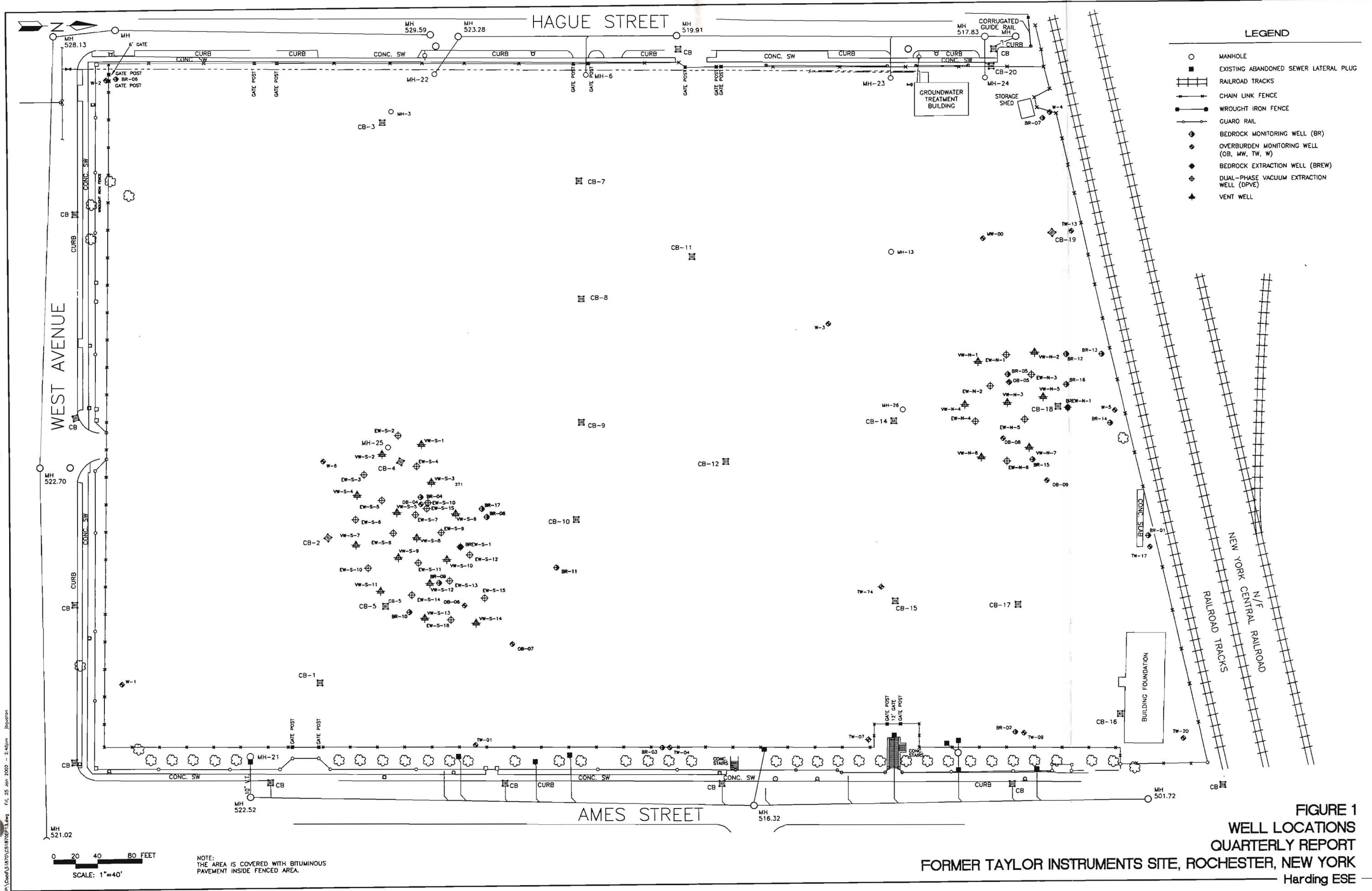
A comparison of analytical data from the 2001 sampling events (Baseline; first quarterly [March], second quarterly [June]; third quarterly [September]; fourth quarterly [December]) and the 2002 sampling event (first quarterly [March]) provides an evaluation of the System performance. The System has been successful in removing VOC contaminants from the subsurface as indicated by the groundwater monitoring data and mass removal quantities. Overall decreases in TCE concentrations have been observed in both the South and North TCE Source Areas. A decrease is also evident in the system influent data. The performance of the System will continue to be tracked through future quarterly sampling events.

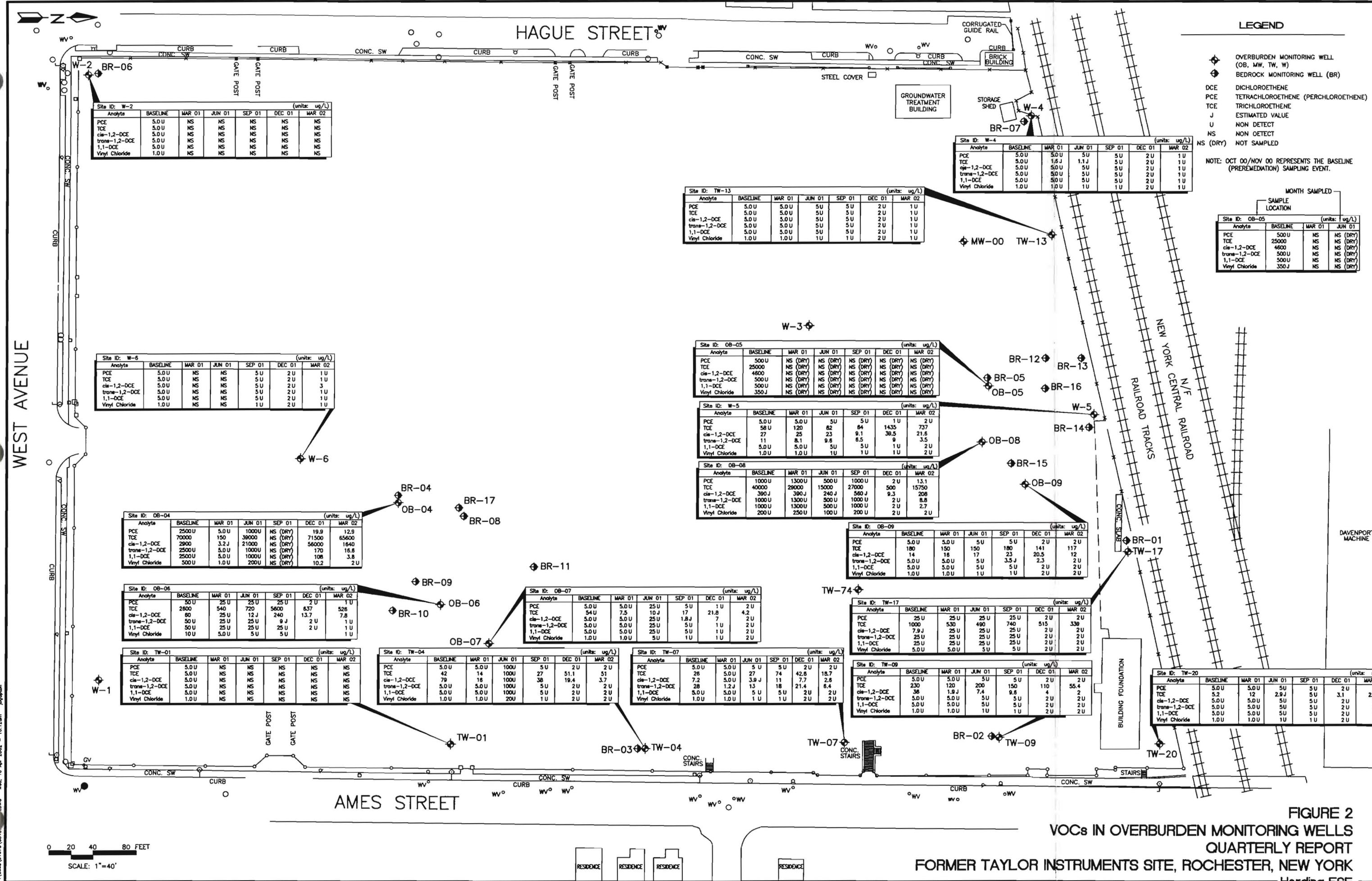
## **6.0 REFERENCES**

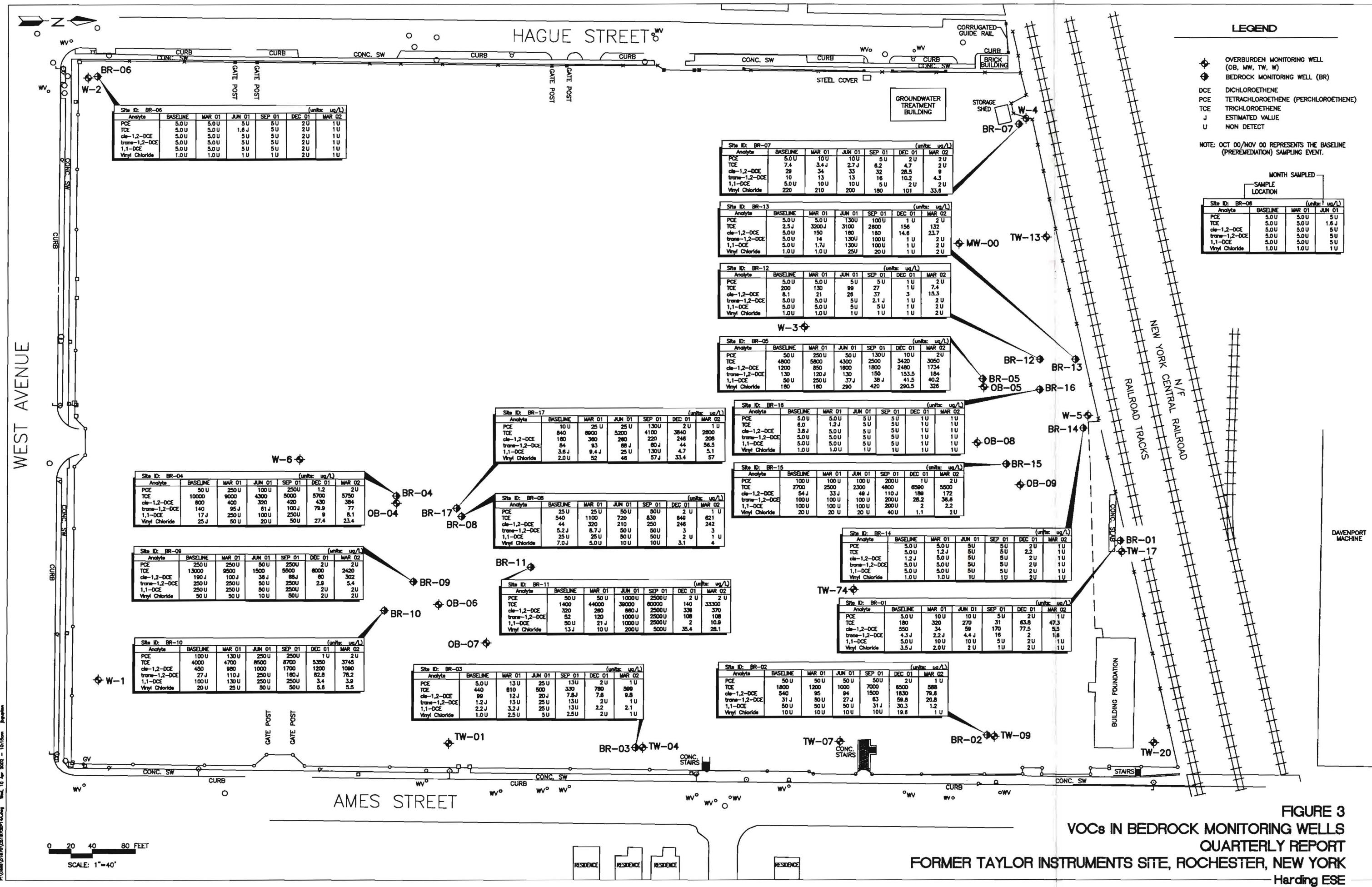
- EPA. 1998. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water.* EPA/600/R-98/128 (September).
- Harding ESE. 2001. *Quarterly Progress Report, First Quarter 2001, Former Taylor Instruments Site, 95 Ames Street in Rochester, New York.* Prepared for Combustion Engineering, Norwalk, Connecticut (March).
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- NYSDEC. 1997. Voluntary Cleanup Agreement regarding the Taylor Instruments Site, Number B8-0508-97-02 (November).

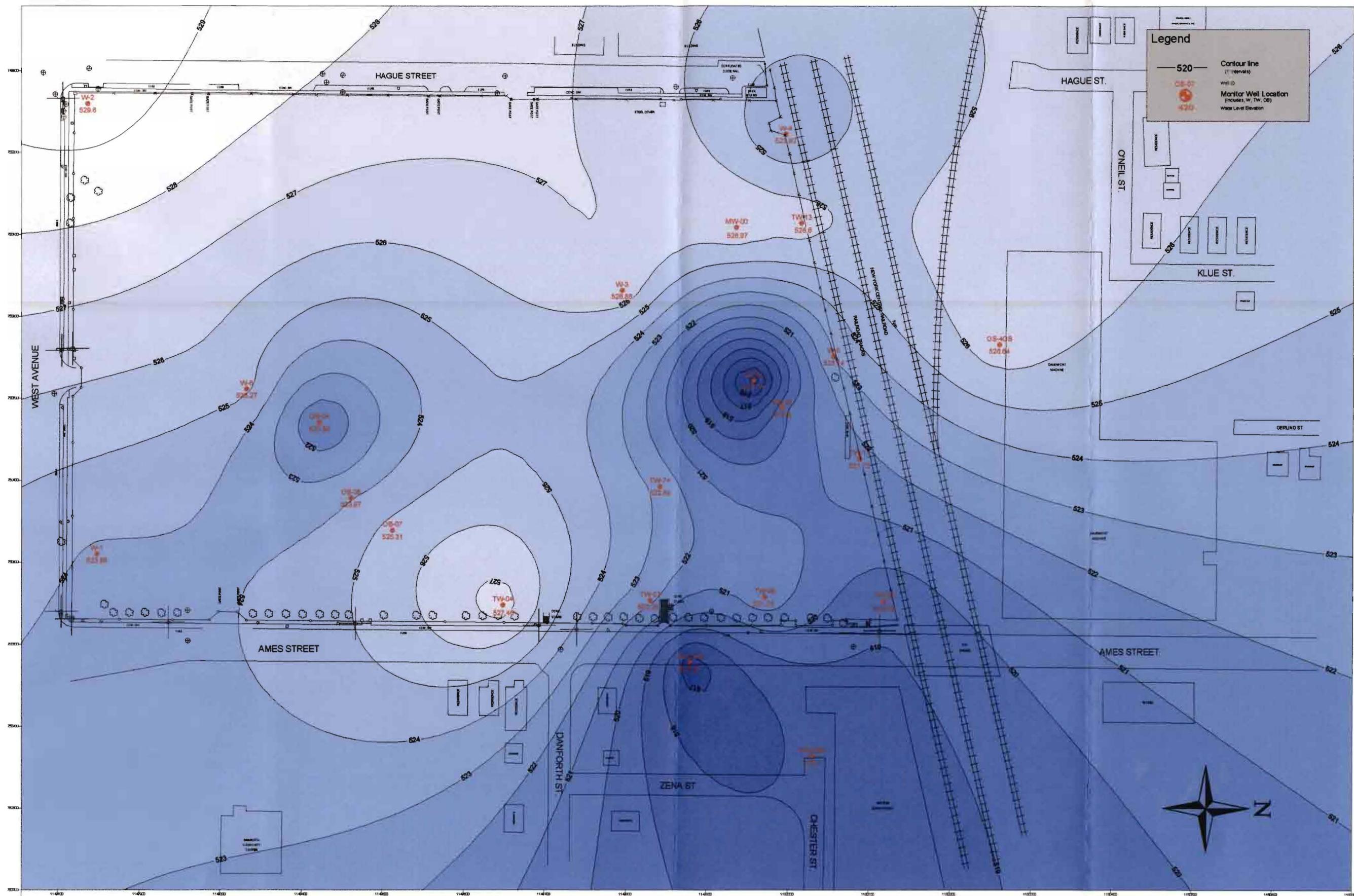
## **APPENDIX A**

### **FIGURES**



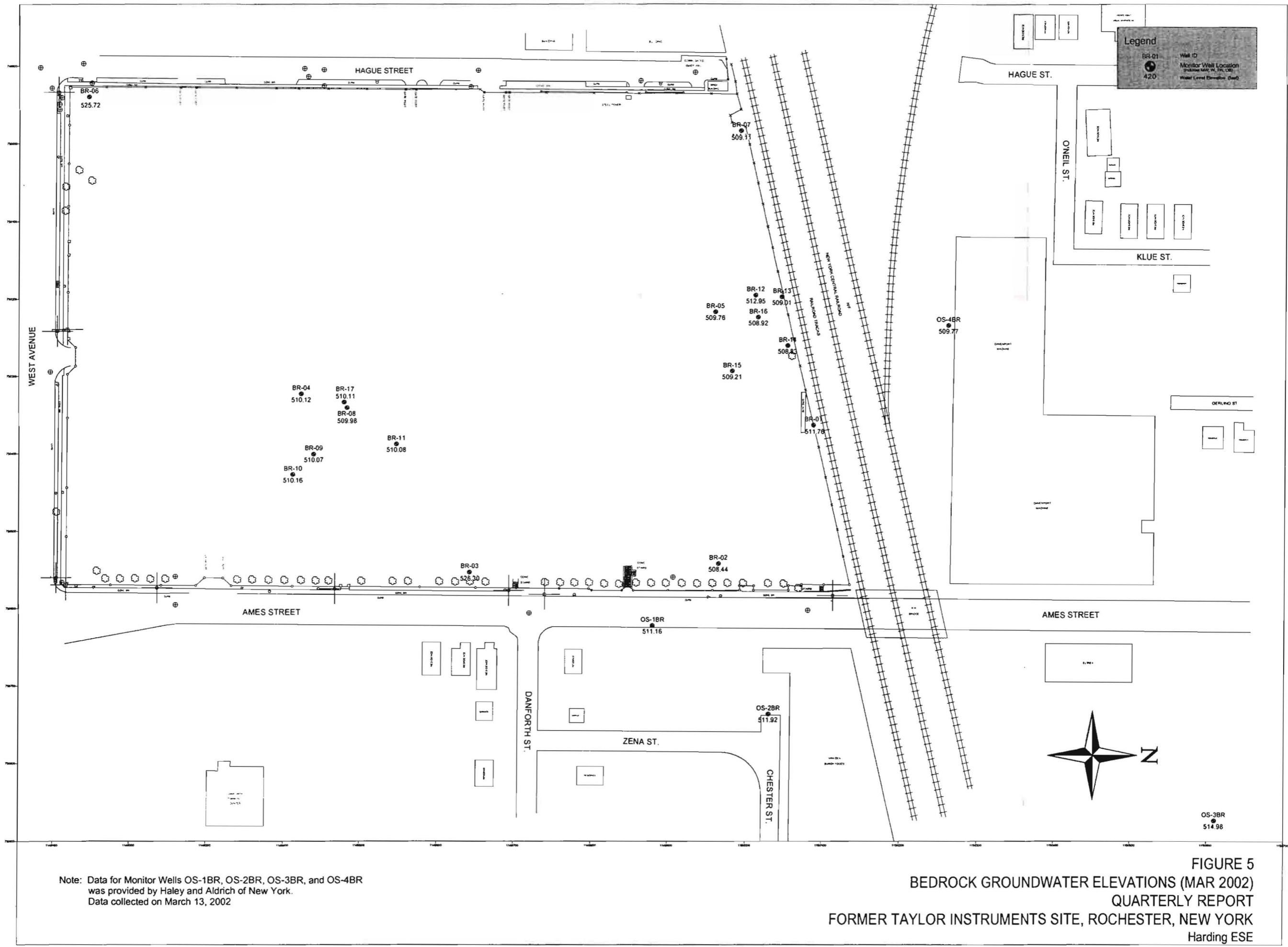




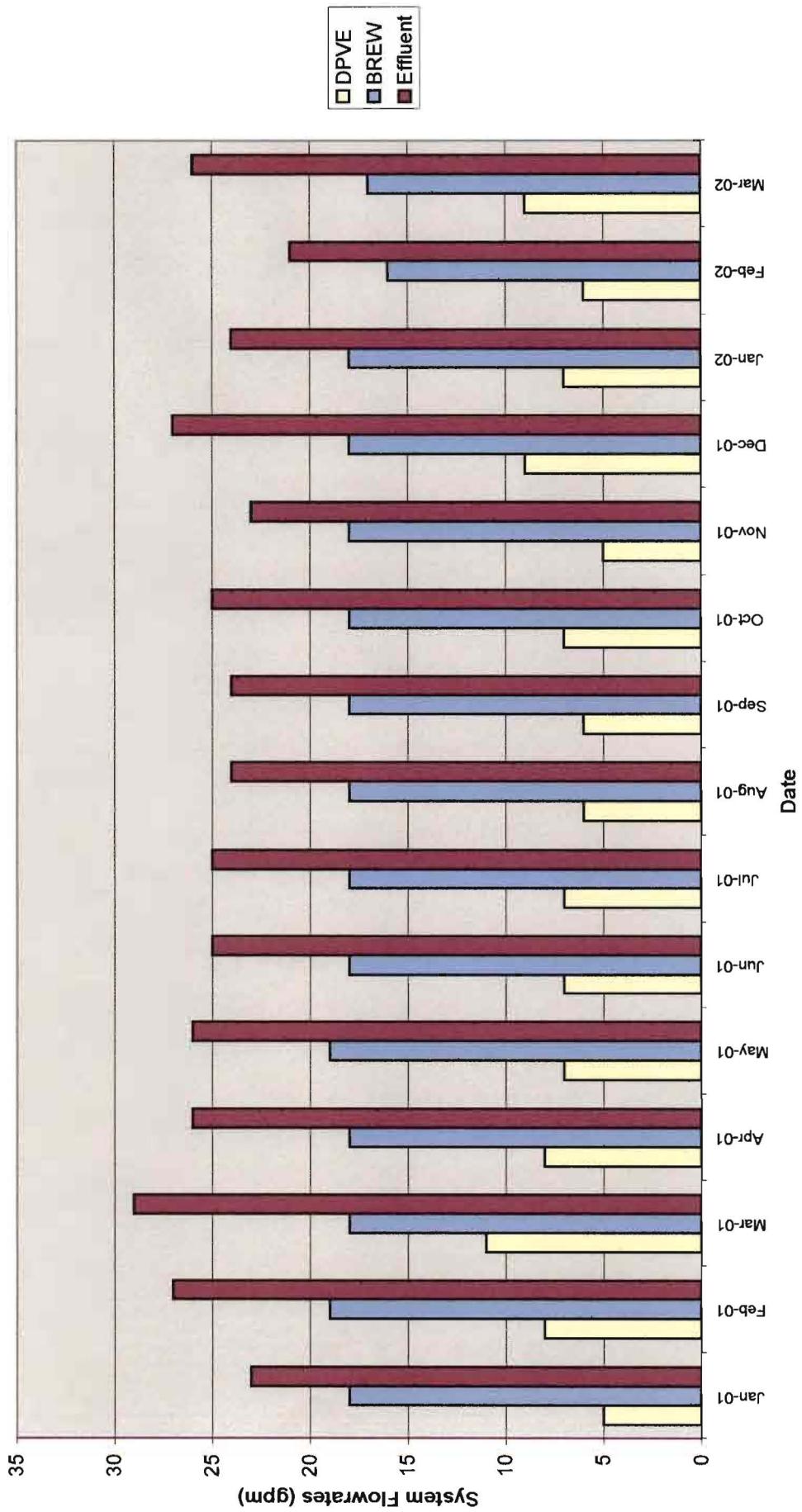


Note: Data for Monitor Wells OS-1OB, OS-2OB, OS-3OB, and OS-4OB was provided by Haley and Aldrich of New York.  
Data collected on March 13, 2001

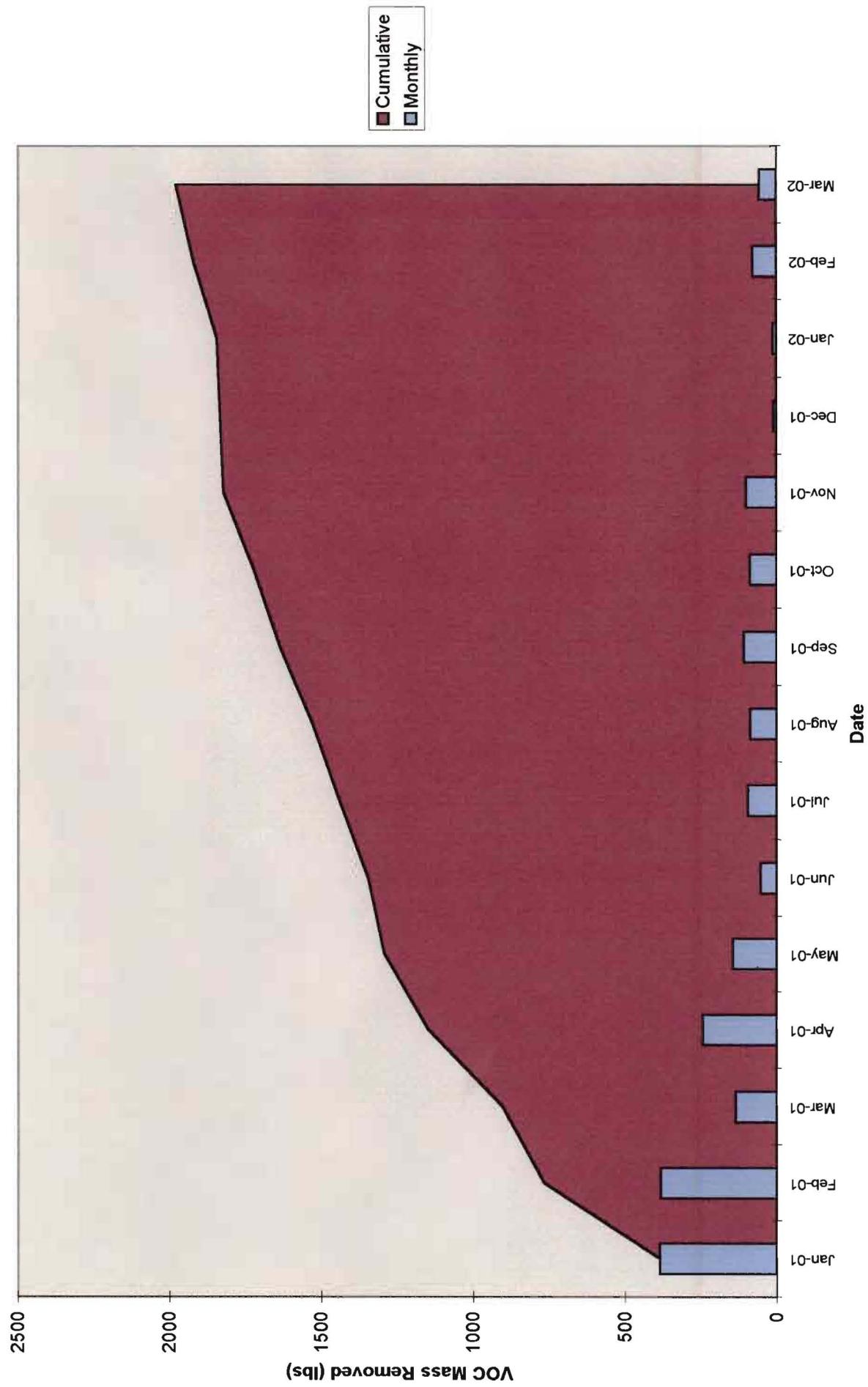
FIGURE 4  
OVERBURDEN POTENTIOMETRIC SURFACE MAP (MAR 2002)  
QUARTERLY REPORT  
FORMER TAYLOR INSTRUMENTS SITE, ROCHESTER, NEW YORK  
Harding ESE



**Figure 6**  
**Monthly Average Groundwater Flowrates**



**Figure 7**  
**TCE Mass Removed**



## **APPENDIX B**

### **LABORATORY REPORTS, GROUNDWATER SAMPLING EVENTS**

**March 5, 2002**  
**Analytical Data**

# TestAmerica

INCORPORATED

3/13/02

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 51870.7 FORMER TAYLOR INSTRUMENT. The Laboratory Project number is 274442. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Collection Date
QATB01	02-A34272	3/ 5/02
QAFB01	02-A34273	3/ 5/02
QARB01	02-A34274	3/ 5/02
W-2	02-A34275	3/ 5/02
TW-04	02-A34276	3/ 5/02
TW-17	02-A34277	3/ 5/02

These results relate only to the items tested.  
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Michael A. Dunn

Paul E. Lane, Jr., Lab Director  
Michael H. Dunn, M.S., Technical Director  
Johnny A. Mitchell, Dir. Technical Serv.  
Eric S. Smith, Assistant Technical Director  
Jennifer P. Flynn, Technical Services

Report Date: 3/13/02

Gail A. Lage, Technical Serv.  
Glenn L. Norton, Technical Serv.  
Kelly S. Comstock, Technical Serv.  
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 11342

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROBERT ELLIS

Lab Number: 02-A34272  
Sample ID: QATB01  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 5/02  
Time Collected:  
Date Received: 3/ 6/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/10/02	15:24	B.Herford	8260B	2651
Benzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Bromobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Bromoform	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Bromomethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
2-Butanone	ND	mg/l	0.0500	1	3/10/02	15:24	B.Herford	8260B	2651
n-Butylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
sec-Butylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
t-Butylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Carbon disulfide	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Carbon tetrachloride	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Chlorobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Chloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Chloroform	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Chloromethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
2-Chlorotoluene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
4-Chlorotoluene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/10/02	15:24	B.Herford	8260B	2651
Dibromochloromethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Dibromomethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A34272  
 Sample ID: QATB01  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
cis-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Ethylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
2-Hexanone	ND	mg/l	0.0100	1	3/10/02	15:24	B.Herford	8260B	2651
Isopropylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/10/02	15:24	B.Herford	8260B	2651
Methylene chloride	ND	mg/l	0.0050	1	3/10/02	15:24	B.Herford	8260B	2651
Naphthalene	ND	mg/l	0.0050	1	3/10/02	15:24	B.Herford	8260B	2651
n-Propylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Styrene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Tetrachloroethene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Toluene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Trichloroethene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Vinyl chloride	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Xylenes (Total)	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651
Bromodichloromethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A34272  
Sample ID: QATB01  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/10/02	15:24	B.Herford	8260B	2651

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	93.	60. - 158.
VOA Surr Toluene-d8	105.	82. - 127.
VOA Surr, 4-BFB	103.	72. - 136.
VOA Surr, DBFM	103.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROBERT ELLIS

Lab Number: 02-A34273  
Sample ID: QAFB01  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 5/02  
Time Collected: 7:57  
Date Received: 3/ 6/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 8/02	23:39	B.Herford	8260B	2651
Benzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Bromobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Bromochloromethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Bromoform	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Bromomethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
2-Butanone	ND	mg/l	0.0500	1	3/ 8/02	23:39	B.Herford	8260B	2651
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Carbon disulfide	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Chlorobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Chloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Chloroform	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Chloromethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 8/02	23:39	B.Herford	8260B	2651
Dibromochloromethane	0.0035	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Dibromomethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651

le report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A34273  
 Sample ID: QAFB01  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
cis-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Ethylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
2-Hexanone	ND	mg/l	0.0100	1	3/ 8/02	23:39	B.Herford	8260B	2651
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 8/02	23:39	B.Herford	8260B	2651
Methylene chloride	ND	mg/l	0.0050	1	3/ 8/02	23:39	B.Herford	8260B	2651
Naphthalene	ND	mg/l	0.0050	1	3/ 8/02	23:39	B.Herford	8260B	2651
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Styrene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Toluene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Trichloroethene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Vinyl chloride	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651
Bromodichloromethane	0.0034	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 02-A34273  
Sample ID: QAFB01  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 8/02	23:39	B.Herford	8260B	2651

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	90.	60. - 158.
VOA Surr Toluene-d8	105.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROBERT ELLIS

Lab Number: 02-A34274  
Sample ID: QARB01  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 5/02  
Time Collected: 8:03  
Date Received: 3/ 6/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/ 9/02	0:09	B.Herford	8260B	2651
Benzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Bromobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Bromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Bromoform	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Bromomethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
2-Butanone	ND	mg/l	0.0500	1	3/ 9/02	0:09	B.Herford	8260B	2651
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Carbon disulfide	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Chlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Chloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Chloroform	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Chloromethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 9/02	0:09	B.Herford	8260B	2651
Dibromochloromethane	0.0035	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Dibromomethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A34274  
 Sample ID: QARB01  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
cis-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Ethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
2-Hexanone	ND	mg/l	0.0100	1	3/ 9/02	0:09	B.Herford	8260B	2651
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 9/02	0:09	B.Herford	8260B	2651
Methylene chloride	ND	mg/l	0.0050	1	3/ 9/02	0:09	B.Herford	8260B	2651
Naphthalene	ND	mg/l	0.0050	1	3/ 9/02	0:09	B.Herford	8260B	2651
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Styrene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Toluene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Trichloroethene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Vinyl chloride	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651
Bromodichloromethane	0.0033	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A34274  
Sample ID: QARB01  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 9/02	0:09	B.Herford	8260B	2651

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	91.	60. - 158.
VOA Surr Toluene-d8	106.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	101.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROBERT ELLIS

Lab Number: 02-A34275  
Sample ID: W-2  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 5/02  
Time Collected: 11:02  
Date Received: 3/ 6/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*MISCELLANEOUS GC PARAMETERS*									
Carbon Dioxide	17.4	mg/l	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C	7938
<hr/>									
*MISCELLANEOUS CHEMISTRY*									
Alkalinity as CaCO <sub>3</sub>	224.	mg/l	5.00	1	3/ 7/02	10:38	S. Duncan	310.1M	3169
Chloride	17.0	mg/l	1.00	1	3/ 7/02	22:30	A.Bamarni	325.3	3938

Carbon dioxide is a field test.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROBERT ELLIS

Lab Number: 02-A34276  
Sample ID: TW-04  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 5/02  
Time Collected: 13:21  
Date Received: 3/ 6/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 9/02	2:42	B.Herford	8260B	2651
Benzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Bromobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Bromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Bromoform	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Bromomethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
2-Butanone	ND	mg/l	0.0500	1	3/ 9/02	2:42	B.Herford	8260B	2651
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Carbon disulfide	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Chlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Chloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Chloroform	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Chloromethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 9/02	2:42	B.Herford	8260B	2651
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Dibromomethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A34276  
 Sample ID: TW-04  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
cis-1,2-Dichloroethene	0.0037	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Ethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
2-Hexanone	ND	mg/l	0.0100	1	3/ 9/02	2:42	B.Herford	8260B	2651
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 9/02	2:42	B.Herford	8260B	2651
Methylene chloride	ND	mg/l	0.0050	1	3/ 9/02	2:42	B.Herford	8260B	2651
Naphthalene	ND	mg/l	0.0050	1	3/ 9/02	2:42	B.Herford	8260B	2651
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Styrene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Toluene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Trichloroethene	0.0510	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Vinyl chloride	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A34276  
 Sample ID: TW-04  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 9/02	2:42	B.Herford	8260B	2651
<b>*MISCELLANEOUS GC PARAMETERS*</b>									
Methane	ND	mg/L	0.026	1	3/11/02	13:51	K. Burritt	RSK175M	5721
Carbon Dioxide	48.8	mg/L	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C	7938
Ethene	ND	mg/L	0.026	1	3/11/02	13:51	K. Burritt	RSK175M	5721
Ethane	ND	mg/L	0.026	1	3/11/02	13:51	K. Burritt	RSK175M	5721
<b>*METALS*</b>									
Ferrous Iron	0.428	mg/l	0.100	1	3/ 6/02	13:56	S. Duncan	3500D	2265
<b>*MISCELLANEOUS CHEMISTRY*</b>									
Nitrate-N as N	0.130	mg/l	0.100	1	3/ 6/02	18:02	A.Bamarni	353.2	2259
Sulfate	259.	mg/l	10.0	10	3/21/02	21:09	M.Shockley	9038	7385
Alkalinity as CaCO <sub>3</sub>	265.	mg/l	5.00	1	3/ 7/02	10:38	S. Duncan	310.1M	3169
Total Organic Carbon	ND	mg/l	1.00	1	3/ 7/02	9:31	M Richards	415.1	2867
Sulfide	ND	mg/l	2.000	2	3/ 8/02	0:30	Abdullatef	376.1	3894
Chloride	10.6	mg/l	1.00	1	3/ 7/02	22:31	A.Bamarni	325.3	3938

Carbon dioxide is a field test.

