

**REMOVAL PROGRAM
PRELIMINARY ASSESSMENT/
SITE INVESTIGATION REPORT ADDENDUM
FOR THE
HENRY'S DRY CLEANERS SITE
LACONIA, BELKNAP COUNTY, NEW HAMPSHIRE
AUGUST THROUGH DECEMBER 2012**

Prepared For:

U.S. Environmental Protection Agency
Region I
Emergency Planning and Response Branch
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

CONTRACT NO. EP-W-05-042

TDD NO. 01-12-11-0002

TASK NO. 0852

DC NO. R-7838

Submitted By:

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Region I
Superfund Technical Assessment and Response Team (START)
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Andover, MA 01810

September 2013

INTRODUCTION

From August through December 2012, U.S. Environmental Protection Agency (EPA) Region I and Weston Solutions, Inc. (Weston), Superfund Technical Assessment and Response Team III (START) mobilized to the Henry's Dry Cleaners site (the site) located in Laconia, Belknap County, New Hampshire. During this timeframe, several sampling events were conducted as part of the Removal Program Preliminary Assessment/Site Investigation (PA/SI) to determine if further actions, including removal activities, were warranted at the site. These events included oversight of monitoring well installation, including soil classification and soil sampling; conducting pore water sampling of the Winnipesaukee River; conducting groundwater sampling of on- and off-site monitoring wells; conducting indoor air sampling at a commercial property; and conducting slug tests of on- and off-site groundwater monitoring wells.

SITE DESCRIPTION

The Henry's Dry Cleaners (Henry's) site (the site) is located at 36 Pleasant Street, Laconia, Belknap County, New Hampshire (NH) (see Appendix A, Figure 1). The geographic coordinates, as measured from the entrance to the property, are 43° 31' 40.70" north latitude and 71° 28' 15.5" west longitude [1]. The site is bordered by Pleasant Street to the north, a Goodwill Industries building to the east, a parking area and Beacon Street to the south, and the Laconia Savings Bank property to the west (see Appendix A, Figure 2). The Beacon Street West Condominium (BSWC), a residential condominium complex, is located across the street from Henry's, at the Former Allen Rogers Mill (FARM) property. The FARM property is located south-southwest, and hydraulically downgradient, of the Henry's site. The Winnipesaukee River forms the southern boundary of the FARM property. Two buildings located on the FARM property (Building Nos. 6 and 8) have been converted into BSWC condominium units. Henry's is currently an active dry cleaning business located in a commercial area in downtown Laconia.

The site is currently owned by Ms. Pauline Smith and Ms. Donna Smith, who also operate Henry's Dry Cleaners. The approximately 0.1-acre site is occupied by a 2,398-square-foot (ft^2), one-story, rectangular building and a paved driveway and parking areas [2]. The southern portion of the building is constructed on a concrete slab foundation, and the northern portion of the building is constructed over a full basement. Dry cleaning operations are conducted on the first floor of the building; and the basement contains a refrigerated vault for fur storage, an old boiler room, two air compressors, and a water heater.

Henry's is registered with the New Hampshire Department of Environmental Services (NH DES) as a Conditionally Exempt Small Quantity Generator (CESQG), which indicates that the facility generates less than 100 kilograms (Kg) per month of non-acute hazardous waste.

From 1986 to 2006, several rounds of groundwater samples were collected from existing monitoring wells located on the BSWC property, where the FARM once operated [2; 5; 6; 7]. Previous groundwater investigations conducted under the oversight of NH DES focused only on sections of the BSWC property, and were conducted by various consultants using different soil classification and groundwater sampling techniques. The primary objective of these sampling rounds was to evaluate petroleum contamination following the removal of underground storage tanks (USTs) and aboveground storage tanks (ASTs). Some of these groundwater sampling

investigations subsequently revealed chlorinated volatile organic compound (CVOC) contamination in groundwater beneath the BSWC property.

In 2006, CPI Environmental Services, Inc. (CPI) installed nested groundwater monitoring wells at three locations on the BSWC property and collected groundwater samples in an effort to determine the extent and possible source(s) of CVOC contamination in groundwater beneath the property [5]. Each nested well consisted of a shallow, intermediate, and deep screened interval. Tetrachloroethylene (PCE) was detected in the groundwater samples at concentrations exceeding NH DES Ambient Groundwater Quality Standards (AGQS) [7]. CPI suspected a potential off-site source of chlorinated solvents, either associated with the mill building north of Water Street or the Henry's property [5]. Henry's Dry Cleaners was subsequently referred by NH DES to the U.S. Environmental Protection Agency (EPA), Region 1.

On 26 February 2010, Sovereign Consulting, Inc. (Sovereign) submitted a Final Site Inspection Report to EPA, Region 1 regarding field activities conducted in 2008 and 2009. The objectives of the Site Inspection were as follows: (1) to document a threat or potential threat to public health or the environment posed by the Henry's site; (2) to assess the need for additional detailed investigation and/or response action at the site; and (3) to provide EPA Region 1 with adequate information to determine whether the site may be eligible for placement on the National Priorities List (NPL) [2]. On 10 December 2008, Sovereign personnel and an NH DES representative met with the property owner to conduct a site reconnaissance as part of the Site Inspection.

During June and July 2009, soil borings were advanced and soil samples were collected. All soil borings were advanced to various depths using hollow-stem augers. Soil boring depths varied based on field-screening results, observations, and subsurface conditions. Five soil samples (SB-101S, SB-101D, SB-102, SB-103, and SB-104), including a field duplicate, were collected from the soil borings. Following the soil borings, four monitoring wells (MW-101S, MW-101D, MW-102, and MW-103) were installed to various shallow depths. On 12 and 13 August 2009, Sovereign collected five groundwater samples (GW-101S, GW-101D, GW-102, GW-103, and GW-104), including a field duplicate, from the four newly installed monitoring wells. Soil and groundwater samples were submitted for analyses for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), target analyte list (TAL) metals, mercury, and cyanide analyses. Based on analytical results, 14 VOCs [including PCE, trichloroethylene (TCE), and cis-1,2-dichloroethylene (cis-1,2-DCE)], six SVOCs, and two pesticides were detected in soil samples at concentrations exceeding reference concentrations. Three VOCs (PCE, TCE, and cis-1,2-DCE), one SVOC, one pesticide, and three metals were detected in groundwater samples at concentrations exceeding reference concentrations [2].

Sovereign concluded that subsurface soil and groundwater beneath the Henry's property had been impacted by VOCs, SVOCs, and pesticides; and that substances detected in groundwater were attributable to on-site sources (e.g., a dry cleaning machine, and contaminated soil), and included PCE, TCE, and DCE.

EPA, Environmental Response Team (ERT), Office of Environmental Measurement and Evaluation (OEME), Scientific, Engineering, Response, and Analytical Services (SERAS), and Superfund Technical Assessment and Response Team (START) personnel mobilized to the site

on 20 March 2012 to begin field data collection activities, including the collection of indoor and outdoor ambient air samples, sub-slab vapor samples, real time ambient air samples, and groundwater samples, and to conduct a subsurface investigation using a Geoprobe equipped with a Membrane Interface Probe (MIP). Findings of these investigations maybe found in the report entitled *Preliminary Assessment/Site Investigation Report for the Henry's Dry Cleaners Laconia, Belknap County, New Hampshire, July 2012*.

SITE ACTIVITIES

On 23 August 2012, START member Colin Cardin mobilized to the Henry's Dry Cleaners Site, located in Laconia, Belknap County, New Hampshire. START member Cardin met on site with GeoSearch, Inc. of Fitchburg Massachusetts and Maher Services of North Reading, Massachusetts to perform a site walk and to discuss the proposed scope of work for the advancement of borings and the installation of groundwater monitoring wells on the Henry's Dry Cleaners, Goodwill Industries Building, Garage Building, and FARM properties.

Prior to beginning activities on each day of the sampling events conducted from September through December 2012, START members conducted a safety and operations meeting, and on-site personnel reviewed and signed the site HASP. The HASP was prepared as a separate document, entitled *Region I START Site Health and Safety Plan (HASP) for the Henry's Dry Cleaners Site, Laconia, Belknap County, New Hampshire*, dated March 2012 [3]. In addition, all sampling activities were performed in accordance with the site-specific sampling plan, which was prepared as a separate document, entitled *Sampling and Analysis Plan for the Henry's Dry Cleaners Site, Laconia, Belknap County, New Hampshire*, dated March 2012 [4].

On 10 through 14 September, and 17 through 21 September 2012, and 10 through 12 October 2012, OSC Allen Jarrell, START personnel George Mavris and Colin Cardin, and Dave Edgerton (SERAS) mobilized to the site to provide oversight during the advancement of borings and the installation of monitoring wells. Drilling and monitoring well installation were performed by GeoSearch, Inc. of Fitchburg, Massachusetts, per the scope of work in the document entitled, *Request for Proposal for Soil Borings and Monitoring Well Installation at the Henry's Dry Cleaners Site, Laconia, New Hampshire*, dated August 2012.

The scope of required services for this project involved the following activities: installing 10 permanent monitoring wells, three of which were completed as nested wells (shallow, intermediate, and deep) installed in the same borehole; installing one monitoring well as a shallow well; conducting continuous (every 2 feet) soil sampling during the advancement of the borings; developing the monitoring wells; and procuring the services of a subsurface utility clearance firm to clear proposed boring locations.

Prior to conducting any subsurface work, a subsurface utility clearance firm (Radar Solutions, Inc.) procured by GeoSearch conducted a comprehensive scan of the subsurface around the proposed boring locations using terrain conductivity (EM-61) and ground penetrating radar (GPR) equipment. Once these locations were cleared, boring advancement began on the paved portion of the Garage Property, located east of the Goodwill Industries Building. This is the location adjacent to where a previous boring (SB-16) was advanced to 46 feet below ground surface (bgs)

during the Preliminary Assessment/Site Investigation (PA/SI) in March 2012 using hollow-stem augers (Figure 3).

GeoSearch advanced the boring (ERT-2) 46 ft bgs using hollow-stem augers. Soil classification and soil sampling activities were not conducted since data for this 46-ft interval was collected during the PA/SI. GeoSearch used a combination of the hollow-stem augering and drive-and-wash drilling methods as they advanced the boring below 46 feet. Continuous split-spoon sampling was done beginning at 46 feet and continuing to the bottom of the boring (74 feet bgs). Soil samples were collected from each 1-ft interval in the split-spoon samplers and placed in a 40-milliliter (mL) vial filled with 10 mL of methanol, and the soil in the split-spoon was characterized. The soil samples were relinquished to EPA Chemist Scott Clifford for on-site VOC screening utilizing the OEME Mobile Laboratory. This procedure was conducted throughout the advancement of the borings. Soil descriptions, soil sample results, and well installation details can be found in Appendix F, Boring Logs.

Following the advancement of the last split-spoon, the boring at ERT-2 was advanced to 80 ft bgs where bedrock was encountered. Three 2-inch-diameter monitoring wells were subsequently installed in the same boring, completing the nested wells at this location. A 10-ft screen was placed in each well in different portions of the aquifer to evaluate discrete zones where soil sample results indicated elevated levels of PCE and TCE. This screen placement procedure was repeated for the other nested wells (ERT-1 and ERT-3). The shallow well was designated as ERT-2A, the intermediate well as ERT-2B, and the deep well as ERT-2C. The same nomenclature was used for naming the other two well clusters. See Appendix F, Boring Logs, for well construction details.

The next boring, ERT-1, was advanced in the paved area of Henry's parking lot near the location of MIP-13. The boring was advanced to a depth of 80 ft bgs using a combination of hollow-stem auger and drive-and-wash drilling methods. Continuous split-spoon sampling was performed beginning at 2 to 4 ft and continued 80 ft bgs. Soil samples were collected at each 1-ft interval and relinquished to EPA Chemist Scott Clifford. Competent bedrock was encountered at 80 ft bgs. Three 2-inch-diameter monitoring wells were installed in the same boring, using the same procedures described for ERT-2.

The third well cluster (ERT-3) was installed in front of the loading dock of the Goodwill Industries Building, near the MIP-5 location. The boring was advanced to a depth of 80 ft bgs using a combination of hollow-stem auger and drive-and-wash drilling methods. Continuous split-spoon sampling was done beginning at 2 to 4 ft and continued 76 ft bgs. Competent bedrock was encountered at 76 ft bgs. Soil samples were collected at each 1-ft interval and relinquished to EPA Chemist Scott Clifford. Three 2-inch-diameter monitoring wells were also installed in the same boring, using the same procedures described for ERT-2.

A boring was advanced to 12 ft bgs and a sentinel well (ERT-4) was installed on the landscaped area on the FARM property, near MIP-17. Continuous split-spoon sampling was performed beginning at 0- to 2-ft and continued through 10- to 12-ft bgs. A monitoring well, with a 10-ft screen, was subsequently installed in the boring. Following the installation of the 10 monitoring wells, GeoSearch developed each of the wells.

A total of 43 55-gallon drums of investigation-derived waste (IDW) (soil cutting, drilling water, decontamination water, and purge water) were generated. The drums were properly labeled and staged on wooden pallets behind the Henry's Dry Cleaners building. A tarp was placed over the drums and secured with rope. The Laconia Police Department was notified of the drums stored behind the building.

On 10 October 2012, START member Colin Cardin and GeoSearch personnel mobilized to the site to install two additional monitoring wells to complement nested wells ERT-2 and ERT-3. EPA and ERT evaluated PCE and TCE concentrations in the soil samples collected during advancement of borings and identified a fourth interval in the aquifer to evaluate. Two additional monitoring wells were installed adjacent to these two nested wells, ERT-2-IB and ERT-3-IB. Monitoring well ERT-2-IB was installed adjacent to ERT-2, with a screened interval between 50 and 60 ft, and monitoring well ERT-3-IB was installed adjacent to ERT-3, with a screened interval between 49 and 59 ft. No soil samples were collected during installation of these wells. See Appendix F, Boring Logs, for well construction details.

On 16 through 17 October 2012, and 15 November 2012, OSC Allen Jarrell, EPA ERT members Alan Humphrey, Chuck Protzman, Jean Brochi, Stephen Blaze, and Eric Nelson, SERAS member John McBurney, and START member Cardin mobilized to the site to collect porewater, surface water, and passive diffuser samples from the Winnipesaukee River.

From 12 through 15 November 2012, START collected 28 groundwater samples (GW-01 through GW-28), including two field duplicates, from 18 groundwater monitoring wells (GEO-1 through GEO-6, NW-3, MW-101S, MW-101D, MW-102, MW-103, OSW-1, ERT-1, ERT-2, ERT-3, ERT-4, ERT-2-IB2, ERT-3-IB). Groundwater monitoring wells ERT-1, ERT-2, and ERT-3 are nested wells. Each nested well consists of three 2-inch diameter wells installed in the same borehole at different depths with each well screened in a different depth interval. The shallow well in these nested wells is designated as "A", the intermediate as "B", and the deep as "C" (e.g. ERT-1A, ERT-1B, and ERT-1C). NW-3 is also a nested well that consists three 1-inch diameter wells installed in the same borehole at different depths with each well screened in a different depth interval. The shallow well in these nested wells is designated as "C", the intermediate as "B", and the deep as "A". Groundwater samples were also submitted to the EPA OEME New England Regional Laboratory (NERL) of North Chelmsford, Massachusetts for VOC analyses.

On 22 through 24 October 2012, SERAS personnel performed indoor air monitoring at the Goodwill Industries Building located adjacent to Henry's Dry Cleaners. A description of the sampling performed and results obtained can be found in Attachment A, *Henry's Dry Cleaners Site, Laconia, New Hampshire, SERAS Work Assignment No. 0-167 Trip Report*.

On 11 and 12 December 2012, EPA ERT member Terrence Johnson, SERAS member David Edgerton, and START member Mavris mobilized to the site and conducted slug tests of all on- and off-site monitoring wells. Two falling head and two rising head slug tests were conducted on each well. The data were processed and evaluated using the Bouwer-Rice solution method. A summary of the hydraulic conductivity (K) for the data from each slug test may be found in Table 3, Summary of Slug Test Data, and the complete set of data sheets generated are included as Attachment B.

A supplementary source investigation of the site was conducted by the EPA Environmental Response Team (ERT). The objectives of the investigation were to close data gaps; improve plume delineation across the site area; to better characterize the lithology and hydraulic properties of the aquifer; and to incorporate this into the site conceptual model. A copy of this report can be found in Attachment C, *Addendum to the Source Investigation and Conceptual Site Model (CSM) of the Henry's Dry Cleaners Chlorinated Solvent Site, Laconia, New Hampshire: Technical Memorandum, SERAS WA#0-173*.

ANALYTICAL DATA SUMMARIES

Groundwater Sampling Summary

On 6 December 2012, START received the analytical results from OEME for the groundwater samples collected from 12 through 15 November 2012 and submitted for VOC analyses. The VOC data are summarized in Appendix B, Table 1. Complete analytical results may be found in Appendix E.

Analytical results received from OEME indicated that CVOCs were detected in 24 of the 28 groundwater samples collected from the monitoring wells. PCE was detected at the following groundwater monitoring well locations (concentration in parentheses): GEO-1 [75 micrograms per liter ($\mu\text{g/L}$)], GEO-4 (79 $\mu\text{g/L}$), NW-3C (6,500 $\mu\text{g/L}$), NW-3B (5,200 $\mu\text{g/L}$), ERT-4 (1,600 $\mu\text{g/L}$), ERT-2C (2,300 $\mu\text{g/L}$), ERT-2B (12,000 $\mu\text{g/L}$), ERT-2A (1,800 $\mu\text{g/L}$), ERT-3C (2,200 $\mu\text{g/L}$), ERT-3B (4,200 $\mu\text{g/L}$), ERT-3A (2,600 $\mu\text{g/L}$), ERT-1C (160 $\mu\text{g/L}$), ERT-1B (2,800/2,600 $\mu\text{g/L}$), ERT-1A (3,000 $\mu\text{g/L}$), MW-101S (120 $\mu\text{g/L}$), MW-101D (16,000 $\mu\text{g/L}$), MW-102 (660 $\mu\text{g/L}$), OSW-01 (2,300 $\mu\text{g/L}$), ERT-2-IB (14,000 $\mu\text{g/L}$), ERT-3-IB (1,700/1,500 $\mu\text{g/L}$) (see Appendix B, Table 1) [8, 9]. All PCE concentrations listed above exceed the NH DES Ambient Groundwater Quality Standards (AGQS) of 5 $\mu\text{g/L}$ for PCE. Trichloroethylene (TCE) was detected in GEO-1 (88 $\mu\text{g/L}$), GEO-4 (210 $\mu\text{g/L}$), GEO-5 (1.3 $\mu\text{g/L}$), ERT-4 (140 $\mu\text{g/L}$), ERT-2B (380 $\mu\text{g/L}$), ERT-2A (59 $\mu\text{g/L}$), and MW-101S (12 $\mu\text{g/L}$) (see Appendix B, Table 1) [8, 9]. With the exception of GEO-5, all other TCE detections listed above exceed the NH DES AGQS of 5 $\mu\text{g/L}$ for TCE.

VOC concentrations in groundwater samples are depicted in Appendix A, Figure 4.

Porewater Sampling Summary

On 19 November 2012, START received the analytical results from OEME for the porewater, surface water, and passive diffuser samples collected from 16 through 17 October 2012 and on 15 November 2012. The VOC data are summarized in Appendix B, Table 2. Complete analytical results may be found in Appendix E.

Analytical results received from OEME indicated that CVOCs were detected in seven of the 21 samples collected. PCE was detected at the following sampling locations (concentration in parentheses): ERTPW-1 [330 micrograms per liter ($\mu\text{g/L}$)] and ERTPW-4 [1,800 $\mu\text{g/L}$] (see Appendix B, Table 2) [10, 11]. Trichloroethylene (TCE) was detected in ERTPW-1 (24 $\mu\text{g/L}$) and ERTPW-4 (230 $\mu\text{g/L}$).

VOC concentrations in groundwater samples are depicted in Appendix A, Figure 5.

Air Sampling Summary

Detailed information on the indoor/outdoor ambient air sampling and soil gas sampling, can be found in Attachment A: *Henry's Dry Cleaners Site, Laconia, New Hampshire, SERAS Work Assignment No. 0-167 Trip Report, 29 November 2012*.

REFERENCES

- [1] United States Geological Survey (USGS). 1987 Laconia, New Hampshire. (7.5 minute series topographic map).
- [2] Sovereign Consulting, Inc. Final Site Inspection Report – February 26, 2010. Contract No. EP-W-06-043-Region 1-START3 (8)A.
- [3] Weston Solutions, Inc. 2012. *Region I START Site Health and Safety Plan (HASP) for the Henry's Dry Cleaners Site, Laconia, Belknap County, New Hampshire*. March.
- [4] Weston Solutions, Inc. 2012. *Sampling and Analysis Plan for the Henry's Dry Cleaners Site, Laconia, Belknap County, New Hampshire*. March.
- [5] CPI Environmental Services, Inc. Supplemental Groundwater Quality Assessment. August 23, 2006.
- [6] Heynen Engineers. Environmental Site Assessment, 54 Water Street, Laconia, New Hampshire. July 24, 1986.
- [7] CPI Environmental Services, Inc. Supplemental Site Investigation: Chlorinated Solvent and Lead Investigation. March 29, 2004.
- [8] U.S. Environmental Protection Agency, New England Regional Laboratory, Office of Environmental Measurement and Evaluation. 30 November 2012. Laboratory Report, Project Number 12110026, VOAs in Water, Henry's Dry Cleaners – Laconia, New Hampshire.
- [9] U.S. Environmental Protection Agency, New England Regional Laboratory, Office of Environmental Measurement and Evaluation. 4 December 2012. Laboratory Report, Project Number 12110027, VOAs in Water, Henry's Dry Cleaners – Laconia, New Hampshire.
- [10] U.S. Environmental Protection Agency, New England Regional Laboratory, Office of Environmental Measurement and Evaluation. 25 October 2012. Laboratory Report, Project Number 12100023, VOAs in Water, Henry's Dry Cleaners – Laconia, New Hampshire.

REFERENCES

- [11] U.S. Environmental Protection Agency, New England Regional Laboratory, Office of Environmental Measurement and Evaluation. 31 October 2012. Laboratory Report, Project Number 12100028, VOAs in Water, Henry's Dry Cleaners – Laconia, New Hampshire.
- [12] U.S. Environmental Protection Agency, New England Regional Laboratory, Office of Environmental Measurement and Evaluation. 3 December 2012. Laboratory Report, Project Number 12100031, VOAs in Water, Henry's Dry Cleaners – Laconia, New Hampshire.

FINAL

Appendices

Appendix A

Figures

- | | |
|----------|---|
| Figure 1 | Site Location Map |
| Figure 2 | Site Map |
| Figure 3 | Monitoring Well Installation Location Map |
| Figure 4 | Summary of Volatile Organic Compound Concentrations Results in
Groundwater Samples |
| Figure 5 | Porewater Sample Results Map |

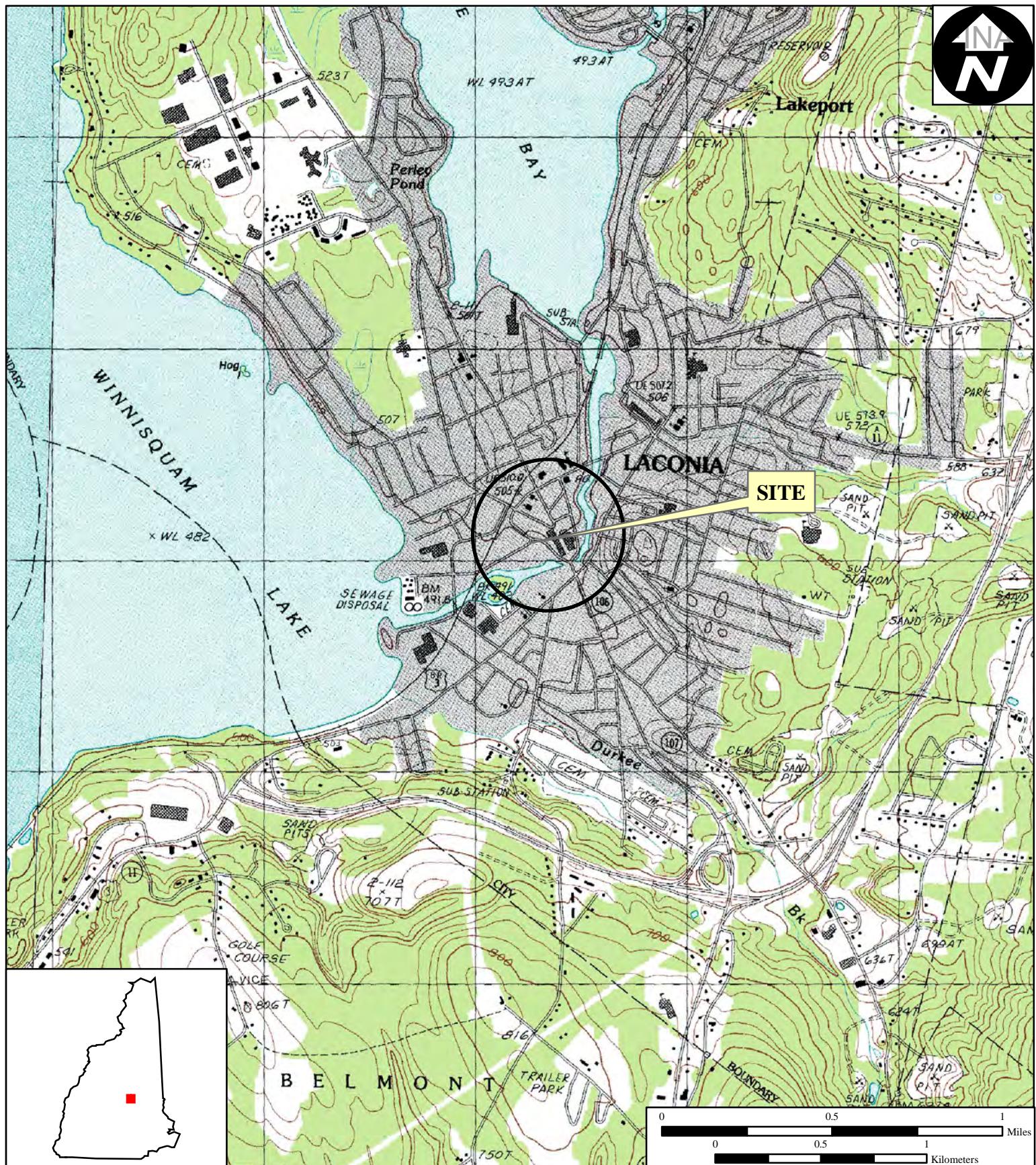


Figure 1

Site Location Map

Henry's Dry Cleaners
36 Pleasant Street
Laconia, New Hampshire

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 11-09-0007
Created by: C. Cardin
Created on: 29 February 2012
Modified by:
Modified on:

Data Sources:
Topos: MicroPath/USGS
Quadrangle Name(s): Laconia, NH
All other data: START

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Restoring Resource Efficiency

Figure 2

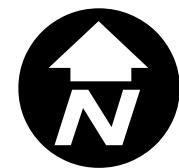
Site Diagram

Henry's Dry Cleaners
36 Pleasant Street
Laconia, New Hampshire

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042
TDD Number: 11-09-0007
Created by: B. Mahany
Created on: 6 March 2012
Modified by: B. Mahany
Modified on: 6 March 2012

LEGEND

 Buildings
 Approximate Property Boundaries



0 50 100
Feet

Data Sources:

Imagery: Bing Maps
Topos: MicroPath
All other data: START

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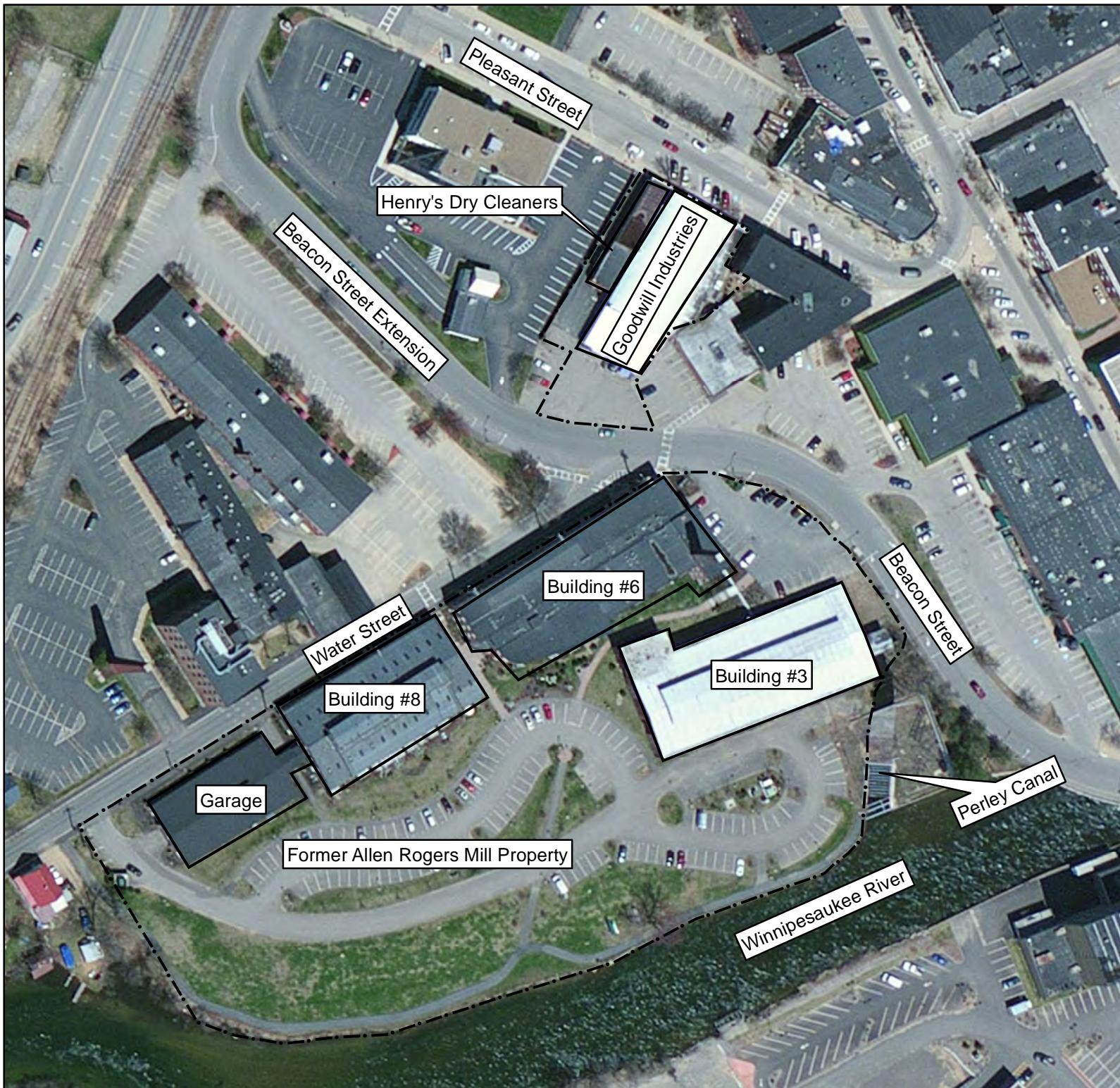


Figure 3

Monitoring Well Installation Location Map
September and October 2012

Henry's Dry Cleaners Property
36 Pleasant Street
Laconia, New Hampshire

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 11-09-0007
Created by: B. Mahany
Created on: 16 March 2012
Modified by: C.Cardin
Modified on: 4 April 2013

LEGEND

 Buildings
 Approximate Property Boundaries

 Monitoring Well Location

Note: Only Monitoring Wells installed during September and October 2012 are shown.



0 50 100 Feet

Data Sources:

Imagery: Bing Maps
Topos: MicroPath
All other data: START

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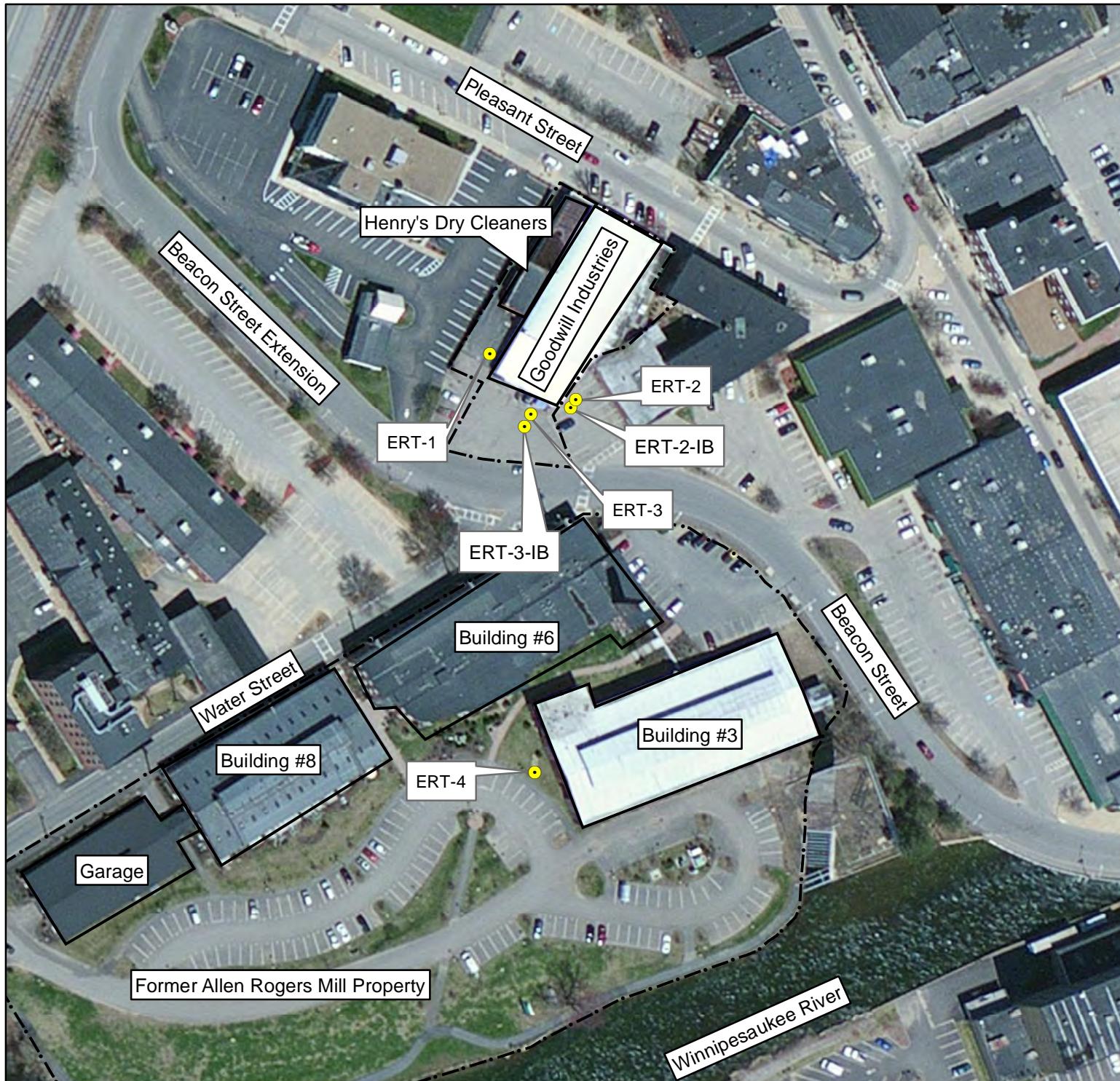


Figure 4

Summary of Volatile Organic Compound Concentrations in Groundwater Samples
12-14 November 2012

Henry's Dry Cleaners Site
36 Pleasant Street
Laconia, New Hampshire

EPA Region I
Superfund Technical Assessment and Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 12-11-0002

Created by: B. Mahany

Created on: 16 March 2012

Modified by: C. Scesny

Modified on: 28 January 2013

LEGEND

- Monitoring Wells
- Buildings
- - - Approximate Property Boundaries

PCE: Tetrachloroethylene
TCE: Trichloroethylene
DCE: cis-1,2-Dichloroethylene
VC: Vinyl Chloride
µg/L: micrograms per liter



0 50 100 200 300
Feet

Note: Laboratory results indicate that 2-Propanone (acetone) was detected, but is associated with the laboratory blank or trip blank contamination. The analyte has not been included in this figure.

Data Sources:

Imagery: Bing Maps
Topos: MicroPath
All other data: START

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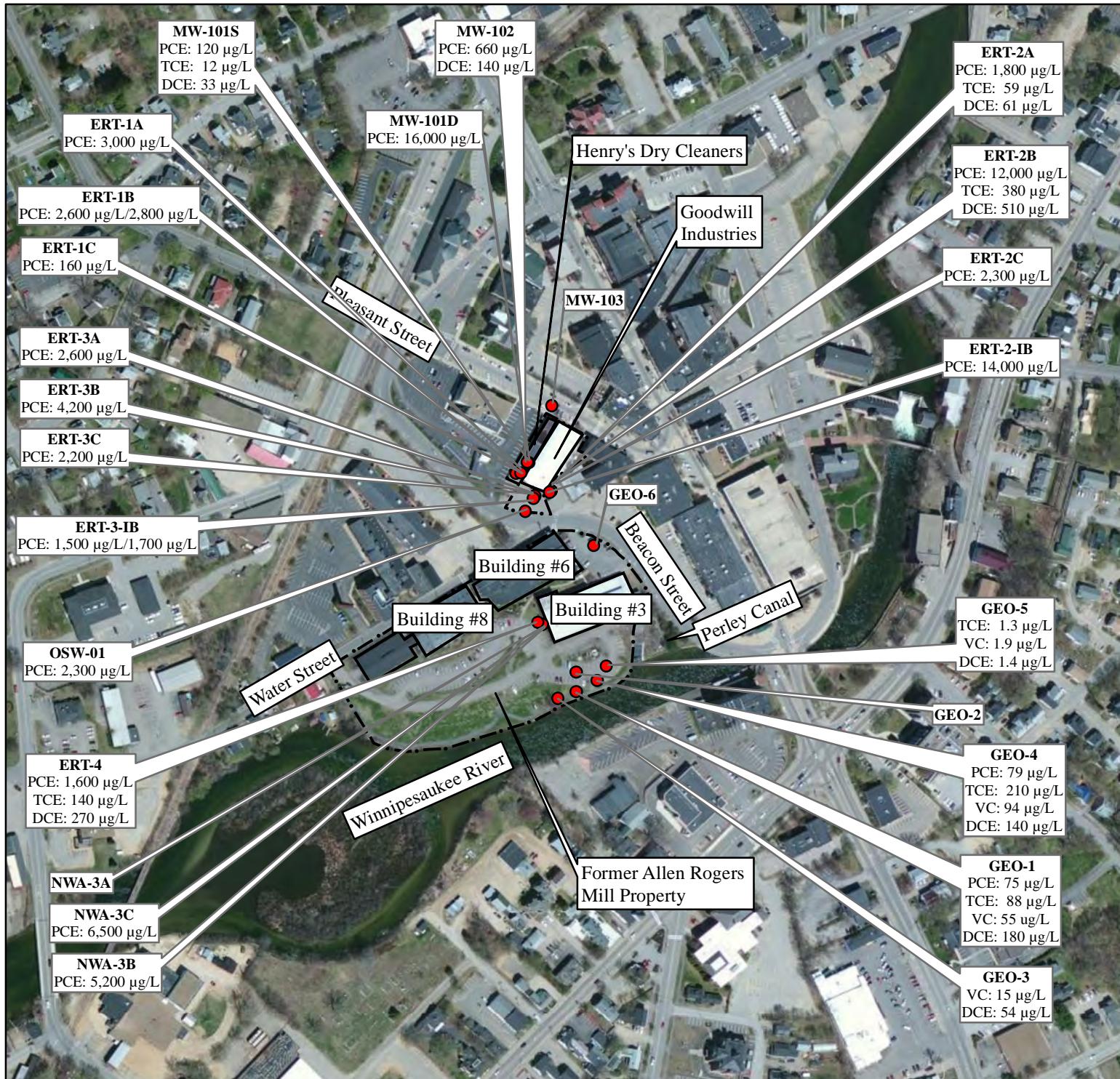


Figure 5

Porewater Sample Results Map
16, 17 October, and 15 November 2012

Henry's Dry Cleaners
36 Pleasant Street
Laconia, New Hampshire

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 12-11-002
Created by: C.Cardin
Created on: 22 March 2012
Modified by: C. Cardin
Modified on: 27 June 2012

LEGEND

● Porewater/Surface water/Passive Diffusion Sample Location

PCE: Tetrachloroethylene
TCE: Trichloroethylene
cis 1,2-DCE: cis-1,2-Dichloroethylene
trans 1,2-DCE: trans-1,2-Dichloroethylene
VC: Vinyl Chloride
ug/L: micrograms per liter

Results depicted include all chlorinated volatile organic compound detections



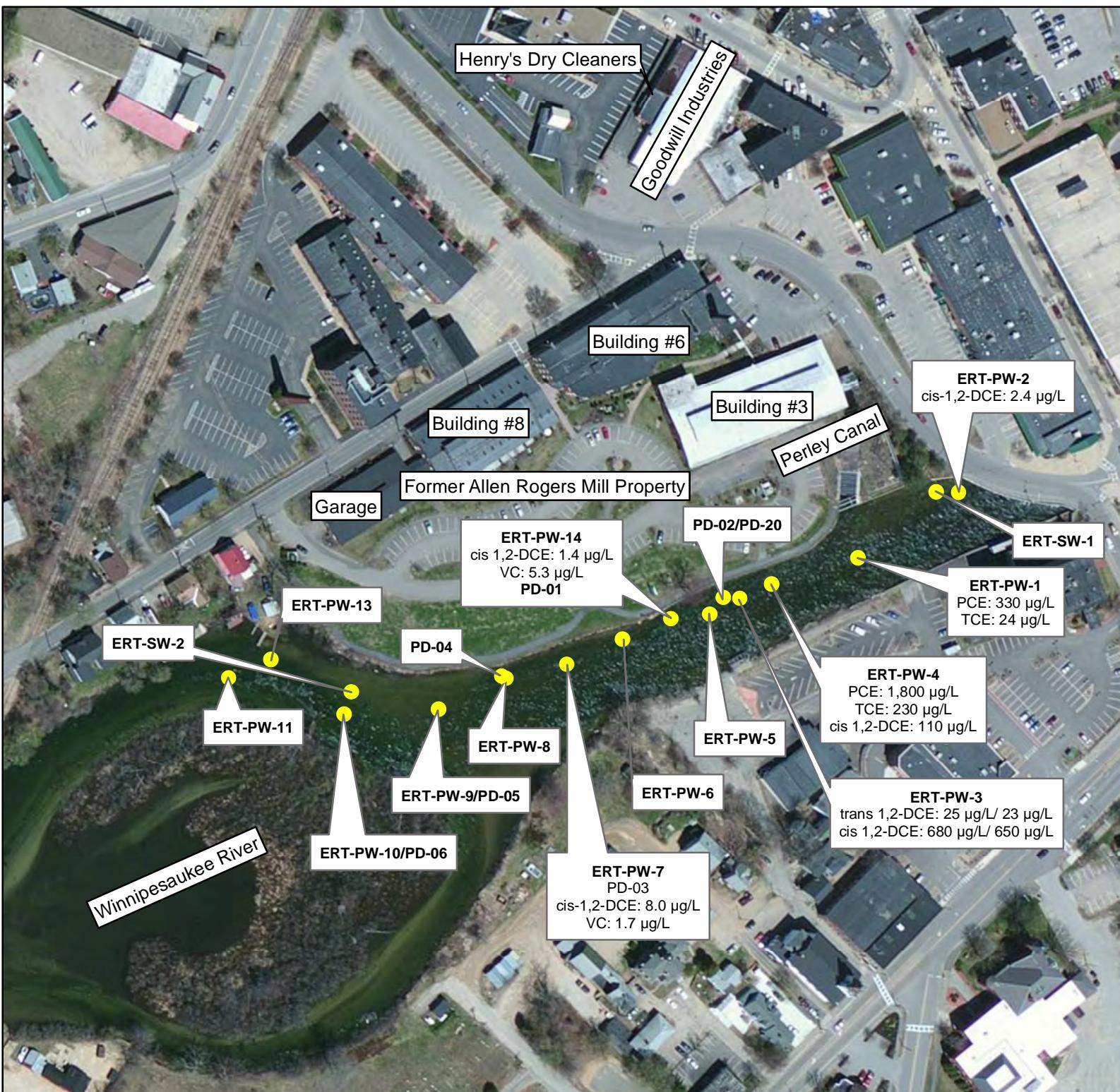
0 50 100 200
Feet

Data Sources:

Imagery: Bing Maps
Topos: MicroPath
All other data: START

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Appendix B

Tables

- | | |
|---------|--|
| Table 1 | Summary of Volatile Organic Compound Results, Groundwater Samples |
| Table 2 | Volatile Organic Compound Results, Porewater, Surface Water, Passive Diffusion Samples |
| Table 3 | Summary of Slug Test Data |

TABLE 1
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
GROUNDWATER SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
Results in µg/L

SAMPLE LOCATION:	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06	GW-07	NHDES AGQS µg/L
WELL LOCATION:	GEO-1	GEO-2	GEO-3	GEO-4	GEO-5	GEO-6	NWA-3C	
SAMPLE NUMBER:	R01-120314JT-0124	R01-120314JT-0125	R01-120314JT-0126	R01-120314JT-0127	R01-120314JT-0128	R01-120314JT-0129	R01-120314JT-0130	
LABORATORY NUMBER:	AB36227	AB36228	AB36229	AB36230	AB36231	AB36232	AB36233	
PARAMETER								
2-Propanone (acetone)	ND	ND	ND	ND	1.3 B	ND	ND	6,000
Tetrachloroethylene	75	ND	ND	79	ND	ND	6,500	5
Trichloroethylene	88	ND	ND	210	1.3	ND	ND	5
Vinyl Chloride	55	ND	15	94	1.9	ND	ND	2
cis-1,2-Dichloroethylene	180	ND	54	140	1.4	ND	ND	70

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) NHDES AGQS = New Hampshire Department of Environmental Services Ambient Groundwater Quality Standards (equivalent to NHDES Method 1 GW-1 Groundwater Standards), May 2007.
- 4) Bolded and shaded results exceed NHDES AGQS.
- 5) ND = Not Detected.
- 6) B = Analyte is associated with the laboratory blank or trip blank contamination.
- 7) Note that summary tables do not include analytes that were not detected. Refer to Appendix C for all analytical results.

TABLE 1
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
GROUNDWATER SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
Results in µg/L

SAMPLE LOCATION:	GW-08	GW-09	GW-10	GW-11	GW-12	GW-13	GW-14	NHDES AGQS µg/L
WELL LOCATION:	NWA-3B	NWA-3A	ERT-4	ERT-2C	ERT-2B	ERT-2A	ERT-3C	
SAMPLE NUMBER:	R01-120314JT-0131	R01-120314JT-0132	R01-120314JT-0133	R01-120314JT-0134	R01-120314JT-0135	R01-120314JT-0136	R01-120314JT-0137	
LABORATORY NUMBER:	AB36234	AB36235	AB36236	AB36237	AB36238	AB36239	AB36240	
PARAMETER	ND							
2-Propanone (acetone)	ND	6,000						
Tetrachloroethylene	5,200	ND	1,600	2,300	12,000	1,800	2,200	5
Trichloroethylene	ND	ND	140	ND	380	59	ND	5
Vinyl Chloride	ND	2						
cis-1,2-Dichloroethylene	ND	ND	270	ND	510	61	ND	70

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) NHDES AGQS = New Hampshire Department of Environmental Services Ambient Groundwater Quality Standards (equivalent to NHDES Method 1 GW-1 Groundwater Standards), May 2007.
- 4) Bolded and shaded results exceed NHDES AGQS.
- 5) ND = Not Detected.
- 6) B = Analyte is associated with the laboratory blank or trip blank contamination.
- 7) Note that summary tables do not include analytes that were not detected. Refer to Appendix C for all analytical results.

TABLE 1
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
GROUNDWATER SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
Results in µg/L

SAMPLE LOCATION:	GW-15	GW-16	GW-17	GW-18	GW-19	GW-20	GW-21	NHDES AGQS µg/L
WELL LOCATION:	ERT-3B	ERT-3A	ERT-1C	ERT-1B	ERT-1A	MW-101S	MW-101D	
SAMPLE NUMBER:	R01-120314JT-0138	R01-120314JT-0139	R01-120314JT-0140	R01-120314JT-0141	R01-120314JT-0142	R01-120314JT-0143	R01-120314JT-0144	
LABORATORY NUMBER:	AB36241	AB36242	AB36243	AB36244	AB36250	AB36245	AB36251	
PARAMETER	ND							
2-Propanone (acetone)	ND	6,000						
Tetrachloroethylene	4,200	2,600	160	2,800	3,000	120	16,000	5
Trichloroethylene	ND	ND	ND	ND	ND	12	ND	5
Vinyl Chloride	ND	2						
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	33	ND	70

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) NHDES AGQS = New Hampshire Department of Environmental Services Ambient Groundwater Quality Standards (equivalent to NHDES Method 1 GW-1 Groundwater Standards), May 2007.
- 4) Bolded and shaded results exceed NHDES AGQS.
- 5) ND = Not Detected.
- 6) B = Analyte is associated with the laboratory blank or trip blank contamination.
- 7) Note that summary tables do not include analytes that were not detected. Refer to Appendix C for all analytical results.

TABLE 1
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
GROUNDWATER SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
Results in µg/L

SAMPLE LOCATION:	GW-22	GW-23	GW-24	GW-25	GW-26	GW-27	GW-28	NHDES AGQS µg/L
WELL LOCATION:	MW-102	MW-103	OSW-01	ERT-2-IB	ERT-3-IB	ERT-IB2	ERT-3-IB2	
SAMPLE NUMBER:	R01-120314JT-0145	R01-120314JT-0146	R01-120314JT-0147	R01-120314JT-0148	R01-120314JT-0149	R01-120314JT-0150	R01-120314JT-0151	
LABORATORY NUMBER:	AB36252	AB36253	AB36254	AB36255	AB36256	AB36246	AB36257	
PARAMETER	ND	6,000						
2-Propanone (acetone)	660	ND	2,300	14,000	1,700	2,600	2,500	5
Tetrachloroethylene	ND	5						
Trichloroethylene	ND	2						
Vinyl Chloride	ND	70						
cis-1,2-Dichloroethylene	140	ND	ND	ND	ND	ND	ND	

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) NHDES AGQS = New Hampshire Department of Environmental Services Ambient Groundwater Quality Standards (equivalent to NHDES Method 1 GW-1 Groundwater Standards), May 2007.
- 4) Bolded and shaded results exceed NHDES AGQS.
- 5) ND = Not Detected.
- 6) B = Analyte is associated with the laboratory blank or trip blank contamination.
- 7) Note that summary tables do not include analytes that were not detected. Refer to Appendix C for all analytical results.

TABLE 2
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
POREWATER, SURFACE WATER, AND PASSIVE DIFFUSION SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
16 AND 17 OCTOBER AND 15 NOVEMBER 2012
µg/L

SAMPLE LOCATION:	ERTPW-1	ERTPW-2	ERTPW-3	ERTPW-3	ERTPW-4	ERTPW-5	ERTPW-6
SAMPLE NUMBER:	R01-120314JT-0107	R01-120314JT-0106	R01-120314JT-0108	R01-120314JT-0109	R01-120314JT-0110	R01-120314JT-0112	R01-120314JT-0113
LABORATORY NUMBER:	AB34663	AB34662	AB34664	AB34665	AB34666	AB34824	AB34825
Comments:	pore water						
PARAMETER							
2-Propanone (acetone)	ND						
Carbon Disulfide	ND						
Tetrachloroethylene	330	ND	ND	ND	1,800	ND	ND
trans-1,2-Dichloroethylene	ND	ND	25	23	ND	ND	ND
Trichloroethylene	24	ND	ND	ND	230	ND	ND
Vinyl Chloride	ND						
cis-1,2-Dichloroethylene	ND	2.4	680	650	110	ND	ND

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) pass. diff. = passive diffusion.
- 4) ND = Not Detected.
- 5) Note that summary tables do not include analytes that were not detected in any of the samples.

TABLE 2
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
POREWATER, SURFACE WATER, AND PASSIVE DIFFUSION SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
16 AND 17 OCTOBER AND 15 NOVEMBER 2012
µg/L

SAMPLE LOCATION:	ERTPW-7	ERTPW-7B	ERTPW-8	ERTPW-9	ERTPW-10	ERTPW-13	ERTPW-14
SAMPLE NUMBER:	R01-120314JT-0114	R01-120314JT-0115	R01-120314JT-0116	R01-120314JT-0117	R01-120314JT-0118	R01-120314JT-0119	R01-120314JT-0123
LABORATORY NUMBER:	AB34826	AB34827	AB34828	AB34829	AB34830	AB34831	AB34835
Comments:	pore water						
PARAMETER							
2-Propanone (acetone)	ND	1.0	ND	ND	1.2	ND	ND
Carbon Disulfide	ND						
Tetrachloroethylene	ND						
trans-1,2-Dichloroethylene	ND						
Trichloroethylene	ND						
Vinyl Chloride	ND	ND	ND	ND	ND	ND	5.3
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	1.4

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) pass. diff. = passive diffusion.
- 4) ND = Not Detected.
- 5) Note that summary tables do not include analytes that were not detected in any of the samples.

TABLE 2
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
POREWATER, SURFACE WATER, AND PASSIVE DIFFUSION SAMPLES
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE
16 AND 17 OCTOBER AND 15 NOVEMBER 2012
µg/L

SAMPLE LOCATION:	ERTSW-1	ERTSW-2	PD-01	PD-02	PD-03	PD-06	PD-20
SAMPLE NUMBER:	R01-120314JT-0120	R01-120314JT-0121	R01-120314JT-0189	R01-120314JT-0190	R01-120314JT-0191	R01-120314JT-0192	R01-120314JT-0193
LABORATORY NUMBER:	AB34832	AB34833	AB36291	AB36292	AB36293	AB36294	AB36295
Comments:	surface water	surface water	pass. diff.	pass. diff.	pass. diff.	pass. diff.	duplicate PD-02
PARAMETER							
2-Propanone (acetone)	1.0	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	1.7	ND	1.8	ND
Tetrachloroethylene	ND						
trans-1,2-Dichloroethylene	ND						
Trichloroethylene	ND						
Vinyl Chloride	ND	ND	ND	ND	1.7	ND	ND
cis-1,2-Dichloroethylene	ND	ND	ND	ND	8.0	ND	ND

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I Standard Operating Procedure (SOP) EIASOP-VOAGCMS9 - VOAs in Water.
- 2) All Results in Micrograms per Liter (µg/L).
- 3) pass. diff. = passive diffusion.
- 4) ND = Not Detected.
- 5) Note that summary tables do not include analytes that were not detected in any of the samples.

TABLE 3
SUMMARY OF SLUG TEST DATA
HENRY'S DRY CLEANERS SITE
LACONIA, NEW HAMPSHIRE

Monitoring Well	Hydraulic Conductivity (K)			
	Falling Head (in)		Rising Head (out)	
	Test 1	Test 2	Test 1	Test 2
GEO-01	6.131	4.63	6.587	6.297
GEO-02	23.59	26.4	25.86	26.62
GEO-03	4.893	10.95	22.98	16.19
GEO-04	15.32	11.04	10.34	12.43
GEO-05	10.42	17.96	12.12	9.753
GEO-06	5.457	4.885	5.184	5.474
MW-101S	2.592	2.002	3.858	4.512
MW-101D	4.731	5.121	4.496	4.116
MW-102	4.464	2.944	3.803	2.85
MW-103	7.401	5.336	7.163	5.198
OSW-01	58.41	20.19	60.98	42.44
ERT-1A	21.08	26.49	47.58	50.62
ERT-1B	11.64	14.9	16.44	11.68
ERT-1C	3.131	2.726	2.917	2.443
ERT-2A	68.58	17.03	71.31	25.03
ERT-2B	0.9745	0.9223	1.074	1.073
ERT-2C	7.689	7.758	8.315	8.14
ERT-2-IB	3.701	3.246	3.35	3.2
ERT-3A	36.35	35.62	43.27	20.83
ERT-3B	6.83	6.881	8.34	8.72
ERT-3C	13.51	12.67	12.64	12.92
ERT-3-IB	6.286	6.383	6.985	6.582

Notes:

K = Hydraulic conductivity in feet per day (ft/day)

Aquifer model = unconfined

Solution Method = Bauer and Rice

FINAL

Appendix C
Photodocumentation Log

PHOTODOCUMENTATION LOG
Henry's Dry Cleaners • Laconia, New Hampshire

FINAL



SCENE: View of subsurface utility clearance equipment and the initial installment stages of groundwater monitoring well ERT-2. Photograph taken facing northeast.

DATE: 10 September 2012

PHOTOGRAPHER: C. Cardin

TIME: 0948 hours

CAMERA: iPhone 4S

TOP



SCENE: View of the initial installment stages of groundwater monitoring well ERT-1. Photograph taken facing east.

DATE: 12 September 2012

PHOTOGRAPHER: C. Cardin

TIME: 1605 hours

CAMERA: iPhone 4S

PHOTODOCUMENTATION LOG
Henry's Dry Cleaners • Laconia, New Hampshire

FINAL



SCENE: View of soil classification area and decontamination. Photograph taken facing northeast.

DATE: 19 September 2012

PHOTOGRAPHER: C. Cardin

TIME: 1053 hours

CAMERA: iPhone 4S

TOP →



SCENE: View of freshly finished well installation of groundwater monitoring well ERT-2-IB. Photograph taken facing southwest.

DATE: 12 October 2012

PHOTOGRAPHER: C. Cardin

TIME: 0932 hours

CAMERA: iPhone 4S

PHOTODOCUMENTATION LOG
Henry's Dry Cleaners • Laconia, New Hampshire

FINAL



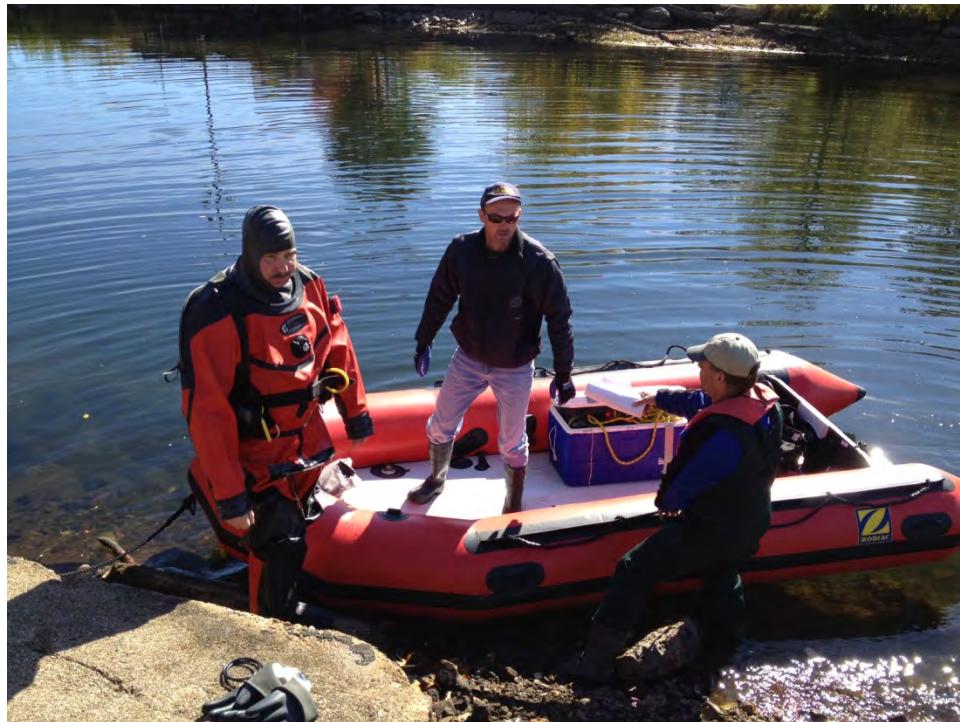
SCENE: View of Investigation-Derived Waste (IDW) drums being stored for transportation and disposal. Photograph taken facing north.

DATE: 12 October 2012

PHOTOGRAPHER: C .Cardin

TIME: 1235 hours

CAMERA: iPhone 4S



SCENE: View of Environmental Response Team (ERT)/Scientific, Engineering, Response, and Analytical Services (SERAS) members preparing for porewater sampling on the Winnipesaukee River. Photograph taken facing south.

DATE: 17 October 2012

PHOTOGRAPHER: C. Cardin

TIME: 1117 hours

CAMERA: iPhone 4S

TDD No. 12-11-002

Page 3 of 4

TASK No. 0852

PHOTODOCUMENTATION LOG
Henry's Dry Cleaners • Laconia, New Hampshire

FINAL

TOP



SCENE: View of ERT/SERAS members collecting a porewater sample from the Winnipesaukee River. Photograph taken facing south.

DATE: 17 October 2012

PHOTOGRAPHER: C. Cardin

TIME: 1017 hours

CAMERA: iPhone 4S

Appendix D
Chain-of-Custody Record

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners/MA

Contact Name: Allie

Contact Phone:

No: 1-101612-141135-0009

Site #: R01-120316T.1

136

Lab Contact:

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners/MA

Contact Name: Allie

Contact Phone:

Special Instructions:

Received	10/16/12
Received by	<i>H. Bier</i>

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

FINAL

USEPA Reg. III

Page 1 of 2

USEPA Region 1
START III

CHAIN OF CUSTODY RECORD
Henry's Dry Cleaners/MA
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 1-101712-122244-0010

Site #: R01-120316TJ

L'AB: NEBI MOE

Lab: NERVOEME

Lab Contact: Doris Guzman

Lab #	Sample #	Location	Analyses	Collected	Sample Time	Matrix	Numbr Container Cont	Preservati ve	Sample_ks	MSIMS D
	R01-120314JT-0112	ERTPW-5	VOC	10/16/2012	04:10	Pore Water	12	40 mL vial	None	
	R01-120314JT-0113	ERTPW-6	VOC	10/16/2012	04:25	Pore Water	4	40 mL vial	None	
	R01-120314JT-0114	ERTPW-7	VOC	10/17/2012	09:05	Pore Water	4	40 mL vial	None	
	R01-120314JT-0115	ERTPW-7B	VOC	10/17/2012	09:15	Pore Water	4	40 mL vial	None	
	R01-120314JT-0116	ERTPW-8	VOC	10/17/2012	09:35	Pore Water	4	40 mL vial	None	
	R01-120314JT-0117	ERTPW-9	VOC	10/17/2012	10:00	Pore Water	4	40 mL vial	None	
	R01-120314JT-0118	ERTPW-10	VOC	10/17/2012	12:00	Pore Water	4	40 mL vial	None	
	R01-120314JT-0119	ERTPW-13	VOC	10/17/2012	01:15	Pore Water	4	40 mL vial	None	
	R01-120314JT-0120	ERTSW-1	VOC	10/17/2012	01:55	Surface Water	4	40 mL vial	None	
	R01-120314JT-0121	ERTSW-2	VOC	10/17/2012	02:05	Surface Water	4	40 mL vial	None	
	R01-120314JT-0122	Trip Blank		10/17/2012	12:00	Blank	4			

Statistical Inference

SAMPLES TRANSFERRED FROM _____
CHAIN OF CUSTODY # _____

P.W. 12100028

Page 2 of 2
USEPA R
START III

Page 40 of 40

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners/MA
Contact Name: Allen Jarrell
Contact Phone: 617-312-4711

No: 1-101712-122244-0010

Site #: R01-120316TJ

1 ah: NIEBI / OEME

Law: Notis Guzman

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Special Institutions:

USEPA Region 1

START/II

Sampler Signatures: 
Date Hand Delivered: 11/15/2012

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners

Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

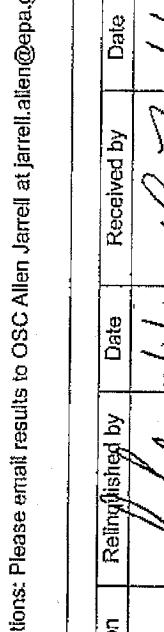
No: 1-111512-110400-0011

Site # R01-120316TJ

Lab: NERL/OEME

Lab Contact: Doris Guzman

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT-0124	GEO-1	GW-01	VOCs (\$VOAMW)	N	11/12/2012	11:45	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0125	GEO-2	GW-02	VOCs (\$VOAMW)	N	11/12/2012	11:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0126	GEO-3	GW-03	VOCs (\$VOAMW)	N	11/12/2012	14:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0127	GEO-4	GW-04	VOCs (\$VOAMW)	N	11/12/2012	11:40	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0128	GEO-5	GW-05	VOCs (\$VOAMW)	N	11/12/2012	11:45	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0129	GEO-6	GW-06	VOCs (\$VOAMW)	N	11/12/2012	15:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0130	NWA-3C	GW-07	VOCs (\$VOAMW)	N	11/13/2012	10:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0131	NWA-3B	GW-08	VOCs (\$VOAMW)	N	11/13/2012	08:40	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0132	NWA-3A	GW-09	VOCs (\$VOAMW)	N	11/12/2012	14:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0133	ERT-4	GW-10	VOCs (\$VOAMW)	N	11/12/2012	16:15	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0134	ERT-2C	GW-11	VOCs (\$VOAMW)	N	11/13/2012	10:55	Ground Water	4	40 mL Vial	HCl	Ice, 4C	

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #											
Item/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	11/15/12		11/15/12	14:20							

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

Page 2 of 3

USEPA Region 1

CONTINUOUS

Sampler Signature

Henry's Dry Cleaners
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No.: 1-111312-110400-0011
Site #: R01-120316TJ
Lab: NERLOEME
Lab Contact: Doris Guzman

CHAIN OF CUSTODY RECORD

Henny's Dry Cleaners

Contact Name: Allen Jarrell
Contact Phone: 617-212-1717

START II Sampler Signatures: *John A.*

Page 56 of 57

Page 56 of 57

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT-035	R01-120314JT-035	ERT-2B	GW-12	VOCs (\$VOAMW)	N	11/13/2012	13:25	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-036	R01-120314JT-036	ERT-2A	GW-13	VOCs (\$VOAMW)	N	11/13/2012	15:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-037	R01-120314JT-037	ERT-3C	GW-14	VOCs (\$VOAMW)	N	11/13/2012	11:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-038	R01-120314JT-038	ERT-3B	GW-15	VOCs (\$VOAMW)	N	11/13/2012	14:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-039	R01-120314JT-039	ERT-3A	GW-16	VOCs (\$VOAMW)	N	11/13/2012	16:10	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-040	R01-120314JT-040	ERT-1C	GW-17	VOCs (\$VOAMW)	N	11/13/2012	13:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0141	R01-120314JT-0141	ERT-1B	GW-18	VOCs (\$VOAMW)	N	11/13/2012	16:00	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0143	R01-120314JT-0143	MW-101S	GW-20	VOCs (\$VOAMW)	Y	11/13/2012	13:30	Ground Water	6	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0150	R01-120314JT-0150	ERT-1B2	GW-27	VOCs (\$VOAMW)	N	11/13/2012	16:00	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0152	R01-120314JT-0152	RB-01		VOCs (\$VOAMW)	N	11/14/2012	09:00	Rinsate Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0153	R01-120314JT-0153	TB-01		VOCs (\$VOAMW)	N	11/12/2012	07:00	Trip Blank	4	40 mL Vial	HCl	Ice, 4C

Special Instructions: Please email results to OSC Allen Jarrell at allen.allen@epa.gov.