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	91.	60. - 158.
VOA Surr Toluene-d8	106.	82. - 127.
VOA Surr, 4-BFB	107.	72. - 136.
VOA Surr, DBFM	103.	81. - 137.

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A34276  
Sample ID: TW-04  
Project: 51870.7  
Page 4

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method  
prescribed holding time.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROBERT ELLIS

Lab Number: 02-A34277  
Sample ID: TW-17  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 5/02  
Time Collected: 16:33  
Date Received: 3/ 6/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 9/02	3:13	B.Herford	8260B	2651
Benzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Bromobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Bromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Bromoform	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Bromomethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
2-Butanone	ND	mg/l	0.0500	1	3/ 9/02	3:13	B.Herford	8260B	2651
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Carbon disulfide	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Chlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Chloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Chloroform	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Chloromethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 9/02	3:13	B.Herford	8260B	2651
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Dibromomethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A34277  
 Sample ID: TW-17  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
cis-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Ethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
2-Hexanone	ND	mg/l	0.0100	1	3/ 9/02	3:13	B.Herford	8260B	2651
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 9/02	3:13	B.Herford	8260B	2651
Methylene chloride	ND	mg/l	0.0050	1	3/ 9/02	3:13	B.Herford	8260B	2651
Naphthalene	ND	mg/l	0.0050	1	3/ 9/02	3:13	B.Herford	8260B	2651
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Styrene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Toluene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Trichloroethene	0.339	mg/l	0.0100	5	3/ 9/02	3:44	B.Herford	8260B	6044
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Vinyl chloride	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B	2651

ple report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A34277  
 Sample ID: TW-17  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report	Dil	Analysis		Analysis		Method	Batch
			Limit	Factor	Date	Time	Analyst			
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 9/02	3:13	B.Herford	8260B		2651
<b>*MISCELLANEOUS GC PARAMETERS*</b>										
Methane	ND	mg/L	0.026	1	3/11/02	13:59	K. Burritt	RSK175M		5721
Carbon Dioxide	43.7	mg/L	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C		7938
Ethene	ND	mg/L	0.026	1	3/11/02	13:59	K. Burritt	RSK175M		5721
Ethane	ND	mg/L	0.026	1	3/11/02	13:59	K. Burritt	RSK175M		5721
<b>*METALS*</b>										
Ferrous Iron	0.100	mg/l	0.100	1	3/ 6/02	13:56	S. Duncan	3500D		2265
<b>*MISCELLANEOUS CHEMISTRY*</b>										
Nitrate-N as N	0.110	mg/l	0.100	1	3/ 6/02	18:05	A.Bamarni	353.2		2259
Sulfate	82.5	mg/l	5.00	5	3/21/02	21:09	M.Shockley	9038		7385
Alkalinity as CaCO <sub>3</sub>	270.	mg/l	5.00	1	3/ 7/02	10:38	S. Duncan	310.1M		3169
Total Organic Carbon	ND	mg/l	1.00	1	3/ 7/02	9:31	M Richards	415.1		2867
Sulfide	ND	mg/l	2.000	2	3/ 8/02	0:30	Abdullatef	376.1		3894
Chloride	13.2	mg/l	1.00	1	3/ 7/02	22:32	A.Bamarni	325.3		3938

Carbon dioxide is a field test.

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	93.	60. - 158.
VOA Surr Toluene-d8	107.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	102.	81. - 137.

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A34277  
Sample ID: TW-17  
Project: 51870.7  
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### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method  
prescribed holding time.

of Sample Report.

# TestAmerica

INCORPORATED

**PROJECT QUALITY CONTROL DATA**  
**Project Number:** 51870.7  
**Page:** 1

**Matrix Spike Recovery**

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
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**\*\*VOA PARAMETERS\*\***

Benzene	mg/l	< 0.00200	0.05020	0.05000	100	70. - 136.	2651	02-A34618
Chlorobenzene	mg/l	< 0.00200	0.04900	0.05000	98	70. - 132.	2651	02-A34618
1,1-Dichloroethene	mg/l	< 0.00200	0.04460	0.05000	89	60. - 145.	2651	02-A34618
Toluene	mg/l	< 0.00200	0.05190	0.05000	104	69. - 137.	2651	02-A34618
Trichloroethene	mg/l	< 0.00200	0.05310	0.05000	106	63. - 149.	2651	02-A34618
Tetrachloroethene	mg/l	< 0.00200	0.05150	0.05000	103	60. - 140.	2651	02-A34618
VOA Surr 1,2-DCA-d4	% Rec				87	60. - 158.	2651	
VOA Surr Toluene-d8	% Rec				108	82. - 127.	2651	
VOA Surr, 4-BFB	% Rec				103	72. - 136.	2651	
VOA Surr, DBFM	% Rec				101	81. - 137.	2651	

**Matrix Spike Recovery**

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
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**\*\*MISC PARAMETERS\*\***

Sulfate	mg/l	10.0	30.9	20.0	104	80 - 120	7385	02-A35820
Sulfide	mg/l	< 1.000	19.90	20.00	100	80 - 120	3894	02-A34276

**Matrix Spike Recovery**

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
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**\*\*MISC PARAMETERS\*\***

Methane	mg/L	0.036	1.30	1.33	95	40 - 140	5721	02-A34597
Methane	mg/L	0.036	1.40	1.33	103	40 - 140	5721	02-A34597

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	0.05020	0.05090	1.38	21.	2651
Chlorobenzene	mg/l	0.04900	0.04960	1.22	25.	2651
1,1-Dichloroethene	mg/l	0.04460	0.04410	1.13	26.	2651
Toluene	mg/l	0.05190	0.05260	1.34	22.	2651
Trichloroethene	mg/l	0.05310	0.05390	1.50	28.	2651
Tetrachloroethene	mg/l	0.05150	0.05120	0.58	24.	2651
VOA Surr 1,2-DCA-d4	% Rec		84.			2651
VOA Surr Toluene-d8	% Rec		107.			2651
VOA Surr, 4-BFB	% Rec		104.			2651
VOA Surr, DBFM	% Rec		99.			2651

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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#### \*\*MISC PARAMETERS\*\*

Methane	mg/L	1.30	1.40	7.41	50	5721
Ethene	mg/L	2.00	2.00	0.00	50	5721
Ethane	mg/L	2.10	2.20	4.65	50	5721

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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#### \*\*MISC PARAMETERS\*\*

Nitrate-N as N	mg/l	7.20	7.20	0.00	20	2259
Sulfate	mg/l	30.9	31.2	0.97	20	7385
Sulfide	mg/l	19.90	19.90	0.00	20	3894

Next QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 3

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**VOA PARAMETERS**</b>						
Acetone	mg/l	0.2500	0.2360	94	54 - 153	2651
Benzene	mg/l	0.05000	0.05250	105	79 - 124	2651
Bromobenzene	mg/l	0.05000	0.04920	98	76 - 122	2651
Bromo(chloromethane)	mg/l	0.05000	0.05360	107	71 - 134	2651
Bromoform	mg/l	0.05000	0.04480	90	66 - 124	2651
Bromomethane	mg/l	0.05000	0.03540	71	51 - 145	2651
2-Butanone	mg/l	0.2500	0.2760	110	62 - 134	2651
n-Butylbenzene	mg/l	0.05000	0.04390	88	61 - 136	2651
sec-Butylbenzene	mg/l	0.05000	0.04300	86	69 - 130	2651
t-Butylbenzene	mg/l	0.05000	0.04320	86	66 - 129	2651
Carbon disulfide	mg/l	0.05000	0.04900	98	71 - 129	2651
Carbon tetrachloride	mg/l	0.05000	0.05180	104	70 - 130	2651
Chlorobenzene	mg/l	0.05000	0.05130	103	80 - 118	2651
Chloroethane	mg/l	0.05000	0.04180	84	59 - 144	2651
Chloroform	mg/l	0.05000	0.04740	95	74 - 123	2651
Chloromethane	mg/l	0.05000	0.04020	80	47 - 155	2651
2-Chlorotoluene	mg/l	0.05000	0.04850	97	74 - 126	2651
4-Chlorotoluene	mg/l	0.05000	0.05110	102	75 - 125	2651
1,2-Dibromo-3-chloropropane	mg/l	0.05000	0.05330	107	58 - 133	2651
Dibromochloromethane	mg/l	0.05000	0.04680	94	73 - 125	2651
1,2-Dibromoethane	mg/l	0.05000	0.05330	107	74 - 125	2651
Dibromomethane	mg/l	0.05000	0.05050	101	71 - 130	2651
1,2-Dichlorobenzene	mg/l	0.05000	0.05240	105	76 - 122	2651
1,3-Dichlorobenzene	mg/l	0.05000	0.05190	104	75 - 122	2651
1,4-Dichlorobenzene	mg/l	0.05000	0.04960	99	76 - 119	2651
Dichlorodifluoromethane	mg/l	0.05000	0.04400	88	53 - 151	2651
1,1-Dichloroethane	mg/l	0.05000	0.04810	96	76 - 127	2651
1,2-Dichloroethane	mg/l	0.05000	0.04710	94	66 - 133	2651
1,1-Dichloroethene	mg/l	0.05000	0.04730	95	72 - 127	2651
cis-1,2-Dichloroethene	mg/l	0.05000	0.04910	98	74 - 127	2651
trans-1,2-Dichloroethene	mg/l	0.05000	0.04420	88	70 - 132	2651

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
1,2-Dichloropropane	mg/l	0.05000	0.04980	100	76 - 124	2651
1,3-Dichloropropane	mg/l	0.05000	0.05150	103	72 - 129	2651
2,2-Dichloropropane	mg/l	0.05000	0.05420	108	33 - 152	2651
1,1-Dichloropropene	mg/l	0.05000	0.05260	105	73 - 127	2651
cis-1,3-Dichloropropene	mg/l	0.05000	0.04600	92	58 - 131	2651
trans-1,3-Dichloropropene	mg/l	0.05000	0.04360	87	53 - 133	2651
Ethylbenzene	mg/l	0.05000	0.05420	108	77 - 126	2651
Hexachlorobutadiene	mg/l	0.05000	0.04600	92	52 - 139	2651
2-Hexanone	mg/l	0.2500	0.2520	101	61 - 136	2651
Isopropylbenzene	mg/l	0.05000	0.04940	99	74 - 127	2651
4-Isopropyltoluene	mg/l	0.05000	0.04640	93	69 - 113	2651
4-Methyl-2-pentanone	mg/l	0.2500	0.2480	99	63 - 135	2651
Methylene chloride	mg/l	0.05000	0.04820	96	70 - 130	2651
Naphthalene	mg/l	0.05000	0.06060	121	57 - 143	2651
n-Propylbenzene	mg/l	0.05000	0.04610	92	71 - 130	2651
Styrene	mg/l	0.05000	0.05000	100	77 - 122	2651
1,1,1,2-Tetrachloroethane	mg/l	0.05000	0.05250	105	71 - 130	2651
1,1,2,2-Tetrachloroethane	mg/l	0.05000	0.05150	103	57 - 136	2651
Tetrachloroethene	mg/l	0.05000	0.05210	104	72 - 126	2651
Toluene	mg/l	0.05000	0.05420	108	78 - 124	2651
1,2,3-Trichlorobenzene	mg/l	0.05000	0.05330	107	58 - 139	2651
1,2,4-Trichlorobenzene	mg/l	0.05000	0.05160	103	60 - 132	2651
1,1,1-Trichloroethane	mg/l	0.05000	0.05180	104	70 - 130	2651
1,1,2-Trichloroethane	mg/l	0.05000	0.05290	106	75 - 124	2651
Trichloroethene	mg/l	0.05000	0.05530	111	70 - 136	2651
Trichloroethene	mg/l	0.05000	0.05530	111	70 - 136	6044
1,2,3-Trichloropropane	mg/l	0.05000	0.04260	85	63 - 132	2651
1,2,4-Trimethylbenzene	mg/l	0.05000	0.04810	96	73 - 127	2651
1,3,5-Trimethylbenzene	mg/l	0.05000	0.04700	94	72 - 128	2651
Vinyl chloride	mg/l	0.05000	0.04260	85	62 - 144	2651
Xylenes (Total)	mg/l	0.1500	0.1569	105	76 - 127	2651
Bromodichloromethane	mg/l	0.05000	0.04650	93	69 - 130	2651
Trichlorofluoromethane	mg/l	0.05000	0.04310	86	64 - 136	2651

ject QC continued . . .

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
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Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Methane	mg/L	1.33	1.30	98	82 - 121	5721
Ethene	mg/L	2.32	2.00	86	83 - 120	5721
Ethane	mg/L	2.50	2.20	88	80 - 120	5721
VOA Surr 1,2-DCA-d4	% Rec			90	60 - 158	2651
VOA Surr 1,2-DCA-d4	% Rec			90	60 - 158	6044
VOA Surr Toluene-d8	% Rec			113	82 - 127	2651
VOA Surr Toluene-d8	% Rec			113	82 - 127	6044
VOA Surr, 4-BFB	% Rec			106	72 - 136	2651
VOA Surr, 4-BFB	% Rec			106	72 - 136	6044
VOA Surr, DBFM	% Rec			104	81 - 137	2651
VOA Surr, DBFM	% Rec			104	81 - 137	6044

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**MISC PARAMETERS**</b>						
Methane	mg/L	1.33	1.30	98	82 - 121	5721
Ethene	mg/L	2.32	2.00	86	83 - 120	5721
Ethane	mg/L	2.50	2.20	88	80 - 120	5721

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**MISC PARAMETERS**</b>						
Nitrate-N as N	mg/l	5.50	5.40	98	90 - 110	2259
Sulfate	mg/l	25.0	24.0	96	90 - 110	7385
Total Organic Carbon	mg/l	200.	203.	102	90 - 110	2867
Sulfide	mg/l	20.00	19.80	99	90 - 110	3894
Chloride	mg/l	15.0	13.8	92	90 - 110	3938

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
Nitrate-N as N	mg/l	< 0.100	< 0.100	N/A	15.	2259	02-A34285
Sulfate	mg/l	10.0	10.0	0.00	15.	7385	02-A35830
Chloride	mg/l	11.9	12.0	0.84	15.	3938	02-A35113

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
**VOA PARAMETERS**					

Acetone	< 0.00840	mg/l	2651	3/ 7/02	10:59
Benzene	< 0.00070	mg/l	2651	3/ 7/02	10:59
Bromobenzene	< 0.00070	mg/l	2651	3/ 7/02	10:59
Bromochloromethane	< 0.00060	mg/l	2651	3/ 7/02	10:59
Bromoform	< 0.00070	mg/l	2651	3/ 7/02	10:59
Bromomethane	< 0.00080	mg/l	2651	3/ 7/02	10:59
2-Butanone	< 0.00390	mg/l	2651	3/ 7/02	10:59
n-Butylbenzene	< 0.00070	mg/l	2651	3/ 7/02	10:59
sec-Butylbenzene	< 0.00080	mg/l	2651	3/ 7/02	10:59
t-Butylbenzene	< 0.00090	mg/l	2651	3/ 7/02	10:59
Carbon disulfide	< 0.00080	mg/l	2651	3/ 7/02	10:59
Carbon tetrachloride	< 0.00070	mg/l	2651	3/ 7/02	10:59
Chlorobenzene	< 0.00070	mg/l	2651	3/ 7/02	10:59
Chloroethane	< 0.00090	mg/l	2651	3/ 7/02	10:59
Chloroform	< 0.00060	mg/l	2651	3/ 7/02	10:59
Chloromethane	< 0.00050	mg/l	2651	3/ 7/02	10:59
2-Chlorotoluene	< 0.00070	mg/l	2651	3/ 7/02	10:59
4-Chlorotoluene	< 0.00060	mg/l	2651	3/ 7/02	10:59
1,2-Dibromo-3-chloropropane	< 0.00310	mg/l	2651	3/ 7/02	10:59
Dibromochloromethane	< 0.00040	mg/l	2651	3/ 7/02	10:59
1,2-Dibromoethane	< 0.00050	mg/l	2651	3/ 7/02	10:59
Dibromomethane	< 0.00040	mg/l	2651	3/ 7/02	10:59
1,2-Dichlorobenzene	< 0.00050	mg/l	2651	3/ 7/02	10:59
1,3-Dichlorobenzene	< 0.00060	mg/l	2651	3/ 7/02	10:59

ject QC continued . . .

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
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**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
1,4-Dichlorobenzene	< 0.00050	mg/l	2651	3/ 7/02	10:59
Dichlorodifluoromethane	< 0.00040	mg/l	2651	3/ 7/02	10:59
1,1-Dichloroethane	< 0.00080	mg/l	2651	3/ 7/02	10:59
1,2-Dichloroethane	< 0.00090	mg/l	2651	3/ 7/02	10:59
1,1-Dichloroethene	< 0.00080	mg/l	2651	3/ 7/02	10:59
cis-1,2-Dichloroethene	< 0.00070	mg/l	2651	3/ 7/02	10:59
trans-1,2-Dichloroethene	< 0.00080	mg/l	2651	3/ 7/02	10:59
1,2-Dichloropropane	< 0.00060	mg/l	2651	3/ 7/02	10:59
1,3-Dichloropropane	< 0.00060	mg/l	2651	3/ 7/02	10:59
2,2-Dichloropropane	< 0.00090	mg/l	2651	3/ 7/02	10:59
1,1-Dichloropropene	< 0.00070	mg/l	2651	3/ 7/02	10:59
cis-1,3-Dichloropropene	< 0.00070	mg/l	2651	3/ 7/02	10:59
trans-1,3-Dichloropropene	< 0.00050	mg/l	2651	3/ 7/02	10:59
Ethylbenzene	< 0.00070	mg/l	2651	3/ 7/02	10:59
Hexachlorobutadiene	< 0.00080	mg/l	2651	3/ 7/02	10:59
2-Hexanone	< 0.00280	mg/l	2651	3/ 7/02	10:59
Isopropylbenzene	< 0.00080	mg/l	2651	3/ 7/02	10:59
4-Isopropyltoluene	< 0.00080	mg/l	2651	3/ 7/02	10:59
4-Methyl-2-pentanone	< 0.00460	mg/l	2651	3/ 7/02	10:59
Methylene chloride	< 0.00150	mg/l	2651	3/ 7/02	10:59
Naphthalene	< 0.00190	mg/l	2651	3/ 7/02	10:59
n-Propylbenzene	< 0.00080	mg/l	2651	3/ 7/02	10:59
Styrene	< 0.00090	mg/l	2651	3/ 7/02	10:59
1,1,1,2-Tetrachloroethane	< 0.00060	mg/l	2651	3/ 7/02	10:59
1,1,2,2-Tetrachloroethane	< 0.00050	mg/l	2651	3/ 7/02	10:59
Tetrachloroethene	< 0.00080	mg/l	2651	3/ 7/02	10:59
Toluene	< 0.00070	mg/l	2651	3/ 7/02	10:59
1,2,3-Trichlorobenzene	< 0.00060	mg/l	2651	3/ 7/02	10:59
1,2,4-Trichlorobenzene	< 0.00090	mg/l	2651	3/ 7/02	10:59
1,1,1-Trichloroethane	< 0.00070	mg/l	2651	3/ 7/02	10:59
1,1,2-Trichloroethane	< 0.00050	mg/l	2651	3/ 7/02	10:59
Trichloroethene	< 0.00090	mg/l	2651	3/ 7/02	10:59
Trichloroethene	< 0.00090	mg/l	6044	3/ 8/02	13:43

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
1,2,3-Trichloropropane	< 0.00040	mg/l	2651	3/ 7/02	10:59
1,2,4-Trimethylbenzene	< 0.00060	mg/l	2651	3/ 7/02	10:59
1,3,5-Trimethylbenzene	< 0.00080	mg/l	2651	3/ 7/02	10:59
Vinyl chloride	< 0.00050	mg/l	2651	3/ 7/02	10:59
Xylenes (Total)	< 0.00090	mg/l	2651	3/ 7/02	10:59
Bromodichloromethane	< 0.00080	mg/l	2651	3/ 7/02	10:59
Trichlorofluoromethane	< 0.00070	mg/l	2651	3/ 7/02	10:59
VOA Surr 1,2-DCA-d4	81.	% Rec	2651	3/ 7/02	10:59
VOA Surr 1,2-DCA-d4	87.	% Rec	6044	3/ 8/02	13:43
VOA Surr Toluene-d8	105.	% Rec	2651	3/ 7/02	10:59
VOA Surr Toluene-d8	105.	% Rec	6044	3/ 8/02	13:43
VOA Surr, 4-BFB	117.	% Rec	2651	3/ 7/02	10:59
VOA Surr, 4-BFB	104.	% Rec	6044	3/ 8/02	13:43
VOA Surr, DBFM	88.	% Rec	2651	3/ 7/02	10:59
VOA Surr, DBFM	98.	% Rec	6044	3/ 8/02	13:43

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**MISC PARAMETERS**</b>					
Nitrate-N as N	< 0.100	mg/l	2259	3/ 6/02	17:55
Sulfate	< 1.00	mg/l	7385	3/21/02	21:09
Total Organic Carbon	< 1.00	mg/l	2867	3/ 7/02	9:31
Sulfide	< 1.000	mg/l	3894	3/ 8/02	0:30
Chloride	< 1.00	mg/l	3938	3/ 7/02	22:25

ject QC continued . . .

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
-----	-----	-----	-----	-----	-----

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

### \*\*MISC PARAMETERS\*\*

Methane	< 0.026	mg/L	5721	3/11/02	12:43
Ethene	< 0.026	mg/L	5721	3/11/02	12:43
Ethane	< 0.026	mg/L	5721	3/11/02	12:43

# - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 274442



**March 6, 2002**  
**Analytical Data**

# TestAmerica

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3/14/02

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project S1870.7 FORMER TAYLOR INSTRUMENT. The Laboratory Project number is 274639. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Collection Date
TW-20	02-A35110	3/ 6/02
TW-07	02-A35111	3/ 6/02
TW-09	02-A35112	3/ 6/02
OB-09	02-A35113	3/ 6/02

These results relate only to the items tested.  
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Report Date: 3/14/02

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Jennifer P. Flynn, Technical Services

Laboratory Certification Number: 11342

# TestAmerica

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## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A35110  
Sample ID: TW-20  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 6/02  
Time Collected: 9:31  
Date Received: 3/ 7/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Benzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Bromobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Bromochloromethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Bromoform	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Bromomethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
2-Butanone	ND	mg/l	0.0500	1	3/ 7/02	14:31	N. Hurt	8260B	3295
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Carbon disulfide	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Chlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Chloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Chloroform	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Chloromethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Dibromomethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35110

Sample ID: TW-20

Project: 51870.7

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
cis-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Ethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
2-Hexanone	ND	mg/l	0.0100	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Methylene chloride	ND	mg/l	0.0050	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Naphthalene	ND	mg/l	0.0050	1	3/ 7/02	14:31	N. Hurt	8260B	3295
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Styrene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Toluene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Trichloroethene	0.0024	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Vinyl chloride	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295

le report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35110  
 Sample ID: TW-20  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 7/02	14:31	N. Hurt	8260B	3295
<b>*MISCELLANEOUS GC PARAMETERS*</b>									
Methane	ND	mg/L	0.026	1	3/11/02	14:26	K. Burritt	RSK175M	5721
Carbon Dioxide	47.3	mg/L	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C	7938
Ethane	ND	mg/L	0.026	1	3/11/02	14:26	K. Burritt	RSK175M	5721
Ethane	ND	mg/L	0.026	1	3/11/02	14:26	K. Burritt	RSK175M	5721
<b>*METALS*</b>									
Ferrous Iron	ND	mg/l	0.100	1	3/ 7/02	17:05	S. Duncan	3500D	3266
<b>*MISCELLANEOUS CHEMISTRY*</b>									
Nitrate-N as N	2.29	mg/l	0.100	1	3/ 7/02	18:53	A.Bamarni	353.2	3900
Sulfate	58.6	mg/l	2.00	2	3/14/02	9:11	M.Shockley	375.4	8660
Alkalinity as CaCO <sub>3</sub>	322.	mg/l	5.00	1	3/ 9/02	7:43	S. Duncan	310.1M	5019
Total Organic Carbon	ND	mg/l	1.00	1	3/ 7/02	22:15	M Richards	415.1	3931
Sulfide	ND	mg/l	2.000	2	3/ 9/02	10:00	Abdullatef	376.1	5077
Chloride	10.6	mg/l	1.00	1	3/ 7/02	22:33	A.Bamarni	325.3	3938

Carbon dioxide is a field test.

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	113.	60. - 158.
VOA Surr Toluene-d8	106.	82. - 127.
VOA Surr, 4-BFB	133.	72. - 136.
VOA Surr, DBFM	110.	81. - 137.

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35110  
Sample ID: TW-20  
Project: 51870.7  
Page 4

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method  
prescribed holding time.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A35111  
Sample ID: TW-07  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 6/02  
Time Collected: 11:36  
Date Received: 3/ 7/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Benzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Bromobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Bromochloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Bromoform	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Bromomethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
2-Butanone	ND	mg/l	0.0500	1	3/ 7/02	15:08	N. Hurt	8260B	3295
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Carbon disulfide	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Chlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Chloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Chloroform	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Chloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Dibromomethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A35111  
 Sample ID: TW-07  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
cis-1,2-Dichloroethene	0.0026	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
trans-1,2-Dichloroethene	0.0064	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Ethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
2-Hexanone	ND	mg/l	0.0100	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Methylene chloride	ND	mg/l	0.0050	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Naphthalene	ND	mg/l	0.0050	1	3/ 7/02	15:08	N. Hurt	8260B	3295
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Styrene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Toluene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Trichloroethene	0.0187	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Vinyl chloride	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35111  
 Sample ID: TW-07  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 7/02	15:08	N. Hurt	8260B	3295

### \*MISCELLANEOUS GC PARAMETERS\*

Methane	ND	mg/L	0.026	1	3/11/02	14:29	K. Burritt	RSK175M	5721
Carbon Dioxide	93.3	mg/L	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C	7938
Ethene	ND	mg/L	0.026	1	3/11/02	14:29	K. Burritt	RSK175M	5721
Ethane	ND	mg/L	0.026	1	3/11/02	14:29	K. Burritt	RSK175M	5721

### \*METALS\*

Ferrous Iron	0.330	mg/l	0.100	1	3/ 7/02	17:05	S. Duncan	3500D	3266
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### \*MISCELLANEOUS CHEMISTRY\*

Nitrate-N as N	35.8	mg/l	0.500	5	3/ 7/02	19:01	A.Bamarni	353.2	3900
Sulfate	371.	mg/l	10.0	10	3/14/02	9:11	M.Shockley	375.4	8660
Alkalinity as CaCO <sub>3</sub>	324.	mg/l	5.00	1	3/ 9/02	7:43	S. Duncan	310.1M	5019
Total Organic Carbon	2.26	mg/l	1.00	1	3/ 7/02	22:15	M Richards	415.1	3931
Sulfide	ND	mg/l	2.000	2	3/ 9/02	10:00	Abdullatef	376.1	5077
Chloride	38.4	mg/l	2.00	2	3/ 7/02	22:51	A.Bamarni	325.3	3938

Carbon dioxide is a field test.

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	111.	60. - 158.
VOA Surr Toluene-d8	105.	82. - 127.
VOA Surr, 4-BFB	131.	72. - 136.
VOA Surr, DBFM	111.	81. - 137.

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35111  
Sample ID: TW-07  
Project: 51870.7  
Page 4

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method  
prescribed holding time.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Lab Number: 02-A35112  
Sample ID: TW-09  
Sample Type: Ground water  
Site ID:

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Date Collected: 3/ 6/02  
Time Collected: 14:24  
Date Received: 3/ 7/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Benzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Bromobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Bromoform	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Bromomethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
2-Butanone	ND	mg/l	0.0500	1	3/ 7/02	15:45	N. Hurt	8260B	3295
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Carbon disulfide	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Chlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Chloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Chloroform	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Chloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Dibromomethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A35112  
 Sample ID: TW-09  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analysis		
			Limit	Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
cis-1,2-Dichloroethene	0.0020	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Ethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
2-Hexanone	ND	mg/l	0.0100	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Methylene chloride	ND	mg/l	0.0050	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Naphthalene	ND	mg/l	0.0050	1	3/ 7/02	15:45	N. Hurt	8260B	3295
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Styrene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Toluene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Trichloroethene	0.0554	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Vinyl chloride	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35112  
 Sample ID: TW-09  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 7/02	15:45	N. Hurt	8260B	3295
<b>*MISCELLANEOUS GC PARAMETERS*</b>									
Methane	ND	mg/L	0.026	1	3/11/02	14:34	K. Burritt	RSK175M	5721
Carbon Dioxide	20.4	mg/L	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C	7938
Ethene	ND	mg/L	0.026	1	3/11/02	14:34	K. Burritt	RSK175M	5721
Ethane	ND	mg/L	0.026	1	3/11/02	14:34	K. Burritt	RSK175M	5721
<b>*METALS*</b>									
Ferrous Iron	ND	mg/l	0.100	1	3/ 7/02	17:05	S. Duncan	3500D	3266
<b>*MISCELLANEOUS CHEMISTRY*</b>									
Nitrate-N as N	1.30	mg/l	0.100	1	3/ 7/02	18:56	A.Bamarni	353.2	3900
Sulfate	362.	mg/l	20.0	20	3/14/02	9:11	M.Shockley	375.4	8660
Alkalinity as CaCO <sub>3</sub>	163.	mg/l	5.00	1	3/ 9/02	7:43	S. Duncan	310.1M	5019
Total Organic Carbon	ND	mg/l	1.00	1	3/ 7/02	22:15	M Richards	415.1	3931
Sulfide	ND	mg/l	2.000	2	3/ 9/02	10:00	Abdullatef	376.1	5077
Chloride	9.45	mg/l	1.00	1	3/ 7/02	22:34	A.Bamarni	325.3	3938

Carbon dioxide is a field test.

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	108.	60. - 158.
VOA Surr Toluene-d8	107.	82. - 127.
VOA Surr, 4-BFB	136.	72. - 136.
VOA Surr, DBFM	112.	81. - 137.

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35112  
Sample ID: TW-09  
Project: 51870.7  
Page 4

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method  
prescribed holding time.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A35113  
Sample ID: OB-09  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 6/02  
Time Collected: 16:26  
Date Received: 3/ 7/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Benzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Bromobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Bromo(chloromethane)	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Bromoform	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Bromomethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
2-Butanone	ND	mg/l	0.0500	1	3/ 7/02	16:22	N. Hurt	8260B	3295
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Carbon disulfide	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Chlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Chloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Chloroform	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Chloromethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Dibromomethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35113  
 Sample ID: OB-09  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
cis-1,2-Dichloroethene	0.0120	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Ethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
2-Hexanone	ND	mg/l	0.0100	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Methylene chloride	ND	mg/l	0.0050	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Naphthalene	ND	mg/l	0.0050	1	3/ 7/02	16:22	N. Hurt	8260B	3295
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Styrene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Toluene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Trichloroethene	0.117	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Vinyl chloride	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35113  
 Sample ID: OB-09  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 7/02	16:22	N. Hurt	8260B	3295
<b>*MISCELLANEOUS GC PARAMETERS*</b>									
Methane	ND	mg/L	0.026	1	3/11/02	14:42	K. Burritt	RSK175M	5721
Carbon Dioxide	45.1	mg/L	3.0	1	3/13/02	14:13	T. Beverly	SM4500CO2C	7938
Ethene	ND	mg/L	0.026	1	3/11/02	14:42	K. Burritt	RSK175M	5721
Ethane	ND	mg/L	0.026	1	3/11/02	14:42	K. Burritt	RSK175M	5721
<b>*METALS*</b>									
Ferrous Iron	0.174	mg/l	0.100	1	3/ 7/02	17:05	S. Duncan	3500D	3266
<b>*MISCELLANEOUS CHEMISTRY*</b>									
Nitrate-N as N	4.99	mg/l	0.100	1	3/ 7/02	18:56	A.Bamarni	353.2	3900
Sulfate	359.	mg/l	10.0	10	3/14/02	9:11	M.Shockley	375.4	8660
Miniminity as CaCO <sub>3</sub>	288.	mg/l	5.00	1	3/ 9/02	7:43	S. Duncan	310.1M	5019
Total Organic Carbon	ND	mg/l	1.00	1	3/ 7/02	22:15	M Richards	415.1	3931
Sulfide	ND	mg/l	2.000	2	3/ 9/02	10:00	Abdullatef	376.1	5077
Chloride	11.9	mg/l	1.00	1	3/ 7/02	22:29	A.Bamarni	325.3	3938

Carbon dioxide is a field test.

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	109.	60. - 158.
VOA Surr Toluene-d8	106.	82. - 127.
VOA Surr, 4-BFB	135.	72. - 136.
VOA Surr, DBFM	111.	81. - 137.

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35113  
Sample ID: OB-09  
Project: 51870.7  
Page 4

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method  
prescribed holding time.

\_\_\_\_\_ of Sample Report.

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 1

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
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#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	< 0.00070	0.05180	0.05000	104	70. - 136.	3295	blank
Chlorobenzene	mg/l	< 0.00070	0.05230	0.05000	105	70. - 132.	3295	blank
1,1-Dichloroethene	mg/l	< 0.00080	0.05160	0.05000	103	60. - 145.	3295	blank
Toluene	mg/l	< 0.00070	0.05050	0.05000	101	69. - 137.	3295	blank
Trichloroethene	mg/l	< 0.00090	0.05020	0.05000	100	63. - 149.	3295	blank
Tetrachloroethene	mg/l	< 0.00080	0.04980	0.05000	100	60. - 140.	3295	blank
VOA Surr 1,2-DCA-d4	% Rec				108	60. - 158.	3295	
VOA Surr Toluene-d8	% Rec				107	82. - 127.	3295	
VOA Surr, 4-BFB	% Rec				111	72. - 136.	3295	
VOA Surr, DBFM	% Rec				111	81. - 137.	3295	

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
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#### \*\*MISC PARAMETERS\*\*

Nitrate-N as N	mg/l	0.110	7.38	7.50	97	80 - 120	3900	02-A35085
Nitrate-N as N	mg/l	0.110	7.40	7.50	97	80 - 120	3900	02-A35085
Sulfate	mg/l	33.6	74.0	40.0	101	80 - 120	8660	02-A37031
Sulfide	mg/l	< 1.000	18.30	20.20	91	80 - 120	5077	02-A34879

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------	-------	--------------

#### \*\*MISC PARAMETERS\*\*

Methane	mg/L	0.036	1.30	1.33	95	40 - 140	5721	02-A34597
Methane	mg/L	0.036	1.40	1.33	103	40 - 140	5721	02-A34597

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 2

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	0.05180	0.05150	0.58	21.	3295
Chlorobenzene	mg/l	0.05230	0.05080	2.91	25.	3295
1,1-Dichloroethene	mg/l	0.05160	0.05150	0.19	26.	3295
Toluene	mg/l	0.05050	0.05040	0.20	22.	3295
Trichloroethene	mg/l	0.05020	0.05070	0.99	28.	3295
Tetrachloroethene	mg/l	0.04980	0.04790	3.89	24.	3295
VOA Surr 1,2-DCA-d4	% Rec		106.			3295
VOA Surr Toluene-d8	% Rec		106.			3295
VOA Surr, 4-BFB	% Rec		108.			3295
VOA Surr, DBFM	% Rec		112.			3295

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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#### \*\*MISC PARAMETERS\*\*

Methane	mg/L	1.30	1.40	7.41	50	5721
Ethene	mg/L	2.00	2.00	0.00	50	5721
Ethane	mg/L	2.10	2.20	4.65	50	5721

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
---------	-------	------------	-----------	-----	-------	------------

#### \*\*MISC PARAMETERS\*\*

Nitrate-N as N	mg/l	7.38	7.40	0.27	20	3900
Sulfate	mg/l	74.0	73.4	0.81	20	8660
Sulfide	mg/l	18.30	18.60	1.63	20	5077

ject QC continued . . .

# TestAmerica

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 3**

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**VOA PARAMETERS**</b>						
Acetone	mg/l	0.2500	0.3300	132	54 - 153	3295
Benzene	mg/l	0.05000	0.05400	108	79 - 124	3295
Bromobenzene	mg/l	0.05000	0.05320	106	76 - 122	3295
Bromochloromethane	mg/l	0.05000	0.04780	96	71 - 134	3295
Bromoform	mg/l	0.05000	0.05220	104	66 - 124	3295
Bromomethane	mg/l	0.05000	0.05290	106	51 - 145	3295
2-Butanone	mg/l	0.2500	0.2680	107	62 - 134	3295
n-Butylbenzene	mg/l	0.05000	0.03760	75	61 - 136	3295
sec-Butylbenzene	mg/l	0.05000	0.04740	95	69 - 130	3295
t-Butylbenzene	mg/l	0.05000	0.04900	98	66 - 129	3295
Carbon disulfide	mg/l	0.05000	0.05560	111	71 - 129	3295
Carbon tetrachloride	mg/l	0.05000	0.05390	108	70 - 130	3295
Chlorobenzene	mg/l	0.05000	0.05260	105	80 - 118	3295
Chloroethane	mg/l	0.05000	0.05600	112	59 - 144	3295
Chloroform	mg/l	0.05000	0.05090	102	74 - 123	3295
Chloromethane	mg/l	0.05000	0.04610	92	47 - 155	3295
2-Chlorotoluene	mg/l	0.05000	0.05310	106	74 - 126	3295
4-Chlorotoluene	mg/l	0.05000	0.05280	106	75 - 125	3295
1,2-Dibromo-3-chloropropane	mg/l	0.05000	0.04670	93	58 - 133	3295
Dibromochloromethane	mg/l	0.05000	0.05340	107	73 - 125	3295
1,2-Dibromoethane	mg/l	0.05000	0.05430	109	74 - 125	3295
Dibromomethane	mg/l	0.05000	0.05680	114	71 - 130	3295
1,2-Dichlorobenzene	mg/l	0.05000	0.05180	104	76 - 122	3295
1,3-Dichlorobenzene	mg/l	0.05000	0.05110	102	75 - 122	3295
1,4-Dichlorobenzene	mg/l	0.05000	0.05110	102	76 - 119	3295
Dichlorodifluoromethane	mg/l	0.05000	0.05500	110	53 - 151	3295
1,1-Dichloroethane	mg/l	0.05000	0.05420	108	76 - 127	3295
1,2-Dichloroethane	mg/l	0.05000	0.05170	103	66 - 133	3295
1,1-Dichloroethene	mg/l	0.05000	0.05440	109	72 - 127	3295
cis-1,2-Dichloroethene	mg/l	0.05000	0.05240	105	74 - 127	3295
trans-1,2-Dichloroethene	mg/l	0.05000	0.05210	104	70 - 132	3295

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**

**Project Number:** 51870.7

**Page:** 4

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
1,2-Dichloropropane	mg/l	0.05000	0.05290	106	76 - 124	3295
1,3-Dichloropropane	mg/l	0.05000	0.05290	106	72 - 129	3295
2,2-Dichloropropane	mg/l	0.05000	0.05370	107	33 - 152	3295
1,1-Dichloropropene	mg/l	0.05000	0.05300	106	73 - 127	3295
cis-1,3-Dichloropropene	mg/l	0.05000	0.05440	109	58 - 131	3295
trans-1,3-Dichloropropene	mg/l	0.05000	0.05430	109	53 - 133	3295
Ethylbenzene	mg/l	0.05000	0.05220	104	77 - 126	3295
Hexachlorobutadiene	mg/l	0.05000	0.04190	84	52 - 139	3295
2-Hexanone	mg/l	0.2500	0.2940	118	61 - 136	3295
Isopropylbenzene	mg/l	0.05000	0.05350	107	74 - 127	3295
4-Isopropyltoluene	mg/l	0.05000	0.04660	93	69 - 113	3295
4-Methyl-2-pentanone	mg/l	0.2500	0.2810	112	63 - 135	3295
Methylene chloride	mg/l	0.05000	0.06370	127	70 - 130	3295
Naphthalene	mg/l	0.05000	0.03390	68	57 - 143	3295
n-Propylbenzene	mg/l	0.05000	0.05280	106	71 - 130	3295
Styrene	mg/l	0.05000	0.05240	105	77 - 122	3295
1,1,1,2-Tetrachloroethane	mg/l	0.05000	0.05190	104	71 - 130	3295
1,1,2,2-Tetrachloroethane	mg/l	0.05000	0.05420	108	57 - 136	3295
Tetrachloroethene	mg/l	0.05000	0.05100	102	72 - 126	3295
Toluene	mg/l	0.05000	0.05300	106	78 - 124	3295
1,2,3-Trichlorobenzene	mg/l	0.05000	0.03460	69	58 - 139	3295
1,2,4-Trichlorobenzene	mg/l	0.05000	0.03510	70	60 - 132	3295
1,1,1-Trichloroethane	mg/l	0.05000	0.05280	106	70 - 130	3295
1,1,2-Trichloroethane	mg/l	0.05000	0.05480	110	75 - 124	3295
Trichloroethene	mg/l	0.05000	0.05270	105	70 - 136	3295
1,2,3-Trichloropropane	mg/l	0.05000	0.05330	107	63 - 132	3295
1,2,4-Trimethylbenzene	mg/l	0.05000	0.04930	99	73 - 127	3295
1,3,5-Trimethylbenzene	mg/l	0.05000	0.05130	103	72 - 128	3295
Vinyl chloride	mg/l	0.05000	0.05590	112	62 - 144	3295
Xylenes (Total)	mg/l	0.1500	0.1542	103	76 - 127	3295
Bromodichloromethane	mg/l	0.05000	0.05430	109	69 - 130	3295
Trichlorofluoromethane	mg/l	0.05000	0.05430	109	64 - 136	3295
Methane	mg/L	1.33	1.30	98	82 - 121	5721

ject QC continued . . .

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 5**

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Ethene	mg/L	2.32	2.00	86	83 - 120	5721
Ethane	mg/L	2.50	2.20	88	80 - 120	5721
VOA Surr 1,2-DCA-d4	% Rec			110	60 - 158	3295
VOA Surr Toluene-d8	% Rec			108	82 - 127	3295
VOA Surr, 4-BFB	% Rec			110	72 - 136	3295
VOA Surr, DBFM	% Rec			114	81 - 137	3295

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Methane	mg/L	1.33	1.30	98	82 - 121	5721
Ethene	mg/L	2.32	2.00	86	83 - 120	5721
Ethane	mg/L	2.50	2.20	88	80 - 120	5721

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Sulfate	mg/l	25.0	24.3	97	90 - 110	8660
Total Organic Carbon	mg/l	200.	207.	104	90 - 110	3931
Sulfide	mg/l	20.20	19.80	98	90 - 110	5077
Chloride	mg/l	15.0	13.8	92	90 - 110	3938

**Duplicates**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
Nitrate-N as N	mg/l	< 0.100	< 0.100	N/A	15.	3900	02-A35368
Sulfate	mg/l	36.0	36.0	0.00	15.	8660	02-A37033

Project QC continued . . .

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 6

### Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
Chloride	mg/l	11.9	12.0	0.84	15.	3938	02-A35113

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
**VOA PARAMETERS**					

Acetone	< 0.00840	mg/l	3295	3/ 7/02	12:36
Benzene	< 0.00070	mg/l	3295	3/ 7/02	12:36
Bromobenzene	< 0.00070	mg/l	3295	3/ 7/02	12:36
Bromochloromethane	< 0.00060	mg/l	3295	3/ 7/02	12:36
Bromoform	< 0.00070	mg/l	3295	3/ 7/02	12:36
Bromomethane	< 0.00080	mg/l	3295	3/ 7/02	12:36
2-Butanone	< 0.00390	mg/l	3295	3/ 7/02	12:36
n-Butylbenzene	< 0.00070	mg/l	3295	3/ 7/02	12:36
sec-Butylbenzene	< 0.00080	mg/l	3295	3/ 7/02	12:36
t-Butylbenzene	< 0.00090	mg/l	3295	3/ 7/02	12:36
Carbon disulfide	< 0.00080	mg/l	3295	3/ 7/02	12:36
Carbon tetrachloride	< 0.00070	mg/l	3295	3/ 7/02	12:36
Chlorobenzene	< 0.00070	mg/l	3295	3/ 7/02	12:36
Chloroethane	< 0.00090	mg/l	3295	3/ 7/02	12:36
Chloroform	< 0.00060	mg/l	3295	3/ 7/02	12:36
Chloromethane	< 0.00050	mg/l	3295	3/ 7/02	12:36
2-Chlorotoluene	< 0.00070	mg/l	3295	3/ 7/02	12:36
4-Chlorotoluene	< 0.00060	mg/l	3295	3/ 7/02	12:36
1,2-Dibromo-3-chloropropane	< 0.00310	mg/l	3295	3/ 7/02	12:36
Dibromochloromethane	< 0.00040	mg/l	3295	3/ 7/02	12:36
1,2-Dibromoethane	< 0.00050	mg/l	3295	3/ 7/02	12:36
Dibromomethane	< 0.00040	mg/l	3295	3/ 7/02	12:36
1,2-Dichlorobenzene	< 0.00050	mg/l	3295	3/ 7/02	12:36
1,3-Dichlorobenzene	< 0.00060	mg/l	3295	3/ 7/02	12:36
1,4-Dichlorobenzene	< 0.00050	mg/l	3295	3/ 7/02	12:36
Dichlorodifluoromethane	< 0.00040	mg/l	3295	3/ 7/02	12:36

ject QC continued . . .

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 7**

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
1,1-Dichloroethane	< 0.00080	mg/l	3295	3/ 7/02	12:36
1,2-Dichloroethane	< 0.00090	mg/l	3295	3/ 7/02	12:36
1,1-Dichloroethene	< 0.00080	mg/l	3295	3/ 7/02	12:36
cis-1,2-Dichloroethene	< 0.00070	mg/l	3295	3/ 7/02	12:36
trans-1,2-Dichloroethene	< 0.00080	mg/l	3295	3/ 7/02	12:36
1,2-Dichloropropane	< 0.00060	mg/l	3295	3/ 7/02	12:36
1,3-Dichloropropane	< 0.00060	mg/l	3295	3/ 7/02	12:36
2,2-Dichloropropane	< 0.00090	mg/l	3295	3/ 7/02	12:36
1,1-Dichloropropene	< 0.00070	mg/l	3295	3/ 7/02	12:36
cis-1,3-Dichloropropene	< 0.00070	mg/l	3295	3/ 7/02	12:36
trans-1,3-Dichloropropene	< 0.00050	mg/l	3295	3/ 7/02	12:36
Ethylbenzene	< 0.00070	mg/l	3295	3/ 7/02	12:36
Hexachlorobutadiene	< 0.00080	mg/l	3295	3/ 7/02	12:36
2-Hexanone	< 0.00280	mg/l	3295	3/ 7/02	12:36
Isopropylbenzene	< 0.00080	mg/l	3295	3/ 7/02	12:36
4-Isopropyltoluene	< 0.00080	mg/l	3295	3/ 7/02	12:36
4-Methyl-2-pentanone	< 0.00460	mg/l	3295	3/ 7/02	12:36
Methylene chloride	< 0.00150	mg/l	3295	3/ 7/02	12:36
Naphthalene	< 0.00190	mg/l	3295	3/ 7/02	12:36
n-Propylbenzene	< 0.00080	mg/l	3295	3/ 7/02	12:36
Styrene	< 0.00090	mg/l	3295	3/ 7/02	12:36
1,1,1,2-Tetrachloroethane	< 0.00060	mg/l	3295	3/ 7/02	12:36
1,1,2,2-Tetrachloroethane	< 0.00050	mg/l	3295	3/ 7/02	12:36
Tetrachloroethene	< 0.00080	mg/l	3295	3/ 7/02	12:36
Toluene	< 0.00070	mg/l	3295	3/ 7/02	12:36
1,2,3-Trichlorobenzene	< 0.00060	mg/l	3295	3/ 7/02	12:36
1,2,4-Trichlorobenzene	< 0.00090	mg/l	3295	3/ 7/02	12:36
1,1,1-Trichloroethane	< 0.00070	mg/l	3295	3/ 7/02	12:36
1,1,2-Trichloroethane	< 0.00050	mg/l	3295	3/ 7/02	12:36
Trichloroethene	< 0.00090	mg/l	3295	3/ 7/02	12:36
1,2,3-Trichloropropane	< 0.00040	mg/l	3295	3/ 7/02	12:36
1,2,4-Trimethylbenzene	< 0.00060	mg/l	3295	3/ 7/02	12:36
1,3,5-Trimethylbenzene	< 0.00080	mg/l	3295	3/ 7/02	12:36

Project QC continued . . .

# TestAmerica

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 8**

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Vinyl chloride	< 0.00050	mg/l	3295	3/ 7/02	12:36
Xylenes (Total)	< 0.00090	mg/l	3295	3/ 7/02	12:36
Bromodichloromethane	< 0.00080	mg/l	3295	3/ 7/02	12:36
Trichlorofluoromethane	< 0.00070	mg/l	3295	3/ 7/02	12:36
VOA Surr 1,2-DCA-d4	111.	% Rec	3295	3/ 7/02	12:36
VOA Surr Toluene-d8	106.	% Rec	3295	3/ 7/02	12:36
VOA Surr, 4-BFB	134.	% Rec	3295	3/ 7/02	12:36
VOA Surr, DBFM	113.	% Rec	3295	3/ 7/02	12:36

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**MISC PARAMETERS**</b>					
Nitrate-N as N	< 0.100	mg/l	3900	3/ 7/02	18:49
Sulfate	< 1.00	mg/l	8660	3/14/02	9:11
Total Organic Carbon	< 1.00	mg/l	3931	3/ 7/02	22:15
Sulfide	< 1.000	mg/l	5077	3/ 9/02	10:00
Chloride	< 1.00	mg/l	3938	3/ 7/02	22:25

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**MISC PARAMETERS**</b>					
Methane	< 0.026	mg/L	5721	3/11/02	12:43
Ethene	< 0.026	mg/L	5721	3/11/02	12:43
Ethane	< 0.026	mg/L	5721	3/11/02	12:43

# - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 274639

# TestAmerica<sup>®</sup> INCORPORATED

**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

**Phone:** 615-726-0177  
**Fax:** 615-726-3404

27463

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

**Client Name**

**Client #:**

**Address:** 1000 University Street, Seattle, WA 98103

Project Manager: Rick Ryan

**Telephone Number:** 510-549-1400      **Fax:** 510-549-1401

**Sampler Name:** (Print Name) Rob Ellis

Sampler Signature: 

Project Name: Former Taylor Instruments

Project #: 57870.7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102501.216.2.99 PO#: 6599

**Special Instructions:**

**LABORATORY COMMENTS:**

Relinquished By: <i>Z.A. &amp; G.A.</i>	Date: 05/06/02	Time: 18:00	Received By: <i>M. Bly</i>	Date: 5/6/02	Time: 9:00	Rec Lab Temp: 10
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Custody Seals: Y N N/A
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Bottles Supplied by Test America: Y N

Method of Shipment:

**March 7, 2002**  
**Analytical Data**

# TestAmerica

INCORPORATED

3/16/02

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 51870.7 FORMER TAYLOR INSTRUMENT. The Laboratory Project number is 274879. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Collection Date
OB-07 MS/MSD	02-A35900	3/ 7/02
W-5	02-A35901	3/ 7/02
W-5 (DUP)	02-A35902	3/ 7/02

These results relate only to the items tested.  
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Report Approved By: Gail A. Lage

Paul E. Lane, Jr., Lab Director  
Michael H. Dunn, M.S., Technical Director  
Johnny A. Mitchell, Dir. Technical Serv.  
Eric S. Smith, Assistant Technical Director  
Jennifer P. Flynn, Technical Services

Report Date: 3/16/02

Gail A. Lage, Technical Serv.  
Glenn L. Norton, Technical Serv.  
Kelly S. Comstock, Technical Serv.  
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 11342

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A35900  
Sample ID: OB-07 MS/MSD  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 7/02  
Time Collected: 9:21  
Date Received: 3/ 8/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 9/02	7:12	J. Adams	8260B	4701
Benzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Bromobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Bromoform	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Bromomethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
2-Butanone	ND	mg/l	0.0500	1	3/ 9/02	7:12	J. Adams	8260B	4701
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Carbon disulfide	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Chlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Chloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Chloroform	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Chloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 9/02	7:12	J. Adams	8260B	4701
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Dibromomethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35900  
 Sample ID: OB-07 MS/MSD  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
cis-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Ethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
2-Hexanone	ND	mg/l	0.0100	1	3/ 9/02	7:12	J. Adams	8260B	4701
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 9/02	7:12	J. Adams	8260B	4701
Methylene chloride	ND	mg/l	0.0050	1	3/ 9/02	7:12	J. Adams	8260B	4701
Naphthalene	ND	mg/l	0.0050	1	3/ 9/02	7:12	J. Adams	8260B	4701
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Styrene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Toluene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Trichloroethene	0.0042	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Vinyl chloride	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35900  
 Sample ID: OB-07 MS/MSD  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 9/02	7:12	J. Adams	8260B	4701
<b>*MISCELLANEOUS GC PARAMETERS*</b>									
Methane	ND	mg/L	0.026	1	3/12/02	18:27	K. Burritt	RSK175M	7000
Carbon Dioxide	ND	mg/L	3.0	1	3/16/02	3:00	T. Beverly	SM4500C02C	589
Ethene	ND	mg/L	0.026	1	3/12/02	18:27	K. Burritt	RSK175M	7000
Ethane	ND	mg/L	0.026	1	3/12/02	18:27	K. Burritt	RSK175M	7000
<b>*METALS*</b>									
Ferrous Iron	ND	mg/l	0.100	1	3/ 8/02	15:53	S. Duncan	3500D	4355
<b>*MISCELLANEOUS CHEMISTRY*</b>									
Nitrate-N as N	3.27	mg/l	0.100	1	3/ 8/02	18:59	A.Bamarni	353.2	5098
Sulfate	200.	mg/l	10.0	10	3/14/02	9:11	M.Shockley	375.4	8660
Alkalinity as CaCO <sub>3</sub>	69.1	mg/l	5.00	1	3/ 9/02	8:01	S. Duncan	310.1M	4360
Total Organic Carbon	2.10	mg/l	1.00	1	3/11/02	1:51	Weatherly	415.1	5569
Sulfide	ND	mg/l	2.000	2	3/ 9/02	10:00	Abdullatef	376.1	5077
Chloride	31.2	mg/l	2.00	2	3/11/02	21:07	A.Bamarni	325.3	6219

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	60. - 158.
VOA Surr Toluene-d8	104.	82. - 127.
VOA Surr, 4-BFB	104.	72. - 136.
VOA Surr, DBFM	103.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method prescribed holding time.

End of Sample Report.

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Lab Number: 02-A35901  
Sample ID: W-5  
Sample Type: Ground water  
Site ID:

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Date Collected: 3/ 7/02  
Time Collected: 12:25  
Date Received: 3/ 8/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/ 9/02	7:41	J. Adams	8260B	4701
Benzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Bromobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Bromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Bromoform	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Bromomethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
2-Butanone	ND	mg/l	0.0500	1	3/ 9/02	7:41	J. Adams	8260B	4701
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Carbon disulfide	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Chlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Chloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Chloroform	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Chloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 9/02	7:41	J. Adams	8260B	4701
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Dibromomethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701

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# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A35901  
 Sample ID: W-5  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
cis-1,2-Dichloroethene	0.0216	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
trans-1,2-Dichloroethene	0.0035	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Ethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
2-Hexanone	ND	mg/l	0.0100	1	3/ 9/02	7:41	J. Adams	8260B	4701
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 9/02	7:41	J. Adams	8260B	4701
Methylene chloride	ND	mg/l	0.0050	1	3/ 9/02	7:41	J. Adams	8260B	4701
Naphthalene	ND	mg/l	0.0050	1	3/ 9/02	7:41	J. Adams	8260B	4701
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Styrene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Toluene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Trichloroethene	0.737	mg/l	0.0200	10	3/ 9/02	21:21	J. Adams	8260B	6625
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Vinyl chloride	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 02-A35901  
 Sample ID: W-5  
 Project: 51870.7  
 Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 9/02	7:41	J. Adams	8260B	4701
<b>*MISCELLANEOUS GC PARAMETERS*</b>									
Methane	ND	mg/L	0.026	1	3/12/02	18:34	K. Burritt	RSK175M	7000
Carbon Dioxide	32.9	mg/L	3.0	1	3/16/02	3:00	T. Beverly	SM4500CO2C	589
Ethene	ND	mg/L	0.026	1	3/12/02	18:34	K. Burritt	RSK175M	7000
Ethane	ND	mg/L	0.026	1	3/12/02	18:34	K. Burritt	RSK175M	7000
<b>*METALS*</b>									
Ferrous Iron	0.584	mg/l	0.100	1	3/ 8/02	15:53	S. Duncan	3500D	4355
<b>*MISCELLANEOUS CHEMISTRY*</b>									
Nitrate-N as N	ND	mg/l	0.100	1	3/ 8/02	19:05	A.Bamarni	353.2	5098
Sulfate	78.2	mg/l	2.00	2	3/14/02	9:11	M.Shockley	375.4	8660
Alkalinity as CaCO <sub>3</sub>	354.	mg/l	5.00	1	3/ 9/02	8:01	S. Duncan	310.1M	4360
Total Organic Carbon	ND	mg/l	1.00	1	3/11/02	1:51	Weatherly	415.1	5569
Sulfide	ND	mg/l	2.000	2	3/ 9/02	10:00	Abdullatef	376.1	5077
Chloride	6.67	mg/l	1.00	1	3/11/02	20:51	A.Bamarni	325.3	6219

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	104.	72. - 136.
VOA Surr, DBFM	98.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method prescribed holding time.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A35902  
Sample ID: W-5 (DUP)  
Sample Type: Ground water  
Site ID:

Date Collected: 3/ 7/02  
Time Collected: 12:25  
Date Received: 3/ 8/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/ 9/02	8:26	J. Adams	8260B	4701
Benzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Bromobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Bromoform	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Bromomethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
2-Butanone	ND	mg/l	0.0500	1	3/ 9/02	8:26	J. Adams	8260B	4701
n-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
sec-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
t-Butylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Carbon disulfide	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Carbon tetrachloride	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Chlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Chloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Chloroform	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Chloromethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
2-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
4-Chlorotoluene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/ 9/02	8:26	J. Adams	8260B	4701
Dibromochloromethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Dibromomethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A35902

Sample ID: W-5 (DUP)

Project: 51870.7

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analysis		
					Date	Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
cis-1,2-Dichloroethene	0.0232	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
trans-1,2-Dichloroethene	0.0039	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Ethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
2-Hexanone	ND	mg/l	0.0100	1	3/ 9/02	8:26	J. Adams	8260B	4701
Isopropylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/ 9/02	8:26	J. Adams	8260B	4701
Methylene chloride	ND	mg/l	0.0050	1	3/ 9/02	8:26	J. Adams	8260B	4701
Naphthalene	ND	mg/l	0.0050	1	3/ 9/02	8:26	J. Adams	8260B	4701
n-Propylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Styrene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Tetrachloroethene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Toluene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Trichloroethene	0.607	mg/l	0.0200	10	3/ 9/02	21:50	J. Adams	8260B	6625
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Vinyl chloride	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Xylenes (Total)	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701
Bromodichloromethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A35902  
Sample ID: W-5 (DUP)  
Project: 51870.7  
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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/ 9/02	8:26	J. Adams	8260B	4701

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	102.	60. - 158.
VOA Surr Toluene-d8	98.	82. - 127.
VOA Surr, 4-BFB	104.	72. - 136.
VOA Surr, DBFM	98.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
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#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	< 0.00200	0.05640	0.05000	113	70. - 136.	4701	02-A35900
Chlorobenzene	mg/l	< 0.00200	0.05340	0.05000	107	70. - 132.	4701	02-A35900
1-Dichloroethene	mg/l	< 0.00200	0.05630	0.05000	113	60. - 145.	4701	02-A35900
Toluene	mg/l	< 0.00200	0.05540	0.05000	111	69. - 137.	4701	02-A35900
Trichloroethene	mg/l	0.00420	0.06700	0.05000	126	63. - 149.	4701	02-A35900
Tetrachloroethene	mg/l	< 0.00200	0.05600	0.05000	112	60. - 140.	4701	02-A35900
VOA Surr 1,2-DCA-d4	% Rec				102	60. - 158.	4701	
VOA Surr Toluene-d8	% Rec				103	82. - 127.	4701	
VOA Surr, 4-BFB	% Rec				104	72. - 136.	4701	
VOA Surr, DBFM	% Rec				102	81. - 137.	4701	

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
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#### \*\*MISC PARAMETERS\*\*

Nitrate-N as N	mg/l	< 0.100	7.42	7.50	99	80 - 120	5098	02-A35801
Nitrate-N as N	mg/l	< 0.100	7.40	7.50	99	80 - 120	5098	02-A35801
Sulfate	mg/l	33.6	74.0	40.0	101	80 - 120	8660	02-A37031
Total Organic Carbon	mg/l	< 1.00	21.5	20.0	108	80 - 120	5569	02-A36410
Sulfide	mg/l	< 1.000	18.30	20.20	91	80 - 120	5077	02-A34879
Chloride	mg/l	< 1.00	10.4	10.0	104	80 - 120	6219	02-A35803

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
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#### \*\*MISC PARAMETERS\*\*

Project QC continued . . .

# TestAmerica

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PROJECT QUALITY CONTROL DATA  
 Project Number: 51870.7  
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#### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
Methane	mg/L	< 0.026	1.20	1.20	100	40 - 140	7000	02-A35900
Methane	mg/L	< 0.026	1.20	1.40	86	40 - 140	7000	02-A35900
Ethene	mg/L	< 0.026	2.00	2.32	86	40 - 140	7000	02-A35900
Ethene	mg/L	< 0.026	2.00	2.32	86	40 - 140	7000	02-A35900
Ethane	mg/L	< 0.026	2.20	2.50	88	40 - 140	7000	02-A35900
Ethane	mg/L	< 0.026	2.20	2.50	88	40 - 140	7000	02-A35900

#### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch

#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	0.05640	0.05730	1.58	21.	4701
o-benzene	mg/l	0.05340	0.05350	0.19	25.	4701
1,1-Dichloroethene	mg/l	0.05630	0.05720	1.59	26.	4701
Toluene	mg/l	0.05540	0.05570	0.54	22.	4701
Trichloroethene	mg/l	0.06700	0.06220	7.43	28.	4701
Tetrachloroethene	mg/l	0.05600	0.05480	2.17	24.	4701
VOA Surr 1,2-DCA-d4	% Rec		103.			4701
VOA Surr Toluene-d8	% Rec		103.			4701
VOA Surr, 4-BFB	% Rec		104.			4701
VOA Surr, DBFM	% Rec		102.			4701

#### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch

#### \*\*MISC PARAMETERS\*\*

Methane	mg/L	1.20	1.40	15.38	50	7000
Ethene	mg/L	2.00	2.00	0.00	50	7000

Project QC continued . . .

# TestAmerica

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PROJECT QUALITY CONTROL DATA  
 Project Number: 51870.7  
 Page: 3

**Matrix Spike Duplicate**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Ethane	mg/L	2.20	2.20	0.00	50	7000

**Matrix Spike Duplicate**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch

**\*\*MISC PARAMETERS\*\***

Nitrate-N as N	mg/l	7.42	7.40	0.27	20	5098
Sulfate	mg/l	74.0	73.4	0.81	20	8660
Total Organic Carbon	mg/l	21.5	21.4	0.47	20	5569
Sulfide	mg/l	18.30	18.60	1.63	20	5077
Chloride	mg/l	10.4	10.1	2.93	20	6219

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch

**\*\*VOA PARAMETERS\*\***

Acetone	mg/l	0.2500	0.2710	108	54 - 153	4701
Benzene	mg/l	0.05000	0.05300	106	79 - 124	4701
Bromobenzene	mg/l	0.05000	0.05250	105	76 - 122	4701
Bromochloromethane	mg/l	0.05000	0.05090	102	71 - 134	4701
Bromoform	mg/l	0.05000	0.05100	102	66 - 124	4701
Bromomethane	mg/l	0.05000	0.05980	120	51 - 145	4701
2-Butanone	mg/l	0.2500	0.2740	110	62 - 134	4701
n-Butylbenzene	mg/l	0.05000	0.05670	113	61 - 136	4701
sec-Butylbenzene	mg/l	0.05000	0.05560	111	69 - 130	4701
t-Butylbenzene	mg/l	0.05000	0.05580	112	66 - 129	4701
Carbon disulfide	mg/l	0.05000	0.05140	103	71 - 129	4701
Carbon tetrachloride	mg/l	0.05000	0.05450	109	70 - 130	4701
Chlorobenzene	mg/l	0.05000	0.05130	103	80 - 118	4701

ject QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Chloroethane	mg/l	0.05000	0.05440	109	59 - 144	4701
Chloroform	mg/l	0.05000	0.05110	102	74 - 123	4701
Chloromethane	mg/l	0.05000	0.04990	100	47 - 155	4701
2-Chlorotoluene	mg/l	0.05000	0.05340	107	74 - 126	4701
4-Chlorotoluene	mg/l	0.05000	0.05250	105	75 - 125	4701
1,2-Dibromo-3-chloropropane	mg/l	0.05000	0.04950	99	58 - 133	4701
Dibromochloromethane	mg/l	0.05000	0.05060	101	73 - 125	4701
1,2-Dibromoethane	mg/l	0.05000	0.05520	110	74 - 125	4701
Dibromomethane	mg/l	0.05000	0.05040	101	71 - 130	4701
1,2-Dichlorobenzene	mg/l	0.05000	0.05180	104	76 - 122	4701
1,3-Dichlorobenzene	mg/l	0.05000	0.05220	104	75 - 122	4701
1,4-Dichlorobenzene	mg/l	0.05000	0.05130	103	76 - 119	4701
Dichlorodifluoromethane	mg/l	0.05000	0.05000	100	53 - 151	4701
1,1-Dichloroethane	mg/l	0.05000	0.05130	103	76 - 127	4701
1,2-Dichloroethane	mg/l	0.05000	0.05050	101	66 - 133	4701
1,1-Dichloroethene	mg/l	0.05000	0.05200	104	72 - 127	4701
cis-1,2-Dichloroethene	mg/l	0.05000	0.05200	104	74 - 127	4701
trans-1,2-Dichloroethene	mg/l	0.05000	0.05140	103	70 - 132	4701
1,2-Dichloropropane	mg/l	0.05000	0.05410	108	76 - 124	4701
1,3-Dichloropropane	mg/l	0.05000	0.05310	106	72 - 129	4701
2,2-Dichloropropane	mg/l	0.05000	0.05860	117	33 - 152	4701
1,1-Dichloropropene	mg/l	0.05000	0.05460	109	73 - 127	4701
cis-1,3-Dichloropropene	mg/l	0.05000	0.05860	117	58 - 131	4701
trans-1,3-Dichloropropene	mg/l	0.05000	0.05320	106	53 - 133	4701
Ethylbenzene	mg/l	0.05000	0.05350	107	77 - 126	4701
Hexachlorobutadiene	mg/l	0.05000	0.04970	99	52 - 139	4701
2-Hexanone	mg/l	0.2500	0.2860	114	61 - 136	4701
Isopropylbenzene	mg/l	0.05000	0.05590	112	74 - 127	4701
4-Isopropyltoluene	mg/l	0.05000	0.05650	113 #	69 - 113	4701
4-Methyl-2-pentanone	mg/l	0.2500	0.2860	114	63 - 135	4701
Methylene chloride	mg/l	0.05000	0.05020	100	70 - 130	4701
Naphthalene	mg/l	0.05000	0.05720	114	57 - 143	4701
n-Propylbenzene	mg/l	0.05000	0.05500	110	71 - 130	4701

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Styrene	mg/l	0.05000	0.05490	110	77 - 122	4701
1,1,1,2-Tetrachloroethane	mg/l	0.05000	0.05540	111	71 - 130	4701
1,1,2,2-Tetrachloroethane	mg/l	0.05000	0.05370	107	57 - 136	4701
Tetrachloroethene	mg/l	0.05000	0.05350	107	72 - 126	4701
Toluene	mg/l	0.05000	0.05190	104	78 - 124	4701
1,2,3-Trichlorobenzene	mg/l	0.05000	0.05130	103	58 - 139	4701
1,2,4-Trichlorobenzene	mg/l	0.05000	0.05430	109	60 - 132	4701
1,1,1-Trichloroethane	mg/l	0.05000	0.05450	109	70 - 130	4701
1,1,2-Trichloroethane	mg/l	0.05000	0.05210	104	75 - 124	4701
Trichloroethene	mg/l	0.05000	0.05400	108	70 - 136	4701
Trichloroethene	mg/l	0.05000	0.04870	97	70 - 136	6625
1,2,3-Trichloropropane	mg/l	0.05000	0.05350	107	63 - 132	4701
1,2,4-Trimethylbenzene	mg/l	0.05000	0.05400	108	73 - 127	4701
1,3,5-Trimethylbenzene	mg/l	0.05000	0.05510	110	72 - 128	4701
Vinyl chloride	mg/l	0.05000	0.05250	105	62 - 144	4701
Xylenes (Total)	mg/l	0.1500	0.1591	106	76 - 127	4701
Bromodichloromethane	mg/l	0.05000	0.05360	107	69 - 130	4701
Trichlorofluoromethane	mg/l	0.05000	0.06610	132	64 - 136	4701
Methane	mg/L	1.33	1.20	90	82 - 121	7000
Ethene	mg/L	2.32	2.00	86	83 - 120	7000
Ethane	mg/L	2.50	2.10	84	80 - 120	7000
VOA Surr 1,2-DCA-d4	% Rec			98	60 - 158	4701
VOA Surr 1,2-DCA-d4	% Rec			98	60 - 158	6625
VOA Surr Toluene-d8	% Rec			101	82 - 127	4701
VOA Surr Toluene-d8	% Rec			97	82 - 127	6625
VOA Surr, 4-BFB	% Rec			104	72 - 136	4701
VOA Surr, 4-BFB	% Rec			105	72 - 136	6625
VOA Surr, DBFM	% Rec			98	81 - 137	4701
VOA Surr, DBFM	% Rec			97	81 - 137	6625

ject QC continued . . .