USEPA Region 1

START III

Sampler Signatures: 
Date Hand Delivered: 11/15/2012

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners

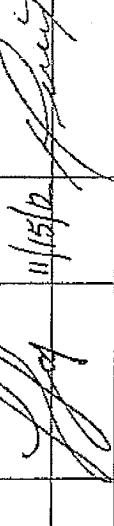
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 1-111512-1-10400-0011
 Site #: R01-120316TJ
 Lab: NERL/OEME
 Lab Contact: Doris Guzman

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT-0155	PE-V81031	VOCs (\$VOAMW)	N	11/11/2012	07:00	PE Aqueous		1	amber ampule	MeOH	Ice, 4C	
R01-120314JT-0142	ERT-1A	VOCs (\$VOAMW)	N	11/14/2012	09:25	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0144	MW-101D	VOCs (\$VOAMW)	N	11/13/2012	10:50	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0145	MW-102	VOCs (\$VOAMW)	N	11/13/2012	15:50	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0146	MW-103	VOCs (\$VOAMW)	N	11/14/2012	12:30	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0147	OSW-01	VOCs (\$VOAMW)	N	11/14/2012	12:05	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0148	ERT-2-IB	VOCs (\$VOAMW)	Y	11/14/2012	10:05	Ground Water		6	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0149	ERT-3-IB	VOCs (\$VOAMW)	N	11/14/2012	10:20	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0151	ERT-3-IB2	VOCs (\$VOAMW)	N	11/14/2012	10:20	Ground Water		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0154	TB-02	VOCs (\$VOAMW)	N	11/12/2012	07:00	Trip Blank		4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0156	PE-V81075	VOCs (\$VOAMW)	N	11/12/2012	07:00	PE Aqueous		1	amber ampule	MeOH	Ice, 4C	

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Samples		11/15/12		11/15/12	14:20						

Appendix E

Analytical Data

Analytical Data Packages	VOAs in Water
Analytical Data Packages	VOAs in Water
Analytical Data Packages	VOAs in Water
Analytical Data Packages	VOAs in Water



**United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431**

Page 1 of 40 FINAL

Laboratory Report

October 31, 2012

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 12100028

Project: Henry's Dry Cleaners - Laconia, NH

Analysis: VOAs in Water

Analyst: Joseph Montanaro

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-VOAGCMS9.

Samples were analyzed by GC/MS. Samples were introduced to the GC via a Tekmar pre-concentrator and an Archon autosampler. The analysis SOP is based on US EPA Method 8260B, method 5030B, rev 2.0 SW-846, Rev 2.0,1996. Method 624, 40CFR Part 136 Appendix A, July 1, 1992, and USEPA CLP SOW for Organic Analysis OLM04.2, 1999.

Date Samples Received by the Laboratory: 10/17/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

12100028\$VOAMW

Qualifiers:

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 5 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 3 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0112	Lab Sample ID:	AB34824
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 4 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0112	Lab Sample ID:	AB34824
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	120	74 - 136
Toluene-D8	94	85 - 118
1,4-Bromofluorobenzene	84	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
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Page 5 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5.0 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 6 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5.0 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	116	74 - 136
Toluene-D8	95	85 - 118
1,4-Bromofluorobenzene	85	78 - 111

Comments: Laboratory blank is associated with all samples in this project.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 7 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0113	Lab Sample ID:	AB34825
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 8 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0113	Lab Sample ID:	AB34825
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	87	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 9 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0114	Lab Sample ID:	AB34826
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 10 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0114	Lab Sample ID:	AB34826
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	120	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	87	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 11 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0115	Lab Sample ID:	AB34827
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	1.0	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 12 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0115	Lab Sample ID:	AB34827
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	126	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	89	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0116	Lab Sample ID:	AB34828
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 14 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0116	Lab Sample ID:	AB34828
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	128	74 - 136
Toluene-D8	94	85 - 118
1,4-Bromofluorobenzene	85	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 15 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0117	Lab Sample ID:	AB34829
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 16 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0117	Lab Sample ID:	AB34829
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	126	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	83	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 17 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0118	Lab Sample ID:	AB34830
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	1.2	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromoform	ND	1.0	J
75-27-4	Bromochloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0118	Lab Sample ID:	AB34830
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	130	74 - 136
Toluene-D8	94	85 - 118
1,4-Bromofluorobenzene	83	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
 Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 19 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0119	Lab Sample ID:	AB34831
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 20 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0119	Lab Sample ID:	AB34831
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	124	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	84	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 21 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0120	Lab Sample ID:	AB34832
Date of Collection:	10/17/2012	Matrix	SW
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	1.0	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0120	Lab Sample ID:	AB34832
Date of Collection:	10/17/2012	Matrix	SW
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	132	74 - 136
Toluene-D8	94	85 - 118
1,4-Bromofluorobenzene	84	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
 Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 23 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0121	Lab Sample ID:	AB34833
Date of Collection:	10/17/2012	Matrix	SW
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 24 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0121	Lab Sample ID:	AB34833
Date of Collection:	10/17/2012	Matrix	SW
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	129	74 - 136
Toluene-D8	95	85 - 118
1,4-Bromofluorobenzene	85	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
Results are qualified with J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 25 of 40 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0122	Lab Sample ID:	AB34834
Date of Collection:	10/17/2012	Matrix	Blank
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 26 of 40 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0122	Lab Sample ID:	AB34834
Date of Collection:	10/17/2012	Matrix	Blank
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	ND	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	123	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	86	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours. It was also analyzed beyond the 12 hour BFB requirement . Results are qualified with J.

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0123	Lab Sample ID:	AB34835
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	J
75-35-4	1,1-Dichloroethylene	ND	1.0	J
563-58-6	1,1-Dichloropropene	ND	1.0	J
75-34-3	1,1-dichloroethane	ND	1.0	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	J
96-18-4	1,2,3-Trichloropropane	ND	1.0	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	J
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	J
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	J
106-93-4	1,2-Dibromoethane	ND	1.0	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	J
107-06-2	1,2-Dichloroethane	ND	1.0	J
78-87-5	1,2-Dichloropropane	ND	1.0	J
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	J
142-28-9	1,3-Dichloropropane	ND	1.0	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	J
594-20-7	2,2-Dichloropropane	ND	1.0	J
78-93-3	2-Butanone (MEK)	ND	1.0	J
95-49-8	2-Chlorotoluene	ND	1.0	J
591-78-6	2-Hexanone	ND	1.0	J
67-64-1	2-Propanone (acetone)	ND	1.0	J
106-43-4	4-Chlorotoluene	ND	1.0	J
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	J
107-13-1	Acrylonitrile	ND	1.0	J
71-43-2	Benzene	ND	1.0	J
108-86-1	Bromobenzene	ND	1.0	J
74-97-5	Bromochloromethane	ND	1.0	J
75-27-4	Bromodichloromethane	ND	1.0	J
75-25-2	Bromoform	ND	1.0	J
74-83-9	Bromomethane	ND	1.0	J
75-15-0	Carbon Disulfide	ND	1.0	J
56-23-5	Carbon tetrachloride	ND	1.0	J
108-90-7	Chlorobenzene	ND	1.0	J
75-00-3	Chloroethane	ND	1.0	J
67-66-3	Chloroform	ND	1.0	J

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0123	Lab Sample ID:	AB34835
Date of Collection:	10/17/2012	Matrix	Pore Water
Date of Extraction:	10/23/12	Amount Prepared	5 mL
Date of Analysis:	10/23/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	J
124-48-1	Dibromochloromethane	ND	1.0	J
74-95-3	Dibromomethane	ND	1.0	J
75-71-8	Dichlorodifluoromethane	ND	1.0	J
60-29-7	Ethyl Ether	ND	1.0	J
100-41-4	Ethylbenzene	ND	1.0	J
87-68-3	Hexachlorobutadiene	ND	1.0	J
98-82-8	Isopropylbenzene	ND	1.0	J
108-38-3/106-42-	M/P Xylene	ND	2.0	J
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	J
75-09-2	Methylene Chloride	ND	1.0	J
104-51-8	N-Butylbenzene	ND	1.0	J
103-65-1	N-Propylbenzene	ND	1.0	J
91-20-3	Naphthalene	ND	1.0	J
95-47-6	Ortho Xylene	ND	1.0	J
99-87-6	Para-Isopropyltoluene	ND	1.0	J
135-98-8	Sec-Butylbenzene	ND	1.0	J
100-42-5	Styrene	ND	1.0	J
98-06-6	Tert-Butylbenzene	ND	1.0	J
127-18-4	Tetrachloroethylene	ND	1.0	J
109-99-9	Tetrahydrofuran	ND	1.0	J
108-88-3	Toluene	ND	1.0	J
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	J
79-01-6	Trichloroethylene	ND	1.0	J
75-69-4	Trichlorofluoromethane	ND	1.0	J
108-05-4	Vinyl Acetate	ND	1.0	J
75-01-4	Vinyl Chloride	5.3	1.0	J
10061-01-5	c-1,3-dichloropropene	ND	1.0	J
156-59-2	cis-1,2-Dichloroethylene	1.4	1.0	J
10061-02-6	t-1,3-Dichloropropene	ND	1.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	129	74 - 136
Toluene-D8	95	85 - 118
1,4-Bromofluorobenzene	83	78 - 111

Comments: This sample was received at a pH of 6 and analyzed outside the hold time period of twenty-four hours.
 Results are qualified with J.

VOA MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB34824

PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
1,1,1,2-Tetrachloroethane	20	ND	20	100	67 - 129
1,1,1-Trichloroethane	20	ND	22	110	75 - 139
1,1,2,2-Tetrachloroethane	20	ND	19	95	50 - 142
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	ND	21	105	55 - 135
1,1,2-Trichloroethane	20	ND	22	110	62 - 142
1,1-Dichloroethylene	20	ND	19	95	80 - 138
1,1-Dichloropropene	20	ND	19	95	73 - 131
1,1-dichloroethane	20	ND	21	105	61 - 152
1,2,3-Trichlorobenzene	20	ND	18	90	49 - 143
1,2,3-Trichloropropane	20	ND	19	95	53 - 135
1,2,4-Trichlorobenzene	20	ND	17	85	63 - 131
1,2,4-Trimethylbenzene	20	ND	20	100	79 - 142
1,2-Dibromo-3-Chloropropane	20	ND	19	95	28 - 122
1,2-Dibromoethane	20	ND	20	100	53 - 139
1,2-Dichlorobenzene	20	ND	19	95	74 - 129
1,2-Dichloroethane	20	ND	22	110	61 - 142
1,2-Dichloropropane	20	ND	19	95	71 - 126
1,3,5-Trimethylbenzene	20	ND	20	100	77 - 140
1,3-Dichlorobenzene	20	ND	19	95	78 - 127
1,3-Dichloropropane	20	ND	20	100	63 - 130
1,4-Dichlorobenzene	20	ND	18	90	72 - 131
2,2-Dichloropropane	20	ND	19	95	50 - 139
2-Butanone (MEK)	20	ND	21	105	29 - 163
2-Chlorotoluene	20	ND	19	95	74 - 134
2-Hexanone	20	ND	21	105	36 - 141
2-Propanone (acetone)	20	ND	22	110	29 - 164
4-Chlorotoluene	20	ND	19	95	68 - 141
4-Methyl-2-Pentanone(MIBK)	20	ND	20	100	35 - 139
Acrylonitrile	20	ND	22	110	42 - 150
Benzene	20	ND	21	105	78 - 134
Bromobenzene	20	ND	18	90	76 - 126
Bromochloromethane	20	ND	21	105	62 - 140
Bromodichloromethane	20	ND	20	100	62 - 133
Bromoform	20	ND	17	85	31 - 133
Bromomethane	20	ND	17	85	58 - 148
Carbon Disulfide	20	ND	20	100	66 - 135
Carbon tetrachloride	20	ND	21	105	62 - 146
Chlorobenzene	20	ND	21	105	74 - 139
Chloroethane	20	ND	21	105	65 - 145
Chloroform	20	ND	23	115	60 - 144
Chloromethane	20	ND	19	95	58 - 134
Dibromochloromethane	20	ND	19	95	34 - 140
Dibromomethane	20	ND	19	95	67 - 125
Dichlorodifluoromethane	20	ND	18	90	30 - 132
Ethyl Ether	20	ND	23	115	58 - 145
Ethylbenzene	20	ND	21	105	73 - 143
Hexachlorobutadiene	20	ND	16	80	56 - 144
Isopropylbenzene	20	ND	18	90	73 - 139

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 30 of 40

FINAL

M/P Xylene	40	ND	41	102	79 - 136
Methyl-t-Butyl Ether	20	ND	20	100	50 - 144
Methylene Chloride	20	ND	22	110	70 - 144
N-Butylbenzene	20	ND	20	100	68 - 143
N-Propylbenzene	20	ND	20	100	72 - 149
Naphthalene	20	ND	18	90	33 - 154
Ortho Xylene	20	ND	18	90	80 - 129
Para-Isopropyltoluene	20	ND	18	90	71 - 140
Sec-Butylbenzene	20	ND	20	100	75 - 148
Styrene	20	ND	19	95	61 - 148
Tert-Butylbenzene	20	ND	18	90	71 - 139
Tetrachloroethylene	20	ND	25	125	45 - 145
Tetrahydrofuran	20	ND	22	110	37 - 143
Toluene	20	ND	22	110	77 - 142
Trans-1,2-Dichloroethylene	20	ND	20	100	79 - 139
Trichloroethylene	20	ND	19	95	65 - 143
Trichlorofluoromethane	20	ND	23	115	58 - 161
Vinyl Acetate	20	ND	19	95	22 - 173
Vinyl Chloride	20	ND	20	100	68 - 139
c-1,3-dichloropropene	20	ND	18	90	51 - 144
cis-1,2-Dichloroethylene	20	ND	21	105	59 - 154
t-1,3-Dichloropropene	20	ND	18	90	47 - 145

Comments:

Sample ID: AB34824

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/L	MSD % REC	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	20	19	95	5	40
1,1,1-Trichloroethane	20	20	100	10	16
1,1,2,2-Tetrachloroethane	20	18	90	5	40
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	20	100	5	40
1,1,2-Trichloroethane	20	21	105	5	40
1,1-Dichloroethylene	20	19	95	0	35
1,1-Dichloropropene	20	18	90	5	40
1,1-dichloroethane	20	20	100	5	40
1,2,3-Trichlorobenzene	20	18	90	0	40
1,2,3-Trichloropropane	20	18	90	5	40
1,2,4-Trichlorobenzene	20	17	85	0	40
1,2,4-Trimethylbenzene	20	19	95	5	40
1,2-Dibromo-3-Chloropropane	20	19	95	0	40
1,2-Dibromoethane	20	19	95	5	40
1,2-Dichlorobenzene	20	19	95	0	40
1,2-Dichloroethane	20	20	100	10	23
1,2-Dichloropropane	20	18	90	5	40
1,3,5-Trimethylbenzene	20	19	95	5	40
1,3-Dichlorobenzene	20	18	90	5	40
1,3-Dichloropropane	20	19	95	5	40
1,4-Dichlorobenzene	20	18	90	0	21
2,2-Dichloropropane	20	18	90	5	40
2-Butanone (MEK)	20	20	100	5	40
2-Chlorotoluene	20	19	95	0	40
2-Hexanone	20	19	95	10	40
2-Propanone (acetone)	20	21	105	5	40
4-Chlorotoluene	20	19	95	0	40
4-Methyl-2-Pentanone(MIBK)	20	19	95	5	40
Acrylonitrile	20	21	105	5	40
Benzene	20	20	100	5	14
Bromobenzene	20	18	90	0	40
Bromochloromethane	20	21	105	0	40
Bromodichloromethane	20	19	95	5	21
Bromoform	20	17	85	0	40
Bromomethane	20	17	85	0	40
Carbon Disulfide	20	19	95	5	40
Carbon tetrachloride	20	19	95	10	19
Chlorobenzene	20	21	105	0	40
Chloroethane	20	22	110	5	40
Chloroform	20	21	105	9	16
Chloromethane	20	20	100	5	40
Dibromochloromethane	20	18	90	5	36
Dibromomethane	20	18	90	5	40
Dichlorodifluoromethane	20	18	90	0	40
Ethyl Ether	20	21	105	9	40
Ethylbenzene	20	20	100	5	40
Hexachlorobutadiene	20	16	80	0	40
Isopropylbenzene	20	17	85	6	40
M/P Xylene	40	40	100	2	40
Methyl-t-Butyl Ether	20	20	100	0	40
Methylene Chloride	20	21	105	5	40
N-Butylbenzene	20	19	95	5	40
N-Propylbenzene	20	19	95	5	40

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 32 of 40

FINAL

Naphthalene	20	17	85	6	40
Ortho Xylene	20	18	90	0	40
Para-Isopropyltoluene	20	17	85	6	40
Sec-Butylbenzene	20	19	95	5	40
Styrene	20	18	90	5	40
Tert-Butylbenzene	20	17	85	6	40
Tetrachloroethylene	20	24	120	4	40
Tetrahydrofuran	20	21	105	5	40
Toluene	20	21	105	5	40
Trans-1,2-Dichloroethylene	20	19	95	5	40
Trichloroethylene	20	18	90	5	22
Trichlorofluoromethane	20	23	115	0	40
Vinyl Acetate	20	18	90	5	40
Vinyl Chloride	20	20	100	0	19
c-1,3-dichloropropene	20	18	90	0	40
cis-1,2-Dichloroethylene	20	21	105	0	40
t-1,3-Dichloropropene	20	18	90	0	40

Comments:

Laboratory Duplicate Results

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB34824

PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUPLICATE RESULT ug/L	PRECISION RPD %	QC LIMITS
1,1,1,2-Tetrachloroethane	ND	ND	ND	30
1,1,1-Trichloroethane	ND	ND	ND	30
1,1,2,2-Tetrachloroethane	ND	ND	ND	30
1,1,2-Trichloro-1,2,2-Trifluoroeth	ND	ND	ND	30
1,1,2-Trichloroethane	ND	ND	ND	30
1,1-Dichloroethylene	ND	ND	ND	30
1,1-Dichloropropene	ND	ND	ND	30
1,1-dichloroethane	ND	ND	ND	30
1,2,3-Trichlorobenzene	ND	ND	ND	30
1,2,3-Trichloropropane	ND	ND	ND	30
1,2,4-Trichlorobenzene	ND	ND	ND	30
1,2,4-Trimethylbenzene	ND	ND	ND	30
1,2-Dibromo-3-Chloropropane	ND	ND	ND	30
1,2-Dibromoethane	ND	ND	ND	30
1,2-Dichlorobenzene	ND	ND	ND	30
1,2-Dichloroethane	ND	ND	ND	30
1,2-Dichloropropane	ND	ND	ND	30
1,3,5-Trimethylbenzene	ND	ND	ND	30
1,3-Dichlorobenzene	ND	ND	ND	30
1,3-Dichloropropane	ND	ND	ND	30
1,4-Dichlorobenzene	ND	ND	ND	30
2,2-Dichloropropane	ND	ND	ND	30
2-Butanone (MEK)	ND	ND	ND	30
2-Chlorotoluene	ND	ND	ND	30
2-Hexanone	ND	ND	ND	30
2-Propanone (acetone)	ND	ND	ND	30
4-Chlorotoluene	ND	ND	ND	30
4-Methyl-2-Pentanone(MIBK)	ND	ND	ND	30
Acrylonitrile	ND	ND	ND	30
Benzene	ND	ND	ND	30
Bromobenzene	ND	ND	ND	30
Bromochloromethane	ND	ND	ND	30
Bromodichloromethane	ND	ND	ND	30
Bromoform	ND	ND	ND	30
Bromomethane	ND	ND	ND	30
Carbon Disulfide	ND	ND	ND	30
Carbon tetrachloride	ND	ND	ND	30
Chlorobenzene	ND	ND	ND	30
Chloroethane	ND	ND	ND	30
Chloroform	ND	ND	ND	30
Chloromethane	ND	ND	ND	30
Dibromochloromethane	ND	ND	ND	30
Dibromomethane	ND	ND	ND	30
Dichlorodifluoromethane	ND	ND	ND	30
Ethyl Ether	ND	ND	ND	30
Ethylbenzene	ND	ND	ND	30
Hexachlorobutadiene	ND	ND	ND	30
Isopropylbenzene	ND	ND	ND	30
M/P Xylene	ND	ND	ND	30

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 34 of 40

FINAL

Methyl-t-Butyl Ether	ND	ND	ND	30
Methylene Chloride	ND	ND	ND	30
N-Butylbenzene	ND	ND	ND	30
N-Propylbenzene	ND	ND	ND	30
Naphthalene	ND	ND	ND	30
Ortho Xylene	ND	ND	ND	30
Para-Isopropyltoluene	ND	ND	ND	30
Sec-Butylbenzene	ND	ND	ND	30
Styrene	ND	ND	ND	30
Tert-Butylbenzene	ND	ND	ND	30
Tetrachloroethylene	ND	ND	ND	30
Tetrahydrofuran	ND	ND	ND	30
Toluene	ND	ND	ND	30
Trans-1,2-Dichloroethylene	ND	ND	ND	30
Trichloroethylene	ND	ND	ND	30
Trichlorofluoromethane	ND	ND	ND	30
Vinyl Acetate	ND	ND	ND	30
Vinyl Chloride	ND	ND	ND	30
c-1,3-dichloropropene	ND	ND	ND	30
cis-1,2-Dichloroethylene	ND	ND	ND	30
t-1,3-Dichloropropene	ND	ND	ND	30

Laboratory Fortified Blank (LFB) Results

Henry's Dry Cleaners - Laconia, NH

PARAMETER	LFB AMOUNT SPIKED ug/mL	LFB RESULT ug/mL	LFB RECOVERY %	QC LIMITS %
1,1,1,2-Tetrachloroethane	20	19	95	79 - 136
1,1,1-Trichloroethane	20	21	105	75 - 146
1,1,2,2-Tetrachloroethane	20	16	80	62 - 141
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	17	85	56 - 130
1,1,2-Trichloroethane	20	19	95	75 - 138
1,1-Dichloroethylene	20	19	95	75 - 136
1,1-Dichloropropene	20	19	95	77 - 137
1,1-dichloroethane	20	21	105	76 - 142
1,2,3-Trichlorobenzene	20	17	85	64 - 143
1,2,3-Trichloropropane	20	15	75	66 - 133
1,2,4-Trichlorobenzene	20	17	85	80 - 131
1,2,4-Trimethylbenzene	20	20	100	74 - 155
1,2-Dibromo-3-Chloropropane	20	14	70	37 - 139
1,2-Dibromoethane	20	17	85	72 - 135
1,2-Dichlorobenzene	20	18	90	85 - 128
1,2-Dichloroethane	20	19	95	74 - 138
1,2-Dichloropropane	20	19	95	83 - 124
1,3,5-Trimethylbenzene	20	20	100	80 - 145
1,3-Dichlorobenzene	20	19	95	84 - 130
1,3-Dichloropropane	20	18	90	77 - 129
1,4-Dichlorobenzene	20	18	90	82 - 128
2,2-Dichloropropane	20	20	100	32 - 171
2-Butanone (MEK)	20	16	80	38 - 179
2-Chlorotoluene	20	19	95	78 - 134
2-Hexanone	20	16	80	45 - 158
2-Propanone (acetone)	20	14	70	14 - 209
4-Chlorotoluene	20	19	95	75 - 144
4-Methyl-2-Pentanone(MIBK)	20	15	75	40 - 144
Acrylonitrile	20	17	85	52 - 154
Benzene	20	21	105	83 - 130
Bromobenzene	20	18	90	85 - 126
Bromochloromethane	20	20	100	69 - 137
Bromodichloromethane	20	19	95	70 - 143
Bromoform	20	15	75	51 - 136
Bromomethane	20	18	90	65 - 140
Carbon Disulfide	20	20	100	68 - 140
Carbon tetrachloride	20	20	100	70 - 144
Chlorobenzene	20	20	100	84 - 131
Chloroethane	20	23	115	70 - 134
Chloroform	20	21	105	76 - 141
Chloromethane	20	21	105	63 - 123
Dibromochloromethane	20	17	85	39 - 154
Dibromomethane	20	18	90	79 - 124
Dichlorodifluoromethane	20	20	100	37 - 117
Ethyl Ether	20	20	100	67 - 140
Ethylbenzene	20	20	100	81 - 133
Hexachlorobutadiene	20	17	85	68 - 146
Isopropylbenzene	20	18	90	78 - 137
M/P Xylene	40	41	103	68 - 155
Methyl-t-Butyl Ether	20	18	90	63 - 144
Methylene Chloride	20	21	105	75 - 140
N-Butylbenzene	20	20	100	69 - 147

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 36 of 40 **FINAL**

N-Propylbenzene	20	20	100	76 - 138
Naphthalene	20	15	75	53 - 155
Ortho Xylene	20	19	95	85 - 135
Para-Isopropyltoluene	20	18	90	77 - 141
Sec-Butylbenzene	20	20	100	80 - 141
Styrene	20	18	90	82 - 139
Tert-Butylbenzene	20	18	90	75 - 144
Tetrachloroethylene	20	23	115	32 - 173
Tetrahydrofuran	20	16	80	47 - 149
Toluene	20	21	105	85 - 134
Trans-1,2-Dichloroethylene	20	20	100	80 - 138
Trichloroethylene	20	19	95	76 - 135
Trichlorofluoromethane	20	20	100	60 - 149
Vinyl Acetate	20	16	80	38 - 187
Vinyl Chloride	20	22	110	66 - 133
c-1,3-dichloropropene	20	17	85	68 - 149
cis-1,2-Dichloroethylene	20	21	105	76 - 143
t-1,3-Dichloropropene	20	17	85	62 - 160

Comments:

LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION ug/L	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	19	95	0	50
1,1,1-Trichloroethane	20	100	5	50
1,1,2,2-Tetrachloroethane	16	80	0	50
1,1,2-Trichloro-1,2,2-Trifluoroetha	21	105	21	50
1,1,2-Trichloroethane	19	95	0	50
1,1-Dichloroethylene	18	90	5	52
1,1-Dichloropropene	18	90	5	50
1,1-dichloroethane	20	100	5	50
1,2,3-Trichlorobenzene	17	85	0	50
1,2,3-Trichloropropane	15	75	0	50
1,2,4-Trichlorobenzene	17	85	0	50
1,2,4-Trimethylbenzene	20	100	0	50
1,2-Dibromo-3-Chloropropane	14	70	0	50
1,2-Dibromoethane	17	85	0	50
1,2-Dichlorobenzene	18	90	0	50
1,2-Dichloroethane	19	95	0	50
1,2-Dichloropropane	18	90	5	50
1,3,5-Trimethylbenzene	19	95	5	50
1,3-Dichlorobenzene	18	90	5	50
1,3-Dichloropropane	18	90	0	50
1,4-Dichlorobenzene	18	90	0	50
2,2-Dichloropropane	19	95	5	50
2-Butanone (MEK)	16	80	0	50
2-Chlorotoluene	19	95	0	50
2-Hexanone	17	85	6	50
2-Propanone (acetone)	18	90	25	50
4-Chlorotoluene	19	95	0	50
4-Methyl-2-Pentanone(MIBK)	16	80	7	50
Acrylonitrile	17	85	0	50
Benzene	20	100	5	50
Bromobenzene	17	85	6	50
Bromochloromethane	20	100	0	50
Bromodichloromethane	18	90	5	50
Bromoform	14	70	7	50
Bromomethane	16	80	12	50
Carbon Disulfide	19	95	5	50
Carbon tetrachloride	19	95	5	50
Chlorobenzene	20	100	0	34
Chloroethane	22	110	4	50
Chloroform	21	105	0	50
Chloromethane	20	100	5	50
Dibromochloromethane	17	85	0	50
Dibromomethane	17	85	6	50
Dichlorodifluoromethane	18	90	11	50
Ethyl Ether	20	100	0	50
Ethylbenzene	20	100	0	50
Hexachlorobutadiene	16	80	6	50
Isopropylbenzene	17	85	6	50
M/P Xylene	40	100	3	50
Methyl-t-Butyl Ether	18	90	0	50
Methylene Chloride	21	105	0	50
N-Butylbenzene	19	95	5	50
N-Propylbenzene	19	95	5	50
Naphthalene	15	75	0	50
Ortho Xylene	18	90	5	50

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 38 of 40

FINAL

Para-Isopropyltoluene	17	85	6	50
Sec-Butylbenzene	20	100	0	50
Styrene	18	90	0	50
Tert-Butylbenzene	17	85	6	50
Tetrachloroethylene	23	115	0	50
Tetrahydrofuran	16	80	0	50
Toluene	20	100	5	50
Trans-1,2-Dichloroethylene	19	95	5	50
Trichloroethylene	18	90	5	27
Trichlorofluoromethane	25	125	22	50
Vinyl Acetate	16	80	0	50
Vinyl Chloride	21	105	5	50
c-1,3-dichloropropene	17	85	0	50
cis-1,2-Dichloroethylene	20	100	5	50
t-1,3-Dichloropropene	17	85	0	50

Samples in Batch: AB34824, AB34825, AB34826, AB34827, AB34828, AB34829, AB34830,
AB34831, AB34832, AB34833, AB34834, AB34835

Page 1 of 2

Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

CHAIN OF CUSTODY RECORD

No: 1-101712-122244-0010
Site #: R01-120316TJ

Site #: R01-120316TJ

Kap. NERVOENE

Contact Name: Allen Jarrell
Contact Phone: 617 312 4717

Lab Contact: Doris Guzman

Lab #	Sample #	Location	Analyses	Collected	Sample Time	Matrix	Number Cont	Container	Preservati ve	Sample_Remar ks	MS/MS D
	R01-120314JT-0112	ERTPW-5	VOC	10/16/2012	04:10	Pore Water	12	40 mL vial	None		
	R01-120314JT-0113	ERTPW-6	VOC	10/16/2012	04:25	Pore Water	4	40 mL vial	None		
	R01-120314JT-0114	ERTPW-7	VOC	10/17/2012	09:05	Pore Water	4	40 mL vial	None		
	R01-120314JT-0115	ERTPW-7B	VOC	10/17/2012	09:15	Pore Water	4	40 mL vial	None		
	R01-120314JT-0116	ERTPW-8	VOC	10/17/2012	09:35	Pore Water	4	40 mL vial	None		
	R01-120314JT-0117	ERTPW-9	VOC	10/17/2012	10:00	Pore Water	4	40 mL vial	None		
	R01-120314JT-0118	ERTPW-10	VOC	10/17/2012	12:00	Pore Water	4	40 mL vial	None		
	R01-120314JT-0119	ERTPW-13	VOC	10/17/2012	01:15	Pore Water	4	40 mL vial	None		
	R01-120314JT-0120	ERTSW-1	VOC	10/17/2012	01:55	Surface Water	4	40 mL vial	None		
	R01-120314JT-0121	ERTSW-2	VOC	10/17/2012	02:05	Surface Water	4	40 mL vial	None		
	R01-120314JT-0122	Trip Blank		10/17/2012	12:00	Blank	4				

SAMPLES TRANSFERRED FROM

SAMPLES TRANSFERRED FROM

USEPA Region 1
Page 2 of 2

START III

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners/MA
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 1-101712-122244-0010

Site #: RU-1203161J

Lab. NERDUEME

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Special Instructions:	
SAMPLES TRANSFERRED FROM	
CHAIN OF CUSTODY #	



**United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431**

Page 1 of 27 FINAL

Laboratory Report

October 25, 2012

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 12100023

Project: Henry's Dry Cleaners - Laconia, NH
Analysis: VOAs in Water
Analyst: Joseph Montanaro

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-VOAGCMS9.

Samples were analyzed by GC/MS. Samples were introduced to the GC via a Tekmar pre-concentrator and an Archon autosampler. The analysis SOP is based on US EPA Method 8260B, method 5030B, rev 2.0 SW-846, Rev 2.0, 1996. Method 624, 40CFR Part 136 Appendix A, July 1, 1992, and USEPA CLP SOW for Organic Analysis OLM04.2, 1999.

Date Samples Received by the Laboratory: 10/17/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

12100023\$VOAMW

Qualifiers: RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 5 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 3 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0106	Lab Sample ID:	AB34662
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 4 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0106	Lab Sample ID:	AB34662
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	2.4	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	116	74 - 136
Toluene-D8	94	85 - 118
1,4-Bromofluorobenzene	86	78 - 111

Comments: Samples analyzed within twenty-four hours of initial hold time.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 5 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5.0 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 6 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5.0 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	95	85 - 118
1,4-Bromofluorobenzene	86	78 - 111

Comments: Laboratory blank is associated with all samples in this project.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 7 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0107	Lab Sample ID:	AB34663
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	
71-55-6	1,1,1-Trichloroethane	ND	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	
79-00-5	1,1,2-Trichloroethane	ND	5.0	
75-35-4	1,1-Dichloroethylene	ND	5.0	
563-58-6	1,1-Dichloropropene	ND	5.0	
75-34-3	1,1-dichloroethane	ND	5.0	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	
96-18-4	1,2,3-Trichloropropane	ND	5.0	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5.0	
106-93-4	1,2-Dibromoethane	ND	5.0	
95-50-1	1,2-Dichlorobenzene	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	5.0	
78-87-5	1,2-Dichloropropane	ND	5.0	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	
541-73-1	1,3-Dichlorobenzene	ND	5.0	
142-28-9	1,3-Dichloropropane	ND	5.0	
106-46-7	1,4-Dichlorobenzene	ND	5.0	
594-20-7	2,2-Dichloropropane	ND	5.0	
78-93-3	2-Butanone (MEK)	ND	5.0	
95-49-8	2-Chlorotoluene	ND	5.0	
591-78-6	2-Hexanone	ND	5.0	
67-64-1	2-Propanone (acetone)	ND	5.0	
106-43-4	4-Chlorotoluene	ND	5.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5.0	
107-13-1	Acrylonitrile	ND	5.0	
71-43-2	Benzene	ND	5.0	
108-86-1	Bromobenzene	ND	5.0	
74-97-5	Bromochloromethane	ND	5.0	
75-27-4	Bromodichloromethane	ND	5.0	
75-25-2	Bromoform	ND	5.0	
74-83-9	Bromomethane	ND	5.0	
75-15-0	Carbon Disulfide	ND	5.0	
56-23-5	Carbon tetrachloride	ND	5.0	
108-90-7	Chlorobenzene	ND	5.0	
75-00-3	Chloroethane	ND	5.0	
67-66-3	Chloroform	ND	5.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 8 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0107	Lab Sample ID:	AB34663
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	5.0	
124-48-1	Dibromochloromethane	ND	5.0	
74-95-3	Dibromomethane	ND	5.0	
75-71-8	Dichlorodifluoromethane	ND	5.0	
60-29-7	Ethyl Ether	ND	5.0	
100-41-4	Ethylbenzene	ND	5.0	
87-68-3	Hexachlorobutadiene	ND	5.0	
98-82-8	Isopropylbenzene	ND	5.0	
108-38-3/106-42-	M/P Xylene	ND	10	
1634-04-4	Methyl-t-Butyl Ether	ND	5.0	
75-09-2	Methylene Chloride	ND	5.0	
104-51-8	N-Butylbenzene	ND	5.0	
103-65-1	N-Propylbenzene	ND	5.0	
91-20-3	Naphthalene	ND	5.0	
95-47-6	Ortho Xylene	ND	5.0	
99-87-6	Para-Isopropyltoluene	ND	5.0	
135-98-8	Sec-Butylbenzene	ND	5.0	
100-42-5	Styrene	ND	5.0	
98-06-6	Tert-Butylbenzene	ND	5.0	
127-18-4	Tetrachloroethylene	330	5.0	
109-99-9	Tetrahydrofuran	ND	5.0	
108-88-3	Toluene	ND	5.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	5.0	
79-01-6	Trichloroethylene	24	5.0	
75-69-4	Trichlorofluoromethane	ND	5.0	
108-05-4	Vinyl Acetate	ND	5.0	
75-01-4	Vinyl Chloride	ND	5.0	
10061-01-5	c-1,3-dichloropropene	ND	5.0	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	
10061-02-6	t-1,3-Dichloropropene	ND	5.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	117	74 - 136
Toluene-D8	95	85 - 118
1,4-Bromofluorobenzene	82	78 - 111

Comments: Samples analyzed within twenty-four hours of initial hold time.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 9 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0108	Lab Sample ID:	AB34664
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	10
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	
71-55-6	1,1,1-Trichloroethane	ND	10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	
79-00-5	1,1,2-Trichloroethane	ND	10	
75-35-4	1,1-Dichloroethylene	ND	10	
563-58-6	1,1-Dichloropropene	ND	10	
75-34-3	1,1-dichloroethane	ND	10	
87-61-6	1,2,3-Trichlorobenzene	ND	10	
96-18-4	1,2,3-Trichloropropane	ND	10	
120-82-1	1,2,4-Trichlorobenzene	ND	10	
95-63-6	1,2,4-Trimethylbenzene	ND	10	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	10	
106-93-4	1,2-Dibromoethane	ND	10	
95-50-1	1,2-Dichlorobenzene	ND	10	
107-06-2	1,2-Dichloroethane	ND	10	
78-87-5	1,2-Dichloropropane	ND	10	
108-67-8	1,3,5-Trimethylbenzene	ND	10	
541-73-1	1,3-Dichlorobenzene	ND	10	
142-28-9	1,3-Dichloropropane	ND	10	
106-46-7	1,4-Dichlorobenzene	ND	10	
594-20-7	2,2-Dichloropropane	ND	10	
78-93-3	2-Butanone (MEK)	ND	10	
95-49-8	2-Chlorotoluene	ND	10	
591-78-6	2-Hexanone	ND	10	
67-64-1	2-Propanone (acetone)	ND	10	
106-43-4	4-Chlorotoluene	ND	10	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	10	
107-13-1	Acrylonitrile	ND	10	
71-43-2	Benzene	ND	10	
108-86-1	Bromobenzene	ND	10	
74-97-5	Bromochloromethane	ND	10	
75-27-4	Bromodichloromethane	ND	10	
75-25-2	Bromoform	ND	10	
74-83-9	Bromomethane	ND	10	
75-15-0	Carbon Disulfide	ND	10	
56-23-5	Carbon tetrachloride	ND	10	
108-90-7	Chlorobenzene	ND	10	
75-00-3	Chloroethane	ND	10	
67-66-3	Chloroform	ND	10	

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0108	Lab Sample ID:	AB34664
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	10
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	10	
124-48-1	Dibromochloromethane	ND	10	
74-95-3	Dibromomethane	ND	10	
75-71-8	Dichlorodifluoromethane	ND	10	
60-29-7	Ethyl Ether	ND	10	
100-41-4	Ethylbenzene	ND	10	
87-68-3	Hexachlorobutadiene	ND	10	
98-82-8	Isopropylbenzene	ND	10	
108-38-3/106-42-	M/P Xylene	ND	20	
1634-04-4	Methyl-t-Butyl Ether	ND	10	
75-09-2	Methylene Chloride	ND	10	
104-51-8	N-Butylbenzene	ND	10	
103-65-1	N-Propylbenzene	ND	10	
91-20-3	Naphthalene	ND	10	
95-47-6	Ortho Xylene	ND	10	
99-87-6	Para-Isopropyltoluene	ND	10	
135-98-8	Sec-Butylbenzene	ND	10	
100-42-5	Styrene	ND	10	
98-06-6	Tert-Butylbenzene	ND	10	
127-18-4	Tetrachloroethylene	ND	10	
109-99-9	Tetrahydrofuran	ND	10	
108-88-3	Toluene	ND	10	
156-60-5	Trans-1,2-Dichloroethylene	25	10	
79-01-6	Trichloroethylene	ND	10	
75-69-4	Trichlorofluoromethane	ND	10	
108-05-4	Vinyl Acetate	ND	10	
75-01-4	Vinyl Chloride	ND	10	
10061-01-5	c-1,3-dichloropropene	ND	10	
156-59-2	cis-1,2-Dichloroethylene	680	10	
10061-02-6	t-1,3-Dichloropropene	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	95	85 - 118
1,4-Bromofluorobenzene	84	78 - 111

Comments: Samples analyzed within twenty-four hours of initial hold time.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 11 of 27 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0109	Lab Sample ID:	AB34665
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	10
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	
71-55-6	1,1,1-Trichloroethane	ND	10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	
79-00-5	1,1,2-Trichloroethane	ND	10	
75-35-4	1,1-Dichloroethylene	ND	10	
563-58-6	1,1-Dichloropropene	ND	10	
75-34-3	1,1-dichloroethane	ND	10	
87-61-6	1,2,3-Trichlorobenzene	ND	10	
96-18-4	1,2,3-Trichloropropane	ND	10	
120-82-1	1,2,4-Trichlorobenzene	ND	10	
95-63-6	1,2,4-Trimethylbenzene	ND	10	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	10	
106-93-4	1,2-Dibromoethane	ND	10	
95-50-1	1,2-Dichlorobenzene	ND	10	
107-06-2	1,2-Dichloroethane	ND	10	
78-87-5	1,2-Dichloropropane	ND	10	
108-67-8	1,3,5-Trimethylbenzene	ND	10	
541-73-1	1,3-Dichlorobenzene	ND	10	
142-28-9	1,3-Dichloropropane	ND	10	
106-46-7	1,4-Dichlorobenzene	ND	10	
594-20-7	2,2-Dichloropropane	ND	10	
78-93-3	2-Butanone (MEK)	ND	10	
95-49-8	2-Chlorotoluene	ND	10	
591-78-6	2-Hexanone	ND	10	
67-64-1	2-Propanone (acetone)	ND	10	
106-43-4	4-Chlorotoluene	ND	10	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	10	
107-13-1	Acrylonitrile	ND	10	
71-43-2	Benzene	ND	10	
108-86-1	Bromobenzene	ND	10	
74-97-5	Bromochloromethane	ND	10	
75-27-4	Bromodichloromethane	ND	10	
75-25-2	Bromoform	ND	10	
74-83-9	Bromomethane	ND	10	
75-15-0	Carbon Disulfide	ND	10	
56-23-5	Carbon tetrachloride	ND	10	
108-90-7	Chlorobenzene	ND	10	
75-00-3	Chloroethane	ND	10	
67-66-3	Chloroform	ND	10	

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0109	Lab Sample ID:	AB34665
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	10
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	10	
124-48-1	Dibromochloromethane	ND	10	
74-95-3	Dibromomethane	ND	10	
75-71-8	Dichlorodifluoromethane	ND	10	
60-29-7	Ethyl Ether	ND	10	
100-41-4	Ethylbenzene	ND	10	
87-68-3	Hexachlorobutadiene	ND	10	
98-82-8	Isopropylbenzene	ND	10	
108-38-3/106-42-	M/P Xylene	ND	20	
1634-04-4	Methyl-t-Butyl Ether	ND	10	
75-09-2	Methylene Chloride	ND	10	
104-51-8	N-Butylbenzene	ND	10	
103-65-1	N-Propylbenzene	ND	10	
91-20-3	Naphthalene	ND	10	
95-47-6	Ortho Xylene	ND	10	
99-87-6	Para-Isopropyltoluene	ND	10	
135-98-8	Sec-Butylbenzene	ND	10	
100-42-5	Styrene	ND	10	
98-06-6	Tert-Butylbenzene	ND	10	
127-18-4	Tetrachloroethylene	ND	10	
109-99-9	Tetrahydrofuran	ND	10	
108-88-3	Toluene	ND	10	
156-60-5	Trans-1,2-Dichloroethylene	23	10	
79-01-6	Trichloroethylene	ND	10	
75-69-4	Trichlorofluoromethane	ND	10	
108-05-4	Vinyl Acetate	ND	10	
75-01-4	Vinyl Chloride	ND	10	
10061-01-5	c-1,3-dichloropropene	ND	10	
156-59-2	cis-1,2-Dichloroethylene	650	10	
10061-02-6	t-1,3-Dichloropropene	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	102	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	84	78 - 111

Comments: Samples analyzed within twenty-four hours of initial hold time.

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0110	Lab Sample ID:	AB34666
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromoform	ND	50	
75-27-4	Bromochloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 14 of 27 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0110	Lab Sample ID:	AB34666
Date of Collection:	10/16/2012	Matrix	Pore Water
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	50	
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-	M/P Xylene	ND	100	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
75-09-2	Methylene Chloride	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
91-20-3	Naphthalene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	1800	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	230	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
156-59-2	cis-1,2-Dichloroethylene	110	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	121	74 - 136
Toluene-D8	94	85 - 118
1,4-Bromofluorobenzene	83	78 - 111

Comments: Samples analyzed within twenty-four hours of initial hold time.

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0111	Lab Sample ID:	AB34667
Date of Collection:	10/16/2012	Matrix	Blank
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 16 of 27 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0111	Lab Sample ID:	AB34667
Date of Collection:	10/16/2012	Matrix	Blank
Date of Extraction:	10/17/12	Amount Prepared	5 mL
Date of Analysis:	10/17/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	114	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	84	78 - 111

Comments: Samples analyzed within twenty-four hours of initial hold time.

VOA MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB34666

PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
1,1,1,2-Tetrachloroethane	1,000	ND	960	96	67 - 129
1,1,1-Trichloroethane	1,000	ND	980	98	75 - 139
1,1,2,2-Tetrachloroethane	1,000	ND	1100	110	50 - 142
1,1,2-Trichloro-1,2,2-Trifluoroethane	1,000	ND	900	90	55 - 135
1,1,2-Trichloroethane	1,000	ND	1100	110	62 - 142
1,1-Dichloroethylene	1,000	ND	850	85	80 - 138
1,1-Dichloropropene	1,000	ND	890	89	73 - 131
1,1-dichloroethane	1,000	ND	970	97	61 - 152
1,2,3-Trichlorobenzene	1,000	ND	940	94	49 - 143
1,2,3-Trichloropropane	1,000	ND	1000	100	53 - 135
1,2,4-Trichlorobenzene	1,000	ND	870	87	63 - 131
1,2,4-Trimethylbenzene	1,000	ND	980	98	79 - 142
1,2-Dibromo-3-Chloropropane	1,000	ND	1000	100	28 - 122
1,2-Dibromoethane	1,000	ND	990	99	53 - 139
1,2-Dichlorobenzene	1,000	ND	940	94	74 - 129
1,2-Dichloroethane	1,000	ND	1000	100	61 - 142
1,2-Dichloropropane	1,000	ND	910	91	71 - 126
1,3,5-Trimethylbenzene	1,000	ND	960	96	77 - 140
1,3-Dichlorobenzene	1,000	ND	910	91	78 - 127
1,3-Dichloropropane	1,000	ND	1000	100	63 - 130
1,4-Dichlorobenzene	1,000	ND	900	90	72 - 131
2,2-Dichloropropane	1,000	ND	910	91	50 - 139
2-Butanone (MEK)	1,000	ND	1200	120	29 - 163
2-Chlorotoluene	1,000	ND	930	93	74 - 134
2-Hexanone	1,000	ND	1200	120	36 - 141
2-Propanone (acetone)	1,000	ND	1100	110	29 - 164
4-Chlorotoluene	1,000	ND	930	93	68 - 141
4-Methyl-2-Pentanone(MIBK)	1,000	ND	1100	110	35 - 139
Acrylonitrile	1,000	ND	1100	110	42 - 150
Benzene	1,000	ND	970	97	78 - 134
Bromobenzene	1,000	ND	900	90	76 - 126
Bromochloromethane	1,000	ND	1000	100	62 - 140
Bromodichloromethane	1,000	ND	950	95	62 - 133
Bromoform	1,000	ND	860	86	31 - 133
Bromomethane	1,000	ND	780	78	58 - 148
Carbon Disulfide	1,000	ND	890	89	66 - 135
Carbon tetrachloride	1,000	ND	950	95	62 - 146
Chlorobenzene	1,000	ND	1000	100	74 - 139
Chloroethane	1,000	ND	960	96	65 - 145
Chloroform	1,000	ND	1000	100	60 - 144
Chloromethane	1,000	ND	900	90	58 - 134
Dibromochloromethane	1,000	ND	910	91	34 - 140
Dibromomethane	1,000	ND	970	97	67 - 125
Dichlorodifluoromethane	1,000	ND	870	87	30 - 132
Ethyl Ether	1,000	ND	1100	110	58 - 145
Ethylbenzene	1,000	ND	980	98	73 - 143
Hexachlorobutadiene	1,000	ND	780	78	56 - 144
Isopropylbenzene	1,000	ND	860	86	73 - 139

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 18 of 27

FINAL

M/P Xylene	2,000	ND	2000	100	79 - 136
Methyl-t-Butyl Ether	1,000	ND	960	96	50 - 144
Methylene Chloride	1,000	ND	1000	100	70 - 144
N-Butylbenzene	1,000	ND	980	98	68 - 143
N-Propylbenzene	1,000	ND	940	94	72 - 149
Naphthalene	1,000	ND	950	95	33 - 154
Ortho Xylene	1,000	ND	890	89	80 - 129
Para-Isopropyltoluene	1,000	ND	860	86	71 - 140
Sec-Butylbenzene	1,000	ND	970	97	75 - 148
Styrene	1,000	ND	910	91	61 - 148
Tert-Butylbenzene	1,000	ND	860	86	71 - 139
Tetrachloroethylene	1,000	1800	2500	70	45 - 145
Tetrahydrofuran	1,000	ND	1200	120	37 - 143
Toluene	1,000	ND	1000	100	77 - 142
Trans-1,2-Dichloroethylene	1,000	ND	910	91	79 - 139
Trichloroethylene	1,000	230	1100	87	65 - 143
Trichlorofluoromethane	1,000	ND	1300	130	58 - 161
Vinyl Acetate	1,000	ND	940	94	22 - 173
Vinyl Chloride	1,000	ND	940	94	68 - 139
c-1,3-dichloropropene	1,000	ND	870	87	51 - 144
cis-1,2-Dichloroethylene	1,000	110	1100	99	59 - 154
t-1,3-Dichloropropene	1,000	ND	880	88	47 - 145

Comments:

Sample ID: AB34666

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/L	MSD % REC	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	1,000	1000	100	4	40
1,1,1-Trichloroethane	1,000	1100	110	12	16
1,1,2,2-Tetrachloroethane	1,000	1100	110	0	40
1,1,2-Trichloro-1,2,2-Trifluoroethane	1,000	1000	100	11	40
1,1,2-Trichloroethane	1,000	1100	110	0	40
1,1-Dichloroethylene	1,000	960	96	12	35
1,1-Dichloropropene	1,000	960	96	8	40
1,1-dichloroethane	1,000	1000	100	3	40
1,2,3-Trichlorobenzene	1,000	980	98	4	40
1,2,3-Trichloropropane	1,000	1000	100	0	40
1,2,4-Trichlorobenzene	1,000	930	93	7	40
1,2,4-Trimethylbenzene	1,000	1000	100	2	40
1,2-Dibromo-3-Chloropropane	1,000	1000	100	0	40
1,2-Dibromoethane	1,000	1000	100	1	40
1,2-Dichlorobenzene	1,000	980	98	4	40
1,2-Dichloroethane	1,000	1000	100	0	23
1,2-Dichloropropane	1,000	970	97	6	40
1,3,5-Trimethylbenzene	1,000	1000	100	4	40
1,3-Dichlorobenzene	1,000	970	97	6	40
1,3-Dichloropropane	1,000	1000	100	0	40
1,4-Dichlorobenzene	1,000	950	95	5	21
2,2-Dichloropropane	1,000	990	99	8	40
2-Butanone (MEK)	1,000	1300	130	8	40
2-Chlorotoluene	1,000	980	98	5	40
2-Hexanone	1,000	1200	120	0	40
2-Propanone (acetone)	1,000	1300	130	17	40
4-Chlorotoluene	1,000	990	99	6	40
4-Methyl-2-Pentanone(MIBK)	1,000	1200	120	9	40
Acrylonitrile	1,000	1200	120	9	40
Benzene	1,000	1000	100	3	14
Bromobenzene	1,000	940	94	4	40
Bromochloromethane	1,000	1100	110	10	40
Bromodichloromethane	1,000	1000	100	5	21
Bromoform	1,000	880	88	2	40
Bromomethane	1,000	890	89	13	40
Carbon Disulfide	1,000	990	99	11	40
Carbon tetrachloride	1,000	1000	100	5	19
Chlorobenzene	1,000	1000	100	0	40
Chloroethane	1,000	1100	110	14	40
Chloroform	1,000	1100	110	10	16
Chloromethane	1,000	1000	100	11	40
Dibromochloromethane	1,000	940	94	3	36
Dibromomethane	1,000	1000	100	3	40
Dichlorodifluoromethane	1,000	960	96	10	40
Ethyl Ether	1,000	1100	110	0	40
Ethylbenzene	1,000	1000	100	2	40
Hexachlorobutadiene	1,000	830	83	6	40
Isopropylbenzene	1,000	920	92	7	40
M/P Xylene	2,000	2100	105	5	40
Methyl-t-Butyl Ether	1,000	1100	110	14	40
Methylene Chloride	1,000	1100	110	10	40
N-Butylbenzene	1,000	1000	100	2	40
N-Propylbenzene	1,000	1000	100	6	40

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 20 of 27 **FINAL**

Naphthalene	1,000	1000	100	5	40
Ortho Xylene	1,000	950	95	7	40
Para-Isopropyltoluene	1,000	920	92	7	40
Sec-Butylbenzene	1,000	1000	100	3	40
Styrene	1,000	960	96	5	40
Tert-Butylbenzene	1,000	930	93	8	40
Tetrachloroethylene	1,000	2600	80	13	40
Tetrahydrofuran	1,000	1200	120	0	40
Toluene	1,000	1000	100	0	40
Trans-1,2-Dichloroethylene	1,000	990	99	8	40
Trichloroethylene	1,000	1200	97	11	22
Trichlorofluoromethane	1,000	1000	100	26	40
Vinyl Acetate	1,000	1000	100	6	40
Vinyl Chloride	1,000	1100	110	16	19
c-1,3-dichloropropene	1,000	920	92	6	40
cis-1,2-Dichloroethylene	1,000	1200	109	10	40
t-1,3-Dichloropropene	1,000	910	91	3	40

Comments:

Laboratory Duplicate Results

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB34662

PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUPLICATE RESULT ug/L	PRECISION RPD %	QC LIMITS
1,1,1,2-Tetrachloroethane	ND	ND	ND	30
1,1,1-Trichloroethane	ND	ND	ND	30
1,1,2,2-Tetrachloroethane	ND	ND	ND	30
1,1,2-Trichloro-1,2,2-Trifluoroeth	ND	ND	ND	30
1,1,2-Trichloroethane	ND	ND	ND	30
1,1-Dichloroethylene	ND	ND	ND	30
1,1-Dichloropropene	ND	ND	ND	30
1,1-dichloroethane	ND	ND	ND	30
1,2,3-Trichlorobenzene	ND	ND	ND	30
1,2,3-Trichloropropane	ND	ND	ND	30
1,2,4-Trichlorobenzene	ND	ND	ND	30
1,2,4-Trimethylbenzene	ND	ND	ND	30
1,2-Dibromo-3-Chloropropane	ND	ND	ND	30
1,2-Dibromoethane	ND	ND	ND	30
1,2-Dichlorobenzene	ND	ND	ND	30
1,2-Dichloroethane	ND	ND	ND	30
1,2-Dichloropropane	ND	ND	ND	30
1,3,5-Trimethylbenzene	ND	ND	ND	30
1,3-Dichlorobenzene	ND	ND	ND	30
1,3-Dichloropropane	ND	ND	ND	30
1,4-Dichlorobenzene	ND	ND	ND	30
2,2-Dichloropropane	ND	ND	ND	30
2-Butanone (MEK)	ND	ND	ND	30
2-Chlorotoluene	ND	ND	ND	30
2-Hexanone	ND	ND	ND	30
2-Propanone (acetone)	ND	ND	ND	30
4-Chlorotoluene	ND	ND	ND	30
4-Methyl-2-Pentanone(MIBK)	ND	ND	ND	30
Acrylonitrile	ND	ND	ND	30
Benzene	ND	ND	ND	30
Bromobenzene	ND	ND	ND	30
Bromochloromethane	ND	ND	ND	30
Bromodichloromethane	ND	ND	ND	30
Bromoform	ND	ND	ND	30
Bromomethane	ND	ND	ND	30
Carbon Disulfide	ND	ND	ND	30
Carbon tetrachloride	ND	ND	ND	30
Chlorobenzene	ND	ND	ND	30
Chloroethane	ND	ND	ND	30
Chloroform	ND	ND	ND	30
Chloromethane	ND	ND	ND	30
Dibromochloromethane	ND	ND	ND	30
Dibromomethane	ND	ND	ND	30
Dichlorodifluoromethane	ND	ND	ND	30
Ethyl Ether	ND	ND	ND	30
Ethylbenzene	ND	ND	ND	30
Hexachlorobutadiene	ND	ND	ND	30
Isopropylbenzene	ND	ND	ND	30
M/P Xylene	ND	ND	ND	30

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 22 of 27 **FINAL**

Methyl-t-Butyl Ether	ND	ND	ND	30
Methylene Chloride	ND	ND	ND	30
N-Butylbenzene	ND	ND	ND	30
N-Propylbenzene	ND	ND	ND	30
Naphthalene	ND	ND	ND	30
Ortho Xylene	ND	ND	ND	30
Para-Isopropyltoluene	ND	ND	ND	30
Sec-Butylbenzene	ND	ND	ND	30
Styrene	ND	ND	ND	30
Tert-Butylbenzene	ND	ND	ND	30
Tetrachloroethylene	ND	ND	ND	30
Tetrahydrofuran	ND	ND	ND	30
Toluene	ND	ND	ND	30
Trans-1,2-Dichloroethylene	ND	ND	ND	30
Trichloroethylene	ND	ND	ND	30
Trichlorofluoromethane	ND	ND	ND	30
Vinyl Acetate	ND	ND	ND	30
Vinyl Chloride	ND	ND	ND	30
c-1,3-dichloropropene	ND	ND	ND	30
cis-1,2-Dichloroethylene	2.4	2.3	4.26	30
t-1,3-Dichloropropene	ND	ND	ND	30

Laboratory Fortified Blank (LFB) Results

Henry's Dry Cleaners - Laconia, NH

PARAMETER	LFB AMOUNT SPIKED ug/mL	LFB RESULT ug/mL	LFB RECOVERY %	QC LIMITS %
1,1,1,2-Tetrachloroethane	20	20	100	79 - 136
1,1,1-Trichloroethane	20	20	100	75 - 146
1,1,2,2-Tetrachloroethane	20	19	95	62 - 141
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	18	90	56 - 130
1,1,2-Trichloroethane	20	20	100	75 - 138
1,1-Dichloroethylene	20	19	95	75 - 136
1,1-Dichloropropene	20	20	100	77 - 137
1,1-dichloroethane	20	20	100	76 - 142
1,2,3-Trichlorobenzene	20	19	95	64 - 143
1,2,3-Trichloropropane	20	18	90	66 - 133
1,2,4-Trichlorobenzene	20	19	95	80 - 131
1,2,4-Trimethylbenzene	20	21	105	74 - 155
1,2-Dibromo-3-Chloropropane	20	17	85	37 - 139
1,2-Dibromoethane	20	19	95	72 - 135
1,2-Dichlorobenzene	20	19	95	85 - 128
1,2-Dichloroethane	20	20	100	74 - 138
1,2-Dichloropropane	20	19	95	83 - 124
1,3,5-Trimethylbenzene	20	20	100	80 - 145
1,3-Dichlorobenzene	20	19	95	84 - 130
1,3-Dichloropropane	20	20	100	77 - 129
1,4-Dichlorobenzene	20	19	95	82 - 128
2,2-Dichloropropane	20	20	100	32 - 171
2-Butanone (MEK)	20	21	105	38 - 179
2-Chlorotoluene	20	20	100	78 - 134
2-Hexanone	20	20	100	45 - 158
2-Propanone (acetone)	20	18	90	14 - 209
4-Chlorotoluene	20	20	100	75 - 144
4-Methyl-2-Pentanone(MIBK)	20	19	95	40 - 144
Acrylonitrile	20	20	100	52 - 154
Benzene	20	20	100	83 - 130
Bromobenzene	20	18	90	85 - 126
Bromochloromethane	20	21	105	69 - 137
Bromodichloromethane	20	19	95	70 - 143
Bromoform	20	16	80	51 - 136
Bromomethane	20	18	90	65 - 140
Carbon Disulfide	20	20	100	68 - 140
Carbon tetrachloride	20	20	100	70 - 144
Chlorobenzene	20	20	100	84 - 131
Chloroethane	20	21	105	70 - 134
Chloroform	20	21	105	76 - 141
Chloromethane	20	19	95	63 - 123
Dibromochloromethane	20	18	90	39 - 154
Dibromomethane	20	19	95	79 - 124
Dichlorodifluoromethane	20	20	100	37 - 117
Ethyl Ether	20	20	100	67 - 140
Ethylbenzene	20	20	100	81 - 133
Hexachlorobutadiene	20	17	85	68 - 146
Isopropylbenzene	20	18	90	78 - 137
M/P Xylene	40	41	103	68 - 155
Methyl-t-Butyl Ether	20	20	100	63 - 144
Methylene Chloride	20	20	100	75 - 140
N-Butylbenzene	20	21	105	69 - 147

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 24 of 27 **FINAL**

N-Propylbenzene	20	20	100	76 - 138
Naphthalene	20	18	90	53 - 155
Ortho Xylene	20	19	95	85 - 135
Para-Isopropyltoluene	20	18	90	77 - 141
Sec-Butylbenzene	20	21	105	80 - 141
Styrene	20	19	95	82 - 139
Tert-Butylbenzene	20	18	90	75 - 144
Tetrachloroethylene	20	19	95	32 - 173
Tetrahydrofuran	20	19	95	47 - 149
Toluene	20	21	105	85 - 134
Trans-1,2-Dichloroethylene	20	20	100	80 - 138
Trichloroethylene	20	19	95	76 - 135
Trichlorofluoromethane	20	25	125	60 - 149
Vinyl Acetate	20	19	95	38 - 187
Vinyl Chloride	20	21	105	66 - 133
c-1,3-dichloropropene	20	18	90	68 - 149
cis-1,2-Dichloroethylene	20	21	105	76 - 143
t-1,3-Dichloropropene	20	17	85	62 - 160

Comments:

LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION ug/L	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	19	95	5	50
1,1,1-Trichloroethane	20	100	0	50
1,1,2,2-Tetrachloroethane	20	100	5	50
1,1,2-Trichloro-1,2,2-Trifluoroetha	22	110	20	50
1,1,2-Trichloroethane	21	105	5	50
1,1-Dichloroethylene	22	110	15	52
1,1-Dichloropropene	19	95	5	50
1,1-dichloroethane	20	100	0	50
1,2,3-Trichlorobenzene	19	95	0	50
1,2,3-Trichloropropane	19	95	5	50
1,2,4-Trichlorobenzene	18	90	5	50
1,2,4-Trimethylbenzene	20	100	5	50
1,2-Dibromo-3-Chloropropane	18	90	6	50
1,2-Dibromoethane	19	95	0	50
1,2-Dichlorobenzene	19	95	0	50
1,2-Dichloroethane	20	100	0	50
1,2-Dichloropropane	19	95	0	50
1,3,5-Trimethylbenzene	20	100	0	50
1,3-Dichlorobenzene	19	95	0	50
1,3-Dichloropropane	20	100	0	50
1,4-Dichlorobenzene	18	90	5	50
2,2-Dichloropropane	20	100	0	50
2-Butanone (MEK)	22	110	5	50
2-Chlorotoluene	19	95	5	50
2-Hexanone	22	110	10	50
2-Propanone (acetone)	24	120	29	50
4-Chlorotoluene	19	95	5	50
4-Methyl-2-Pentanone(MIBK)	20	100	5	50
Acrylonitrile	21	105	5	50
Benzene	20	100	0	50
Bromobenzene	18	90	0	50
Bromochloromethane	20	100	5	50
Bromodichloromethane	19	95	0	50
Bromoform	16	80	0	50
Bromomethane	18	90	0	50
Carbon Disulfide	18	90	11	50
Carbon tetrachloride	20	100	0	50
Chlorobenzene	20	100	0	34
Chloroethane	21	105	0	50
Chloroform	21	105	0	50
Chloromethane	19	95	0	50
Dibromochloromethane	18	90	0	50
Dibromomethane	19	95	0	50
Dichlorodifluoromethane	20	100	0	50
Ethyl Ether	21	105	5	50
Ethylbenzene	20	100	0	50
Hexachlorobutadiene	17	85	0	50
Isopropylbenzene	18	90	0	50
M/P Xylene	40	100	3	50
Methyl-t-Butyl Ether	21	105	5	50
Methylene Chloride	20	100	0	50
N-Butylbenzene	20	100	5	50
N-Propylbenzene	19	95	5	50
Naphthalene	18	90	0	50
Ortho Xylene	18	90	5	50

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 26 of 27 FINAL

Para-Isopropyltoluene	18	90	0	50
Sec-Butylbenzene	20	100	5	50
Styrene	18	90	5	50
Tert-Butylbenzene	18	90	0	50
Tetrachloroethylene	20	100	5	50
Tetrahydrofuran	21	105	10	50
Toluene	20	100	5	50
Trans-1,2-Dichloroethylene	19	95	5	50
Trichloroethylene	18	90	5	27
Trichlorofluoromethane	23	115	8	50
Vinyl Acetate	20	100	5	50
Vinyl Chloride	20	100	5	50
c-1,3-dichloropropene	18	90	0	50
cis-1,2-Dichloroethylene	20	100	5	50
t-1,3-Dichloropropene	17	85	0	50

Samples in Batch: AB34662, AB34663, AB34664, AB34665, AB34666, AB34667

Page 27 of 27 FINAL

PN:12100023

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners/MA

Contact Phone:

Lab Contact:

Special Instructions:

Placed
in 1901 storage

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #



**United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431**

Page 1 of 57 FINAL

Laboratory Report

December 04, 2012

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 12110027

Project: Henry's Dry Cleaners - Laconia, NH
Analysis: VOAs in Water
Analyst: Joseph Montanaro

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-VOAGCMS9.

Samples were analyzed by GC/MS. Samples were introduced to the GC via a Tekmar pre-concentrator and an Archon autosampler. The analysis SOP is based on US EPA Method 8260B, method 5030B, rev 2.0 SW-846, Rev 2.0, 1996. Method 624, 40CFR Part 136 Appendix A, July 1, 1992, and USEPA CLP SOW for Organic Analysis OLM04.2, 1999.

Date Samples Received by the Laboratory: 11/15/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

12110027\$VOAMW

Qualifiers: RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 5 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 3 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0141	Lab Sample ID:	AB36244
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	100	
79-00-5	1,1,2-Trichloroethane	ND	100	
75-35-4	1,1-Dichloroethylene	ND	100	
563-58-6	1,1-Dichloropropene	ND	100	
75-34-3	1,1-dichloroethane	ND	100	
87-61-6	1,2,3-Trichlorobenzene	ND	100	
96-18-4	1,2,3-Trichloropropane	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-63-6	1,2,4-Trimethylbenzene	ND	100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	100	
106-93-4	1,2-Dibromoethane	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
107-06-2	1,2-Dichloroethane	ND	100	
78-87-5	1,2-Dichloropropane	ND	100	
108-67-8	1,3,5-Trimethylbenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
142-28-9	1,3-Dichloropropane	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
594-20-7	2,2-Dichloropropane	ND	100	
78-93-3	2-Butanone (MEK)	ND	100	
95-49-8	2-Chlorotoluene	ND	100	
591-78-6	2-Hexanone	ND	100	
67-64-1	2-Propanone (acetone)	ND	100	
106-43-4	4-Chlorotoluene	ND	100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	100	
107-13-1	Acrylonitrile	ND	100	
71-43-2	Benzene	ND	100	
108-86-1	Bromobenzene	ND	100	
74-97-5	Bromoform	ND	100	
75-27-4	Bromochloromethane	ND	100	
75-25-2	Bromoform	ND	100	
74-83-9	Bromomethane	ND	100	
75-15-0	Carbon Disulfide	ND	100	
56-23-5	Carbon tetrachloride	ND	100	
108-90-7	Chlorobenzene	ND	100	
75-00-3	Chloroethane	ND	100	
67-66-3	Chloroform	ND	100	

12110027\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 4 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0141	Lab Sample ID:	AB36244
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	100	
124-48-1	Dibromochloromethane	ND	100	
74-95-3	Dibromomethane	ND	100	
75-71-8	Dichlorodifluoromethane	ND	100	
60-29-7	Ethyl Ether	ND	100	
100-41-4	Ethylbenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
98-82-8	Isopropylbenzene	ND	100	
108-38-3/106-42-	M/P Xylene	ND	200	
1634-04-4	Methyl-t-Butyl Ether	ND	100	
75-09-2	Methylene Chloride	ND	100	
104-51-8	N-Butylbenzene	ND	100	
103-65-1	N-Propylbenzene	ND	100	
91-20-3	Naphthalene	ND	100	
95-47-6	Ortho Xylene	ND	100	
99-87-6	Para-Isopropyltoluene	ND	100	
135-98-8	Sec-Butylbenzene	ND	100	
100-42-5	Styrene	ND	100	
98-06-6	Tert-Butylbenzene	ND	100	
127-18-4	Tetrachloroethylene	2800	100	
109-99-9	Tetrahydrofuran	ND	100	
108-88-3	Toluene	ND	100	
156-60-5	Trans-1,2-Dichloroethylene	ND	100	
79-01-6	Trichloroethylene	ND	100	
75-69-4	Trichlorofluoromethane	ND	100	
108-05-4	Vinyl Acetate	ND	100	
75-01-4	Vinyl Chloride	ND	100	
10061-01-5	c-1,3-dichloropropene	ND	100	
156-59-2	cis-1,2-Dichloroethylene	ND	100	
10061-02-6	t-1,3-Dichloropropene	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

Comments:

12110027\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 5 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5.0 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.2	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

12110027\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 6 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5.0 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
Toluene-D8	97	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 7 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5.0 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
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Comments: Laboratory blank is associated with samples AB36244, AB36246, and AB36251 - AB36257.