# TestAmerica

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
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Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**MISC PARAMETERS**</b>						
Methane	mg/L	1.33	1.20	90	82 - 121	7000
Ethene	mg/L	2.32	2.00	86	83 - 120	7000
Ethane	mg/L	2.50	2.10	84	80 - 120	7000

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**MISC PARAMETERS**</b>						
Nitrate-N as N	mg/l	5.50	5.80	105	90 - 110	5098
Sulfate	mg/l	25.0	24.3	97	90 - 110	8660
Total Organic Carbon	mg/l	200.	191.	96	90 - 110	5569
Sulfide	mg/l	20.20	19.80	98	90 - 110	5077
Chloride	mg/l	15.0	13.5	90	90 - 110	6219

Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
Nitrate-N as N	mg/l	3.27	3.26	0.31	15.	5098	02-A35900
Sulfate	mg/l	36.0	36.0	0.00	15.	8660	02-A37033
Chloride	mg/l	456.	458.	0.44	15.	6219	02-A36773

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**VOA PARAMETERS**</b>					

Acetone	< 0.00840	mg/l	4701	3/ 8/02	17:23
Benzene	< 0.00070	mg/l	4701	3/ 8/02	17:23

Project QC continued . . .

## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Bromobenzene	< 0.00070	mg/l	4701	3/ 8/02	17:23
Bromoform	< 0.00060	mg/l	4701	3/ 8/02	17:23
Bromomethane	< 0.00070	mg/l	4701	3/ 8/02	17:23
2-Butanone	< 0.00080	mg/l	4701	3/ 8/02	17:23
n-Butylbenzene	< 0.00070	mg/l	4701	3/ 8/02	17:23
sec-Butylbenzene	< 0.00080	mg/l	4701	3/ 8/02	17:23
t-Butylbenzene	< 0.00090	mg/l	4701	3/ 8/02	17:23
Carbon disulfide	< 0.00080	mg/l	4701	3/ 8/02	17:23
Carbon tetrachloride	< 0.00070	mg/l	4701	3/ 8/02	17:23
Chlorobenzene	< 0.00070	mg/l	4701	3/ 8/02	17:23
Chloroethane	< 0.00090	mg/l	4701	3/ 8/02	17:23
Chloroform	< 0.00060	mg/l	4701	3/ 8/02	17:23
Chloromethane	< 0.00050	mg/l	4701	3/ 8/02	17:23
2-Chlorotoluene	< 0.00070	mg/l	4701	3/ 8/02	17:23
4-Chlorotoluene	< 0.00060	mg/l	4701	3/ 8/02	17:23
1,2-Dibromo-3-chloropropane	< 0.00310	mg/l	4701	3/ 8/02	17:23
Dibromochloromethane	< 0.00040	mg/l	4701	3/ 8/02	17:23
1,2-Dibromoethane	< 0.00050	mg/l	4701	3/ 8/02	17:23
Dibromomethane	< 0.00040	mg/l	4701	3/ 8/02	17:23
1,2-Dichlorobenzene	< 0.00050	mg/l	4701	3/ 8/02	17:23
1,3-Dichlorobenzene	< 0.00060	mg/l	4701	3/ 8/02	17:23
1,4-Dichlorobenzene	< 0.00050	mg/l	4701	3/ 8/02	17:23
Dichlorodifluoromethane	< 0.00040	mg/l	4701	3/ 8/02	17:23
1,1-Dichloroethane	< 0.00080	mg/l	4701	3/ 8/02	17:23
1,2-Dichloroethane	< 0.00090	mg/l	4701	3/ 8/02	17:23
1,1-Dichloroethene	< 0.00080	mg/l	4701	3/ 8/02	17:23
cis-1,2-Dichloroethene	< 0.00070	mg/l	4701	3/ 8/02	17:23
trans-1,2-Dichloroethene	< 0.00080	mg/l	4701	3/ 8/02	17:23
1,2-Dichloropropane	< 0.00060	mg/l	4701	3/ 8/02	17:23
1,3-Dichloropropane	< 0.00060	mg/l	4701	3/ 8/02	17:23
2,2-Dichloropropane	< 0.00090	mg/l	4701	3/ 8/02	17:23
1,1-Dichloropropene	< 0.00070	mg/l	4701	3/ 8/02	17:23

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 8

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
cis-1,3-Dichloropropene	< 0.00070	mg/l	4701	3/ 8/02	17:23
trans-1,3-Dichloropropene	< 0.00050	mg/l	4701	3/ 8/02	17:23
Ethylbenzene	< 0.00070	mg/l	4701	3/ 8/02	17:23
Hexachlorobutadiene	< 0.00080	mg/l	4701	3/ 8/02	17:23
2-Hexanone	< 0.00280	mg/l	4701	3/ 8/02	17:23
Isopropylbenzene	< 0.00080	mg/l	4701	3/ 8/02	17:23
4-Isopropyltoluene	< 0.00080	mg/l	4701	3/ 8/02	17:23
4-Methyl-2-pentanone	< 0.00460	mg/l	4701	3/ 8/02	17:23
Methylene chloride	< 0.00150	mg/l	4701	3/ 8/02	17:23
Naphthalene	< 0.00190	mg/l	4701	3/ 8/02	17:23
n-Propylbenzene	< 0.00080	mg/l	4701	3/ 8/02	17:23
Styrene	< 0.00090	mg/l	4701	3/ 8/02	17:23
1,1,1,2-Tetrachloroethane	< 0.00060	mg/l	4701	3/ 8/02	17:23
1,1,2,2-Tetrachloroethane	< 0.00050	mg/l	4701	3/ 8/02	17:23
Tetrachloroethene	< 0.00080	mg/l	4701	3/ 8/02	17:23
Toluene	< 0.00070	mg/l	4701	3/ 8/02	17:23
1,2,3-Trichlorobenzene	< 0.00060	mg/l	4701	3/ 8/02	17:23
1,2,4-Trichlorobenzene	< 0.00090	mg/l	4701	3/ 8/02	17:23
1,1,1-Trichloroethane	< 0.00070	mg/l	4701	3/ 8/02	17:23
1,1,2-Trichloroethane	< 0.00050	mg/l	4701	3/ 8/02	17:23
Trichloroethene	< 0.00090	mg/l	4701	3/ 8/02	17:23
Trichloroethene	< 0.00090	mg/l	6625	3/ 9/02	17:33
1,2,3-Trichloropropane	< 0.00040	mg/l	4701	3/ 8/02	17:23
1,2,4-Trimethylbenzene	< 0.00060	mg/l	4701	3/ 8/02	17:23
1,3,5-Trimethylbenzene	< 0.00080	mg/l	4701	3/ 8/02	17:23
Vinyl chloride	< 0.00050	mg/l	4701	3/ 8/02	17:23
Xylenes (Total)	< 0.00090	mg/l	4701	3/ 8/02	17:23
Bromodichloromethane	< 0.00080	mg/l	4701	3/ 8/02	17:23
Trichlorofluoromethane	< 0.00070	mg/l	4701	3/ 8/02	17:23

Project QC continued . . .

# TestAmerica

INCORPORATED

## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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VOA Surr 1,2-DCA-d4	100.	% Rec	4701	3/ 8/02	17:23
VOA Surr 1,2-DCA-d4	100.	% Rec	6625	3/ 9/02	17:33
VOA Surr Toluene-d8	103.	% Rec	4701	3/ 8/02	17:23
VOA Surr Toluene-d8	98.	% Rec	6625	3/ 9/02	17:33
VOA Surr, 4-BFB	104.	% Rec	4701	3/ 8/02	17:23
VOA Surr, 4-BFB	103.	% Rec	6625	3/ 9/02	17:33
VOA Surr, DBFM	99.	% Rec	4701	3/ 8/02	17:23
VOA Surr, DBFM	96.	% Rec	6625	3/ 9/02	17:33

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
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### \*\*MISC PARAMETERS\*\*

Nitrate-N as N	< 0.100	mg/l	5098	3/ 8/02	18:54
Sulfate	< 1.00	mg/l	8660	3/14/02	9:11
Total Organic Carbon	< 1.00	mg/l	5569	3/11/02	1:51
Sulfide	< 1.000	mg/l	5077	3/ 9/02	10:00
Chloride	< 1.00	mg/l	6219	3/11/02	20:44

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
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### \*\*MISC PARAMETERS\*\*

Methane	< 0.026	mg/L	7000	3/12/02	16:27
Ethene	< 0.026	mg/L	7000	3/12/02	16:27
Ethane	< 0.026	mg/L	7000	3/12/02	16:27

# - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 274879



**March 8 - 10, 2002**  
**Analytical Data**

# TestAmerica

INCORPORATED

3/14/02

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 51870.7 FORMER TAYLOR INSTRUMENT. The Laboratory Project number is 275351. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Collection Date
W-4	02-A38207	3/ 8/02
TW-13	02-A38208	3/ 8/02
OB-06	02-A38209	3/ 8/02
BR-08	02-A38210	3/ 8/02
BR-17	02-A38211	3/ 8/02
BR-03	02-A38212	3/ 8/02
BR-14	02-A38213	3/ 9/02
BR-01	02-A38214	3/ 9/02
BR-02	02-A38215	3/ 9/02
QATB02	02-A38216	3/ 9/02
QAFB02	02-A38217	3/ 9/02
QARB02	02-A38218	3/ 9/02
BR-06, BR-06 MS, BR-06 MSD	02-A38219	3/ 9/02
W-6	02-A38220	3/ 9/02
BR-16	02-A38221	3/10/02

# TestAmerica

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Page 2

Sample Identification

Lab Number

Collection Date

These results relate only to the items tested.  
This report shall not be reproduced except in full and with  
permission of the laboratory.

Report Approved By: Gail Lage

Report Date: 3/14/02

Paul E. Lane, Jr., Lab Director  
Michael H. Dunn, M.S., Technical Director  
Johnny A. Mitchell, Dir. Technical Serv.  
Eric S. Smith, Assistant Technical Director  
Jennifer P. Flynn, Technical Services

Gail A. Lage, Technical Serv.  
Glenn L. Norton, Technical Serv.  
Kelly S. Comstock, Technical Serv.  
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 11342

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38207

Sample ID: W-4

Sample Type: Water

Site ID:

Date Collected: 3/ 8/02

Time Collected: 7:52

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil	Analysis		Analyst	Method	Batch
				Factor	Date	Time			
<b>*VOLATILE ORGANICS*</b>									
Benzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/12/02	22:57	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/12/02	22:57	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/12/02	22:57	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/12/02	22:57	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38207  
 Sample ID: W-4  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/12/02	22:57	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/12/02	22:57	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/12/02	22:57	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38207  
Sample ID: W-4  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/12/02	22:57	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	106.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

■ a of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38208

Sample ID: TW-13

Sample Type: Water

Site ID:

Date Collected: 3/ 8/02

Time Collected: 9:27

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Benzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/12/02	23:25	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/12/02	23:25	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/12/02	23:25	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/12/02	23:25	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38208  
 Sample ID: TW-13  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Dibromomethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/12/02	23:25	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/12/02	23:25	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/12/02	23:25	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38208  
Sample ID: TW-13  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/12/02	23:25	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	107.	60. - 158.
VOA Surr Toluene-d8	98.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38209  
Sample ID: OB-06  
Sample Type: Water  
Site ID:

Date Collected: 3/8/02  
Time Collected: 11:25  
Date Received: 3/12/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/12/02	23:53	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/12/02	23:53	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/12/02	23:53	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/12/02	23:53	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38209  
 Sample ID: OB-06  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
cis-1,2-Dichloroethene	0.00780	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/12/02	23:53	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/12/02	23:53	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/12/02	23:53	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Trichloroethene	0.5260	mg/l	0.01000	10	3/13/02	9:24	J. Adams	8260B	8911
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 02-A38209  
Sample ID: OB-06  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Bromodichloromethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/12/02	23:53	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	98.	82. - 127.
VOA Surr, 4-BFB	107.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38210

Sample ID: BR-08

Sample Type: Water

Site ID:

Date Collected: 3/ 8/02

Time Collected: 14:04

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
<b>*VOLATILE ORGANICS*</b>									
Benzene	0.00280	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Toluene	0.00860	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Ethylbenzene	0.00110	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Xylenes (Total)	0.00900	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	0:22	J. Adams	8260B	8902
Acetone	0.6120	mg/l	0.05000	1	3/13/02	0:22	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	0:22	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	0:22	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38210  
 Sample ID: BR-08  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
cis-1,2-Dichloroethene	0.2420	mg/l	0.01000	10	3/13/02	9:53	J. Adams	8260B	8911
trans-1,2-Dichloroethene	0.00300	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	0:22	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	0:22	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	0:22	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Trichloroethene	0.6210	mg/l	0.01000	10	3/13/02	9:53	J. Adams	8260B	8911
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	0.00150	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Vinyl chloride	0.00400	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38210  
Sample ID: BR-08  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	0:22	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38211

Sample ID: BR-17

Sample Type: Water

Site ID:

Date Collected: 3/ 8/02

Time Collected: 15:24

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
<b>*VOLATILE ORGANICS*</b>									
Benzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	0:50	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	0:50	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	0:50	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	0:50	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38211  
 Sample ID: BR-17  
 Project: 51870.7  
 Page 2

Analyst	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1-Dichloroethene	0.00510	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
cis-1,2-Dichloroethene	0.2080	mg/l	0.01000	10	3/13/02	17:57	J. Adams	8260B	8911
trans-1,2-Dichloroethene	0.05650	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	0:50	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	0:50	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	0:50	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Trichloroethene	2.600	mg/l	0.05000	50	3/13/02	10:21	J. Adams	8260B	8921
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Vinyl chloride	0.05700	mg/l	0.01000	10	3/13/02	17:57	J. Adams	8260B	8911

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38211  
Sample ID: BR-17  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	0:50	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	60. - 158.
VOA Surr Toluene-d8	98.	82. - 127.
VOA Surr, 4-BFB	105.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38212

Sample ID: BR-03

Sample Type: Water

Site ID:

Date Collected: 3/ 8/02

Time Collected: 16:38

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	13:41	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	13:41	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	13:41	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	13:41	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38212  
 Sample ID: BR-03  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil	Analysis		Analyst	Method	Batch
				Factor	Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1-Dichloroethene	0.00210	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
cis-1,2-Dichloroethene	0.00980	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	13:41	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	13:41	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	13:41	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Trichloroethene	0.5990	mg/l	0.01000	10	3/13/02	18:26	J. Adams	8260B	8911
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902

ple report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38212  
Sample ID: BR-03  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	13:41	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38213  
Sample ID: BR-14  
Sample Type: Water  
Site ID:

Date Collected: 3/ 9/02  
Time Collected: 8:59  
Date Received: 3/12/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Benzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Toluene	0.00640	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	14:09	J. Adams	8260B	8902
Acetone	0.3090	mg/l	0.05000	1	3/13/02	14:09	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	14:09	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	14:09	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38213  
 Sample ID: BR-14  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
2-Hexanone	0.01230	mg/l	0.01000	1	3/13/02	14:09	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	14:09	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	14:09	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38213  
Sample ID: BR-14  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	14:09	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	104.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

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## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38214

Sample ID: BR-01

Sample Type: Water

Site ID:

Date Collected: 3/ 9/02

Time Collected: 10:15

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	14:38	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	14:38	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	14:38	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	14:38	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38214  
 Sample ID: BR-01  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
cis-1,2-Dichloroethene	0.00550	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
trans-1,2-Dichloroethene	0.00160	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	14:38	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	14:38	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	14:38	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Trichloroethene	0.04730	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38214  
Sample ID: BR-01  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	14:38	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Lab Number: 02-A38215

Sample ID: BR-02

Sample Type: Water

Site ID:

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT

Sampler: ROB ELLIS

Date Collected: 3/ 9/02

Time Collected: 11:35

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	15:06	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	15:06	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	15:06	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	15:06	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38215  
 Sample ID: BR-02  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analysis		Method	Batch
			Limit	Factor	Date	Time	Analyst	Method		
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1-Dichloroethene	0.00120	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
cis-1,2-Dichloroethene	0.07960	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
trans-1,2-Dichloroethene	0.02080	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	15:06	J. Adams	8260B	8902	
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	15:06	J. Adams	8260B	8902	
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	15:06	J. Adams	8260B	8902	
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
Styrene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
Trichloroethene	0.5880	mg/l	0.01000	10	3/13/02	18:54	J. Adams	8260B	8911	
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902	

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38215  
Sample ID: BR-02  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	15:06	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	105.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT

Sampler: ROB ELLIS

Lab Number: 02-A38216

Sample ID: QATB02

Sample Type: Water

Site ID:

Date Collected: 3/ 9/02

Time Collected:

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
<b>*VOLATILE ORGANICS*</b>									
Benzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	6:04	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	6:04	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	6:04	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	6:04	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38216  
 Sample ID: QATB02  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	6:04	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	6:04	J. Adams	8260B	8902
Methylene chloride	0.00310	mg/l	0.00200	1	3/13/02	6:04	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902

le report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38216  
Sample ID: QATB02  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	6:04	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	106.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	100.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Lab Number: 02-A38217  
Sample ID: QAFB02  
Sample Type: Water  
Site ID:

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT

Sampler: ROB ELLIS

Date Collected: 3/ 9/02  
Time Collected: 12:56  
Date Received: 3/12/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	15:35	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	15:35	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	15:35	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Chloroform	0.00130	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	15:35	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902

ple report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38217  
 Sample ID: QAFB02  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	15:35	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	15:35	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	15:35	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38217  
Sample ID: QAFB02  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	15:35	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	102.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Lab Number: 02-A38218

Sample ID: QARBO2

Sample Type: Water

Site ID:

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT

Sampler: ROB ELLIS

Date Collected: 3/ 9/02

Time Collected: 13:02

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	16:03	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	16:03	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	16:03	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Chloroform	0.00120	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	16:03	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38218  
 Sample ID: QARB02  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	16:03	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	16:03	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	16:03	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38218  
Sample ID: QARB02  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	16:03	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	98.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38219  
Sample ID: BR-06, BR-06 MS, BR-06 M  
Sample Type: Water  
Site ID:

Date Collected: 3/ 9/02  
Time Collected: 14:38  
Date Received: 3/12/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Benzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	16:32	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	16:32	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	16:32	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	16:32	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902

ple report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38219  
 Sample ID: BR-06, BR-06 MS, BR-06 MS  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	16:32	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	16:32	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	16:32	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38219  
Sample ID: BR-06, BR-06 MS, BR-06 MS  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	16:32	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	105.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT

Sampler: ROB ELLIS

Lab Number: 02-A38220

Sample ID: W-6

Sample Type: Water

Site ID:

Date Collected: 3/ 9/02

Time Collected: 15:12

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	17:00	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	17:00	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	17:00	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	17:00	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A38220  
 Sample ID: W-6  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analysis		Method	Batch
					Date	Time	Analyst			
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
cis-1,2-Dichloroethene	0.00300	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
Hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	17:00	J. Adams	8260B	8902	
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	17:00	J. Adams	8260B	8902	
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	17:00	J. Adams	8260B	8902	
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
Styrene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902	

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38220  
Sample ID: W-6  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	17:00	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	104.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A38221

Sample ID: BR-16

Sample Type: Water

Site ID:

Date Collected: 3/10/02

Time Collected: 11:36

Date Received: 3/12/02

Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Benzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Toluene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Ethylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Xylenes (Total)	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2-Dibromoethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Naphthalene	ND	mg/l	0.00250	1	3/13/02	17:29	J. Adams	8260B	8902
Acetone	ND	mg/l	0.05000	1	3/13/02	17:29	J. Adams	8260B	8902
Bromobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Bromochloromethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Bromoform	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Bromomethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
2-Butanone	ND	mg/l	0.05000	1	3/13/02	17:29	J. Adams	8260B	8902
n-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
sec-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
t-Butylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Carbon disulfide	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Carbon tetrachloride	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Chlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Chloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Chloroform	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Chloromethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
2-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
4-Chlorotoluene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1	3/13/02	17:29	J. Adams	8260B	8902
Dibromochloromethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A38221  
 Sample ID: BR-16  
 Project: 51870.7  
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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Dibromomethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,3-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,4-Dichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Dichlorodifluoromethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2-Dichloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,3-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
2,2-Dichloropropane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
hexachlorobutadiene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
2-Hexanone	ND	mg/l	0.01000	1	3/13/02	17:29	J. Adams	8260B	8902
Isopropylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
4-Isopropyltoluene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
4-Methyl-2-pentanone	ND	mg/l	0.01000	1	3/13/02	17:29	J. Adams	8260B	8902
Methylene chloride	ND	mg/l	0.00200	1	3/13/02	17:29	J. Adams	8260B	8902
n-Propylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Styrene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Tetrachloroethene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1,1-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,1,2-Trichloroethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Trichloroethene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2,3-Trichloropropane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,2,4-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Vinyl chloride	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A38221  
Sample ID: BR-16  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
Bromodichloromethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902
Trichlorofluoromethane	ND	mg/l	0.00100	1	3/13/02	17:29	J. Adams	8260B	8902

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	106.	72. - 136.
VOA Surr, DBFM	99.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 1

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
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#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	< 0.00100	0.05360	0.05000	107	70. - 136.	8902	02-A38219
Chlorobenzene	mg/l	< 0.00100	0.05360	0.05000	107	70. - 132.	8902	02-A38219
1,1-Dichloroethene	mg/l	< 0.00100	0.05540	0.05000	111	60. - 145.	8902	02-A38219
Toluene	mg/l	< 0.00100	0.05230	0.05000	105	69. - 137.	8902	02-A38219
Trichloroethene	mg/l	< 0.00100	0.05700	0.05000	114	63. - 149.	8902	02-A38219
Tetrachloroethene	mg/l	< 0.00100	0.05610	0.05000	112	60. - 140.	8902	02-A382
VOA Surr 1,2-DCA-d4	% Rec				104	60. - 158.	8902	
VOA Surr Toluene-d8	% Rec				99	82. - 127.	8902	
VOA Surr, 4-BFB	% Rec				107	72. - 136.	8902	
VOA Surr, DBFM	% Rec				103	81. - 137.	8902	

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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#### \*\*VOA PARAMETERS\*\*

Benzene	mg/l	0.05360	0.05340	0.37	21.	8902
Chlorobenzene	mg/l	0.05360	0.05340	0.37	25.	8902
1,1-Dichloroethene	mg/l	0.05540	0.05380	2.93	26.	8902
Toluene	mg/l	0.05230	0.05200	0.58	22.	8902
Trichloroethene	mg/l	0.05700	0.05380	5.78	28.	8902
Tetrachloroethene	mg/l	0.05610	0.05470	2.53	24.	8902
VOA Surr 1,2-DCA-d4	% Rec		105.			8902
VOA Surr Toluene-d8	% Rec		99.			8902
VOA Surr, 4-BFB	% Rec		106.			8902
VOA Surr, DBFM	% Rec		102.			8902

Project QC continued . . .

# TestAmerica

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 2**

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**VOA PARAMETERS**</b>						
Acetone	mg/l	0.2500	0.2620	105	54 - 153	8902
Benzene	mg/l	0.05000	0.04900	98	79 - 124	8902
Bromobenzene	mg/l	0.05000	0.05320	106	76 - 122	8902
Bromochloromethane	mg/l	0.05000	0.04670	93	71 - 134	8902
Bromoform	mg/l	0.05000	0.04880	98	66 - 124	8902
Bromomethane	mg/l	0.05000	0.05620	112	51 - 145	8902
2-Butanone	mg/l	0.2500	0.2580	103	62 - 134	8902
n-Butylbenzene	mg/l	0.05000	0.05400	108	61 - 136	8902
sec-Butylbenzene	mg/l	0.05000	0.05450	109	69 - 130	8902
t-Butylbenzene	mg/l	0.05000	0.06200	124	66 - 129	8902
Carbon disulfide	mg/l	0.05000	0.04780	96	71 - 129	8902
Carbon tetrachloride	mg/l	0.05000	0.05050	101	70 - 130	8902
Chlorobenzene	mg/l	0.05000	0.04980	100	80 - 118	8902
Chloroethane	mg/l	0.05000	0.04790	96	59 - 144	8902
Chloroform	mg/l	0.05000	0.04810	96	74 - 123	8902
Chloromethane	mg/l	0.05000	0.04740	95	47 - 155	8902
2-Chlorotoluene	mg/l	0.05000	0.05330	107	74 - 126	8902
4-Chlorotoluene	mg/l	0.05000	0.05290	106	75 - 125	8902
1,2-Dibromo-3-chloropropane	mg/l	0.05000	0.05200	104	58 - 133	8902
Dibromochloromethane	mg/l	0.05000	0.05070	101	73 - 125	8902
1,2-Dibromoethane	mg/l	0.05000	0.05390	108	74 - 125	8902
Dibromomethane	mg/l	0.05000	0.04800	96	71 - 130	8902
1,2-Dichlorobenzene	mg/l	0.05000	0.05130	103	76 - 122	8902
1,3-Dichlorobenzene	mg/l	0.05000	0.05180	104	75 - 122	8902
1,4-Dichlorobenzene	mg/l	0.05000	0.05040	101	76 - 119	8902
Dichlorodifluoromethane	mg/l	0.05000	0.04580	92	53 - 151	8902
1,1-Dichloroethane	mg/l	0.05000	0.04790	96	76 - 127	8902
1,2-Dichloroethane	mg/l	0.05000	0.04860	97	66 - 133	8902
1,1-Dichloroethene	mg/l	0.05000	0.04820	96	72 - 127	8902
cis-1,2-Dichloroethene	mg/l	0.05000	0.04910	98	74 - 127	8902
cis-1,2-Dichloroethene	mg/l	0.05000	0.04890	98	74 - 127	8911

ject QC continued . . .

# TestAmerica

INCORPORATED

## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
trans-1,2-Dichloroethene	mg/l	0.05000	0.04840	97	70 - 132	8902
1,2-Dichloropropane	mg/l	0.05000	0.05030	101	76 - 124	8902
1,3-Dichloropropane	mg/l	0.05000	0.04990	100	72 - 129	8902
2,2-Dichloropropane	mg/l	0.05000	0.05410	108	33 - 152	8902
1,1-Dichloropropene	mg/l	0.05000	0.05080	102	73 - 127	8902
cis-1,3-Dichloropropene	mg/l	0.05000	0.05540	111	58 - 131	8902
trans-1,3-Dichloropropene	mg/l	0.05000	0.05060	101	53 - 133	8902
Ethylbenzene	mg/l	0.05000	0.05200	104	77 - 126	8902
Hexachlorobutadiene	mg/l	0.05000	0.04720	94	52 - 139	8902
2-Hexanone	mg/l	0.2500	0.2710	108	61 - 136	8902
Isopropylbenzene	mg/l	0.05000	0.05510	110	74 - 127	8902
4-Isopropyltoluene	mg/l	0.05000	0.05450	109	69 - 113	8902
4-Methyl-2-pentanone	mg/l	0.2500	0.2730	109	63 - 135	8902
Methylene chloride	mg/l	0.05000	0.04500	90	70 - 130	8902
Naphthalene	mg/l	0.05000	0.05710	114	57 - 143	8902
n-Propylbenzene	mg/l	0.05000	0.05450	109	71 - 130	8902
Styrene	mg/l	0.05000	0.05310	106	77 - 122	8902
1,1,1,2-Tetrachloroethane	mg/l	0.05000	0.05530	111	71 - 130	8902
1,1,2,2-Tetrachloroethane	mg/l	0.05000	0.05360	107	57 - 136	8902
Tetrachloroethene	mg/l	0.05000	0.05130	103	72 - 126	8902
Toluene	mg/l	0.05000	0.04750	95	78 - 124	8902
1,2,3-Trichlorobenzene	mg/l	0.05000	0.05350	107	58 - 139	8902
1,2,4-Trichlorobenzene	mg/l	0.05000	0.05170	103	60 - 132	8902
1,1,1-Trichloroethane	mg/l	0.05000	0.05030	101	70 - 130	8902
1,1,2-Trichloroethane	mg/l	0.05000	0.04810	96	75 - 124	8902
Trichloroethene	mg/l	0.05000	0.04930	99	70 - 136	8902
Trichloroethene	mg/l	0.05000	0.04800	96	70 - 136	8911
1,2,3-Trichloropropene	mg/l	0.05000	0.05320	106	63 - 132	8902
1,2,4-Trimethylbenzene	mg/l	0.05000	0.05350	107	73 - 127	8902
1,3,5-Trimethylbenzene	mg/l	0.05000	0.05470	109	72 - 128	8902
Vinyl chloride	mg/l	0.05000	0.05280	106	62 - 144	8902
Vinyl chloride	mg/l	0.05000	0.04580	92	62 - 144	8911
Xylenes (Total)	mg/l	0.1500	0.1535	102	76 - 127	8902

Project QC continued . . .

# TestAmerica

INCORPORATED

## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Bromodichloromethane	mg/l	0.05000	0.05030	101	69 - 130	8902
Trichlorofluoromethane	mg/l	0.05000	0.05710	114	64 - 136	8902
VOA Surr 1,2-DCA-d4	% Rec			100	60 - 158	8902
VOA Surr 1,2-DCA-d4	% Rec			100	60 - 158	8911
VOA Surr Toluene-d8	% Rec			98	82 - 127	8902
VOA Surr Toluene-d8	% Rec			98	82 - 127	8911
VOA Surr, 4-BFB	% Rec			106	72 - 136	8902
VOA Surr, 4-BFB	% Rec			106	72 - 136	8911
VOA Surr, DBFM	% Rec			99	81 - 137	8902
VOA Surr, DBFM	% Rec			98	81 - 137	8911

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
**VOA PARAMETERS**					

Acetone	< 0.00840	mg/l	8902	3/12/02	17:43
Benzene	< 0.00070	mg/l	8902	3/12/02	17:43
Bromobenzene	< 0.00070	mg/l	8902	3/12/02	17:43
Bromochloromethane	< 0.00060	mg/l	8902	3/12/02	17:43
Bromoform	< 0.00070	mg/l	8902	3/12/02	17:43
Bromomethane	< 0.00080	mg/l	8902	3/12/02	17:43
2-Butanone	< 0.00390	mg/l	8902	3/12/02	17:43
n-Butylbenzene	< 0.00070	mg/l	8902	3/12/02	17:43
sec-Butylbenzene	< 0.00080	mg/l	8902	3/12/02	17:43
t-Butylbenzene	< 0.00090	mg/l	8902	3/12/02	17:43
Carbon disulfide	< 0.00080	mg/l	8902	3/12/02	17:43
Carbon tetrachloride	< 0.00070	mg/l	8902	3/12/02	17:43
Chlorobenzene	< 0.00070	mg/l	8902	3/12/02	17:43
Chloroethane	< 0.00090	mg/l	8902	3/12/02	17:43
Chloroform	< 0.00060	mg/l	8902	3/12/02	17:43
Chloromethane	< 0.00050	mg/l	8902	3/12/02	17:43

ject QC continued . . .