Acetone was reported in this laboratory blank at 1.2 ug/L. Observations of this compound in samples associated with this laboratory blank are qualified with a B.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 8 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0143	Lab Sample ID:	AB36245
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	
71-55-6	1,1,1-Trichloroethane	ND	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	
79-00-5	1,1,2-Trichloroethane	ND	5.0	
75-35-4	1,1-Dichloroethylene	ND	5.0	
563-58-6	1,1-Dichloropropene	ND	5.0	
75-34-3	1,1-dichloroethane	ND	5.0	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	
96-18-4	1,2,3-Trichloropropane	ND	5.0	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5.0	
106-93-4	1,2-Dibromoethane	ND	5.0	
95-50-1	1,2-Dichlorobenzene	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	5.0	
78-87-5	1,2-Dichloropropane	ND	5.0	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	
541-73-1	1,3-Dichlorobenzene	ND	5.0	
142-28-9	1,3-Dichloropropane	ND	5.0	
106-46-7	1,4-Dichlorobenzene	ND	5.0	
594-20-7	2,2-Dichloropropane	ND	5.0	
78-93-3	2-Butanone (MEK)	ND	5.0	
95-49-8	2-Chlorotoluene	ND	5.0	
591-78-6	2-Hexanone	ND	5.0	
67-64-1	2-Propanone (acetone)	ND	5.0	
106-43-4	4-Chlorotoluene	ND	5.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5.0	
107-13-1	Acrylonitrile	ND	5.0	
71-43-2	Benzene	ND	5.0	
108-86-1	Bromobenzene	ND	5.0	
74-97-5	Bromochloromethane	ND	5.0	
75-27-4	Bromodichloromethane	ND	5.0	
75-25-2	Bromoform	ND	5.0	
74-83-9	Bromomethane	ND	5.0	
75-15-0	Carbon Disulfide	ND	5.0	
56-23-5	Carbon tetrachloride	ND	5.0	
108-90-7	Chlorobenzene	ND	5.0	
75-00-3	Chloroethane	ND	5.0	
67-66-3	Chloroform	ND	5.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 9 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0143	Lab Sample ID:	AB36245
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	5.0	
124-48-1	Dibromochloromethane	ND	5.0	
74-95-3	Dibromomethane	ND	5.0	
75-71-8	Dichlorodifluoromethane	ND	5.0	
60-29-7	Ethyl Ether	ND	5.0	
100-41-4	Ethylbenzene	ND	5.0	
87-68-3	Hexachlorobutadiene	ND	5.0	
98-82-8	Isopropylbenzene	ND	5.0	
108-38-3/106-42-	M/P Xylene	ND	10	
1634-04-4	Methyl-t-Butyl Ether	ND	5.0	
75-09-2	Methylene Chloride	ND	5.0	
104-51-8	N-Butylbenzene	ND	5.0	
103-65-1	N-Propylbenzene	ND	5.0	
91-20-3	Naphthalene	ND	5.0	
95-47-6	Ortho Xylene	ND	5.0	
99-87-6	Para-Isopropyltoluene	ND	5.0	
135-98-8	Sec-Butylbenzene	ND	5.0	
100-42-5	Styrene	ND	5.0	
98-06-6	Tert-Butylbenzene	ND	5.0	
127-18-4	Tetrachloroethylene	120	5.0	
109-99-9	Tetrahydrofuran	ND	5.0	
108-88-3	Toluene	ND	5.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	5.0	
79-01-6	Trichloroethylene	12	5.0	
75-69-4	Trichlorofluoromethane	ND	5.0	
108-05-4	Vinyl Acetate	ND	5.0	
75-01-4	Vinyl Chloride	ND	5.0	
10061-01-5	c-1,3-dichloropropene	ND	5.0	
156-59-2	cis-1,2-Dichloroethylene	33	5.0	
10061-02-6	t-1,3-Dichloropropene	ND	5.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments:

12110027\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 10 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0150	Lab Sample ID:	AB36246
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	20
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	
71-55-6	1,1,1-Trichloroethane	ND	20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	20	
79-00-5	1,1,2-Trichloroethane	ND	20	
75-35-4	1,1-Dichloroethylene	ND	20	
563-58-6	1,1-Dichloropropene	ND	20	
75-34-3	1,1-dichloroethane	ND	20	
87-61-6	1,2,3-Trichlorobenzene	ND	20	
96-18-4	1,2,3-Trichloropropane	ND	20	
120-82-1	1,2,4-Trichlorobenzene	ND	20	
95-63-6	1,2,4-Trimethylbenzene	ND	20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	20	
106-93-4	1,2-Dibromoethane	ND	20	
95-50-1	1,2-Dichlorobenzene	ND	20	
107-06-2	1,2-Dichloroethane	ND	20	
78-87-5	1,2-Dichloropropane	ND	20	
108-67-8	1,3,5-Trimethylbenzene	ND	20	
541-73-1	1,3-Dichlorobenzene	ND	20	
142-28-9	1,3-Dichloropropane	ND	20	
106-46-7	1,4-Dichlorobenzene	ND	20	
594-20-7	2,2-Dichloropropane	ND	20	
78-93-3	2-Butanone (MEK)	ND	20	
95-49-8	2-Chlorotoluene	ND	20	
591-78-6	2-Hexanone	ND	20	
67-64-1	2-Propanone (acetone)	ND	20	
106-43-4	4-Chlorotoluene	ND	20	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	20	
107-13-1	Acrylonitrile	ND	20	
71-43-2	Benzene	ND	20	
108-86-1	Bromobenzene	ND	20	
74-97-5	Bromochloromethane	ND	20	
75-27-4	Bromodichloromethane	ND	20	
75-25-2	Bromoform	ND	20	
74-83-9	Bromomethane	ND	20	
75-15-0	Carbon Disulfide	ND	20	
56-23-5	Carbon tetrachloride	ND	20	
108-90-7	Chlorobenzene	ND	20	
75-00-3	Chloroethane	ND	20	
67-66-3	Chloroform	ND	20	

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0150	Lab Sample ID:	AB36246
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	20
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	20	
124-48-1	Dibromochloromethane	ND	20	
74-95-3	Dibromomethane	ND	20	
75-71-8	Dichlorodifluoromethane	ND	20	
60-29-7	Ethyl Ether	ND	20	
100-41-4	Ethylbenzene	ND	20	
87-68-3	Hexachlorobutadiene	ND	20	
98-82-8	Isopropylbenzene	ND	20	
108-38-3/106-42-	M/P Xylene	ND	40	
1634-04-4	Methyl-t-Butyl Ether	ND	20	
75-09-2	Methylene Chloride	ND	20	
104-51-8	N-Butylbenzene	ND	20	
103-65-1	N-Propylbenzene	ND	20	
91-20-3	Naphthalene	ND	20	
95-47-6	Ortho Xylene	ND	20	
99-87-6	Para-Isopropyltoluene	ND	20	
135-98-8	Sec-Butylbenzene	ND	20	
100-42-5	Styrene	ND	20	
98-06-6	Tert-Butylbenzene	ND	20	
127-18-4	Tetrachloroethylene	2600	200	
109-99-9	Tetrahydrofuran	ND	20	
108-88-3	Toluene	ND	20	
156-60-5	Trans-1,2-Dichloroethylene	ND	20	
79-01-6	Trichloroethylene	ND	20	
75-69-4	Trichlorofluoromethane	ND	20	
108-05-4	Vinyl Acetate	ND	20	
75-01-4	Vinyl Chloride	ND	20	
10061-01-5	c-1,3-dichloropropene	ND	20	
156-59-2	cis-1,2-Dichloroethylene	ND	20	
10061-02-6	t-1,3-Dichloropropene	ND	20	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	111	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments: The level reported for tetrachloroethylene is derived from a two-hundred fold dilution.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 12 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**Laboratory Blank for \$VOAMW**

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.1	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 13 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	109	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 14 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
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Comments: Laboratory blank is associated with sample AB36246 (Dilution).

Acetone was reported in this laboratory blank at 1.1 ug/L. Observations of this compound in samples associated with this laboratory blank are qualified with a B.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 15 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0152	Lab Sample ID:	AB36247
Date of Collection:	11/14/2012	Matrix	Rinsate
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.4	1.0	B
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 16 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0152	Lab Sample ID:	AB36247
Date of Collection:	11/14/2012	Matrix	Rinsate
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 17 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID: R01-120314JT-0152
Date of Collection: 11/14/2012
Date of Extraction: 11/16/12
Date of Analysis: 11/16/12
Dry Weight Extracted: N/A
Wet Weight Extracted: N/A

Lab Sample ID: AB36247
Matrix Rinsate
Amount Prepared 5 mL
Percent Solids: N/A
Extract Dilution: 1
pH: <2

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration</u> <u>ug/L</u>	<u>RL</u> <u>ug/L</u>	<u>Qualifier</u>
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Comments: Acetone was observed in the laboratory blank associated with this sample and is qualified with a B.

Tentatively Identified Compounds
Isopropyl alcohol 27 ppb J

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0153	Lab Sample ID:	AB36248
Date of Collection:	11/12/2012	Matrix	Trip Blank
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	3.1	1.0	B
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 19 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0153	Lab Sample ID:	AB36248
Date of Collection:	11/12/2012	Matrix	Trip Blank
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	8.2	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	1.5	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	95	78 - 111

Comments: Acetone was observed in the laboratory blank associated with this sample and is qualified with a B.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 20 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0155	Lab Sample ID:	AB36249
Date of Collection:	11/12/2012	Matrix	PE Aqueous
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	49	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	38	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	89	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	40	1.0	
78-87-5	1,2-Dichloropropane	49	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	28	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	2.4	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	90	10	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	68	1.0	
108-86-1	Bromobenzene	48	1.0	
74-97-5	Bromoform	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	68	1.0	
67-66-3	Chloroform	28	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 21 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0155	Lab Sample ID:	AB36249
Date of Collection:	11/12/2012	Matrix	PE Aqueous
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	18	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	70	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	81	10	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	39	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	50	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	97	1.0	
156-60-5	Trans-1,2-Dichloroethylene	59	1.0	
79-01-6	Trichloroethylene	84	1.0	
75-69-4	Trichlorofluoromethane	60	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	100	10	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	19	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	99	78 - 111

Comments: The levels reported for vinyl chloride, MTBE, and 2-hexanone are derived from a ten-fold dilution.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 22 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0142	Lab Sample ID:	AB36250
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	100	
79-00-5	1,1,2-Trichloroethane	ND	100	
75-35-4	1,1-Dichloroethylene	ND	100	
563-58-6	1,1-Dichloropropene	ND	100	
75-34-3	1,1-dichloroethane	ND	100	
87-61-6	1,2,3-Trichlorobenzene	ND	100	
96-18-4	1,2,3-Trichloropropane	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-63-6	1,2,4-Trimethylbenzene	ND	100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	100	
106-93-4	1,2-Dibromoethane	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
107-06-2	1,2-Dichloroethane	ND	100	
78-87-5	1,2-Dichloropropane	ND	100	
108-67-8	1,3,5-Trimethylbenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
142-28-9	1,3-Dichloropropane	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
594-20-7	2,2-Dichloropropane	ND	100	
78-93-3	2-Butanone (MEK)	ND	100	
95-49-8	2-Chlorotoluene	ND	100	
591-78-6	2-Hexanone	ND	100	
67-64-1	2-Propanone (acetone)	ND	100	
106-43-4	4-Chlorotoluene	ND	100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	100	
107-13-1	Acrylonitrile	ND	100	
71-43-2	Benzene	ND	100	
108-86-1	Bromobenzene	ND	100	
74-97-5	Bromoform	ND	100	
75-27-4	Bromochloromethane	ND	100	
75-25-2	Bromoform	ND	100	
74-83-9	Bromomethane	ND	100	
75-15-0	Carbon Disulfide	ND	100	
56-23-5	Carbon tetrachloride	ND	100	
108-90-7	Chlorobenzene	ND	100	
75-00-3	Chloroethane	ND	100	
67-66-3	Chloroform	ND	100	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 23 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0142	Lab Sample ID:	AB36250
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	100	
124-48-1	Dibromochloromethane	ND	100	
74-95-3	Dibromomethane	ND	100	
75-71-8	Dichlorodifluoromethane	ND	100	
60-29-7	Ethyl Ether	ND	100	
100-41-4	Ethylbenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
98-82-8	Isopropylbenzene	ND	100	
108-38-3/106-42-	M/P Xylene	ND	200	
1634-04-4	Methyl-t-Butyl Ether	ND	100	
75-09-2	Methylene Chloride	ND	100	
104-51-8	N-Butylbenzene	ND	100	
103-65-1	N-Propylbenzene	ND	100	
91-20-3	Naphthalene	ND	100	
95-47-6	Ortho Xylene	ND	100	
99-87-6	Para-Isopropyltoluene	ND	100	
135-98-8	Sec-Butylbenzene	ND	100	
100-42-5	Styrene	ND	100	
98-06-6	Tert-Butylbenzene	ND	100	
127-18-4	Tetrachloroethylene	3000	100	
109-99-9	Tetrahydrofuran	ND	100	
108-88-3	Toluene	ND	100	
156-60-5	Trans-1,2-Dichloroethylene	ND	100	
79-01-6	Trichloroethylene	ND	100	
75-69-4	Trichlorofluoromethane	ND	100	
108-05-4	Vinyl Acetate	ND	100	
75-01-4	Vinyl Chloride	ND	100	
10061-01-5	c-1,3-dichloropropene	ND	100	
156-59-2	cis-1,2-Dichloroethylene	ND	100	
10061-02-6	t-1,3-Dichloropropene	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

Comments:

12110027\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 24 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**Laboratory Blank for \$VOAMW**

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5.0 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.2	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 25 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5.0 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 26 of 57

FINAL

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/16/12	Amount Prepared	5.0 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
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Comments: Laboratory blank is associated with samples AB36245, AB36247, AB36248, AB36249, AB36250 (MS/MS and Duplicate Studies), and AB36259.

Acetone was reported in this laboratory blank at 1.2 ug/L. Observations of this compound in samples associated with this laboratory blank are qualified with a B.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 27 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0144	Lab Sample ID:	AB36251
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	500
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	
71-55-6	1,1,1-Trichloroethane	ND	500	
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	
79-00-5	1,1,2-Trichloroethane	ND	500	
75-35-4	1,1-Dichloroethylene	ND	500	
563-58-6	1,1-Dichloropropene	ND	500	
75-34-3	1,1-dichloroethane	ND	500	
87-61-6	1,2,3-Trichlorobenzene	ND	500	
96-18-4	1,2,3-Trichloropropane	ND	500	
120-82-1	1,2,4-Trichlorobenzene	ND	500	
95-63-6	1,2,4-Trimethylbenzene	ND	500	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	500	
106-93-4	1,2-Dibromoethane	ND	500	
95-50-1	1,2-Dichlorobenzene	ND	500	
107-06-2	1,2-Dichloroethane	ND	500	
78-87-5	1,2-Dichloropropane	ND	500	
108-67-8	1,3,5-Trimethylbenzene	ND	500	
541-73-1	1,3-Dichlorobenzene	ND	500	
142-28-9	1,3-Dichloropropane	ND	500	
106-46-7	1,4-Dichlorobenzene	ND	500	
594-20-7	2,2-Dichloropropane	ND	500	
78-93-3	2-Butanone (MEK)	ND	500	
95-49-8	2-Chlorotoluene	ND	500	
591-78-6	2-Hexanone	ND	500	
67-64-1	2-Propanone (acetone)	ND	500	
106-43-4	4-Chlorotoluene	ND	500	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	500	
107-13-1	Acrylonitrile	ND	500	
71-43-2	Benzene	ND	500	
108-86-1	Bromobenzene	ND	500	
74-97-5	Bromochloromethane	ND	500	
75-27-4	Bromodichloromethane	ND	500	
75-25-2	Bromoform	ND	500	
74-83-9	Bromomethane	ND	500	
75-15-0	Carbon Disulfide	ND	500	
56-23-5	Carbon tetrachloride	ND	500	
108-90-7	Chlorobenzene	ND	500	
75-00-3	Chloroethane	ND	500	
67-66-3	Chloroform	ND	500	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 28 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0144	Lab Sample ID:	AB36251
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	500
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	500	
124-48-1	Dibromochloromethane	ND	500	
74-95-3	Dibromomethane	ND	500	
75-71-8	Dichlorodifluoromethane	ND	500	
60-29-7	Ethyl Ether	ND	500	
100-41-4	Ethylbenzene	ND	500	
87-68-3	Hexachlorobutadiene	ND	500	
98-82-8	Isopropylbenzene	ND	500	
108-38-3/106-42-	M/P Xylene	ND	1000	
1634-04-4	Methyl-t-Butyl Ether	ND	500	
75-09-2	Methylene Chloride	ND	500	
104-51-8	N-Butylbenzene	ND	500	
103-65-1	N-Propylbenzene	ND	500	
91-20-3	Naphthalene	ND	500	
95-47-6	Ortho Xylene	ND	500	
99-87-6	Para-Isopropyltoluene	ND	500	
135-98-8	Sec-Butylbenzene	ND	500	
100-42-5	Styrene	ND	500	
98-06-6	Tert-Butylbenzene	ND	500	
127-18-4	Tetrachloroethylene	16000	500	
109-99-9	Tetrahydrofuran	ND	500	
108-88-3	Toluene	ND	500	
156-60-5	Trans-1,2-Dichloroethylene	ND	500	
79-01-6	Trichloroethylene	ND	500	
75-69-4	Trichlorofluoromethane	ND	500	
108-05-4	Vinyl Acetate	ND	500	
75-01-4	Vinyl Chloride	ND	500	
10061-01-5	c-1,3-dichloropropene	ND	500	
156-59-2	cis-1,2-Dichloroethylene	ND	500	
10061-02-6	t-1,3-Dichloropropene	ND	500	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	110	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

Comments:

12110027\$VOAMW

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID: R01-120314JT-0145 Lab Sample ID: AB36252
Date of Collection: 11/13/2012 Matrix GW
Date of Extraction: 11/18/12 Amount Prepared 5 mL
Date of Analysis: 11/18/12 Percent Solids: N/A
Dry Weight Extracted: N/A Extract Dilution: 20
Wet Weight Extracted: N/A pH: <2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	
71-55-6	1,1,1-Trichloroethane	ND	20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	20	
79-00-5	1,1,2-Trichloroethane	ND	20	
75-35-4	1,1-Dichloroethylene	ND	20	
563-58-6	1,1-Dichloropropene	ND	20	
75-34-3	1,1-dichloroethane	ND	20	
87-61-6	1,2,3-Trichlorobenzene	ND	20	
96-18-4	1,2,3-Trichloropropane	ND	20	
120-82-1	1,2,4-Trichlorobenzene	ND	20	
95-63-6	1,2,4-Trimethylbenzene	ND	20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	20	
106-93-4	1,2-Dibromoethane	ND	20	
95-50-1	1,2-Dichlorobenzene	ND	20	
107-06-2	1,2-Dichloroethane	ND	20	
78-87-5	1,2-Dichloropropane	ND	20	
108-67-8	1,3,5-Trimethylbenzene	ND	20	
541-73-1	1,3-Dichlorobenzene	ND	20	
142-28-9	1,3-Dichloropropane	ND	20	
106-46-7	1,4-Dichlorobenzene	ND	20	
594-20-7	2,2-Dichloropropane	ND	20	
78-93-3	2-Butanone (MEK)	ND	20	
95-49-8	2-Chlorotoluene	ND	20	
591-78-6	2-Hexanone	ND	20	
67-64-1	2-Propanone (acetone)	ND	20	
106-43-4	4-Chlorotoluene	ND	20	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	20	
107-13-1	Acrylonitrile	ND	20	
71-43-2	Benzene	ND	20	
108-86-1	Bromobenzene	ND	20	
74-97-5	Bromochloromethane	ND	20	
75-27-4	Bromodichloromethane	ND	20	
75-25-2	Bromoform	ND	20	
74-83-9	Bromomethane	ND	20	
75-15-0	Carbon Disulfide	ND	20	
56-23-5	Carbon tetrachloride	ND	20	
108-90-7	Chlorobenzene	ND	20	
75-00-3	Chloroethane	ND	20	
67-66-3	Chloroform	ND	20	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 30 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0145	Lab Sample ID:	AB36252
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	20
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	20	
124-48-1	Dibromochloromethane	ND	20	
74-95-3	Dibromomethane	ND	20	
75-71-8	Dichlorodifluoromethane	ND	20	
60-29-7	Ethyl Ether	ND	20	
100-41-4	Ethylbenzene	ND	20	
87-68-3	Hexachlorobutadiene	ND	20	
98-82-8	Isopropylbenzene	ND	20	
108-38-3/106-42-	M/P Xylene	ND	40	
1634-04-4	Methyl-t-Butyl Ether	ND	20	
75-09-2	Methylene Chloride	ND	20	
104-51-8	N-Butylbenzene	ND	20	
103-65-1	N-Propylbenzene	ND	20	
91-20-3	Naphthalene	ND	20	
95-47-6	Ortho Xylene	ND	20	
99-87-6	Para-Isopropyltoluene	ND	20	
135-98-8	Sec-Butylbenzene	ND	20	
100-42-5	Styrene	ND	20	
98-06-6	Tert-Butylbenzene	ND	20	
127-18-4	Tetrachloroethylene	660	20	
109-99-9	Tetrahydrofuran	ND	20	
108-88-3	Toluene	ND	20	
156-60-5	Trans-1,2-Dichloroethylene	ND	20	
79-01-6	Trichloroethylene	ND	20	
75-69-4	Trichlorofluoromethane	ND	20	
108-05-4	Vinyl Acetate	ND	20	
75-01-4	Vinyl Chloride	ND	20	
10061-01-5	c-1,3-dichloropropene	ND	20	
156-59-2	cis-1,2-Dichloroethylene	140	20	
10061-02-6	t-1,3-Dichloropropene	ND	20	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	114	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments:

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 31 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0146	Lab Sample ID:	AB36253
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 32 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0146	Lab Sample ID:	AB36253
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments:

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 33 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0147	Lab Sample ID:	AB36254
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	100	
79-00-5	1,1,2-Trichloroethane	ND	100	
75-35-4	1,1-Dichloroethylene	ND	100	
563-58-6	1,1-Dichloropropene	ND	100	
75-34-3	1,1-dichloroethane	ND	100	
87-61-6	1,2,3-Trichlorobenzene	ND	100	
96-18-4	1,2,3-Trichloropropane	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-63-6	1,2,4-Trimethylbenzene	ND	100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	100	
106-93-4	1,2-Dibromoethane	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
107-06-2	1,2-Dichloroethane	ND	100	
78-87-5	1,2-Dichloropropane	ND	100	
108-67-8	1,3,5-Trimethylbenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
142-28-9	1,3-Dichloropropane	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
594-20-7	2,2-Dichloropropane	ND	100	
78-93-3	2-Butanone (MEK)	ND	100	
95-49-8	2-Chlorotoluene	ND	100	
591-78-6	2-Hexanone	ND	100	
67-64-1	2-Propanone (acetone)	ND	100	
106-43-4	4-Chlorotoluene	ND	100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	100	
107-13-1	Acrylonitrile	ND	100	
71-43-2	Benzene	ND	100	
108-86-1	Bromobenzene	ND	100	
74-97-5	Bromoform	ND	100	
75-27-4	Bromochloromethane	ND	100	
75-25-2	Bromoform	ND	100	
74-83-9	Bromomethane	ND	100	
75-15-0	Carbon Disulfide	ND	100	
56-23-5	Carbon tetrachloride	ND	100	
108-90-7	Chlorobenzene	ND	100	
75-00-3	Chloroethane	ND	100	
67-66-3	Chloroform	ND	100	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 34 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0147	Lab Sample ID:	AB36254
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	100	
124-48-1	Dibromochloromethane	ND	100	
74-95-3	Dibromomethane	ND	100	
75-71-8	Dichlorodifluoromethane	ND	100	
60-29-7	Ethyl Ether	ND	100	
100-41-4	Ethylbenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
98-82-8	Isopropylbenzene	ND	100	
108-38-3/106-42-	M/P Xylene	ND	200	
1634-04-4	Methyl-t-Butyl Ether	ND	100	
75-09-2	Methylene Chloride	ND	100	
104-51-8	N-Butylbenzene	ND	100	
103-65-1	N-Propylbenzene	ND	100	
91-20-3	Naphthalene	ND	100	
95-47-6	Ortho Xylene	ND	100	
99-87-6	Para-Isopropyltoluene	ND	100	
135-98-8	Sec-Butylbenzene	ND	100	
100-42-5	Styrene	ND	100	
98-06-6	Tert-Butylbenzene	ND	100	
127-18-4	Tetrachloroethylene	2300	100	
109-99-9	Tetrahydrofuran	ND	100	
108-88-3	Toluene	ND	100	
156-60-5	Trans-1,2-Dichloroethylene	ND	100	
79-01-6	Trichloroethylene	ND	100	
75-69-4	Trichlorofluoromethane	ND	100	
108-05-4	Vinyl Acetate	ND	100	
75-01-4	Vinyl Chloride	ND	100	
10061-01-5	c-1,3-dichloropropene	ND	100	
156-59-2	cis-1,2-Dichloroethylene	ND	100	
10061-02-6	t-1,3-Dichloropropene	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	113	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments:

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Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0148	Lab Sample ID:	AB36255
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	500
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	
71-55-6	1,1,1-Trichloroethane	ND	500	
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	
79-00-5	1,1,2-Trichloroethane	ND	500	
75-35-4	1,1-Dichloroethylene	ND	500	
563-58-6	1,1-Dichloropropene	ND	500	
75-34-3	1,1-dichloroethane	ND	500	
87-61-6	1,2,3-Trichlorobenzene	ND	500	
96-18-4	1,2,3-Trichloropropane	ND	500	
120-82-1	1,2,4-Trichlorobenzene	ND	500	
95-63-6	1,2,4-Trimethylbenzene	ND	500	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	500	
106-93-4	1,2-Dibromoethane	ND	500	
95-50-1	1,2-Dichlorobenzene	ND	500	
107-06-2	1,2-Dichloroethane	ND	500	
78-87-5	1,2-Dichloropropane	ND	500	
108-67-8	1,3,5-Trimethylbenzene	ND	500	
541-73-1	1,3-Dichlorobenzene	ND	500	
142-28-9	1,3-Dichloropropane	ND	500	
106-46-7	1,4-Dichlorobenzene	ND	500	
594-20-7	2,2-Dichloropropane	ND	500	
78-93-3	2-Butanone (MEK)	ND	500	
95-49-8	2-Chlorotoluene	ND	500	
591-78-6	2-Hexanone	ND	500	
67-64-1	2-Propanone (acetone)	ND	500	
106-43-4	4-Chlorotoluene	ND	500	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	500	
107-13-1	Acrylonitrile	ND	500	
71-43-2	Benzene	ND	500	
108-86-1	Bromobenzene	ND	500	
74-97-5	Bromochloromethane	ND	500	
75-27-4	Bromodichloromethane	ND	500	
75-25-2	Bromoform	ND	500	
74-83-9	Bromomethane	ND	500	
75-15-0	Carbon Disulfide	ND	500	
56-23-5	Carbon tetrachloride	ND	500	
108-90-7	Chlorobenzene	ND	500	
75-00-3	Chloroethane	ND	500	
67-66-3	Chloroform	ND	500	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 36 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0148	Lab Sample ID:	AB36255
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	500
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	500	
124-48-1	Dibromochloromethane	ND	500	
74-95-3	Dibromomethane	ND	500	
75-71-8	Dichlorodifluoromethane	ND	500	
60-29-7	Ethyl Ether	ND	500	
100-41-4	Ethylbenzene	ND	500	
87-68-3	Hexachlorobutadiene	ND	500	
98-82-8	Isopropylbenzene	ND	500	
108-38-3/106-42-	M/P Xylene	ND	1000	
1634-04-4	Methyl-t-Butyl Ether	ND	500	
75-09-2	Methylene Chloride	ND	500	
104-51-8	N-Butylbenzene	ND	500	
103-65-1	N-Propylbenzene	ND	500	
91-20-3	Naphthalene	ND	500	
95-47-6	Ortho Xylene	ND	500	
99-87-6	Para-Isopropyltoluene	ND	500	
135-98-8	Sec-Butylbenzene	ND	500	
100-42-5	Styrene	ND	500	
98-06-6	Tert-Butylbenzene	ND	500	
127-18-4	Tetrachloroethylene	14000	500	
109-99-9	Tetrahydrofuran	ND	500	
108-88-3	Toluene	ND	500	
156-60-5	Trans-1,2-Dichloroethylene	ND	500	
79-01-6	Trichloroethylene	ND	500	
75-69-4	Trichlorofluoromethane	ND	500	
108-05-4	Vinyl Acetate	ND	500	
75-01-4	Vinyl Chloride	ND	500	
10061-01-5	c-1,3-dichloropropene	ND	500	
156-59-2	cis-1,2-Dichloroethylene	ND	500	
10061-02-6	t-1,3-Dichloropropene	ND	500	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	114	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments:

12110027\$VOAMW

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0149	Lab Sample ID:	AB36256
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromoform	ND	50	
75-27-4	Bromodichloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 38 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0149	Lab Sample ID:	AB36256
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	50	
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-	M/P Xylene	ND	100	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
75-09-2	Methylene Chloride	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
91-20-3	Naphthalene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	1700	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	ND	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
156-59-2	cis-1,2-Dichloroethylene	ND	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	115	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments:

12110027\$VOAMW

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID: R01-120314JT-0151 Lab Sample ID: AB36257
Date of Collection: 11/14/2012 Matrix GW
Date of Extraction: 11/18/12 Amount Prepared 5 mL
Date of Analysis: 11/18/12 Percent Solids: N/A
Dry Weight Extracted: N/A Extract Dilution: 50
Wet Weight Extracted: N/A pH: <2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromoform	ND	50	
75-27-4	Bromochloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 40 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0151	Lab Sample ID:	AB36257
Date of Collection:	11/14/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	50	
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-	M/P Xylene	ND	100	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
75-09-2	Methylene Chloride	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
91-20-3	Naphthalene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	1500	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	ND	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
156-59-2	cis-1,2-Dichloroethylene	ND	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	117	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments:

12110027\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 41 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0154	Lab Sample ID:	AB36258
Date of Collection:	11/12/2012	Matrix	Trip Blank
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	9.9	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 42 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0154	Lab Sample ID:	AB36258
Date of Collection:	11/12/2012	Matrix	Trip Blank
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	12	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
Toluene-D8	100	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments: Acetone was observed in the laboratory blank associated with this sample and is qualified with a B.

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0156	Lab Sample ID:	AB36259
Date of Collection:	11/12/2012	Matrix	PE Aqueous
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	51	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	40	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	90	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	41	1.0	
78-87-5	1,2-Dichloropropane	50	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	28	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	2.6	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	83	10	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	72	1.0	
108-86-1	Bromobenzene	51	1.0	
74-97-5	Bromoform	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	72	1.0	
67-66-3	Chloroform	30	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 44 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0156	Lab Sample ID:	AB36259
Date of Collection:	11/12/2012	Matrix	PE Aqueous
Date of Extraction:	11/16/12	Amount Prepared	5 mL
Date of Analysis:	11/16/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	18	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	73	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	79	10	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	40	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	52	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	86	10	
156-60-5	Trans-1,2-Dichloroethylene	63	1.0	
79-01-6	Trichloroethylene	87	1.0	
75-69-4	Trichlorofluoromethane	64	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	100	10	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	19	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
Toluene-D8	97	85 - 118
1,4-Bromofluorobenzene	97	78 - 111

Comments: The levels reported for vinyl chloride, MTBE, toluene, and 2-hexanone are derived from a ten-fold dilution.

VOA MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB36250

PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
1,1,1,2-Tetrachloroethane	2,000	ND	2000	100	67 - 129
1,1,1-Trichloroethane	2,000	ND	2000	100	75 - 139
1,1,2,2-Tetrachloroethane	2,000	ND	2000	100	50 - 142
1,1,2-Trichloro-1,2,2-Trifluoroethane	2,000	ND	1900	95	55 - 135
1,1,2-Trichloroethane	2,000	ND	2000	100	62 - 142
1,1-Dichloroethylene	2,000	ND	1900	95	80 - 138
1,1-Dichloropropene	2,000	ND	1900	95	73 - 131
1,1-dichloroethane	2,000	ND	1900	95	61 - 152
1,2,3-Trichlorobenzene	2,000	ND	1900	95	49 - 143
1,2,3-Trichloropropane	2,000	ND	1900	95	53 - 135
1,2,4-Trichlorobenzene	2,000	ND	1900	95	63 - 131
1,2,4-Trimethylbenzene	2,000	ND	1900	95	79 - 142
1,2-Dibromo-3-Chloropropane	2,000	ND	1800	90	28 - 122
1,2-Dibromoethane	2,000	ND	2000	100	53 - 139
1,2-Dichlorobenzene	2,000	ND	1900	95	74 - 129
1,2-Dichloroethane	2,000	ND	1900	95	61 - 142
1,2-Dichloropropane	2,000	ND	1900	95	71 - 126
1,3,5-Trimethylbenzene	2,000	ND	1900	95	77 - 140
1,3-Dichlorobenzene	2,000	ND	1900	95	78 - 127
1,3-Dichloropropane	2,000	ND	2000	100	63 - 130
1,4-Dichlorobenzene	2,000	ND	1900	95	72 - 131
2,2-Dichloropropane	2,000	ND	1900	95	50 - 139
2-Butanone (MEK)	2,000	ND	1600	80	29 - 163
2-Chlorotoluene	2,000	ND	1900	95	74 - 134
2-Hexanone	2,000	ND	1600	80	36 - 141
2-Propanone (acetone)	2,000	ND	1400	70	29 - 164
4-Chlorotoluene	2,000	ND	1900	95	68 - 141
4-Methyl-2-Pentanone(MIBK)	2,000	ND	1800	90	35 - 139
Acrylonitrile	2,000	ND	2000	100	42 - 150
Benzene	2,000	ND	1900	95	78 - 134
Bromobenzene	2,000	ND	1900	95	76 - 126
Bromochloromethane	2,000	ND	1900	95	62 - 140
Bromodichloromethane	2,000	ND	1900	95	62 - 133
Bromoform	2,000	ND	1900	95	31 - 133
Bromomethane	2,000	ND	1800	90	58 - 148
Carbon Disulfide	2,000	ND	1800	90	66 - 135
Carbon tetrachloride	2,000	ND	2000	100	62 - 146
Chlorobenzene	2,000	ND	2000	100	74 - 139
Chloroethane	2,000	ND	1800	90	65 - 145
Chloroform	2,000	ND	2000	100	60 - 144
Chloromethane	2,000	ND	1800	90	58 - 134
Dibromochloromethane	2,000	ND	2100	105	34 - 140
Dibromomethane	2,000	ND	1900	95	67 - 125
Dichlorodifluoromethane	2,000	ND	1600	80	30 - 132
Ethyl Ether	2,000	ND	1900	95	58 - 145
Ethylbenzene	2,000	ND	2000	100	73 - 143
Hexachlorobutadiene	2,000	ND	1800	90	56 - 144
Isopropylbenzene	2,000	ND	2000	100	73 - 139

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 46 of 57

FINAL

M/P Xylene	4,000	ND	3900	98	79 - 136
Methyl-t-Butyl Ether	2,000	ND	1800	90	50 - 144
Methylene Chloride	2,000	ND	1900	95	70 - 144
N-Butylbenzene	2,000	ND	2000	100	68 - 143
N-Propylbenzene	2,000	ND	1900	95	72 - 149
Naphthalene	2,000	ND	2100	105	33 - 154
Ortho Xylene	2,000	ND	2000	100	80 - 129
Para-Isopropyltoluene	2,000	ND	2000	100	71 - 140
Sec-Butylbenzene	2,000	ND	2000	100	75 - 148
Styrene	2,000	ND	2000	100	61 - 148
Tert-Butylbenzene	2,000	ND	2000	100	71 - 139
Tetrachloroethylene	2,000	3000	4400	70	45 - 145
Tetrahydrofuran	2,000	ND	1900	95	37 - 143
Toluene	2,000	ND	1900	95	77 - 142
Trans-1,2-Dichloroethylene	2,000	ND	1900	95	79 - 139
Trichloroethylene	2,000	ND	1900	95	65 - 143
Trichlorofluoromethane	2,000	ND	1900	95	58 - 161
Vinyl Acetate	2,000	ND	1900	95	22 - 173
Vinyl Chloride	2,000	ND	1900	95	68 - 139
c-1,3-dichloropropene	2,000	ND	2000	100	51 - 144
cis-1,2-Dichloroethylene	2,000	ND	2000	100	59 - 154
t-1,3-Dichloropropene	2,000	ND	2000	100	47 - 145

Comments:

Sample ID: AB36250

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/L	MSD % REC	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	2,000	2000	100	0	40
1,1,1-Trichloroethane	2,000	2100	105	5	16
1,1,2,2-Tetrachloroethane	2,000	2000	100	0	40
1,1,2-Trichloro-1,2,2-Trifluoroethane	2,000	2100	105	10	40
1,1,2-Trichloroethane	2,000	2000	100	0	40
1,1-Dichloroethylene	2,000	2000	100	5	35
1,1-Dichloropropene	2,000	2000	100	5	40
1,1-dichloroethane	2,000	2000	100	5	40
1,2,3-Trichlorobenzene	2,000	2000	100	5	40
1,2,3-Trichloropropane	2,000	2000	100	5	40
1,2,4-Trichlorobenzene	2,000	2000	100	5	40
1,2,4-Trimethylbenzene	2,000	2000	100	5	40
1,2-Dibromo-3-Chloropropane	2,000	1900	95	5	40
1,2-Dibromoethane	2,000	2000	100	0	40
1,2-Dichlorobenzene	2,000	1900	95	0	40
1,2-Dichloroethane	2,000	2000	100	5	23
1,2-Dichloropropane	2,000	1900	95	0	40
1,3,5-Trimethylbenzene	2,000	2000	100	5	40
1,3-Dichlorobenzene	2,000	2000	100	5	40
1,3-Dichloropropane	2,000	2000	100	0	40
1,4-Dichlorobenzene	2,000	1900	95	0	21
2,2-Dichloropropane	2,000	1900	95	0	40
2-Butanone (MEK)	2,000	1500	75	6	40
2-Chlorotoluene	2,000	1900	95	0	40
2-Hexanone	2,000	1500	75	6	40
2-Propanone (acetone)	2,000	1200	60	15	40
4-Chlorotoluene	2,000	2000	100	5	40
4-Methyl-2-Pentanone(MIBK)	2,000	1800	90	0	40
Acrylonitrile	2,000	2100	105	5	40
Benzene	2,000	2000	100	5	14
Bromobenzene	2,000	2000	100	5	40
Bromochloromethane	2,000	2000	100	5	40
Bromodichloromethane	2,000	2000	100	5	21
Bromoform	2,000	2000	100	5	40
Bromomethane	2,000	1900	95	5	40
Carbon Disulfide	2,000	1900	95	5	40
Carbon tetrachloride	2,000	2100	105	5	19
Chlorobenzene	2,000	2000	100	0	40
Chloroethane	2,000	1900	95	5	40
Chloroform	2,000	2000	100	0	16
Chloromethane	2,000	1800	90	0	40
Dibromochloromethane	2,000	2100	105	0	36
Dibromomethane	2,000	2000	100	5	40
Dichlorodifluoromethane	2,000	1700	85	6	40
Ethyl Ether	2,000	1900	95	0	40
Ethylbenzene	2,000	2000	100	0	40
Hexachlorobutadiene	2,000	1900	95	5	40
Isopropylbenzene	2,000	2100	105	5	40
M/P Xylene	4,000	4000	100	3	40
Methyl-t-Butyl Ether	2,000	1900	95	5	40
Methylene Chloride	2,000	2000	100	5	40
N-Butylbenzene	2,000	2100	105	5	40
N-Propylbenzene	2,000	2000	100	5	40

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 48 of 57

FINAL

Naphthalene	2,000	2200	110	5	40
Ortho Xylene	2,000	2000	100	0	40
Para-Isopropyltoluene	2,000	2100	105	5	40
Sec-Butylbenzene	2,000	2000	100	0	40
Styrene	2,000	2100	105	5	40
Tert-Butylbenzene	2,000	2100	105	5	40
Tetrachloroethylene	2,000	4500	75	7	40
Tetrahydrofuran	2,000	2100	105	10	40
Toluene	2,000	2000	100	5	40
Trans-1,2-Dichloroethylene	2,000	2000	100	5	40
Trichloroethylene	2,000	2000	100	5	22
Trichlorofluoromethane	2,000	2000	100	5	40
Vinyl Acetate	2,000	2000	100	5	40
Vinyl Chloride	2,000	2000	100	5	19
c-1,3-dichloropropene	2,000	2000	100	0	40
cis-1,2-Dichloroethylene	2,000	2100	105	5	40
t-1,3-Dichloropropene	2,000	2100	105	5	40

Comments:

Laboratory Duplicate Results

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB36250

PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUPLICATE RESULT ug/L	PRECISION RPD %	QC LIMITS
1,1,1,2-Tetrachloroethane	ND	ND	ND	30
1,1,1-Trichloroethane	ND	ND	ND	30
1,1,2,2-Tetrachloroethane	ND	ND	ND	30
1,1,2-Trichloro-1,2,2-Trifluoroeth	ND	ND	ND	30
1,1,2-Trichloroethane	ND	ND	ND	30
1,1-Dichloroethylene	ND	ND	ND	30
1,1-Dichloropropene	ND	ND	ND	30
1,1-dichloroethane	ND	ND	ND	30
1,2,3-Trichlorobenzene	ND	ND	ND	30
1,2,3-Trichloropropane	ND	ND	ND	30
1,2,4-Trichlorobenzene	ND	ND	ND	30
1,2,4-Trimethylbenzene	ND	ND	ND	30
1,2-Dibromo-3-Chloropropane	ND	ND	ND	30
1,2-Dibromoethane	ND	ND	ND	30
1,2-Dichlorobenzene	ND	ND	ND	30
1,2-Dichloroethane	ND	ND	ND	30
1,2-Dichloropropane	ND	ND	ND	30
1,3,5-Trimethylbenzene	ND	ND	ND	30
1,3-Dichlorobenzene	ND	ND	ND	30
1,3-Dichloropropane	ND	ND	ND	30
1,4-Dichlorobenzene	ND	ND	ND	30
2,2-Dichloropropane	ND	ND	ND	30
2-Butanone (MEK)	ND	ND	ND	30
2-Chlorotoluene	ND	ND	ND	30
2-Hexanone	ND	ND	ND	30
2-Propanone (acetone)	ND	ND	ND	30
4-Chlorotoluene	ND	ND	ND	30
4-Methyl-2-Pentanone(MIBK)	ND	ND	ND	30
Acrylonitrile	ND	ND	ND	30
Benzene	ND	ND	ND	30
Bromobenzene	ND	ND	ND	30
Bromochloromethane	ND	ND	ND	30
Bromodichloromethane	ND	ND	ND	30
Bromoform	ND	ND	ND	30
Bromomethane	ND	ND	ND	30
Carbon Disulfide	ND	ND	ND	30
Carbon tetrachloride	ND	ND	ND	30
Chlorobenzene	ND	ND	ND	30
Chloroethane	ND	ND	ND	30
Chloroform	ND	ND	ND	30
Chloromethane	ND	ND	ND	30
Dibromochloromethane	ND	ND	ND	30
Dibromomethane	ND	ND	ND	30
Dichlorodifluoromethane	ND	ND	ND	30
Ethyl Ether	ND	ND	ND	30
Ethylbenzene	ND	ND	ND	30
Hexachlorobutadiene	ND	ND	ND	30
Isopropylbenzene	ND	ND	ND	30
M/P Xylene	ND	ND	ND	30

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 50 of 57

FINAL

Methyl-t-Butyl Ether	ND	ND	ND	30
Methylene Chloride	ND	ND	ND	30
N-Butylbenzene	ND	ND	ND	30
N-Propylbenzene	ND	ND	ND	30
Naphthalene	ND	ND	ND	30
Ortho Xylene	ND	ND	ND	30
Para-Isopropyltoluene	ND	ND	ND	30
Sec-Butylbenzene	ND	ND	ND	30
Styrene	ND	ND	ND	30
Tert-Butylbenzene	ND	ND	ND	30
Tetrachloroethylene	3000	2800	6.90	30
Tetrahydrofuran	ND	ND	ND	30
Toluene	ND	ND	ND	30
Trans-1,2-Dichloroethylene	ND	ND	ND	30
Trichloroethylene	ND	ND	ND	30
Trichlorofluoromethane	ND	ND	ND	30
Vinyl Acetate	ND	ND	ND	30
Vinyl Chloride	ND	ND	ND	30
c-1,3-dichloropropene	ND	ND	ND	30
cis-1,2-Dichloroethylene	ND	ND	ND	30
t-1,3-Dichloropropene	ND	ND	ND	30

Laboratory Fortified Blank (LFB) Results

Henry's Dry Cleaners - Laconia, NH

PARAMETER	LFB AMOUNT SPIKED ug/mL	LFB RESULT ug/mL	LFB RECOVERY %	QC LIMITS %
1,1,1,2-Tetrachloroethane	20	21	105	79 - 136
1,1,1-Trichloroethane	20	21	105	75 - 146
1,1,2,2-Tetrachloroethane	20	20	100	62 - 141
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	19	95	56 - 130
1,1,2-Trichloroethane	20	20	100	75 - 138
1,1-Dichloroethylene	20	21	105	75 - 136
1,1-Dichloropropene	20	20	100	77 - 137
1,1-dichloroethane	20	20	100	76 - 142
1,2,3-Trichlorobenzene	20	19	95	64 - 143
1,2,3-Trichloropropane	20	20	100	66 - 133
1,2,4-Trichlorobenzene	20	20	100	80 - 131
1,2,4-Trimethylbenzene	20	21	105	74 - 155
1,2-Dibromo-3-Chloropropane	20	19	95	37 - 139
1,2-Dibromoethane	20	20	100	72 - 135
1,2-Dichlorobenzene	20	19	95	85 - 128
1,2-Dichloroethane	20	19	95	74 - 138
1,2-Dichloropropane	20	20	100	83 - 124
1,3,5-Trimethylbenzene	20	20	100	80 - 145
1,3-Dichlorobenzene	20	20	100	84 - 130
1,3-Dichloropropane	20	20	100	77 - 129
1,4-Dichlorobenzene	20	19	95	82 - 128
2,2-Dichloropropane	20	21	105	32 - 171
2-Butanone (MEK)	20	20	100	38 - 179
2-Chlorotoluene	20	20	100	78 - 134
2-Hexanone	20	21	105	45 - 158
2-Propanone (acetone)	20	20	100	14 - 209
4-Chlorotoluene	20	20	100	75 - 144
4-Methyl-2-Pentanone(MIBK)	20	20	100	40 - 144
Acrylonitrile	20	20	100	52 - 154
Benzene	20	20	100	83 - 130
Bromobenzene	20	20	100	85 - 126
Bromochloromethane	20	20	100	69 - 137
Bromodichloromethane	20	20	100	70 - 143
Bromoform	20	20	100	51 - 136
Bromomethane	20	19	95	65 - 140
Carbon Disulfide	20	19	95	68 - 140
Carbon tetrachloride	20	21	105	70 - 144
Chlorobenzene	20	20	100	84 - 131
Chloroethane	20	19	95	70 - 134
Chloroform	20	20	100	76 - 141
Chloromethane	20	18	90	63 - 123
Dibromochloromethane	20	21	105	39 - 154
Dibromomethane	20	20	100	79 - 124
Dichlorodifluoromethane	20	17	85	37 - 117
Ethyl Ether	20	19	95	67 - 140
Ethylbenzene	20	21	105	81 - 133
Hexachlorobutadiene	20	19	95	68 - 146
Isopropylbenzene	20	21	105	78 - 137
M/P Xylene	40	42	105	68 - 155
Methyl-t-Butyl Ether	20	19	95	63 - 144
Methylene Chloride	20	20	100	75 - 140
N-Butylbenzene	20	21	105	69 - 147

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 52 of 57 **FINAL**

N-Propylbenzene	20	20	100	76 - 138
Naphthalene	20	21	105	53 - 155
Ortho Xylene	20	22	110	85 - 135
Para-Isopropyltoluene	20	21	105	77 - 141
Sec-Butylbenzene	20	21	105	80 - 141
Styrene	20	22	110	82 - 139
Tert-Butylbenzene	20	21	105	75 - 144
Tetrachloroethylene	20	20	100	32 - 173
Tetrahydrofuran	20	19	95	47 - 149
Toluene	20	20	100	85 - 134
Trans-1,2-Dichloroethylene	20	20	100	80 - 138
Trichloroethylene	20	19	95	76 - 135
Trichlorofluoromethane	20	20	100	60 - 149
Vinyl Acetate	20	19	95	38 - 187
Vinyl Chloride	20	20	100	66 - 133
c-1,3-dichloropropene	20	21	105	68 - 149
cis-1,2-Dichloroethylene	20	20	100	76 - 143
t-1,3-Dichloropropene	20	21	105	62 - 160

Comments:

LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION ug/L	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	20	100	5	50
1,1,1-Trichloroethane	19	95	10	50
1,1,2,2-Tetrachloroethane	19	95	5	50
1,1,2-Trichloro-1,2,2-Trifluoroetha	19	95	0	50
1,1,2-Trichloroethane	20	100	0	50
1,1-Dichloroethylene	19	95	10	52
1,1-Dichloropropene	19	95	5	50
1,1-dichloroethane	19	95	5	50
1,2,3-Trichlorobenzene	18	90	5	50
1,2,3-Trichloropropane	19	95	5	50
1,2,4-Trichlorobenzene	18	90	11	50
1,2,4-Trimethylbenzene	19	95	10	50
1,2-Dibromo-3-Chloropropane	19	95	0	50
1,2-Dibromoethane	19	95	5	50
1,2-Dichlorobenzene	18	90	5	50
1,2-Dichloroethane	18	90	5	50
1,2-Dichloropropane	19	95	5	50
1,3,5-Trimethylbenzene	19	95	5	50
1,3-Dichlorobenzene	19	95	5	50
1,3-Dichloropropane	19	95	5	50
1,4-Dichlorobenzene	18	90	5	50
2,2-Dichloropropane	19	95	10	50
2-Butanone (MEK)	19	95	5	50
2-Chlorotoluene	18	90	11	50
2-Hexanone	20	100	5	50
2-Propanone (acetone)	20	100	0	50
4-Chlorotoluene	19	95	5	50
4-Methyl-2-Pentanone(MIBK)	19	95	5	50
Acrylonitrile	19	95	5	50
Benzene	19	95	5	50
Bromobenzene	19	95	5	50
Bromochloromethane	19	95	5	50
Bromodichloromethane	19	95	5	50
Bromoform	18	90	11	50
Bromomethane	19	95	0	50
Carbon Disulfide	18	90	5	50
Carbon tetrachloride	19	95	10	50
Chlorobenzene	18	90	11	34
Chloroethane	18	90	5	50
Chloroform	19	95	5	50
Chloromethane	18	90	0	50
Dibromochloromethane	20	100	5	50
Dibromomethane	19	95	5	50
Dichlorodifluoromethane	17	85	0	50
Ethyl Ether	19	95	0	50
Ethylbenzene	19	95	10	50
Hexachlorobutadiene	18	90	5	50
Isopropylbenzene	19	95	10	50
M/P Xylene	38	95	10	50
Methyl-t-Butyl Ether	19	95	0	50
Methylene Chloride	19	95	5	50
N-Butylbenzene	19	95	10	50
N-Propylbenzene	19	95	5	50
Naphthalene	20	100	5	50
Ortho Xylene	20	100	10	50

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 54 of 57

FINAL

Para-Isopropyltoluene	20	100	5	50
Sec-Butylbenzene	19	95	10	50
Styrene	20	100	10	50
Tert-Butylbenzene	19	95	10	50
Tetrachloroethylene	20	100	0	50
Tetrahydrofuran	19	95	0	50
Toluene	19	95	5	50
Trans-1,2-Dichloroethylene	20	100	0	50
Trichloroethylene	19	95	0	27
Trichlorofluoromethane	19	95	5	50
Vinyl Acetate	19	95	0	50
Vinyl Chloride	19	95	5	50
c-1,3-dichloropropene	20	100	5	50
cis-1,2-Dichloroethylene	19	95	5	50
t-1,3-Dichloropropene	20	100	5	50

Samples in Batch: AB36244, AB36245, AB36246, AB36247, AB36248, AB36249, AB36250,
AB36251, AB36252, AB36253, AB36254, AB36255, AB36256, AB36257,
AB36258, AB36259

USEPA Region 1

START II

Samples

Date: _____

Bart Iwan

CHAIN OF CUSTODY RECORD

No: 1-111512-110400-0011

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Lab: NEUROEME

Lab Contact: Doris Guzman

Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample	Matrix	Numb Cont	Container	Preservative	Storage
	R01-120314JT-0124	GEO-1	GW-01	VOCS (\$VOAMW)	N	11/12/2012	11:45	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0125	GEO-2	GW-02	VOCS (\$VOAMW)	N	11/12/2012	11:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0126	GEO-3	GW-03	VOCS (\$VOAMW)	N	11/12/2012	14:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0127	GEO-4	GW-04	VOCs (\$VOAMW)	N	11/12/2012	11:40	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0128	GEO-5	GW-05	VOCs (\$VOAMW)	N	11/12/2012	11:45	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0129	GEO-6	GW-06	VOCs (\$VOAMW)	N	11/12/2012	15:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0130	NWA-3C	GW-07	VOCs (\$VOAMW)	N	11/13/2012	10:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0131	NWA-3B	GW-08	VOCs (\$VOAMW)	N	11/13/2012	08:40	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0132	NWA-3A	GW-09	VOCs (\$VOAMW)	N	11/12/2012	14:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0133	ERT-4	GW-10	VOCs (\$VOAMW)	N	11/12/2012	16:15	Ground Water	4	40 mL Vial	HCl	Ice, 4C
	R01-120314JT-0134	ERT-2C	GW-11	VOCs (\$VOAMW)	N	11/13/2012	10:55	Ground Water	4	40 mL Vial	HCl	Ice, 4C

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

USEPA Region 4
START III

Sampler Signatures: *John K. Miller*
Date Hand Delivered: 11/15/2012
Allen. Allen

CHAIN OF CUSTODY RECORD
Henry's Dry Cleaners
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 1-111512-110400-0011

Site #: R01-120316TJ
Lab: NERL/JOEME
Lab Contact: Doris Guzman

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT-0135	ERT-2B	GW-12	VOCs (\$VOAMW)	N	11/13/2012	13:25	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0136	ERT-2A	GW-13	VOCs (\$VOAMW)	N	11/13/2012	15:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0137	ERT-3C	GW-14	VOCs (\$VOAMW)	N	11/13/2012	11:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0138	ERT-3B	GW-15	VOCs (\$VOAMW)	N	11/13/2012	14:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0139	ERT-3A	GW-16	VOCs (\$VOAMW)	N	11/13/2012	16:10	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0140	ERT-1C	GW-17	VOCs (\$VOAMW)	N	11/13/2012	13:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0141	ERT-1B	GW-18	VOCs (\$VOAMW)	N	11/13/2012	16:00	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0143	MW-101S	GW-20	VOCs (\$VOAMW)	Y	11/13/2012	13:30	Ground Water	6	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0150	ERT-1B2	GW-27	VOCs (\$VOAMW)	N	11/13/2012	16:00	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT-0152	RB-01		VOCs (\$VOAMW)	N	11/14/2012	09:00	Rinsate Water	4	40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0153	TB-01	VOCs (\$VOAMW)	N	11/12/2012	07:00	Trip Blank	4	40 mL Vial	HCl	Ice, 4C	

Special Instructions: Please email results to OSC Allen Jarrell at jarrel.allen@epa.gov.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

PN: 12110027

CHAIN OF CUSTODY RECORD

No: 1-111512-116400-001
Site #: R01-120316TJ

Site #: R01-120316TJ

START III
Sampler Signatures: *John Doe* *Allen Jarrell*
Date Hand Delivered: 11/15/2012
Contact Phone: 617-312-4777
Henry's Dry Cleaners

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample	Matrix	Numb Cont	Container	Preservative	Storage
	R01-120314JT-0155	PE-V81031		VOCs (\$VOAMW)	N	1/1/2012	07:00	PE Aqueous	1 amber ampule	MeOH	Ice, 4C	
	R01-120314JT-0142	ERT-1A	GW-19	VOCS (\$VOAMW)	N	1/1/2012	09:25	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0144	MW-101D	GW-21	VOCS (\$VOAMW)	N	1/1/2012	10:50	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0145	MW-102	GW-22	VOCS (\$VOAMW)	N	1/1/2012	15:50	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0146	MW-103	GW-23	VOCS (\$VOAMW)	N	1/1/2012	12:30	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0147	OSW-01	GW-24	VOCS (\$VOAMW)	N	1/1/2012	12:05	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0148	ERT-2-B	GW-25	VOCS (\$VOAMW)	Y	1/1/2012	10:05	Ground Water	6 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0149	ERT-3-B	GW-26	VOCS (\$VOAMW)	N	1/1/2012	10:20	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0151	ERT-3-B2	GW-28	VOCS (\$VOAMW)	N	1/1/2012	10:20	Ground Water	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0154	TB-02		VOCS (\$VOAMW)	N	1/1/2012	07:00	Trip Blank	4 40 mL Vial	HCl	Ice, 4C	
	R01-120314JT-0156	PE-V81075		VOCs (\$VOAMW)	N	1/1/2012	07:00	PE Aqueous	1 amber ampule	MeOH	Ice, 4C	

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**



**United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431**

Page 1 of 57 FINAL

Laboratory Report

November 30, 2012

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 12110026

Project: Henry's Dry Cleaners - Laconia, NH
Analysis: VOAs in Water
Analyst: Joseph Montanaro

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-VOAGCMS9.

Samples were analyzed by GC/MS. Samples were introduced to the GC via a Tekmar pre-concentrator and an Archon autosampler. The analysis SOP is based on US EPA Method 8260B, method 5030B, rev 2.0 SW-846, Rev 2.0, 1996. Method 624, 40CFR Part 136 Appendix A, July 1, 1992, and USEPA CLP SOW for Organic Analysis OLM04.2, 1999.

Date Samples Received by the Laboratory: 11/15/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

12110026\$VOAMW

Qualifiers: RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 5 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 3 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0124	Lab Sample ID:	AB36227
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	
71-55-6	1,1,1-Trichloroethane	ND	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	
79-00-5	1,1,2-Trichloroethane	ND	5.0	
75-35-4	1,1-Dichloroethylene	ND	5.0	
563-58-6	1,1-Dichloropropene	ND	5.0	
75-34-3	1,1-dichloroethane	ND	5.0	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	
96-18-4	1,2,3-Trichloropropane	ND	5.0	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5.0	
106-93-4	1,2-Dibromoethane	ND	5.0	
95-50-1	1,2-Dichlorobenzene	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	5.0	
78-87-5	1,2-Dichloropropane	ND	5.0	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	
541-73-1	1,3-Dichlorobenzene	ND	5.0	
142-28-9	1,3-Dichloropropane	ND	5.0	
106-46-7	1,4-Dichlorobenzene	ND	5.0	
594-20-7	2,2-Dichloropropane	ND	5.0	
78-93-3	2-Butanone (MEK)	ND	5.0	
95-49-8	2-Chlorotoluene	ND	5.0	
591-78-6	2-Hexanone	ND	5.0	
67-64-1	2-Propanone (acetone)	ND	5.0	
106-43-4	4-Chlorotoluene	ND	5.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5.0	
107-13-1	Acrylonitrile	ND	5.0	
71-43-2	Benzene	ND	5.0	
108-86-1	Bromobenzene	ND	5.0	
74-97-5	Bromochloromethane	ND	5.0	
75-27-4	Bromodichloromethane	ND	5.0	
75-25-2	Bromoform	ND	5.0	
74-83-9	Bromomethane	ND	5.0	
75-15-0	Carbon Disulfide	ND	5.0	
56-23-5	Carbon tetrachloride	ND	5.0	
108-90-7	Chlorobenzene	ND	5.0	
75-00-3	Chloroethane	ND	5.0	
67-66-3	Chloroform	ND	5.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 4 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0124	Lab Sample ID:	AB36227
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	5.0	
124-48-1	Dibromochloromethane	ND	5.0	
74-95-3	Dibromomethane	ND	5.0	
75-71-8	Dichlorodifluoromethane	ND	5.0	
60-29-7	Ethyl Ether	ND	5.0	
100-41-4	Ethylbenzene	ND	5.0	
87-68-3	Hexachlorobutadiene	ND	5.0	
98-82-8	Isopropylbenzene	ND	5.0	
108-38-3/106-42-	M/P Xylene	ND	10	
1634-04-4	Methyl-t-Butyl Ether	ND	5.0	
75-09-2	Methylene Chloride	ND	5.0	
104-51-8	N-Butylbenzene	ND	5.0	
103-65-1	N-Propylbenzene	ND	5.0	
91-20-3	Naphthalene	ND	5.0	
95-47-6	Ortho Xylene	ND	5.0	
99-87-6	Para-Isopropyltoluene	ND	5.0	
135-98-8	Sec-Butylbenzene	ND	5.0	
100-42-5	Styrene	ND	5.0	
98-06-6	Tert-Butylbenzene	ND	5.0	
127-18-4	Tetrachloroethylene	75	5.0	
109-99-9	Tetrahydrofuran	ND	5.0	
108-88-3	Toluene	ND	5.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	5.0	
79-01-6	Trichloroethylene	88	5.0	
75-69-4	Trichlorofluoromethane	ND	5.0	
108-05-4	Vinyl Acetate	ND	5.0	
75-01-4	Vinyl Chloride	55	5.0	
10061-01-5	c-1,3-dichloropropene	ND	5.0	
156-59-2	cis-1,2-Dichloroethylene	180	5.0	
10061-02-6	t-1,3-Dichloropropene	ND	5.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	109	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	90	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 5 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.1	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 6 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	109	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 7 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
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Comments: Laboratory blank is associated with samples AB36227 - AB36233 and AB36235 - AB36237.

Acetone was reported in this laboratory blank at 1.1 ug/L. Observations of this compound in samples associated with this laboratory blank are qualified with a B.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 8 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0125	Lab Sample ID:	AB36228
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 9 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0125	Lab Sample ID:	AB36228
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	113	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	89	78 - 111

Comments:

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 10 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0126	Lab Sample ID:	AB36229
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 11 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0126	Lab Sample ID:	AB36229
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	15	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	54	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	89	78 - 111

Comments:

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Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0127	Lab Sample ID:	AB36230
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	
71-55-6	1,1,1-Trichloroethane	ND	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	
79-00-5	1,1,2-Trichloroethane	ND	5.0	
75-35-4	1,1-Dichloroethylene	ND	5.0	
563-58-6	1,1-Dichloropropene	ND	5.0	
75-34-3	1,1-dichloroethane	ND	5.0	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	
96-18-4	1,2,3-Trichloropropane	ND	5.0	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5.0	
106-93-4	1,2-Dibromoethane	ND	5.0	
95-50-1	1,2-Dichlorobenzene	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	5.0	
78-87-5	1,2-Dichloropropane	ND	5.0	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	
541-73-1	1,3-Dichlorobenzene	ND	5.0	
142-28-9	1,3-Dichloropropane	ND	5.0	
106-46-7	1,4-Dichlorobenzene	ND	5.0	
594-20-7	2,2-Dichloropropane	ND	5.0	
78-93-3	2-Butanone (MEK)	ND	5.0	
95-49-8	2-Chlorotoluene	ND	5.0	
591-78-6	2-Hexanone	ND	5.0	
67-64-1	2-Propanone (acetone)	ND	5.0	
106-43-4	4-Chlorotoluene	ND	5.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5.0	
107-13-1	Acrylonitrile	ND	5.0	
71-43-2	Benzene	ND	5.0	
108-86-1	Bromobenzene	ND	5.0	
74-97-5	Bromochloromethane	ND	5.0	
75-27-4	Bromodichloromethane	ND	5.0	
75-25-2	Bromoform	ND	5.0	
74-83-9	Bromomethane	ND	5.0	
75-15-0	Carbon Disulfide	ND	5.0	
56-23-5	Carbon tetrachloride	ND	5.0	
108-90-7	Chlorobenzene	ND	5.0	
75-00-3	Chloroethane	ND	5.0	
67-66-3	Chloroform	ND	5.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 13 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0127	Lab Sample ID:	AB36230
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	5.0	
124-48-1	Dibromochloromethane	ND	5.0	
74-95-3	Dibromomethane	ND	5.0	
75-71-8	Dichlorodifluoromethane	ND	5.0	
60-29-7	Ethyl Ether	ND	5.0	
100-41-4	Ethylbenzene	ND	5.0	
87-68-3	Hexachlorobutadiene	ND	5.0	
98-82-8	Isopropylbenzene	ND	5.0	
108-38-3/106-42-	M/P Xylene	ND	10	
1634-04-4	Methyl-t-Butyl Ether	ND	5.0	
75-09-2	Methylene Chloride	ND	5.0	
104-51-8	N-Butylbenzene	ND	5.0	
103-65-1	N-Propylbenzene	ND	5.0	
91-20-3	Naphthalene	ND	5.0	
95-47-6	Ortho Xylene	ND	5.0	
99-87-6	Para-Isopropyltoluene	ND	5.0	
135-98-8	Sec-Butylbenzene	ND	5.0	
100-42-5	Styrene	ND	5.0	
98-06-6	Tert-Butylbenzene	ND	5.0	
127-18-4	Tetrachloroethylene	79	5.0	
109-99-9	Tetrahydrofuran	ND	5.0	
108-88-3	Toluene	ND	5.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	5.0	
79-01-6	Trichloroethylene	210	5.0	
75-69-4	Trichlorofluoromethane	ND	5.0	
108-05-4	Vinyl Acetate	ND	5.0	
75-01-4	Vinyl Chloride	94	5.0	
10061-01-5	c-1,3-dichloropropene	ND	5.0	
156-59-2	cis-1,2-Dichloroethylene	140	5.0	
10061-02-6	t-1,3-Dichloropropene	ND	5.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	90	78 - 111

Comments:

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 14 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0128	Lab Sample ID:	AB36231
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.3	1.0	B
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 15 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0128	Lab Sample ID:	AB36231
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	1.3	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	1.9	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	1.4	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	115	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments: Acetone was observed in the laboratory blank associated with this sample and is qualified with a B.

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0129	Lab Sample ID:	AB36232
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 17 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0129	Lab Sample ID:	AB36232
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	113	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	90	78 - 111

Comments:

12110026\$VOAMW

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0130	Lab Sample ID:	AB36233
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	200
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	200	
71-55-6	1,1,1-Trichloroethane	ND	200	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	
79-00-5	1,1,2-Trichloroethane	ND	200	
75-35-4	1,1-Dichloroethylene	ND	200	
563-58-6	1,1-Dichloropropene	ND	200	
75-34-3	1,1-dichloroethane	ND	200	
87-61-6	1,2,3-Trichlorobenzene	ND	200	
96-18-4	1,2,3-Trichloropropane	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
95-63-6	1,2,4-Trimethylbenzene	ND	200	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	200	
106-93-4	1,2-Dibromoethane	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
107-06-2	1,2-Dichloroethane	ND	200	
78-87-5	1,2-Dichloropropane	ND	200	
108-67-8	1,3,5-Trimethylbenzene	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
142-28-9	1,3-Dichloropropane	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
594-20-7	2,2-Dichloropropane	ND	200	
78-93-3	2-Butanone (MEK)	ND	200	
95-49-8	2-Chlorotoluene	ND	200	
591-78-6	2-Hexanone	ND	200	
67-64-1	2-Propanone (acetone)	ND	200	
106-43-4	4-Chlorotoluene	ND	200	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	200	
107-13-1	Acrylonitrile	ND	200	
71-43-2	Benzene	ND	200	
108-86-1	Bromobenzene	ND	200	
74-97-5	Bromochloromethane	ND	200	
75-27-4	Bromodichloromethane	ND	200	
75-25-2	Bromoform	ND	200	
74-83-9	Bromomethane	ND	200	
75-15-0	Carbon Disulfide	ND	200	
56-23-5	Carbon tetrachloride	ND	200	
108-90-7	Chlorobenzene	ND	200	
75-00-3	Chloroethane	ND	200	
67-66-3	Chloroform	ND	200	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 19 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0130	Lab Sample ID:	AB36233
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	200
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	200	
124-48-1	Dibromochloromethane	ND	200	
74-95-3	Dibromomethane	ND	200	
75-71-8	Dichlorodifluoromethane	ND	200	
60-29-7	Ethyl Ether	ND	200	
100-41-4	Ethylbenzene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
98-82-8	Isopropylbenzene	ND	200	
108-38-3/106-42-	M/P Xylene	ND	400	
1634-04-4	Methyl-t-Butyl Ether	ND	200	
75-09-2	Methylene Chloride	ND	200	
104-51-8	N-Butylbenzene	ND	200	
103-65-1	N-Propylbenzene	ND	200	
91-20-3	Naphthalene	ND	200	
95-47-6	Ortho Xylene	ND	200	
99-87-6	Para-Isopropyltoluene	ND	200	
135-98-8	Sec-Butylbenzene	ND	200	
100-42-5	Styrene	ND	200	
98-06-6	Tert-Butylbenzene	ND	200	
127-18-4	Tetrachloroethylene	6500	200	
109-99-9	Tetrahydrofuran	ND	200	
108-88-3	Toluene	ND	200	
156-60-5	Trans-1,2-Dichloroethylene	ND	200	
79-01-6	Trichloroethylene	ND	200	
75-69-4	Trichlorofluoromethane	ND	200	
108-05-4	Vinyl Acetate	ND	200	
75-01-4	Vinyl Chloride	ND	200	
10061-01-5	c-1,3-dichloropropene	ND	200	
156-59-2	cis-1,2-Dichloroethylene	ND	200	
10061-02-6	t-1,3-Dichloropropene	ND	200	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	117	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments:

12110026\$VOAMW

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0131	Lab Sample ID:	AB36234
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	200
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	200	
71-55-6	1,1,1-Trichloroethane	ND	200	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	
79-00-5	1,1,2-Trichloroethane	ND	200	
75-35-4	1,1-Dichloroethylene	ND	200	
563-58-6	1,1-Dichloropropene	ND	200	
75-34-3	1,1-dichloroethane	ND	200	
87-61-6	1,2,3-Trichlorobenzene	ND	200	
96-18-4	1,2,3-Trichloropropane	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
95-63-6	1,2,4-Trimethylbenzene	ND	200	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	200	
106-93-4	1,2-Dibromoethane	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
107-06-2	1,2-Dichloroethane	ND	200	
78-87-5	1,2-Dichloropropane	ND	200	
108-67-8	1,3,5-Trimethylbenzene	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
142-28-9	1,3-Dichloropropane	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
594-20-7	2,2-Dichloropropane	ND	200	
78-93-3	2-Butanone (MEK)	ND	200	
95-49-8	2-Chlorotoluene	ND	200	
591-78-6	2-Hexanone	ND	200	
67-64-1	2-Propanone (acetone)	ND	200	
106-43-4	4-Chlorotoluene	ND	200	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	200	
107-13-1	Acrylonitrile	ND	200	
71-43-2	Benzene	ND	200	
108-86-1	Bromobenzene	ND	200	
74-97-5	Bromochloromethane	ND	200	
75-27-4	Bromodichloromethane	ND	200	
75-25-2	Bromoform	ND	200	
74-83-9	Bromomethane	ND	200	
75-15-0	Carbon Disulfide	ND	200	
56-23-5	Carbon tetrachloride	ND	200	
108-90-7	Chlorobenzene	ND	200	
75-00-3	Chloroethane	ND	200	
67-66-3	Chloroform	ND	200	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 21 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0131	Lab Sample ID:	AB36234
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	200
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	200	
124-48-1	Dibromochloromethane	ND	200	
74-95-3	Dibromomethane	ND	200	
75-71-8	Dichlorodifluoromethane	ND	200	
60-29-7	Ethyl Ether	ND	200	
100-41-4	Ethylbenzene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
98-82-8	Isopropylbenzene	ND	200	
108-38-3/106-42-	M/P Xylene	ND	400	
1634-04-4	Methyl-t-Butyl Ether	ND	200	
75-09-2	Methylene Chloride	ND	200	
104-51-8	N-Butylbenzene	ND	200	
103-65-1	N-Propylbenzene	ND	200	
91-20-3	Naphthalene	ND	200	
95-47-6	Ortho Xylene	ND	200	
99-87-6	Para-Isopropyltoluene	ND	200	
135-98-8	Sec-Butylbenzene	ND	200	
100-42-5	Styrene	ND	200	
98-06-6	Tert-Butylbenzene	ND	200	
127-18-4	Tetrachloroethylene	5200	200	
109-99-9	Tetrahydrofuran	ND	200	
108-88-3	Toluene	ND	200	
156-60-5	Trans-1,2-Dichloroethylene	ND	200	
79-01-6	Trichloroethylene	ND	200	
75-69-4	Trichlorofluoromethane	ND	200	
108-05-4	Vinyl Acetate	ND	200	
75-01-4	Vinyl Chloride	ND	200	
10061-01-5	c-1,3-dichloropropene	ND	200	
156-59-2	cis-1,2-Dichloroethylene	ND	200	
10061-02-6	t-1,3-Dichloropropene	ND	200	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 22 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5.0 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	1.2	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 23 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5.0 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
Toluene-D8	97	85 - 118
1,4-Bromofluorobenzene	94	78 - 111

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 24 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/18/12	Amount Prepared	5.0 mL
Date of Analysis:	11/18/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
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Comments: Laboratory blank is associated with sample AB36234 (MS/MS and Duplicate Studies).

Acetone was reported in this laboratory blank at 1.2 ug/L. Observations of this compound in samples associated with this laboratory blank are qualified with a B.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 25 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0132	Lab Sample ID:	AB36235
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 26 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0132	Lab Sample ID:	AB36235
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	116	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	92	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 27 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0133	Lab Sample ID:	AB36236
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromoform	ND	50	
75-27-4	Bromochloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0133	Lab Sample ID:	AB36236
Date of Collection:	11/12/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	50	
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-	M/P Xylene	ND	100	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
75-09-2	Methylene Chloride	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
91-20-3	Naphthalene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	1600	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	140	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
156-59-2	cis-1,2-Dichloroethylene	270	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	118	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	88	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 29 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0134	Lab Sample ID:	AB36237
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	100	
79-00-5	1,1,2-Trichloroethane	ND	100	
75-35-4	1,1-Dichloroethylene	ND	100	
563-58-6	1,1-Dichloropropene	ND	100	
75-34-3	1,1-dichloroethane	ND	100	
87-61-6	1,2,3-Trichlorobenzene	ND	100	
96-18-4	1,2,3-Trichloropropane	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-63-6	1,2,4-Trimethylbenzene	ND	100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	100	
106-93-4	1,2-Dibromoethane	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
107-06-2	1,2-Dichloroethane	ND	100	
78-87-5	1,2-Dichloropropane	ND	100	
108-67-8	1,3,5-Trimethylbenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
142-28-9	1,3-Dichloropropane	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
594-20-7	2,2-Dichloropropane	ND	100	
78-93-3	2-Butanone (MEK)	ND	100	
95-49-8	2-Chlorotoluene	ND	100	
591-78-6	2-Hexanone	ND	100	
67-64-1	2-Propanone (acetone)	ND	100	
106-43-4	4-Chlorotoluene	ND	100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	100	
107-13-1	Acrylonitrile	ND	100	
71-43-2	Benzene	ND	100	
108-86-1	Bromobenzene	ND	100	
74-97-5	Bromoform	ND	100	
75-27-4	Bromochloromethane	ND	100	
75-25-2	Bromodichloromethane	ND	100	
74-83-9	Bromomethane	ND	100	
75-15-0	Carbon Disulfide	ND	100	
56-23-5	Carbon tetrachloride	ND	100	
108-90-7	Chlorobenzene	ND	100	
75-00-3	Chloroethane	ND	100	
67-66-3	Chloroform	ND	100	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 30 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0134	Lab Sample ID:	AB36237
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	100	
124-48-1	Dibromochloromethane	ND	100	
74-95-3	Dibromomethane	ND	100	
75-71-8	Dichlorodifluoromethane	ND	100	
60-29-7	Ethyl Ether	ND	100	
100-41-4	Ethylbenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
98-82-8	Isopropylbenzene	ND	100	
108-38-3/106-42-	M/P Xylene	ND	200	
1634-04-4	Methyl-t-Butyl Ether	ND	100	
75-09-2	Methylene Chloride	ND	100	
104-51-8	N-Butylbenzene	ND	100	
103-65-1	N-Propylbenzene	ND	100	
91-20-3	Naphthalene	ND	100	
95-47-6	Ortho Xylene	ND	100	
99-87-6	Para-Isopropyltoluene	ND	100	
135-98-8	Sec-Butylbenzene	ND	100	
100-42-5	Styrene	ND	100	
98-06-6	Tert-Butylbenzene	ND	100	
127-18-4	Tetrachloroethylene	2300	100	
109-99-9	Tetrahydrofuran	ND	100	
108-88-3	Toluene	ND	100	
156-60-5	Trans-1,2-Dichloroethylene	ND	100	
79-01-6	Trichloroethylene	ND	100	
75-69-4	Trichlorofluoromethane	ND	100	
108-05-4	Vinyl Acetate	ND	100	
75-01-4	Vinyl Chloride	ND	100	
10061-01-5	c-1,3-dichloropropene	ND	100	
156-59-2	cis-1,2-Dichloroethylene	ND	100	
10061-02-6	t-1,3-Dichloropropene	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	118	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	90	78 - 111

Comments:

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Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0135	Lab Sample ID:	AB36238
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	250
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	
71-55-6	1,1,1-Trichloroethane	ND	250	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	
79-00-5	1,1,2-Trichloroethane	ND	250	
75-35-4	1,1-Dichloroethylene	ND	250	
563-58-6	1,1-Dichloropropene	ND	250	
75-34-3	1,1-dichloroethane	ND	250	
87-61-6	1,2,3-Trichlorobenzene	ND	250	
96-18-4	1,2,3-Trichloropropane	ND	250	
120-82-1	1,2,4-Trichlorobenzene	ND	250	
95-63-6	1,2,4-Trimethylbenzene	ND	250	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	250	
106-93-4	1,2-Dibromoethane	ND	250	
95-50-1	1,2-Dichlorobenzene	ND	250	
107-06-2	1,2-Dichloroethane	ND	250	
78-87-5	1,2-Dichloropropane	ND	250	
108-67-8	1,3,5-Trimethylbenzene	ND	250	
541-73-1	1,3-Dichlorobenzene	ND	250	
142-28-9	1,3-Dichloropropane	ND	250	
106-46-7	1,4-Dichlorobenzene	ND	250	
594-20-7	2,2-Dichloropropane	ND	250	
78-93-3	2-Butanone (MEK)	ND	250	
95-49-8	2-Chlorotoluene	ND	250	
591-78-6	2-Hexanone	ND	250	
67-64-1	2-Propanone (acetone)	ND	250	
106-43-4	4-Chlorotoluene	ND	250	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	250	
107-13-1	Acrylonitrile	ND	250	
71-43-2	Benzene	ND	250	
108-86-1	Bromobenzene	ND	250	
74-97-5	Bromochloromethane	ND	250	
75-27-4	Bromodichloromethane	ND	250	
75-25-2	Bromoform	ND	250	
74-83-9	Bromomethane	ND	250	
75-15-0	Carbon Disulfide	ND	250	
56-23-5	Carbon tetrachloride	ND	250	
108-90-7	Chlorobenzene	ND	250	
75-00-3	Chloroethane	ND	250	
67-66-3	Chloroform	ND	250	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 32 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0135	Lab Sample ID:	AB36238
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	250
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	250	
124-48-1	Dibromochloromethane	ND	250	
74-95-3	Dibromomethane	ND	250	
75-71-8	Dichlorodifluoromethane	ND	250	
60-29-7	Ethyl Ether	ND	250	
100-41-4	Ethylbenzene	ND	250	
87-68-3	Hexachlorobutadiene	ND	250	
98-82-8	Isopropylbenzene	ND	250	
108-38-3/106-42-	M/P Xylene	ND	500	
1634-04-4	Methyl-t-Butyl Ether	ND	250	
75-09-2	Methylene Chloride	ND	250	
104-51-8	N-Butylbenzene	ND	250	
103-65-1	N-Propylbenzene	ND	250	
91-20-3	Naphthalene	ND	250	
95-47-6	Ortho Xylene	ND	250	
99-87-6	Para-Isopropyltoluene	ND	250	
135-98-8	Sec-Butylbenzene	ND	250	
100-42-5	Styrene	ND	250	
98-06-6	Tert-Butylbenzene	ND	250	
127-18-4	Tetrachloroethylene	12000	250	
109-99-9	Tetrahydrofuran	ND	250	
108-88-3	Toluene	ND	250	
156-60-5	Trans-1,2-Dichloroethylene	ND	250	
79-01-6	Trichloroethylene	380	250	
75-69-4	Trichlorofluoromethane	ND	250	
108-05-4	Vinyl Acetate	ND	250	
75-01-4	Vinyl Chloride	ND	250	
10061-01-5	c-1,3-dichloropropene	ND	250	
156-59-2	cis-1,2-Dichloroethylene	510	250	
10061-02-6	t-1,3-Dichloropropene	ND	250	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	119	74 - 136
Toluene-D8	99	85 - 118
1,4-Bromofluorobenzene	90	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 33 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**Laboratory Blank for \$VOAMW**

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	
71-55-6	1,1,1-Trichloroethane	ND	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND	1.0	
75-35-4	1,1-Dichloroethylene	ND	1.0	
563-58-6	1,1-Dichloropropene	ND	1.0	
75-34-3	1,1-dichloroethane	ND	1.0	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	
96-18-4	1,2,3-Trichloropropane	ND	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	1.0	
106-93-4	1,2-Dibromoethane	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	1.0	
107-06-2	1,2-Dichloroethane	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	1.0	
142-28-9	1,3-Dichloropropane	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	1.0	
594-20-7	2,2-Dichloropropane	ND	1.0	
78-93-3	2-Butanone (MEK)	ND	1.0	
95-49-8	2-Chlorotoluene	ND	1.0	
591-78-6	2-Hexanone	ND	1.0	
67-64-1	2-Propanone (acetone)	ND	1.0	
106-43-4	4-Chlorotoluene	ND	1.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	1.0	
107-13-1	Acrylonitrile	ND	1.0	
71-43-2	Benzene	ND	1.0	
108-86-1	Bromobenzene	ND	1.0	
74-97-5	Bromochloromethane	ND	1.0	
75-27-4	Bromodichloromethane	ND	1.0	
75-25-2	Bromoform	ND	1.0	
74-83-9	Bromomethane	ND	1.0	
75-15-0	Carbon Disulfide	ND	1.0	
56-23-5	Carbon tetrachloride	ND	1.0	
108-90-7	Chlorobenzene	ND	1.0	
75-00-3	Chloroethane	ND	1.0	
67-66-3	Chloroform	ND	1.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 34 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

Laboratory Blank for \$VOAMW

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5.0 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	~6

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	1.0	
124-48-1	Dibromochloromethane	ND	1.0	
74-95-3	Dibromomethane	ND	1.0	
75-71-8	Dichlorodifluoromethane	ND	1.0	
60-29-7	Ethyl Ether	ND	1.0	
100-41-4	Ethylbenzene	ND	1.0	
87-68-3	Hexachlorobutadiene	ND	1.0	
98-82-8	Isopropylbenzene	ND	1.0	
108-38-3/106-42-	M/P Xylene	ND	2.0	
1634-04-4	Methyl-t-Butyl Ether	ND	1.0	
75-09-2	Methylene Chloride	ND	1.0	
104-51-8	N-Butylbenzene	ND	1.0	
103-65-1	N-Propylbenzene	ND	1.0	
91-20-3	Naphthalene	ND	1.0	
95-47-6	Ortho Xylene	ND	1.0	
99-87-6	Para-Isopropyltoluene	ND	1.0	
135-98-8	Sec-Butylbenzene	ND	1.0	
100-42-5	Styrene	ND	1.0	
98-06-6	Tert-Butylbenzene	ND	1.0	
127-18-4	Tetrachloroethylene	ND	1.0	
109-99-9	Tetrahydrofuran	ND	1.0	
108-88-3	Toluene	ND	1.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	1.0	
79-01-6	Trichloroethylene	ND	1.0	
75-69-4	Trichlorofluoromethane	ND	1.0	
108-05-4	Vinyl Acetate	ND	1.0	
75-01-4	Vinyl Chloride	ND	1.0	
10061-01-5	c-1,3-dichloropropene	ND	1.0	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	
10061-02-6	t-1,3-Dichloropropene	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	112	74 - 136
Toluene-D8	96	85 - 118
1,4-Bromofluorobenzene	93	78 - 111

Comments: Laboratory blank is associated with samples AB36238 - AB36243.

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Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0136	Lab Sample ID:	AB36239
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromochloromethane	ND	50	
75-27-4	Bromodichloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0136	Lab Sample ID:	AB36239
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/19/12	Amount Prepared	5 mL
Date of Analysis:	11/19/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	50
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	50	
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-	M/P Xylene	ND	100	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
75-09-2	Methylene Chloride	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
91-20-3	Naphthalene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	1800	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	59	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
156-59-2	cis-1,2-Dichloroethylene	61	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	119	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	91	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 37 of 57

FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0137	Lab Sample ID:	AB36240
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	100	
79-00-5	1,1,2-Trichloroethane	ND	100	
75-35-4	1,1-Dichloroethylene	ND	100	
563-58-6	1,1-Dichloropropene	ND	100	
75-34-3	1,1-dichloroethane	ND	100	
87-61-6	1,2,3-Trichlorobenzene	ND	100	
96-18-4	1,2,3-Trichloropropane	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-63-6	1,2,4-Trimethylbenzene	ND	100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	100	
106-93-4	1,2-Dibromoethane	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
107-06-2	1,2-Dichloroethane	ND	100	
78-87-5	1,2-Dichloropropane	ND	100	
108-67-8	1,3,5-Trimethylbenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
142-28-9	1,3-Dichloropropane	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
594-20-7	2,2-Dichloropropane	ND	100	
78-93-3	2-Butanone (MEK)	ND	100	
95-49-8	2-Chlorotoluene	ND	100	
591-78-6	2-Hexanone	ND	100	
67-64-1	2-Propanone (acetone)	ND	100	
106-43-4	4-Chlorotoluene	ND	100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	100	
107-13-1	Acrylonitrile	ND	100	
71-43-2	Benzene	ND	100	
108-86-1	Bromobenzene	ND	100	
74-97-5	Bromoform	ND	100	
75-27-4	Bromochloromethane	ND	100	
75-25-2	Bromodichloromethane	ND	100	
74-83-9	Bromomethane	ND	100	
75-15-0	Carbon Disulfide	ND	100	
56-23-5	Carbon tetrachloride	ND	100	
108-90-7	Chlorobenzene	ND	100	
75-00-3	Chloroethane	ND	100	
67-66-3	Chloroform	ND	100	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 38 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0137	Lab Sample ID:	AB36240
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	100	
124-48-1	Dibromochloromethane	ND	100	
74-95-3	Dibromomethane	ND	100	
75-71-8	Dichlorodifluoromethane	ND	100	
60-29-7	Ethyl Ether	ND	100	
100-41-4	Ethylbenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
98-82-8	Isopropylbenzene	ND	100	
108-38-3/106-42-	M/P Xylene	ND	200	
1634-04-4	Methyl-t-Butyl Ether	ND	100	
75-09-2	Methylene Chloride	ND	100	
104-51-8	N-Butylbenzene	ND	100	
103-65-1	N-Propylbenzene	ND	100	
91-20-3	Naphthalene	ND	100	
95-47-6	Ortho Xylene	ND	100	
99-87-6	Para-Isopropyltoluene	ND	100	
135-98-8	Sec-Butylbenzene	ND	100	
100-42-5	Styrene	ND	100	
98-06-6	Tert-Butylbenzene	ND	100	
127-18-4	Tetrachloroethylene	2200	100	
109-99-9	Tetrahydrofuran	ND	100	
108-88-3	Toluene	ND	100	
156-60-5	Trans-1,2-Dichloroethylene	ND	100	
79-01-6	Trichloroethylene	ND	100	
75-69-4	Trichlorofluoromethane	ND	100	
108-05-4	Vinyl Acetate	ND	100	
75-01-4	Vinyl Chloride	ND	100	
10061-01-5	c-1,3-dichloropropene	ND	100	
156-59-2	cis-1,2-Dichloroethylene	ND	100	
10061-02-6	t-1,3-Dichloropropene	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	120	74 - 136
Toluene-D8	97	85 - 118
1,4-Bromofluorobenzene	89	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 39 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0138	Lab Sample ID:	AB36241
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	200
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	200	
71-55-6	1,1,1-Trichloroethane	ND	200	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	
79-00-5	1,1,2-Trichloroethane	ND	200	
75-35-4	1,1-Dichloroethylene	ND	200	
563-58-6	1,1-Dichloropropene	ND	200	
75-34-3	1,1-dichloroethane	ND	200	
87-61-6	1,2,3-Trichlorobenzene	ND	200	
96-18-4	1,2,3-Trichloropropane	ND	200	
120-82-1	1,2,4-Trichlorobenzene	ND	200	
95-63-6	1,2,4-Trimethylbenzene	ND	200	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	200	
106-93-4	1,2-Dibromoethane	ND	200	
95-50-1	1,2-Dichlorobenzene	ND	200	
107-06-2	1,2-Dichloroethane	ND	200	
78-87-5	1,2-Dichloropropane	ND	200	
108-67-8	1,3,5-Trimethylbenzene	ND	200	
541-73-1	1,3-Dichlorobenzene	ND	200	
142-28-9	1,3-Dichloropropane	ND	200	
106-46-7	1,4-Dichlorobenzene	ND	200	
594-20-7	2,2-Dichloropropane	ND	200	
78-93-3	2-Butanone (MEK)	ND	200	
95-49-8	2-Chlorotoluene	ND	200	
591-78-6	2-Hexanone	ND	200	
67-64-1	2-Propanone (acetone)	ND	200	
106-43-4	4-Chlorotoluene	ND	200	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	200	
107-13-1	Acrylonitrile	ND	200	
71-43-2	Benzene	ND	200	
108-86-1	Bromobenzene	ND	200	
74-97-5	Bromochloromethane	ND	200	
75-27-4	Bromodichloromethane	ND	200	
75-25-2	Bromoform	ND	200	
74-83-9	Bromomethane	ND	200	
75-15-0	Carbon Disulfide	ND	200	
56-23-5	Carbon tetrachloride	ND	200	
108-90-7	Chlorobenzene	ND	200	
75-00-3	Chloroethane	ND	200	
67-66-3	Chloroform	ND	200	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 40 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0138	Lab Sample ID:	AB36241
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	200
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	200	
124-48-1	Dibromochloromethane	ND	200	
74-95-3	Dibromomethane	ND	200	
75-71-8	Dichlorodifluoromethane	ND	200	
60-29-7	Ethyl Ether	ND	200	
100-41-4	Ethylbenzene	ND	200	
87-68-3	Hexachlorobutadiene	ND	200	
98-82-8	Isopropylbenzene	ND	200	
108-38-3/106-42-	M/P Xylene	ND	400	
1634-04-4	Methyl-t-Butyl Ether	ND	200	
75-09-2	Methylene Chloride	ND	200	
104-51-8	N-Butylbenzene	ND	200	
103-65-1	N-Propylbenzene	ND	200	
91-20-3	Naphthalene	ND	200	
95-47-6	Ortho Xylene	ND	200	
99-87-6	Para-Isopropyltoluene	ND	200	
135-98-8	Sec-Butylbenzene	ND	200	
100-42-5	Styrene	ND	200	
98-06-6	Tert-Butylbenzene	ND	200	
127-18-4	Tetrachloroethylene	4200	200	
109-99-9	Tetrahydrofuran	ND	200	
108-88-3	Toluene	ND	200	
156-60-5	Trans-1,2-Dichloroethylene	ND	200	
79-01-6	Trichloroethylene	ND	200	
75-69-4	Trichlorofluoromethane	ND	200	
108-05-4	Vinyl Acetate	ND	200	
75-01-4	Vinyl Chloride	ND	200	
10061-01-5	c-1,3-dichloropropene	ND	200	
156-59-2	cis-1,2-Dichloroethylene	ND	200	
10061-02-6	t-1,3-Dichloropropene	ND	200	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	122	74 - 136
Toluene-D8	100	85 - 118
1,4-Bromofluorobenzene	90	78 - 111

Comments:

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 41 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0139	Lab Sample ID:	AB36242
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	100	
79-00-5	1,1,2-Trichloroethane	ND	100	
75-35-4	1,1-Dichloroethylene	ND	100	
563-58-6	1,1-Dichloropropene	ND	100	
75-34-3	1,1-dichloroethane	ND	100	
87-61-6	1,2,3-Trichlorobenzene	ND	100	
96-18-4	1,2,3-Trichloropropane	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-63-6	1,2,4-Trimethylbenzene	ND	100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	100	
106-93-4	1,2-Dibromoethane	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
107-06-2	1,2-Dichloroethane	ND	100	
78-87-5	1,2-Dichloropropane	ND	100	
108-67-8	1,3,5-Trimethylbenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
142-28-9	1,3-Dichloropropane	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
594-20-7	2,2-Dichloropropane	ND	100	
78-93-3	2-Butanone (MEK)	ND	100	
95-49-8	2-Chlorotoluene	ND	100	
591-78-6	2-Hexanone	ND	100	
67-64-1	2-Propanone (acetone)	ND	100	
106-43-4	4-Chlorotoluene	ND	100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	100	
107-13-1	Acrylonitrile	ND	100	
71-43-2	Benzene	ND	100	
108-86-1	Bromobenzene	ND	100	
74-97-5	Bromoform	ND	100	
75-27-4	Bromochloromethane	ND	100	
75-25-2	Bromodichloromethane	ND	100	
74-83-9	Bromomethane	ND	100	
75-15-0	Carbon Disulfide	ND	100	
56-23-5	Carbon tetrachloride	ND	100	
108-90-7	Chlorobenzene	ND	100	
75-00-3	Chloroethane	ND	100	
67-66-3	Chloroform	ND	100	

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0139	Lab Sample ID:	AB36242
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	100
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	100	
124-48-1	Dibromochloromethane	ND	100	
74-95-3	Dibromomethane	ND	100	
75-71-8	Dichlorodifluoromethane	ND	100	
60-29-7	Ethyl Ether	ND	100	
100-41-4	Ethylbenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
98-82-8	Isopropylbenzene	ND	100	
108-38-3/106-42-	M/P Xylene	ND	200	
1634-04-4	Methyl-t-Butyl Ether	ND	100	
75-09-2	Methylene Chloride	ND	100	
104-51-8	N-Butylbenzene	ND	100	
103-65-1	N-Propylbenzene	ND	100	
91-20-3	Naphthalene	ND	100	
95-47-6	Ortho Xylene	ND	100	
99-87-6	Para-Isopropyltoluene	ND	100	
135-98-8	Sec-Butylbenzene	ND	100	
100-42-5	Styrene	ND	100	
98-06-6	Tert-Butylbenzene	ND	100	
127-18-4	Tetrachloroethylene	2600	100	
109-99-9	Tetrahydrofuran	ND	100	
108-88-3	Toluene	ND	100	
156-60-5	Trans-1,2-Dichloroethylene	ND	100	
79-01-6	Trichloroethylene	ND	100	
75-69-4	Trichlorofluoromethane	ND	100	
108-05-4	Vinyl Acetate	ND	100	
75-01-4	Vinyl Chloride	ND	100	
10061-01-5	c-1,3-dichloropropene	ND	100	
156-59-2	cis-1,2-Dichloroethylene	ND	100	
10061-02-6	t-1,3-Dichloropropene	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	121	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	89	78 - 111

Comments:

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 43 of 57 FINAL

Henry's Dry Cleaners - Laconia, NH**VOAs in Water**

Client Sample ID:	R01-120314JT-0140	Lab Sample ID:	AB36243
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	
71-55-6	1,1,1-Trichloroethane	ND	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	
79-00-5	1,1,2-Trichloroethane	ND	5.0	
75-35-4	1,1-Dichloroethylene	ND	5.0	
563-58-6	1,1-Dichloropropene	ND	5.0	
75-34-3	1,1-dichloroethane	ND	5.0	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	
96-18-4	1,2,3-Trichloropropane	ND	5.0	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5.0	
106-93-4	1,2-Dibromoethane	ND	5.0	
95-50-1	1,2-Dichlorobenzene	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	5.0	
78-87-5	1,2-Dichloropropane	ND	5.0	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	
541-73-1	1,3-Dichlorobenzene	ND	5.0	
142-28-9	1,3-Dichloropropane	ND	5.0	
106-46-7	1,4-Dichlorobenzene	ND	5.0	
594-20-7	2,2-Dichloropropane	ND	5.0	
78-93-3	2-Butanone (MEK)	ND	5.0	
95-49-8	2-Chlorotoluene	ND	5.0	
591-78-6	2-Hexanone	ND	5.0	
67-64-1	2-Propanone (acetone)	ND	5.0	
106-43-4	4-Chlorotoluene	ND	5.0	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5.0	
107-13-1	Acrylonitrile	ND	5.0	
71-43-2	Benzene	ND	5.0	
108-86-1	Bromobenzene	ND	5.0	
74-97-5	Bromochloromethane	ND	5.0	
75-27-4	Bromodichloromethane	ND	5.0	
75-25-2	Bromoform	ND	5.0	
74-83-9	Bromomethane	ND	5.0	
75-15-0	Carbon Disulfide	ND	5.0	
56-23-5	Carbon tetrachloride	ND	5.0	
108-90-7	Chlorobenzene	ND	5.0	
75-00-3	Chloroethane	ND	5.0	
67-66-3	Chloroform	ND	5.0	

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 44 of 57 **FINAL**

Henry's Dry Cleaners - Laconia, NH

VOAs in Water

Client Sample ID:	R01-120314JT-0140	Lab Sample ID:	AB36243
Date of Collection:	11/13/2012	Matrix	GW
Date of Extraction:	11/20/12	Amount Prepared	5 mL
Date of Analysis:	11/20/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	5
Wet Weight Extracted:	N/A	pH:	<2

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
74-87-3	Chloromethane	ND	5.0	
124-48-1	Dibromochloromethane	ND	5.0	
74-95-3	Dibromomethane	ND	5.0	
75-71-8	Dichlorodifluoromethane	ND	5.0	
60-29-7	Ethyl Ether	ND	5.0	
100-41-4	Ethylbenzene	ND	5.0	
87-68-3	Hexachlorobutadiene	ND	5.0	
98-82-8	Isopropylbenzene	ND	5.0	
108-38-3/106-42-	M/P Xylene	ND	10	
1634-04-4	Methyl-t-Butyl Ether	ND	5.0	
75-09-2	Methylene Chloride	ND	5.0	
104-51-8	N-Butylbenzene	ND	5.0	
103-65-1	N-Propylbenzene	ND	5.0	
91-20-3	Naphthalene	ND	5.0	
95-47-6	Ortho Xylene	ND	5.0	
99-87-6	Para-Isopropyltoluene	ND	5.0	
135-98-8	Sec-Butylbenzene	ND	5.0	
100-42-5	Styrene	ND	5.0	
98-06-6	Tert-Butylbenzene	ND	5.0	
127-18-4	Tetrachloroethylene	160	5.0	
109-99-9	Tetrahydrofuran	ND	5.0	
108-88-3	Toluene	ND	5.0	
156-60-5	Trans-1,2-Dichloroethylene	ND	5.0	
79-01-6	Trichloroethylene	ND	5.0	
75-69-4	Trichlorofluoromethane	ND	5.0	
108-05-4	Vinyl Acetate	ND	5.0	
75-01-4	Vinyl Chloride	ND	5.0	
10061-01-5	c-1,3-dichloropropene	ND	5.0	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	
10061-02-6	t-1,3-Dichloropropene	ND	5.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	122	74 - 136
Toluene-D8	98	85 - 118
1,4-Bromofluorobenzene	88	78 - 111

Comments:

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VOA MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB36234

PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
1,1,1,2-Tetrachloroethane	4,000	ND	4100	102	67 - 129
1,1,1-Trichloroethane	4,000	ND	4100	102	75 - 139
1,1,2,2-Tetrachloroethane	4,000	ND	3800	95	50 - 142
1,1,2-Trichloro-1,2,2-Trifluoroethane	4,000	ND	4000	100	55 - 135
1,1,2-Trichloroethane	4,000	ND	4000	100	62 - 142
1,1-Dichloroethylene	4,000	ND	4000	100	80 - 138
1,1-Dichloropropene	4,000	ND	3900	98	73 - 131
1,1-dichloroethane	4,000	ND	4100	102	61 - 152
1,2,3-Trichlorobenzene	4,000	ND	3800	95	49 - 143
1,2,3-Trichloropropane	4,000	ND	3900	98	53 - 135
1,2,4-Trichlorobenzene	4,000	ND	3700	93	63 - 131
1,2,4-Trimethylbenzene	4,000	ND	4000	100	79 - 142
1,2-Dibromo-3-Chloropropane	4,000	ND	3500	88	28 - 122
1,2-Dibromoethane	4,000	ND	3900	98	53 - 139
1,2-Dichlorobenzene	4,000	ND	3800	95	74 - 129
1,2-Dichloroethane	4,000	ND	3900	98	61 - 142
1,2-Dichloropropane	4,000	ND	3900	98	71 - 126
1,3,5-Trimethylbenzene	4,000	ND	4000	100	77 - 140
1,3-Dichlorobenzene	4,000	ND	3900	98	78 - 127
1,3-Dichloropropane	4,000	ND	4000	100	63 - 130
1,4-Dichlorobenzene	4,000	ND	3700	93	72 - 131
2,2-Dichloropropane	4,000	ND	4000	100	50 - 139
2-Butanone (MEK)	4,000	ND	3500	88	29 - 163
2-Chlorotoluene	4,000	ND	3900	98	74 - 134
2-Hexanone	4,000	ND	3600	90	36 - 141
2-Propanone (acetone)	4,000	ND	3300	83	29 - 164
4-Chlorotoluene	4,000	ND	3900	98	68 - 141
4-Methyl-2-Pentanone(MIBK)	4,000	ND	3600	90	35 - 139
Acrylonitrile	4,000	ND	4200	105	42 - 150
Benzene	4,000	ND	4000	100	78 - 134
Bromobenzene	4,000	ND	3800	95	76 - 126
Bromochloromethane	4,000	ND	4000	100	62 - 140
Bromodichloromethane	4,000	ND	4100	102	62 - 133
Bromoform	4,000	ND	3700	93	31 - 133
Bromomethane	4,000	ND	4000	100	58 - 148
Carbon Disulfide	4,000	ND	3900	98	66 - 135
Carbon tetrachloride	4,000	ND	4100	102	62 - 146
Chlorobenzene	4,000	ND	4000	100	74 - 139
Chloroethane	4,000	ND	3800	95	65 - 145
Chloroform	4,000	ND	4100	102	60 - 144
Chloromethane	4,000	ND	3700	93	58 - 134
Dibromochloromethane	4,000	ND	4200	105	34 - 140
Dibromomethane	4,000	ND	4000	100	67 - 125
Dichlorodifluoromethane	4,000	ND	3300	83	30 - 132
Ethyl Ether	4,000	ND	3900	98	58 - 145
Ethylbenzene	4,000	ND	4000	100	73 - 143
Hexachlorobutadiene	4,000	ND	3500	88	56 - 144
Isopropylbenzene	4,000	ND	4100	102	73 - 139

12110026\$VOAMW

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 46 of 57

FINAL

M/P Xylene	8,000	ND	8000	100	79 - 136
Methyl-t-Butyl Ether	4,000	ND	3800	95	50 - 144
Methylene Chloride	4,000	ND	4000	100	70 - 144
N-Butylbenzene	4,000	ND	4100	102	68 - 143
N-Propylbenzene	4,000	ND	3900	98	72 - 149
Naphthalene	4,000	ND	4200	105	33 - 154
Ortho Xylene	4,000	ND	4000	100	80 - 129
Para-Isopropyltoluene	4,000	ND	4000	100	71 - 140
Sec-Butylbenzene	4,000	ND	4100	102	75 - 148
Styrene	4,000	ND	4200	105	61 - 148
Tert-Butylbenzene	4,000	ND	4000	100	71 - 139
Tetrachloroethylene	4,000	5200	8800	90	45 - 145
Tetrahydrofuran	4,000	ND	4000	100	37 - 143
Toluene	4,000	ND	4000	100	77 - 142
Trans-1,2-Dichloroethylene	4,000	ND	4000	100	79 - 139
Trichloroethylene	4,000	ND	3900	98	65 - 143
Trichlorofluoromethane	4,000	ND	4000	100	58 - 161
Vinyl Acetate	4,000	ND	4000	100	22 - 173
Vinyl Chloride	4,000	ND	4000	100	68 - 139
c-1,3-dichloropropene	4,000	ND	4100	102	51 - 144
cis-1,2-Dichloroethylene	4,000	ND	4000	100	59 - 154
t-1,3-Dichloropropene	4,000	ND	4000	100	47 - 145

Comments:

Sample ID: AB36234

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/L	MSD % REC	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	4,000	4000	100	2	40
1,1,1-Trichloroethane	4,000	4100	102	0	16
1,1,2,2-Tetrachloroethane	4,000	3800	95	0	40
1,1,2-Trichloro-1,2,2-Trifluoroetha	4,000	3900	98	3	40
1,1,2-Trichloroethane	4,000	4000	100	0	40
1,1-Dichloroethylene	4,000	4000	100	0	35
1,1-Dichloropropene	4,000	3900	98	0	40
1,1-dichloroethane	4,000	3900	98	5	40
1,2,3-Trichlorobenzene	4,000	3800	95	0	40
1,2,3-Trichloropropane	4,000	3800	95	3	40
1,2,4-Trichlorobenzene	4,000	3800	95	3	40
1,2,4-Trimethylbenzene	4,000	4000	100	0	40
1,2-Dibromo-3-Chloropropane	4,000	3500	88	0	40
1,2-Dibromoethane	4,000	3800	95	3	40
1,2-Dichlorobenzene	4,000	3700	93	3	40
1,2-Dichloroethane	4,000	3800	95	3	23
1,2-Dichloropropane	4,000	3800	95	3	40
1,3,5-Trimethylbenzene	4,000	4000	100	0	40
1,3-Dichlorobenzene	4,000	3900	98	0	40
1,3-Dichloropropane	4,000	4000	100	0	40
1,4-Dichlorobenzene	4,000	3700	93	0	21
2,2-Dichloropropane	4,000	3900	98	3	40
2-Butanone (MEK)	4,000	3400	85	3	40
2-Chlorotoluene	4,000	3900	98	0	40
2-Hexanone	4,000	3400	85	6	40
2-Propanone (acetone)	4,000	3100	78	6	40
4-Chlorotoluene	4,000	3800	95	3	40
4-Methyl-2-Pentanone(MIBK)	4,000	3600	90	0	40
Acrylonitrile	4,000	4200	105	0	40
Benzene	4,000	3900	98	3	14
Bromobenzene	4,000	3900	98	3	40
Bromochloromethane	4,000	3800	95	5	40
Bromodichloromethane	4,000	3800	95	7	21
Bromoform	4,000	3600	90	3	40
Bromomethane	4,000	4000	100	0	40
Carbon Disulfide	4,000	3900	98	0	40
Carbon tetrachloride	4,000	4000	100	2	19
Chlorobenzene	4,000	3800	95	5	40
Chloroethane	4,000	3700	93	3	40
Chloroform	4,000	4000	100	2	16
Chloromethane	4,000	3600	90	3	40
Dibromochloromethane	4,000	4000	100	5	36
Dibromomethane	4,000	3900	98	3	40
Dichlorodifluoromethane	4,000	3400	85	3	40
Ethyl Ether	4,000	3900	98	0	40
Ethylbenzene	4,000	3900	98	3	40
Hexachlorobutadiene	4,000	3600	90	3	40
Isopropylbenzene	4,000	4000	100	2	40
M/P Xylene	8,000	7700	96	4	40
Methyl-t-Butyl Ether	4,000	3900	98	3	40
Methylene Chloride	4,000	3900	98	3	40
N-Butylbenzene	4,000	4000	100	2	40
N-Propylbenzene	4,000	3900	98	0	40

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 48 of 57

FINAL

Naphthalene	4,000	4100	102	3	40
Ortho Xylene	4,000	4000	100	0	40
Para-Isopropyltoluene	4,000	4000	100	0	40
Sec-Butylbenzene	4,000	4000	100	2	40
Styrene	4,000	4100	102	3	40
Tert-Butylbenzene	4,000	4000	100	0	40
Tetrachloroethylene	4,000	8700	88	3	40
Tetrahydrofuran	4,000	3900	98	3	40
Toluene	4,000	3900	98	3	40
Trans-1,2-Dichloroethylene	4,000	4000	100	0	40
Trichloroethylene	4,000	3800	95	3	22
Trichlorofluoromethane	4,000	4000	100	0	40
Vinyl Acetate	4,000	3900	98	3	40
Vinyl Chloride	4,000	4000	100	0	19
c-1,3-dichloropropene	4,000	3900	98	5	40
cis-1,2-Dichloroethylene	4,000	4100	102	2	40
t-1,3-Dichloropropene	4,000	4000	100	0	40

Comments:

Laboratory Duplicate Results

Henry's Dry Cleaners - Laconia, NH

Sample ID: AB36234

PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUPLICATE RESULT ug/L	PRECISION RPD %	QC LIMITS
1,1,1,2-Tetrachloroethane	ND	ND	ND	30
1,1,1-Trichloroethane	ND	ND	ND	30
1,1,2,2-Tetrachloroethane	ND	ND	ND	30
1,1,2-Trichloro-1,2,2-Trifluoroeth	ND	ND	ND	30
1,1,2-Trichloroethane	ND	ND	ND	30
1,1-Dichloroethylene	ND	ND	ND	30
1,1-Dichloropropene	ND	ND	ND	30
1,1-dichloroethane	ND	ND	ND	30
1,2,3-Trichlorobenzene	ND	ND	ND	30
1,2,3-Trichloropropane	ND	ND	ND	30
1,2,4-Trichlorobenzene	ND	ND	ND	30
1,2,4-Trimethylbenzene	ND	ND	ND	30
1,2-Dibromo-3-Chloropropane	ND	ND	ND	30
1,2-Dibromoethane	ND	ND	ND	30
1,2-Dichlorobenzene	ND	ND	ND	30
1,2-Dichloroethane	ND	ND	ND	30
1,2-Dichloropropane	ND	ND	ND	30
1,3,5-Trimethylbenzene	ND	ND	ND	30
1,3-Dichlorobenzene	ND	ND	ND	30
1,3-Dichloropropane	ND	ND	ND	30
1,4-Dichlorobenzene	ND	ND	ND	30
2,2-Dichloropropane	ND	ND	ND	30
2-Butanone (MEK)	ND	ND	ND	30
2-Chlorotoluene	ND	ND	ND	30
2-Hexanone	ND	ND	ND	30
2-Propanone (acetone)	ND	ND	ND	30
4-Chlorotoluene	ND	ND	ND	30
4-Methyl-2-Pentanone(MIBK)	ND	ND	ND	30
Acrylonitrile	ND	ND	ND	30
Benzene	ND	ND	ND	30
Bromobenzene	ND	ND	ND	30
Bromochloromethane	ND	ND	ND	30
Bromodichloromethane	ND	ND	ND	30
Bromoform	ND	ND	ND	30
Bromomethane	ND	ND	ND	30
Carbon Disulfide	ND	ND	ND	30
Carbon tetrachloride	ND	ND	ND	30
Chlorobenzene	ND	ND	ND	30
Chloroethane	ND	ND	ND	30
Chloroform	ND	ND	ND	30
Chloromethane	ND	ND	ND	30
Dibromochloromethane	ND	ND	ND	30
Dibromomethane	ND	ND	ND	30
Dichlorodifluoromethane	ND	ND	ND	30
Ethyl Ether	ND	ND	ND	30
Ethylbenzene	ND	ND	ND	30
Hexachlorobutadiene	ND	ND	ND	30
Isopropylbenzene	ND	ND	ND	30
M/P Xylene	ND	ND	ND	30

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 50 of 57

FINAL

Methyl-t-Butyl Ether	ND	ND	ND	30
Methylene Chloride	ND	ND	ND	30
N-Butylbenzene	ND	ND	ND	30
N-Propylbenzene	ND	ND	ND	30
Naphthalene	ND	ND	ND	30
Ortho Xylene	ND	ND	ND	30
Para-Isopropyltoluene	ND	ND	ND	30
Sec-Butylbenzene	ND	ND	ND	30
Styrene	ND	ND	ND	30
Tert-Butylbenzene	ND	ND	ND	30
Tetrachloroethylene	5200	5100	1.94	30
Tetrahydrofuran	ND	ND	ND	30
Toluene	ND	ND	ND	30
Trans-1,2-Dichloroethylene	ND	ND	ND	30
Trichloroethylene	ND	ND	ND	30
Trichlorofluoromethane	ND	ND	ND	30
Vinyl Acetate	ND	ND	ND	30
Vinyl Chloride	ND	ND	ND	30
c-1,3-dichloropropene	ND	ND	ND	30
cis-1,2-Dichloroethylene	ND	ND	ND	30
t-1,3-Dichloropropene	ND	ND	ND	30

Laboratory Fortified Blank (LFB) Results

Henry's Dry Cleaners - Laconia, NH

PARAMETER	LFB AMOUNT SPIKED ug/mL	LFB RESULT ug/mL	LFB RECOVERY %	QC LIMITS %
1,1,1,2-Tetrachloroethane	20	21	105	79 - 136
1,1,1-Trichloroethane	20	20	100	75 - 146
1,1,2,2-Tetrachloroethane	20	20	100	62 - 141
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	19	95	56 - 130
1,1,2-Trichloroethane	20	20	100	75 - 138
1,1-Dichloroethylene	20	21	105	75 - 136
1,1-Dichloropropene	20	20	100	77 - 137
1,1-dichloroethane	20	20	100	76 - 142
1,2,3-Trichlorobenzene	20	19	95	64 - 143
1,2,3-Trichloropropane	20	19	95	66 - 133
1,2,4-Trichlorobenzene	20	19	95	80 - 131
1,2,4-Trimethylbenzene	20	21	105	74 - 155
1,2-Dibromo-3-Chloropropane	20	17	85	37 - 139
1,2-Dibromoethane	20	20	100	72 - 135
1,2-Dichlorobenzene	20	19	95	85 - 128
1,2-Dichloroethane	20	19	95	74 - 138
1,2-Dichloropropane	20	20	100	83 - 124
1,3,5-Trimethylbenzene	20	20	100	80 - 145
1,3-Dichlorobenzene	20	20	100	84 - 130
1,3-Dichloropropane	20	20	100	77 - 129
1,4-Dichlorobenzene	20	19	95	82 - 128
2,2-Dichloropropane	20	20	100	32 - 171
2-Butanone (MEK)	20	18	90	38 - 179
2-Chlorotoluene	20	20	100	78 - 134
2-Hexanone	20	20	100	45 - 158
2-Propanone (acetone)	20	19	95	14 - 209
4-Chlorotoluene	20	20	100	75 - 144
4-Methyl-2-Pentanone(MIBK)	20	19	95	40 - 144
Acrylonitrile	20	19	95	52 - 154
Benzene	20	20	100	83 - 130
Bromobenzene	20	20	100	85 - 126
Bromochloromethane	20	20	100	69 - 137
Bromodichloromethane	20	20	100	70 - 143
Bromoform	20	20	100	51 - 136
Bromomethane	20	19	95	65 - 140
Carbon Disulfide	20	18	90	68 - 140
Carbon tetrachloride	20	20	100	70 - 144
Chlorobenzene	20	20	100	84 - 131
Chloroethane	20	18	90	70 - 134
Chloroform	20	20	100	76 - 141
Chloromethane	20	18	90	63 - 123
Dibromochloromethane	20	21	105	39 - 154
Dibromomethane	20	20	100	79 - 124
Dichlorodifluoromethane	20	16	80	37 - 117
Ethyl Ether	20	18	90	67 - 140
Ethylbenzene	20	20	100	81 - 133
Hexachlorobutadiene	20	20	100	68 - 146
Isopropylbenzene	20	21	105	78 - 137
M/P Xylene	40	41	103	68 - 155
Methyl-t-Butyl Ether	20	18	90	63 - 144
Methylene Chloride	20	20	100	75 - 140
N-Butylbenzene	20	21	105	69 - 147

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 52 of 57 **FINAL**

N-Propylbenzene	20	20	100	76 - 138
Naphthalene	20	20	100	53 - 155
Ortho Xylene	20	21	105	85 - 135
Para-Isopropyltoluene	20	21	105	77 - 141
Sec-Butylbenzene	20	21	105	80 - 141
Styrene	20	22	110	82 - 139
Tert-Butylbenzene	20	21	105	75 - 144
Tetrachloroethylene	20	20	100	32 - 173
Tetrahydrofuran	20	17	85	47 - 149
Toluene	20	20	100	85 - 134
Trans-1,2-Dichloroethylene	20	20	100	80 - 138
Trichloroethylene	20	20	100	76 - 135
Trichlorofluoromethane	20	19	95	60 - 149
Vinyl Acetate	20	19	95	38 - 187
Vinyl Chloride	20	20	100	66 - 133
c-1,3-dichloropropene	20	21	105	68 - 149
cis-1,2-Dichloroethylene	20	21	105	76 - 143
t-1,3-Dichloropropene	20	21	105	62 - 160

Comments:

LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION ug/L	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	20	100	5	50
1,1,1-Trichloroethane	20	100	0	50
1,1,2,2-Tetrachloroethane	18	90	11	50
1,1,2-Trichloro-1,2,2-Trifluoroetha	19	95	0	50
1,1,2-Trichloroethane	19	95	5	50
1,1-Dichloroethylene	20	100	5	52
1,1-Dichloropropene	20	100	0	50
1,1-dichloroethane	20	100	0	50
1,2,3-Trichlorobenzene	19	95	0	50
1,2,3-Trichloropropane	18	90	5	50
1,2,4-Trichlorobenzene	19	95	0	50
1,2,4-Trimethylbenzene	20	100	5	50
1,2-Dibromo-3-Chloropropane	17	85	0	50
1,2-Dibromoethane	19	95	5	50
1,2-Dichlorobenzene	19	95	0	50
1,2-Dichloroethane	19	95	0	50
1,2-Dichloropropane	19	95	5	50
1,3,5-Trimethylbenzene	20	100	0	50
1,3-Dichlorobenzene	20	100	0	50
1,3-Dichloropropane	19	95	5	50
1,4-Dichlorobenzene	19	95	0	50
2,2-Dichloropropane	20	100	0	50
2-Butanone (MEK)	18	90	0	50
2-Chlorotoluene	19	95	5	50
2-Hexanone	19	95	5	50
2-Propanone (acetone)	18	90	5	50
4-Chlorotoluene	20	100	0	50
4-Methyl-2-Pentanone(MIBK)	19	95	0	50
Acrylonitrile	19	95	0	50
Benzene	19	95	5	50
Bromobenzene	19	95	5	50
Bromochloromethane	19	95	5	50
Bromodichloromethane	19	95	5	50
Bromoform	18	90	11	50
Bromomethane	19	95	0	50
Carbon Disulfide	19	95	5	50
Carbon tetrachloride	20	100	0	50
Chlorobenzene	19	95	5	34
Chloroethane	18	90	0	50
Chloroform	20	100	0	50
Chloromethane	18	90	0	50
Dibromochloromethane	19	95	10	50
Dibromomethane	19	95	5	50
Dichlorodifluoromethane	16	80	0	50
Ethyl Ether	18	90	0	50
Ethylbenzene	20	100	0	50
Hexachlorobutadiene	19	95	5	50
Isopropylbenzene	20	100	5	50
M/P Xylene	39	98	5	50
Methyl-t-Butyl Ether	18	90	0	50
Methylene Chloride	19	95	5	50
N-Butylbenzene	20	100	5	50
N-Propylbenzene	20	100	0	50
Naphthalene	20	100	0	50
Ortho Xylene	20	100	5	50

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 54 of 57

FINAL

Para-Isopropyltoluene	20	100	5	50
Sec-Butylbenzene	20	100	5	50
Styrene	20	100	10	50
Tert-Butylbenzene	20	100	5	50
Tetrachloroethylene	19	95	5	50
Tetrahydrofuran	18	90	6	50
Toluene	19	95	5	50
Trans-1,2-Dichloroethylene	19	95	5	50
Trichloroethylene	19	95	5	27
Trichlorofluoromethane	19	95	0	50
Vinyl Acetate	20	100	5	50
Vinyl Chloride	20	100	0	50
c-1,3-dichloropropene	20	100	5	50
cis-1,2-Dichloroethylene	20	100	5	50
t-1,3-Dichloropropene	21	105	0	50

Samples in Batch: AB36227, AB36228, AB36229, AB36230, AB36231, AB36232, AB36233,
AB36234, AB36235, AB36236, AB36237, AB36238, AB36239, AB36240,
AB36241, AB36242, AB36243

PN : 12110026

Page 1 of 3

USEPA Region 1

START III

Sampler Signatures: *Chandra* *Allen Jarrell*

Date Hand Delivered: 11/15/2012

Chandra *Allen Jarrell*

CHAIN OF CUSTODY RECORD
Henry's Dry Cleaners
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717
Lab Contact: Doris Guzman

No: 1-111512-110400-0011

Site #: R01-120316TJ

Lab: NERL/OEME

Lab Contact: Doris Guzman

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT- 0124	GEO-1	GW-01	VOCS (\$VOCAMW)	N	11/12/2012	11:45	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0125	GEO-2	GW-02	VOCS (\$VOCAMW)	N	11/12/2012	11:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0126	GEO-3	GW-03	VOCS (\$VOCAMW)	N	11/12/2012	14:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0127	GEO-4	GW-04	VOCS (\$VOCAMW)	N	11/12/2012	11:40	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0128	GEO-5	GW-05	VOCS (\$VOCAMW)	N	11/12/2012	11:45	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0129	GEO-6	GW-06	VOCS (\$VOCAMW)	N	11/12/2012	15:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0130	NWA-3C	GW-07	VOCS (\$VOCAMW)	N	11/13/2012	10:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0131	NWA-3B	GW-08	VOCS (\$VOCAMW)	N	11/13/2012	08:40	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0132	NWA-3A	GW-09	VOCS (\$VOCAMW)	N	11/12/2012	14:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0133	ERT-4	GW-10	VOCS (\$VOCAMW)	N	11/12/2012	16:15	Ground Water	4	40 mL Vial	HCl	Ice, 4C	
R01-120314JT- 0134	ERT-2C	GW-11	VOCS (\$VOCAMW)	N	11/13/2012	10:55	Ground Water	4	40 mL Vial	HCl	Ice, 4C	

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Samples	<i>J. Jarrell</i>	11/15/12	<i>J. Jarrell</i>	11/15/12	14:20						

Allen Jarrell

CHAIN OF CUSTODY RECORD

Henry's Dry Cleaners
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 1-111512-110400-0011

Site #: R01-120316TJ
Lab: NERL/OEME

Lab Contact: Doris Guzman

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT-0135	ERT-2B	GW-12		VOCS (\$VOAMW)	N	11/13/2012	13:25	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0136	ERT-2A	GW-13		VOCS (\$VOAMW)	N	11/13/2012	15:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0137	ERT-3C	GW-14		VOCS (\$VOAMW)	N	11/13/2012	11:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0138	ERT-3B	GW-15		VOCS (\$VOAMW)	N	11/13/2012	14:35	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0139	ERT-3A	GW-16		VOCS (\$VOAMW)	N	11/13/2012	16:10	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0140	ERT-1C	GW-17		VOCS (\$VOAMW)	N	11/13/2012	13:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0141	ERT-1B	GW-18		VOCS (\$VOAMW)	N	11/13/2012	16:00	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0143	MW-101S	GW-20		VOCS (\$VOAMW)	Y	11/13/2012	13:30	Ground Water	6	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0150	ERT-1B2	GW-27		VOCS (\$VOAMW)	N	11/13/2012	16:00	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0152	RB-01			VOCS (\$VOAMW)	N	11/14/2012	09:00	Rinsate Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0153	TB-01			VOCS (\$VOAMW)	N	11/12/2012	07:00	Trip Blank	4	40 mL Vial	HCl	Ice, 4C

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

USEPA Region 1

START III

Sampler Signatures:

Date Hand Delivered: 11/15/2012



CHAIN OF CUSTODY RECORD
 Henry's Dry Cleaners
 Contact Name: Allen Jarrell
 Contact Phone: 617-312-4717

No: 1-111512-110400-0011

Site #: R01-120316TJ

Lab: NERLOEME

Lab Contact: Doris Guzman

Lab #	Sample #	Location	Sub Location	Analyses	MS/MSD	Collected	Sample Time	Matrix	Numb Cont	Container	Preservative	Storage
R01-120314JT-0155	PE-V81031			VOCS (\$VOCAMW)	N	11/12/2012	07:00	PE Aqueous	1	amber ampule	MeOH	Ice, 4C
R01-120314JT-0142	ERT-1A	GW-19		VOCS (\$VOCAMW)	N	11/14/2012	09:25	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0144	MW-101D	GW-21		VOCS (\$VOCAMW)	N	11/13/2012	10:50	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0145	MW-102	GW-22		VOCS (\$VOCAMW)	N	11/13/2012	15:50	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0146	MW-103	GW-23		VOCS (\$VOCAMW)	N	11/14/2012	12:30	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0147	OSW-01	GW-24		VOCS (\$VOCAMW)	N	11/14/2012	12:05	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0148	ERT-2-IB	GW-25		VOCS (\$VOCAMW)	Y	11/14/2012	10:05	Ground Water	6	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0149	ERT-3-IB	GW-26		VOCS (\$VOCAMW)	N	11/14/2012	10:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0151	ERT-3-IB2	GW-28		VOCS (\$VOCAMW)	N	11/14/2012	10:20	Ground Water	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0154	TB-02			VOCS (\$VOCAMW)	N	11/12/2012	07:00	Trip Blank	4	40 mL Vial	HCl	Ice, 4C
R01-120314JT-0156	PE-V81075			VOCS (\$VOCAMW)	N	11/12/2012	07:00	PE Aqueous	1	amber ampule	MeOH	Ice, 4C

Special Instructions: Please email results to OSC Allen Jarrell at jarrell.allen@epa.gov.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Appendix F

Boring Logs

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG			Page 1 of 4	
Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)		
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)
Date Drilled		Sept. 12 - 17, 2012		Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-1B (inter)	19-Sep-12	12.15
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93
Drill Rig Type		CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
2		NA	NA	NA	No soil samples collected. Soil sampling began at 2 - 4 interval.	NA	NA	NA
4		1	1-2-3-4	15	0 - 3" Dark brown, fine-to-medium SAND, trace coarse-to-fine gravel (brick fragments). Dry. 3 - 15" Light brown-orange brown, coarse-to-fine SAND, little fine gravel (rocks). Dry.	0	36/ND	Very Loose
6		2	1-3-5-6	13	0 - 13" Light brown-orange brown, coarse-to-fine SAND, little fine gravel. Dry.	0	ND/ND	
8		3	3-3-4-5	23	0 - 6" Lt. brown, fine-to-coarse SAND , trace fine gravel and silt. Dry. 6 - 8" Black, coarse GRAVEL. Dry. 8 - 23" Lt. brown-orange brown, coarse-to-fine SAND , trace fine gravel. Moist.	0	920/ND	Loose
10		4	2-4-4-5	17	0 - 5" Lt. brown, fine-to-coarse SAND , trace fine gravel and silt. Moist. 5 - 8" Lt. brown, coarse GRAVEL (rocks) and fine-to-coarse SAND. Moist. 8 - 17" Lt. brown, fine-to-coarse SAND , little coarse gravel (rocks). Moist.	0	15/ND	
12		5	5-7-9-11	18	0 - 13" Lt. brown, coarse-to-fine GRAVEL and coarse-to-fine SAND, trace silt. Moist. 13 - 15" Black, fine-to-coarse GRAVEL and fine-to-coarse SAND. Dry. 15 - 18" Rusty brown, fine-to-coarse GRAVEL and fine-to-coarse SAND. Dry.	0	ND/ND	Medium Dense
14		6	15-21-24-23	8	0 - 5" Lt. brown, fine-to-coarse GRAVEL and fine-to-coarse SAND. Dry. 5 - 7" Rusty-brown, fine-to-coarse SAND, little fine-to-coarse gravel. Dry. 7 - 8" Gray, fine-to-medium SAND , trace fine gravel. Dry.	0	159/ND	
16		7	15-15-17-12	17	0 - 3" Brown-gray, f-to-c SAND, trace f-to-c gravel and silt. Wet. 3 - 10" Rusty-brown, c-to-f SAND, little c-to-f gravel. Wet. 10 - 13" Olive-gray, SILT. Wet. 13 - 17" Brown-gray, f-to-c SAND, trace fine gravel and silt. Wet.	0	283/ND	Dense
18		8	12-13-15-19	14	0 - 14" Rusty-brown, gray, and grayish brown, coarse-to-fine GRAVEL (subangular and subrounded granitic and metamorphic rock fragments). Wet.	0	306/ND	
20		9	7-13-15-19	18	0 - 16" Lt. brown- dark brown, fine-to-medium SAND (mottled). Wet. 16 - 18" Black, medium-to-coarse SAND, trace fine gravel. Wet.	0	77/ND	Medium Dense
22		10	6-12-13-16	16	0 - 10" Lt. brown and rusty brown, fine-to-medium SAND, coarse-to-fine gravel (subangular and subrounded metamorphic rock fragments). Wet. 10 - 16" Olive-gray, fine-to-medium SAND (sorted). Wet.	0	30/ND	
24		11	11-11-13-15	10	0 - 10" Brown, coarse-to-fine SAND and coarse-to-fine GRAVEL (subangular and subrounded), trace silt. Wet.	0	53/ND	Medium Dense
26		12	55-120R (3 in)	9	0 - 3" Brown and rusty-brown, fine-to-coarse SAND, trace f. gravel. Wet. 3 - 5" White, coarse GRAVEL (granitic rock fragments), little fine-to-medium SAND. Wet. 5 - 9" Brownish-gray, fine-to-medium SAND, little coarse gravel. Wet.	0	1600/ND	
						0	141/ND	Medium
						0.2	84/ND	Dense
						0	19/ND	Very Dense

Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)		
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)
Date Drilled		Sept. 12 - 17, 2012		Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-1B (inter)	19-Sep-12	12.15
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93
Drill Rig Type		CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
28		13	26-60-120R (0 in)	10	0 - 10" Light brown, coarse-to-fine SAND, little coarse-to-fine gravel (subangular and subrounded). Wet.	0	ND/ND	Very Dense
30		14	28-38-48-78	24	0 - 19" Light brown, fine-to-coarse SAND and coarse-to-fine GRAVEL, trace silt. Very stiff. Wet. 19 - 24" Light brown, fine-to-medium SAND (well sorted), trace silt. Wet.	0	17/ND	
32		15	65-85-92-120R (4 in)	22	0 - 2" Light brown, fine SAND, trace silt. Wet. 2 - 7" Rusty-brown, coarse-to-fine SAND, little fine gravel. Wet. 7 - 16" Light brown, f-to-m SAND, some c-to-f gravel (subangular). Wet. 16 - 22" Light brown, fine SAND (mottled, well sorted). Wet.	0	44/ND	Very Dense
34		16	10-20-38-45	18	0 - 6" Light brown, fine-to-medium SAND (sorted), trace fine gravel and silt. Wet. 6 - 18" Rusty brown, fine-to-coarse SAND (sorted), trace silt. Wet.	0	ND/ND	
36		17	13-13-32-43	24	0 - 24" Orange-brown and rusty brown, coarse-to-fine SAND (sorted), trace fine gravel and silt. Wet.	0	17/ND	Dense
38		18	3-3-13-50	16	0 - 12" Orange-brown, fine-to-coarse GRAVEL and fine-to-coarse SAND, trace silt. Wet. 12 - 16" Orange-brown, fine-to-medium SAND (sorted), trace silt. Wet.	0	38/ND	
40		19	18-6-15-40	21	0 - 17" Brown, fine-to-coarse SAND, trace fine gravel and silt. Wet. 17 - 21" Brown, fine-to-medium SAND (sorted), trace silt. Wet. Drilled to 0 - 40 feet bgs using hollow stem augers and from 40 - 72 feet using drive and wash.	0	31/ND	Medium Dense
42		20	19-38-49-51	16	0 - 10" Brown, fine-to-medium SAND, trace fine-to-coarse gravel (subangular). Wet. 10 - 16" Gray, fine SAND (sorted), trace silt. Wet.	0	37/ND	
44		21	30-49-58-75	20	0 - 7" Light gray, coarse-to-medium SAND (sorted), trace fine gravel and silt. Wet. 7 - 20" Light gray, fine SAND (well sorted). Wet.	0	2261/ND	Very Dense
46		22	15-56-94-67	16	0 - 8" Light gray, very coarse-to-medium SAND, trace silt. Wet. 8 - 16" Light gray, medium SAND (well sorted), trace silt. Wet.	0	9/ND	
48		23	42-95-96-120R (5 in)	21	0 - 21" Light gray, coarse-to-fine SAND (well sorted), trace silt. Wet.	0	25/ND	Very Dense
50		24	30-59-116-120R (4 in)	22	0 - 22" Light gray, very coarse-to-fine SAND (well sorted), trace silt. Wet.	0	21/ND	
52		25	4-11-11-47	19	0 - 17" Light gray and grayish-brown, very coarse-to-medium SAND, some fine gravel, trace silt. Wet. 17 - 19" Light gray, medium SAND, trace silt. Wet.	0	313/ND	Very Dense
						0	155/ND	
						0	30/ND	Very Dense
						0	164/ND	
						0	120/ND	Very Dense
						0	16/ND	
						0	90/ND	Medium Dense
						0	59/ND	

Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)												
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)										
Date Drilled		Sept. 12 - 17, 2012		Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91										
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-1B (inter)	19-Sep-12	12.15										
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93										
Drill Rig Type		CME-85		Surface Elevation														
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)																
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density								
					0 - 18"	Light gray, fine-to-coarse SAND (well sorted), trace fine gravel. Wet.	0 - 9" 9 - 23"				Light gray, very coarse-to-medium SAND, trace fine-to-coarse gravel and silt. Wet. Light gray, medium SAND (well sorted), trace silt. Wet.	0 - 16"	Light gray, medium SAND (well sorted), trace silt. Wet.	0 - 14" 16 - 22"	Light greenish-gray, fine-to-medium SAND, trace fine gravel and silt. Moist. Light greenish-gray, coarse-to-medium SAND, trace fine-to-coarse gravel. Moist.	0 - 13"	0 - 16" 16 - 22"	Light gray, very coarse-to-medium SAND (well sorted), trace fine gravel. Wet. Light brown, fine-to-medium SAND (0.25-in oxidation streak on top), trace fine gravel and silt. Wet.
—		26	120R (0 in)	0	No recovery.			NA	NA	NA								
54		27	42-89-95-100	18	0 - 18"			0	24/ND	Very Dense								
56		28	42-81-120R (5 in)	23	0 - 9" 9 - 23"			0	ND/ND									
58		29	91-92-120R (4 in)	16	Light gray, very coarse-to-medium SAND, trace fine-to-coarse gravel and silt. Wet. Light gray, medium SAND (well sorted), trace silt. Wet.			0	19/ND	Very Dense								
60		30	120R (3 in)	3	0 - 16"			0	ND/ND									
62		31	46-67-120R (5 in)	14	Light gray, fine-to-medium SAND and fine GRAVEL, trace silt. Wet.			0	ND/ND	Very Dense								
64		32	39-52-93-117	13	0 - 14"			0	ND/ND									
66		33	21-48-71-120R (4 in)	22	Light greenish-gray, coarse-to-medium SAND, trace fine-to-coarse gravel. Moist.			0	ND/ND	Very Dense								
68		34	24-28-68-96	19	0 - 13"			0	ND/ND									
70		35	35-71-120R (1 in)	24	Light greenish-gray, very coarse-to-medium SAND (well sorted), trace fine gravel and silt. Wet.			0	ND/ND	Very Dense								
72		36	89-111-100-120R (4 in)	20	16 - 22"			0	ND/ND									
74		NA	NA	NA	16 - 19"			0	NA	Very Dense								
76		NA	NA	NA	Gray, very fine SAND and SILT, trace fine gravel. Wet.			NA	NA									
78		NA	NA	NA	0 - 18"			0	ND/ND	Very Dense								
					Slough (Orange-brown, c-to-m SAND (sorted), trace f gravel and silt. Wet. Gray, fine SAND and SILT (very stiff), trace fine-to-coarse gravel (schist and granitic). Moist. Weathered bedrock?)			0	ND/ND									
					18 - 24"			0	NA									
					0 - 7"			0	ND/ND	Very Dense								
					Slough (Orange-brown and gray, coarse-to-medium SAND, little fine-to-coarse gravel). Wet. Dark brown, fine-to-coarse SAND, some coarse-to-fine gravel. Wet. Weathered bedrock?			0	ND/ND									
					7 - 22"			NA	NA									
					Rollerbit from 72 - 77 feet. Encountered soft materials at 78 feet and advance split spoon from 78 - 80 feet.			NA	NA									
					Rollerbit to 78 feet.			NA	NA									

Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)		
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)
Date Drilled		Sept. 12 - 17, 2012		Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-1B (inter)	19-Sep-12	12.15
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93
Drill Rig Type		CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
—		37	117-120R (4 in)	10	0 - 3" Slough. 3 - 10" Dark brown, coarse GRAVEL (angular), little coarse sand. Wet. Weathered bedrock?	0	ND/ND	Very Dense
80						NA	NA	
—		38	120R (4 in)	0	No recovery.	NA	NA	NA
82								
—					Competent bedrock at 80 feet.			
84					-End of Boring at 80 feet-			

Well Construction Details:

			Shallow	Interm.	Deep
			Feet below ground surface		
	Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen	8 - 18	36 - 46	67 - 77
	Riser	2-in diameter, Schedule 40 PVC riser	0.45 - 8	0.45 - 36	0.45 - 67
	Filter sand	Filter sand	6 - 18.5	34 - 46.5	65 - 82
	Bentonite seal	Bentonite seal	4 - 6	30 - 34	61 - 65
	Bentonite/sand mix	Alternating bentonite/sand	-----	18.5 - 30	46.5 - 61
	Sand	Sand	1 - 4		
	Concrete	Concrete	0 - 1		

bgs = below ground surface

PID = Photo-ionization Detector

NA = Not Applicable

ppm = parts per million

SS = Split Spoon (2-in diameter)

ppb = parts per billion

MC = Macrocore (5-ft)

ND = Non detect

HSA = Hollow Stem Augers

NA = Not applicable

D&W = Drive and Wash

PCE = Tetrachloroethylene

R = Refusal

TCE = Trichloroethylene

Rec. = Recovery

VOCs = Volatile Organic Compounds

WOH = Weight of hammer

f = fine

c = coarse

m = medium

1) Used 2-inch diameter split spoons with 140-lb auto-hammer.