# TestAmerica

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PROJECT QUALITY CONTROL DATA  
 Project Number: 51870.7  
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## Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
2-Chlorotoluene	< 0.00070	mg/l	8902	3/12/02	17:43
4-Chlorotoluene	< 0.00060	mg/l	8902	3/12/02	17:43
1,2-Dibromo-3-chloropropane	< 0.00310	mg/l	8902	3/12/02	17:43
Dibromochloromethane	< 0.00040	mg/l	8902	3/12/02	17:43
1,2-Dibromoethane	< 0.00050	mg/l	8902	3/12/02	17:43
Dibromomethane	< 0.00040	mg/l	8902	3/12/02	17:43
1,2-Dichlorobenzene	< 0.00050	mg/l	8902	3/12/02	17:43
1,3-Dichlorobenzene	< 0.00060	mg/l	8902	3/12/02	17:43
1,4-Dichlorobenzene	< 0.00050	mg/l	8902	3/12/02	17:43
Dichlorodifluoromethane	< 0.00040	mg/l	8902	3/12/02	17:43
1,1-Dichloroethane	< 0.00080	mg/l	8902	3/12/02	17:43
1,2-Dichloroethane	< 0.00090	mg/l	8902	3/12/02	17:43
1,1-Dichloroethene	< 0.00080	mg/l	8902	3/12/02	17:43
cis-1,2-Dichloroethene	< 0.00070	mg/l	8902	3/12/02	17:43
cis-1,2-Dichloroethene	< 0.00070	mg/l	8911	3/13/02	12:16
trans-1,2-Dichloroethene	< 0.00080	mg/l	8902	3/12/02	17:43
1,2-Dichloropropane	< 0.00060	mg/l	8902	3/12/02	17:43
1,3-Dichloropropane	< 0.00060	mg/l	8902	3/12/02	17:43
2,2-Dichloropropane	< 0.00090	mg/l	8902	3/12/02	17:43
1,1-Dichloropropene	< 0.00070	mg/l	8902	3/12/02	17:43
cis-1,3-Dichloropropene	< 0.00070	mg/l	8902	3/12/02	17:43
trans-1,3-Dichloropropene	< 0.00050	mg/l	8902	3/12/02	17:43
Ethylbenzene	< 0.00070	mg/l	8902	3/12/02	17:43
Hexachlorobutadiene	< 0.00080	mg/l	8902	3/12/02	17:43
2-Hexanone	< 0.00280	mg/l	8902	3/12/02	17:43
Isopropylbenzene	< 0.00080	mg/l	8902	3/12/02	17:43
4-Isopropyltoluene	< 0.00080	mg/l	8902	3/12/02	17:43
4-Methyl-2-pentanone	< 0.00460	mg/l	8902	3/12/02	17:43
Methylene chloride	< 0.00150	mg/l	8902	3/12/02	17:43
Naphthalene	< 0.00190	mg/l	8902	3/12/02	17:43
n-Propylbenzene	< 0.00080	mg/l	8902	3/12/02	17:43
Styrene	< 0.00090	mg/l	8902	3/12/02	17:43
1,1,1,2-Tetrachloroethane	< 0.00060	mg/l	8902	3/12/02	17:43

Project QC continued . . .

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 6

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
1,1,2,2-Tetrachloroethane	< 0.00050	mg/l	8902	3/12/02	17:43
Tetrachloroethene	< 0.00080	mg/l	8902	3/12/02	17:43
Toluene	< 0.00070	mg/l	8902	3/12/02	17:43
1,2,3-Trichlorobenzene	< 0.00060	mg/l	8902	3/12/02	17:43
1,2,4-Trichlorobenzene	< 0.00090	mg/l	8902	3/12/02	17:43
1,1,1-Trichloroethane	< 0.00070	mg/l	8902	3/12/02	17:43
1,1,2-Trichloroethane	< 0.00050	mg/l	8902	3/12/02	17:43
Trichloroethene	< 0.00090	mg/l	8902	3/12/02	17:43
Trichloroethene	< 0.00090	mg/l	8911	3/13/02	12:16
1,2,3-Trichloropropane	< 0.00040	mg/l	8902	3/12/02	17:43
1,2,4-Trimethylbenzene	< 0.00060	mg/l	8902	3/12/02	17:43
1,3,5-Trimethylbenzene	< 0.00080	mg/l	8902	3/12/02	17:43
Vinyl chloride	< 0.00050	mg/l	8902	3/12/02	17:43
Vinyl chloride	< 0.00050	mg/l	8911	3/13/02	12:16
Xylenes (Total)	< 0.00090	mg/l	8902	3/12/02	17:43
Bromodichloromethane	< 0.00080	mg/l	8902	3/12/02	17:43
Trichlorofluoromethane	< 0.00070	mg/l	8902	3/12/02	17:43
VOA Surr 1,2-DCA-d4	105.	% Rec	8902	3/12/02	17:43
VOA Surr 1,2-DCA-d4	104.	% Rec	8911	3/13/02	12:16
VOA Surr Toluene-d8	99.	% Rec	8902	3/12/02	17:43
VOA Surr Toluene-d8	99.	% Rec	8911	3/13/02	12:16
VOA Surr, 4-BFB	106.	% Rec	8902	3/12/02	17:43
VOA Surr, 4-BFB	106.	% Rec	8911	3/13/02	12:16
VOA Surr, DBFM	101.	% Rec	8902	3/12/02	17:43
VOA Surr, DBFM	98.	% Rec	8911	3/13/02	12:16

# - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 275351

# TestAmerica

INCORPORATED

**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

**Phone:** 615-726-0177  
**Fax:** 615-726-3404

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

**Client Name**

**Client #:** 12345

**Address:** 123 Main Street, Anytown, USA 12345

**City/State/Zip Code:** Franklin TN 37064-2000

Project Manager: Fick Ryan

**Telephone Number:** 410-548-1923      **Fax:** 410-548-1924

Sampler Name: (Print Name) Rob Ellis

Sampler Signature: Raffi J. H.

Project Name: Former Taylor Instruments

Project #: 57870.7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102581.216, 2.99 PO#: 6599

TAT				Matrix		Preservation & # of Containers		Analyze For:										QC Deliverables	
<input checked="" type="checkbox"/> Standard				SL - Sludge	DW - Drinking Water	S - Soil/Solid										None			
Rush (surcharges may apply)				GW - Groundwater	WW - Wastewater	Specify Other										<input checked="" type="checkbox"/> Level 2 (Batch QC)			
Date Needed:				HNO <sub>3</sub>	HCl	NaOH										<input type="checkbox"/> Level 3			
Fax Results:		(Y) N					H <sub>2</sub> SO <sub>4</sub>	Methanol	None	Other (Specify)	VOCs - P260					<input type="checkbox"/> Level 4			
SAMPLE ID		275 351														Other: _____			
REMARKS																			
W-4	38207	03/08/02	07:52	G	GW	3					3								
BR-13	08	03/08/02	09:21	G	GW	3					3								
OB-06	09	03/08/02	11:25	G	GW	3					3								
BR-08	10	03/08/02	14:04	G	GW	3					3								
BR-17	11	03/08/02	15:24	G	GW	3					3								
BR-03	12	03/08/02	16:38	G	GW	3					3								
BR-14	13	03/09/02	08:59	G	GW	3					3								
BR-01	14	03/09/02	10:15	G	GW	3					3								
BR-02	15	03/09/02	11:35	G	GW	3					3								
QATB02	38216	03/09/02	00:00	G	GW	1					1					Trip Blank			
Special Instructions:		lowest possible detection limits																LABORATORY COMMENTS:	
																		Init Lab Temp:	2.0
																		Rec Lab Temp:	
																		Custody Seals:	Y    N    N/A
																		Bottles Supplied by Test America:	Y    N
																		Method of Shipment:	
Relinquished By:	R. A. S.	Date:	03/11/02	Time:	1730	Received By:			Date:	Time:									
Relinquished By:		Date:		Time:		Received By:			Date:	Time:									
Relinquished By:		Date:		Time:		Received By:	D. W. Mingle		Date:	Time:	3-12-02	9100							

# TestAmerica

INCORPORATED

**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

**Phone:** 615-726-0177  
**Fax:** 615-726-3404

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

**Client Name**

**Client #:**

**Address:** 1000 University Avenue, Suite 100, Seattle, WA 98101

**City/State/Zip Code:** Waco, TX

Project Manager: Rick Ryan

**Telephone Number:** 800-555-1234 **Fax:** 800-555-1234

**Sampler Name:** (Print Name) Rob Ellis

Sampler Signature: Karen A. Gaff

Project Name: Former Taylor Instruments

Project #: 51870,7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102501.216.2.

Quote #: 102501,216,2,99 PO#: 6599

**March 11 - 13, 2002**  
**Analytical Data**

# TestAmerica

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3/19/02

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 51870.7 FORMER TAYLOR INSTRUMENT. The Laboratory Project number is 275776. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

Page 1

Sample Identification	Lab Number	Collection Date
BR-07	02-A39888	3/11/02
BR-07 DUP	02-A39889	3/11/02
BR-12	02-A39890	3/11/02
BR-13	02-A39891	3/11/02
BR-15	02-A39892	3/11/02
BR-10	02-A39893	3/11/02
OB-04	02-A39894	3/12/02
BR-04	02-A39895	3/12/02
BR-05	02-A39896	3/12/02
BR-09	02-A39897	3/12/02
OB-08	02-A39898	3/12/02
BR-11	02-A39899	3/13/02

# TestAmerica

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Page 2

Sample Identification

Lab Number

Collection Date

These results relate only to the items tested.

This report shall not be reproduced except in full and with  
permission of the laboratory.

Report Approved By: Paul E. Lane

Report Date: 3/19/02

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Jennifer P. Flynn, Technical Services

Laboratory Certification Number: 11342

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39888  
Sample ID: BR-07  
Sample Type: Ground water  
Site ID:

Date Collected: 3/11/02  
Time Collected: 8:45  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	0.488	mg/l	0.0500	1	3/18/02	15:08	M. Taylor	8260B	297
Benzene	0.0030	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/18/02	15:08	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/18/02	15:08	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A39888  
 Sample ID: BR-07  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.0090	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
trans-1,2-Dichloroethene	0.0043	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/18/02	15:08	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/18/02	15:08	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/18/02	15:08	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/18/02	15:08	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Trichloroethene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Vinyl chloride	0.0336	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

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## ANALYTICAL REPORT

Laboratory Number: 02-A39888  
Sample ID: BR-07  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/18/02	15:08	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	100.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	102.	72. - 136.
VOA Surr, DBFM	104.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

# TestAmerica

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## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39889  
Sample ID: BR-07 DUP  
Sample Type: Ground water  
Site ID:

Date Collected: 3/11/02  
Time Collected: 8:45  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	0.491	mg/l	0.250	5	3/18/02	16:32	M. Taylor	8260B	2405
Benzene	0.0030	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/18/02	16:04	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/18/02	16:04	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A39889  
 Sample ID: BR-07 DUP  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.0088	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
trans-1,2-Dichloroethene	0.0044	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/18/02	16:04	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/18/02	16:04	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/18/02	16:04	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/18/02	16:04	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Trichloroethene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Vinyl chloride	0.0337	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39889  
Sample ID: BR-07 DUP  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/18/02	16:04	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	99.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	100.	72. - 136.
VOA Surr, DBFM	104.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39890  
Sample ID: BR-12  
Sample Type: Ground water  
Site ID:

Date Collected: 3/11/02  
Time Collected: 10:23  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil	Analysis		Analyst	Method	Batch
				Factor	Date	Time			
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/18/02	14:40	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/18/02	14:40	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/18/02	14:40	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39890  
 Sample ID: BR-12  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.0153	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/18/02	14:40	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/18/02	14:40	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/18/02	14:40	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/18/02	14:40	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Trichloroethene	0.0074	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Vinyl chloride	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39890  
Sample ID: BR-12  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/18/02	14:40	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	99.	72. - 136.
VOA Surr, DBFM	104.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

1 of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39891  
Sample ID: BR-13  
Sample Type: Ground water  
Site ID:

Date Collected: 3/11/02  
Time Collected: 11:47  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/17/02	13:37	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	13:37	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	13:37	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39891  
 Sample ID: BR-13  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil	Analysis		Analyst	Method	Batch
				Factor	Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.0237	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
trans-1,2-Dichloroethene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	13:37	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	13:37	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	13:37	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	13:37	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Trichloroethene	0.132	mg/l	0.0100	5	3/19/02	2:46	M. Taylor	8260B	2405
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Vinyl chloride	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39891  
Sample ID: BR-13  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	13:37	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	100.	60. - 158.
VOA Surr Toluene-d8	98.	82. - 127.
VOA Surr, 4-BFB	102.	72. - 136.
VOA Surr, DBFM	105.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39892  
Sample ID: BR-15  
Sample Type: Ground water  
Site ID:

Date Collected: 3/11/02  
Time Collected: 14:49  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/17/02	14:05	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	14:05	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	14:05	M. Taylor	8260B	297
Dibromoform	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39892  
 Sample ID: BR-15  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,1-Dichloroethene	0.0022	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.172	mg/l	0.0400	20	3/19/02	3:14	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.0366	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	14:05	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	14:05	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	14:05	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	14:05	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Trichloroethene	5.50	mg/l	1.00	500	3/19/02	3:42	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Vinyl chloride	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39892  
Sample ID: BR-15  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	14:05	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	103.	72. - 136.
VOA Surr, DBFM	106.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

1 of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39893  
Sample ID: BR-10  
Sample Type: Ground water  
Site ID:

Date Collected: 3/11/02  
Time Collected: 16:31  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/17/02	14:33	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	14:33	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	14:33	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A39893  
 Sample ID: BR-10  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,1-Dichloroethene	0.0039	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
cis-1,2-Dichloroethene	1.09	mg/l	0.100	50	3/19/02	4:10	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.0782	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	14:33	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	14:33	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	14:33	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	14:33	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Trichloroethene	3.74	mg/l	0.100	50	3/19/02	4:10	M. Taylor	8260B	2405
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Vinyl chloride	0.0055	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39893  
Sample ID: BR-10  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	14:33	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	102.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	102.	72. - 136.
VOA Surr, DBFM	106.	81. - 137.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.

# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE. 158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39894  
Sample ID: OB-04  
Sample Type: Ground water  
Site ID:

Date Collected: 3/12/02  
Time Collected: 8:56  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/17/02	15:01	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	15:01	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	15:01	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39894  
 Sample ID: OB-04  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,1-Dichloroethene	0.0038	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
cis-1,2-Dichloroethene	1.64	mg/l	0.200	100	3/19/02	5:06	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.0166	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	15:01	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	15:01	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	15:01	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	15:01	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Tetrachloroethene	0.0129	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Toluene	0.0034	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Trichloroethene	65.6	mg/l	2.00	1000	3/19/02	5:34	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Vinyl chloride	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39894  
Sample ID: OB-04  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	15:01	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	101.	72. - 136.
VOA Surr, DBFM	106.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39895  
Sample ID: BR-04  
Sample Type: Ground water  
Site ID:

Date Collected: 3/12/02  
Time Collected: 10:12  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/17/02	15:29	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	15:29	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	15:29	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A39895  
 Sample ID: BR-04  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit	Factor	Date	Time			
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,1-Dichloroethene	0.0081	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.384	mg/l	0.0400	20	3/19/02	6:02	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.0770	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	15:29	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	15:29	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	15:29	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	15:29	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Trichloroethene	5.75	mg/l	1.00	500	3/19/02	11:17	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Vinyl chloride	0.0234	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 02-A39895  
Sample ID: BR-04  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	15:29	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	102.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	100.	72. - 136.
VOA Surr, DBFM	106.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39896  
Sample ID: BR-05  
Sample Type: Ground water  
Site ID:

Date Collected: 3/12/02  
Time Collected: 11:43  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/17/02	15:57	M. Taylor	8260B	297
Benzene	0.0116	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	15:57	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	15:57	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39896  
 Sample ID: BR-05  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,1-Dichloroethene	0.0402	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
cis-1,2-Dichloroethene	1.73	mg/l	0.0400	20	3/19/02	11:45	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.164	mg/l	0.0400	20	3/19/02	11:45	M. Taylor	8260B	2405
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	15:57	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	15:57	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	15:57	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	15:57	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Trichloroethene	3.05	mg/l	1.00	500	3/19/02	12:13	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Vinyl chloride	0.326	mg/l	0.0400	20	3/19/02	11:45	M. Taylor	8260B	2405
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Lab Number: 02-A39897  
Sample ID: BR-09  
Sample Type: Ground water  
Site ID:

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Date Collected: 3/12/02  
Time Collected: 14:15  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report	Dil	Analysis		Analysis			Batch
			Limit	Factor	Date	Time	Analyst	Method	Batch	
<b>*VOLATILE ORGANICS*</b>										
Acetone	ND	mg/l	0.0500	1	3/17/02	9:53	M. Taylor	8260B	297	
Benzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Bromoform	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Bromomethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
2-Butanone	ND	mg/l	0.0500	1	3/17/02	9:53	M. Taylor	8260B	297	
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Chloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Chloroform	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Chloromethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	9:53	M. Taylor	8260B	297	
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297	

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39896  
Sample ID: BR-05  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	15:57	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	103.	72. - 136.
VOA Surr, DBFM	106.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39897  
 Sample ID: BR-09  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,1-Dichloroethene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.302	mg/l	0.0200	10	3/18/02	23:59	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.0054	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	9:53	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	9:53	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	9:53	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	9:53	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Trichloroethene	2.42	mg/l	0.200	100	3/19/02	0:27	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Vinyl chloride	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39897  
Sample ID: BR-09  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	9:53	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	99.	82. - 127.
VOA Surr, 4-BFB	99.	72. - 136.
VOA Surr, DBFM	104.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7  
Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39898  
Sample ID: OB-08  
Sample Type: Ground water  
Site ID:

Date Collected: 3/12/02  
Time Collected: 16:00  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*VOLATILE ORGANICS*</b>									
Acetone	ND	mg/l	0.0500	1	3/17/02	10:21	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	10:21	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	10:21	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39898  
 Sample ID: OB-08  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,1-Dichloroethene	0.0027	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.208	mg/l	0.0400	20	3/19/02	0:55	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.0086	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	10:21	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	10:21	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	10:21	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	10:21	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Tetrachloroethene	0.0131	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Trichloroethene	15.8	mg/l	1.00	500	3/19/02	1:23	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Vinyl chloride	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297

Sample report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39898  
Sample ID: OB-08  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	10:21	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	101.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	100.	72. - 136.
VOA Surr, DBFM	105.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

# - Recovery outside Laboratory historical or method prescribed limits.

of Sample Report.

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

HARDING ESE 4997

1400 CENTERPOINT BLVD, STE.158  
KNOXVILLE, TN 37932-1968

Project: 51870.7

Project Name: FORMER TAYLOR INSTRUMENT  
Sampler: ROB ELLIS

Lab Number: 02-A39899  
Sample ID: BR-11  
Sample Type: Ground water  
Site ID:

Date Collected: 3/13/02  
Time Collected: 11:14  
Date Received: 3/14/02  
Time Received: 9:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*VOLATILE ORGANICS*									
Acetone	ND	mg/l	0.0500	1	3/17/02	10:49	M. Taylor	8260B	297
Benzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Bromobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Bromochloromethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Bromoform	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Bromomethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
2-Butanone	ND	mg/l	0.0500	1	3/17/02	10:49	M. Taylor	8260B	297
n-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
sec-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
t-Butylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Carbon disulfide	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Carbon tetrachloride	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Chlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Chloroethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Chloroform	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Chloromethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
2-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
4-Chlorotoluene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	3/17/02	10:49	M. Taylor	8260B	297
Dibromochloromethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2-Dibromoethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Dibromomethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,3-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,4-Dichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Dichlorodifluoromethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A39899  
 Sample ID: BR-11  
 Project: 51870.7  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	0.0033	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2-Dichloroethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,1-Dichloroethene	0.0109	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
cis-1,2-Dichloroethene	0.370	mg/l	0.0400	20	3/19/02	1:51	M. Taylor	8260B	2405
trans-1,2-Dichloroethene	0.106	mg/l	0.0400	20	3/19/02	1:51	M. Taylor	8260B	2405
1,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,3-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
2,2-Dichloropropane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,1-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
cis-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
trans-1,3-Dichloropropene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Ethylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Hexachlorobutadiene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
2-Hexanone	ND	mg/l	0.0100	1	3/17/02	10:49	M. Taylor	8260B	297
Isopropylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
4-Isopropyltoluene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	3/17/02	10:49	M. Taylor	8260B	297
Methylene chloride	ND	mg/l	0.0050	1	3/17/02	10:49	M. Taylor	8260B	297
Naphthalene	ND	mg/l	0.0050	1	3/17/02	10:49	M. Taylor	8260B	297
n-Propylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Styrene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,1,1,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,1,2,2-Tetrachloroethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Tetrachloroethene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Toluene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2,3-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2,4-Trichlorobenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,1,1-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,1,2-Trichloroethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Trichloroethene	33.3	mg/l	1.00	500	3/19/02	2:18	M. Taylor	8260B	2407
1,2,3-Trichloropropane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
1,3,5-Trimethylbenzene	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Vinyl chloride	0.0281	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Xylenes (Total)	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297
Bromodichloromethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297

ple report continued . . .

# TestAmerica

INCORPORATED

## ANALYTICAL REPORT

Laboratory Number: 02-A39899  
Sample ID: BR-11  
Project: 51870.7  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Trichlorofluoromethane	ND	mg/l	0.0020	1	3/17/02	10:49	M. Taylor	8260B	297

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	102.	60. - 158.
VOA Surr Toluene-d8	100.	82. - 127.
VOA Surr, 4-BFB	102.	72. - 136.
VOA Surr, DBFM	106.	81. - 137.

### LABORATORY COMMENTS:

ND - Not detected at the report limit.

\* - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA  
 Project Number: 51870.7  
 Page: 1

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike Sample
<hr/>									
**VOA PARAMETERS**									
Benzene	mg/l	< 0.00200	0.05270	0.05000	105	70. - 136.	297	02-A39731	
Chlorobenzene	mg/l	< 0.00200	0.05050	0.05000	101	70. - 132.	297	02-A39731	
1,1-Dichloroethene	mg/l	< 0.00200	0.05360	0.05000	107	60. - 145.	297	02-A39731	
Toluene	mg/l	< 0.00200	0.05310	0.05000	106	69. - 137.	297	02-A39731	
Trichloroethene	mg/l	< 0.00200	0.05430	0.05000	109	63. - 149.	297	02-A39731	
Tetrachloroethene	mg/l	< 0.00200	0.04830	0.05000	97	60. - 140.	297	02-A39731	
VOA Surr 1,2-DCA-d4	% Rec				100	60. - 158.	297		
VOA Surr Toluene-d8	% Rec				104	82. - 127.	297		
VOA Surr, 4-BFB	% Rec				98	72. - 136.	297		
VOA Surr, DBFM	% Rec				105	81. - 137.	297		

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
<hr/>						
**VOA PARAMETERS**						
Benzene	mg/l	0.05270	0.05160	2.11	21.	297
Chlorobenzene	mg/l	0.05050	0.04940	2.20	25.	297
1,1-Dichloroethene	mg/l	0.05360	0.05300	1.13	26.	297
Toluene	mg/l	0.05310	0.05190	2.29	22.	297
Trichloroethene	mg/l	0.05430	0.05340	1.67	28.	297
Tetrachloroethene	mg/l	0.04830	0.04790	0.83	24.	297
VOA Surr 1,2-DCA-d4	% Rec		101.			297
VOA Surr Toluene-d8	% Rec		104.			297
VOA Surr, 4-BFB	% Rec		97.			297
VOA Surr, DBFM	% Rec		105.			297

ject QC continued . . .

**PROJECT QUALITY CONTROL DATA**
**Project Number:** 51870.7

**Page:** 2

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**VOA PARAMETERS**</b>						
Acetone	mg/l	0.2500	0.3380	135	54 - 153	297
Acetone	mg/l	0.2500	0.3370	135	54 - 153	2405
Benzene	mg/l	0.05000	0.04870	97	79 - 124	297
Bromobenzene	mg/l	0.05000	0.04780	96	76 - 122	297
Bromochloromethane	mg/l	0.05000	0.04110	82	71 - 134	297
Bromoform	mg/l	0.05000	0.04710	94	66 - 124	297
Bromomethane	mg/l	0.05000	0.06280	126	51 - 145	297
2-Butanone	mg/l	0.2500	0.2880	115	62 - 134	297
n-Butylbenzene	mg/l	0.05000	0.04390	88	61 - 136	297
sec-Butylbenzene	mg/l	0.05000	0.04630	93	69 - 130	297
t-Butylbenzene	mg/l	0.05000	0.04540	91	66 - 129	297
Carbon disulfide	mg/l	0.05000	0.04760	95	71 - 129	297
Carbon tetrachloride	mg/l	0.05000	0.04670	93	70 - 130	297
Chlorobenzene	mg/l	0.05000	0.04820	96	80 - 118	297
Chloroethane	mg/l	0.05000	0.04690	94	59 - 144	297
Chloroform	mg/l	0.05000	0.04780	96	74 - 123	297
Chloromethane	mg/l	0.05000	0.04690	94	47 - 155	297
2-Chlorotoluene	mg/l	0.05000	0.04890	98	74 - 126	297
4-Chlorotoluene	mg/l	0.05000	0.04880	98	75 - 125	297
1,2-Dibromo-3-chloropropane	mg/l	0.05000	0.04930	99	58 - 133	297
Dibromochloromethane	mg/l	0.05000	0.05070	101	73 - 125	297
1,2-Dibromoethane	mg/l	0.05000	0.05090	102	74 - 125	297
Dibromomethane	mg/l	0.05000	0.05180	104	71 - 130	297
1,2-Dichlorobenzene	mg/l	0.05000	0.04920	98	76 - 122	297
1,3-Dichlorobenzene	mg/l	0.05000	0.04760	95	75 - 122	297
1,4-Dichlorobenzene	mg/l	0.05000	0.04760	95	76 - 119	297
Dichlorodifluoromethane	mg/l	0.05000	0.04020	80	53 - 151	297
1,1-Dichloroethane	mg/l	0.05000	0.04830	97	76 - 127	297
1,2-Dichloroethane	mg/l	0.05000	0.04950	99	66 - 133	297
1,1-Dichloroethene	mg/l	0.05000	0.04860	97	72 - 127	297
cis-1,2-Dichloroethene	mg/l	0.05000	0.04800	96	74 - 127	297

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 3**

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
cis-1,2-Dichloroethene	mg/l	0.05000	0.04700	94	74 - 127	2405
trans-1,2-Dichloroethene	mg/l	0.05000	0.05240	105	70 - 132	297
trans-1,2-Dichloroethene	mg/l	0.05000	0.05430	109	70 - 132	2405
1,2-Dichloropropane	mg/l	0.05000	0.04820	96	76 - 124	297
1,3-Dichloropropane	mg/l	0.05000	0.05130	103	72 - 129	297
2,2-Dichloropropane	mg/l	0.05000	0.04440	89	33 - 152	297
1,1-Dichloropropene	mg/l	0.05000	0.04670	93	73 - 127	297
cis-1,3-Dichloropropene	mg/l	0.05000	0.04910	98	58 - 131	297
trans-1,3-Dichloropropene	mg/l	0.05000	0.04790	96	53 - 133	297
Ethylbenzene	mg/l	0.05000	0.04970	99	77 - 126	297
Hexachlorobutadiene	mg/l	0.05000	0.03990	80	52 - 139	297
2-Hexanone	mg/l	0.2500	0.2930	117	61 - 136	297
Isopropylbenzene	mg/l	0.05000	0.04900	98	74 - 127	297
4-Isopropyltoluene	mg/l	0.05000	0.04670	93	69 - 113	297
4-Methyl-2-pentanone	mg/l	0.2500	0.2910	116	63 - 135	297
Methylene chloride	mg/l	0.05000	0.05320	106	70 - 130	297
Naphthalene	mg/l	0.05000	0.04580	92	57 - 143	297
n-Propylbenzene	mg/l	0.05000	0.04910	98	71 - 130	297
Styrene	mg/l	0.05000	0.05430	109	77 - 122	297
1,1,1,2-Tetrachloroethane	mg/l	0.05000	0.04860	97	71 - 130	297
1,1,2,2-Tetrachloroethane	mg/l	0.05000	0.05570	111	57 - 136	297
Tetrachloroethene	mg/l	0.05000	0.04800	96	72 - 126	297
Toluene	mg/l	0.05000	0.04930	99	78 - 124	297
1,2,3-Trichlorobenzene	mg/l	0.05000	0.04800	96	58 - 139	297
1,2,4-Trichlorobenzene	mg/l	0.05000	0.04530	91	60 - 132	297
1,1,1-Trichloroethane	mg/l	0.05000	0.04600	92	70 - 130	297
1,1,2-Trichloroethane	mg/l	0.05000	0.05210	104	75 - 124	297
Trichloroethene	mg/l	0.05000	0.04640	93	70 - 136	297
Trichloroethene	mg/l	0.05000	0.05070	101	70 - 136	2405
1,2,3-Trichloropropane	mg/l	0.05000	0.05010	100	63 - 132	297
1,2,4-Trimethylbenzene	mg/l	0.05000	0.04980	100	73 - 127	297
1,3,5-Trimethylbenzene	mg/l	0.05000	0.05010	100	72 - 128	297
Vinyl chloride	mg/l	0.05000	0.04820	96	62 - 144	297

ject QC continued . . .

# TestAmerica

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**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 4**

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Vinyl chloride	mg/l	0.05000	0.05100	102	62 - 144	2405
Xylenes (Total)	mg/l	0.1500	0.1509	101	76 - 127	297
Bromodichloromethane	mg/l	0.05000	0.05000	100	69 - 130	297
Trichlorofluoromethane	mg/l	0.05000	0.04960	99	64 - 136	297
VOA Surr 1,2-DCA-d4	% Rec			100	60 - 158	297
VOA Surr 1,2-DCA-d4	% Rec			101	60 - 158	2405
VOA Surr Toluene-d8	% Rec			105	82 - 127	297
VOA Surr Toluene-d8	% Rec			105	82 - 127	2405
VOA Surr, 4-BFB	% Rec			95	72 - 136	297
VOA Surr, 4-BFB	% Rec			97	72 - 136	2405
VOA Surr, DBFM	% Rec			105	81 - 137	297
VOA Surr, DBFM	% Rec			106	81 - 137	2405

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**VOA PARAMETERS**</b>					
Acetone	< 0.00840	mg/l	297	3/16/02	21:14
Acetone	< 0.00840	mg/l	2405	3/18/02	19:48
Benzene	< 0.00070	mg/l	297	3/16/02	21:14
Bromobenzene	< 0.00070	mg/l	297	3/16/02	21:14
Bromochloromethane	< 0.00060	mg/l	297	3/16/02	21:14
Bromoform	< 0.00070	mg/l	297	3/16/02	21:14
Bromomethane	< 0.00080	mg/l	297	3/16/02	21:14
2-Butanone	< 0.00390	mg/l	297	3/16/02	21:14
n-Butylbenzene	< 0.00070	mg/l	297	3/16/02	21:14
sec-Butylbenzene	< 0.00080	mg/l	297	3/16/02	21:14
t-Butylbenzene	< 0.00090	mg/l	297	3/16/02	21:14
Carbon disulfide	< 0.00080	mg/l	297	3/16/02	21:14
Carbon tetrachloride	< 0.00070	mg/l	297	3/16/02	21:14
Chlorobenzene	< 0.00070	mg/l	297	3/16/02	21:14

Project QC continued . . .

# TestAmerica

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## PROJECT QUALITY CONTROL DATA

Project Number: 51870.7

Page: 5

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Chloroethane	< 0.00090	mg/l	297	3/16/02	21:14
Chloroform	< 0.00060	mg/l	297	3/16/02	21:14
Chloromethane	< 0.00050	mg/l	297	3/16/02	21:14
2-Chlorotoluene	< 0.00070	mg/l	297	3/16/02	21:14
4-Chlorotoluene	< 0.00060	mg/l	297	3/16/02	21:14
1,2-Dibromo-3-chloropropane	< 0.00310	mg/l	297	3/16/02	21:14
Dibromochloromethane	< 0.00040	mg/l	297	3/16/02	21:14
1,2-Dibromoethane	< 0.00050	mg/l	297	3/16/02	21:14
Dibromomethane	< 0.00040	mg/l	297	3/16/02	21:14
1,2-Dichlorobenzene	< 0.00050	mg/l	297	3/16/02	21:14
1,3-Dichlorobenzene	< 0.00060	mg/l	297	3/16/02	21:14
1,4-Dichlorobenzene	< 0.00050	mg/l	297	3/16/02	21:14
Dichlorodifluoromethane	< 0.00040	mg/l	297	3/16/02	21:14
1,1-Dichloroethane	< 0.00080	mg/l	297	3/16/02	21:14
1,2-Dichloroethane	< 0.00090	mg/l	297	3/16/02	21:14
1,1-Dichloroethene	< 0.00080	mg/l	297	3/16/02	21:14
cis-1,2-Dichloroethene	< 0.00070	mg/l	297	3/16/02	21:14
cis-1,2-Dichloroethene	< 0.00070	mg/l	2405	3/18/02	19:48
trans-1,2-Dichloroethene	< 0.00080	mg/l	297	3/16/02	21:14
trans-1,2-Dichloroethene	< 0.00080	mg/l	2405	3/18/02	19:48
1,2-Dichloropropane	< 0.00060	mg/l	297	3/16/02	21:14
1,3-Dichloropropane	< 0.00060	mg/l	297	3/16/02	21:14
2,2-Dichloropropane	< 0.00090	mg/l	297	3/16/02	21:14
1,1-Dichloropropene	< 0.00070	mg/l	297	3/16/02	21:14
cis-1,3-Dichloropropene	< 0.00070	mg/l	297	3/16/02	21:14
trans-1,3-Dichloropropene	< 0.00050	mg/l	297	3/16/02	21:14
Ethylbenzene	< 0.00070	mg/l	297	3/16/02	21:14
Hexachlorobutadiene	< 0.00080	mg/l	297	3/16/02	21:14
2-Hexanone	< 0.00280	mg/l	297	3/16/02	21:14
Isopropylbenzene	< 0.00080	mg/l	297	3/16/02	21:14
4-Isopropyltoluene	< 0.00080	mg/l	297	3/16/02	21:14
4-Methyl-2-pentanone	< 0.00460	mg/l	297	3/16/02	21:14
Methylene chloride	< 0.00150	mg/l	297	3/16/02	21:14

ject QC continued . . .

# TestAmerica

INCORPORATED

**PROJECT QUALITY CONTROL DATA**  
**Project Number: 51870.7**  
**Page: 6**

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Naphthalene	< 0.00190	mg/l	297	3/16/02	21:14
n-Propylbenzene	< 0.00080	mg/l	297	3/16/02	21:14
Styrene	< 0.00090	mg/l	297	3/16/02	21:14
1,1,1,2-Tetrachloroethane	< 0.00060	mg/l	297	3/16/02	21:14
1,1,2,2-Tetrachloroethane	< 0.00050	mg/l	297	3/16/02	21:14
Tetrachloroethene	< 0.00080	mg/l	297	3/16/02	21:14
Toluene	< 0.00070	mg/l	297	3/16/02	21:14
1,2,3-Trichlorobenzene	< 0.00060	mg/l	297	3/16/02	21:14
1,2,4-Trichlorobenzene	< 0.00090	mg/l	297	3/16/02	21:14
1,1,1-Trichloroethane	< 0.00070	mg/l	297	3/16/02	21:14
1,1,2-Trichloroethane	< 0.00050	mg/l	297	3/16/02	21:14
Trichloroethene	< 0.00090	mg/l	297	3/16/02	21:14
Trichloroethene	< 0.00090	mg/l	2405	3/18/02	19:48
1,2,3-Trichloropropane	< 0.00040	mg/l	297	3/16/02	21:14
1,2,4-Trimethylbenzene	< 0.00060	mg/l	297	3/16/02	21:14
1,3,5-Trimethylbenzene	< 0.00080	mg/l	297	3/16/02	21:14
Vinyl chloride	< 0.00050	mg/l	297	3/16/02	21:14
Vinyl chloride	< 0.00050	mg/l	2405	3/18/02	19:48
Xylenes (Total)	< 0.00090	mg/l	297	3/16/02	21:14
Bromodichloromethane	< 0.00080	mg/l	297	3/16/02	21:14
Trichlorofluoromethane	< 0.00070	mg/l	297	3/16/02	21:14
VOA Surr 1,2-DCA-d4	100.	% Rec	297	3/16/02	21:14
VOA Surr 1,2-DCA-d4	100.	% Rec	2405	3/18/02	19:48
VOA Surr Toluene-d8	100.	% Rec	297	3/16/02	21:14
VOA Surr Toluene-d8	99.	% Rec	2405	3/18/02	19:48
VOA Surr, 4-BFB	101.	% Rec	297	3/16/02	21:14
VOA Surr, 4-BFB	101.	% Rec	2405	3/18/02	19:48
VOA Surr, DBFM	105.	% Rec	297	3/16/02	21:14
VOA Surr, DBFM	104.	% Rec	2405	3/18/02	19:48

Project QC continued . . .