2) N = 120R (x in) = Refusal where 120 blow counts were applied and split spoon advanced x inches.

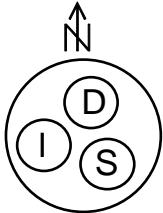
3) Soil samples from 2 - 76 ft bgs were collected from standard split spoons using combination hollow stem auger/drive and wash drilling method by GeoSearch Inc., between September 12 - 17, 2012, in a boring co-located approximately 3 feet from MIP-13.



Top of water table



Sediment Trap



Well Configuration

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 1 of 4	
Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels (bgs)			
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet (bgs)	
Date Drilled		March 30/Sept. 10 - 12, 2012		Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18	
Drilling Company		Stone Env./GeoSearch, Inc.		Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5	
Drilling Foreman		Mike Jordan/Chris Stamos		Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57	
Drill Rig Type		Geoprobe/CME-85		Surface Elevation					
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)							
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE
								PID (ppm)	Field Lab (ppb)
2		NA	NA	24	0 - 2" Brown, medium-to-coarse SAND, some coarse-to-fine gravel. Dry. 2 - 5" Rusty-brown, medium-to-coarse SAND, trace coarse-to-fine gravel. Dry. 5 - 9" Yellow-brown, fine SAND. Dry. 9 - 16" Black, fine SAND, little silt, trace gravel. Dry. 16 - 24" Brown, medium-to-coarse SAND, trace fine gravel. Dry.	0 (top) 0 (length) 0 (bot)	1480/ND 2 - 3 ft	NA	
4		NA	NA	32	0 - 4" Dark brown, fine-to-coarse SAND, trace fine gravel. Dry. 4 - 12" Yellow brown, fine-to-medium SAND, trace fine gravel. Dry.	0 (top)	110/ND 3 - 4 ft		
6		NA	NA	32	12 - 16" Light brown, medium-to-very coarse SAND, trace fine gravel. Dry. 16 - 32" Light brown, medium SAND (well sorted). Moist	0 (length)		NA	
8		NA	NA	35	0 - 3" Reddish-brown, medium-to-coarse SAND, little coarse-to-fine gravel. Moist. 3 - 6" Yellow brown, medium SAND, trace fine gravel. Moist. 6 - 10" Black, medium SAND, little silt. Moist.	0 (top)	1600/ND 8 - 9 ft		
10		NA	NA	35	10 - 35" Light brown, fine-to-medium SAND, trace fine gravel. Moist	0 (length)		NA	
12		NA	NA	36	0 - 8" Brown, medium-to-coarse SAND, little coarse-to-fine gravel. Wet. 8 - 17" Light brown, medium-to-coarse SAND. Saturated at 13 ft.	0 (top)			
14		NA	NA	36	17 - 34" Rusty-brown, fine-to-medium SAND, trace silt and fine gravel. Wet. 34 - 34.5" Black, coarse SAND and fine gravel. Wet. 34.5 - 36" Rusty-brown, fine-to-medium SAND, trace silt and fine gravel. Wet.	0 (length)		NA	
16		NA	NA	31	0 - 10" Brown, medium-to-coarse SAND, trace fine-to-coarse gravel. Wet. 10 - 14" Reddish-brown, medium SAND, trace fine gravel. Wet. 10 - 16" Black, fine-to-medium SAND. Wet. 16 - 19" Greenish-gray, fine SAND, little silt. Wet. 19 - 25" Brownish-red, fine-to-medium SAND, trace silt and fine gravel. Wet.	0 (top) 0 (length)	52/ND 17 - 18 ft		
20		NA	NA	31	25 - 31" Gray, fine SAND and coarse GRAVEL, little silt. Wet.	0 (bottom)		NA	
22		NA	NA	48	0 - 3" Brown, fine SAND. Moist 3 - 13" Rusty-brown, medium-to-coarse SAND, little coarse-to-fine gravel. Wet. 13 - 27" Gray, medium SAND, little coarse-to-fine gravel. Wet.	0 (top) 0 (bottom)	2280/ND 22 - 23 ft		
24		NA	NA	48		0 (top)	600/ND 23 - 24 ft		
26		NA	NA	48		0 (top)	700/ND 24 - 25 ft		
						0 (length)	1090/ND 25 - 26 ft		

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 2 of 4		
Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels*				
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet*		
Date Drilled		March 30/Sept. 10 - 12, 2012			Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18	
Drilling Company		Stone Env./GeoSearch, Inc.			Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5	
Drilling Foreman		Mike Jordan/Chris Stamos			Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57	
Drill Rig Type		Geoprobe/CME-85			Surface Elevation					
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Construction		Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE
									PID (ppm)	Field Lab
28			NA	NA	48	27 - 46" Greenish-gray, medium SAND, little fine-to-coarse gravel. Wet. 46 - 48" Greenish-gray, fine SAND. Moist.			0 (bottom)	980/ND 26 - 27 ft 844/ND 27 - 28 ft
30			NA	NA	34	0 - 8" Brown, fine-to-medium SAND, trace fine gravel. Wet. 8 - 10" Brownish-gray, coarse-to-fine GRAVEL, little medium-to-coarse sand. Wet. 10 - 17" Greenish-gray, medium SAND, trace fine gravel and silt. Wet. 17 - 34" Gray, fine-to-medium SAND, little coarse-to-fine gravel. Wet.			0 (top)	2020/ND 28 - 29 ft 920/ND 29 - 30 ft 2620/ND 30 - 31 ft 1730/ND 31 - 32 ft 2400/ND 32 - 33 ft
32									0 (bottom)	
34			NA	NA	50	0 - 25" Heaving sands (Brown, medium-to-coarse SAND, trace silt and fine gravel. Wet.).			1.1 (top)	
36			NA	NA	50	25 - 50' Gray, fine-to-medium SAND, trace coarse gravel. Wet.			0 (length)	4050/ND 35 - 36 ft 3220/ND 36 - 37 ft 4860/ND 37 - 38 ft
38									0 (bottom)	
40			NA	NA	30	0 - 7" Heaving sands (Brown, medium-to-coarse SAND, trace silt and fine gravel. Wet.).			1.1 (top)	4460/ND 38 - 39 ft 4490/ND 39 - 40 ft 7360/ND 40 - 41 ft 5190/ND 41 - 42 ft 4230/ND 42 - 43 ft
42						7 - 30" Light gray, fine SAND, trace silt (well sorted). Wet.			0 (length)	
44			NA	NA	44	0 - 18" Light gray and brown, medium SAND, trace silt. Wet. 18 - 28" Light gray, fine SAND, some coarse gravel. Wet. 28 - 44" Light gray, medium SAND. Wet. Soil samples from 0 - 46 ft bgs were collected from macrocores advanced using a combination hollow stem auger (HSA)/direct push drilling method; and samples from 46 - 78 ft bgs were collected using combination HSA/drive & wash method.			0.8 (top)	1930/ND 43 - 44 ft 2010/ND 44 - 45 ft 0 (length)
46									0 (bottom)	2650/ND 445 - 46
48			1	9-13-16-21	10	0 - 10" Light gray, fine-to-coarse SAND, some coarse-to-fine gravel (subangular), trace silt. Very moist.			0	1990/ND
50			2	56-89-120R (5-in)	24	0 - 11" Light gray, very coarse SAND (sorted), some fine-to-coarse gravel (subrounded and subangular), 11 - 16" Light gray, fine SAND, trace silt. Very moist. 16 - 24" Same as 0 - 11" interval.			0	1997/ND
52			3	8-72-120R (5-in)	10	0 - 10" Light gray, fine-to-medium SAND (well sorted), trace silt. Wet.			0	2659/ND
									0	1356/ND
									0	8523/ND

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 3 of 4				
Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels*						
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet*				
Date Drilled		March 30/Sept. 10 - 12, 2012			Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18			
Drilling Company		Stone Env./GeoSearch, Inc.			Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5			
Drilling Foreman		Mike Jordan/Chris Stamos			Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57			
Drill Rig Type		Geoprobe/CME-85			Surface Elevation							
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)										
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)					VOCs PID (ppm)	PCE/TCE Field Lab	Density
—		4	58-120R (2-in)	6	0 - 6 " Light gray, fine-to-medium SAND, trace fine-to-coarse gravel (schist) and silt. Wet. Roller bit from 53 - 54 feet.					0	4085/ND	Very Dense
54		5	120R (4-in)	4	0 - 4 " Light gray, fine-to-medium SAND (sorted), trace silt. Wet.					0	NA	
56					Bottom of hole collapsed. Advance 4-inch casing and clean out boring to 58 feet using drive and wash.					NA	NA	NA
58					NA NA					NA	NA	
—		6	94-120R (4-inch)	10	0 - 8 " Light gray, fine SAND (well-sorted), trace silt. Wet. 8 - 10" Light gray, SILT, little clay. Wet.					161	37800/N D	Very Dense
60										NA	9760/ND	
—		7	67-122-120R (5-in)	14	0 - 14" Light gray, medium-to-fine SAND, trace fine-to-coarse gravel (granitic) and silt. Abundant muscovite flakes present. Wet.					0	390/ND	Very Dense
62										0	642/ND	
—		8	56-120R (5-in)	11	0 - 5" Slough 5 - 11" Light gray, medium-to-fine SAND, trace fine-to-coarse gravel (granitic and metamorphic) and silt. Abundant muscovite flakes present. Wet.					0	337/ND	Very Dense
64										0	NA	
—		9	67-120R (3-in)	9	0 - 9" Light gray, fine-to-medium SAND, trace fine gravel and silt. Wet.					0	654/ND	Very Dense
66										0	NA	
—		10	63-119-116-120R (4-in)	18	0 - 18" Light gray, medium-to-fine SAND, trace coarse gravel (Subangular, schist) and silt. Abundant muscovite flakes present. Moist.					0	1134/ND	Very Dense
68										0	624/ND	
—		11	39-68-99-120R (5-in)	18	0 - 18" Light gray and light brown, fine-to-medium SAND, trace fine gravel (schist). Abundant muscovite flakes present. Moist. Weathered bedrock?					0	716/ND	Very Dense
70										0	666/ND	
—		12	47-120R (3-in)	8	0 - 8" Light gray and light brown, fine-to-medium SAND, trace fine gravel (schist). Abundant muscovite flakes and black grains (hornblende?) present. Moist. Weathered bedrock?					0	527/ND	Very Dense
72										0	NA	
—		13	120-120R (2-in)	6	0 - 6" Light gray and light brown, fine-to-coarse GRAVEL (schist) and fine-to-coarse SAND, trace silt. Moist.					0	265/ND	Very Dense
74					Hit hard surface at 74 feet. Roller bit from 74 - 80 feet. Cuttings consist of pulverized schist, containing abundant muscovite and hornblende(?) fragments.							
—												
76												
—												
78												

Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels*		
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet*
Date Drilled		March 30/Sept. 10 - 12, 2012		Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18
Drilling Company		Stone Env./GeoSearch, Inc.		Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5
Drilling Foreman		Mike Jordan/Chris Stamos		Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57
Drill Rig Type		Geoprobe/CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PCE/TCE
								PID (ppm) Field Lab (ppb)
—					Attempt to drive split spoon at 80 feet. N = 120R (0.5-in).			
80					-End of Boring at 80 feet-			
—								
82								Very Dense

Well Construction Details:

		Shallow	Interm.	Deep
	Feet below ground surface			
Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen	8 - 18	35 - 45	68 - 78
Riser	2-in diameter, Schedule 40 PVC riser	0.3 - 8	0.3 - 35	0.4 - 68
Filter sand	Filter sand	6 - 18	33 - 46	66 - 80
Bentonite seal	Bentonite seal	4 - 6	29 - 33	61 - 66
Bentonite/sand mix	Alternating bentonite/sand	-----	18 - 31	46 - 61
Sand	Sand		1 - 4	
Concrete	Concrete		0 - 1	

bgs = below ground surface

PID = Photo-ionization Detector

NA = Not Applicable

ppm = parts per million

SS = Split Spoon (2-in diameter)

ppb = parts per billion

MC = Macrocore (5-ft)

ND = Non detect

Top of water table

HSA = Hollow Stem Augers

NA = Not applicable

D&W = Drive and Wash

PCE = Tetrachloroethylene

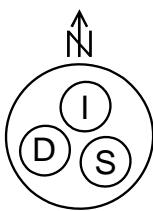
R = Refusal

TCE = Trichloroethylene

Rec. = Recovery

VOCs = Volatile Organic Compounds

WOH = Weight of hammer



Well Configuration

- 1) Used 2-inch diameter split spoons with 140-lb auto-hammer.
- 2) N = 120R (x in) = Refusal where 120 blow counts were applied and split spoon advanced x inches.
- 3) Soil samples from 0 - 46 ft bgs were collected from macrocores advanced using a combination hollow stem auger/direct push drilling method by Stone Environmental Inc., on March 30, 2012 in boring designated as SB-16 (MIP-16). Soil samples from 46 - 78 ft bgs were collected from standard split spoons using combination hollow stem auger/drive and wash drilling method by GeoSearch Inc., between September 10 - 12, 2012, in a boring co-located approximately 4 feet from SB-16 (MIP-16).

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG			Page 1 of 4			
Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)				
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)		
Date Drilled		Sept. 18 - 20, 2012		Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11		
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-3B (inter)	19-Sep-12	12.45		
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78		
Drill Rig Type		CME-85		Surface Elevation						
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density
2		NA	NA	NA	No soil samples collected. Soil sampling began at 2 - 4 interval.			NA	NA	NA
4		1	2-1-2-5	22	0 - 6" Dark brown, fine SAND and SILT, trace fine gravel. Dry. 6 - 12" Brown, fine-to-medium SAND, trace fine gravel and silt. Moist. 12 - 22" Orange-brown, medium-to-coarse SAND, trace fine gravel. Moist.			0	1531/ND	Very Loose
6		2	4-4-3-5	11	0 - 11" Orange-brown, very coarse-to-medium SAND, trace fine gravel. Moist.			0	16/ND	
8		3	6-6-7-5	12	0 - 12" Orange-brown, medium-to-coarse SAND, trace fine gravel and silt. Moist.			7.8	9/ND	Medium Dense
10		4	2-3-2-2	6	0 - 6" Orange-brown, fine-to-medium SAND (sorted), trace silt. Very moist.			0	ND/ND	
12		5	2-4-5-7	16	0 - 16" Orange-brown, medium-to-fine SAND, trace silt and fine gravel. Very moist.			0	27/ND	Loose
14		6	2-3-4-3	5	0 - 5" Orange-brown, fine-to-coarse GRAVEL and coarse-to-medium SAND, trace silt. Wet.			1.3	ND/ND	
16		7	2-5-5-7	6	0 - 6" Orange-brown, very coarse-to-medium SAND (sorted), trace fine gravel and silt. Wet.			0	11/ND	Loose
18		8	4-4-5-5	11	0 - 11" Orange-brown, coarse-to-medium SAND (sorted), trace fine gravel and silt. Wet.			0	14/ND	
20		9	3-6-8-9	10	0 - 10" Orange-brown and brown, very coarse-to-medium SAND, trace fine gravel and silt. Wet.			2.3	8/ND	Medium Dense
22		10	8-8-12-12	13	0 - 8" Brown, c-to-m SAND, trace c-to-f gravel, trace silt. Wet. 8 - 8.5" Black, medium SAND. Wet. 8.5 - 9" Rusty-brown, medium SAND. Wet. 9 - 13" Brown, medium-to-coarse SAND, trace fine gravel and silt. Wet.			0	7/ND	
24		11	6-6-13-17	5	0 - 5" Brown and brown, fine-to-medium SAND, trace fine gravel and silt. Wet.			2.8	623/ND	Medium Dense
26		12	2-4-4-6	5	0 - 2" Rusty-brown, fine-to-medium SAND, trace silt. Wet. 2 - 5" Light brown, fine-to-medium SAND, trace fine gravel and silt. Wet.			9.1	2920/ND	Loose

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 2 of 4			
Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)					
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)			
Date Drilled		Sept. 18 - 20, 2012		Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11			
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-3B (inter)	19-Sep-12	12.45			
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78			
Drill Rig Type		CME-85		Surface Elevation							
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)									
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)				VOCs	PCE/TCE	Density
					PID (ppm)	Field Lab (ppb)					
28		13	7-7-11-17	6	0 - 6"	Brown, fine SAND, some coarse-to-fine gravel (subangular). Wet.		8.7	687/ND	Medium Dense	
30		14	29-30-41-40	17	0 - 17"	Light brown, medium SAND, trace fine gravel and silt. Moist.		0	4920/ND	Very Dense	
32		15	16-120R (2 in)	6	0 - 6"	Light brown, fine SAND, trace fine gravel. Wet.		25	3374/ND		
34		16	13-41-61R (2 in)	12	0 - 12"	Rusty-brown and light brown, fine-to-medium SAND, little coarse gravel (granitic). Wet. Cobble stuck in cutting shoe.		0	2626/ND	Very Dense	
36		17	14-19	7	0 - 7"	Roller bit through boulder/cobble 35 - 36 feet. Split spoon advanced from 35 - 36 feet. Light brown, coarse GRAVEL (angular, granitic), little coarse-to-fine sand, trace silt. Wet.		NA	NA		
38		18	7-8-12-9	13	0 - 2"	Brown, coarse GRAVEL, trace fine-to-medium sand and silt. Wet.		0	2074/ND	Medium Dense	
40		19	2-7-6-11	12	2 - 13"	2 - 13" Brown, SILT and fine SAND, trace fine gravel. Wet.		1.5	6092/ND		
42		20	8-12-16-17	9	0 - 9"	Light gray, fine-to-medium SAND (well sorted). Wet.		0	6915/ND	Medium Dense	
44		NA	NA	0	No recovery, cobble stuck in cutting shoe.				NA	NA	
46		21	6-11-15-17	11	0 - 11"	Light gray, fine SAND, trace fine gravel and silt. Wet.		0	116/ND	Medium Dense	
48		22	16-28-38-120R (3 in)	14	0 - 14"	Light gray, fine SAND, trace fine gravel and silt. Wet.		9	4472/ND		
50		23	10-15-18-18	13	0 - 13"	Light gray, medium-to-coarse SAND, trace fine gravel and silt. Wet.		0	352/ND	Very Dense	
52		24	5-9-17-19	11	0 - 11"	Light gray, medium-to-fine SAND, trace fine gravel and silt. Wet.		8.6	3138/ND		
								12	755/ND	Dense	
								25	3927/ND		
								0	90/ND	Medium Dense	
								0	1015/ND		

Project	Henry's Dry Cleaners	Boring ID	ERT-3	Groundwater Levels (bgs)		
Location	Laconia, NH	Well ID	ERT-3	Well Interval	Date	Feet (bgs)
Date Drilled	Sept. 18 - 20, 2012	Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11
Drilling Company	GeoSearch, Inc.	Method	SS	ERT-3B (inter)	19-Sep-12	12.45
Drilling Foreman	Chris Stamos	Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78
Drill Rig Type	CME-85	Surface Elevation				

Logged by George Mavris - Weston, Superfund Technical Assessment and Response Team (START)

Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
—						0.7	6250/ND	Very Dense
54		25	36-120R (1 in)	5	0 - 5" Light gray, SILT, trace fine gravel and clay. Very moist.	NA	NA	
—		26	25-120R (4 in)	10	0 - 10" Light gray, fine SAND, trace fine gravel and silt. Wet.	0	701/ND	Very Dense
56		27	120R (4 in)	10	0 - 4" Light gray, fine SAND, trace fine gravel and silt. Wet.	1.6	757/ND	
—		28	120R (6 in)	2	0 - 2" Light gray, SILT. Wet.	0.4	298/ND	Very Dense
58		29	28-120R (3 in)	5	0 - 5" Light gray, fine SAND, trace fine gravel and silt. Wet.	NA	NA	
—		30	14-19-22-22	18	0 - 6" Light gray, fine SAND, trace fine gravel and silt. Wet. 6 - 18" Light gray, very coarse SAND, trace fine gravel and silt. Wet.	0.6	1312/ND	Very Dense
60		30	14-19-22-22	18		NA	NA	
—		31	4-12-120R(2 in)	5	0 - 5" Light gray, very coarse SAND and fine-to-coarse GRAVEL, trace silt. Wet.	0	774/ND	Very Dense
62		31	4-12-120R(2 in)	5		NA	NA	
—		32	4-12-12-15	10	0 - 10" Light gray, SILT, trace fine gravel. Wet.	0	332/ND	Dense
64		32	4-12-12-15	10		0	586/ND	
—		33	4-7-19-19	13	0 - 13" Brownish-gray, SILT, little coarse gravel (schist rock fragments). Wet.	0	57/ND	Very Dense
66		33	4-7-19-19	13		NA	NA	
—		NA	120R (3 in)	0	No recovery.	0	1491/ND	Medium Dense
68		NA	120R (3 in)	0		0	1343/ND	
—		NA	120R (2 in)	0	No recovery.	0	631/ND	Medium Dense
70		NA	120R (2 in)	0		0	1831/ND	
—		NA	120R (2 in)	0	No recovery.	NA	NA	NA
72		NA	120R (2 in)	0		NA	NA	NA
—		NA	120R (2 in)	0	No recovery.	NA	NA	NA
74		NA	120R (2 in)	0		NA	NA	NA
—		NA	120R (2 in)	0	No recovery.	NA	NA	NA
76		NA	120R (2 in)	0	Competent bedrock at 76 feet.	NA	NA	NA
—		NA	NA	NA	Roller bit to 78 feet.	NA	NA	NA
78								

Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)				
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)		
Date Drilled		Sept. 18 - 20, 2012		Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11		
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-3B (inter)	19-Sep-12	12.45		
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78		
Drill Rig Type		CME-85		Surface Elevation						
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE	
					PID (ppm)	Field Lab (ppb)	Density			
—		NA	NA	NA	Roller bit to 80 feet.			NA	NA	NA
80	—				-End of Boring at 80 feet-					
—										
82	—									

Well Construction Details:

					Shallow	Interm.	Deep
					Feet below ground surface		
	Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen			8 - 18	36 - 46	68 - 78
	Riser	2-in diameter, Schedule 40 PVC riser			0.3 - 8	0.25 - 36	0.3 - 8
	Filter sand	Filter sand			6 - 18.5	34 - 46.5	66 - 80
	Bentonite seal	Bentonite seal			4 - 6	32 - 34	62 - 66
	Bentonite/sand mix	Alternating bentonite/sand			-----	18.5 - 32	46.5 - 66
	Sand	Sand			1 - 4		
	Concrete	Concrete			0 - 1		

bgs = below ground surface

PID = Photo-ionization Detector

NA = Not Applicable

ppm = parts per million

SS = Split Spoon (2-in diameter)

ppb = parts per billion

MC = Macrocore (5-ft)

ND = Non detect

HSA = Hollow Stem Augers

NA = Not applicable

D&W = Drive and Wash

PCE = Tetrachloroethylene

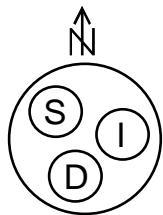
R = Refusal

TCE = Trichloroethylene

Rec. = Recovery

VOCs = Volatile Organic Compounds

WOH = Weight of hammer



Well Configuration

- 1) Used 2-inch diameter split spoons with 140-lb auto-hammer.
- 2) N = 120R (x in) = Refusal where 120 blow counts were applied and split spoon advanced x inches.
- 3) Soil samples from 2 - 76 ft bgs were collected from standard split spoons using combination hollow stem auger/drive and wash drilling method by GeoSearch Inc., between September 18 - 20, 2012, in a boring co-located approximately 3 feet from MIP-5.

SOIL BORING/WELL COMPLETION LOG							Page 1 of 1					
Project		Henry's Dry Cleaners		Boring ID	ERT-4	Groundwater Levels (bgs)						
Location		Laconia, NH		Well ID	ERT-4	Well Interval	Date	Feet (bgs)				
Date Drilled		Sept. 20, 2012		Drilling Method	Hollow Stem Augers	ERT-4	20-Sep-12	4.25				
Drilling Company		Geosearch, Inc.		Method	SS							
Drilling Foreman		Chris Stamos		Total Depth	12 feet							
Drill Rig Type		CME-85		Surface Elevation								
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)										
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)		VOCs	PCE/TCE				
							PID (ppm)	Field Lab (ppb)	Density			
2	1	1	2-1-2-5	15	0 - 3"	Dark brown, fine SAND and SILT, trace roots (topsoil). Dry.	3	111/ND	Very Loose			
					3 - 5"	Brown, fine SAND, trace fine gravel. Moist.	0	ND/ND				
					5 - 10"	Black, fine SAND, trace fine gravel (degraded oil). Moist.			Medium Dense			
					10 - 15"	Dark brown, fine SAND, trace fine gravel. Moist.						
	2		6-9-9-6	20	0 - 10"	Brown and black, fine-to-medium SAND, trace fine gravel and silt. Moist.	0	ND/ND	Loose			
					10 - 20"	Gray and black, medium-to-fine SAND, trace fine gravel and silt. Moist.	1.4	ND/ND				
	3		3-4-6-5	14	0 - 10"	Light gray, medium-to-fine SAND, trace fine-to-coarse gravel and silt. Wet.	0	ND/ND	Loose			
					12 - 14"	Light gray, SILT, trace clay. Wet.	0.6	ND/ND				
4	4	4	2-2-4-5	12	0 - 8"	Gray, medium-to-fine SAND, trace fine-to-coarse gravel and silt. Wet.	0	ND/ND	Loose			
					8 - 12"	Black, coarse GRAVEL (wood fragments), little fine-to-medium sand. Wet.	0.1	ND/ND				
	5	5	2-9-15-12	14	0 - 4"	Greenish-gray, coarse-to-medium SAND, trace silt. Wet.	46	27/ND	Medium Dense			
					4 - 7"	Black, coarse-to-medium SAND,trace coarse gravel. Wet. Hydrocarbon odor.	0	ND/ND				
10	6	6	8-15-6-8	14	7 - 14"	Orange brown, c-to-m SAND, little f-to-c gravel, trace silt. Wet.			Medium Dense			
					0 - 14"	Orange brown, coarse-to-fine GRAVEL and very coarse-to-medium SAND, trace silt. Wet.	0	128/ND				
12					-End of Boring at 12 feet-		0.6	223/ND	Medium Dense			
<p>Screen 2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen (2 - 12 feet) Riser 2-in diameter, Schedule 40 PVC riser (0.3 - 2 feet) Filter sand 1.5 - 12 feet Bentonite seal 1.0 - 1.5 feet Concrete 0 - 1.0 feet</p> <p>Top of water table Sediment Trap</p>												
<p>bgs = below ground surface SS = Split Spoon (2-in diameter) Rec. = Recovery c = coarse m = medium f = fine</p>					<p>PID = Photo-ionization Detector ppm = parts per million ppb = parts per billion ND = Non detect PCE = Tetrachloroethylene TCE = Trichloroethylene VOCs = Volatile Organic Compounds</p>							
<p>1) Used 2-inch diameter split spoons with 140-lb auto-hammer. 2) ERT-4 located approximately 4 feet southwest of MIP-17.</p>												

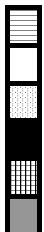
Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 1 of 3			
Project		Henry's Dry Cleaners		Boring ID	ERT-2-IB	Groundwater Levels (bgs)				
Location		Laconia, NH		Well ID	ERT-2-IB	Date	Feet (bgs)			
Date Drilled		Oct. 10, 2012		Drilling Method	Drive and Wash	10-Oct-12	12.29			
Drilling Company		Geosearch, Inc.		Method	None					
Drilling Foreman		Chris Stamos		Total Depth	60 feet					
Drill Rig Type		CME-85		Surface Elevation						
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density
2		NA	NA	NA	No soil sampling conducted. See ERT-2 for soil descriptions.			NA	NA	NA
4										
6										
8										
10										
12										
14										
16										
18										
20										
22										
24										
26										

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 2 of 3	
Project		Henry's Dry Cleaners		Boring ID	ERT-2-IB	Groundwater Levels (bgs)		
Location		Laconia, NH		Well ID	ERT-2-IB	Date	Feet (bgs)	
Date Drilled		Oct. 10, 2012		Drilling Method	Drive and Wash	10-Oct-12	12.29	
Drilling Company		Geosearch, Inc.		Method	None			
Drilling Foreman		Chris Stamos		Total Depth	60 feet			
Drill Rig Type		CME-85		Surface Elevation				
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
28								
30								
32								
34								
36								
38								
40								
42								
44								
46								
48								
50								
52								

Project	Henry's Dry Cleaners	Boring ID	ERT-2-IB	Groundwater Levels (bgs)		
Location	Laconia, NH	Well ID	ERT-2-IB	Date		
Date Drilled	Oct. 10, 2012	Drilling Method	Drive and Wash	10-Oct-12		
Drilling Company	Geosearch, Inc.	Method	None	12.29		
Drilling Foreman	Chris Stamos	Total Depth	60 feet			
Drill Rig Type	CME-85	Surface Elevation				

Logged by Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)

Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
54								
56								
58								
60					-End of Boring at 60 feet-			
62								



- Screen 2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen (50 - 60 feet)
- Riser 2-in diameter, Schedule 40 PVC riser (0.9 - 50 feet)
- Filter sand 48 - 60 feet
- Bentonite seal 46 - 48 feet
- Grout 1.0 - 46 feet
- Concrete 0 - 1.0 feet



Top of water table
Sediment Trap

bgs = below ground surface

Rec. = Recovery

PID = Photo-ionization Detector

ppm = parts per million

ppb = parts per billion

ND = Non detect

VOCs = Volatile Organic Compounds

ERT-2-IB is co-located next to ERT-2.

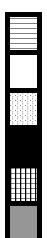
Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 1 of 3			
Project		Henry's Dry Cleaners		Boring ID	ERT-3-IB	Groundwater Levels (bgs)				
Location		Laconia, NH		Well ID	ERT-3-IB	Date	Feet (bgs)			
Date Drilled		Oct. 11, 2012		Drilling Method	Drive and Wash	11-Oct-12	12.18			
Drilling Company		Geosearch, Inc.		Method	None					
Drilling Foreman		Chris Stamos		Total Depth	59 feet					
Drill Rig Type		CME-85		Surface Elevation						
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density
2		NA	NA	NA	No soil sampling conducted. See ERT-3 for soil descriptions.			NA	NA	NA
4										
6										
8										
10										
12										
14										
16										
18										
20										
22										
24										
26										

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 2 of 3		
Project		Henry's Dry Cleaners		Boring ID	ERT-3-IB	Groundwater Levels (bgs)			
Location		Laconia, NH		Well ID	ERT-3-IB	Date	Feet (bgs)		
Date Drilled		Oct. 11, 2012		Drilling Method	Drive and Wash	11-Oct-12	12.18		
Drilling Company		Geosearch, Inc.		Method	None				
Drilling Foreman		Chris Stamos		Total Depth	59 feet				
Drill Rig Type		CME-85		Surface Elevation					
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)							
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density	
						PID (ppm)	Field Lab (ppb)		
28									
30									
32									
34									
36									
38									
40									
42									
44									
46									
48									
50									
52									

Project	Henry's Dry Cleaners	Boring ID	ERT-3-IB	Groundwater Levels (bgs)	
Location	Laconia, NH	Well ID	ERT-3-IB	Date	
Date Drilled	Oct. 11, 2012	Drilling Method	Drive and Wash	11-Oct-12	
Drilling Company	Geosearch, Inc.	Method	None	12.18	
Drilling Foreman	Chris Stamos	Total Depth	59 feet		
Drill Rig Type	CME-85	Surface Elevation			

Logged by Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)

Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
54								
56								
58								
60					-End of Boring at 59 feet-			



- Screen 2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen (49 - 59 feet)
- Riser 2-in diameter, Schedule 40 PVC riser (0.1 - 49 feet)
- Filter sand 47 - 59 feet
- Bentonite seal 45 - 47 feet
- Grout 1.0 - 45 feet
- Concrete 0 - 1.0 feet



Top of water table
Sediment Trap

bgs = below ground surface

Rec. = Recovery

PCE = Tetrachloroethylene

TCE = Trichloroethylene

PID = Photo-ionization Detector

ppm = parts per million

ppb = parts per billion

ND = Non detect

VOCs = Volatile Organic Compounds

ERT-3-IB is co-located next to ERT-3.

FINAL

Attachments

FINAL

Attachment A

Lockheed Martin
Scientific Engineering Response and Analytical Services
2890 Woodbridge Ave, Building 209
Edison, NJ 08837-3679
Telephone: 732-321-4200 Facsimile: 732-494-4021

LOCKHEED MARTIN 

DATE: 29 November 2012

TO: David B. Mickunas, U.S. EPA/ERT Work Assignment Manager

THROUGH: Dennis A. Miller, SERAS Program Manager 

FROM: Scott J. Thompson, SERAS Task Leader 

SUBJECT: Henry's Dry Cleaners Site, Laconia, New Hampshire
Work Assignment #0-167 – TRIP REPORT

1.0 BACKGROUND

The Environmental Protection Agency/Environmental Response Team (EPA/ERT) issued an Amended Work Assignment (WA) SERAS-167.2 for Henry's Dry Cleaners Site (Site) in Laconia, New Hampshire (NH) to Lockheed Martin under the Scientific, Engineering, Response, and Analytical Services (SERAS) contract. The purpose of this amended WA was to assist EPA Region I during the performance of a vapor intrusion study. The study was conducted at a commercial property adjacent to the Site. The study will assist in determining the extent of the subsurface plume and evaluating the potential impact to indoor air quality associated with the subsurface plume.

Henry's Dry Cleaners is located at 36 Pleasant Street in Laconia, NH. The 0.1-acre lot is occupied by a 2,398 square-foot (ft^2) one-story building constructed in 1946. Henry's Dry Cleaners is bordered by Pleasant Street to the north, a property occupied by the Goodwill Industries building to the south and east, and the Laconia Savings Bank property to the west. The southern portion of the building is constructed on a concrete slab foundation and the northern portion of the building is constructed over a full basement.

The 0.1-acre lot also has an asphalt paved driveway and parking areas. The 0.1-acre lot is currently owned by Ms. Smith who also operates Henry's Dry Cleaners. EPA and New Hampshire Department of Environmental Services (NHDES) conducted a site reconnaissance on October 06, 2011, and interviewed the owner and her daughter and conducted a tour of the facility. The customer service counter and clean clothing rack area are located in the northern portion of the building and the dry cleaning machine and hazardous waste storage area are located in the southern portion of the building.

Dry cleaning operations are conducted on the first floor and a fur storage room is located in the basement. The floor around the base of the dry cleaning machine was observed to be unsealed concrete slab. Small containers of spot cleaning chemicals were stored in a refrigerator in the same room as the dry cleaning machine. A pronounced chemical odor was noted when the refrigerator door was opened and the photoionization detector (PID) reading jumped to 30 parts per million (ppm). A functional air compressor, a non-operating air compressor, a water heater, and the building's only floor drain were located in the old boiler room.

Pipe wrappings, possibly asbestos containing materials (ACM) were noted in the boiler room. A 275-gallon heating oil tank is located along the south wall inside the building. On-site monitoring wells were observed. The Goodwill Industries building is located next to Henry's Dry Cleaners. EPA and NHDES conducted a walkthrough of the Goodwill Industries building with the manager and performed continuous air monitoring with a PID, no readings were observed above background. The reconnaissance proceeded to the south side of the former Allen-Rogers Mill Complex (FARM Complex) property and observed buildings, river, canal, and parking lot.

The FARM Complex is located at approximately 71 degrees, 28 minutes and 15 seconds west longitude,

and 43 degrees, 31 minutes and 45 seconds north latitude on the 7.5 minute Laconia Quadrangle, United States Geological Survey (USGS) topographic map dated 1983.

The Winnipesaukee River abuts the FARM Complex to the south. Residential properties abut the FARM Complex to the west. Water Street and renovated mill buildings abut the FARM Complex to the north. A parking lot, Beacon Street, South Main Street, and commercial properties abut the FARM Complex to the east. The FARM Complex property consists of approximately 5.6 acres identified as Map 135, Lot 4 in the City of Laconia in Belknap County. The current owner of record is Chinburg Builders, Inc. of Durham, New Hampshire.

The FARM Complex is comprised of four buildings. Three are multi-story, brick buildings formerly used in wood milling operations. The fourth building, located at the southeast corner of the property, is constructed of wood and appears to be a former storage building. Perley Canal runs underneath this building into the Winnipesaukee River. A majority of the complex is covered by pavement and gravel. The FARM Complex topography is generally level with a slight slope to the south toward the Winnipesaukee River.

The FARM Complex was originally developed in the early 1860s and operated as a rail car manufacturer until the early 1920s. The FARM Complex was used to manufacture wooden boats in the 1920s and was inactive for several years until the early 1930s. Between 1934 and the late 1990s, the FARM Complex was used to manufacture turned wood products.

Several environmental investigations have been conducted at the complex beginning in 1986. A Site Investigation Report prepared by EnviroSense in February 1997 details the work scope, findings, and recommendations of the previous investigations at the FARM Complex.

2.0 OCTOBER 2012 ACTIVITIES/METHODOLOGY

SERAS personnel mobilized to the Site on 22 October 2012. Upon arrival at the Site, all equipment was prepared for the installation of sub-slab soil gas probes and air sampling using SUMMA® canisters.

The October 2012 scope of work included the evaluation of sub-slab soil gas, indoor air, and outdoor ambient air quality at a commercial property adjacent to the Site.

Activities included the installation of sub-slab soil gas probes and the collection of 12-hour time-weighted sub-slab soil gas, indoor air and outdoor ambient air samples using SUMMA® canisters.

The volatile organic compounds (VOCs) of interest for sub-slab soil gas, indoor air and outdoor ambient air samples collected in SUMMA® canisters were tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride (VCL). All air samples collected in SUMMA® canisters were delivered to the ERT/SERAS Laboratory for GC/MS analysis per US EPA Method TO-15, “*Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*”.

2.1 Installation of Sub-Slab Soil Gas Probes

On 23 October 2012, SERAS personnel installed nine sub-slab soil gas probes on the first floor of the commercial property at locations designated by the WAM in accordance with SERAS Standard Operating Procedure (SOP) #2082, *Construction and Installation of Permanent Sub-Slab Soil Gas Wells*. Each sub-slab soil gas probe was installed flush with the first floor slab approximately 12 hours prior to sub-slab soil gas sampling and capped with a Teflon® plug, which was removed during the sampling event.

2.2 Collection and Analysis of Air Samples using SUMMA® Canisters

On 23 October 2012, SERAS personnel started the collection of ten sub-slab soil gas, six indoor air and four outdoor ambient air samples using SUMMA® canisters. Sub-slab soil gas, indoor air, and outdoor ambient air samples were collected using SUMMA® canisters, each equipped with a restrictive orifice set at an approximate flow rate of 7.0 milliliters per minute (mL/min) to collect between four to five liters of air sample during the 12-hour sampling period.

On 24 October 2012, after the 12-hour sampling period had elapsed, the sub-slab soil gas, indoor air, and outdoor ambient air samples in SUMMA® canisters were collected and properly documented in accordance with SERAS SOP #1704, *SUMMA® Canister Sampling*. All air samples collected using SUMMA® canisters and one “Trip Blank” SUMMA® canister were delivered under COC Records to the ERT/SERAS Laboratory and analyzed in accordance with EPA Toxic Organic Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*.

SERAS Quality Assurance Group personnel validated the final laboratory data for all air samples collected in SUMMA® canisters and issued an Analytical Report. The Analytical Report indicates that the data (i.e., SUMMA® canisters data) is definitive in nature. Usability of definitive data is evaluated by a group independent from the group who is conducting the analyses. Data qualifiers and reasons for qualification are outlined in the case narrative of the Analytical Report. The COC records and definitive data for sub-slab soil gas, indoor air, outdoor ambient air samples collected using SUMMA® canisters can be found in the Analytical Report, SERAS-167-DAR-111612, located in Appendix A.

3.0 OCTOBER 2012 RESULTS

Table 1 summarizes the October 2012 SUMMA® canister sampling locations for BLDG G at the Henry's Dry Cleaners Site. Table 2 presents the summary of results for VOC analysis of samples collected using SUMMA® canisters in part per billion by volume (ppbv). Table 3 presents the summary of results for VOC analysis of samples collected using SUMMA® canisters in microgram per cubic meter ($\mu\text{g}/\text{m}^3$).

Figure 1 presents the locations for the commercial building at the Site. Location named BLDG G was sampled during the October 2012 mobilization. Figure 2 displays the sub-slab soil gas sampling locations and analytical results for PCE in BLDG G in units of ppbv and $\mu\text{g}/\text{m}^3$. Figure 3 displays the sub-slab soil gas sampling locations and analytical results for TCE in BLDG G in units of ppbv and $\mu\text{g}/\text{m}^3$. Figure 4 displays the indoor air and outdoor ambient air sampling locations and analytical results for PCE in BLDG G in units of ppbv and $\mu\text{g}/\text{m}^3$. Figure 5 displays the indoor air and outdoor ambient air sampling locations and analytical results for TCE in BLDG G in units of ppbv and $\mu\text{g}/\text{m}^3$.

3.1 SUMMA® Canister Results

Of the ten sub-slab soil gas samples collected using SUMMA® canisters on 23-24 October 2012, sample numbers 167-025 (SS1-4), 167-034 (SS-B-1), and 167-030 (SS2-4) have the highest reportable results for tetrachloroethene at 84,900 ppbv (576,000 $\mu\text{g}/\text{m}^3$), 53,900 ppbv (366,000 $\mu\text{g}/\text{m}^3$), and 40,900 ppbv (277,000 $\mu\text{g}/\text{m}^3$), respectively. Sample numbers 167-034 (SS-B-1), 167-026 (SS1-5), and 167-025 (SS1-4) have the highest reportable results for trichloroethene at 1,600 ppbv (8,620 $\mu\text{g}/\text{m}^3$), 989 ppbv (5,320 $\mu\text{g}/\text{m}^3$), and 714 ppbv (3,840 $\mu\text{g}/\text{m}^3$), respectively. Sample number 167-034 (SS-B-1) had the highest reportable result for 1,1-dichloroethene at 4.25 ppbv (16.9 $\mu\text{g}/\text{m}^3$). Sample numbers 167-034 (SS-B-1), 167-026 (SS1-5), and 167-025 (SS1-4) have the highest reportable results for cis-1,2-dichloroethene at 13,700 ppbv (54,500 $\mu\text{g}/\text{m}^3$), 5,560 ppbv (22,000 $\mu\text{g}/\text{m}^3$), and 821 ppbv (3,260 $\mu\text{g}/\text{m}^3$), respectively. Sample numbers 167-034 (SS-B-1), 167-026 (SS1-5), and 167-025 (SS1-4) have the highest reportable results for trans-1,2-dichloroethene at 18.1 ppbv (71.7 $\mu\text{g}/\text{m}^3$), 15.7 ppbv (62.4 $\mu\text{g}/\text{m}^3$), and 9.67 ppbv (38.3 $\mu\text{g}/\text{m}^3$), respectively. Vinyl chloride was not detected above its reporting limits.

Of the six indoor air samples collected in SUMMA® canisters on 23-24 October 2012, sample numbers 167-035 (IA-B-1A), 167-037 (IA-B-1B), and 167-033 (IA-FF-3) have the highest reportable results for tetrachloroethene at 53.3 ppbv (361 µg/m³), 32.7 ppbv (222 µg/m³), and 14.3 ppbv (96.8 µg/m³), respectively. Sample numbers 167-035 (IA-B-1A), 167-037 (IA-B-1B), and 167-033 (IA-FF-3) have the highest reportable results for trichloroethene at 1.86 ppbv (9.97 µg/m³), 1.39 ppbv (7.45 µg/m³), and 0.702 ppbv (3.77 µg/m³), respectively. Sample numbers 167-035 (IA-B-1A), 167-037 (IA-B-1B), and 167-033 (IA-FF-3) have the highest reportable results for cis-1,2-dichloroethene at 5.4 ppbv (21.4 µg/m³), 4.99 ppbv (19.8 µg/m³), and 1.42 ppbv (5.64 µg/m³), respectively. 1,1-dichloroethene, trans-1,2-dichloroethene and vinyl chloride were not detected above their reporting limits.

Of the four outdoor ambient air samples collected using SUMMA® canisters on 23-24 October 2012, sample numbers 167-040 (OA-2) and 167-039 (OA-3) have the highest reportable results for tetrachloroethene at 0.414 ppbv (2.81 µg/m³) and 0.205 ppbv (1.39 µg/m³), respectively. Sample numbers 167-040 (OA-2) and 167-039 (OA-3) have the highest reportable results for trichloroethene at 0.517 ppbv (2.78 µg/m³) and 0.512 ppbv (2.75 µg/m³), respectively. 1,1-dichloroethene and vinyl chloride were not detected above their reporting limits.

The SUMMA® canister sampling worksheets used during the October 2012 sampling events can be found in Appendix B, Field Worksheets.

TABLES

TABLE 1
 Summary of October 2012 SUMMA® Canister Sampling Locations
 Henry's Dry Cleaners Site
 Laconia, NJ
 November 2012

Location	Sub-Location	Sample #	Media	Start Date	Start Time	End Date	End Time	Remarks
BLDG G	SS1-1	167-022	SUMMA	10/23/2012	19:19	10/24/2012	8:08	
BLDG G	SS1-2	167-023	SUMMA	10/23/2012	19:19	10/24/2012	8:08	
BLDG G	SS1-3	167-024	SUMMA	10/23/2012	19:20	10/24/2012	8:08	
BLDG G	SS1-4	167-025	SUMMA	10/23/2012	19:20	10/24/2012	8:08	
BLDG G	SS1-5	167-026	SUMMA	10/23/2012	19:21	10/24/2012	8:08	
BLDG G	SS2-1	167-027	SUMMA	10/23/2012	19:21	10/24/2012	8:08	
BLDG G	SS2-2	167-028	SUMMA	10/23/2012	19:22	10/24/2012	8:08	
BLDG G	SS2-3	167-029	SUMMA	10/23/2012	19:22	10/24/2012	8:08	
BLDG G	SS2-4	167-030	SUMMA	10/23/2012	19:23	10/24/2012	8:08	
BLDG G	IA-FF-1	167-031	SUMMA	10/23/2012	19:24	10/24/2012	8:08	
BLDG G	IA-FF-2A	167-032	SUMMA	10/23/2012	19:24	10/24/2012	8:08	
BLDG G	IA-FF-3	167-033	SUMMA	10/23/2012	19:24	10/24/2012	8:08	
BLDG G	SS-B-1	167-034	SUMMA	10/23/2012	19:27	10/24/2012	8:08	
BLDG G	IA-B-1A	167-035	SUMMA	10/23/2012	19:27	10/24/2012	8:08	
BLDG G	IA-FF-2B	167-036	SUMMA	10/23/2012	19:34	10/24/2012	8:08	
BLDG G	IA-B-1B	167-037	SUMMA	10/23/2012	19:36	10/24/2012	8:08	
BLDG G	OA-1	167-038	SUMMA	10/23/2012	19:53	10/24/2012	8:43	
BLDG G	OA-3	167-039	SUMMA	10/23/2012	19:44	10/24/2012	8:43	
BLDG G	OA-2	167-040	SUMMA	10/23/2012	19:57	10/24/2012	8:45	
BLDG G	OA-4	167-041	SUMMA	10/23/2012	19:48	10/24/2012	8:43	
BLDG G	Trip Blank	167-042	SUMMA	10/23/2012	NA	10/24/2012	NA	

SS = Sub-Slab Soil Gas, IA = Indoor Air, OA = Outdoor Air

B = Basement, FF = First Floor

NA = Not Applicable

TABLE 2
 Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv
 Henry's Dry Cleaners Site
 Laconia, NJ
 November 2012

Sample No	Location	Sub-Location	PCE	TCE	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VCL	Units
167-022	BLDG G	SS1-1	150	3 U	3 U	3.05	3 U	3 U	ppbv
167-023	BLDG G	SS1-2	517	3 U	3 U	3 U	3 U	3 U	ppbv
167-024	BLDG G	SS1-3	5490	22.9	3 U	4.58 J	3 U	3 U	ppbv
167-025	BLDG G	SS1-4	84900	714	3 U	821	9.67	3 U	ppbv
167-026	BLDG G	SS1-5	25000	989	3 U	5560	15.7	3 U	ppbv
167-027	BLDG G	SS2-1	128	3 U	3 U	3 U	3 U	3 U	ppbv
167-028	BLDG G	SS2-2	586	3 U	3 U	3 U	3 U	3 U	ppbv
167-029	BLDG G	SS2-3	38700	60.2	3 U	3 U	3 U	3 U	ppbv
167-030	BLDG G	SS2-4	40900	251	3 U	51.3	3 U	3 U	ppbv
167-031	BLDG G	IA-FF-1	9.38	0.471	0.03 U	0.897	0.03 U	0.03 U	ppbv
167-032	BLDG G	IA-FF-2A	3.73	0.118	0.03 U	0.338	0.03 U	0.03 U	ppbv
167-033	BLDG G	IA-FF-3	14.3	0.702	0.03 U	1.42	0.03 U	0.03 U	ppbv
167-034	BLDG G	SS-B-1	53900	1600	4.25	13700	18.1	3 U	ppbv
167-035	BLDG G	IA-B-1A	53.3	1.86	0.03 U	5.40	0.03 U	0.03 U	ppbv
167-036	BLDG G	IA-FF-2B	11.6	0.565	0.03 U	1.10	0.03 U	0.03 U	ppbv
167-037	BLDG G	IA-B-1B	32.7	1.39	0.03 U	4.99	0.03 U	0.03 U	ppbv
167-038	BLDG G	OA-1	0.170	0.433	0.03 U	0.166	0.171	0.03 U	ppbv
167-039	BLDG G	OA-3	0.205	0.512	0.03 U	0.03 U	0.03 U	0.03 U	ppbv
167-040	BLDG G	OA-2	0.414	0.517	0.03 U	0.03 U	0.03 U	0.03 U	ppbv
167-041	BLDG G	OA-4	0.166	0.494	0.03 U	0.03 U	0.03 U	0.03 U	ppbv
167-042	BLDG G	Trip Blank	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	ppbv

VOC = Volatile Organic Compound

PCE = Tetrachloroethene, TCE = Trichloroethene, 1,1-DCE = 1,1-Dichloroethene, cis-1,2-DCE = cis-1,2-Dichloroethene,
 trans-1,2-DCE = trans-1,2-Dichloroethene, VCL= Vinyl Chloride

Concentrations are given in part per billion by volume (ppbv)

SS = Sub-Slab Soil Gas AMB = Ambient IA = Indoor Air OA = Outdoor Air

U = Not detected above Reporting Limit (RL), J = Detected below Reporting Limit (RL)

TABLE 3
 Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in $\mu\text{g}/\text{m}^3$
 Henry's Dry Cleaners Site
 Laconia, NJ
 November 2012

Sample No	Location	Sub-Location	PCE	TCE	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VCL	Units
167-022	BLDG G	SS1-1	1020	16.1 U	11.9 U	12.1	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-023	BLDG G	SS1-2	3500	16.1 U	11.9 U	11.9 U	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-024	BLDG G	SS1-3	37300	123	11.9 U	18.2 J	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-025	BLDG G	SS1-4	576000	3840	11.9 U	3260	38.3	7.67 U	$\mu\text{g}/\text{m}^3$
167-026	BLDG G	SS1-5	170000	5320	11.9 U	22000	62.4	7.67 U	$\mu\text{g}/\text{m}^3$
167-027	BLDG G	SS2-1	870	16.1 U	11.9 U	11.9 U	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-028	BLDG G	SS2-2	3970	16.1 U	11.9 U	11.9 U	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-029	BLDG G	SS2-3	263000	323	11.9 U	11.9 U	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-030	BLDG G	SS2-4	277000	1350	11.9 U	203	11.9 U	7.67 U	$\mu\text{g}/\text{m}^3$
167-031	BLDG G	IA-FF-1	63.7	2.53	0.119 U	3.56	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-032	BLDG G	IA-FF-2A	25.3	0.633	0.119 U	1.34	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-033	BLDG G	IA-FF-3	96.8	3.77	0.119 U	5.64	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-034	BLDG G	SS-B-1	366000	8620	16.9	54500	71.7	7.67 U	$\mu\text{g}/\text{m}^3$
167-035	BLDG G	IA-B-1A	361	9.97	0.119 U	21.4	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-036	BLDG G	IA-FF-2B	78.4	3.04	0.119 U	4.37	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-037	BLDG G	IA-B-1B	222	7.45	0.119 U	19.8	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-038	BLDG G	OA-1	1.15	2.33	0.119 U	0.657	0.678	0.0767 U	$\mu\text{g}/\text{m}^3$
167-039	BLDG G	OA-3	1.39	2.75	0.119 U	0.119 U	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-040	BLDG G	OA-2	2.81	2.78	0.119 U	0.119 U	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-041	BLDG G	OA-4	1.13	2.66	0.119 U	0.119 U	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$
167-042	BLDG G	Trip Blank	0.203 U	0.161 U	0.119 U	0.119 U	0.119 U	0.0767 U	$\mu\text{g}/\text{m}^3$

VOC = Volatile Organic Compound

PCE = Tetrachloroethene, TCE = Trichloroethene, 1,1-DCE = 1,1-Dichloroethene, cis-1,2-DCE = cis-1,2-Dichloroethene,

trans-1,2-DCE = trans-1,2-Dichloroethene, VCL= Vinyl Chloride

Concentrations are given in micrograms per cubic meter

SS = Sub-Slab Soil Gas AMB = Ambient IA = Indoor Air OA = Outdoor Air

U = Not detected above Reporting Limit (RL), J = Detected below Reporting Limit (RL)

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FIGURES

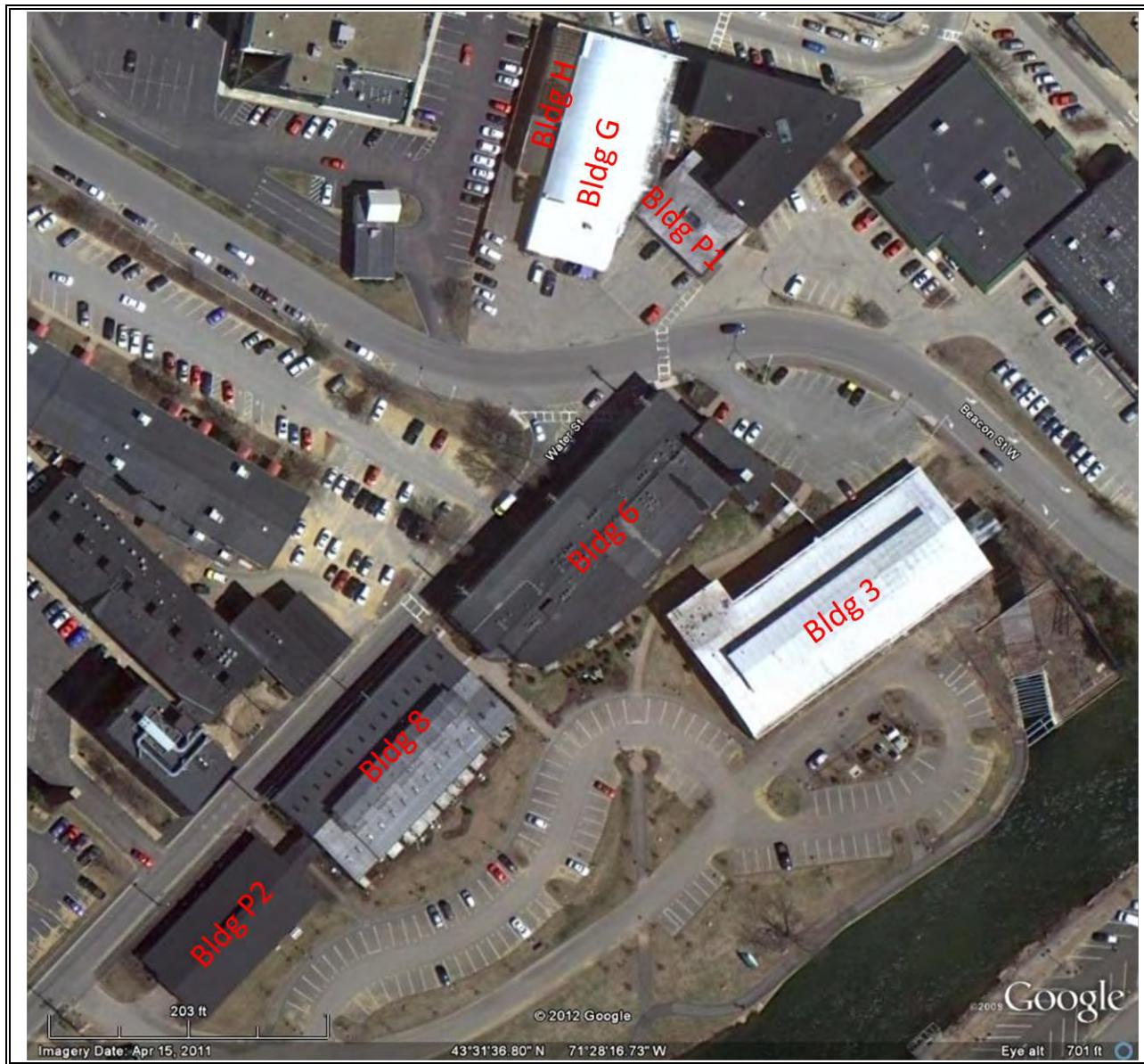


Figure 1: Locations of Buildings at Henry's Dry Cleaners Site

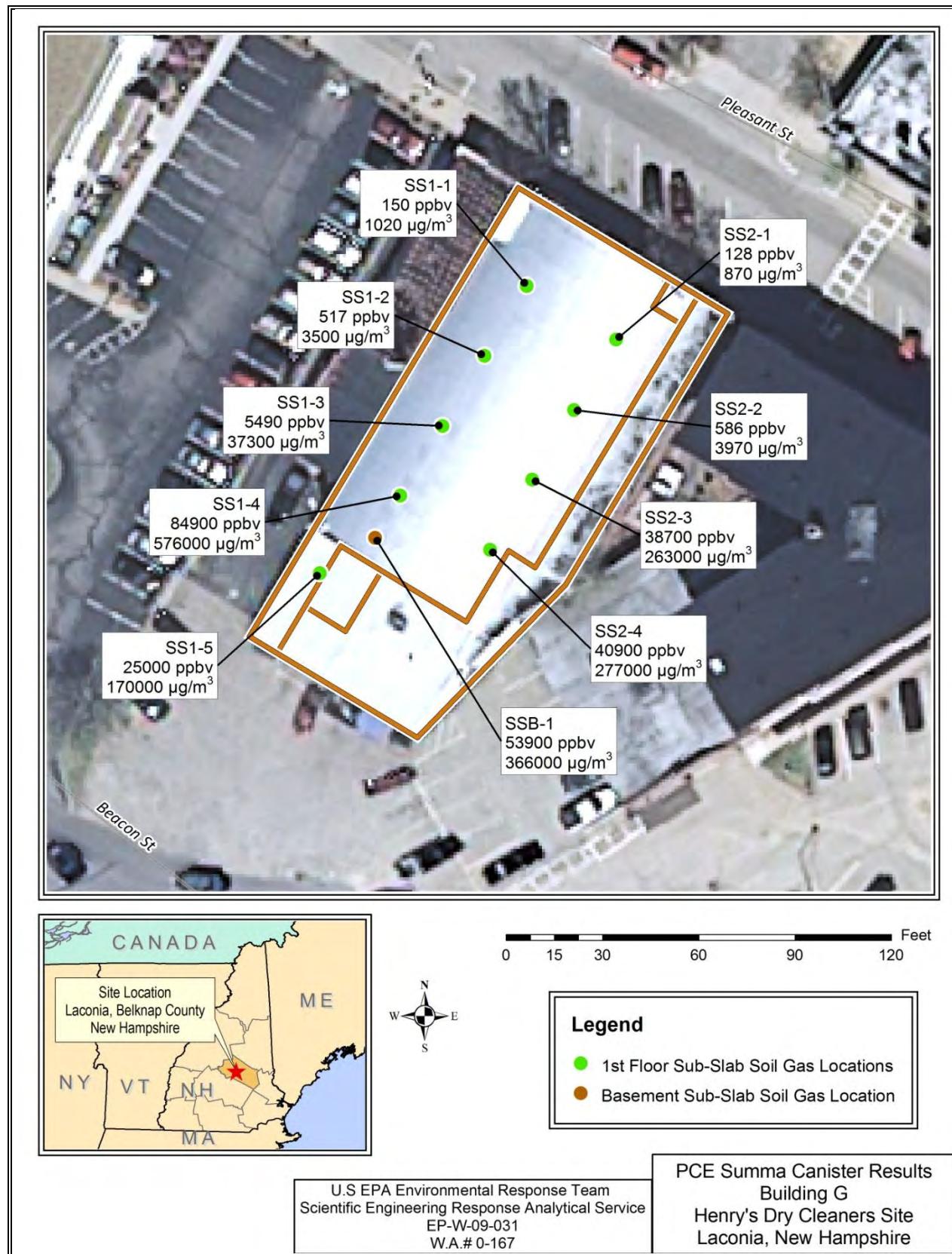


Figure 2: Sub-Slab Soil Gas Results for PCE

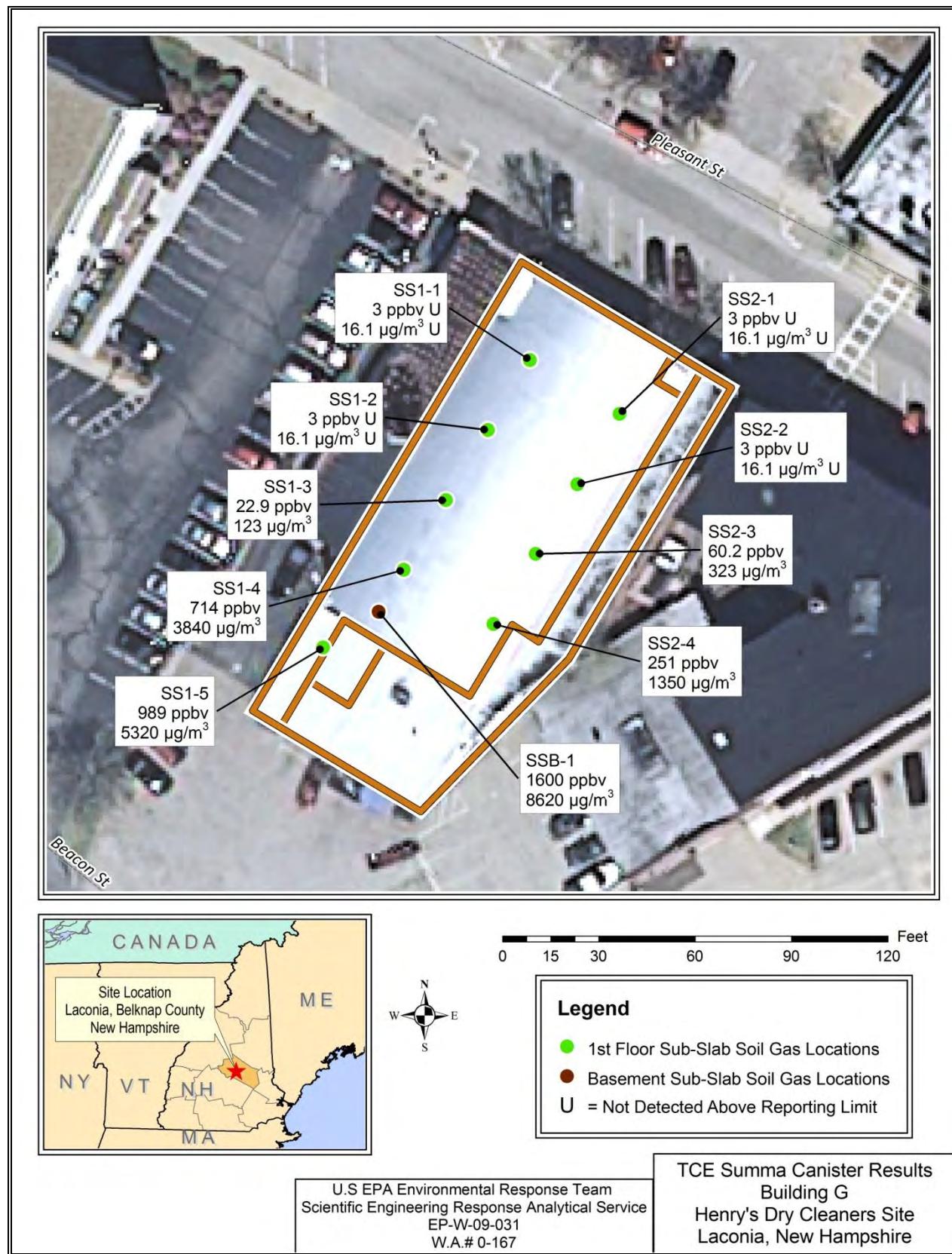


Figure 3: Sub-Slab Soil Gas Results for TCE

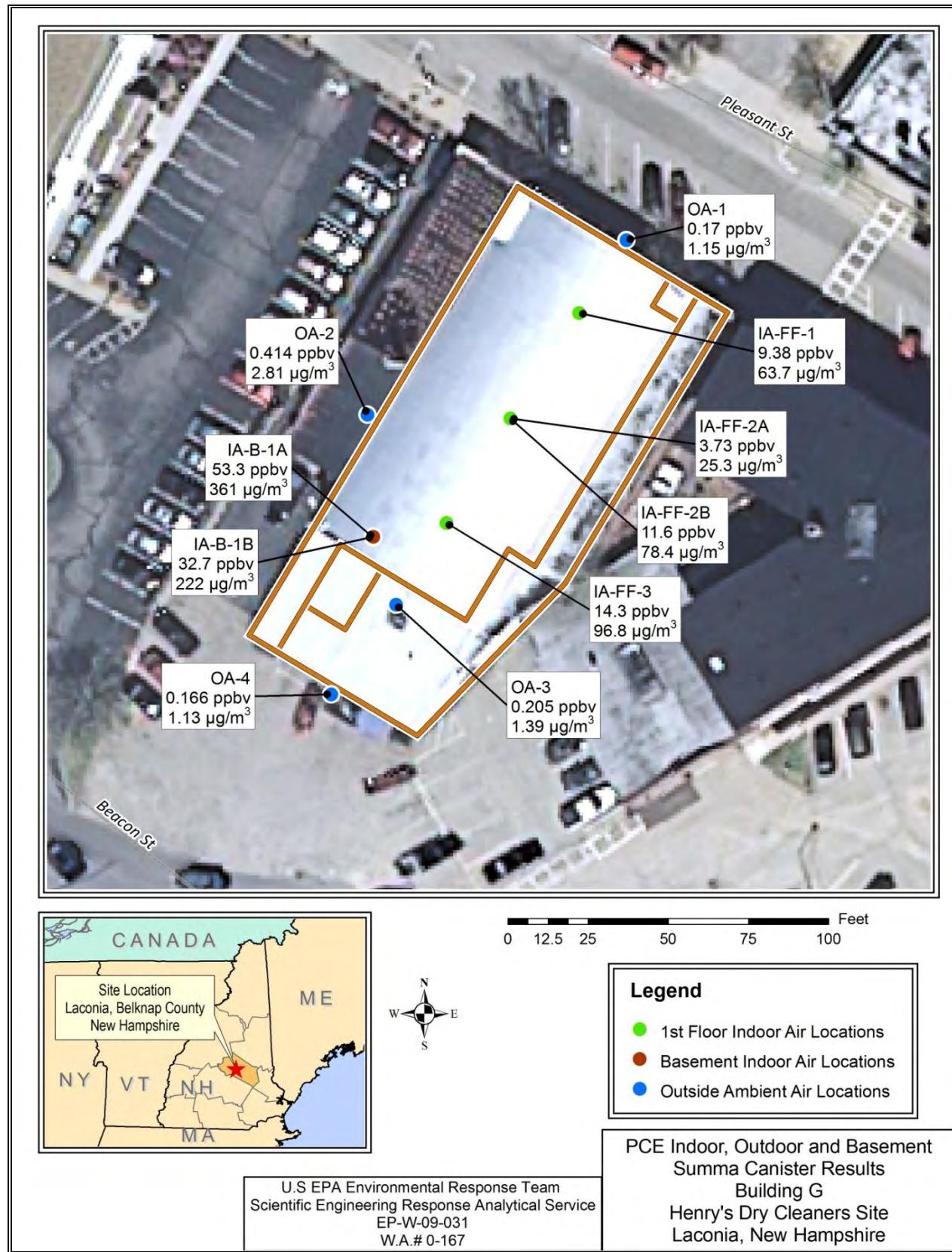


Figure 4: Indoor Air and Outdoor Ambient Air Results for PCE

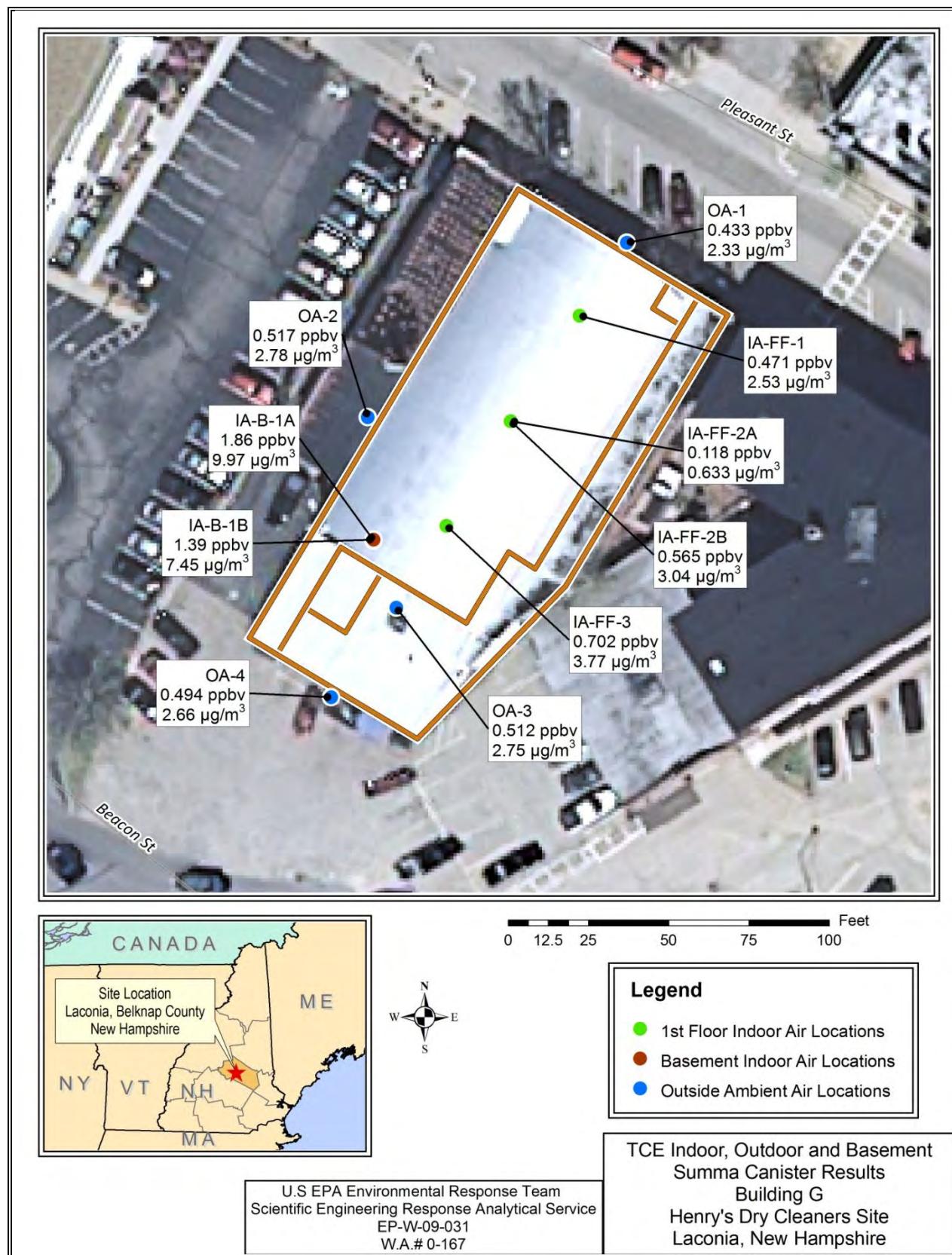


Figure 5: Indoor Air and Outdoor Ambient Air Results for TCE

APPENDIX A

Analytical Report

Henry's Dry Cleaners Site

Trip Report

November 2012

ANALYTICAL REPORT

Prepared by

Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Henry's Dry Cleaners Site
Laconia, New Hampshire

November 2012

EPA Work Assignment No. SERAS-167
LOCKHEED MARTIN Work Order SER0167
EPA Contract No. EP-W-09-031

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REPORT OF LABORATORY ANALYSIS

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SERAS-167-DAR-111612





Table of Contents

Topic

Testing Laboratories Information
Detailed Sample Information
Introduction
Case Narrative
Summary of Abbreviations

Section I

Section II

Results of the LCS Analysis for VOC in Air **Table 2.1**
Results of the Duplicate Analysis for VOC in Air **Table 2.2**

Section III

Chain of Custody

Appendices

Appendix A Data for VOC in Air X 1990

Appendices will be furnished on request.

TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air by SERAS SOP # 1814 "Analysis of Volatile Organic Compounds (VOCs) In Air By Gas Chromatography/Mass Spectrometry (GC/MS) (EPA TO-15)"

ERT/SERAS
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023, for TO-15 analysis in air.



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Detailed Sample Information

<u>SERAS Laboratory Number</u>	<u>Field Sample #</u>
R211001-01	167-022
R211001-02	167-023
R211001-03	167-024
R211001-04	167-025
R211001-05	167-026
R211001-06	167-027
R211001-07	167-028
R211001-08	167-029
R211001-09	167-030
R211001-10	167-031
R211001-11	167-032
R211001-12	167-033
R211001-13	167-034
R211001-14	167-035
R211001-15	167-036
R211001-16	167-037
R211001-17	167-038
R211001-18	167-039
R211001-19	167-040
R211001-20	167-041
R211001-21	167-042

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Introduction

SERAS personnel, in response to WA# SERAS-167, provided analytical support for environmental samples collected from the Henry's Dry Cleaning Site in Laconia, New Hampshire, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/Method	Laboratory	Data Package
0-167-10/25/12-0007	20	10/24/12	10/25/12	10/25 – 11/05/12	Air	TO-15(VOC)/SERAS SOP# 1814	ERT/SERAS	X 190
	1				Trip Blank			

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

TO-15 (VOC) in Air Package X 190

cis-1,2-Dichloroethene was above the RPD criterion of the method for the replicate analysis of sample 167-024. The cis-1,2-dichloroethene result in sample 167-024 is qualified estimated (J).

The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.

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Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09



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Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

Page 1 of 2

SERAS Laboratory Number	MethodBlank102512-01 P System Blank102512-01				R210023-21		R210023-10		R210023-11	
Sample Number	MethodBlank102512-01 P System Blank102512-01				167-042		167-031		167-032	
Sample Location	N/A				BLDG G		BLDG G		BLDG G	
Sublocation	N/A				Trip Blank		IA-FF-1		IA-FF-2A	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	0.897	0.0300	0.338	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	0.471	0.0300	0.118	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	U	0.0300	9.38	0.0300	3.73	0.0300

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

SERAS Laboratory Number	R210023-12	R210023-14	R210023-15	R210023-16	R210023-17					
Sample Number	167-033	167-035	167-036	167-037	167-038					
Sample Location	BLDG G	BLDG G	BLDG G	BLDG G	BLDG G					
Sublocation	IA-FF-3	IA-B-1A	IA-FF-2B	IA-B-1B	0A-1					
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.171	0.0300
cis-1,2-Dichloroethene	1.42	0.0300	5.40	0.0300	1.10	0.0300	4.99	0.0300	0.166	0.0300
Trichloroethene	0.702	0.0300	1.86	0.0300	0.565	0.0300	1.39	0.0300	0.433	0.0300
Tetrachloroethene	14.3	0.0300	53.3	0.300	11.6	0.0300	32.7	0.300	0.170	0.0300

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

SERAS Laboratory Number	R210023-18	R210023-19	R210023-20	MethodBlank102612-01	R210023-02					
Sample Number	167-039	167-040	167-041	N/A	167-023					
Sample Location	BLDG G	BLDG G	BLDG G	N/A	BLDG G					
Sublocation	0A-3	0A-2	0A-4	N/A	SS1-2					
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	3.00
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	3.00
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	3.00
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	3.00
Trichloroethene	0.512	0.0300	0.517	0.0300	0.494	0.0300	U	0.0300	U	3.00
Tetrachloroethene	0.205	0.0300	0.414	0.0300	0.166	0.0300	U	0.0300	517	3.00

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

Page 2 of 2

SERAS Laboratory Number	R210023-03	R210023-04		R210023-05		R210023-06		R210023-07		
Sample Number	167-024	167-025		167-026		167-027		167-028		
Sample Location	BLDG G	BLDG G		BLDG G		BLDG G		BLDG G		
Sublocation	SS1-3	SS1-4		SS1-5		SS2-1		SS2-2		
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	
Vinyl Chloride	U	3.00	U	3.00	U	3.00	U	3.00	U	3.00
1,1-Dichloroethene	U	3.00	U	3.00	U	3.00	U	3.00	U	3.00
trans-1,2-Dichloroethene	U	3.00	9.67	3.00	15.7	3.00	U	3.00	U	3.00
cis-1,2-Dichloroethene	4.58	J 3.00	821	3.00	5560	150	U	3.00	U	3.00
Trichloroethene	22.9	3.00	714	3.00	989	3.00	U	3.00	U	3.00
Tetrachloroethene	5490	150	84900	150	25000	150	128	3.00	586	3.00

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

SERAS Laboratory Number	R210023-08	R210023-09		R210023-13		R210023-01		
Sample Number	167-029	167-030		167-034		167-022		
Sample Location	BLDG G	BLDG G		BLDG G		BLDG G		
Sublocation	SS2-3	SS2-4		SSB-1		SS1-1		
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	
Vinyl Chloride	U	3.00	U	3.00	U	3.00	U	3.00
1,1-Dichloroethene	U	3.00	U	3.00	4.25	3.00	U	3.00
trans-1,2-Dichloroethene	U	3.00	U	3.00	18.1	3.00	U	3.00
cis-1,2-Dichloroethene	U	3.00	51.3	3.00	13700	150	3.05	3.00
Trichloroethene	60.2	3.00	251	3.00	1600	3.00	U	3.00
Tetrachloroethene	38700	150	40900	150	53900	150	150	3.00

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

Page 1 of 2

Analyte	R210023-21		R210023-10		R210023-11	
	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U 0.0767		U 0.0767		U 0.0767	
1,1-Dichloroethene	U 0.119		U 0.119		U 0.119	
trans-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119	
cis-1,2-Dichloroethene	U 0.119		U 0.119		3.56 0.119	1.34 0.119
Trichloroethene	U 0.161		U 0.161		2.53 0.161	0.633 0.161
Tetrachloroethene	U 0.203		U 0.203		63.7 0.203	25.3 0.203

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

Analyte	R210023-12		R210023-14		R210023-15		R210023-16		R210023-17	
	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U 0.0767									
1,1-Dichloroethene	U 0.119									
trans-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119		U 0.119		0.678 0.119	
cis-1,2-Dichloroethene	5.64 0.119		21.4 0.119		4.37 0.119		19.8 0.119		0.657 0.119	
Trichloroethene	3.77 0.161		9.97 0.161		3.04 0.161		7.45 0.161		2.33 0.161	
Tetrachloroethene	96.8 0.203		361 2.03		78.4 0.203		222 2.03		1.15 0.203	

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

Analyte	R210023-18		R210023-19		R210023-20		MethodBlank102612-01	R210023-02		SS1-2
	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$		167-023	BLDG G	
Vinyl Chloride	U 0.0767		U 0.0767		U 0.0767		N/A			
1,1-Dichloroethene	U 0.119		U 0.119		U 0.119		N/A			
trans-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119		0A-4			
cis-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119					
Trichloroethene	2.75 0.161		2.78 0.161		2.66 0.161					
Tetrachloroethene	1.39 0.203		2.81 0.203		1.13 0.203					
								3500	20.3	

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Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

Page 2 of 2

SERAS Laboratory Number	R210023-03	R210023-04		R210023-05		R210023-06		R210023-07	
Sample Number	167-024	167-025		167-026		167-027		167-028	
Sample Location	BLDG G	BLDG G		BLDG G		BLDG G		BLDG G	
Sublocation	SS1-3	SS1-4		SS1-5		SS2-1		SS2-2	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	7.67	U	7.67	U	7.67	U	7.67	U
1,1-Dichloroethene	U	11.9	U	11.9	U	11.9	U	11.9	U
trans-1,2-Dichloroethene	U	11.9	38.3	11.9	62.4	11.9	U	11.9	U
cis-1,2-Dichloroethene	18.2	J 11.9	3260	11.9	22000	595	U	11.9	U
Trichloroethene	123	16.1	3840	16.1	5320	16.1	U	16.1	U
Tetrachloroethene	37300	1020	576000	1020	170000	1020	870	20.3	3970

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Method: SERAS SOP#1814

SERAS Laboratory Number	R210023-08	R210023-09		R210023-13		R210023-01	
Sample Number	167-029	167-030		167-034		167-022	
Sample Location	BLDG G	BLDG G		BLDG G		BLDG G	
Sublocation	SS2-3	SS2-4		SSB-1		SS1-1	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	7.67	U	7.67	U	7.67	U
1,1-Dichloroethene	U	11.9	U	11.9	16.9	11.9	U
trans-1,2-Dichloroethene	U	11.9	U	11.9	71.7	11.9	U
cis-1,2-Dichloroethene	U	11.9	203	11.9	54500	595	12.1
Trichloroethene	323	16.1	1350	16.1	8620	16.1	U
Tetrachloroethene	263000	1020	277000	1020	366000	1020	1020

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Table 2.1 Results of the LCS Analysis for VOC in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Sample ID: LCS 10/25/12

Page 1 of 1

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.00	1.05	105	54 - 149
1,1-Dichloroethene	1.00	1.02	102	55 - 137
trans-1,2-Dichloroethene	1.00	1.03	103	74 - 130
cis-1,2-Dichloroethene	1.00	1.01	101	73 - 128
Trichloroethene	1.00	1.02	102	73 - 136
Tetrachloroethene	1.00	1.06	106	77 - 138

Sample ID: LCS 10/26/12

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.00	1.15	115	54 - 149
1,1-Dichloroethene	1.00	1.12	112	55 - 137
trans-1,2-Dichloroethene	1.00	1.14	114	74 - 130
cis-1,2-Dichloroethene	1.00	1.12	112	73 - 128
Trichloroethene	1.00	1.13	113	73 - 136
Tetrachloroethene	1.00	1.19	119	77 - 138

Sample ID: LCS 11/05/12

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.00	1.02	102	54 - 149
1,1-Dichloroethene	1.00	0.984	98	55 - 137
trans-1,2-Dichloroethene	1.00	0.998	100	74 - 130
cis-1,2-Dichloroethene	1.00	1.04	104	73 - 128
Trichloroethene	1.00	1.03	103	73 - 136
Tetrachloroethene	1.00	1.25	125	77 - 138

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Table 2.2 Results of the Duplicate Analysis for VOC in Air
 WA # SERAS-167 Henry's Dry Cleaning Site

Sample ID: 167-032

Page 1 of 1

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
cis-1,2-Dichloroethene	0.338	0.328	3	≤25
Trichloroethene	0.118	0.120	2	≤25
Tetrachloroethene	3.73	3.68	1	≤25

Sample ID: 167-039

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Trichloroethene	0.512	0.509	0.6	≤25
Tetrachloroethene	0.205	0.200	2	≤25

Sample ID: 167-024

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
cis-1,2-Dichloroethene	4.58	15.2	100	*
Trichloroethene	22.9	22.1	4	≤25
Tetrachloroethene	5490	5560	1	≤25

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ERT

SERAS, Edison, NJ

EPA Contract Number: EP-W-09-031

CHAIN OF CUSTODY RECORD

Site #: 0-167

No: 0-167-10/25/12-0007

Lab: ERT/SERAS Laboratory

Wott R210023m 11/5/12 R211001

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Num b Cont	Container	Preservat ive	Pump #	OrificeID	Stop Press ure
01	167-022	BLDG G	SS1-1	VOCs TO-15	SS	10/24/12	1	SUMMA CANISTER	None	64	13925	-6
02	167-023	BLDG G	SS1-2	VOCs TO-15	SS		1	SUMMA CANISTER	None	148	13942	-8
03	167-024	BLDG G	SS1-3	VOCs TO-15	SS		1	SUMMA CANISTER	None	175	13916	-1
04	167-025	BLDG G	SS1-4	VOCs TO-15	SS		1	SUMMA CANISTER	None	66	13935	-8
05	167-026	BLDG G	SS1-5	VOCs TO-15	SS		1	SUMMA CANISTER	None	231	13780	-7
06	167-027	BLDG G	SS2-1	VOCs TO-15	SS		1	SUMMA CANISTER	None	26	13946	-8
07	167-028	BLDG G	SS2-2	VOCs TO-15	SS		1	SUMMA CANISTER	None	150	13918	-8
08	167-029	BLDG G	SS2-3	VOCs TO-15	SS		1	SUMMA CANISTER	None	79	14005	-6
09	167-030	BLDG G	SS2-4	VOCs TO-15	SS		1	SUMMA CANISTER	None	12625	13799	-7
10	167-031	BLDG G	IA-FF-1	VOCs TO-15	Air		1	SUMMA CANISTER	None	119	13774	-8

Special Instructions: Historical on-site Loop GC/MS (SOP#1741) data from 03/16/2012 shows extremely high values at sample location SSB-1 for the target compound list: PCE at 21,000 ppbv, TCE at 1,100 ppbv, cis-1,2-DCE at 7,700 ppbv, trans-1,2-DCE at 13 ppbv, 1,1-DCE at 8.4 ppb and Vinyl Chloride at 5.1 ppbv. Please take this into consideration when estimating LOE for SERAS analytical services (SOP#1816) and Data Validation/Report Writing.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

* Entered on 11/15/12 as per Task Leader's information A. Killen 11/15/12

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Analyses	J. Myers	10/25/12	Mary Parini	10/25/12	15:10	All Analyses	Mary Parini	10/25/12	J. Myers	10/25/12	16:00

W0# R210023 ^{11/5/12} R211001

CHAIN OF CUSTODY RECORD

Site #: 0-167

No: 0-167-10/25/12-0007

Lab: ERT/SERAS Laboratory

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Num b Cont	Container	Preservat ive	Pump #	OrificeID	Stop Press ure
11	167-032	BLDG G	IA-FF-2A	VOCs TO-15	Air	10/24/12	1	SUMMA CANISTER	None	158	13958	-0.5
12	167-033	BLDG G	IA-FF-3	VOCs TO-15	Air		1	SUMMA CANISTER	None	280	14015	-7
13	167-034	BLDG G	SSB-1	VOCs TO-15	SS		1	SUMMA CANISTER	None	112	13921	-6.5
14	167-035	BLDG G	IA-B-1A	VOCs TO-15	Air		1	SUMMA CANISTER	None	11508	13801	-8
15	167-036	BLDG G	IA-FF-2B	VOCs TO-15	Air		1	SUMMA CANISTER	None	160	13787	-8
16	167-037	BLDG G	IA-B-1B	VOCs TO-15	Air		1	SUMMA CANISTER	None	181	13956	-2
17	167-038	BLDG G	OA-1	VOCs TO-15	Air		1	SUMMA CANISTER	None	141 ^{11/5/12} ₁₁₄	13954	-7
18	167-039	BLDG G	OA-3	VOCs TO-15	Air		1	SUMMA CANISTER	None	159	13998	-2
19	167-040	BLDG G	OA-2	VOCs TO-15	Air		1	SUMMA CANISTER	None	70	13994	-5
20	167-041	BLDG G	OA-4	VOCs TO-15	Air	↓	1	SUMMA CANISTER	None	152	13920	-6

Special Instructions: Historical on-site Loop GC/MS (SOP#1741) data from 03/16/2012 shows extremely high values at sample location SSB-1 for the target compound list: PCE at 21,000 ppbv, TCE at 1,100 ppbv, cis-1,2-DCE at 7,700 ppbv, trans-1,2-DCE at 13 ppbv, 1,1-DCE at 8.4 ppb and Vinyl Chloride at 5.1 ppbv. Please take this into consideration when estimating LOE for SERAS analytical services (SOP#1816) and Data Validation/Report Writing.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ANALYSIS	<i>Neeta S. Thayaram</i>	10/25/12	<i>Tony Parvin</i>	10/25/12	15:10	All Analyses	<i>Tony Parvin</i>	10/25/12	<i>J. Ladd</i>	10/25/12	16:00

SERAS-167-DAR-111612 ERT
SERAS SERA
EPA C EPA C
W
Lab #
2

ERT

SERAS, Edison, NJ

EPA Contract Number: EP-W-09-031

CHAIN OF CUSTODY RECORD

Site #: 0-167

No: 0-167-10/25/12-0007

Lab: ERT/SERAS Laboratory

WO#~~R210023~~ ^{11/5/10}_m R211001

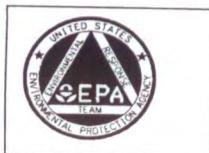
Special Instructions: Historical on-site Loop GC/MS (SOP#1741) data from 03/16/2012 shows extremely high values at sample location SSB-1 for the target compound list: PCE at 21,000 ppbv, TCE at 1,100 ppbv, cis-1,2-DCE at 7,700 ppbv, trans-1,2-DCE at 13 ppbv, 1,1-DCE at 8.4 ppb and Vinyl Chloride at 5.1 ppbv. Please take this into consideration when estimating LOE for SERAS analytical services (SOP#1816) and Data Validation/Report Writing.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

10

APPENDIX B
SUMMA Canister Worksheets
Henry's Dry Cleaners Site
Trip Report
November 2012



EPA Environmental Response Team
 Scientific, Engineering, Response and Analytical Services (SERAS) Contract
 SUMMA Sampling Worksheet
 Lockheed Martin Corp., Edison, NJ
 U.S. EPA Contract No. EP-W-09-031

Site: Henry's Dry Cleaners Site
 Sampler: Scott J. Thompson
 Date: 10/23/12

WA# 0-167
 ERT WAM: David Mickunas
 SERAS TL: Scott J. Thompson

Sample #	Location	Sub-Location	Matrix	SUMMA #	Orifice #	Analysis/ Method	Initial Pressure (in. Hg)	Start Flow Rate (ml/min)	Time (Start)	Date (Start)	Time (Stop)	Date (Stop)	Post Pressure (in. Hg)	Comme
167-022	Bldg C	SS-1	SG	0000 64	013 925	TO-15	-30	7.3	07:19	10/23/12	08:08	10/24	-6	
-023	"	SS1-2	SG	000 148	013 942	TO-15	-30	7.03	07:19				-8	
-024	"	SS1-3	SG	000 175	013 916	TO-15	-30	7.0	07:20				-1	
-025	"	SS1-4	SG	000 066	013 935	TO-15	-30	7.25	07:20				-8	
-026	"	SS1-5	SG	000 231	013 780	TO-15	-30	7.05	07:21				-7	
-027	"	SS2-1	SG	000 026	013 946	TO-15	-30	6.70	07:21				-8	
-028	"	SS2-2	SG	000 150	013 918	TO-15	-30	6.75	07:22				-8	
-029	"	SS2-3	SG	000 079	014 005	TO-15	-30	7.20	07:22				-6	
-030	"	SS2-4	SG	126 25	013 799	TO-15	-30	6.90	07:23				-7	
↓ -031	"	TA-1	TA	000 119	013 774	TO-15	-30	6.92	07:24	↓	↓	↓	-8	
REMARKS:		$\begin{aligned} SS &= 10 \text{ on 1st / 1 in B} \\ TA &= 6 \text{ 4 " 12 " } \\ TA &= 4 \\ TA &= 20 \\ +TB &= 21 \end{aligned}$												



EPA Environmental Response Team
Scientific, Engineering, Response and Analytical Services (SERAS) Contract
SUMMA Sampling Worksheet
Lockheed Martin Corp., Edison, NJ
U.S. EPA Contract No. EP-W-09-031

Site: Henry's Dry Cleaners Site
Sampler: Scott J. Thompson
Date: 10/23/12

WA# 0-167
ERT WAM: David Mickunas
SERAS TL: Scott J. Thompson

Sample #	Location	Sub-Location	Matrix	SUMMA #	Orifice #	Analysis/ Method	Initial Pressure (in. Hg)	Start Flow Rate (ml/min)	Time (Start)	Date (Start)	Time (Stop)	Date (Stop)	Post Pressure (in. Hg)	Comments
167-032	B1D6 G	FA-2A	IA	000 158	013 95P	TO-15	-30	7.05	07:24	10/23	08: 24	10/24	-0.5	39
-033	11	FA-3	IA	000 280	014 015	TO-15	-30	2.30	07: 24				-7	Pic 28 40
-034	11	SSB-J	SG	000 112	013 921	TO-15	-30	7.4	07: 24				-6.5	Pic 27 16
-035	11	FA-B-1A 10/23/12	IA	115 08	013 801	TO-15	-30	6.85	07: 27				-8	IA-B-1A 28
-036	11	FA-2B 10/23/12	IA	000 160	013 787	TO-15	-30	7.56	07: 34				-8	IA-FF-2B 41
-037	11	FA-B-1B 10/23/12	IA	000 181	013 956	TO-15	-30	6.65	07: 36				-2	FA-B-1B 42
-038	11	OA-1	OA	000 141	013 959	TO-15	-30	6.25	07:53		09:43		-7	46
-039	11	OA-3	OA	000 159	013 998	TO-15	-30	7.3	07: 44		08: 43		-2	
-040	11	OA-2	OA	000 070	013 994	TO-15	-30	7.35	07: 57		08: 45		-5	44
↓ -041	11	OA-4	OA	0000152	013 920	TO-15	-30	7.0	07: 48	4	08: 48	N	-6	

REMARKS:



EPA Environmental Response Team

Scientific, Engineering, Response and Analytical Services (SERAS) Contract
SUMMA Sampling Worksheet
Lockheed Martin Corp., Edison, NJ
U.S. EPA Contract No. EP-W-09-031

Site: Henry's Dry Cleaners Site
Sampler: Scott J. Thompson
Date: 10/23/12

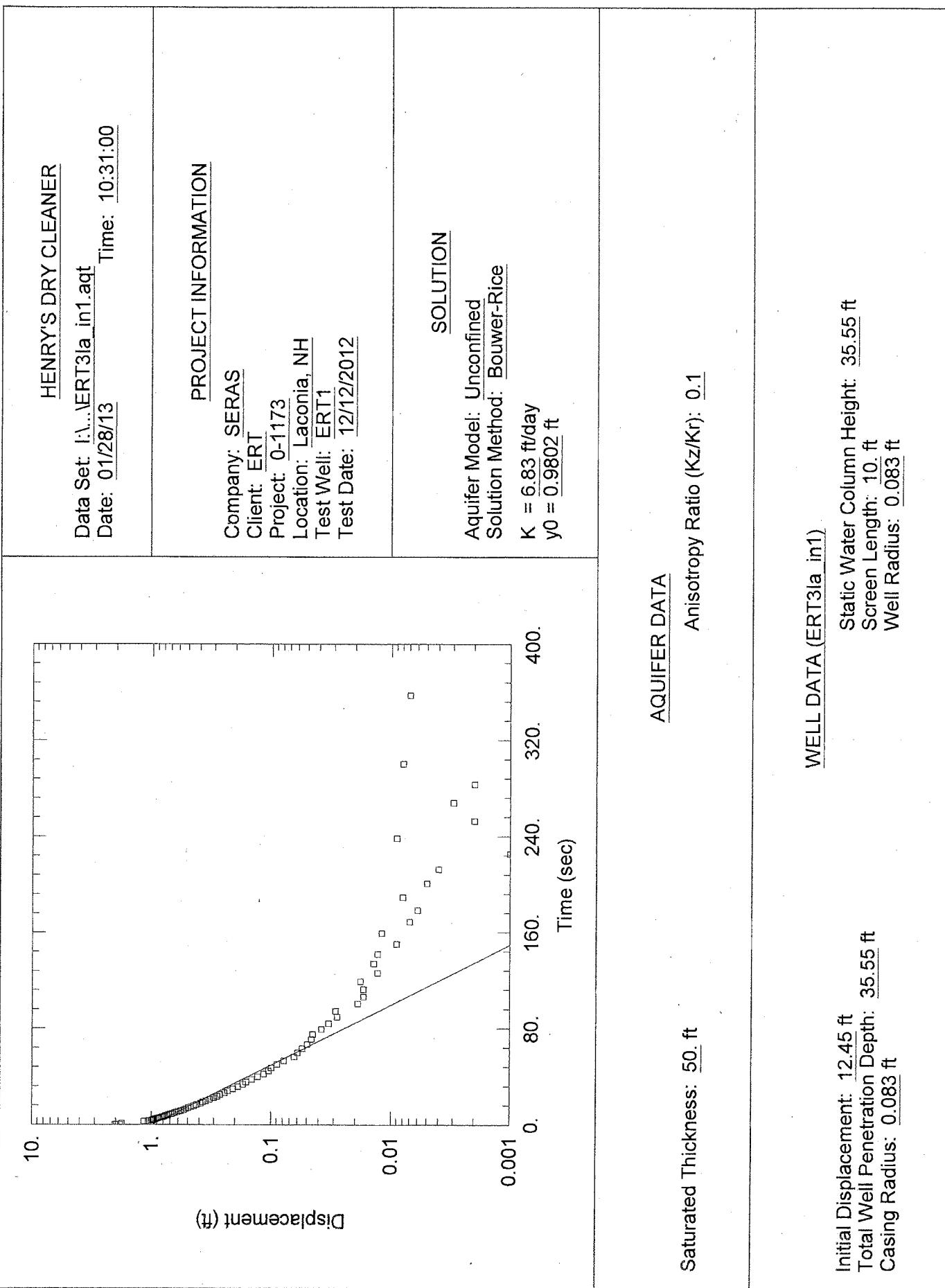
WA# 0-167
ERT WAM: David Mickunas
SERAS TL: Scott J. Thompson

FINAL

Attachment B

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\ERT3\a\in2.aqt Date: 01/28/13 Time: 10:31:00</p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u></p> $K = \frac{6.881}{1} \text{ ft/day}$ $y_0 = 1 \text{ ft}$	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p> <p>Saturated Thickness: <u>50 ft</u></p>	<p><u>WELL DATA (ERT3\la\out1)</u></p> <p>Initial Displacement: <u>12.45 ft</u> Total Well Penetration Depth: <u>35.55 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>35.55 ft</u> Screen Length: <u>10 ft</u> Well Radius: <u>0.083 ft</u></p>
<p>Displacement (ft)</p> <p>Time (sec)</p>				

<p>HENRY'S DRY CLEANER</p> <p>Data Set: <u>I:\...\ERT3la_out2.aqt</u> Date: <u>01/28/13</u> Time: <u>10:30:59</u></p>	<p>PROJECT INFORMATION</p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p>SOLUTION</p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u></p> $K = 8.72 \text{ ft/day}$ $y_0 = 1.49 \text{ ft}$	<p>AQUIFER DATA</p> <p>Anisotropy Ratio (Kz/Kr): <u>0.1</u></p>	<p>WELL DATA (ERT3la_out2)</p> <p>Static Water Column Height: <u>35.55</u> ft Screen Length: <u>10</u> ft Well Radius: <u>0.083</u> ft</p> <p>Initial Displacement: <u>12.45</u> ft Total Well Penetration Depth: <u>35.55</u> ft Casing Radius: <u>0.083</u> ft</p>
<p>Displacement (ft)</p> <p>Time (sec)</p>				



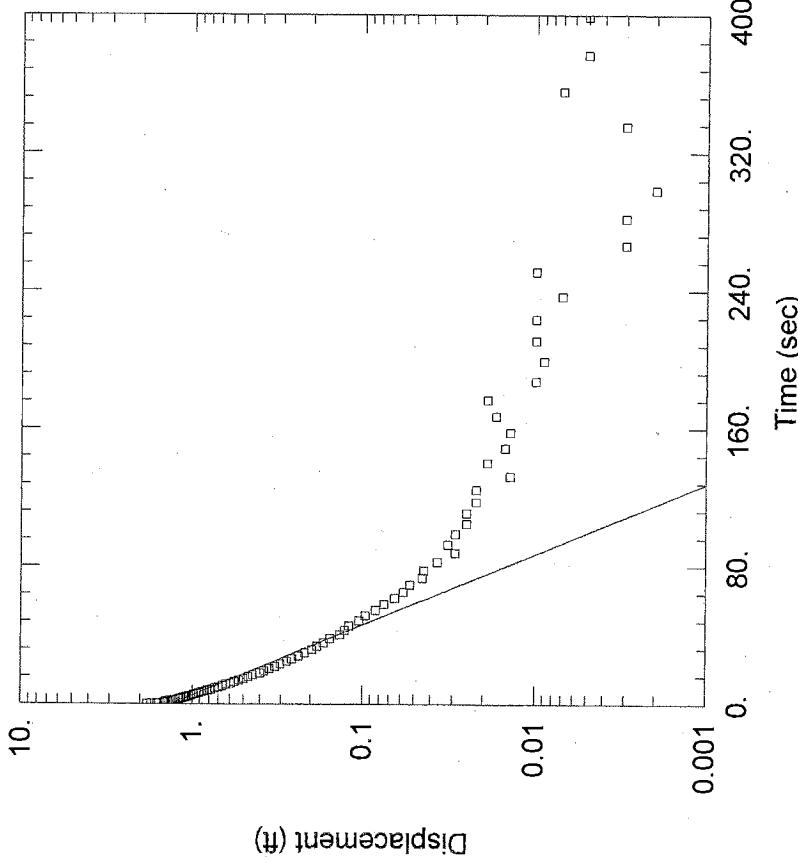
HENRY'S DRY CLEANER

Data Set: I:\...\ERT3la_out1.aqt
 Date: 01/28/13 Time: 10:30:59

PROJECT INFORMATIONCompany: SERASClient: ERTProject: 0-1173Location: Laconia, NHTest Well: ERT1Test Date: 12/12/2012SOLUTIONAquifer Model: UnconfinedSolution Method: Bouwer-Rice

$$K = 8.34 \text{ ft/day}$$

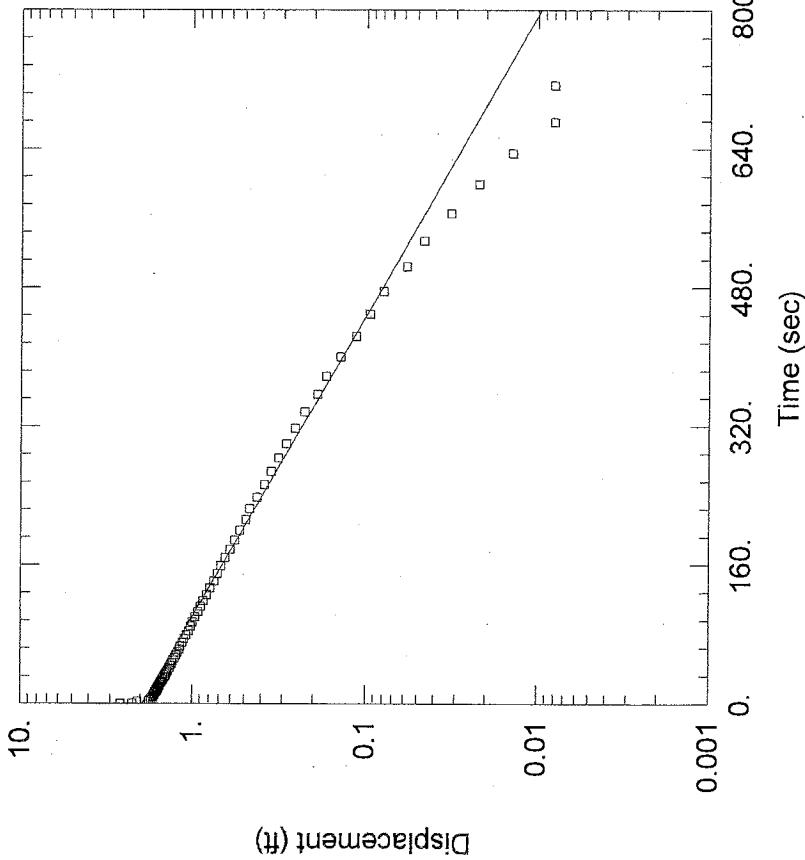
$$y_0 = 1.335 \text{ ft}$$

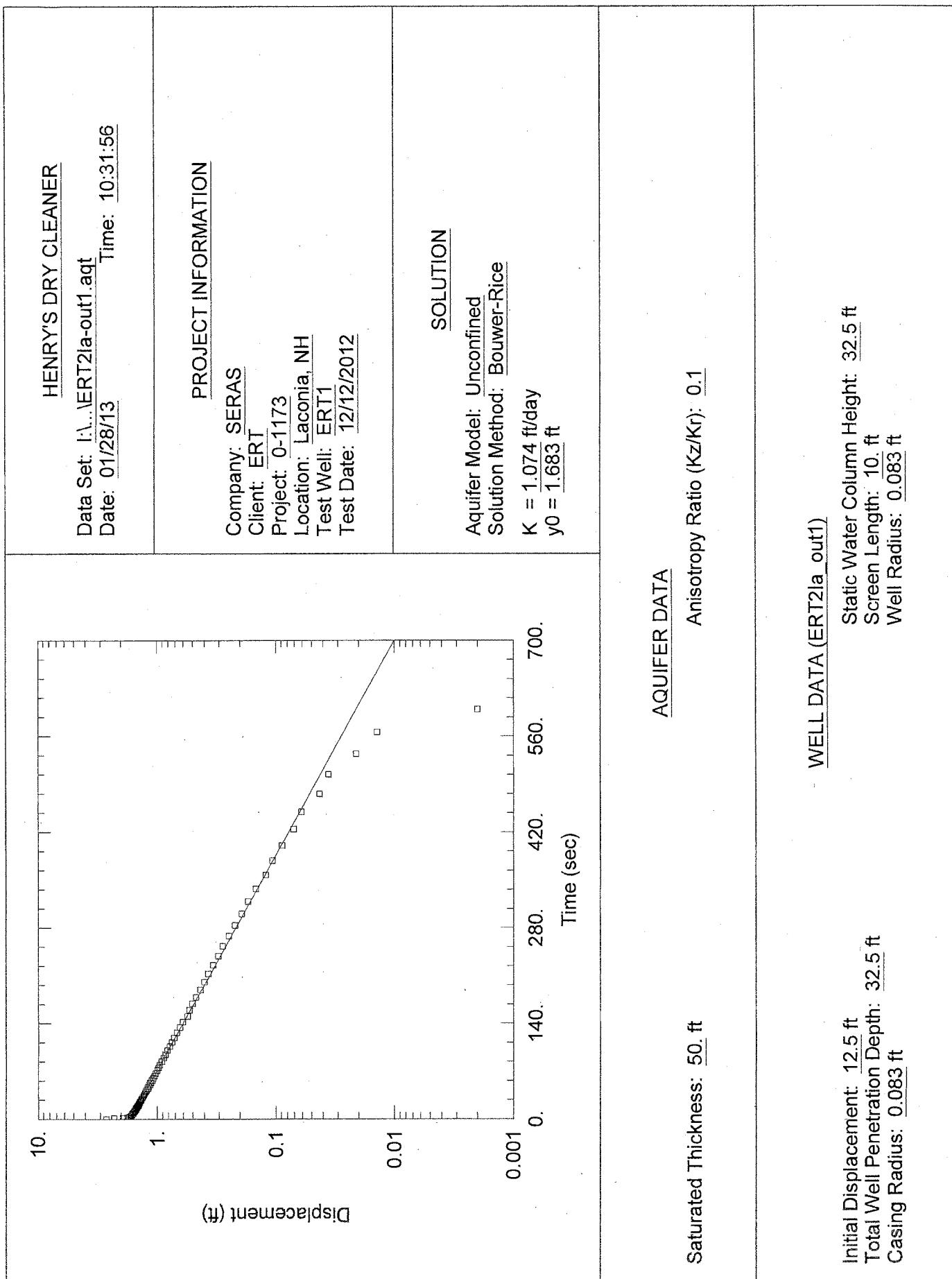
AQUIFER DATAAnisotropy Ratio (Kz/Kr): 0.1Saturated Thickness: 50. ftWELL DATA (ERT3la_out1)

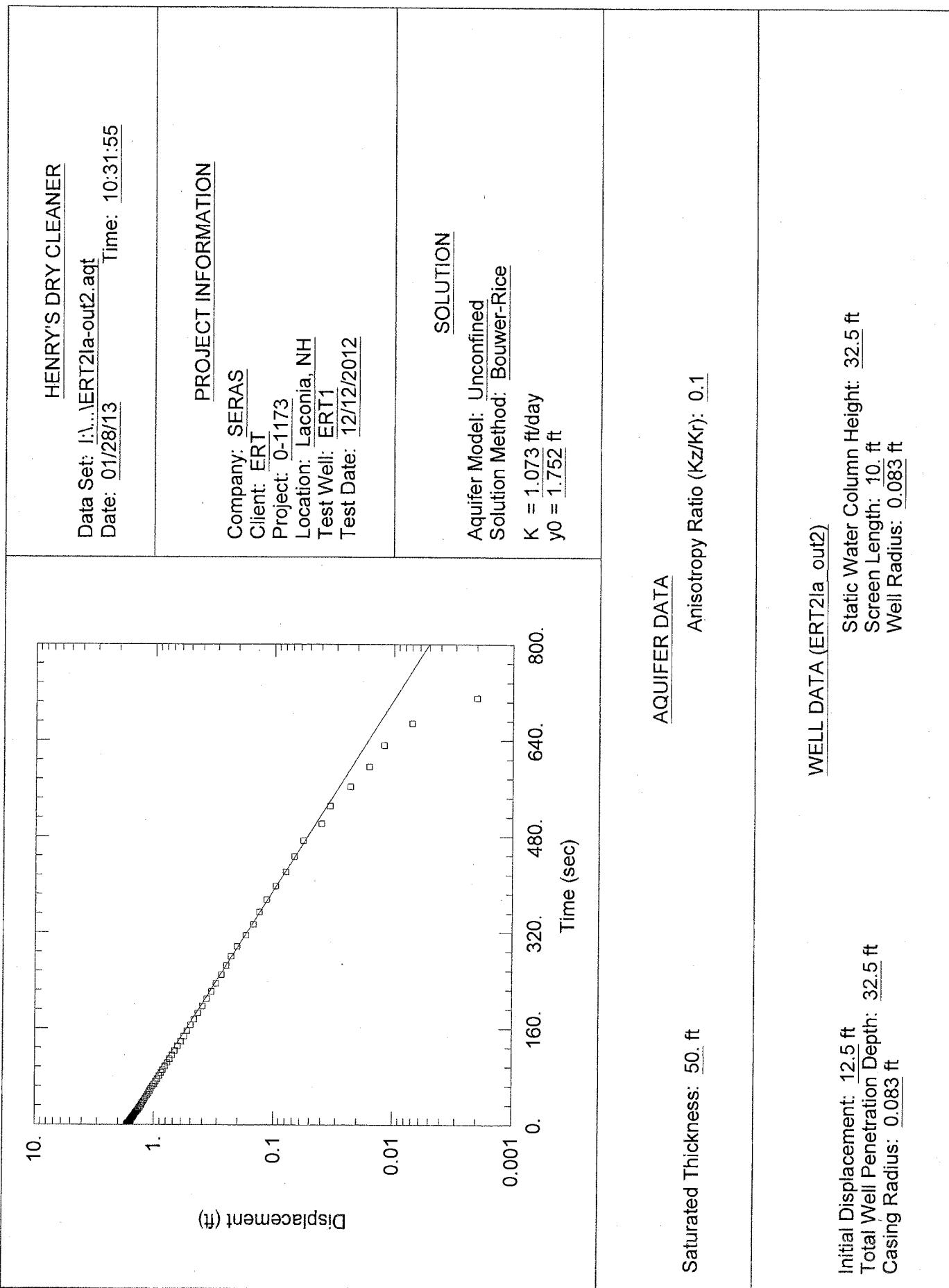
Initial Displacement: 12.45 ft
 Total Well Penetration Depth: 35.55 ft
 Casing Radius: 0.083 ft

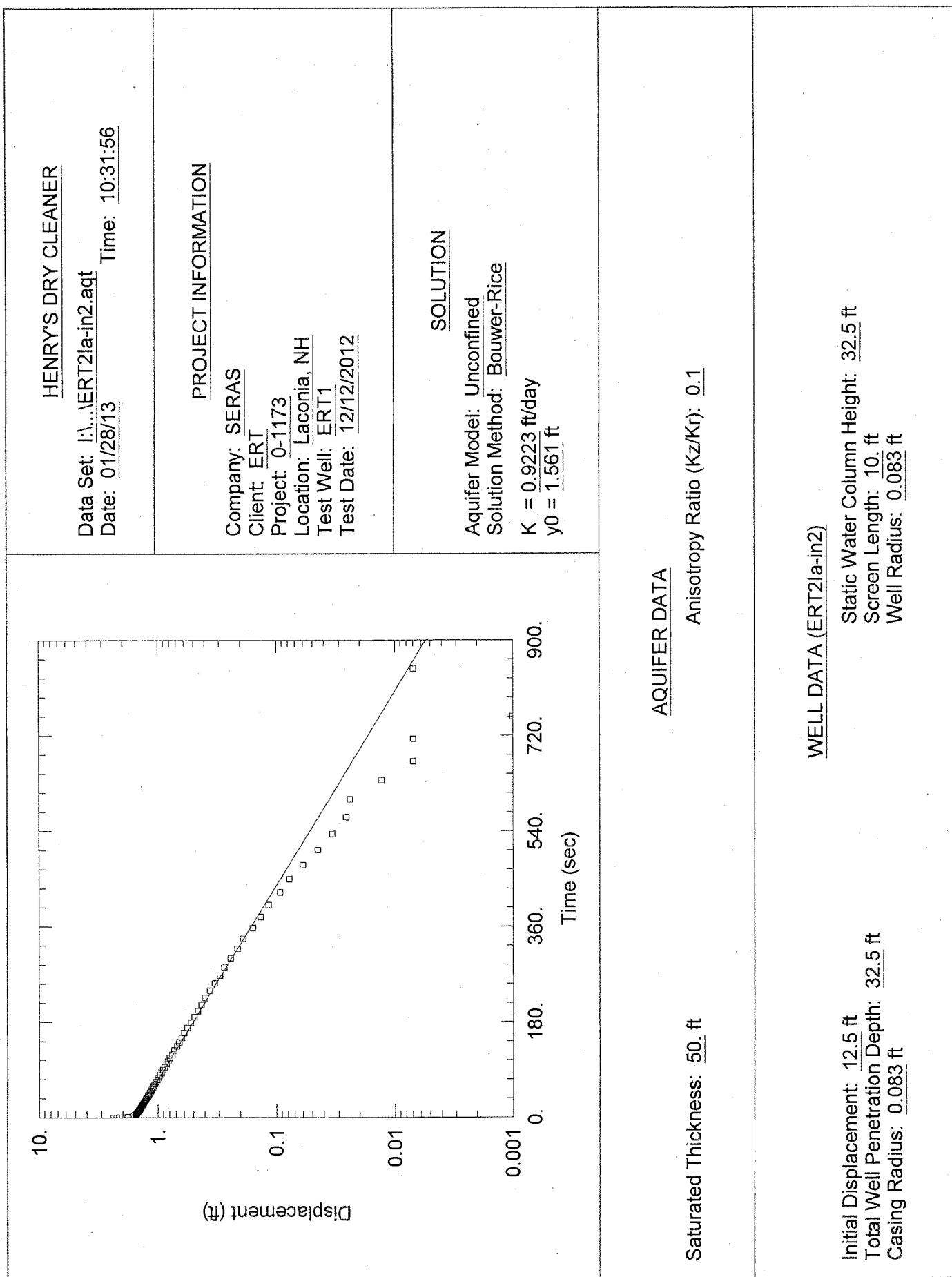
Static Water Column Height: 35.55 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft

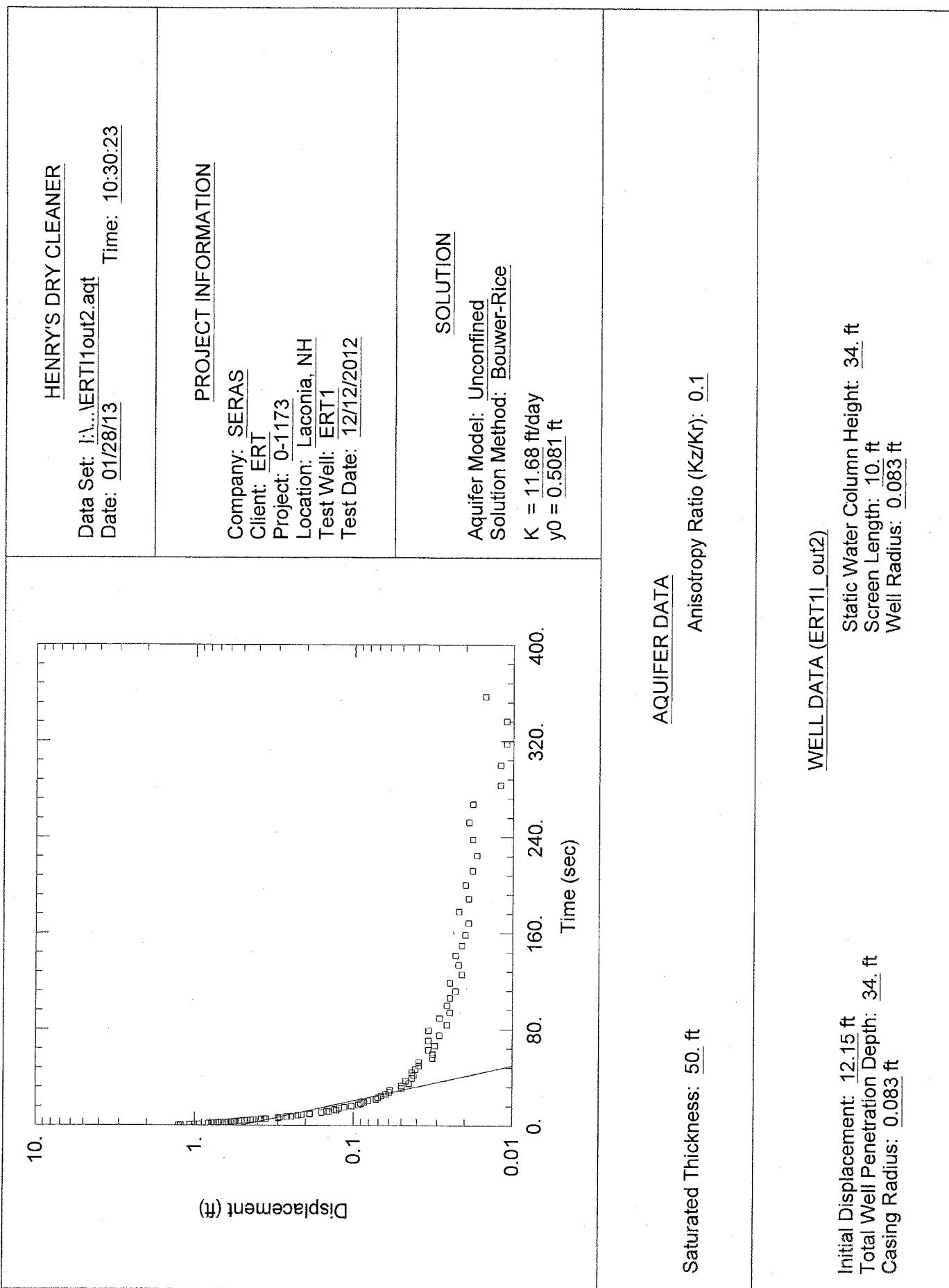
<u>HENRY'S DRY CLEANER</u>	
<p>Data Set: I:\...\ERT2\la-in1.aqt Date: <u>01/28/13</u> Time: <u>10:31:57</u></p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>Q-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>
<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = \frac{0.9745}{1.942} \text{ ft/day}$ $y_0 = 1.942 \text{ ft}$</p>	
<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p> <p>Saturated Thickness: <u>50. ft</u></p>	
<p><u>WELL DATA (ERT2\la_in1)</u></p> <p>Initial Displacement: <u>12.5 ft</u> Total Well Penetration Depth: <u>32.5 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>32.5 ft</u> Screen Length: <u>10. ft</u> Well Radius: <u>0.083 ft</u></p>	