# TestAmerica

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PROJECT QUALITY CONTROL DATA  
Project Number: 51870.7  
Page: 7

# - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 275776

# TestAmerica

INCORPORATED

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

Phone: 615-726-0177  
Fax: 615-726-3404

25176

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?  
Compliance Monitoring

Client Name: Rick Ryan

Client #: 102501

Address: 1000 W. Foster Rd., Ste. 200, Elgin, IL 60123

City/State/Zip Code: Elgin, IL 60123

Project Manager: Rick Ryan

Telephone Number: (708) 929-1982

Fax: (708) 929-1983

Sampler Name: (Print Name) Rob Ellis

Sampler Signature: Rob A. Ellis

Project Name: Former Taylor Instruments

Project #: 51870.7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102501.216.2.99 PO#: 6599

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)	Date Needed:	Fax Results: <input checked="" type="radio"/> N	SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers					QC Deliverables <input checked="" type="checkbox"/> None <input checked="" type="checkbox"/> Level 2 (Batch QC) <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Other: _____						
									SL - Sludge	DW - Drinking Water	S - Soil/Solid	Other	HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Merchandise	None	Other (Specify)	
BR-07	3/11/02	08:45	G	GW		3												3	VOCs - 8260	
BR-07 (DUP)	89	03/11/02	08:45	G	GW	3												3		
BR-12	90	03/11/02	10:23	G	GW	3												3		
BR-13	91	03/11/02	11:47	G	GW	3												3		
BR-15	92	03/11/02	14:49	G	GW	3												3		
BR-16	93	03/11/02	16:31	G	GW	3												3		
BR-04 OB-04	94	03/12/02	08:56	G	GW	3												3		
BR-04	95	03/12/02	10:12	G	GW	3												3		
BR-05	96	03/12/02	11:43	G	GW	3												3		
BR-09	97	03/12/02	14:15	G	GW	3												3		

Special Instructions:

lowest possible detection limits

Relinquished By: <u>Rick Ryan</u>	Date: <u>03/13/02</u>	Time: <u>1630</u>	Received By: <u>M. K.</u>	Date: <u>3/14/02</u>	Time: <u>9:00</u>
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Relinquished By:	Date:	Time:	Received By:	Date:	Time:
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Relinquished By:	Date:	Time:	Received By:	Date:	Time:
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LABORATORY COMMENTS:

Init Lab Temp:

Rec Lab Temp: 20

Custody Seals:  Y  N  N/A

Bottles Supplied by Test America:  Y  N

Method of Shipment:

# TestAmerica

INCORPORATED

**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

**Phone:** 615-726-0177  
**Fax:** 615-726-3404

275746

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

**Client Name:**

**Client #:**

**Address:** 400 CONSTITUTION AVENUE, WASH., D. C.

**City/State/Zip Code:** SANTA FE, NM 87501

Project Manager: Rick Ryan

**Telephone Number:** 1455911234      **Fax:** 1455911234

**Sampler Name: (Print Name)**

Rob. Ellis

**Sampler Signature:**

*Port of San Juan*

Project Name: Former Taylor Instruments

Project #: 5870, 7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102501.216.2.99 PO#: 6599

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)		Date Sampled	Time Sampled	G = Grab, C = Composite	Matrix	Preservation & # of Containers						Analyze For:										QC Deliverables <input type="checkbox"/> None <input checked="" type="checkbox"/> Level 2 <input type="checkbox"/> (Batch QC) <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Other: _____					
Date Needed:																											
Fax Results: <input checked="" type="checkbox"/> N																											
SAMPLE ID																											
OB-08 34898 03/12/02 16:00 G		Field Filtered	SL - Sludge	DW - Drinking Water	GW - Groundwater	S - Soil/Solid	WW - Wastewater	Specify Other	HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Methanol	None	Other (Specify)	VOC - 8260											
BL-11 34899 03/13/02 11:14 G			GW	3												3											
Special Instructions:		lowest possible detection limits																		LABORATORY COMMENTS:							
Relinquished By:	<i>JMA/DE</i>	Date: 03/13/02	Time: 1630	Received By:	<i>MB</i>		Date: 3/14/02	Time: 9:30																			Init Lab Temp:
Relinquished By:		Date:	Time:	Received By:			Date:	Time:																			Rec Lab Temp:
Relinquished By:		Date:	Time:	Received By:			Date:	Time:																			Custody Seals: Y N N/A
																				Bottles Supplied by Test America: Y N							
																				Method of Shipment:							

**APPENDIX C**

**CHAIN-OF-CUSTODY FORMS**







# TestAmerica INCORPORATED

**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

**Phone:** 615-726-0177  
**Fax:** 615-726-3404

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

**Client Name**

**Address:** 1000 18th Street, Suite 1000, Washington, DC 20006

**City/State/Zip Code:** Waukesha, WI 53188

Project Manager: Rick Ryan

**Telephone Number:** (404) 522-1010      **Fax:** (404) 522-1010

Sampler Name: (Print Name) Pab Filz

Sampler Signature: Randy A. PAA

**Client #:**

Project Name: Former Taylor Instruments

Project #: 57870.7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102501.216.2.99 PO#: 6599



# Test America

INCORPORATED

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

Phone: 615-726-0177  
Fax: 615-726-3404

25176

To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?  
Compliance Monitoring

Client Name: Rick Ryan / Rob Ellis

Client #: 4407

Address: 1000 University Ave., Suite 1000, Seattle, WA 98101

City/State/Zip Code: Seattle, WA 98101

Project Manager: Rick Ryan

Telephone Number: 206-467-1881

Fax: 206-467-1884

Sampler Name: (Print Name) Rob Ellis

Sampler Signature: Rob A. Ellis

Project Name: Former Taylor Instruments

Project #: 57870.7

Site/Location ID: Rochester State: NY

Report To: Rick Ryan / Rob Ellis

Invoice To: Rick Ryan

Quote #: 102501.216.2.99 PO#: 6599

TAT	<input checked="" type="checkbox"/> Standard	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers					QC Deliverables	
							SL - Sludge	DW	GW	S	Other		
							HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Methanol	None	
1	BR-07	3/11/02	08:45	G	GW	SL	3						
2	BR-07 (DUP)	3/11/02	08:45	G	GW	GW	3						
3	BR-12	3/11/02	10:23	G	GW	GW	3						
4	BR-13	3/11/02	11:47	G	GW	GW	3						
5	BR-15	3/11/02	14:49	G	GW	GW	3						
6	BR-16	3/11/02	16:31	G	GW	GW	3						
7	BR-04 OB-04	3/12/02	08:58	G	GW	SL	3						
8	BR-04	3/12/02	10:12	G	GW	GW	3						
9	BR-05	3/12/02	11:43	G	GW	GW	3						
10	BR-09	3/12/02	14:15	G	GW	SL	3						

Special Instructions:

lowest possible detection limits

LABORATORY COMMENTS:

Init Lab Temp:

Rec Lab Temp: 20

Relinquished By: Rob A. Ellis

Date: 03/13/02 Time: 1630

Received By: MM Klem

Date: 3/19/02 Time: 9:00

Relinquished By:

Date: Time:

Received By:

Date: Time:

Relinquished By:

Date: Time:

Received By:

Date: Time:

Custody Seals: Y N N/A

Bottles Supplied by Test America: Y N

Method of Shipment:

# TestAmerica

**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

Phone: 615-726-0177  
Fax: 615-726-3404

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To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

**Client Name**

**Client #:**

**Address:** 1401 E MONTGOMERY ST, SUITE 100, PHOENIX, AZ

**City/State/Zip Code:** 340-10110      701      37454-1029

Project Manager: Rick Ryan

**Telephone Number:** 442-5210

Sampler Name: (Print Name) Rob Ellis

Samper Signature: 

**Special Instructions:**

lowest possible detection limits

**LABORATORY COMMENTS:**

**Init Lab Temp**

Rec Lab Temp

Reinhardt, Dr. *J. A. J. D.* 03/13/02 1630 Received By MR Date: 3/14/02 Time: 9: a.m.

**Renewed By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Received By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

**Relinquished By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Received By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **M**

**Custody Seals:** Y N N/A      **Bottles Supplied by Test America:** Y N

### **Method of Solution**

## **APPENDIX D**

## **FIELD DATA RECORDS**

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/05/02	
SITE ID	QATB01	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 0745	END 0755	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	_____ FT	WELL DEPTH _____ FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER _____ IN
FINAL DEPTH TO WATER	_____ FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR YES _____ NO _____ N/A _____
DRAWDOWN	_____ FT	DRAWDOWN VOLUME _____ GAL	PRODUCT THICKNESS _____ FT	
((Initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	_____ L/MIN	BEGIN PURGING	END PURGING	TOTAL VOL. PURGED _____ GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

<b>EQUIPMENT DOCUMENTATION</b>			
<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

PURGE OBSERVATIONS	NOTES
	<p>Collect Trip Blank Time listed as 00:00</p>

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Oil Sampling Event	DATE	03/05/02
SITE ID	QAFB01	SITE TYPE	Monitor Well
SITE ACTIVITY	START 0755 END 0800	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____		PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT		PROTECTIVE CASING / WELL DIFFERENCE _____ FT	
INITIAL DEPTH TO WATER	_____ FT	WELL DEPTH	_____ FT	PID AMBIENT AIR	_____ PPM	WELL DIAMETER	_____ IN
FINAL DEPTH TO WATER	_____ FT	SCREEN LENGTH	_____ FT	PID WELL MOUTH	_____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES _____ NO _____ N/A _____
DRAWDOWN	_____ FT	DRAWDOWN VOLUME	_____ GAL	PRODUCT THICKNESS	_____ FT		
$((\text{initial} - \text{final}) \times 0.16 \text{ (2-inch)} \text{ or } x 0.65 \text{ (4-inch)} \text{ or } x 1.5 \text{ (6-inch)})$							
PURGE RATE	_____ L/MIN	BEGIN PURGING	_____	END PURGING	_____	TOTAL VOL. PURGED	_____ GAL
(purge rate (L/min) x duration (min)) x 0.26 gal/L)							

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLOL LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLOL
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

PURGE OBSERVATIONS	NOTES
	Collect QAFBØ1 at 0757

SIGNATURE: 

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/09/02
SITE ID	BR-01	SITE TYPE	Monitor Well
SITE ACTIVITY	START 0923 END 1025	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER		PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT		PROTECTIVE CASING / WELL DIFFERENCE _____ FT	
INITIAL DEPTH TO WATER	19.81 FT	WELL DEPTH	38.60 FT	PID AMBIENT AIR	_____ PPM	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	19.90 FT	SCREEN LENGTH	_____ FT	PID WELL MOUTH	_____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES X NO — N/A —
DRAWDOWN	0.09 FT	DRAWDOWN VOLUME	0.06 GAL	PRODUCT THICKNESS	_____ FT		
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))							
PURGE RATE	0.070 L/MIN	BEGIN PURGING	0929	END PURGING	1018	TOTAL VOL. PURGED (purge rate (L/min) x duration (min) x 0.26 gal/L)	0.89 GAL

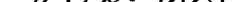
## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

#### **PURGE OBSERVATIONS**

## NOTES

0946 - DTW = 19.41' bfor  
0955 - DTW = 19.97' bfor  
1003 - DTW = 20.00' bfor  
1012 - DTW = 20.01' bfor

SIGNATURE:  JAMES H. KOTT

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/09/02	
SITE ID	BR-02	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1032	END 1142	JOB NUMBER	51870.7

## **WATER LEVEL / PUMP SETTINGS**

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	21.35' FT <i>erroneous reading?</i>	WELL DEPTH 42.75 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 4 IN
FINAL DEPTH TO WATER	24.35 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP YES <input checked="" type="checkbox"/> Casing <input checked="" type="checkbox"/> LOCKED <input checked="" type="checkbox"/> COLLAR <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
DRAWDOWN	0.04 FT	DRAWDOWN VOLUME 0.03 GAL	PRODUCT THICKNESS _____ FT	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.060 L/MIN	BEGIN PURGING 1039	END PURGING 1137	TOTAL VOL. PURGED 0.90 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

**PURGE DATA**

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLON
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## PURGE OBSERVATIONS

## NOTES

$$\begin{aligned}1100 - DTW &= 24.31' \text{ bfor} \\1111 - DTW &= 24.36' \text{ bfor} \\1121 - DTW &= 24.39' \text{ bfor} \\1131 - DTW &= 24.40' \text{ bfor}\end{aligned}$$

**SIGNATURE:**

*R.H. Goff*

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/08/02
SITE ID	BR-03	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1550 END 1646	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT		PROTECTIVE Casing Stickup (From Ground) FT		PROTECTIVE Casing / Well Difference FT	
		<input checked="" type="checkbox"/> TOP OF WELL RISER	<input type="checkbox"/> TOP OF PROTECTIVE CASING				
		<input type="checkbox"/> OTHER					
INITIAL DEPTH TO WATER	10.89 FT	WELL DEPTH	42.2 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	11.65 FT	SCREEN LENGTH	FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAP Casing Locked Collar	YES NO N/A
DRAWDOWN	0.76 FT	DRAWDOWN VOLUME	0.49 GAL	PRODUCT THICKNESS	FT	X X X X	— — — —
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))							
PURGE RATE	0.082 L/MIN	BEGIN PURGING	1536	END PURGING	1641	TOTAL VOL. PURGED	0.96 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)							

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFION LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

**PURGE OBSERVATIONS**

## NOTES

$$\begin{aligned}1611 - \text{DTW} &= 11.22' \text{ btor} \\1620 - \text{DTW} &= 11.32' \text{ btor} \\1627 - \text{DTW} &= 11.45' \text{ btor} \\1635 - \text{DTW} &= 11.60' \text{ btor}\end{aligned}$$

TYPE OF BLADDER MATERIAL (If applicable)

SIGNATURE: 

1611 - DTW = 11.22' btor  
1620 - DTW = 11.32' btor  
1627 - DTW = 11.45' btor  
1635 - DTW = 11.60' btor

SIGNATURE: \_\_\_\_\_

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event			DATE	03/12/02			
SITE ID	BR-04	SITE TYPE		Monitor Well				
SITE ACTIVITY	START 0903	END 1020	JOB NUMBER	51870.7				
WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT						
	<input checked="" type="checkbox"/> TOP OF WELL RISER	<input type="checkbox"/> TOP OF PROTECTIVE CASING		PROTECTIVE CASING STICKUP (FROM GROUND) FT				
	<input type="checkbox"/> OTHER							
INITIAL DEPTH TO WATER	22.75 FT	WELL DEPTH	40.80 FT	PID AMBIENT AIR	PPM			
FINAL DEPTH TO WATER	22.75 FT	SCREEN LENGTH	FT	PID WELL MOUTH	PPM			
DRAWDOWN	0 FT	DRAWDOWN VOLUME	0 GAL	PRODUCT THICKNESS	FT			
(Initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch)								
PURGE RATE	0.059 L/MIN	BEGIN PURGING	0906	END PURGING	1013			
				TOTAL VOL. PURGED	1.03 GAL			
(purge rate (L/min) x duration (min)) x 0.26 gal/L)								
PURGE DATA		Horizon		Down-hole				
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O <sub>2</sub> (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments
0928	1.30	6.87	1.81	0	0.39 0.13	8.54	-129	=59 ml/min
0938	1.89	6.88	1.83	0	0.00 0.14	8.08	-130	=59 ml/min
0948	2.48	6.89	1.81	0	0.00 0.10	8.30	-130	=59 ml/min
0957	3.01	6.89	1.83	0	0.00 0.10	8.33	-130	=59 ml/min
1008	3.66	6.90	1.83	0	0.00 0.12	8.62	-130	=59 ml/min
1012	Collect sample BR-04 for 8260							
EQUIPMENT DOCUMENTATION								
TYPE OF PUMP		TYPE OF TUBING		TYPE OF PUMP MATERIAL		TYPE OF BLADDER MATERIAL (if applicable)		
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFILON OR TEFILON LINED	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> OTHER	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> TEFILON	<input type="checkbox"/> OTHER _____	
<input type="checkbox"/> SUBMERSIBLE								
<input type="checkbox"/> OTHER _____								
PURGE OBSERVATIONS				NOTES				
				0928 - DTW = 22.75' btor 0938 - DTW = 22.75' btor 0948 - DTW = 22.76' btor 0957 - DTW = 22.76' btor 1008 - DTW = 22.76' btor				
								
SIGNATURE:								

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/12/02	
SITE ID	BR-05	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1033	END 1153	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	22.25 FT	WELL DEPTH 50.15 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 4 IN
FINAL DEPTH TO WATER	22.28 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
DRAWDOWN	0.03 FT	DRAWDOWN VOLUME 0.02 GAL	PRODUCT THICKNESS _____ FT	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.057 L/MIN	BEGIN PURGING 1040	END PURGING 1146	TOTAL VOL. PURGED 0.98 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

## **EQUIPMENT DOCUMENTATION**

<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL (if applicable)</u>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## PURGE OBSERVATIONS

## **NOTES**

1059 - DTW = 22.26' bbar  
 1110 - DTW = 22.32' bbar  
 1120 - DTW = 22.32' bbar  
 1130 - DTW = 22.31' bbar  
 1140 - DTW = 22.30' bbar

TYPE OF BLADDER MATERIAL (if applicable)

TEFILON  
 OTHER

## QUESTION

PURGE OBSERVATIONS	NOTES
	1059 - DTW = 22.76' bbar
	1110 - DTW = 22.32' bbar
	1120 - DTW = 22.32' bbar
	1130 - DTW = 22.31' bbar
	1140 - DTW = 22.30' bbar

SIGNATURE: *John A. Cox*

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/09/02
SITE ID	BR-46	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1323	JOB NUMBER	END 1453

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	12.94 FT	WELL DEPTH 43.55 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 4 IN
FINAL DEPTH TO WATER	14.60 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
DRAWDOWN	1.66 FT	DRAWDOWN VOLUME 1.08 GAL	PRODUCT THICKNESS _____ FT	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.065 L/MIN	BEGIN PURGING 1332	END PURGING 1449	TOTAL VOL. PURGED 1.30 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

<b>EQUIPMENT DOCUMENTATION</b>	<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (If applicable)</b>
	<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON OR TEFLON LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON <input type="checkbox"/> OTHER _____

PURGE OBSERVATIONS	NOTES
	<p>1347 - DTW = 14.15' bbar</p> <p>1357 - DTW = 14.30' bbar</p> <p>1406 - DTW = 14.40' bbar</p> <p>1416 - DTW = 14.45' bbar</p> <p>1425 - DTW = 14.52' bbar</p> <p>1435 - DTW = 14.58' bbar</p>

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/11/02
SITE ID	BR-07	SITE TYPE	Monitor Well
SITE ACTIVITY	START 0733 END 0856	JOB NUMBER	51870.7

## **WATER LEVEL / PUMP SETTINGS**

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT			PROTECTIVE Casing Stickup (From Ground)		Protective Casing / Well Difference	
		<input checked="" type="checkbox"/> TOP OF WELL RISER						
		<input type="checkbox"/> TOP OF PROTECTIVE CASING						
		<input type="checkbox"/> OTHER _____						
INITIAL DEPTH TO WATER		25.91 FT	WELL DEPTH	53.9 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER		25.85 FT	SCREEN LENGTH	FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAP YES X CASING X LOCKED X COLLAR X	N/A
DRAWDOWN		Ø FT	DRAWDOWN VOLUME	Ø GAL	PRODUCT THICKNESS	FT		
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))								
PURGE RATE	0.042 L/MIN	BEGIN PURGING	0744	END PURGING	0852	TOTAL VOL. PURGED	0.74 GAL	
(purge rate (L/min) duration (min) x 0.26 gal/L)								

**PURGE DATA**

## EQUIPMENT DOCUMENTATION

<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL (if applicable)</u>
<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON OR TEFLON LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLO <input type="checkbox"/> OTHER _____

## **PURGE OBSERVATIONS**

\* well purging very unusual - very difficult  
to purge - won't pump

## **NOTES**

$$0811 - DTW = 25.74' bfor$$

$$0826 - DTW = 25.81' bfor$$

$$0841 - DTW = 25.82' bfor$$

SIGNATURE: 

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/12/02
SITE ID	BR-09	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1259	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT			
INITIAL DEPTH TO WATER	22.82 FT	WELL DEPTH	49.40 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER	6 IN	
FINAL DEPTH TO WATER	22.80 FT	SCREEN LENGTH	_____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	
DRAWDOWN	0 FT	DRAWDOWN VOLUME	0 GAL	PRODUCT THICKNESS _____ FT			
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))							
PURGE RATE	0.054 L/MIN	BEGIN PURGING	1307	END PURGING	1418	TOTAL VOL. PURGED	1.10 GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)							

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## PURGE OBSERVATIONS

## NOTES

$$\begin{aligned}1327 - DTW &= 22.81^\circ \text{ btor} \\1338 - DTW &= 22.85^\circ \text{ btor} \\1349 - DTW &= 22.82^\circ \text{ btor} \\1400 - DTW &= 22.83^\circ \text{ btor} \\1411 - DTW &= 22.83^\circ \text{ btor}\end{aligned}$$

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/11/02
SITE ID	BR-10	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1571	JOB NUMBER	51870.7

## **WATER LEVEL / PUMP SETTINGS**

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	22.42 FT	WELL DEPTH	50.25 FT	PID AMBIENT AIR _____ PPM
FINAL DEPTH TO WATER	22.50 FT	SCREEN LENGTH	FT	WELL DIAMETER
DRAWDOWN	0.08 FT	DRAWDOWN VOLUME	0.12 GAL	PID WELL MOUTH _____ PPM
WELL INTEGRITY: CAP CASING LOCKED COLLAR				
$(\text{initial - final}) \times 0.16 \text{ (2-inch)} \text{ or } 0.65 \text{ (4-inch)} \text{ or } 1.5 \text{ (6-inch)}$				
PURGE RATE	0.045 L/MIN	BEGIN PURGING	1518	END PURGING
			1636	TOTAL VOL. PURGED
			0.91 GAL	$(\text{purge rate (L/min)} \times \text{duration (min)} \times 0.26 \text{ gal/L})$

**PURGE DATA**

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFILON OR TEFILON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFILON
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## PURGE OBSERVATIONS

**NOTES**

1540 - DTW = 22.44' bfor  
 1552 - DTW = 22.44' bfor  
 1605 - DTW = 22.45' bfor  
 1617 - DTW = 22.45' bfor  
 1628 - DTW = 22.45' bfor

**SIGNATURE:** \_\_\_\_\_

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event		DATE	03/13/02				
SITE ID	BR-11		SITE TYPE	Monitor Well				
SITE ACTIVITY	START 0936	END 1131	JOB NUMBER	51870.7				
<b>WATER LEVEL / PUMP SETTINGS</b>		<b>MEASUREMENT POINT</b> <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____ FT						
INITIAL DEPTH TO WATER	FT	WELL DEPTH	57.50 FT	PID AMBIENT AIR PPM				
FINAL DEPTH TO WATER	FT	SCREEN LENGTH	FT	PID WELL MOUTH PPM				
DRAWDOWN	FT	DRAWDOWN VOLUME	GAL	PRODUCT THICKNESS FT				
(initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch)								
PURGE RATE	0.063 L/MIN	BEGIN PURGING	1005	END PURGING	1127	TOTAL VOL. PURGED	1.34 GAL	
(purge rate (L/min) x duration (min)) x 0.26 gal/L)								
<b>PURGE DATA</b>								
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O <sub>2</sub> (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments
1025	1.26	7.04	1.81	52.6	1.15	11.55	-141	≈ 63 mV/min
1034	1.83	7.06	1.82	57.6	0.41	11.63	-144	≈ 63 mV/min
1045	2.52	7.07	1.82	50.5	0.10	11.65	-146	≈ 63 mV/min
1058	3.34	7.08	1.81	50.0	0.00	11.91	-146	≈ 63 mV/min
1107	3.91	7.09	1.82	49.2	0.10	12.03	-146	≈ 63 mV/min
1114	Collect sample BR-11 for B260							
<b>EQUIPMENT DOCUMENTATION</b>								
<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>		<b>TYPE OF PUMP MATERIAL</b>		<b>TYPE OF BLADDER MATERIAL (if applicable)</b>			
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFILON OR TEFILON LINED	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> TEFILON			
<input type="checkbox"/> SUBMERSIBLE	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER			
<b>PURGE OBSERVATIONS</b>				<b>NOTES</b>				
* Water level indicator malfunctioning Unable to collect water levels								

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event		DATE 03/11/02						
SITE ID BR-12	SITE TYPE Monitor Well							
SITE ACTIVITY START 0912 END 1032	JOB NUMBER 51870.7							
<b>WATER LEVEL / PUMP SETTINGS</b>								
MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____		PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT					
INITIAL DEPTH TO WATER 19.11 FT	WELL DEPTH 44.45 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 6 IN					
FINAL DEPTH TO WATER 19.54 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> N/A					
DRAWDOWN 0.43 FT	DRAWDOWN VOLUME 0.65 GAL	PRODUCT THICKNESS _____ FT						
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))								
PURGE RATE 0.059 L/MIN	BEGIN PURGING 0923	END PURGING 1026	TOTAL VOL. PURGED 0.97 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)					
<b>PURGE DATA</b>								
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O <sub>2</sub> (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments
0940	1.00	7.05	2.60	2.1	0.46 0.13	7.65	-201	= 59 mV/min
0951	1.65	7.06	2.54	0.4	2.36 0.13	8.68	-203	= 59 mV/min
1000	2.22	7.07	2.57	0	7.43 0.12	8.43	-204	= 63 mV/min
1010	2.81	7.08	2.57	0	6.65 0.11	8.05	-202	= 59 mV/min
1020	3.37	7.08	2.58	0	5.78 0.11	8.45	-201	= 56 mV/min
1023	Collect sample BR-12 for 8260							
<b>EQUIPMENT DOCUMENTATION</b>								
<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>		<b>TYPE OF PUMP MATERIAL</b>		<b>TYPE OF BLADDER MATERIAL (if applicable)</b>			
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED		<input type="checkbox"/> POLYVINYL CHLORIDE		<input type="checkbox"/> TEFLO			
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE		<input type="checkbox"/> STAINLESS STEEL		<input type="checkbox"/> OTHER _____			
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____		<input type="checkbox"/> OTHER _____					
<b>PURGE OBSERVATIONS</b>				<b>NOTES</b>				
				0940 - DTW = 19.22' btor 0951 - DTW = 19.32' btor 1000 - DTW = 19.41' btor 1010 - DTW = 19.46' btor 1020 - DTW = 19.55' btor				
SIGNATURE: 								

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## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event			DATE	03/11/02						
SITE ID	BR-13			SITE TYPE	Monitor Well						
SITE ACTIVITY	START 1032	END 1158	JOB NUMBER	51870.7							
WATER LEVEL / PUMP SETTINGS			MEASUREMENT POINT								
	<input checked="" type="checkbox"/> TOP OF WELL RISER	<input type="checkbox"/> TOP OF PROTECTIVE CASING	<input type="checkbox"/> OTHER	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WELL DIFFERENCE	FT				
INITIAL DEPTH TO WATER	23.35	FT	WELL DEPTH	78.2	FT	PID AMBIENT AIR	PPM	WELL DIAMETER	6	IN	
FINAL DEPTH TO WATER	23.39	FT	SCREEN LENGTH		FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>
DRAWDOWN	0.04	FT	DRAWDOWN VOLUME	0.06	GAL	PRODUCT THICKNESS	FT				
$((\text{initial} - \text{final}) \times 0.16 \text{ (2-inch)} \text{ or } 0.65 \text{ (4-inch)} \text{ or } 1.5 \text{ (6-inch)})$											
PURGE RATE	0.058	L/MIN	BEGIN PURGING	1040	END PURGING	1150	TOTAL VOL. PURGED	1.06	GAL		
(purge rate (L/min) x duration (min) x 0.26 gal/L)											
Purge Data											
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	Horiba 1 Down-Well				Comments		
1102	1.19	6.96	1.61	34.0	0.58	0.11	8.59	-134	$\approx 54 \text{ mL/min}$		
1113	1.81	6.96	1.60	16.0	0.15	0.11	8.55	-136	$\approx 56 \text{ mL/min}$		
1123	2.39	6.96	1.61	2.8	0.00	0.11	8.49	-136	$\approx 58 \text{ mL/min}$		
1133	3.00	6.96	1.60	2.2	0.80	0.13	9.10	-138	$\approx 61 \text{ mL/min}$		
1143	3.60	6.97	1.61	0.7	0.73	0.26	8.57	-139	$\approx 60 \text{ mL/min}$		
1147	Collect sample BR-13 for 8260										
Equipment Documentation											
TYPE OF PUMP		TYPE OF TUBING		TYPE OF PUMP MATERIAL			TYPE OF BLADDER MATERIAL (if applicable)				
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFILON OR TEFILON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFILON								
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER								
<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER								
PURGE OBSERVATIONS		NOTES									
		$1102 - DTW = 23.44' \text{ bbar}$ $1113 - DTW = 23.45' \text{ bbar}$ $1123 - DTW = 23.41' \text{ bbar}$ $1133 - DTW = 23.45' \text{ bbar}$ $1143 - DTW = 23.43' \text{ bbar}$									

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## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/09/02	
SITE ID	BR-14	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 0740	JOB NUMBER	END 0907	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	21.60 FT	WELL DEPTH 77.65 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 4 IN
FINAL DEPTH TO WATER	22.83 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
DRAWDOWN	1.23 FT	DRAWDOWN VOLUME 0.80 GAL	PRODUCT THICKNESS _____ FT	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.054 L/MIN	BEGIN PURGING 0749	END PURGING 0903	TOTAL VOL. PURGED 1.04 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON OR TEFION LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON <input type="checkbox"/> OTHER _____

PURGE OBSERVATIONS	NOTES
	0810 - DTW = 22.02' bfor 0821 - DTW = 22.32' bfor 0833 - DTW = 22.49' bfor 0844 - DTW = 22.68' bfor 0855 - DTW = 22.91' bfor

SIGNATURE:

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/11/02	
SITE ID	BR-15	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1320	END 1459	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER	PROTECTIVE CASING STICKUP (FROM GROUND)	PROTECTIVE CASING / WELL DIFFERENCE			
INITIAL DEPTH TO WATER	<u>must be erroneous</u> 17.56 FT	WELL DEPTH	77.75 FT	WELL DIAMETER			
FINAL DEPTH TO WATER	23.00 FT	SCREEN LENGTH	FT	PID AMBIENT AIR PPM			
DRAWDOWN	0.16 FT	DRAWDOWN VOLUME	0.24 GAL	PID WELL MOUTH PPM			
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))							
PURGE RATE	0.045 L/MIN	BEGIN PURGING	1329	END PURGING	1453	TOTAL VOL. PURGED	0.98 GAL
					(purge rate (L/min) x duration (min) x 0.26 gal/L)		

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLON
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

PURGE OBSERVATIONS	NOTES
	<p>1353 - DTW = 22.84' btor</p> <p>1406 - DTW = 23.00' btor</p> <p>1419 - DTW = 23.05' btor</p> <p>1432 - DTW = 23.10' btor</p> <p>1446 - DTW = 23.10' btor</p>

SIGNATURE: 

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## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/10/02	
SITE ID	BL-16	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1025	END 1145	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	22.65 FT	WELL DEPTH 57.7 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 6 IN
FINAL DEPTH TO WATER	22.95 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
DRAWDOWN	0.3 FT	DRAWDOWN VOLUME 0.45 GAL	PRODUCT THICKNESS _____ FT	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.062 L/MIN	BEGIN PURGING 1035	END PURGING 1140	TOTAL VOL. PURGED 1.05 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLON
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

PURGE OBSERVATIONS	NOTES
	1053 - DTW = 22.82' bfor
	1104 - DTW = 22.98' bfor
	1113 - DTW = 23.00' bfor
	1123 - DTW = 23.00' bfor
	1133 - DTW = 23.05' bfor