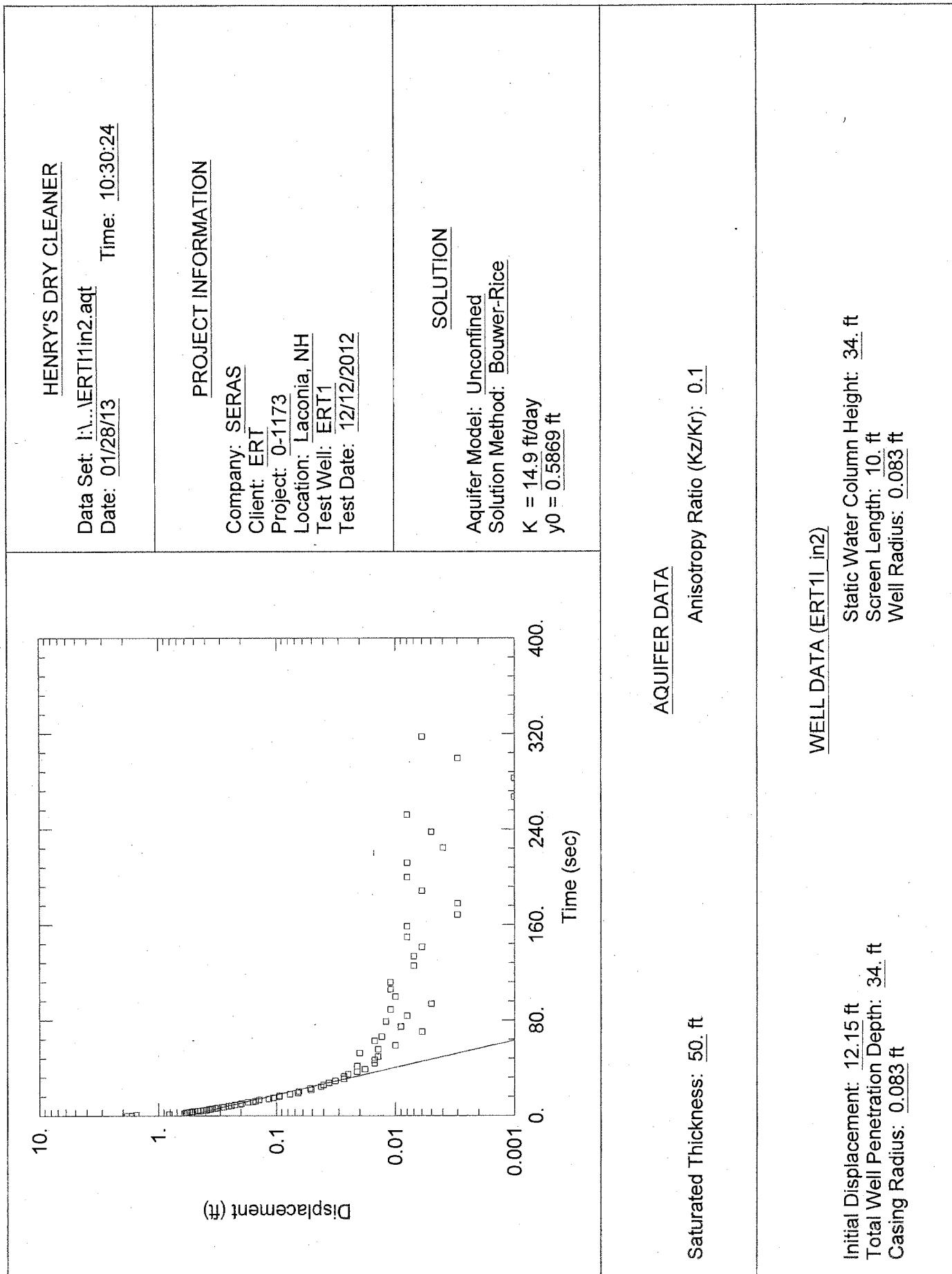


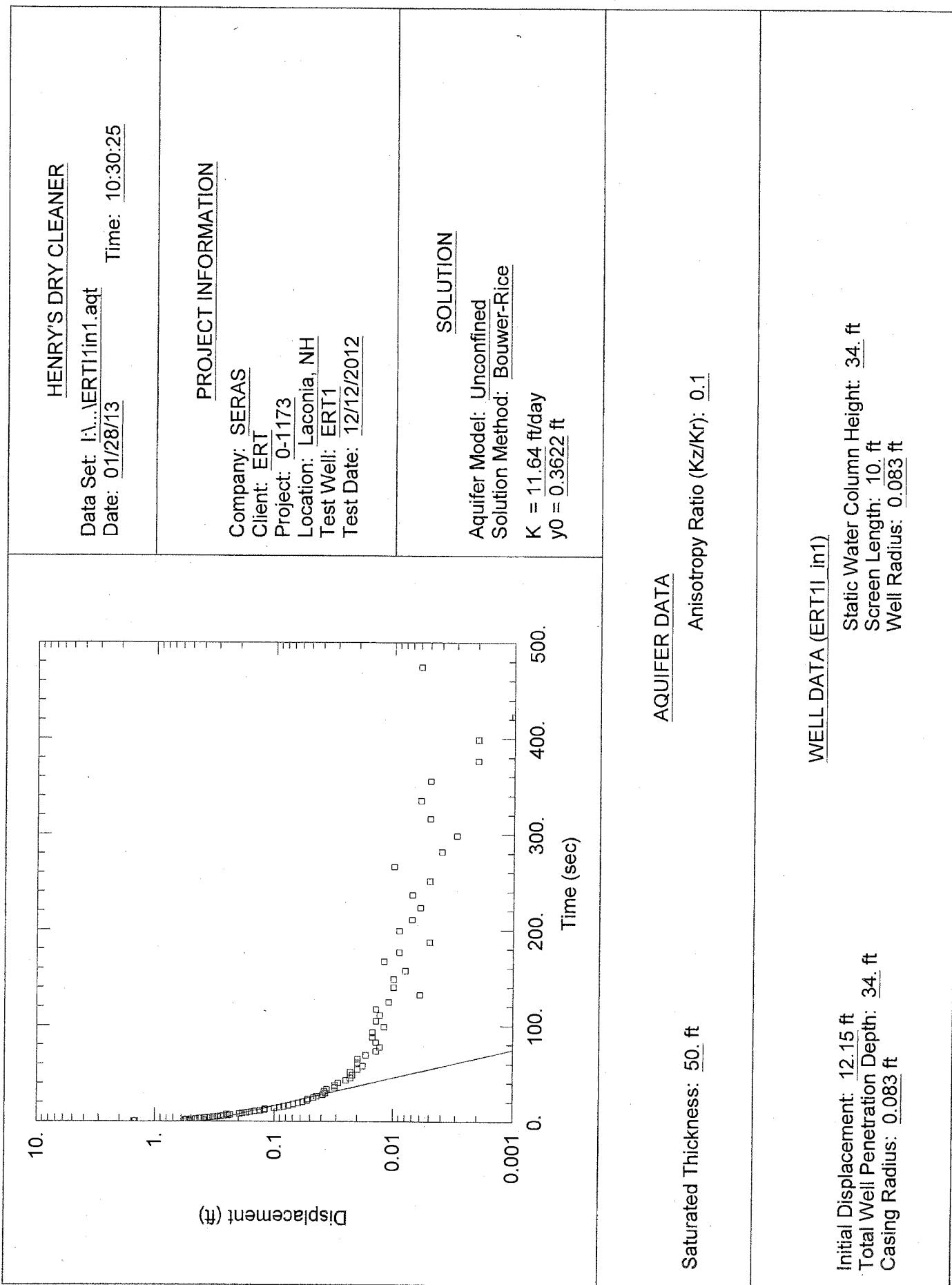


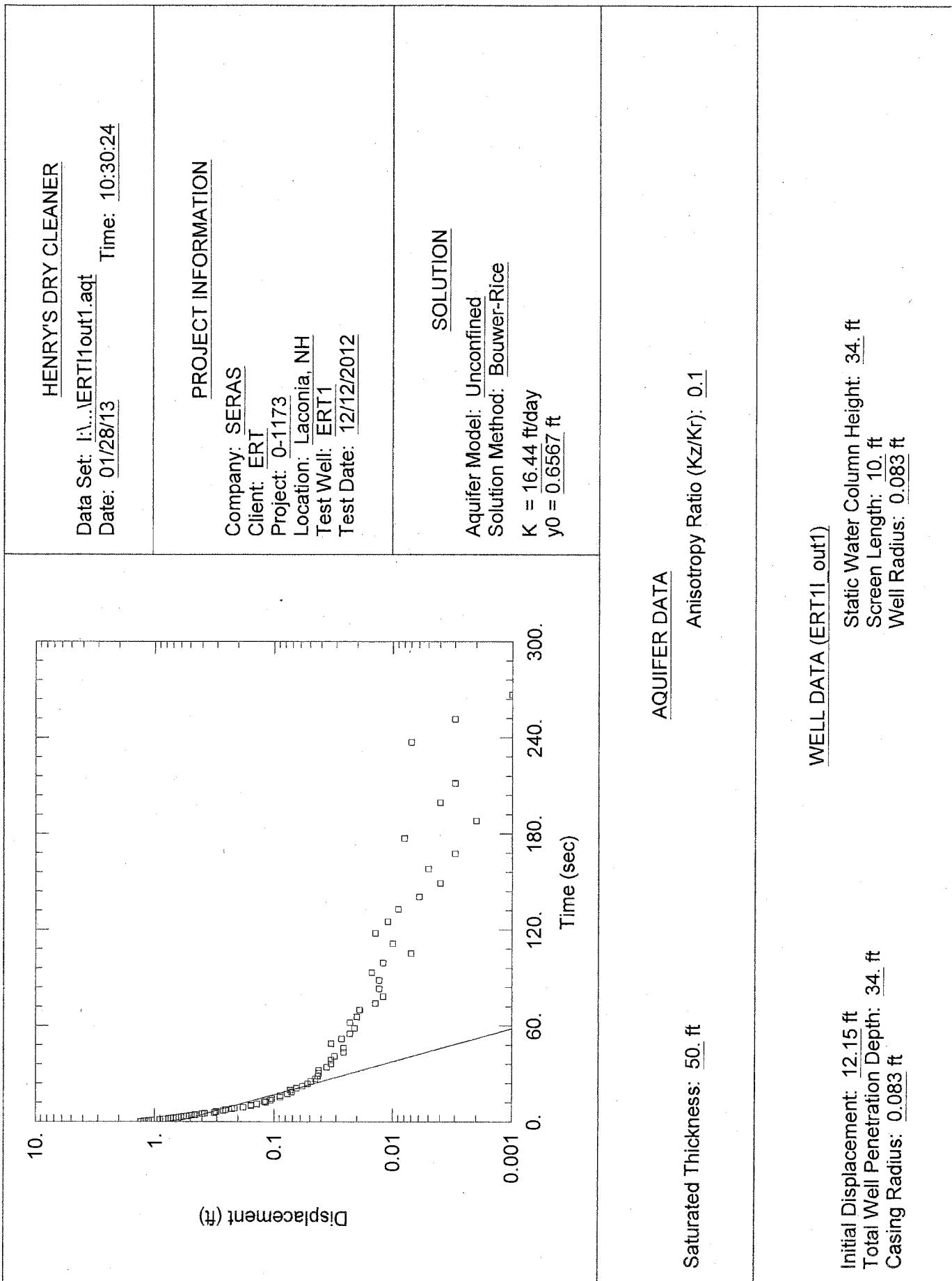


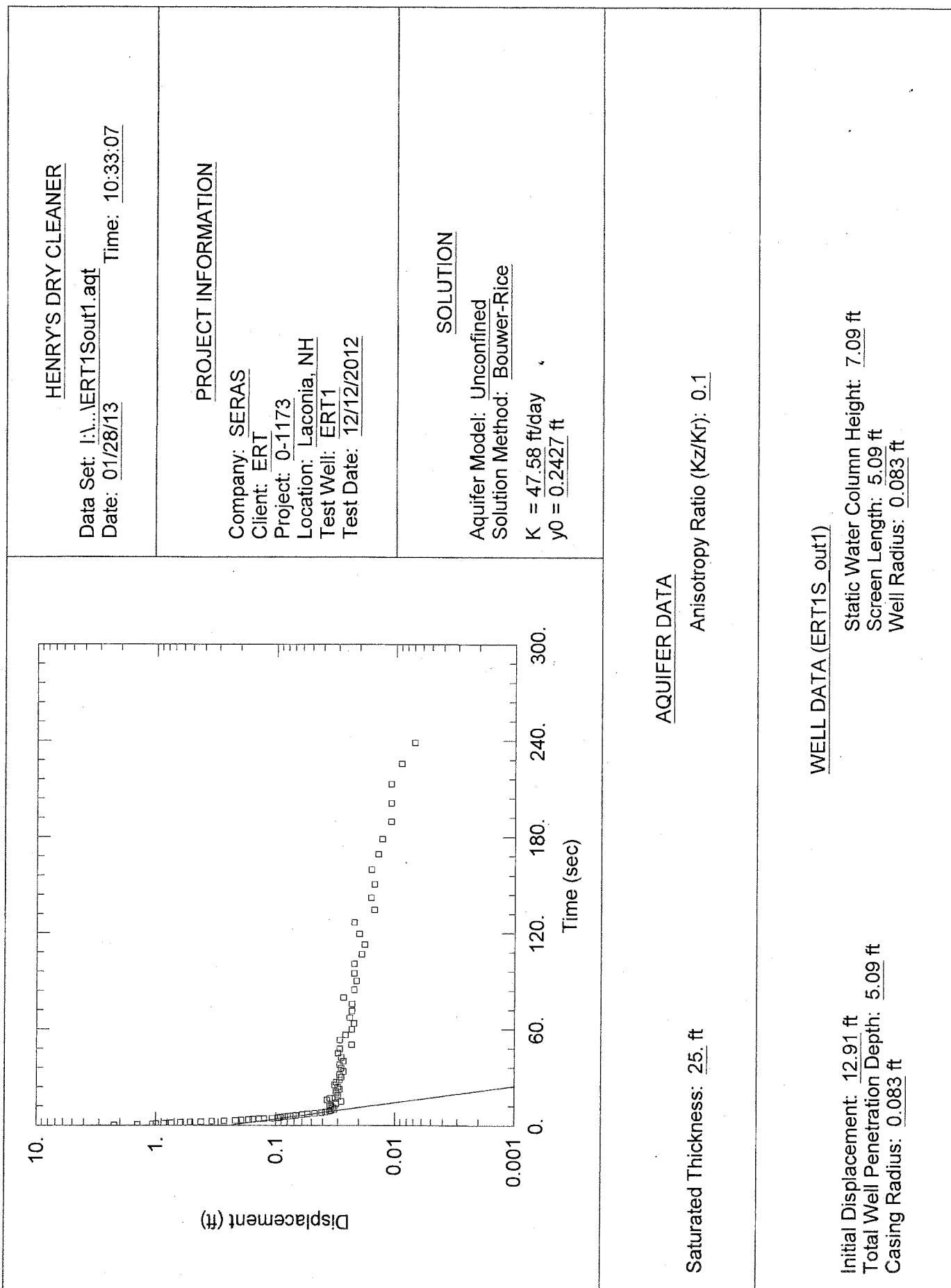


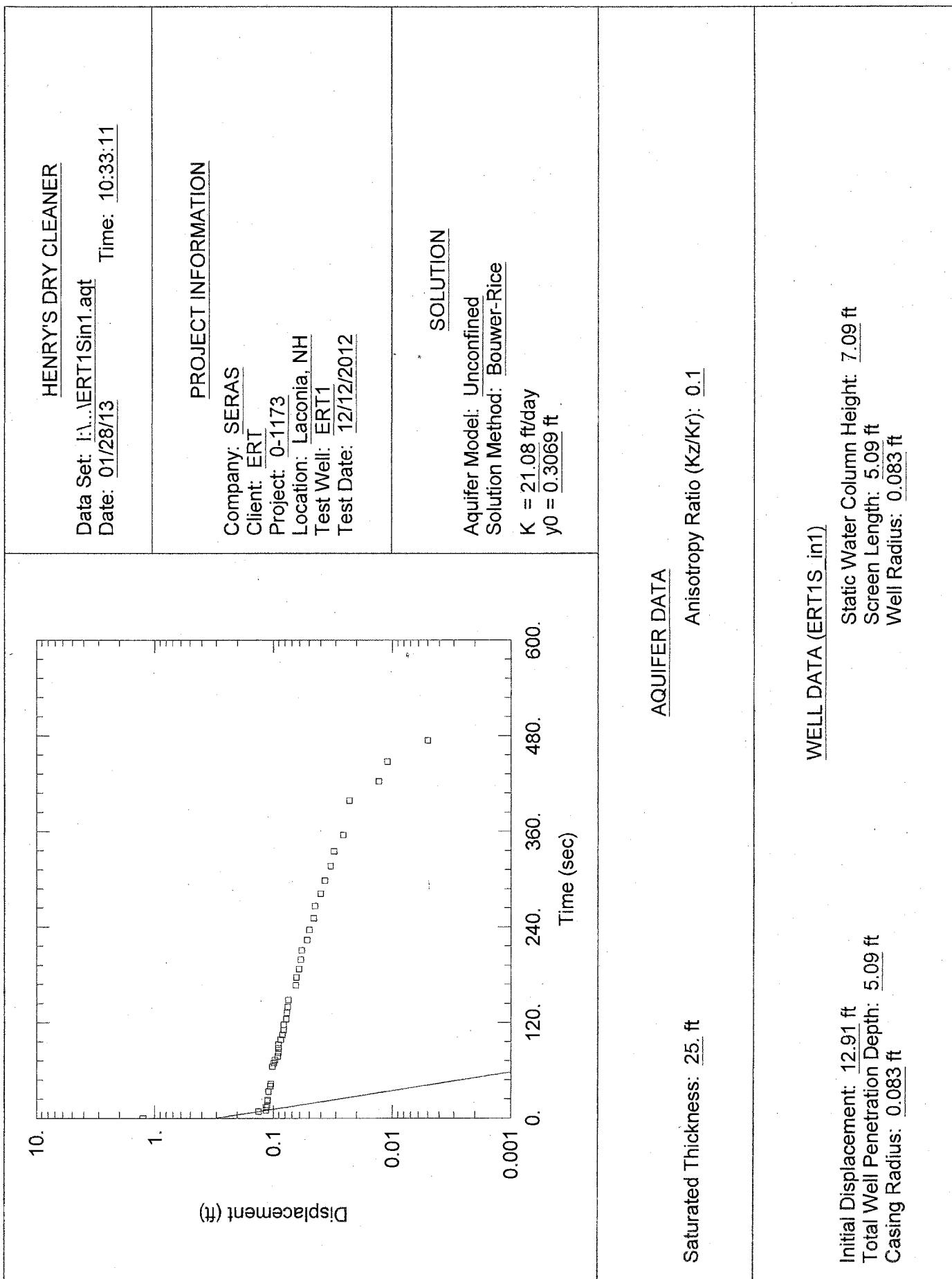


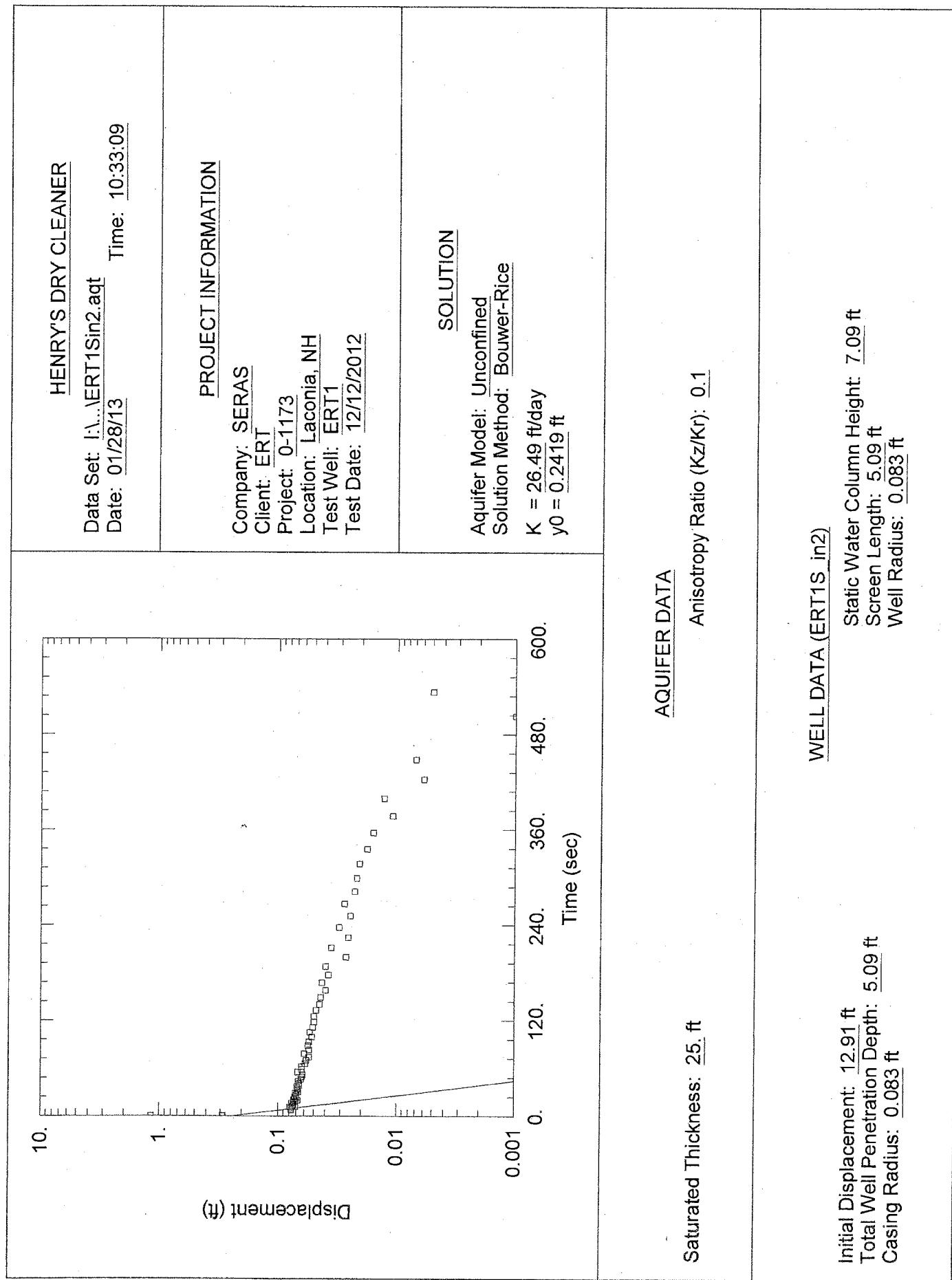


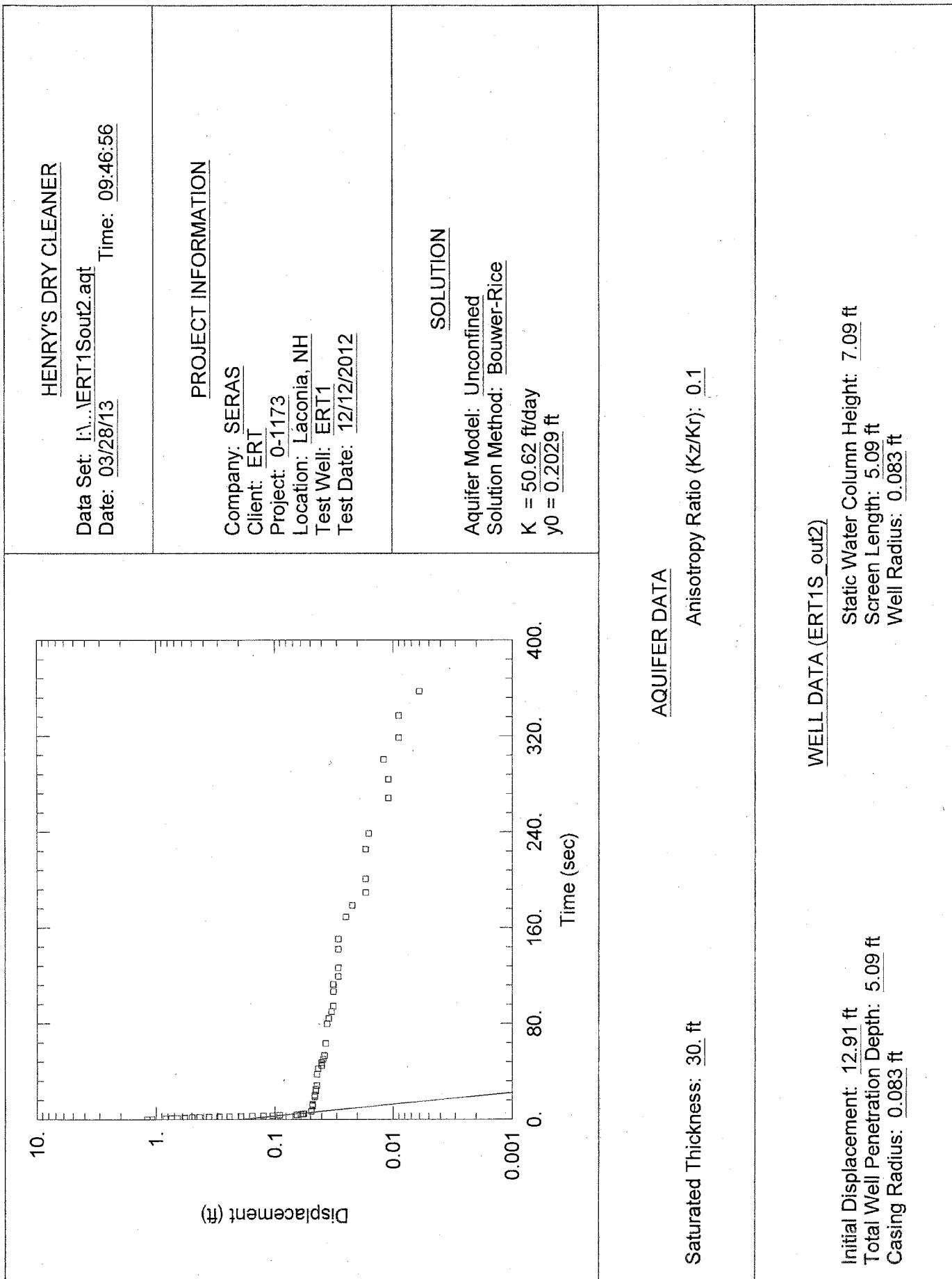


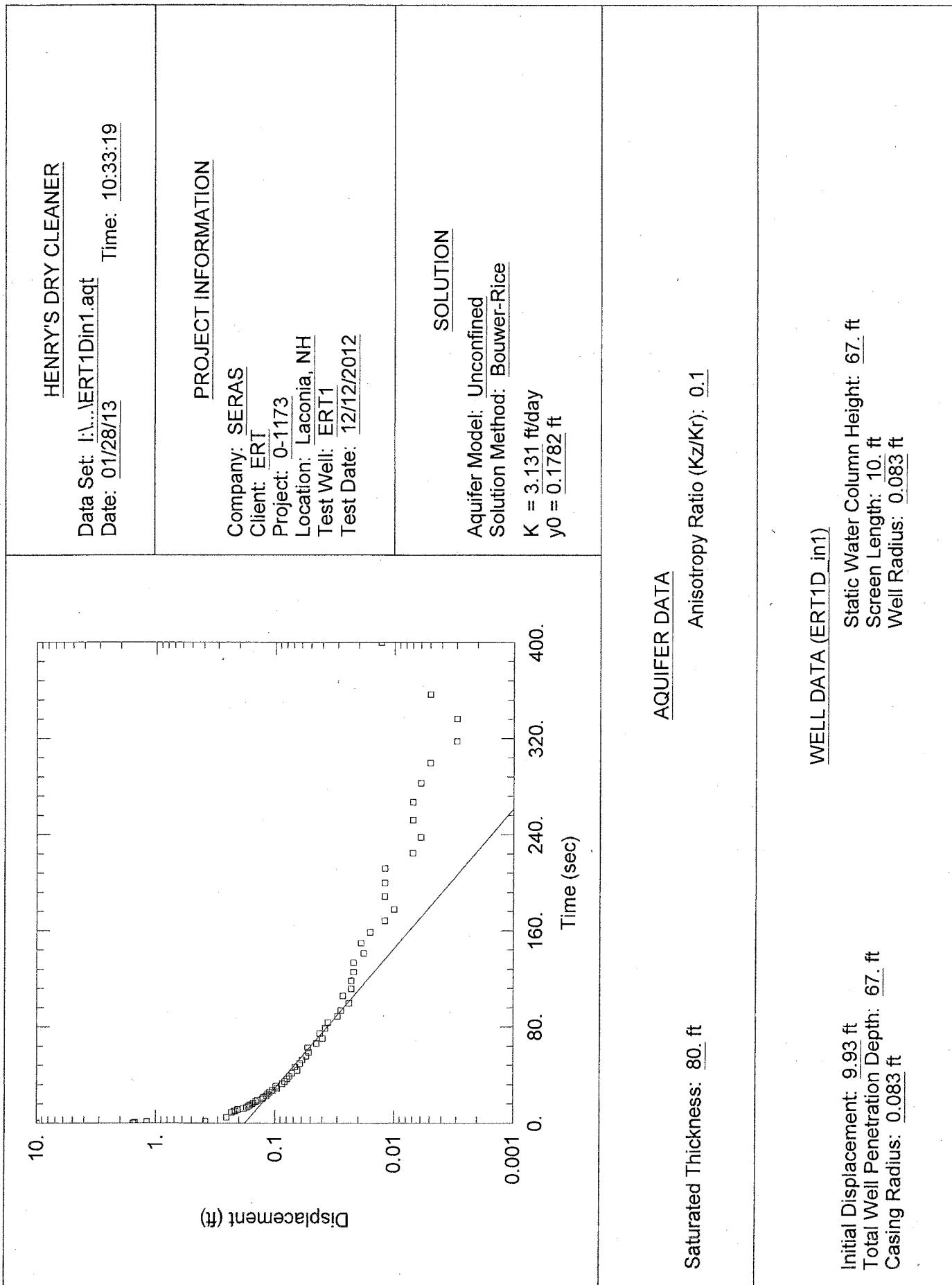


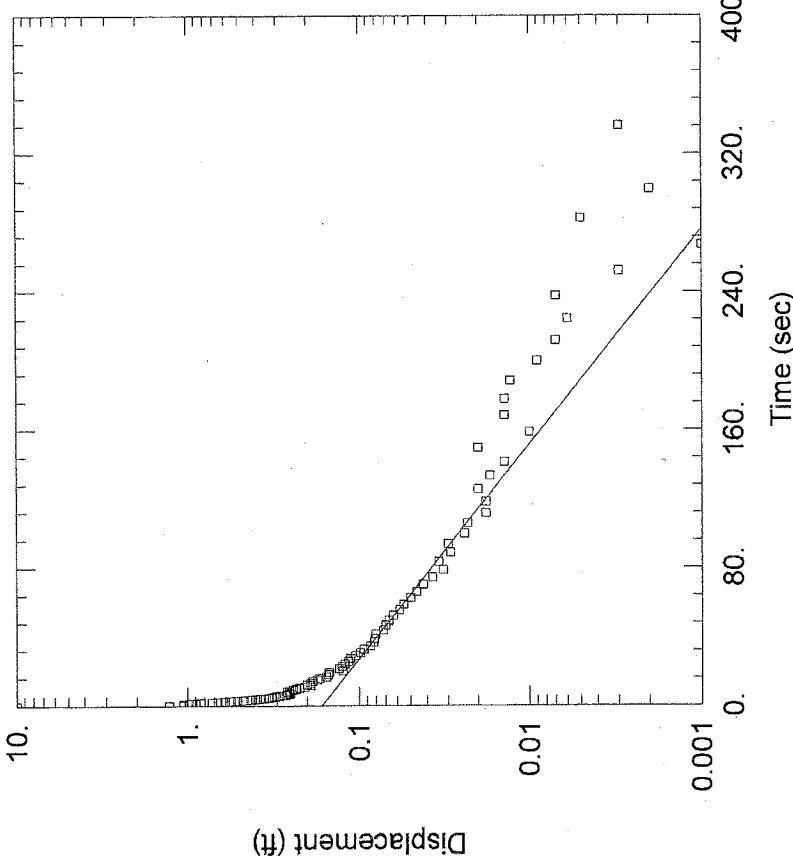










HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Dout1.aqt
 Date: 01/28/13 Time: 10:33:16

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 2.917 \text{ ft/day}$
 $y_0 = 0.1645 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 0.1

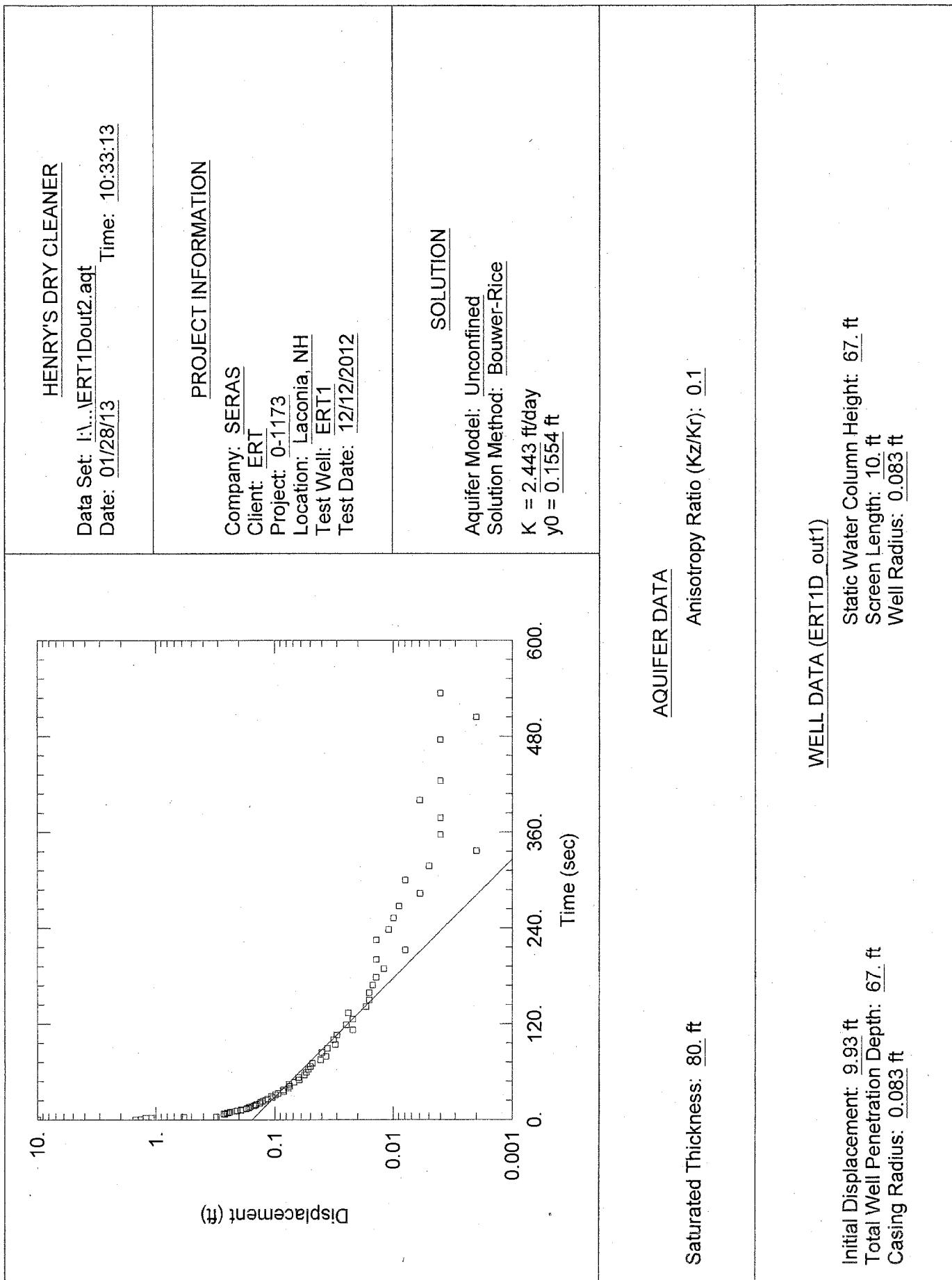
WELL DATA (ERT1D_out1)

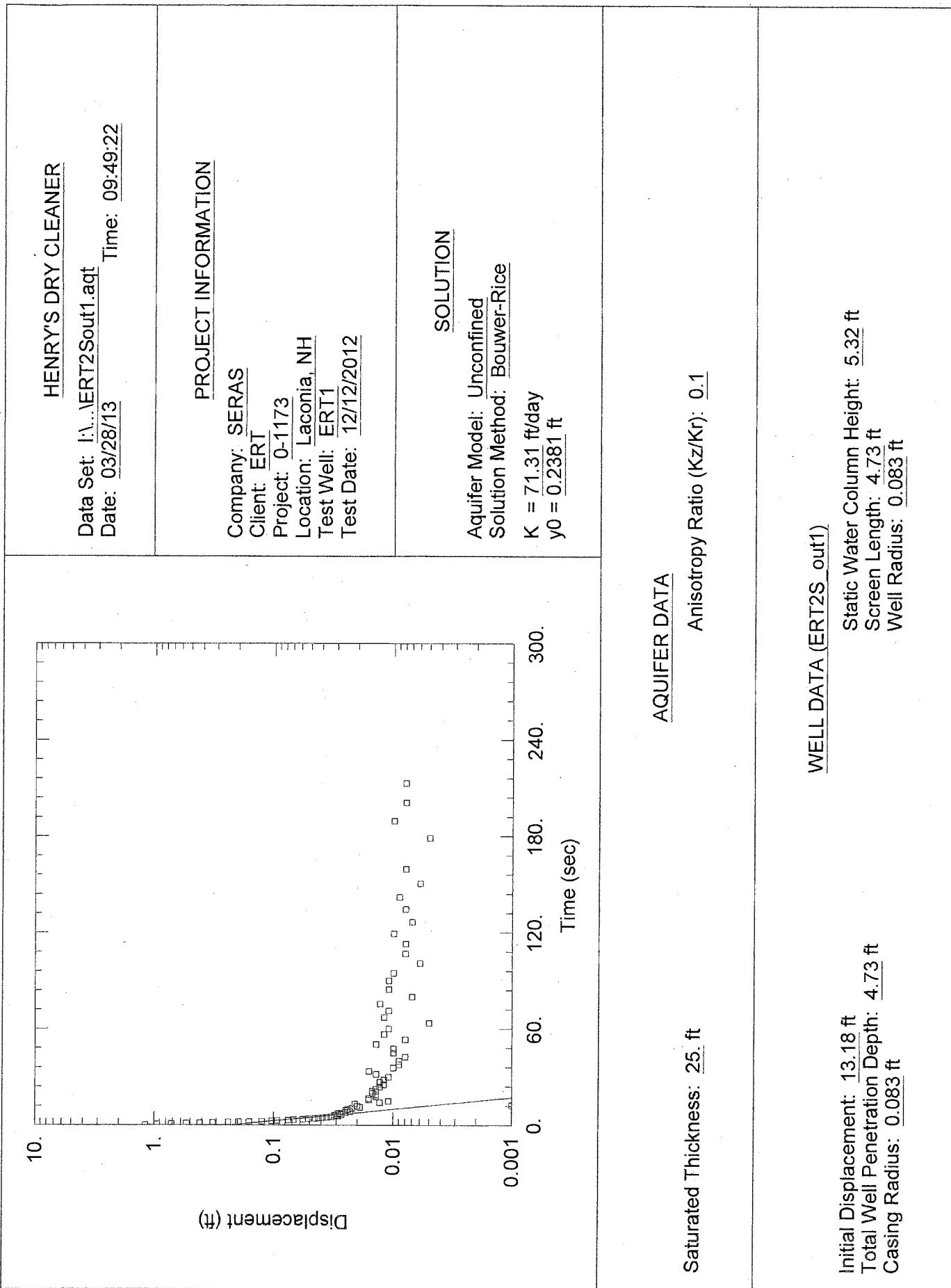
Initial Displacement: 9.93 ft
 Total Well Penetration Depth: 67. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 67. ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft

Saturated Thickness: 80. ft

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\ERT1Din2.agt Date: <u>01/28/13</u> Time: <u>10:33:18</u></p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u></p> $K = 2.726 \text{ ft/day}$ $y_0 = 0.1691 \text{ ft}$	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p> <p>Saturated Thickness: <u>80. ft</u></p>	<p><u>WELL DATA (ERT1D_in2)</u></p> <p>Initial Displacement: <u>9.93 ft</u> Total Well Penetration Depth: <u>67. ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>67. ft</u> Screen Length: <u>10. ft</u> Well Radius: <u>0.083 ft</u></p>





HENRY'S DRY CLEANER

Data Set: I:\...\ERT2Sim1.agt
 Date: 03/28/13 Time: 09:48:22

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

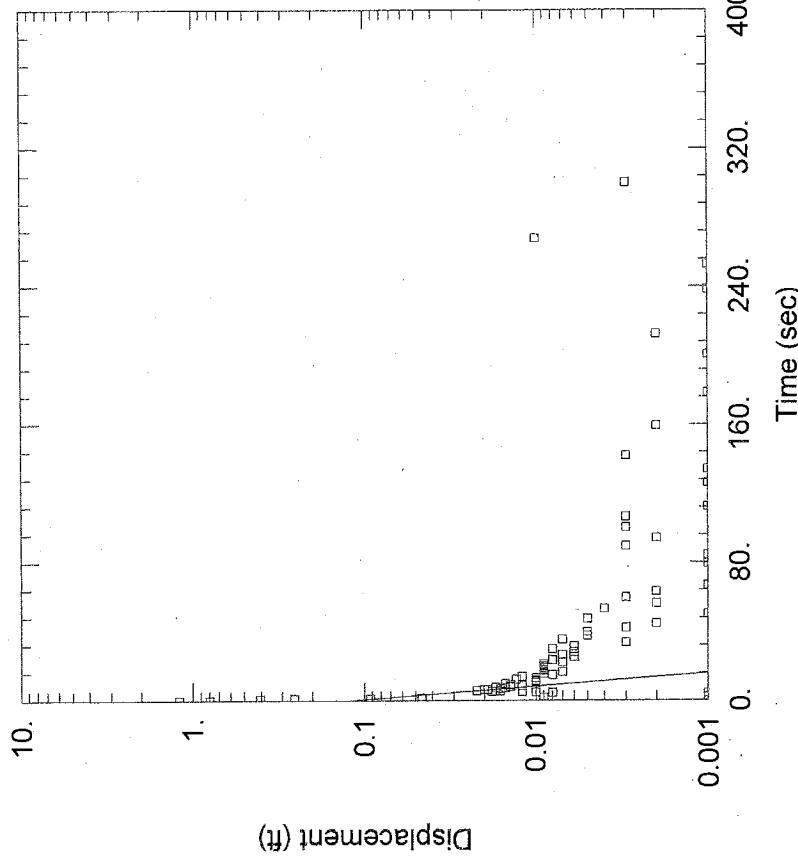
Solution Method: Bouwer-Rice

$$K = 68.58 \text{ ft/day}$$

$$y_0 = 0.1253 \text{ ft}$$

AQUIFER DATA

Anisotropy Ratio (K_z/K_r): 0.1

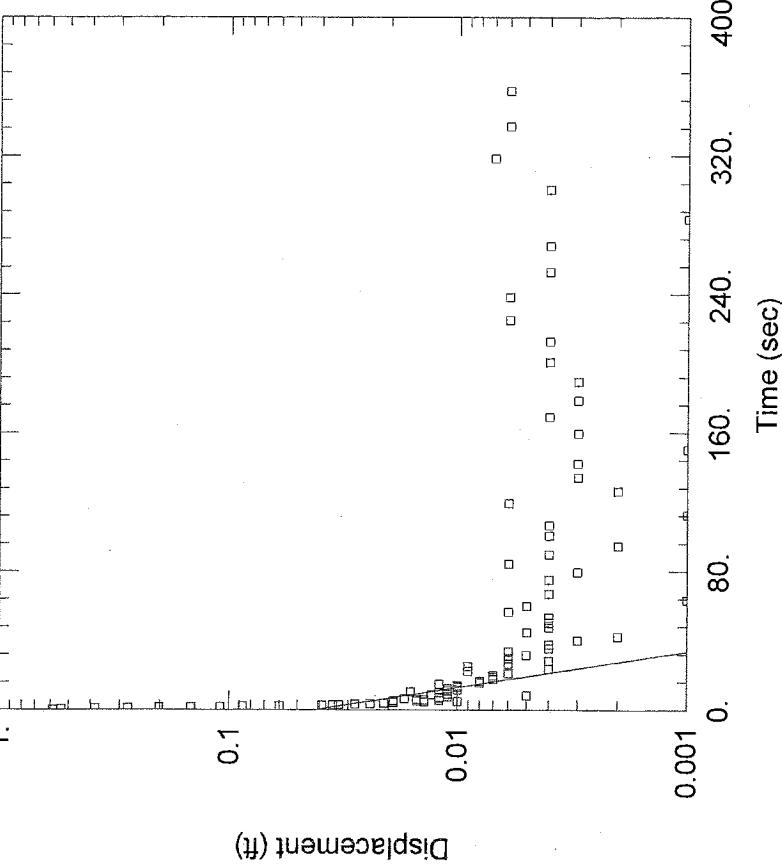


Saturated Thickness: 25. ft

WELL DATA (ERT2S_in1)

Static Water Column Height: 5.32 ft
 Screen Length: 4.73 ft
 Well Radius: 0.083 ft

Initial Displacement: 13.18 ft
 Total Well Penetration Depth: 4.73 ft
 Casing Radius: 0.083 ft

HENRY'S DRY CLEANER

Data Set: I:\...\ERT2Sout2.aqt
 Date: 01/28/13 Time: 10:31:50

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$$K = 25.03 \text{ ft/day}$$

$$y_0 = 0.04206 \text{ ft}$$

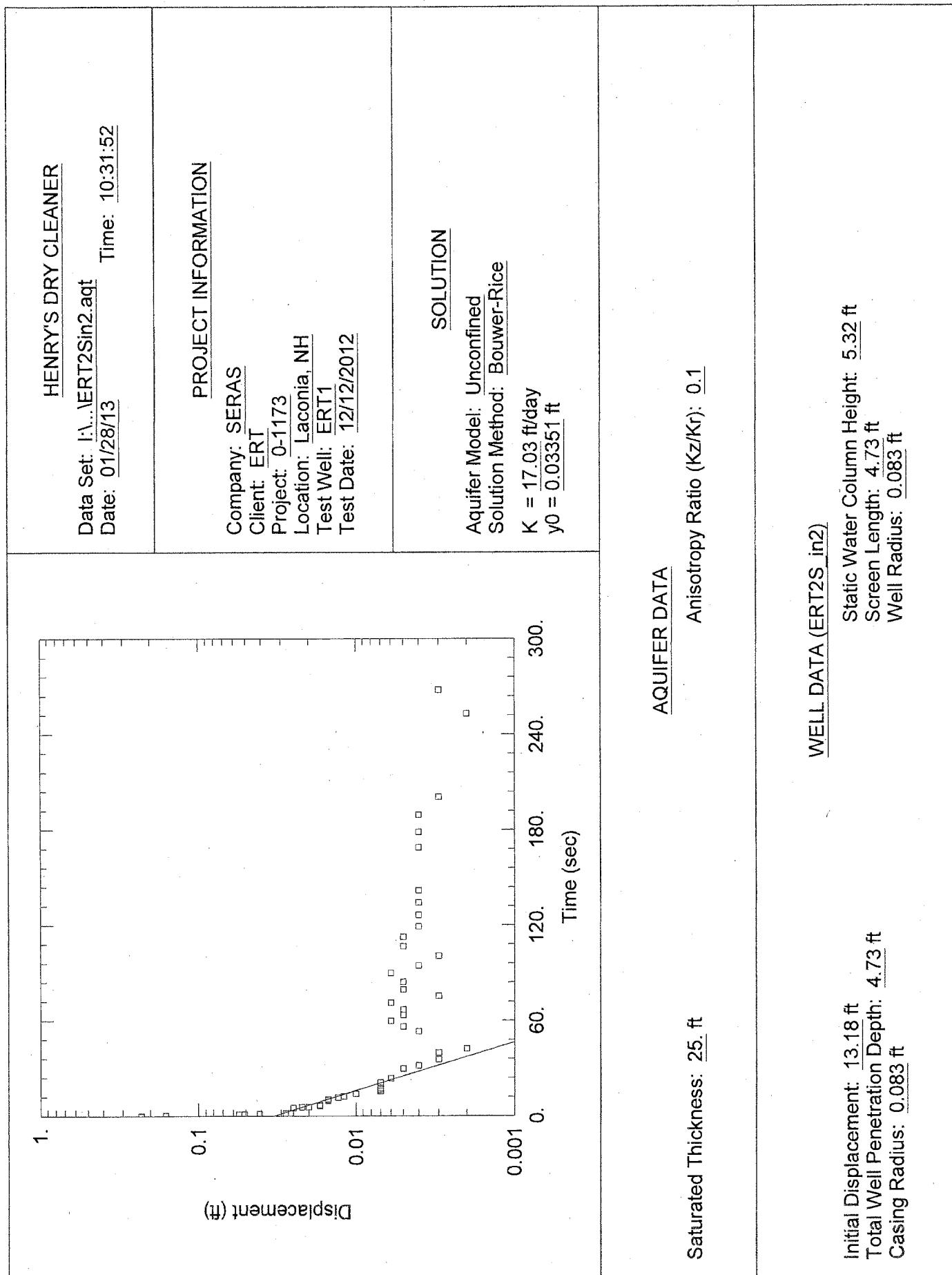
AQUIFER DATA
 Anisotropy Ratio (K_z/K_r): 0.1

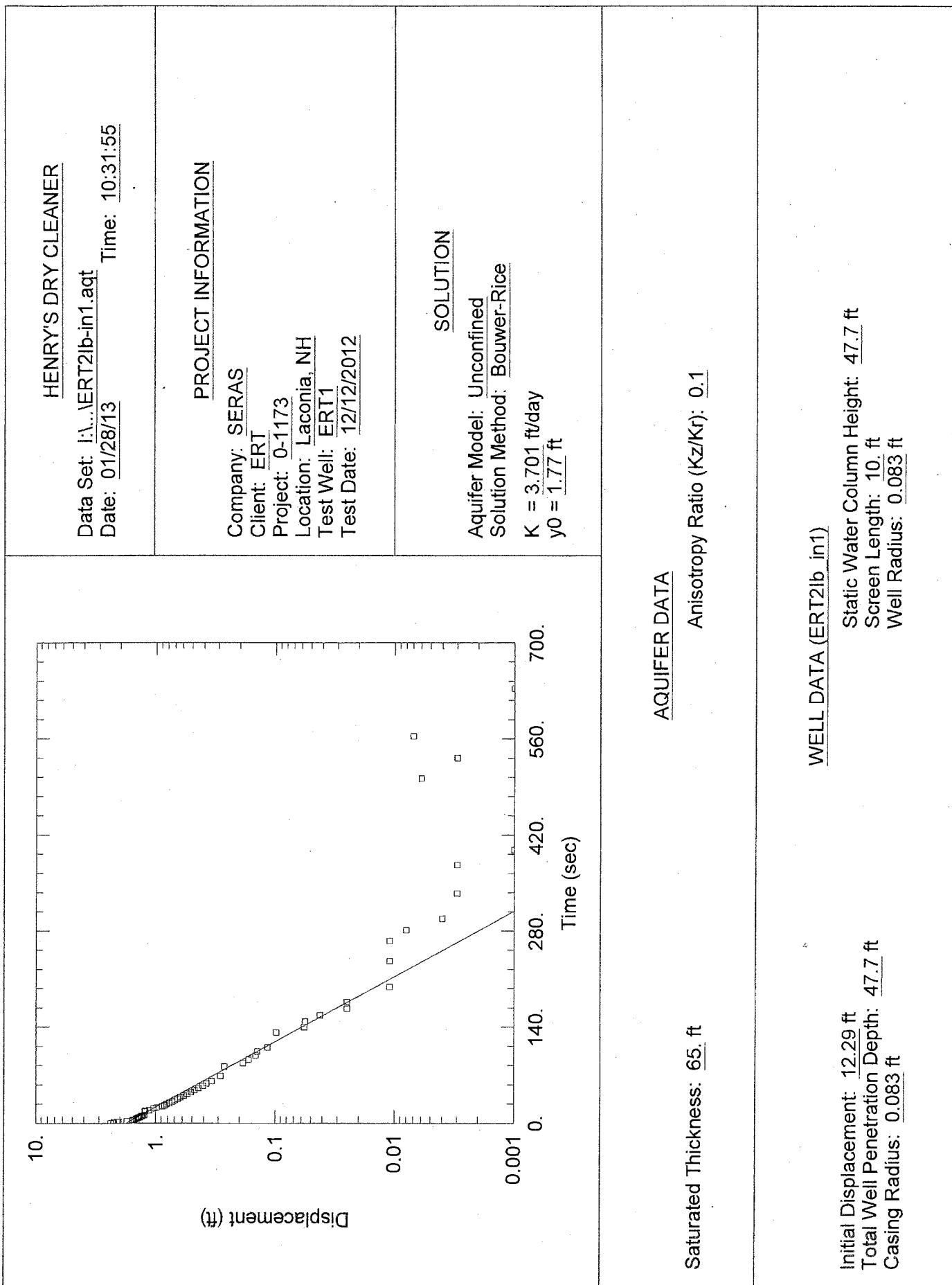
WELL DATA (ERT2S_out2)

Initial Displacement: 13.18 ft
 Total Well Penetration Depth: 4.73 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.32 ft
 Screen Length: 4.73 ft
 Well Radius: 0.083 ft

Saturated Thickness: 25. ft





Initial Displacement: 12.29 ft
Total Well Penetration Depth: 47.7 ft
Casing Radius: 0.083 ft

HENRY'S DRY CLEANER

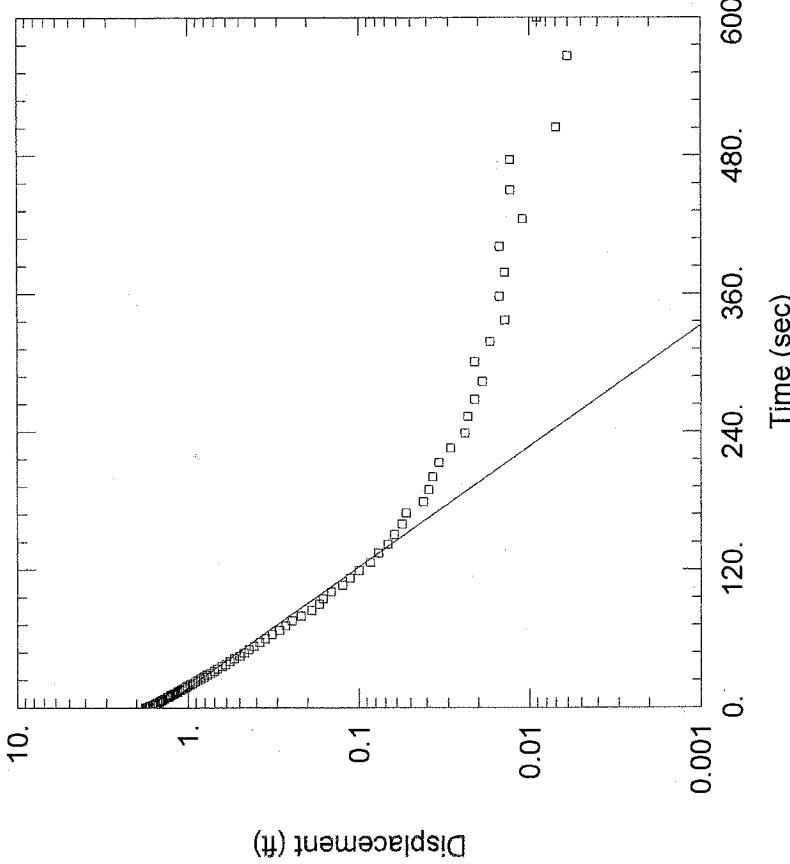
Data Set: I:\...\ERT2lb-out1.aqt
 Date: 01/28/13 Time: 10:31:53

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.35 \text{ ft/day}$
 $y_0 = 1.463 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (K_z/K_t): 0.1

WELL DATA (ERT2lb_out1)

Static Water Column Height: 47.7 ft
 Screen Length: 10 ft
 Well Radius: 0.083 ft

Initial Displacement: 12.29 ft
 Total Well Penetration Depth: 47.7 ft
 Casing Radius: 0.083 ft

HENRY'S DRY CLEANER

Data Set: I:\..\ERT2\lb-out2.aqt
 Date: 01/28/13 Time: 10:31:53

PROJECT INFORMATION

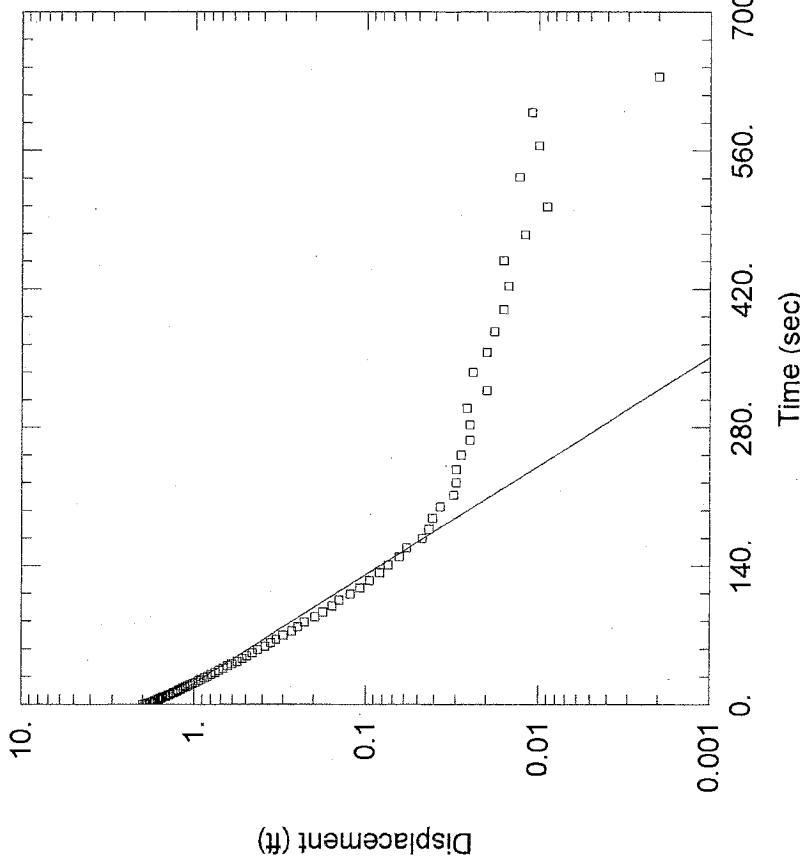
Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.2 \text{ ft/day}$
 $y_0 = 1.553 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 0.1



Saturated Thickness: 65 ft

WELL DATA (ERT2\lb_out2)

Static Water Column Height: 47.7 ft
 Screen Length: 10 ft
 Well Radius: 0.083 ft

Initial Displacement: 12.29 ft
 Total Well Penetration Depth: 47.7 ft
 Casing Radius: 0.083 ft

HENRY'S DRY CLEANER

Data Set: I:\...\ERT2lb-in2.aqt
 Date: 01/28/13 Time: 10:31:54

PROJECT INFORMATION

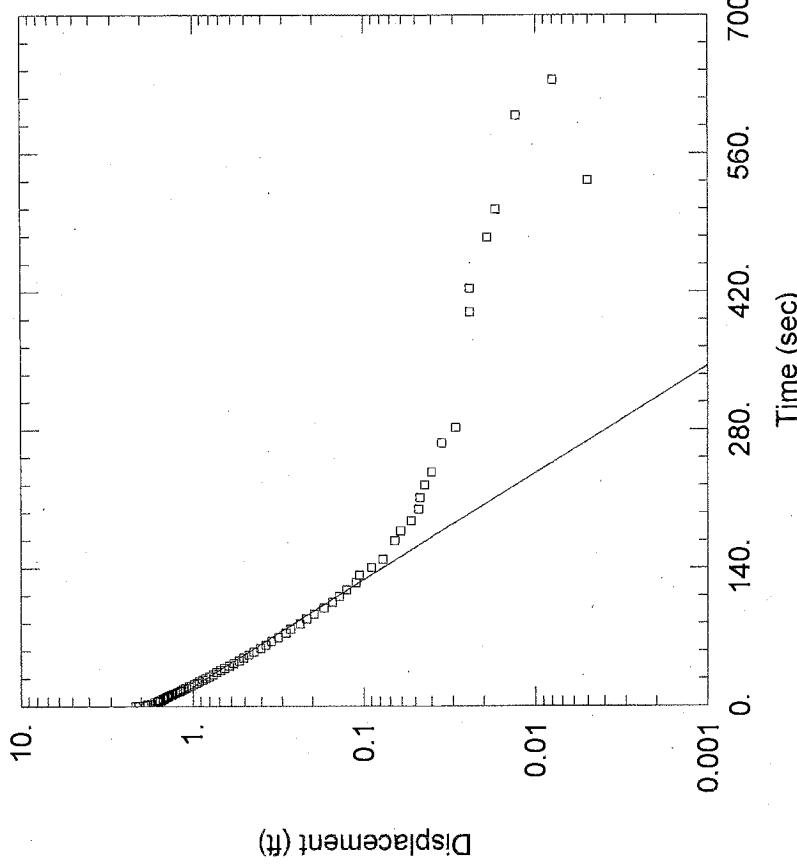
Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.246 \text{ ft/day}$
 $y_0 = 1.523 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (K_z/K_r): 0.1

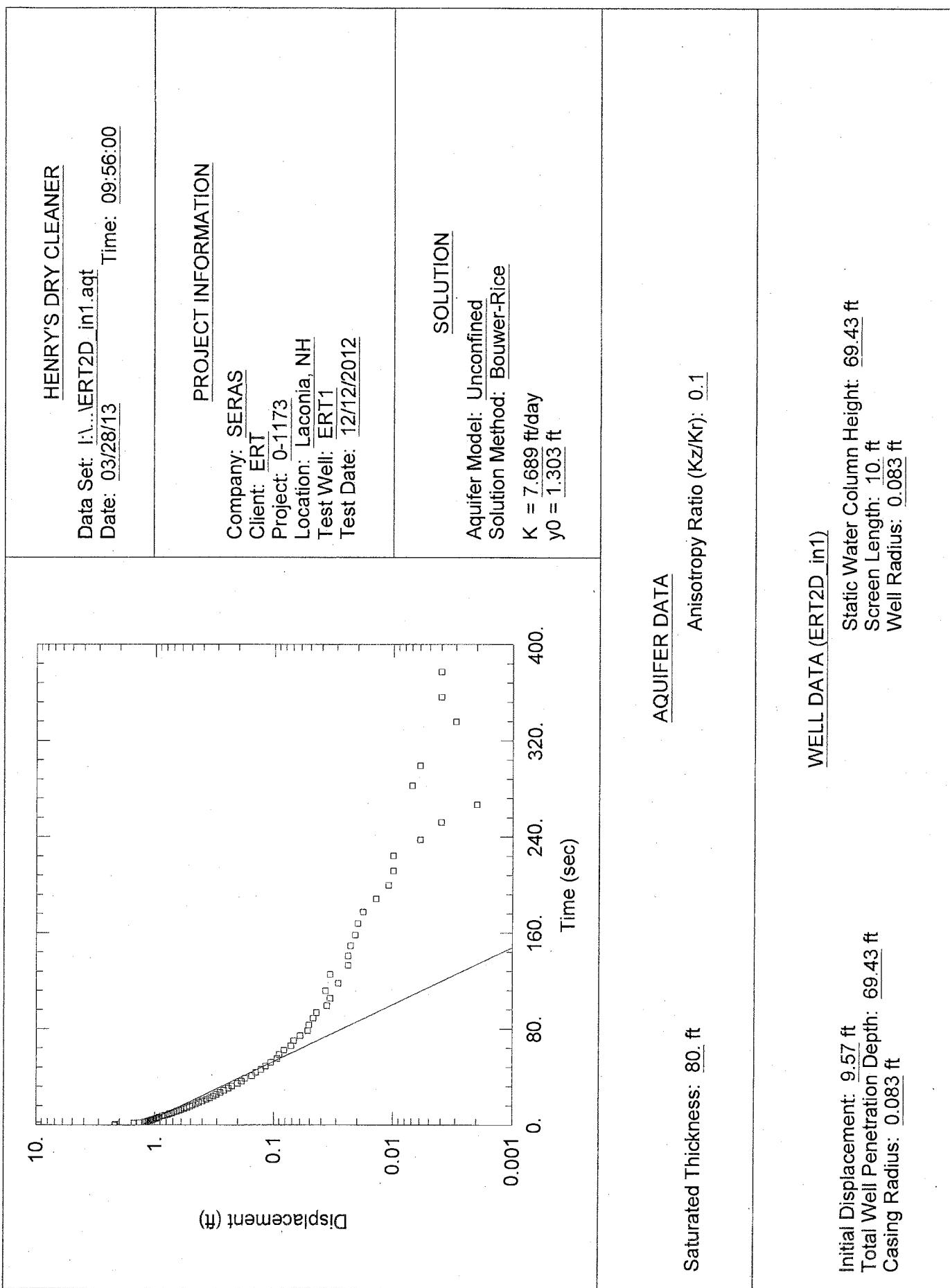


Saturated Thickness: 65. ft

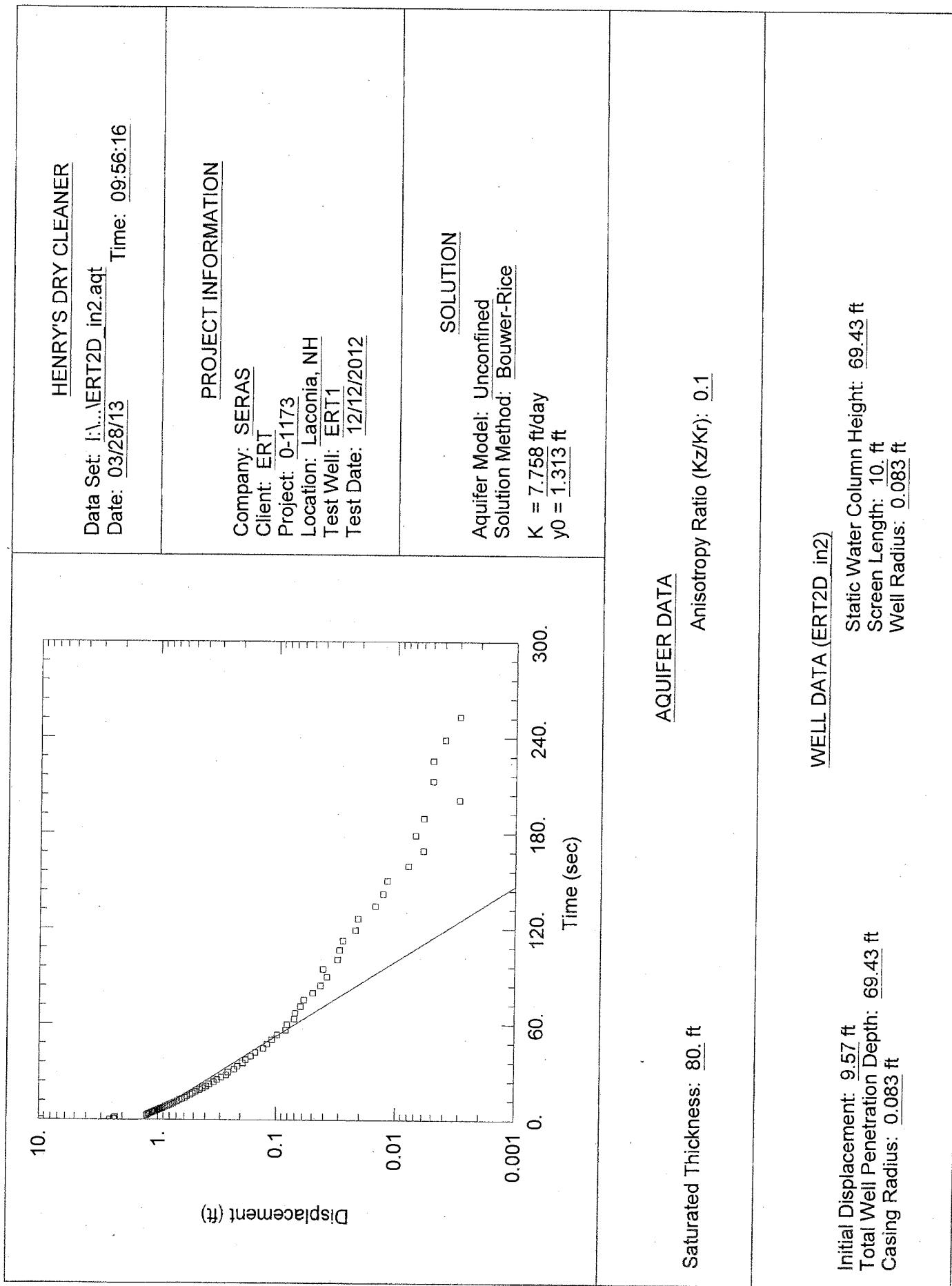
WELL DATA (ERT2lb_in2)

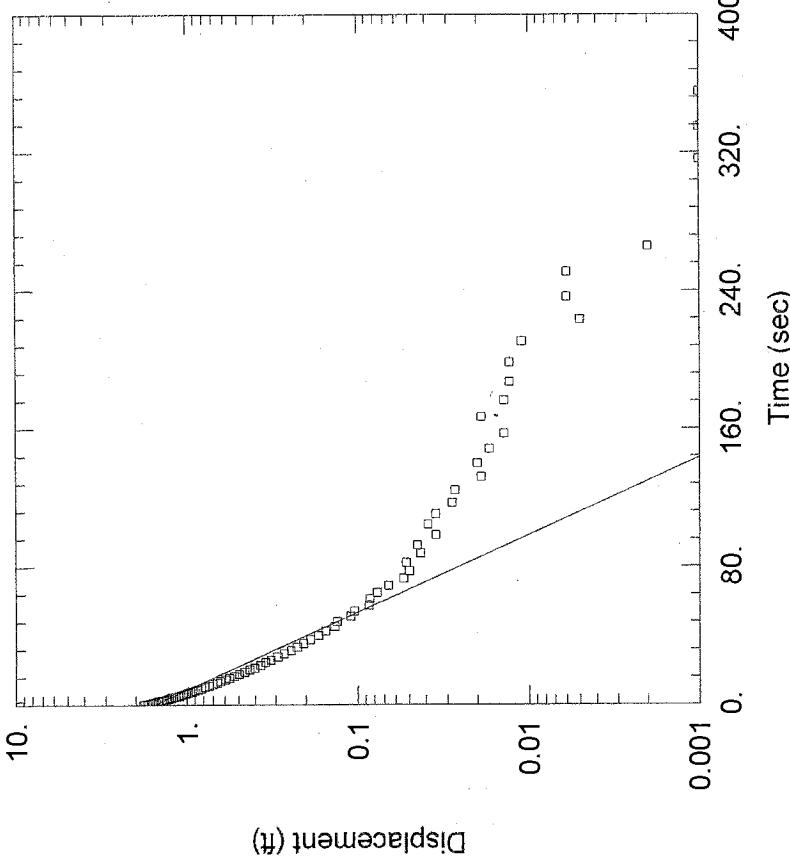
Initial Displacement: 12.29 ft
 Total Well Penetration Depth: 47.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 47.7 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\ERT2D_out1.aqt Date: 03/28/13 Time: 09:56:33</p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: SERAS Client: ERT Project: 0-1173 Location: Laconia, NH Test Well: ERT1 Test Date: 12/12/2012</p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: Unconfined Solution Method: Bouwer-Rice</p> $K = 8.315 \text{ ft/day}$ $y_0 = 1.683 \text{ ft}$
	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_x): 0.1</p> <p>Saturated Thickness: 80. ft</p>	<p><u>WELL DATA (ERT2D_in1)</u></p> <p>Initial Displacement: 9.57 ft Total Well Penetration Depth: 69.43 ft Casing Radius: 0.083 ft</p> <p>Static Water Column Height: 69.43 ft Screen Length: 10. ft Well Radius: 0.083 ft</p>



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2D\out2.aqt
Date: 03/28/13 Time: 09:56:55

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$$K = 8.14 \text{ ft/day}$$

$$y_0 = 1.561 \text{ ft}$$

AQUIFER DATA

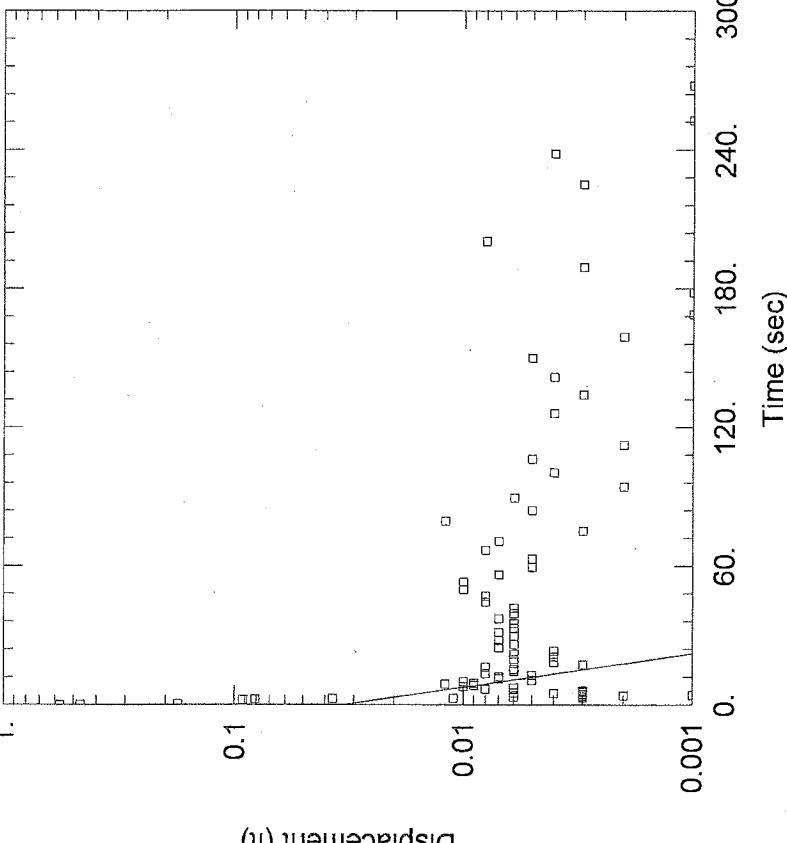
Anisotropy Ratio (K_z/K_r): 0.1

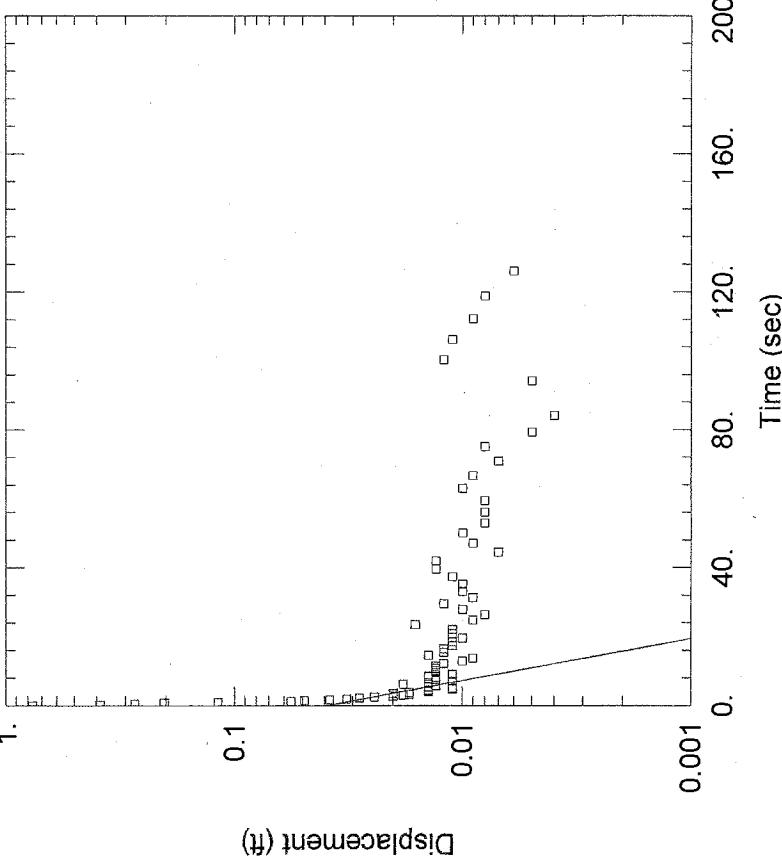
WELL DATA (ERT2D in2)

Static Water Column Height: 69.43 ft
Screen Length: 10 ft
Well Radius: 0.083 ft

Initial Displacement: 9.57 ft
Total Well Penetration Depth: 69.43 ft
Casing Radius: 0.083 ft

Saturated Thickness: 80 ft

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: <u>I:\...\ERT3S\in1.aqt</u> Date: <u>01/28/13</u> Time: <u>10:30:26</u></p>	
<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	
<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = 36.35 \text{ ft/day}$ $y_0 = 0.03352 \text{ ft}$</p>	
<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p> <p>Saturated Thickness: <u>25. ft</u></p>	
<p><u>WELL DATA (ERT3S_in1)</u></p> <p>Initial Displacement: <u>13.11 ft</u> Total Well Penetration Depth: <u>4.61 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>5.39 ft</u> Screen Length: <u>4.61 ft</u> Well Radius: <u>0.083 ft</u></p>	
	