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## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/08/02																				
SITE ID	MW-ØØ	SITE TYPE	Monitor Well																				
SITE ACTIVITY	START 0949 END 0955	JOB NUMBER	51870.7																				
<b>WATER LEVEL / PUMP SETTINGS</b>																							
<table border="0"> <tr> <td colspan="2">MEASUREMENT POINT</td> <td colspan="2"></td> </tr> <tr> <td colspan="2"> <input checked="" type="checkbox"/> TOP OF WELL RISER  <input type="checkbox"/> TOP OF PROTECTIVE CASING  <input type="checkbox"/> OTHER         </td> <td colspan="2">           PROTECTIVE            CASING STICKUP            (FROM GROUND) <input type="text"/> FT         </td> </tr> <tr> <td>INITIAL DEPTH TO WATER</td> <td><input type="text"/> FT</td> <td>WELL DEPTH</td> <td><input type="text"/> FT</td> </tr> <tr> <td>FINAL DEPTH TO WATER</td> <td><input type="text"/> FT</td> <td>SCREEN LENGTH</td> <td><input type="text"/> FT</td> </tr> <tr> <td>DRAWDOWN</td> <td><input type="text"/> FT</td> <td>DRAWDOWN VOLUME</td> <td><input type="text"/> GAL</td> </tr> </table>				MEASUREMENT POINT				<input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER		PROTECTIVE CASING STICKUP (FROM GROUND) <input type="text"/> FT		INITIAL DEPTH TO WATER	<input type="text"/> FT	WELL DEPTH	<input type="text"/> FT	FINAL DEPTH TO WATER	<input type="text"/> FT	SCREEN LENGTH	<input type="text"/> FT	DRAWDOWN	<input type="text"/> FT	DRAWDOWN VOLUME	<input type="text"/> GAL
MEASUREMENT POINT																							
<input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER		PROTECTIVE CASING STICKUP (FROM GROUND) <input type="text"/> FT																					
INITIAL DEPTH TO WATER	<input type="text"/> FT	WELL DEPTH	<input type="text"/> FT																				
FINAL DEPTH TO WATER	<input type="text"/> FT	SCREEN LENGTH	<input type="text"/> FT																				
DRAWDOWN	<input type="text"/> FT	DRAWDOWN VOLUME	<input type="text"/> GAL																				
<table border="0"> <tr> <td>PID AMBIENT AIR</td> <td><input type="text"/> PPM</td> <td>WELL DIAMETER</td> <td><input type="text"/> IN</td> </tr> <tr> <td>PID WELL MOUTH</td> <td><input type="text"/> PPM</td> <td>WELL INTEGRITY: CAP CASING LOCKED COLLAR</td> <td>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/></td> </tr> </table>				PID AMBIENT AIR	<input type="text"/> PPM	WELL DIAMETER	<input type="text"/> IN	PID WELL MOUTH	<input type="text"/> PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>												
PID AMBIENT AIR	<input type="text"/> PPM	WELL DIAMETER	<input type="text"/> IN																				
PID WELL MOUTH	<input type="text"/> PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>																				
$((\text{initial} - \text{final}) \times 0.16 \text{ (2-inch)} \text{ or } \times 0.65 \text{ (4-inch)} \text{ or } \times 1.5 \text{ (6-inch)})$																							
PURGE RATE	<input type="text"/> L/MIN	BEGIN PURGING	<input type="text"/> END PURGING																				
TOTAL VOL. PURGED <input type="text"/> GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)																							
<b>PURGE DATA</b>																							
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)																				
			TURBIDITY (NTU)																				
			DISSOLVED O <sub>2</sub> (mg/L)																				
			TEMPERATURE (°C)																				
			REDOX POTENTIAL (mV)																				
			Comments																				
<b>EQUIPMENT DOCUMENTATION</b>																							
<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL (if applicable)</u>																				
<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLO <sup>N</sup> OR TEFLO <sup>N</sup> LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLO <sup>N</sup> <input type="checkbox"/> OTHER _____																				
<b>PURGE OBSERVATIONS</b>		<b>NOTES</b>																					
		Obstructed at 6' btor Cannot collect sample																					

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/12/02	
SITE ID	OB-04	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 0746	END 0903	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER	PROTECTIVE CASING STICKUP (FROM GROUND)	PROTECTIVE CASING / WELL DIFFERENCE
INITIAL DEPTH TO WATER	12.15 FT	WELL DEPTH	16.45 FT	PID AMBIENT AIR
FINAL DEPTH TO WATER	13.42 FT	SCREEN LENGTH		PID WELL MOUTH
DRAWDOWN	1.27 FT	DRAWDOWN VOLUME	0.20 GAL	PRODUCT THICKNESS
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.068 L/MIN	BEGIN PURGING	0753	END PURGING
			0858	TOTAL VOL. PURGED
				1.15 GAL
(purge rate (L/min) x duration (min)) x 0.26 gal/L)				

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLOL LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLOL
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## PURGE OBSERVATIONS

## NOTES

0803 - DTW = 12.45' btar  
 0811 - DTW = 12.65' btar  
 0818 - DTW = 12.67' star  
 0826 - DTW = 12.84' btar  
 0834 - DTW = 13.05' btar  
 0842 - DTW = 13.21' btar  
 0852 - DTW = 13.31' btar

TYPE OF BLADDER MATERIAL (If applicable)

SIGNATURE: *Dave J. Johnson*

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/12/02
SITE ID	OB-05	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1153	JOB NUMBER	51870.7

## **WATER LEVEL / PUMP SETTINGS**

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	_____ FT	WELL DEPTH _____ FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER _____ IN
FINAL DEPTH TO WATER	_____ FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
DRAWDOWN	_____ FT	DRAWDOWN VOLUME _____ GAL	PRODUCT THICKNESS _____ FT	     
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	_____ L/MIN	BEGIN PURGING	END PURGING	TOTAL VOL. PURGED (purge rate (L/min) x duration (min) x 0.26 gal/L)

**PURGE DATA**

## EQUIPMENT DOCUMENTATION

<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL (if applicable)</u>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## **PURGE OBSERVATIONS**

\* Well dry - cannot sample

## NOTES

SIGNATURE:  John Doe

*[Signature]*

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/08/02	
SITE ID	OB-06	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1016	END 129 1835	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WELL DIFFERENCE	FT	
INITIAL DEPTH TO WATER	11.45 FT	WELL DEPTH	16.45 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	12.66 FT	SCREEN LENGTH	FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAP Casing Locked Collar	YES X NO — N/A
DRAWDOWN	1.21 FT	DRAWDOWN VOLUME	0.19 GAL	PRODUCT THICKNESS	FT		
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))							
PURGE RATE	0.061 L/MIN	BEGIN PURGING	1023	END PURGING	1129	TOTAL VOL. PURGED (purge rate (L/min) x duration (min) x 0.26 gal/L)	1.05 GAL

## EQUIPMENT DOCUMENTATION

<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL, (if applicable)</u>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLON
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

#### **PURGE OBSERVATIONS**

## **NOTES**

1040 - DTW = 11.93' bfor  
 1049 - DTW = 12.15' bfor  
 1100 - DTW = 12.38' bfor  
 1112 - DTW = 12.51' bfor  
 1122 - DTW = 12.55' bfor

**TYPE OF BLADDER MATERIAL** (if applicable)

SIGNATURE: 

1049 - DTW = 12.15' btor  
1100 - DTW = 12.38' btor  
1112 - DTW = 12.51' btor  
1122 - DTW = 12.55' btor

SIGNATURE: 

Harding ESE

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event		DATE	03/07/02																																																																																																																																	
SITE ID	OB-07		SITE TYPE	Monitor Well																																																																																																																																	
SITE ACTIVITY	START_0808	END_1002	JOB NUMBER	51870.7																																																																																																																																	
WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER																																																																																																																																			
INITIAL DEPTH TO WATER	8.22 FT	WELL DEPTH	20.01 FT	PROTECTIVE CASING STICKUP (FROM GROUND) FT																																																																																																																																	
FINAL DEPTH TO WATER	8.80 FT	SCREEN LENGTH	FT	PROTECTIVE CASING / WELL DIFFERENCE FT																																																																																																																																	
DRAWDOWN	0.58 FT	DRAWDOWN VOLUME	0.09 GAL	PID AMBIENT AIR PPM																																																																																																																																	
(Initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch)																																																																																																																																					
PURGE RATE	0.067 L/MIN	BEGIN PURGING	0814	END PURGING																																																																																																																																	
			0956	TOTAL VOL. PURGED 1.78 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)																																																																																																																																	
Horiba   Danuwell <table border="1"> <thead> <tr> <th>Time</th> <th>VOLUME PURGED (L)</th> <th>pH (units)</th> <th>SpC (cond) (mS/cm)</th> <th>TURBIDITY (NTU)</th> <th>DISSOLVED O<sub>2</sub> (mg/L)</th> <th>TEMPERATURE (°C)</th> <th>REDOX POTENTIAL (mV)</th> <th>Comments</th> </tr> </thead> <tbody> <tr><td>0829</td><td>1.07</td><td>7.60</td><td>1.35</td><td>1.8</td><td>1.26</td><td>10.70</td><td>7.87</td><td>-20</td></tr> <tr><td>0838</td><td>1.71</td><td>7.67</td><td>1.31</td><td>0</td><td>0.89</td><td>10.62</td><td>7.67</td><td>-49</td></tr> <tr><td>0848</td><td>2.40</td><td>7.88</td><td>1.22</td><td>0</td><td>1.25</td><td>9.76</td><td>7.36</td><td>-49</td></tr> <tr><td>0858</td><td>3.05</td><td>8.29</td><td>1.09</td><td>0</td><td>2.18</td><td>9.54</td><td>7.15</td><td>-22</td></tr> <tr><td>0907</td><td>3.63</td><td>8.80</td><td>0.816</td><td>0</td><td>3.52</td><td>9.24</td><td>7.19</td><td>66</td></tr> <tr><td>0917</td><td>4.26</td><td>8.78</td><td>0.800</td><td>0</td><td>5.60</td><td>9.46</td><td>7.05</td><td>133</td></tr> <tr><td>0921</td><td colspan="7">Collect sample OB-07 for 8260 + NA</td><td>= 71 ml/min</td></tr> <tr><td>0922</td><td colspan="7">Collect samples OB-07 (MS) and OB-07 (MSD)</td><td>= 71 ml/min</td></tr> <tr><td colspan="8"><input checked="" type="checkbox"/> Horiba out of batteries (error message just began)</td><td>= 69 ml/min</td></tr> <tr><td colspan="8"></td><td>= 65 ml/min</td></tr> <tr><td colspan="8"></td><td>= 64 ml/min</td></tr> <tr><td colspan="8"></td><td>= 63 ml/min</td></tr> <tr><td colspan="8"></td><td>X</td></tr> </tbody> </table>								Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O <sub>2</sub> (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments	0829	1.07	7.60	1.35	1.8	1.26	10.70	7.87	-20	0838	1.71	7.67	1.31	0	0.89	10.62	7.67	-49	0848	2.40	7.88	1.22	0	1.25	9.76	7.36	-49	0858	3.05	8.29	1.09	0	2.18	9.54	7.15	-22	0907	3.63	8.80	0.816	0	3.52	9.24	7.19	66	0917	4.26	8.78	0.800	0	5.60	9.46	7.05	133	0921	Collect sample OB-07 for 8260 + NA							= 71 ml/min	0922	Collect samples OB-07 (MS) and OB-07 (MSD)							= 71 ml/min	<input checked="" type="checkbox"/> Horiba out of batteries (error message just began)								= 69 ml/min									= 65 ml/min									= 64 ml/min									= 63 ml/min									X
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O <sub>2</sub> (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments																																																																																																																													
0829	1.07	7.60	1.35	1.8	1.26	10.70	7.87	-20																																																																																																																													
0838	1.71	7.67	1.31	0	0.89	10.62	7.67	-49																																																																																																																													
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<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFILON OR TEFION LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO																																																																																																																																		
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER																																																																																																																																		
<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER																																																																																																																																			
PURGE OBSERVATIONS				NOTES																																																																																																																																	
				0829 - DTW = 8.85' btor 0838 - DTW = 8.90' btor 0848 - DTW = 8.92' btor 0858 - DTW = 8.91' btor 0907 - DTW = 8.93' btor 0917 - DTW = 8.92' btor																																																																																																																																	

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/12/02	
SITE ID	OB-08	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1435	END 1611	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT				
INITIAL DEPTH TO WATER	17.66 FT	WELL DEPTH	24.85 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER	2 IN		
FINAL DEPTH TO WATER	18.23 FT	SCREEN LENGTH	FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>
DRAWDOWN	0.57 FT	DRAWDOWN VOLUME	0.09 GAL	PRODUCT THICKNESS _____ FT	CAP CASING LOCKED COLLAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
$((\text{initial} - \text{final}) \times 0.16 \text{ (2-inch)} \text{ or } 0.65 \text{ (4-inch)} \text{ or } 1.5 \text{ (6-inch)})$								
PURGE RATE	0.061 L/MIN	BEGIN PURGING	1443	END PURGING	1604	TOTAL VOL. PURGED	1.28 GAL	
(purge rate (L/min) x duration (min)) x 0.26 gal/L)								

<b>EQUIPMENT DOCUMENTATION</b>			
<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (If applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLOL LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLOL
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

PURGE OBSERVATIONS	NOTES
	1505 - DTW = 18.54' bfor
	1516 - DTW = 18.57' bfor
	1527 - DTW = 18.57' bfor
	1536 - DTW = 18.62' bfor
	1547 - DTW = 18.62' bfor
	1558 - DTW = 18.38' bfor

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event				DATE	03/06/02		
SITE ID	OB-09		SITE TYPE	Monitor Well				
SITE ACTIVITY	START 1531	END 1650	JOB NUMBER	51870.7				
WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____		PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WELL DIFFERENCE	FT	
INITIAL DEPTH TO WATER	12.62 FT	WELL DEPTH	23.25 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	2 IN	
FINAL DEPTH TO WATER	12.95 FT	SCREEN LENGTH	FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES X NO — N/A —	
DRAWDOWN	0.33 FT	DRAWDOWN VOLUME	0.05 GAL	PRODUCT THICKNESS	FT			
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))								
PURGE RATE	0.083 L/MIN	BEGIN PURGING	1538	END PURGING	1644	TOTAL VOL. PURGED	1.42 GAL	
(purge rate (L/min) x duration (min) x 0.26 gal/L)								
PURGE DATA								
Horizon Down-Well								
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	DISSOLVED O <sub>2</sub> (mg/L)	TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments
1551	1.12	7.00	1.44	0	0.63	11.43	10.36	41
1559	1.76	7.00	1.44	0	0.21	11.59	10.53	16
1607	2.42	7.00	1.44	0	0.00	11.62	10.67	-2
1614	3.00	7.00	1.44	0	0.00	11.63	10.71	-5
1622	3.66	7.01	1.44	0	0.00	11.68	10.76	-7
Collect sample OB-09 for 8260 + NA								
EQUIPMENT DOCUMENTATION								
TYPE OF PUMP		TYPE OF TUBING		TYPE OF PUMP MATERIAL		TYPE OF BLADDER MATERIAL (if applicable)		
<input checked="" type="checkbox"/> PERISTALTIC		<input type="checkbox"/> TEFLOL OR TEFLOL LINED		<input type="checkbox"/> POLYVINYL CHLORIDE		<input type="checkbox"/> TEFLOL		
<input type="checkbox"/> SUBMERSIBLE		<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE		<input type="checkbox"/> STAINLESS STEEL		<input type="checkbox"/> OTHER _____		
<input type="checkbox"/> OTHER _____		<input type="checkbox"/> OTHER _____		<input type="checkbox"/> OTHER _____				
PURGE OBSERVATIONS				NOTES				
				1551 - DTW = 13.05' btor 1559 - DTW = 13.05' btor 1607 - DTW = 13.08' btor 1614 - DTW = 13.10' btor 1622 - DTW = 13.10' btor				
SIGNATURE: 								

Harding ESE

## **FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/05/02
SITE ID	TW-04	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1155 END 1351	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____		PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT		PROTECTIVE CASING / WELL DIFFERENCE _____ FT	
INITIAL DEPTH TO WATER	9.71 FT	WELL DEPTH	20.72 FT	PID AMBIENT AIR	_____ PPM	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	10.82 FT	SCREEN LENGTH	_____ FT	PID WELL MOUTH	_____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
DRAWDOWN	1.11 FT	DRAWDOWN VOLUME	6.18 GAL	PRODUCT THICKNESS	_____ FT		
(initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch)							
PURGE RATE	0.051 L/MIN	BEGIN PURGING	1204	END PURGING	1346	TOTAL VOL. PURGED	1.35 GAL
(purge rate (L/min) x duration (min)) x 0.26 gal/L							

## **EQUIPMENT DOCUMENTATION**

<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL (if applicable)</u>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLO
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

## PURGE OBSERVATIONS

## NOTES

1229 - DTW = 10.52' btor  
 1242 - DTW = 10.68' btor  
 1255 - DTW = 10.75' btor  
 1307 - DTW = 10.70' btor  
 1316 - DTW = 10.80' btor

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/06/02
SITE ID	TN-07	SITE TYPE	Monitor Well
SITE ACTIVITY	START 1032 END 1201	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT			
INITIAL DEPTH TO WATER	9.70 FT	WELL DEPTH	18.35 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER	2 IN	
FINAL DEPTH TO WATER	10.82 FT	SCREEN LENGTH	FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY:	YES CAP X Casing LOCKED X COLLAR X	NO — — — —
DRAWDOWN	1.12 FT	DRAWDOWN VOLUME	0.18 GAL	PRODUCT THICKNESS _____ FT			
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))							
PURGE RATE	0.086 L/MIN	BEGIN PURGING	1043	END PURGING	1155	TOTAL VOL. PURGED	1.61 GAL
(purge rate (L/min) x duration (min)) x 0.26 gal/L)							

<b>EQUIPMENT DOCUMENTATION</b>	<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
	<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON OR TEFLON LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON <input type="checkbox"/> OTHER _____

PURGE OBSERVATIONS	NOTES
	1058 - DTW = 10.18' bbar
	1106 - DTW = 10.35' bbar
	1114 - DTW = 10.45' bbar
	1123 - DTW = 10.54' bbar
	1131 - DTW = 10.64' bbar

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/08/02	
SITE ID	TW-13	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 0809	JOB NUMBER	END 0936	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	5.24 FT	WELL DEPTH 15.1 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER 2 IN
FINAL DEPTH TO WATER	5.98 FT	SCREEN LENGTH _____ FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR YES <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
DRAWDOWN	0.74 FT	DRAWDOWN VOLUME 0.12 GAL	PRODUCT THICKNESS _____ FT	
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))				
PURGE RATE	0.056 L/MIN	BEGIN PURGING 0814	END PURGING 0931	TOTAL VOL. PURGED 1.12 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)

## EQUIPMENT DOCUMENTATION

<b>TYPE OF PUMP</b>	<b>TYPE OF TUBING</b>	<b>TYPE OF PUMP MATERIAL</b>	<b>TYPE OF BLADDER MATERIAL (if applicable)</b>
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFILON
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	

PURGE OBSERVATIONS	NOTES
	0835 - DTW = 5.92' bfor 0847 - DTW = 6.00' bfor 0859 - DTW = 6.05' bfor 0909 - DTW = 6.05' bfor 0920 - DTW = 6.10' bfor

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event			DATE	03/05/02	
SITE ID	TW-17	SITE TYPE		Monitor Well		
SITE ACTIVITY	START 1526 END 1710	JOB NUMBER		51870.7		
WATER LEVEL / PUMP SETTINGS			MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER WELL DEPTH 17.45 FT PID AMBIENT AIR PPM WELL DIAMETER 2 IN FINAL DEPTH TO WATER 10.54 FT SCREEN LENGTH FT PID WELL MOUTH PPM WELL INTEGRITY: CAP YES Casing LOCKED NO COLLAR N/A DRAWDOWN 0.01 FT DRAWDOWN VOLUME 0.002 GAL PRODUCT THICKNESS FT			
(initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch)						
PURGE RATE	0.062 L/MIN	BEGIN PURGING	1535	END PURGING	1701	
					TOTAL VOL. PURGED 1.39 GAL (purge rate (L/min) x duration (min) x 0.26 gal/L)	
PURGE DATA						
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	Horiba Down Well DISSOLVED O <sub>2</sub> (mg/L) TEMPERATURE (°C) REDOX POTENTIAL (mV)	Comments
1550	≈ 1.01	7.18	0.753	4.0	6.83 81.8 4.99 138	≈ 67 mL/min
1600	≈ 1.65	7.18	0.765	3.7	6.75 81.0 4.56 106	≈ 64 mL/min
1609	≈ 2.19	7.17	0.770	3.4	6.56 81.4 4.45 87	≈ 60 mL/min
1619	≈ 2.77	7.17	0.763	3.4	6.47 80.4 4.66 72	≈ 58 mL/min
1630	≈ 3.42	7.17	0.766	3.5	6.40 80.7 4.46 63	≈ 59 mL/min
1633 Collect sample TW-17 for 8260 + NA						→ Wrong units (%)
EQUIPMENT DOCUMENTATION						
TYPE OF PUMP	TYPE OF TUBING		TYPE OF PUMP MATERIAL		TYPE OF BLADDER MATERIAL (if applicable)	
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE		<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER		<input type="checkbox"/> TEFLON <input type="checkbox"/> OTHER	
<input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER					
PURGE OBSERVATIONS			NOTES			
			1543 - DTW = 10.60' btor 1550 - DTW = 10.66' btor 1600 - DTW = 10.69' btor 1609 - DTW = 10.68' btor 1619 - DTW = 10.70' btor 1630 - DTW = 10.70' btor			
						

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/06/02	
SITE ID	TW-20	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 0820	END 1000	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____	PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT				
INITIAL DEPTH TO WATER	13.51 FT	WELL DEPTH	17.22 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER	2 IN		
FINAL DEPTH TO WATER	13.99 FT	SCREEN LENGTH	FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>
DRAWDOWN	0.48 FT	DRAWDOWN VOLUME	0.08 GAL	PRODUCT THICKNESS _____ FT.	CAP CASING LOCKED COLLAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))								
PURGE RATE	0.09 L/MIN	BEGIN PURGING	0848	END PURGING	0953	TOTAL VOL. PURGED	1.52 GAL	
(purge rate (L/min) x duration (min) x 0.26 gal/L)								

Marine | Down-Web

## EQUIPMENT DOCUMENTATION

TYPE OF PUMP

### TYPE OF TUBING

### TYPE OF PUMP MATERIAL

TYPE OF BLADDER MATERIAL (if applicable)

 PERISTALTIC

TEFILON OR TEFILON LINED

POLYVINYL CHLORIDE

 TEFLO

SUBME

 HIGH DE

STAINL

OTHER \_\_\_\_\_

#### **BURGE OBSERVATIONS**

## NOTES

$$\theta_{904} = DTW = 13.85' \text{ btor}$$

$$D9(3) - DTW = 13.82' \text{ bfor}$$

0920 - DTW = 13,98' btr

**SIGNATURE**

GW\_Sample\_Form.xls

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	DATE	03/05/02	
SITE ID	W-2	SITE TYPE	Monitor Well	
SITE ACTIVITY	START 0924	END 1115	JOB NUMBER	51870.7

WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT		PROTECTIVE CASING STICKUP (FROM GROUND)		PROTECTIVE CASING / WELL DIFFERENCE		
		<input checked="" type="checkbox"/> TOP OF WELL RISER						
		<input type="checkbox"/> TOP OF PROTECTIVE CASING						
		<input type="checkbox"/> OTHER						
INITIAL DEPTH TO WATER		9.39 FT	WELL DEPTH	20.9 FT	PID AMBIENT AIR		WELL DIAMETER	Z IN
FINAL DEPTH TO WATER		9.90 FT	SCREEN LENGTH		PID WELL MOUTH		WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES X NO — N/A —
DRAWDOWN		0.51 FT	DRAWDOWN VOLUME	0.08 GAL	PRODUCT THICKNESS			
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))								
PURGE RATE	±0.066 L/MIN	BEGIN PURGING	20430949 RE	END PURGING	1107	TOTAL VOL.. PURGED	1.34 GAL	
(purge rate (L/min) x duration (min) x 0.26 gal/L)								

→ Wrong units (%)

## EQUIPMENT DOCUMENTATION

<u>TYPE OF PUMP</u>	<u>TYPE OF TUBING</u>	<u>TYPE OF PUMP MATERIAL</u>	<u>TYPE OF BLADDER MATERIAL</u> (if applicable)
<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLON OR TEFLON LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE <input type="checkbox"/> OTHER _____	<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____	<input type="checkbox"/> TEFLO <input type="checkbox"/> OTHER _____

PURGE OBSERVATIONS	NOTES
	0958 - DTW = 9.85' btor
	1006 - DTW = 9.95' btor
	1016 - DTW = 9.97' btor
	1026 - DTW = 10.00' btor
	1036 - DTW = 10.00' btor
	1046 - DTW = 10.02' btor
	1058 - DTW = 10.03' btor

SIGNATURE: 

## Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event		DATE	03/07/02	
SITE ID	W-4		SITE TYPE	Monitor Well	
SITE ACTIVITY	START 1603-77 END 0759 - 7/8		JOB NUMBER	51870.7	
WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER _____		PROTECTIVE CASING STICKUP (FROM GROUND) _____ FT	PROTECTIVE CASING / WELL DIFFERENCE _____ FT
INITIAL DEPTH TO WATER	9.75 FT	WELL DEPTH	28.84 FT	PID AMBIENT AIR _____ PPM	WELL DIAMETER _____ IN
FINAL DEPTH TO WATER	FT	SCREEN LENGTH	FT	PID WELL MOUTH _____ PPM	WELL INTEGRITY: CAP CASING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
DRAWDOWN	FT	DRAWDOWN VOLUME	GAL	PRODUCT THICKNESS _____ FT	LOCKED <input checked="" type="checkbox"/> <input type="checkbox"/> COLLAR <input checked="" type="checkbox"/> <input type="checkbox"/>
(initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch)					
PURGE RATE	L/MIN	BEGIN PURGING	1616	END PURGING	1646
				TOTAL VOL. PURGED	GAL
(purge rate (L/min) x duration (min) x 0.26 gal/L)					
Purge Data					
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	Horizon / Down-Well DISSOLVED O <sub>2</sub> (mg/L) TEMPERATURE (°C) REDOX POTENTIAL (mV) Comments
1636	1.34	6.95	1.34	14.0	0.74 1.30 7.51 -70 ≈ 67 mV/m
1644	1.91	6.93	1.35	26.9	0.52 12.23 7.84 -62 ≈ 71 mV/m
1646	Purging well dry *				
3/7	0752 Collect sample W-4 for 8260				
3/8					
EQUIPMENT DOCUMENTATION					
TYPE OF PUMP	TYPE OF TUBING		TYPE OF PUMP MATERIAL		TYPE OF BLADDER MATERIAL (if applicable)
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED <input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE		<input type="checkbox"/> POLYVINYL CHLORIDE <input type="checkbox"/> STAINLESS STEEL <input type="checkbox"/> OTHER _____		<input type="checkbox"/> TEFLO <input type="checkbox"/> OTHER _____
<input type="checkbox"/> SUBMERSIBLE	<input type="checkbox"/> OTHER _____				
<input type="checkbox"/> OTHER _____					
PURGE OBSERVATIONS		NOTES			
# Cannot minimize drawdown - purge well dry		<p>3/7 1628 - DTW = 10.32' btor 1636 - DTW = 10.95' btor 1644 - DTW = 11.68' btor</p> <p>3/8 0748 - DTW = 9.64' btor</p>			
SIGNATURE: 					

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

Harding ESE

## FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Former Taylor Instruments 2002 1 <sup>st</sup> Qtr Sampling Event	SITE TYPE	Monitor Well	DATE	03/07/02			
SITE ID	W-6	JOB NUMBER	51870.7					
SITE ACTIVITY	START 1500 3/7 END 1520 3/7							
WATER LEVEL / PUMP SETTINGS		MEASUREMENT POINT <input checked="" type="checkbox"/> TOP OF WELL RISER <input type="checkbox"/> TOP OF PROTECTIVE CASING <input type="checkbox"/> OTHER	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WELL DIFFERENCE	FT		
INITIAL DEPTH TO WATER	6.78 3/7 FT	WELL DEPTH	11.30 FT	PID AMBIENT AIR	PPM	WELL DIAMETER	2 IN	
FINAL DEPTH TO WATER	9.22 3/7 FT	SCREEN LENGTH	FT	PID WELL MOUTH	PPM	WELL INTEGRITY: CAP CASING LOCKED COLLAR	YES X NO — N/A —	
DRAWDOWN	FT	DRAWDOWN VOLUME	GAL	PRODUCT THICKNESS	FT			
((initial - final) x 0.16 (2-inch) or x 0.65 (4-inch) or x 1.5 (6-inch))								
PURGE RATE	L/MIN	BEGIN PURGING	1520	END PURGING	1546	TOTAL VOL. PURGED	GAL	
(purge rate (L/min) x duration (min) x 0.26 gal/L)								
PURGE DATA								
Time	VOLUME PURGED (L)	pH (units)	SpC (cond) (mS/cm)	TURBIDITY (NTU)	Horizon DISSOLVED O <sub>2</sub> (mg/L)	Down-well TEMPERATURE (°C)	REDOX POTENTIAL (mV)	Comments
1533	1.00	12.66	11.3	0	5.58 13.01	6.12	5	= 77 mV/min
1544	1.69	12.69	11.3	0	5.42 12.90	6.01	-24	= 63 mV/min
1546	Purging well dry *							
3/7	1512	Collect Sample W-6 for 8260						
EQUIPMENT DOCUMENTATION								
TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL (if applicable)					
<input checked="" type="checkbox"/> PERISTALTIC	<input type="checkbox"/> TEFLON OR TEFLON LINED	<input type="checkbox"/> POLYVINYL CHLORIDE	<input type="checkbox"/> TEFLON					
<input type="checkbox"/> SUBMERSIBLE	<input checked="" type="checkbox"/> HIGH DENSITY POLYETHYLENE	<input type="checkbox"/> STAINLESS STEEL	<input type="checkbox"/> OTHER _____					
<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____	<input type="checkbox"/> OTHER _____						
PURGE OBSERVATIONS		NOTES						
3/7 * Cannot minimize drawdown - purge well dry		1526 - DTW = 7.45' bbar 3/7 1533 - DTW = 8.25' bbar 1544 - DTW = 9.50' bbar						
3/9 * Collect sample even though well not recharged, 48 hrs. since purging		1501 - DTW = 8.92' bbar 3/9						
SIGNATURE: 								

**APPENDIX E**

**WELL CONSTRUCTION INFORMATION**

**Appendix E**  
**Well Construction Information**

Quarterly Progress Report  
First Quarter 2002  
Former Taylor Instruments Site  
Rochester, New York

Well ID	Date Installed	Boring Depth	Well Depth	Screen Interval		Coordinates			Well Material	Completion		
				Top	Bottom	Easting	Northing	Elevation		Flush-mount	Vault	Stick-up
BR-01	09/02/97	42.2	42.2	NA	NA	750364.06	1150086.89	531.92	Stainless / Open	X		
BR-02	09/02/97	44.0	44.0	NA	NA	750541.81	1149964.51	532.39	Stainless / Open	X		
BR-03	09/02/97	40.1	40.1	NA	NA	750552.93	1149641.68	536.32	Stainless / Open			X
BR-04	09/03/97	44.2	44.2	NA	NA	750322.96	1149422.13	532.68	Stainless / Open	X		
BR-05	09/03/97	49.9	49.9	NA	NA	750216.62	1149958.67	531.76	Stainless / Open	X		
BR-06	09/03/97	42.6	42.6	NA	NA	749939.91	1149145.54	539.1	Stainless / Open	X		
BR-07	09/03/97	53.3	53.3	NA	NA	749983.5	1149989.76	534.46	Stainless / Open			X
BR-08	07/28/00	73.0	73.0	NA	NA	750340.94	1149482.41	533.13	Iron / Open	X		
BR-09	07/28/00	47.0	47.0	NA	NA	750400.72	1149438.67	532.72	Iron / Open	X		
BR-10	07/28/00	47.0	47.0	NA	NA	750426.9	1149411.76	532.29	Iron / Open	X		
BR-11	07/28/00	52.0	52.0	NA	NA	750387.82	1149546.25	532.53	Iron / Open	X		
BR-12	07/28/00	42.0	42.0	NA	NA	750195.19	1150010.12	531.9	Iron / Open	X		
BR-13	07/28/00	67.5	67.5	NA	NA	750197.49	1150044.27	532.01	Iron / Open	X		
BR-14	07/28/00	75.3	75.3	NA	NA	750260.61	1150052.2	531.67	Iron / Open	X		
BR-15	07/26/00	72.0	72.0	NA	NA	750293.39	1149980.43	531.69	Iron / Open	X		
BR-16	07/26/00	55.0	55.0	NA	NA	750223.79	1150013.71	531.32	Iron / Open	X		
BR-17	07/28/00	52.0	52.0	NA	NA	750333.76	1149478.26	533.16	Iron / Open	X		
EW-N-1	08/15/00	27.0	27.0	5.2	26.0	750198.77	1149956.96	529.28	Stainless / PVC			X
EW-N-2	08/23/00	27.0	27.0	5.5	26.0	750225.81	1149942.16	528.76	Stainless / PVC			X
EW-N-3	08/22/00	26.8	26.8	5.2	25.8	750217.16	1149980.06	528.69	Stainless / PVC			X
EW-N-4	08/23/00	26.0	26.0	7.2	25.0	750259.43	1149928.84	529.32	Stainless / PVC			X
EW-N-5	08/16/00	27.0	27.0	5.5	26.0	750257.98	1149972.33	528.26	Stainless / PVC			X
EW-N-6	08/18/00	25.5	25.0	6.1	24.0	750293.49	1149957.98	529.18	Stainless / PVC			X
EW-S-1S	10/01/98	14.0	13.7	4.3	13.7	750332.8	1149428.08	529.41	Stainless			X
EW-S-1D	10/01/98	18.3	18.3	4.3	17.9	750327.22	1149428.49	529.41	Stainless			X
EW-S-2	07/26/00	23.1	22.0	5.5	21.0	750256.26	1149404.38	528.68	Stainless / PVC			X
EW-S-3	07/28/00	23.5	22.0	5.5	21.0	750301.18	1149370.46	529.55	Stainless / PVC			X
EW-S-4	07/26/00	23.5	22.0	5.5	21.0	750293.94	1149418.71	532.41	Stainless / PVC			X
EW-S-5	08/01/00	23.5	22.5	5.8	21.5	750325.14	1149386.52	529.53	Stainless / PVC			X

**Appendix E**  
**Well Construction Information**

Quarterly Progress Report  
First Quarter 2002  
Former Taylor Instruments Site  
Rochester, New York

Well ID	Date Installed			Screen Interval		Coordinates			Well Material	Completion		
		Boring Depth	Well Depth	Top	Bottom	Easting	Northing	Elevation		Flush-mount	Vault	Stick-up
EW-S-6	07/31/00	22.9	22.4	5.9	20.9	750341.87	1149362.58	529.27	Stainless / PVC		X	
EW-S-7	08/07/00	23.1	22.5	5.9	21.6	750339.03	1149413.8	529.59	Stainless / PVC		X	
EW-S-8	08/02/00	23.0	22.5	5.8	21.5	750359.86	1149402.69	529.65	Stainless / PVC		X	
EW-S-9	08/03/00	23.0	22.5	6.0	21.5	750355.07	1149440.13	532.99	Stainless / PVC		X	
EW-S-10	08/09/00	22.6	22.5	6.0	21.5	750381.3	1149367.65	529.43	Stainless / PVC		X	
EW-S-11	08/08/00	22.6	22.5	5.9	22.0	750377.04	1149418.02	529.5	Stainless / PVC		X	
EW-S-12	08/04/00	22.3	22.3	5.8	21.3	750375.38	1149466.45	529.96	Stainless / PVC		X	
EW-S-13	08/10/00	22.0	22.0	6.0	21.0	750399.16	1149448.68	529.53	Stainless / PVC		X	
EW-S-14	08/11/00	22.0	22.0	5.6	21.0	750406.59	1149410.24	529.37	Stainless / PVC		X	
EW-S-15	08/14/00	22.0	21.8	5.2	20.8	750414.78	1149480.34	529.96	Stainless / PVC		X	
EW-S-16	08/10/00	21.3	21.3	5.2	20.3	750433.72	1149448.95	529.57	Stainless / PVC		X	
OB-04	09/05/97	17.5	17.5	2.5	17.5	750329.65	1149422.19	532.8	PVC	X		
OB-05	09/05/97	18.0	18.0	4.0	18.0	750223.51	1149958.83	531.5	PVC	X		
OB-06	07/19/00	17.0	17.0	6.8	16.8	750421.89	1149461.5	532.6	PVC	X		
OB-07	07/19/00	20.5	20.5	10.2	20.2	750461.13	1149512.6	533.03	PVC	X		
OB-08	07/28/00	25.5	25.3	15.3	25.1	750279	1149957.45	531.64	PVC	X		
OB-09	07/28/00	23.5	23.3	13.3	23.1	750312.26	1149992.94	531.85	PVC	X		
TW-01	03/12/96	22.0	22.0	17.0	22.0	750548.13	1149471.23	533.3	PVC	X		
TW-04	03/15/96	17.5	17.3	12.3	17.3	750552.18	1149648.54	536.34	PVC			X
TW-07	03/15/96	17.5	17.5	12.5	17.5	750546.69	1149830.01	532.55	PVC	X		
TW-09	03/30/96	16.0	16.0	11.0	16.0	750542.22	1149971.84	532.3	PVC	X		
TW-13	03/12/96	15.0	15.0	10.0	15.0	750086.24	1150016.03	531.69	PVC	X		
TW-17	03/13/96	15.0	15.0	10.0	15.0	750373.39	1150088.34	531.86	PVC			X
TW-20	03/13/96	15.0	15.0	10.0	15.0	750547.88	1150118.75	532.42	PVC			X
W-2	09/15/82	21.0	18.0	13.0	18.0	749940.43	1149136.77	539.1	PVC			X
W-4	09/22/82	29.0	26.0	21.0	26.0	749977.63	1149996.42	533.12	PVC			X
W-5	09/15/82	24.0	20.5	15.5	20.5	750248.88	1150056.27	531.52	PVC	X		
W-6	09/15/82	16.5	15.0	13.0	15.0	750288.78	1149332.79	532.66	PVC	X		

**APPENDIX F**

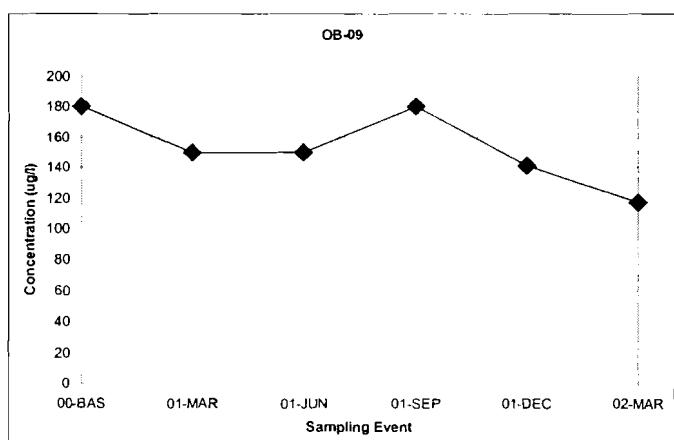
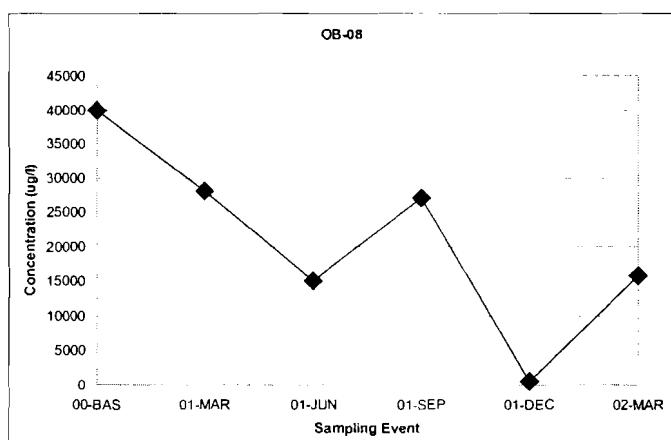
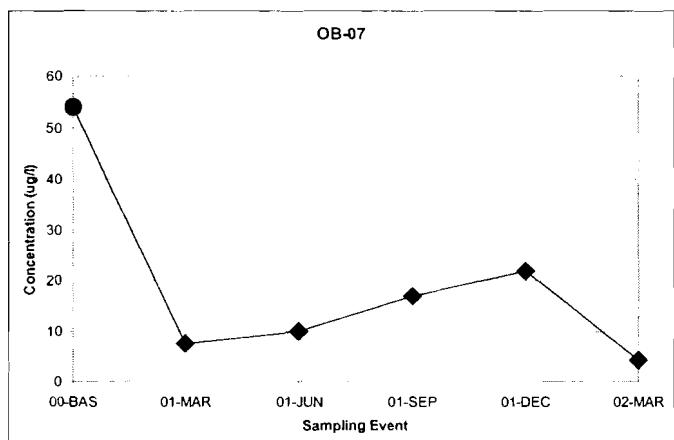
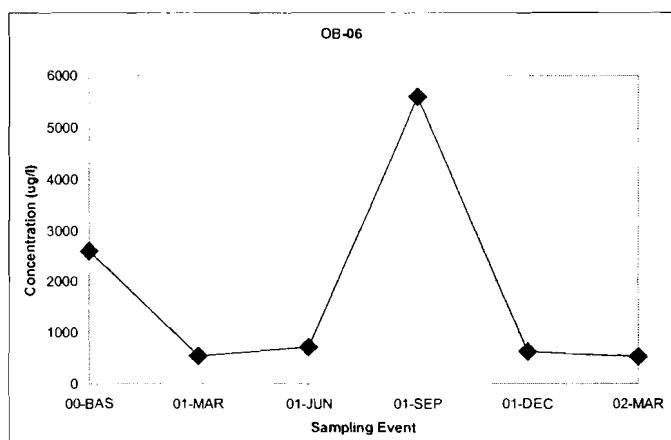
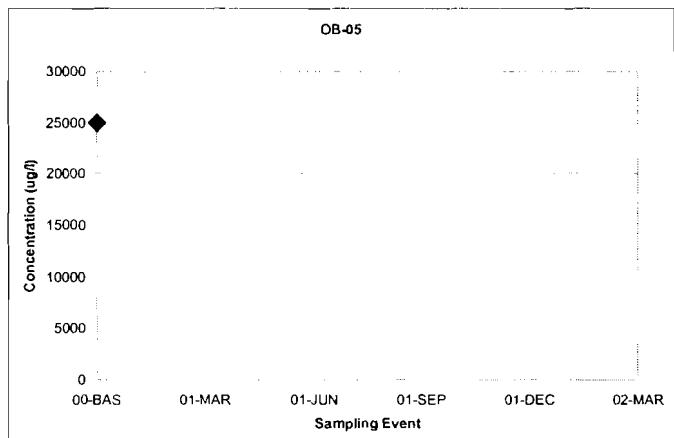
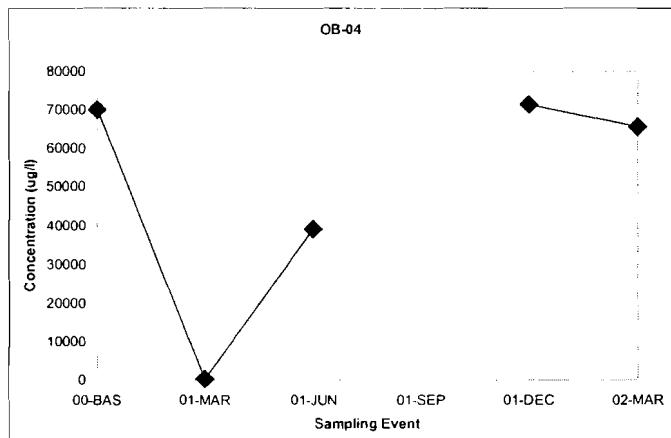
**MONITOR WELL CONCENTRATION  
TREND GRAPHS**

## Appendix F

### Monitor Well Concentration Trend Graphs

#### (TCE Concentration Trends)

##### Overburden Wells



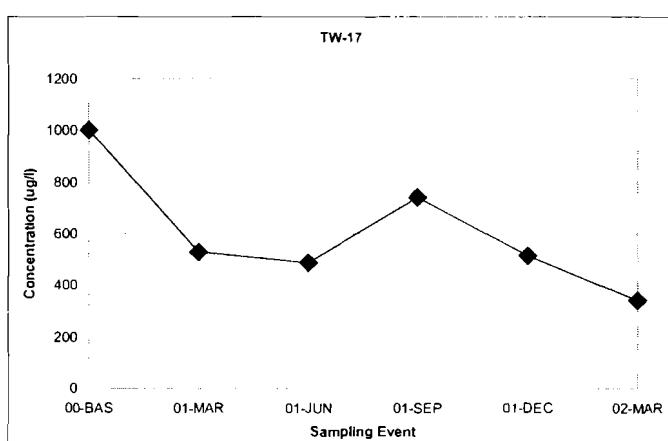
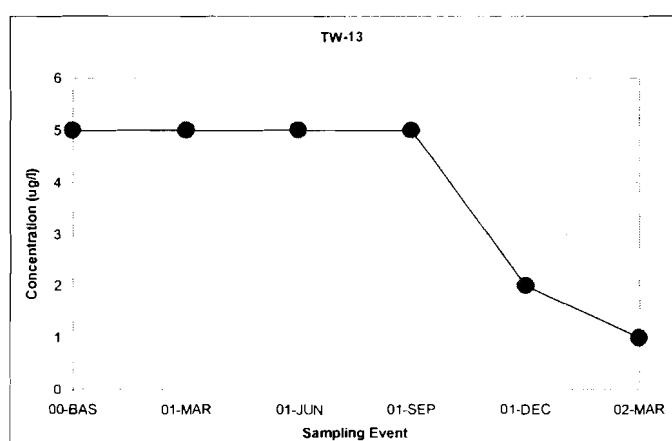
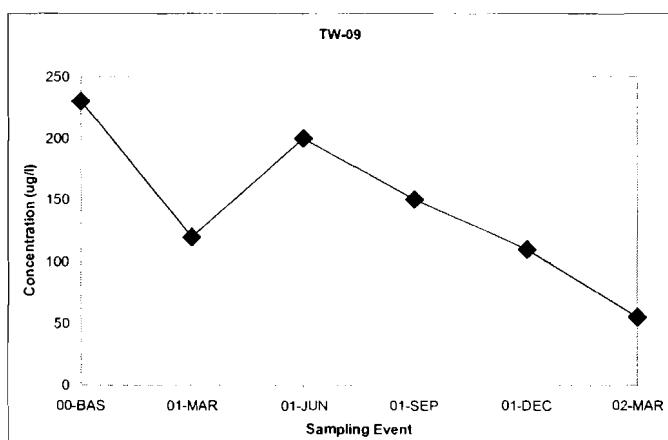
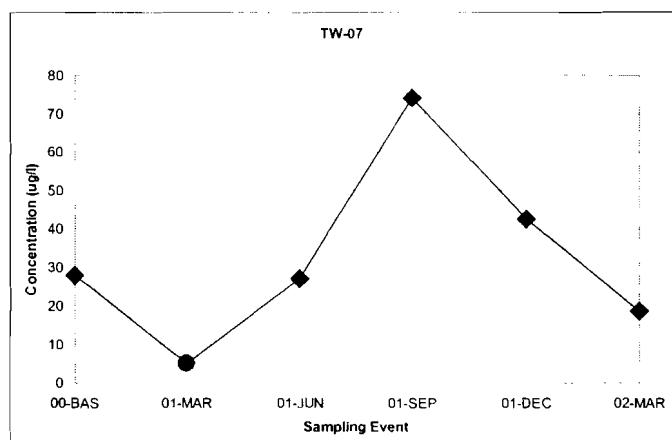
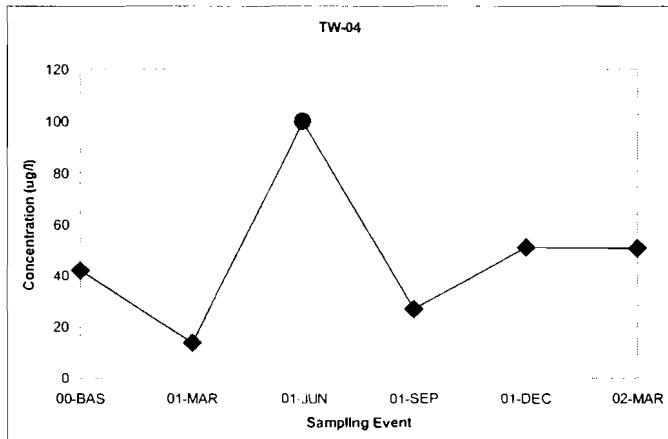
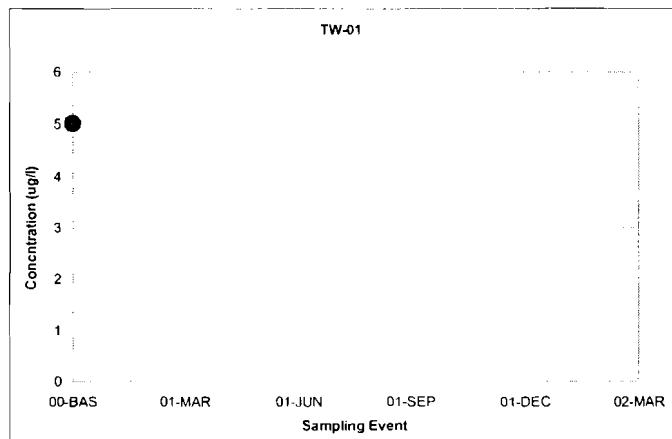
◆ = actual value

● = value below graphed detection limit

## Appendix F

### Monitor Well Concentration Trend Graphs

#### (TCE Concentration Trends)

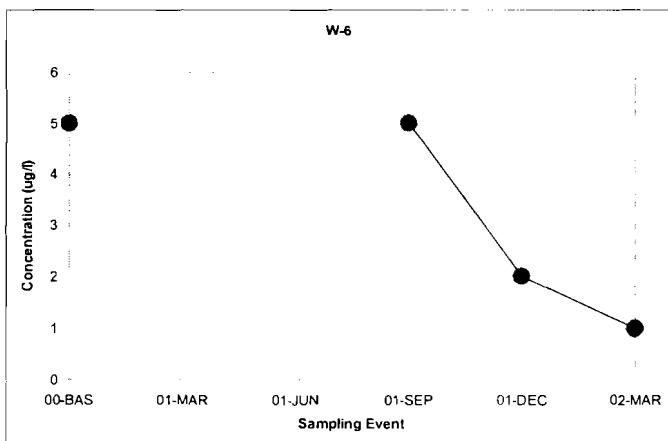
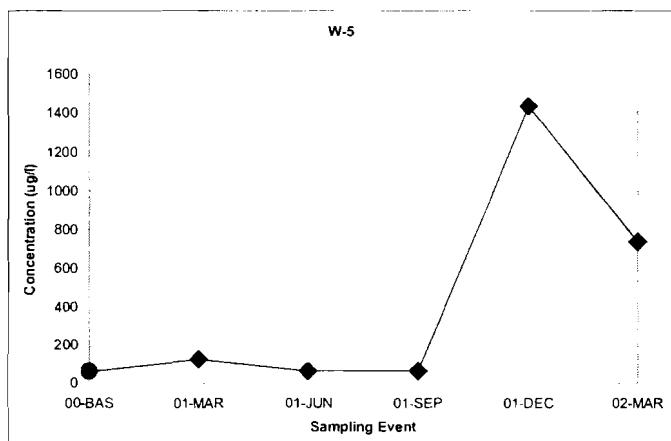
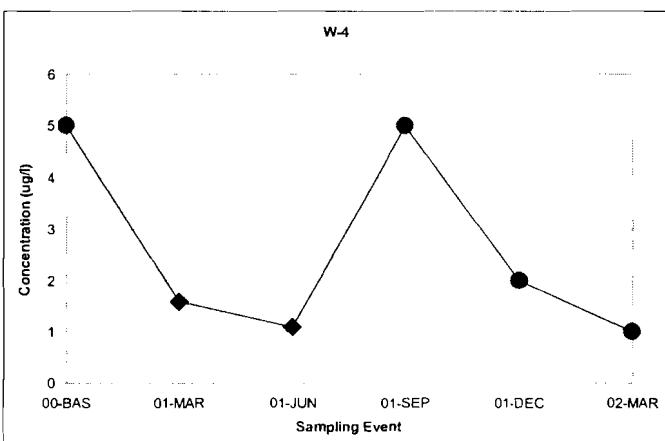
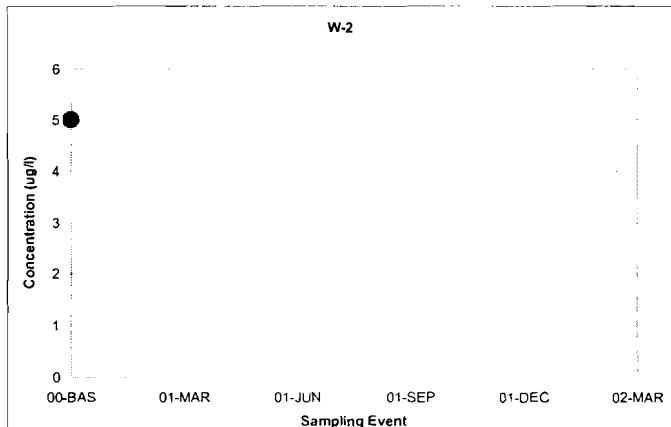
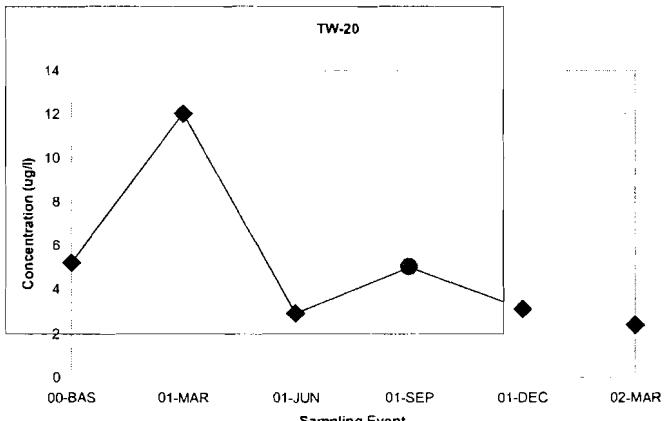


- ◆ = actual value
- = value below graphed detection limit

## Appendix F

### Monitor Well Concentration Trend Graphs

#### (TCE Concentration Trends)



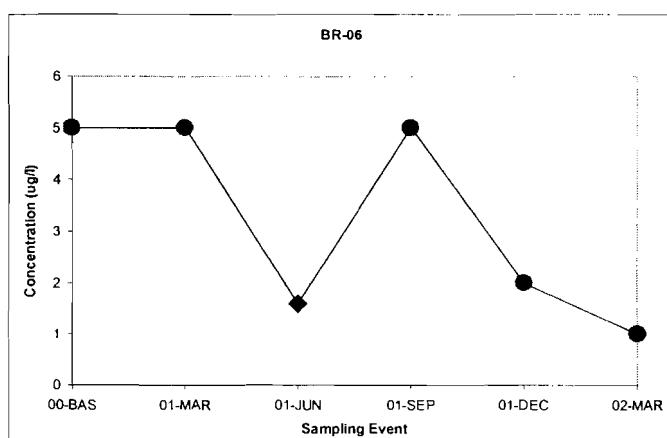
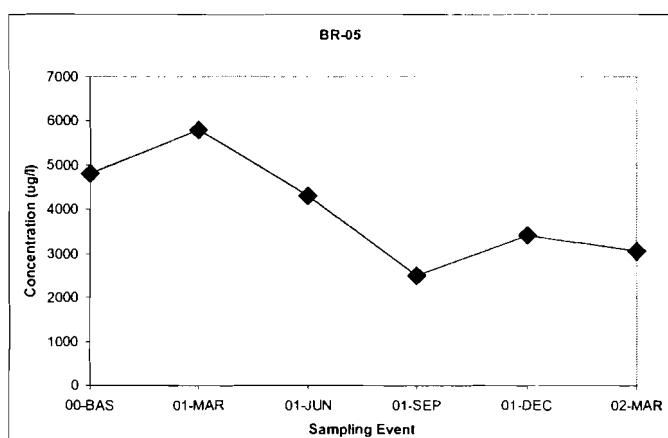
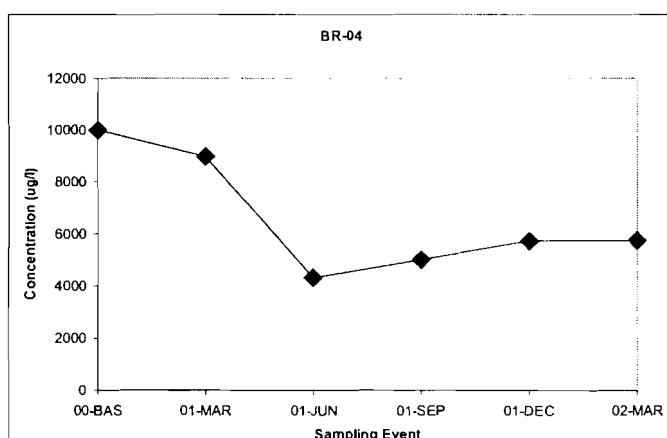
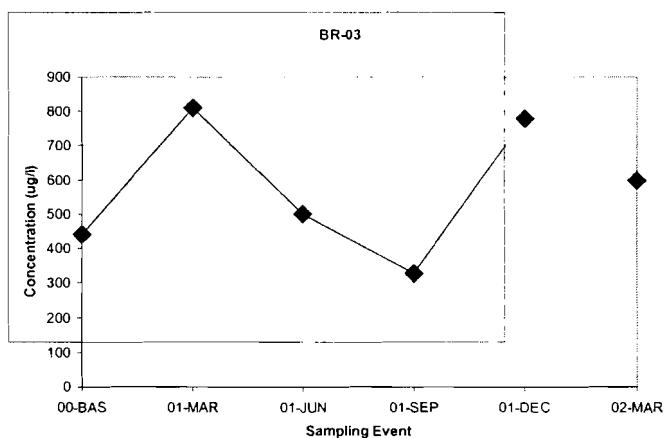
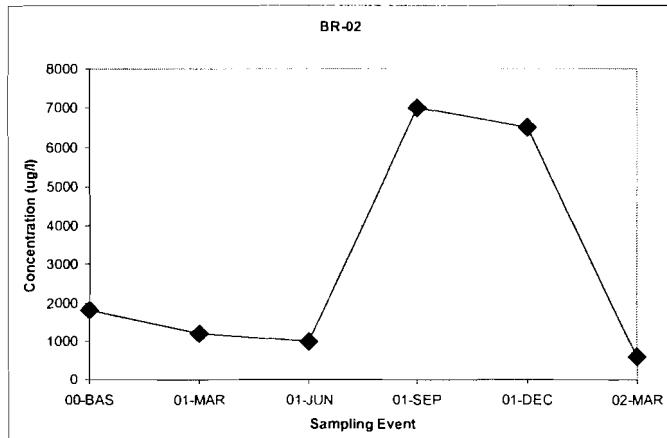
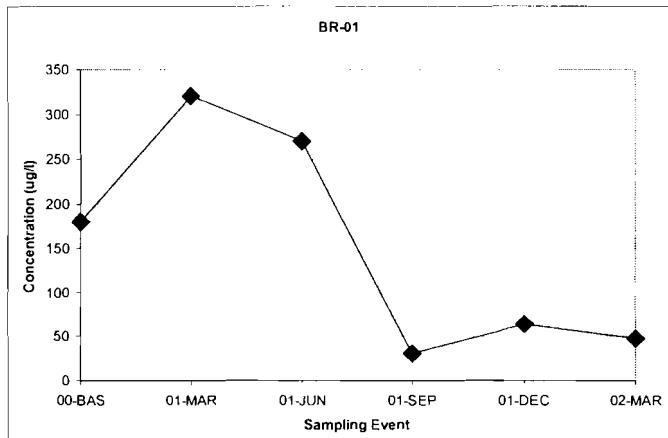
- ◆ = actual value
- = value below graphed detection limit

## Appendix F

### Monitor Well Concentration Trend Graphs

#### (TCE Concentration Trends)

##### **Bedrock Wells**

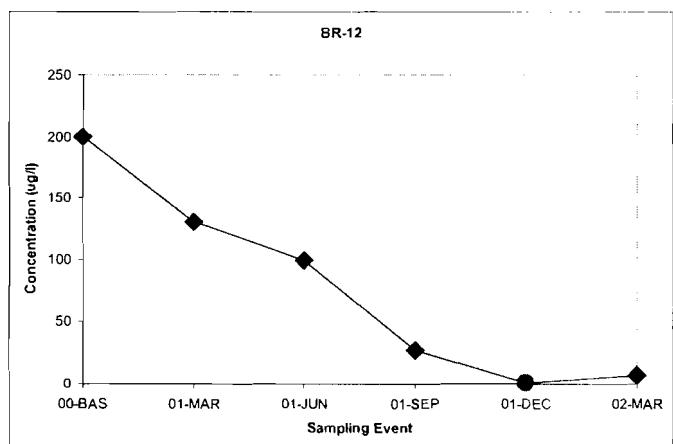
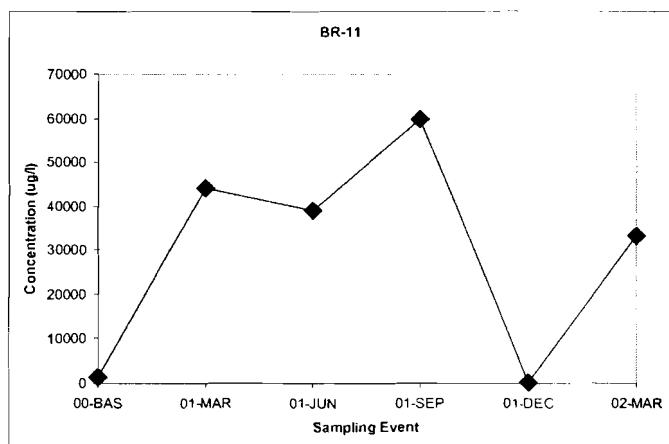
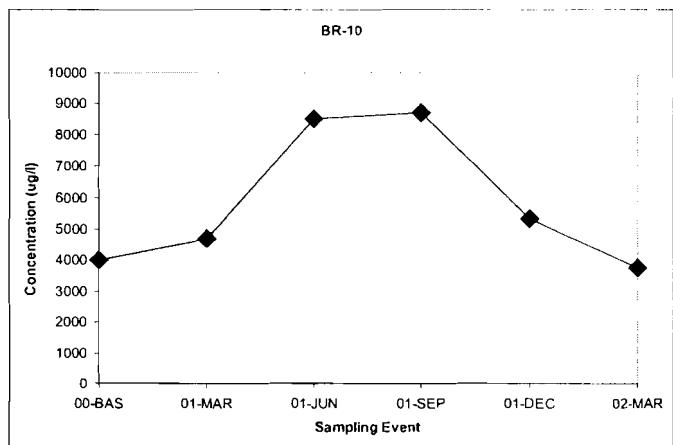
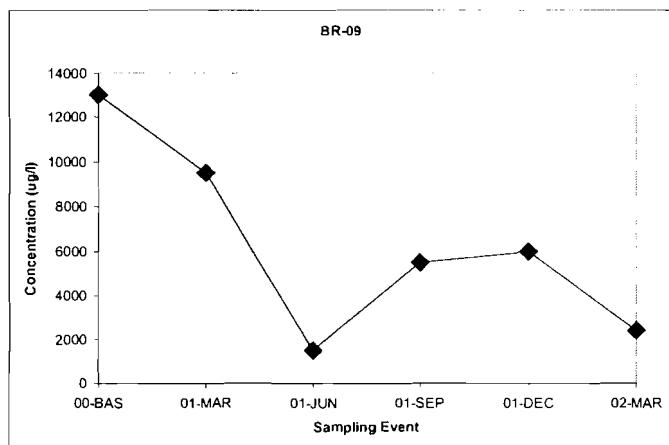
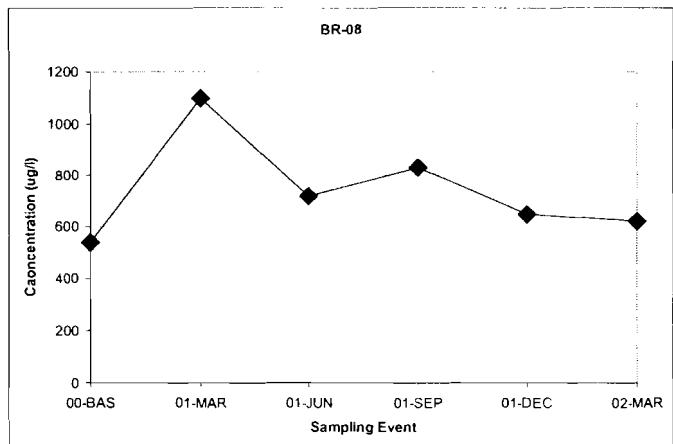
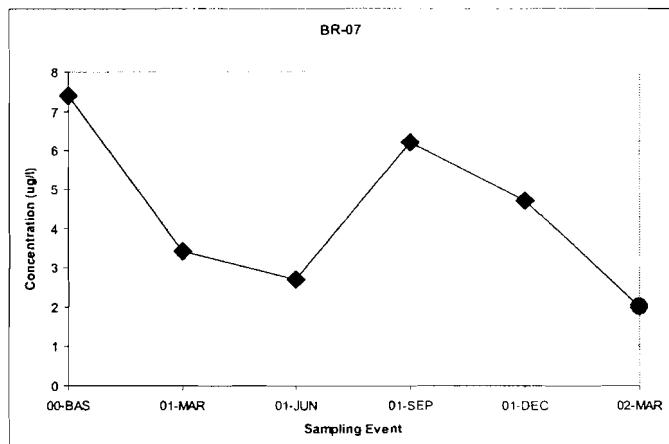


- ◆ = actual value
- = value below graphed detection limit

## Appendix F

### Monitor Well Concentration Trend Graphs

#### (TCE Concentration Trends)



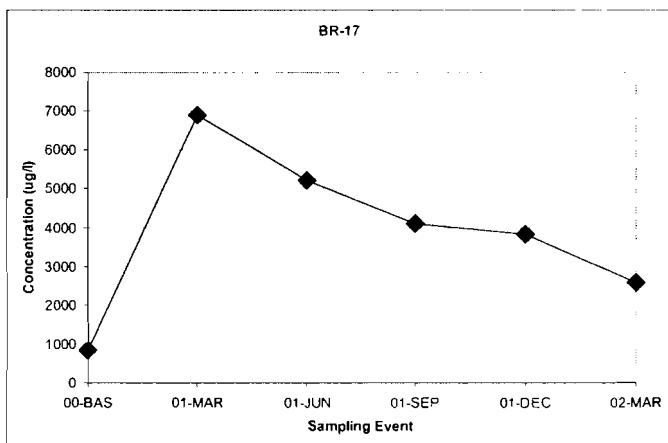
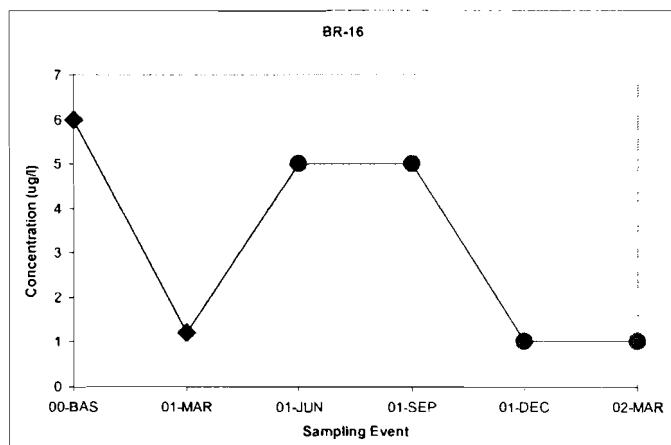
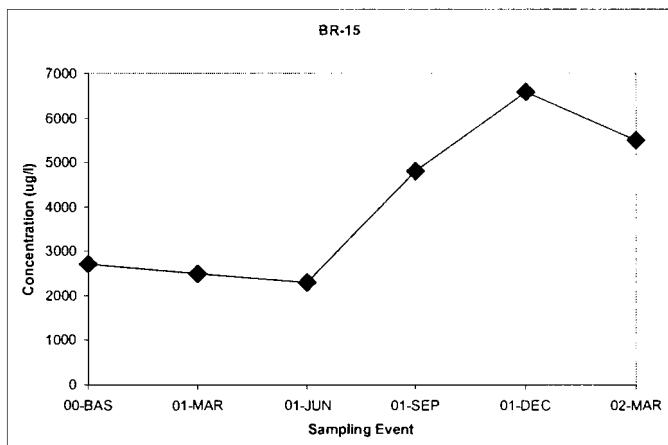
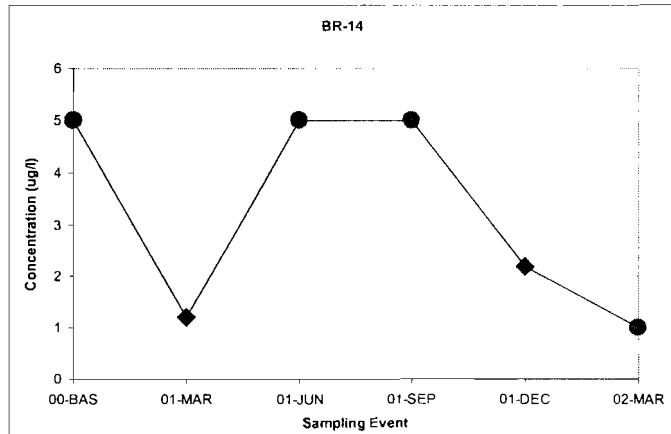
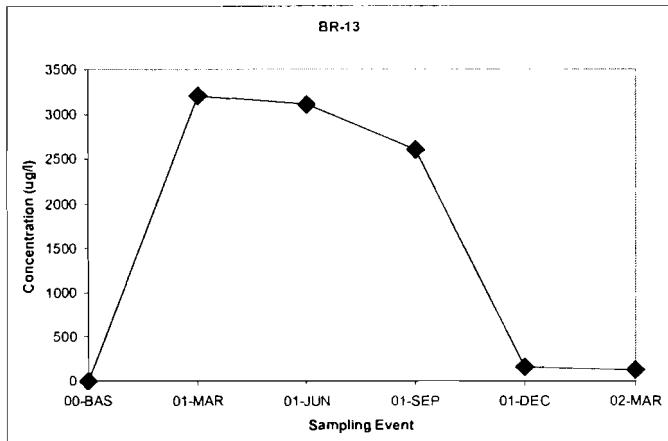
◆ = actual value

● = value below graphed detection limit

## Appendix F

### Monitor Well Concentration Trend Graphs

#### (TCE Concentration Trends)



- ◆ = actual value
- = value below graphed detection limit