HENRY'S DRY CLEANER

Data Set: I:\...\ERT3Sout1.aqt
Date: 01/28/13 Time: 10:30:26

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$$K = 43.27 \text{ ft/day}$$

$$y_0 = 0.03898 \text{ ft}$$

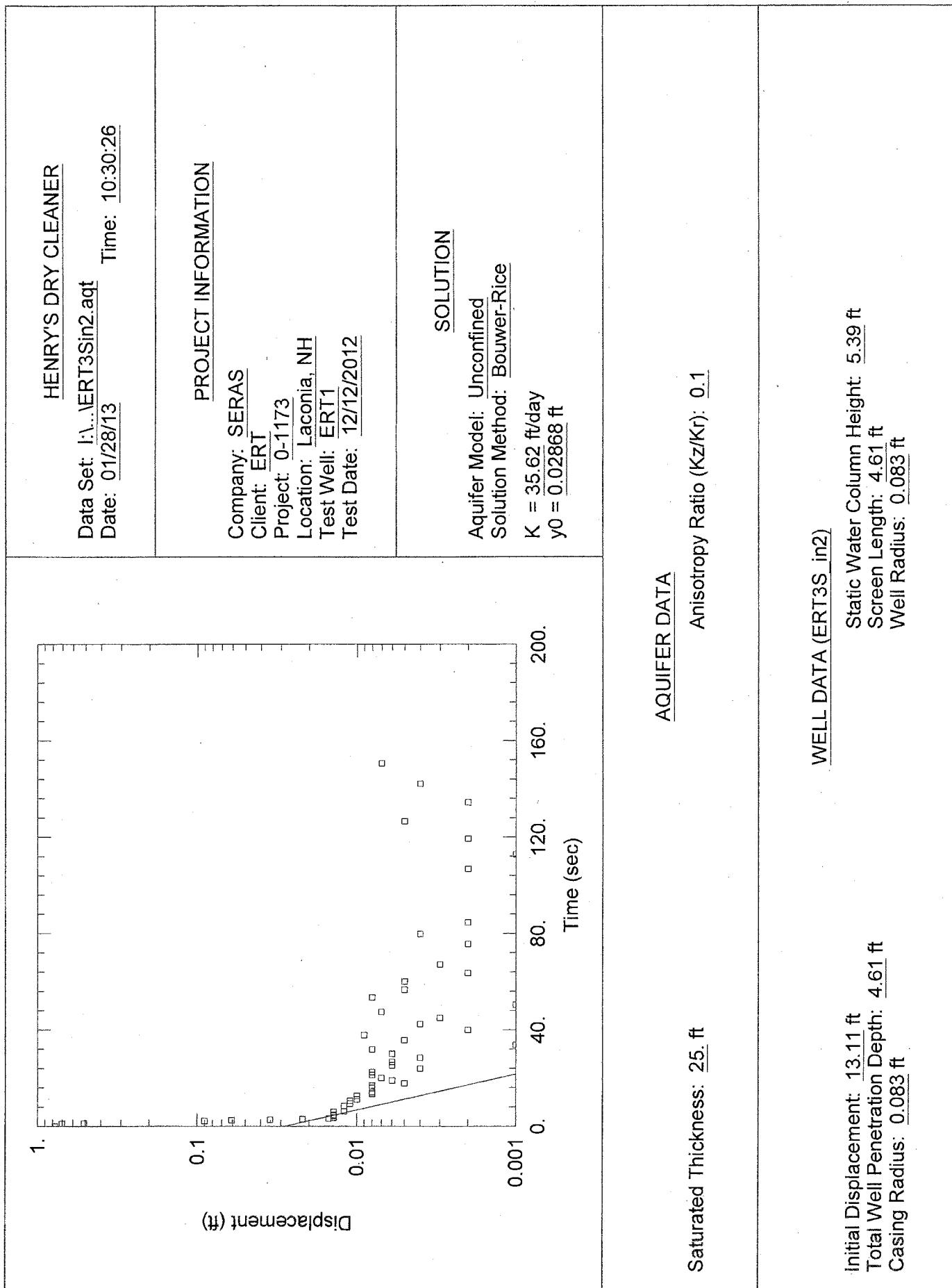
AQUIFER DATA

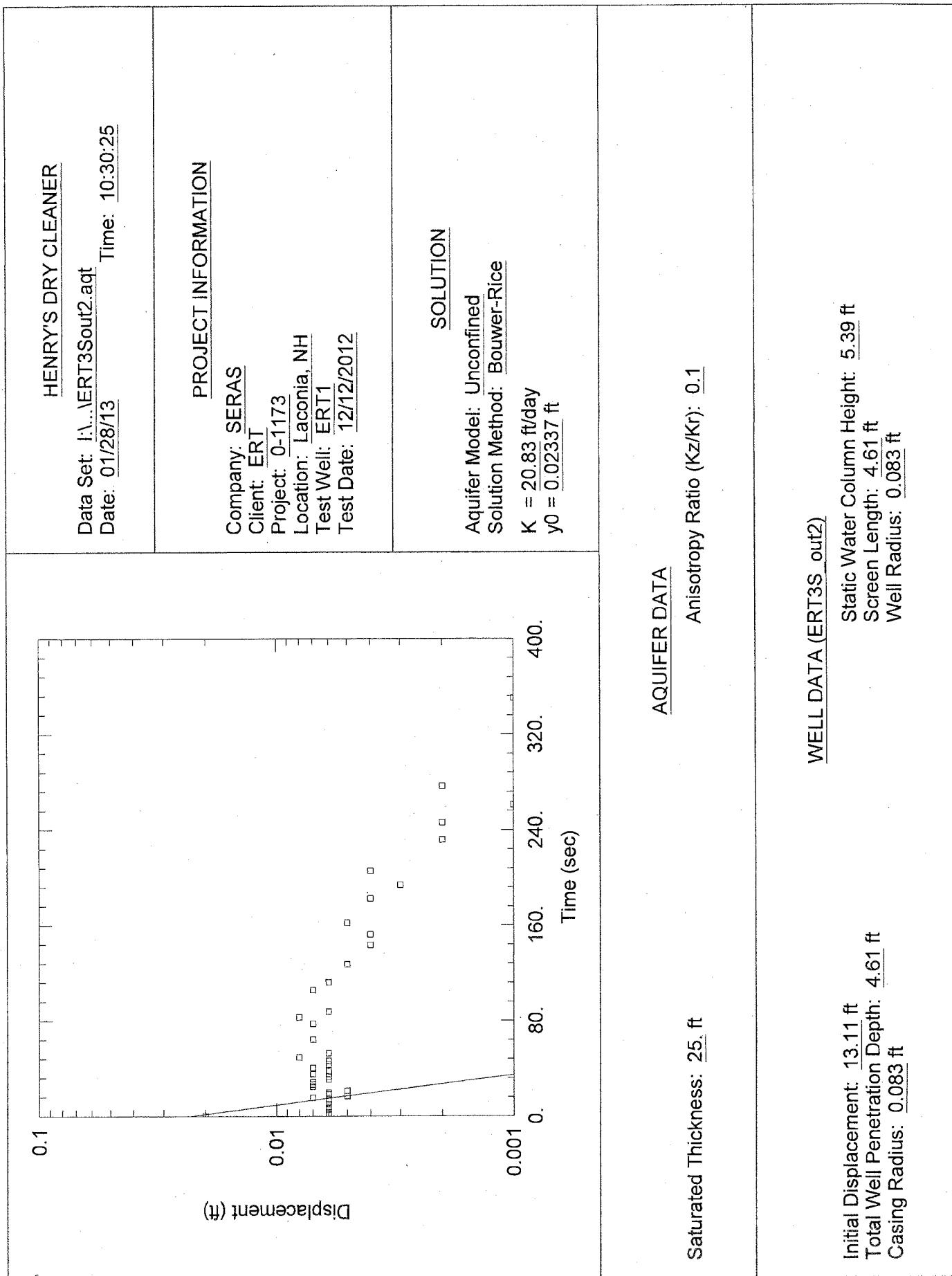
Anisotropy Ratio (K_z/K_t): 0.1

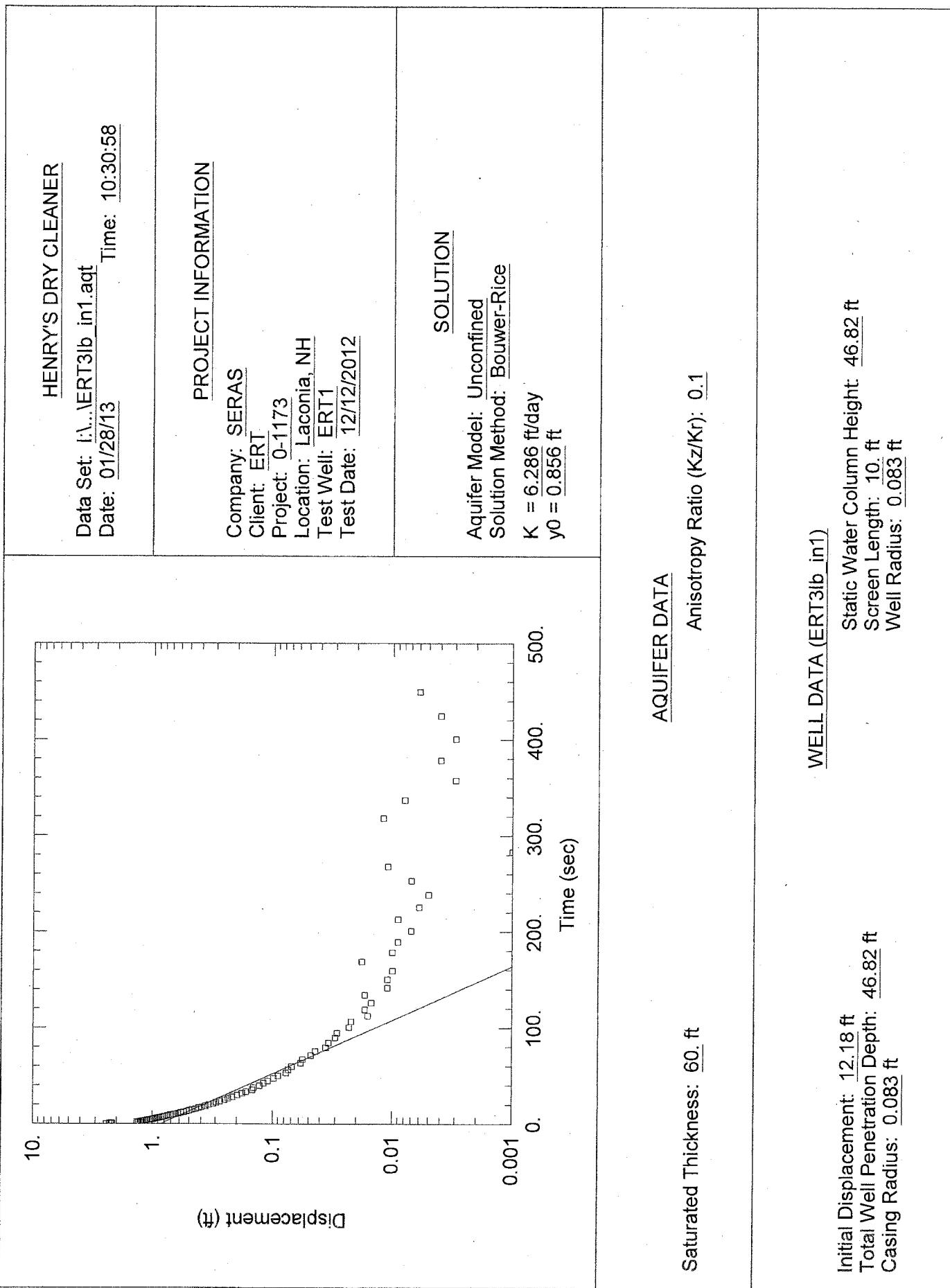
WELL DATA (ERT3S_out)

Initial Displacement: 13.11 ft
Total Well Penetration Depth: 4.61 ft
Casing Radius: 0.083 ft

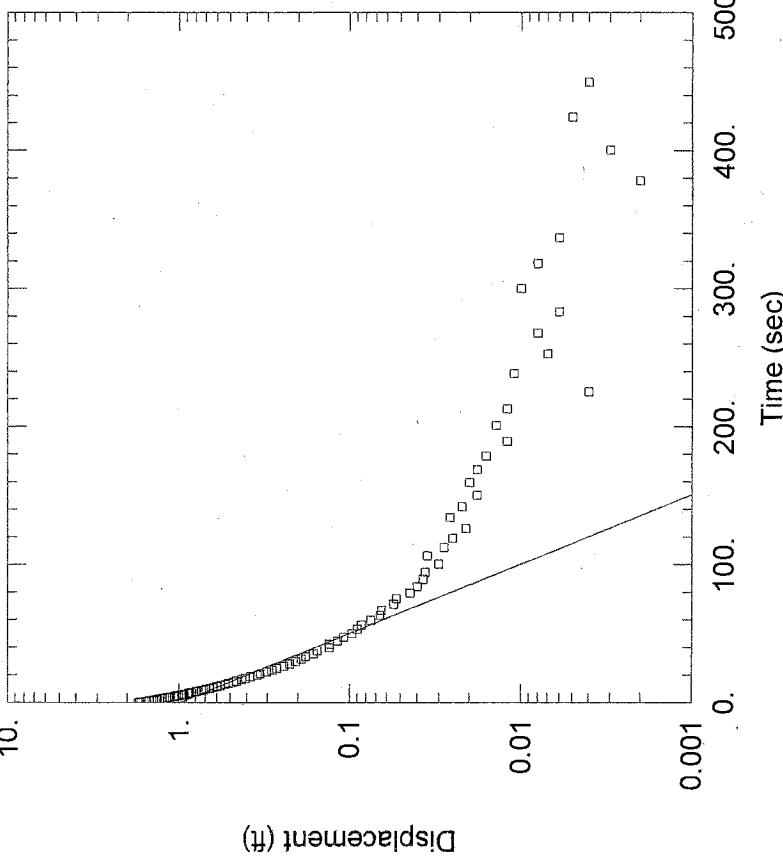
Static Water Column Height: 5.39 ft
Screen Length: 4.61 ft
Well Radius: 0.083 ft







10.

HENRY'S DRY CLEANER

Data Set: I:\...\ERT3lb_out1.aqt
 Date: 01/28/13 Time: 10:30:57

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

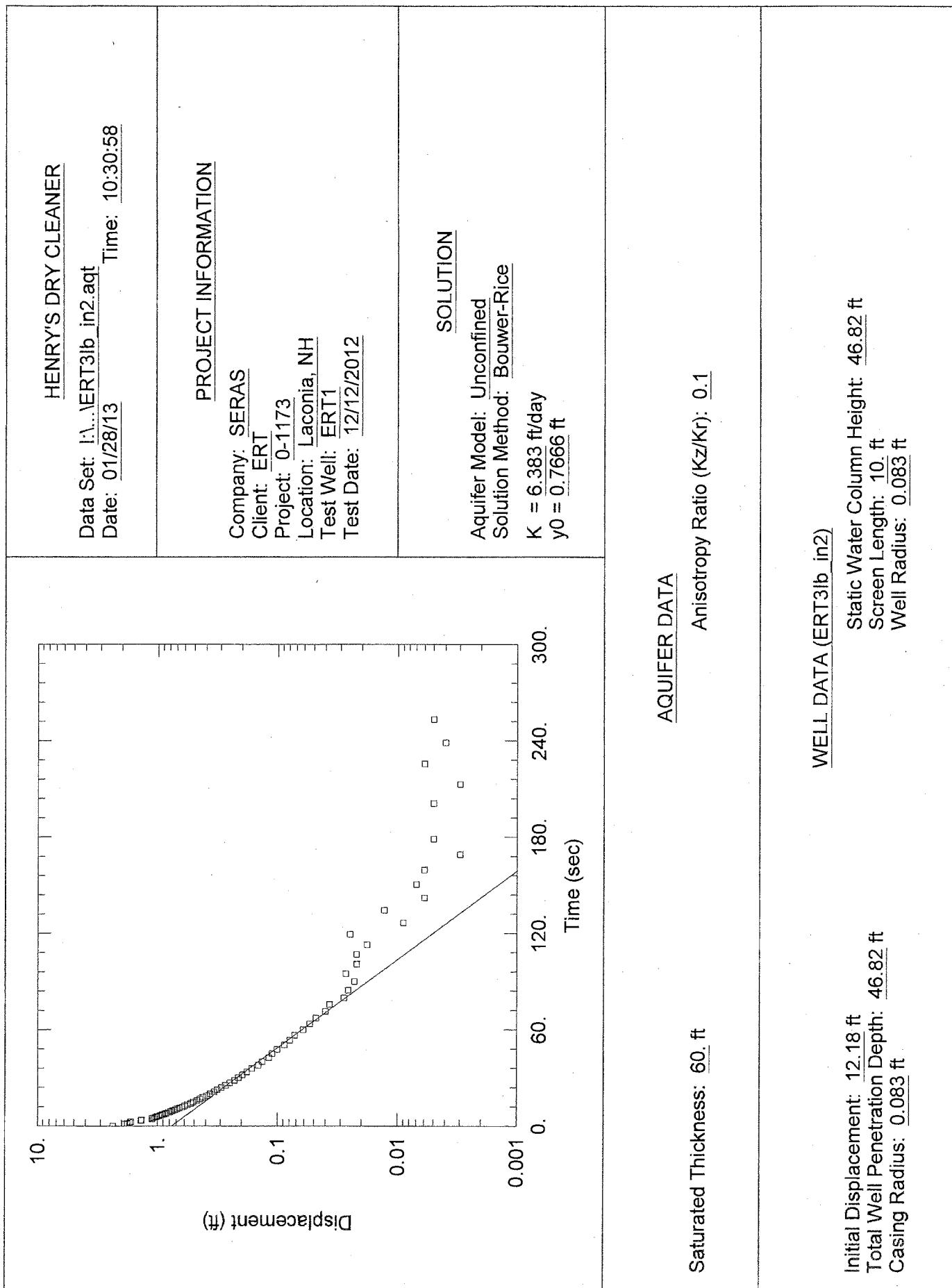
SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.985 \text{ ft/day}$
 $y_0 = 0.9897 \text{ ft}$

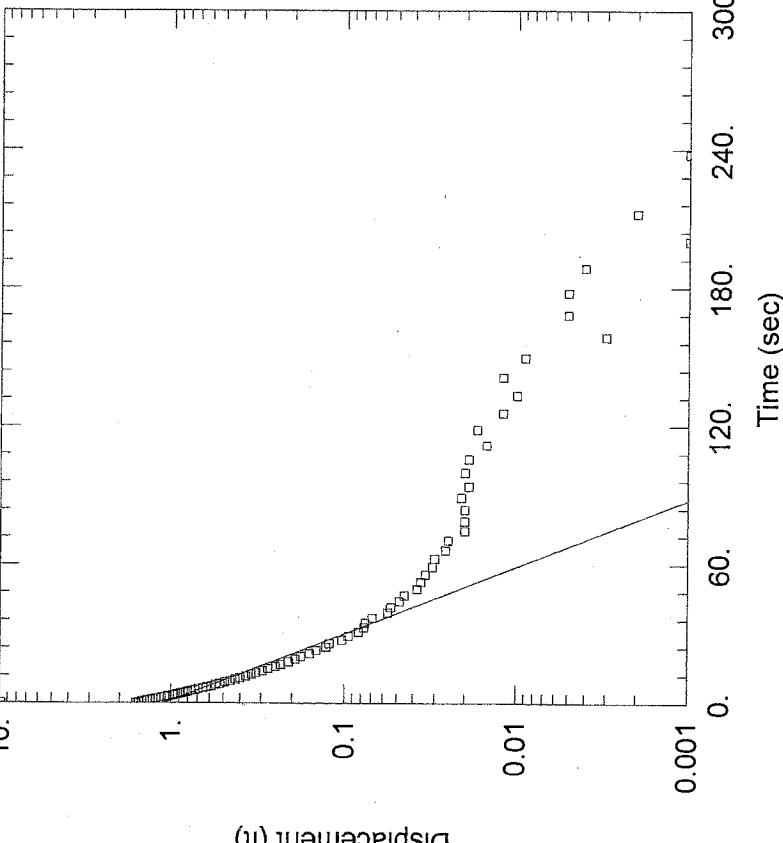
AQUIFER DATA
 Anisotropy Ratio (K_z/K_t): 0.1

WELL DATA (ERT3lb_out1)

Initial Displacement: 12.18 ft
 Total Well Penetration Depth: 46.82 ft
 Casing Radius: 0.083 ft
 Static Water Column Height: 46.82 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: <u>I:\...\ERT3lb_out2.aqt</u> Date: <u>01/28/13</u> Time: <u>10:30:57</u></p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u></p> $K = 6.582 \text{ ft/day}$ $y_0 = 0.9962 \text{ ft}$	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_t): <u>0.1</u></p> <p>Saturated Thickness: <u>60. ft</u></p>	<p><u>WELL DATA (ERT3lb_out2)</u></p> <p>Initial Displacement: <u>12.18 ft</u> Total Well Penetration Depth: <u>46.82 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>46.82 ft</u> Screen Length: <u>10. ft</u> Well Radius: <u>0.083 ft</u></p>

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\..\ERT3D_out1.aqt Date: <u>01/28/13</u> Time: <u>10:31:01</u></p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: Unconfined Solution Method: <u>Bouwer-Rice</u> $K = 12.64 \text{ ft/day}$ $y_0 = 1.087 \text{ ft}$</p>	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p>	<p><u>WELL DATA (ERT3D_out1)</u></p> <p>Initial Displacement: <u>9.78 ft</u> Total Well Penetration Depth: <u>70.22 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>70.22 ft</u> Screen Length: <u>10. ft</u> Well Radius: <u>0.083 ft</u></p>
		<p>Saturated Thickness: <u>80. ft</u></p>		

HENRY'S DRY CLEANER

Data Set: I:\...\ERT3D_in1.agt
 Date: 01/28/13 Time: 10:31:03

PROJECT INFORMATION

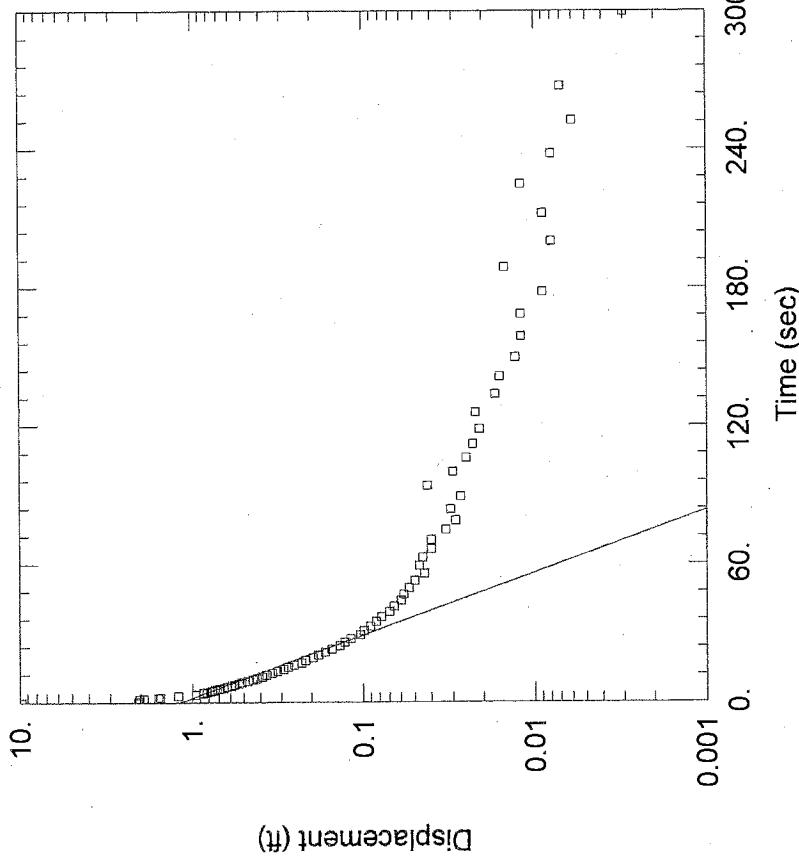
Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 13.51 \text{ ft/day}$
 $y_0 = 1.186 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT3D_in1)

Initial Displacement: 9.78 ft
 Total Well Penetration Depth: 70.22 ft
 Casing Radius: 0.083 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft
 Static Water Column Height: 70.22 ft

Saturated Thickness: 80. ft

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: <u>I:\..\ERT3D\out2.act</u> Date: <u>01/28/13</u> Time: <u>10:31:01</u></p>	
<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	
<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u></p> $K = 12.92 \text{ ft/day}$ $y_0 = 1.181 \text{ ft}$	
<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p>	
<p><u>WELL DATA (ERT3D\out2)</u></p> <p>Initial Displacement: <u>9.78 ft</u> Total Well Penetration Depth: <u>70.22 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>70.22 ft</u> Screen Length: <u>10. ft</u> Well Radius: <u>0.083 ft</u></p>	
<p>Displacement (ft)</p> <p>Time (sec)</p>	
<p>Saturated Thickness: <u>80. ft</u></p>	

HENRY'S DRY CLEANER

Data Set: I:\...\ERT3D\in2.aqt
 Date: 01/28/13 Time: 10:31:02

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

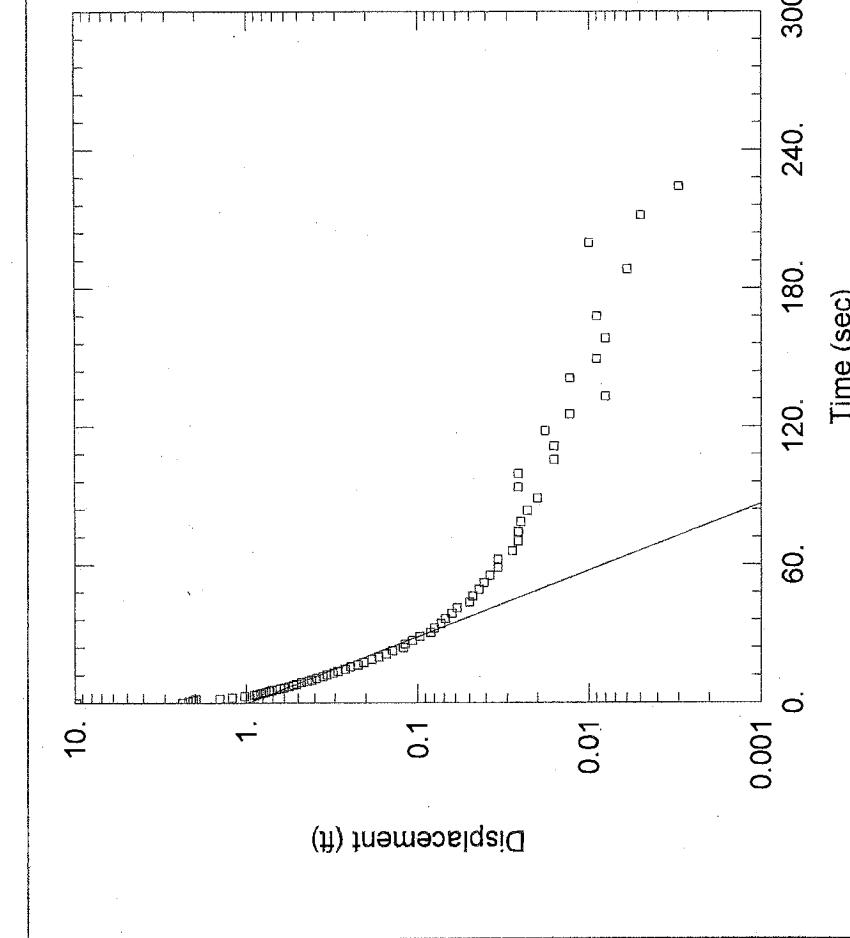
Solution Method: Bouwer-Rice

$K = 12.67 \text{ ft/day}$

$y_0 = 0.9802 \text{ ft}$

AQUIFER DATA

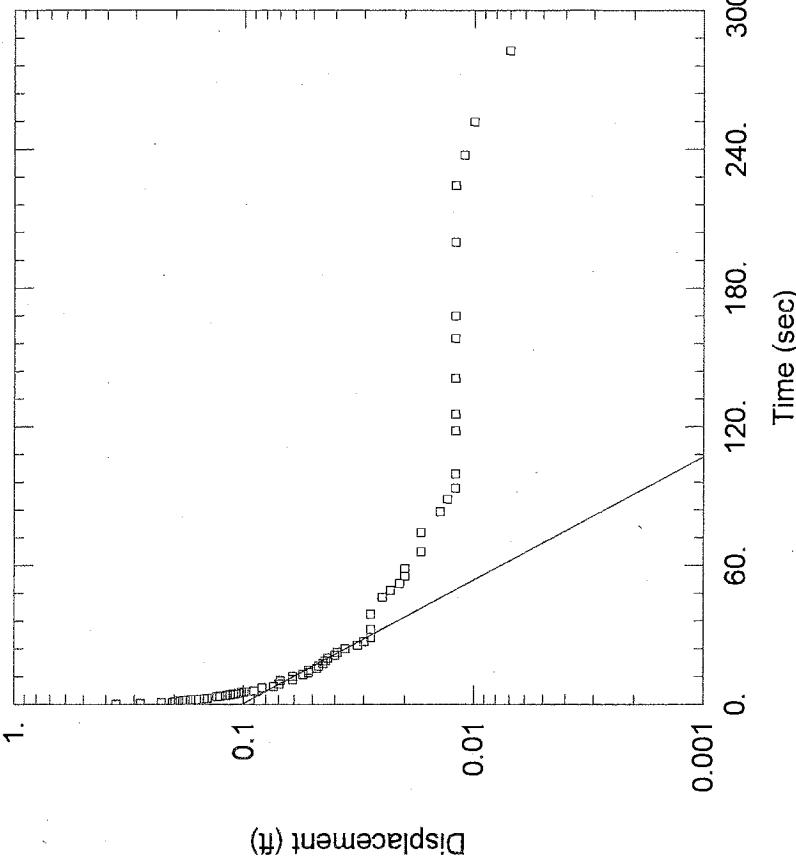
Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT3D\in2)

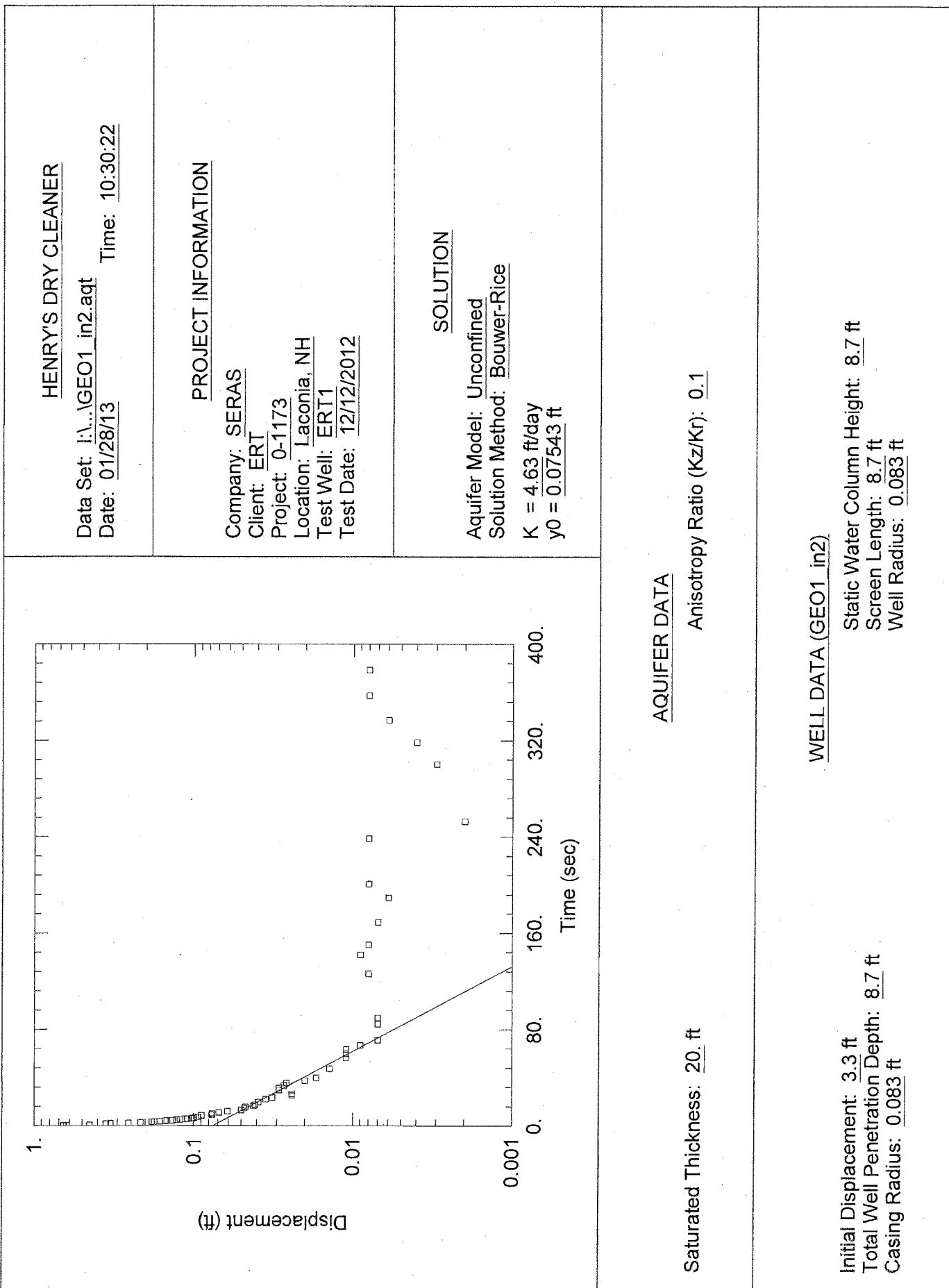
Initial Displacement: 9.78 ft
 Total Well Penetration Depth: 70.22 ft
 Casing Radius: 0.083 ft

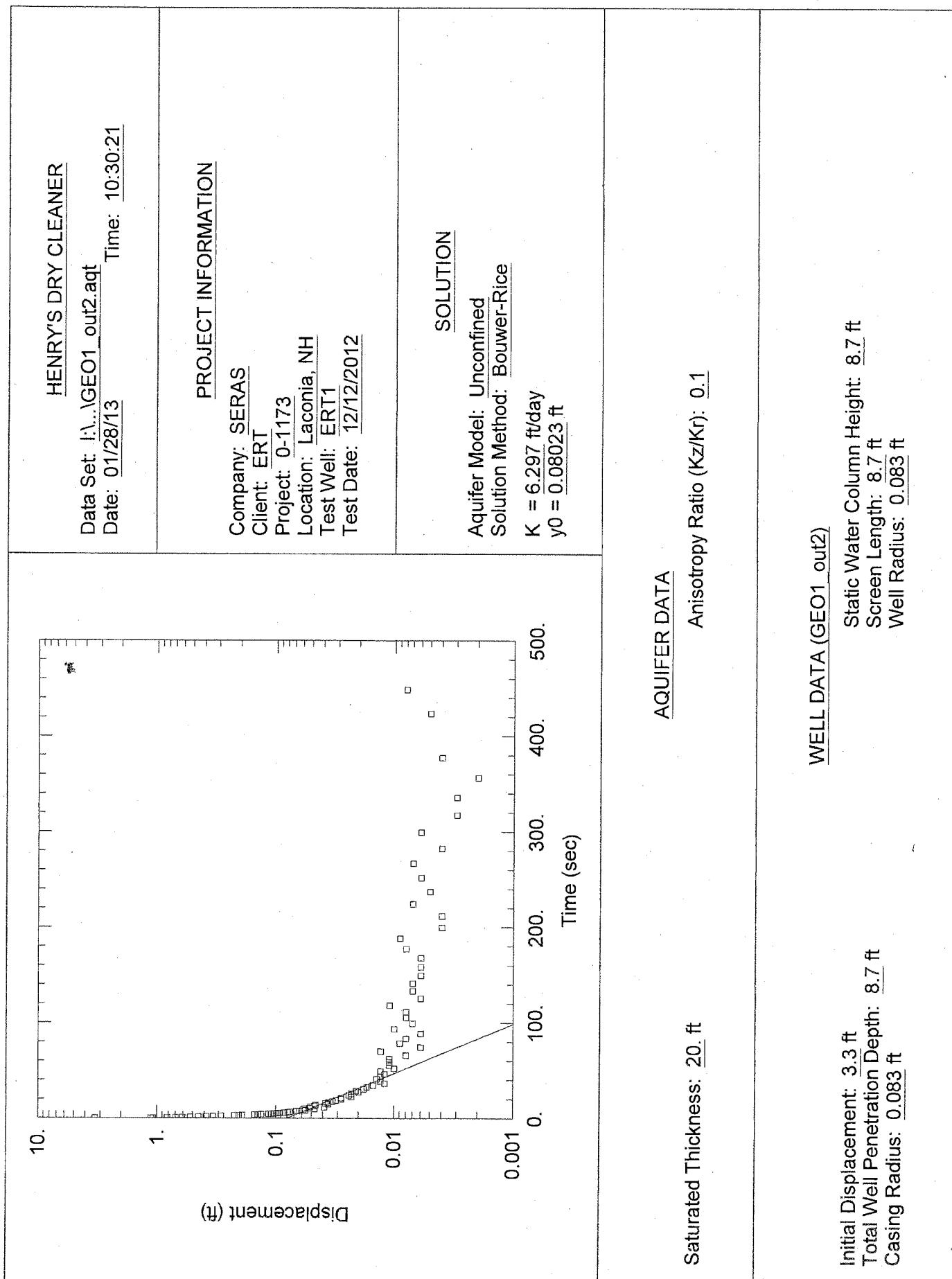
Static Water Column Height: 70.22 ft
 Screen Length: 10 ft
 Well Radius: 0.083 ft

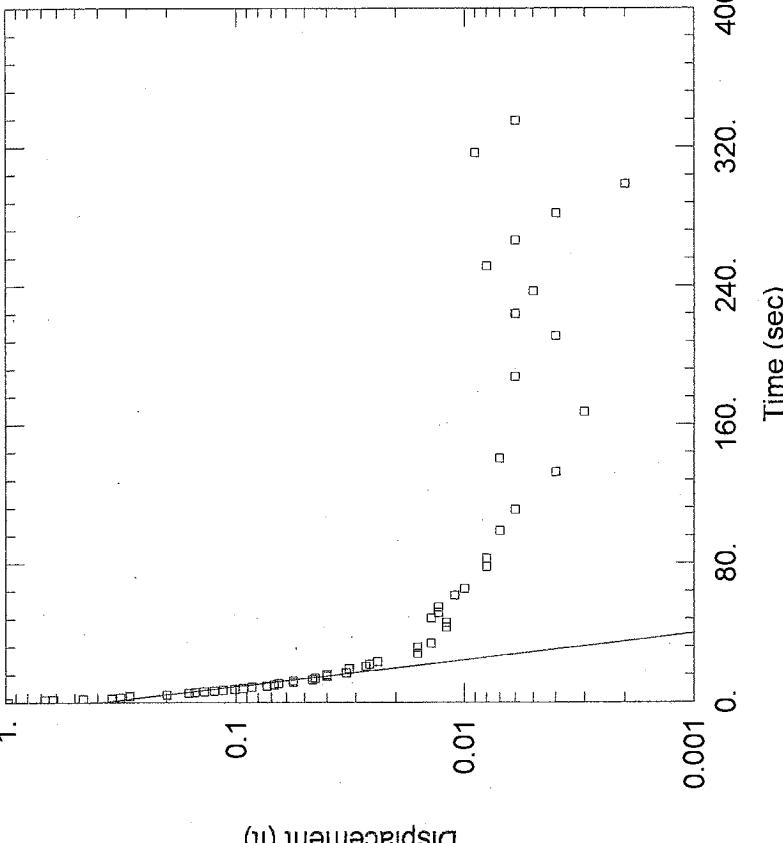
<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\GEO1_in1.agt Date: 01/28/13 Time: 10:30:23</p>	
<p><u>PROJECT INFORMATION</u></p> <p>Company: SERAS Client: ERT Project: 0-1173 Location: Laconia, NH Test Well: ERT1 Test Date: 12/12/2012</p>	
<p><u>SOLUTION</u></p> <p>Aquifer Model: Unconfined Solution Method: Bouwer-Rice $K = 6.131 \text{ ft/day}$ $y_0 = 0.1018 \text{ ft}$</p>	
<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (Kz/Kr): 0.1</p> <p>Saturated Thickness: 20. ft</p>	
<p><u>WELL DATA (GEO1_in1)</u></p> <p>Initial Displacement: 3.3 ft Total Well Penetration Depth: 8.7 ft Casing Radius: 0.083 ft</p> <p>Static Water Column Height: 8.7 ft Screen Length: 8.7 ft Well Radius: 0.083 ft</p>	

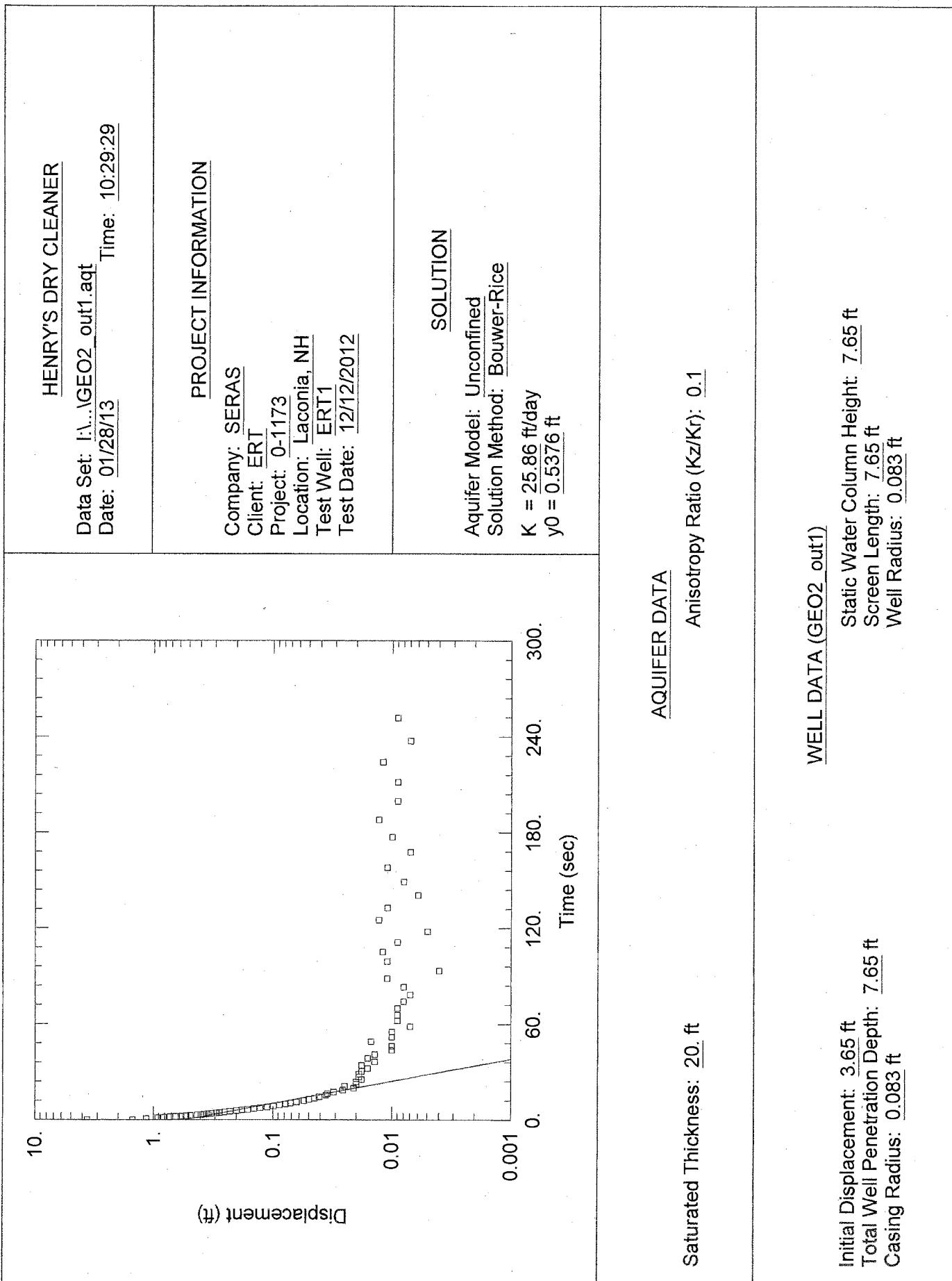


<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\GEO1_out1.aqt Date: 01/28/13 Time: 10:30:21</p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: SERAS Client: ERT Project: 0-1173 Location: Laconia, NH Test Well: ERT1 Test Date: 12/12/2012</p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: Unconfined Solution Method: Bouwer-Rice $K = 6.587 \text{ ft/day}$ $y_0 = 0.07864 \text{ ft}$</p>	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_x): 0.1</p>	<p><u>WELL DATA (GEO1_out1)</u></p> <p>Static Water Column Height: 8.7 ft Screen Length: 8.7 ft Well Radius: 0.083 ft</p>
<p>1.</p>	<p>10. 0.1 0.01 0.001</p> <p>0. 80. 160. 240. 320. 400. Time (sec)</p>	<p>10. 0.1 0.01 0.001</p> <p>0. 80. 160. 240. 320. 400. Time (sec)</p>	<p>10. 0.1 0.01 0.001</p> <p>0. 80. 160. 240. 320. 400. Time (sec)</p>	<p>10. 0.1 0.01 0.001</p> <p>0. 80. 160. 240. 320. 400. Time (sec)</p>





<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\GEO2_in1.aqt Date: 01/28/13 Time: 10:29:31</p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: SERAS Client: ERT Project: 0-1173 Location: Laconia, NH Test Well: ERT1 Test Date: 12/12/2012</p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: Unconfined Solution Method: Bouwer-Rice $K = 23.59 \text{ ft/day}$ $y_0 = 0.397 \text{ ft}$</p>	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (Kz/Kr): 0.1</p>	<p><u>WELL DATA (GEO2_in1)</u></p> <p>Initial Displacement: 3.65 ft Total Well Penetration Depth: 7.65 ft Casing Radius: 0.083 ft</p> <p>Static Water Column Height: 7.65 ft Screen Length: 7.65 ft Well Radius: 0.083 ft</p>
	<p>Saturated Thickness: 20. ft</p>			



<p>HENRY'S DRY CLEANER</p> <p>Data Set: I:\...\GEO2_in2.aqt Date: <u>01/28/13</u> Time: <u>10:29:30</u></p>	<p>PROJECT INFORMATION</p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p>SOLUTION</p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = 26.4 \text{ ft/day}$ $y = 0.4171 \text{ ft}$</p>	<p>AQUIFER DATA</p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p> <p>Saturated Thickness: <u>20. ft</u></p>	<p>WELL DATA (GEO2_in2)</p> <p>Initial Displacement: <u>3.65 ft</u> Total Well Penetration Depth: <u>7.65 ft</u> Casing Radius: <u>0.083 ft</u> Screen Length: <u>7.65 ft</u> Well Radius: <u>0.083 ft</u> Static Water Column Height: <u>7.65 ft</u></p>
<p>Displacement (ft)</p> <p>Time (sec)</p>				

HENRY'S DRY CLEANER

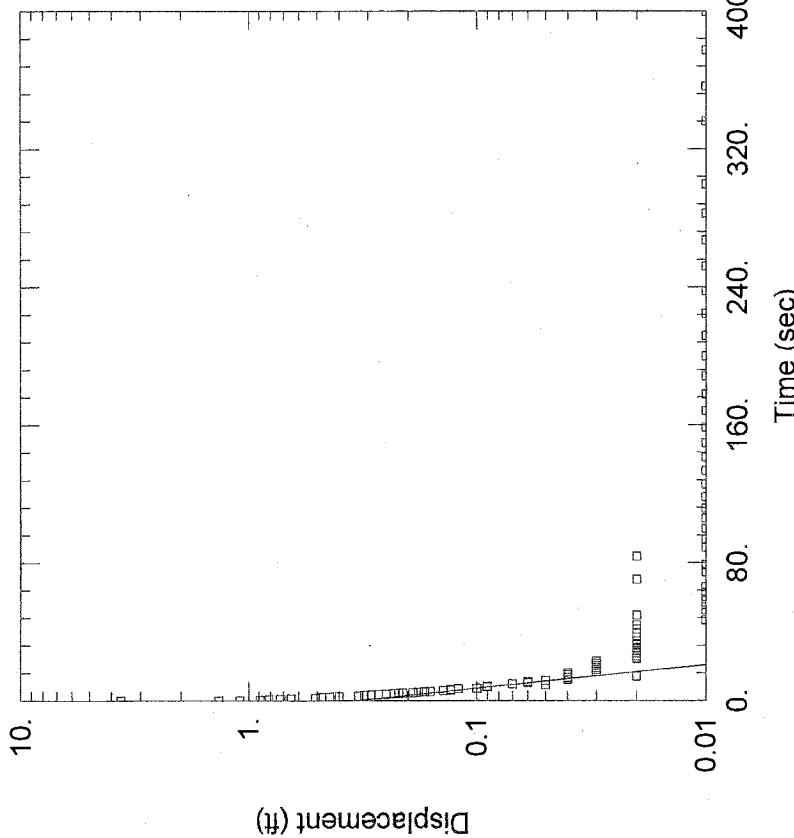
Data Set: I:\...\GEO2_out2.aqt
 Date: 01/28/13 Time: 10:29:29

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 26.62 \text{ ft/day}$
 $y_0 = 0.3409 \text{ ft}$

AQUIFER DATA

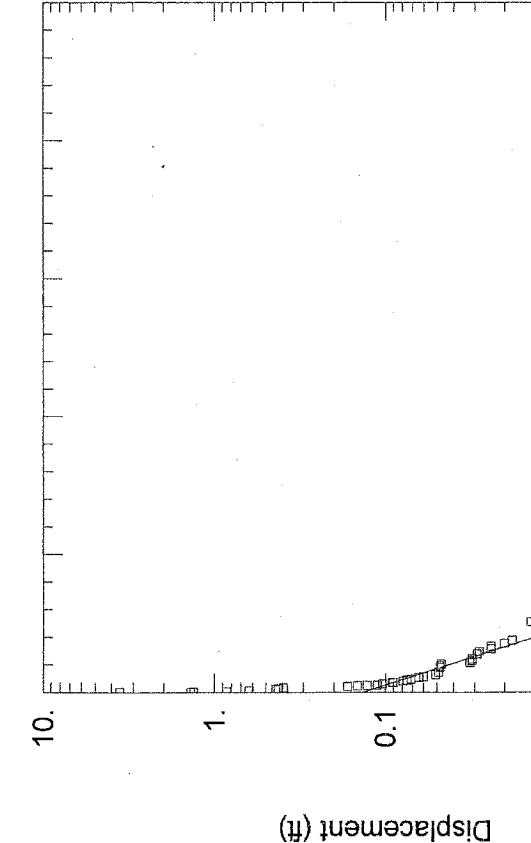
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO2_out2)

Initial Displacement: 3.65 ft
 Total Well Penetration Depth: 7.65 ft
 Casing Radius: 0.083 ft
 Static Water Column Height: 7.65 ft
 Screen Length: 7.65 ft
 Well Radius: 0.083 ft

Saturated Thickness: 20. ft

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\GEO3\in1.aqt Date: <u>01/28/13</u> Time: <u>10:29:28</u></p>	
<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	
<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = 4.893 \text{ ft/day}$ $y_0 = 0.07487 \text{ ft}$</p>	
<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (Kz/Kr): <u>0.1</u></p> <p>Saturated Thickness: <u>20 ft</u></p>	
<p><u>WELL DATA (GEO3\in1)</u></p> <p>Initial Displacement: <u>3.59 ft</u> Total Well Penetration Depth: <u>8.1 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>8.1 ft</u> Screen Length: <u>8.1 ft</u> Well Radius: <u>0.083 ft</u></p>	

HENRY'S DRY CLEANER

Data Set: !:\...\GEO3\in2.aqt
 Date: 01/28/13 Time: 10:29:27

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

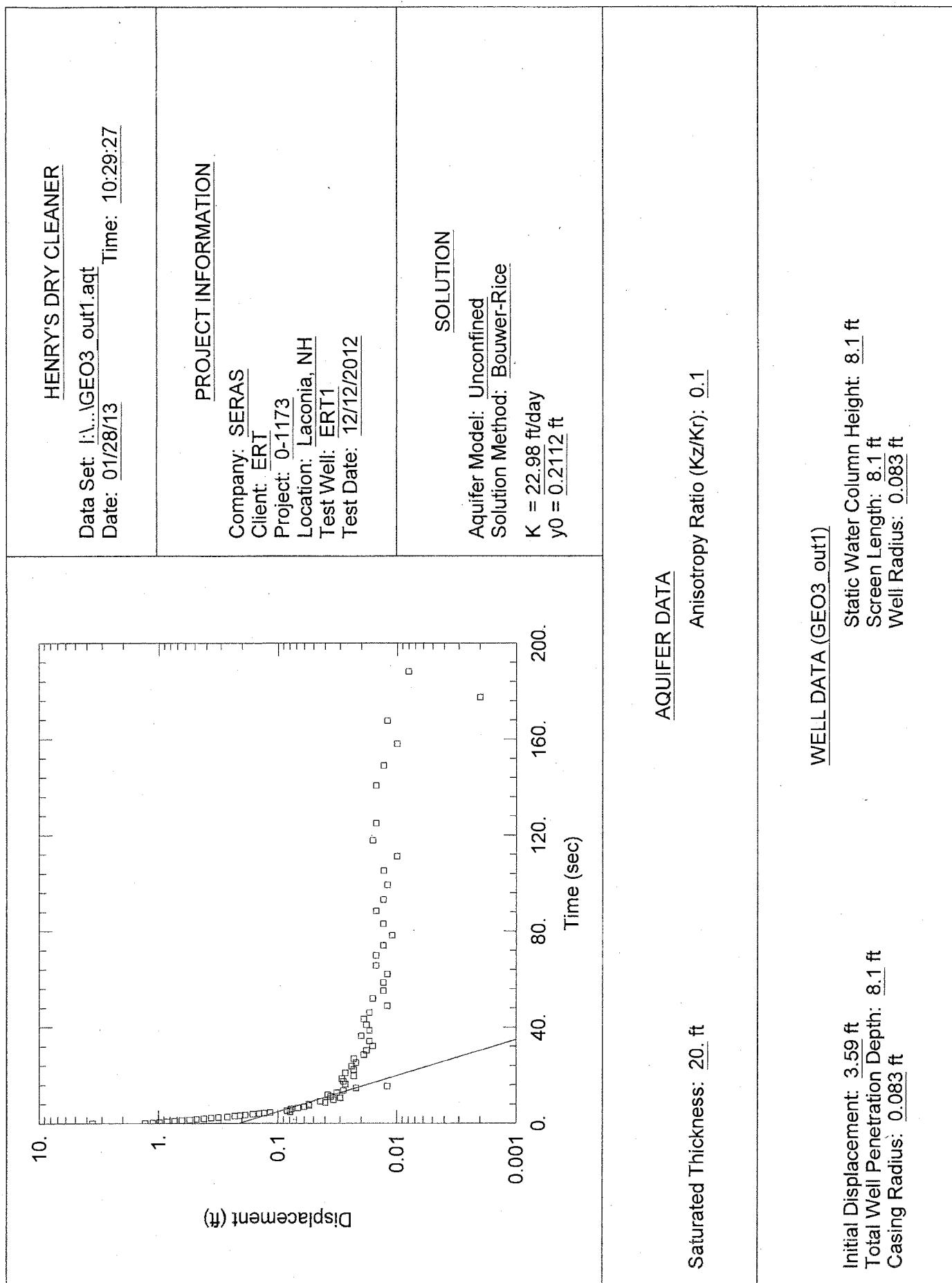
Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 10.95 \text{ ft/day}$
 $y_0 = 0.136 \text{ ft}$

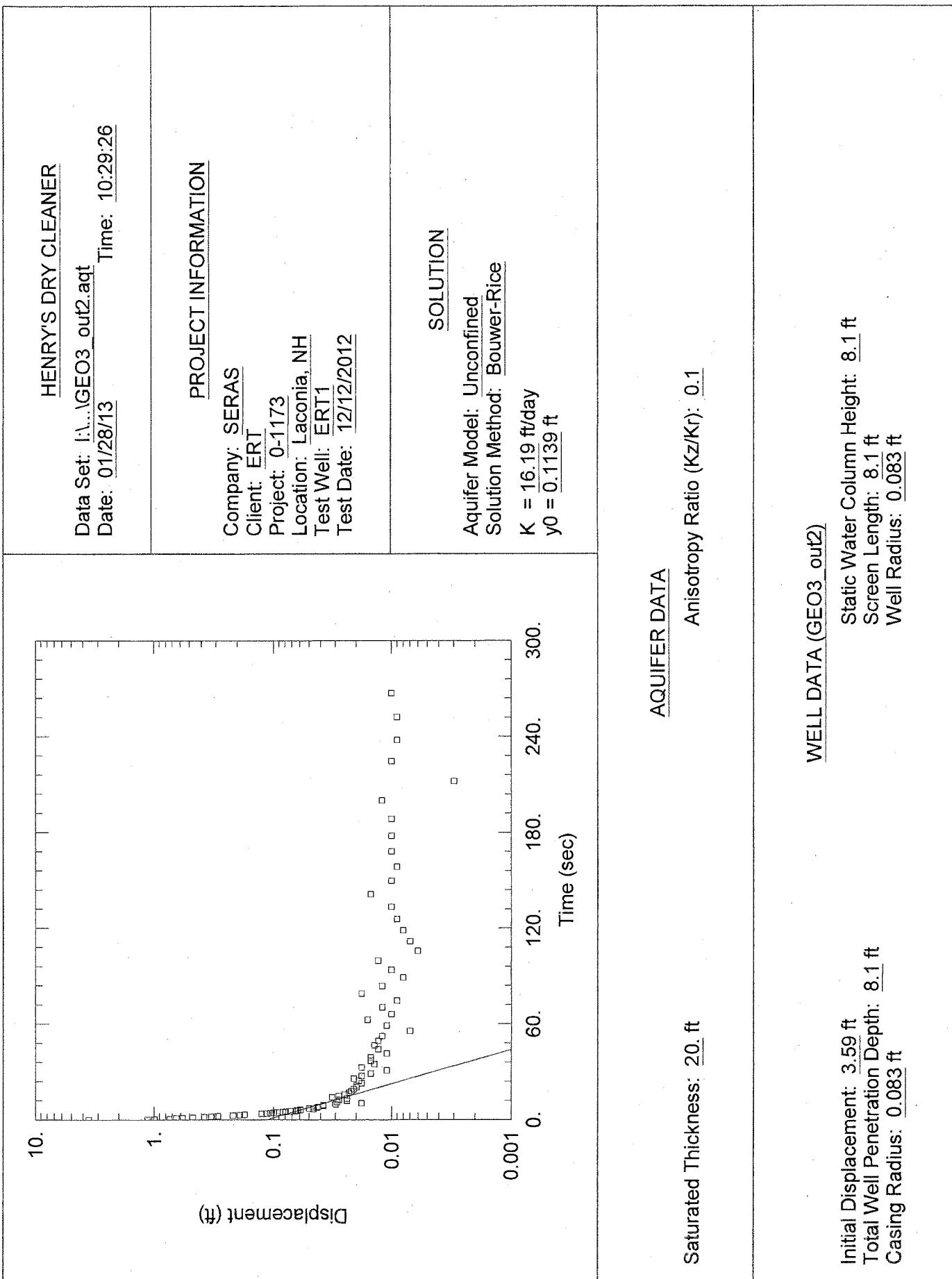
AQUIFER DATA

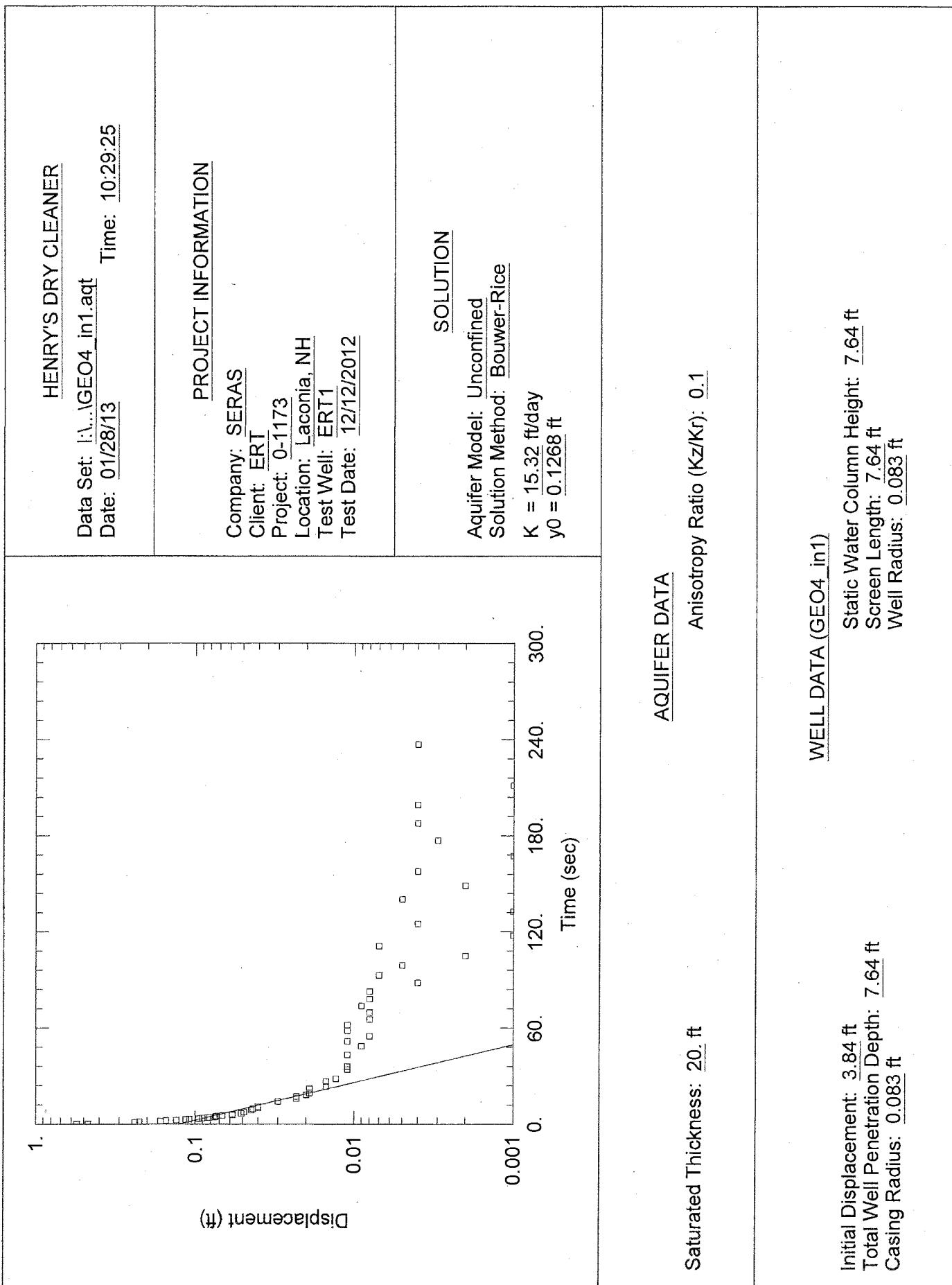
Anisotropy Ratio (K_z/K_t): 0.1

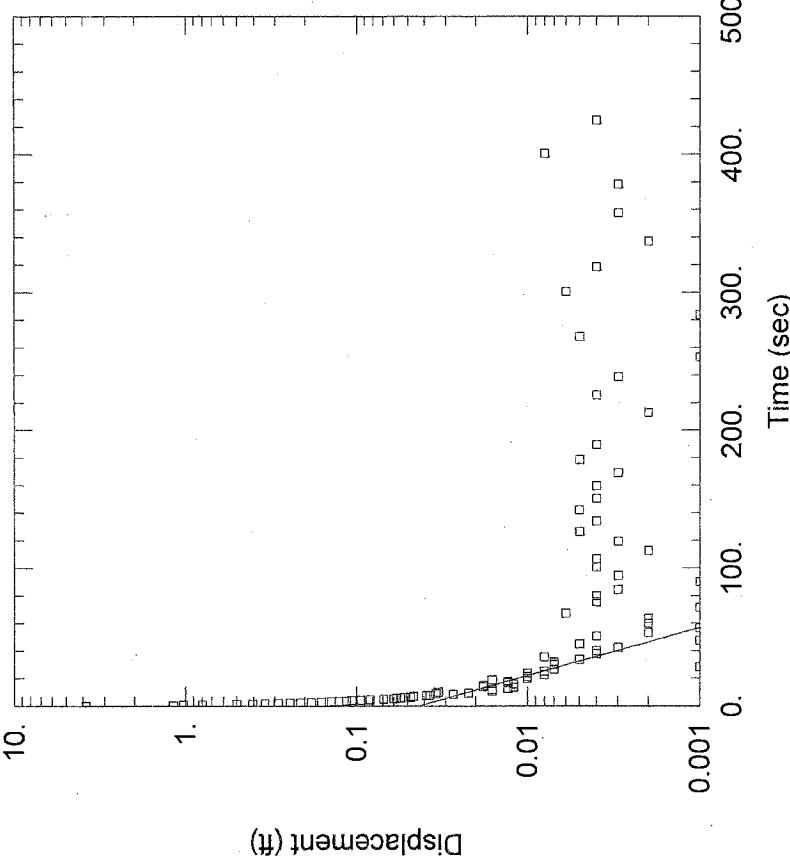
WELL DATA (GEO3 in2)

Initial Displacement: 3.59 ft
 Total Well Penetration Depth: 8.1 ft
 Casing Radius: 0.083 ft
 Static Water Column Height: 8.1 ft
 Screen Length: 8.1 ft
 Well Radius: 0.083 ft







HENRY'S DRY CLEANER

Data Set: I:\...\GEO4_out1.aqt
 Date: 01/28/13 Time: 10:29:24

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 10.34 \text{ ft/day}$
 $y_0 = 0.04277 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (K_z/K_t): 0.1

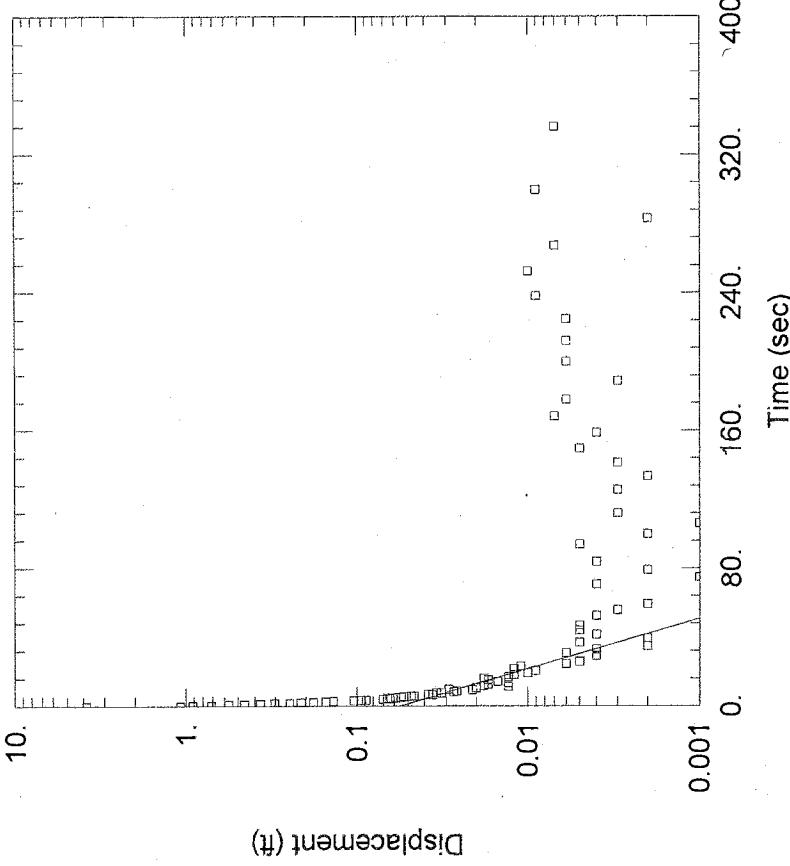
WELL DATA (GEO4_out1)

Initial Displacement: 3.84 ft
 Total Well Penetration Depth: 7.64 ft
 Casing Radius: 0.083 ft
 Static Water Column Height: 7.64 ft
 Screen Length: 7.64 ft
 Well Radius: 0.083 ft

Saturated Thickness: 20. ft

	HENRY'S DRY CLEANER Data Set: <u>I:\...\GEO4\in2.agt</u> Date: <u>01/28/13</u> Time: <u>10:29:25</u>	PROJECT INFORMATION Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u>	SOLUTION Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = \frac{11.04}{0.08155} \text{ ft/day}$ $y_0 = 0.08155 \text{ ft}$	AQUIFER DATA Anisotropy Ratio (Kz/Kr): <u>0.1</u>	WELL DATA (GEO4 in2) Static Water Column Height: <u>7.64</u> ft Screen Length: <u>7.64</u> ft Well Radius: <u>0.083</u> ft																																												
	<p>Graph showing Displacement (ft) vs Time (sec). The y-axis is logarithmic, and the x-axis ranges from 0 to 400 seconds.</p> <table border="1"> <caption>Data points estimated from the graph</caption> <thead> <tr> <th>Time (sec)</th> <th>Displacement (ft)</th> </tr> </thead> <tbody> <tr><td>0</td><td>0.001</td></tr> <tr><td>20</td><td>0.0015</td></tr> <tr><td>40</td><td>0.002</td></tr> <tr><td>60</td><td>0.0025</td></tr> <tr><td>80</td><td>0.003</td></tr> <tr><td>100</td><td>0.0035</td></tr> <tr><td>120</td><td>0.004</td></tr> <tr><td>140</td><td>0.0045</td></tr> <tr><td>160</td><td>0.005</td></tr> <tr><td>180</td><td>0.0055</td></tr> <tr><td>200</td><td>0.006</td></tr> <tr><td>220</td><td>0.0065</td></tr> <tr><td>240</td><td>0.007</td></tr> <tr><td>260</td><td>0.0075</td></tr> <tr><td>280</td><td>0.008</td></tr> <tr><td>300</td><td>0.0085</td></tr> <tr><td>320</td><td>0.009</td></tr> <tr><td>340</td><td>0.0095</td></tr> <tr><td>360</td><td>0.01</td></tr> <tr><td>380</td><td>0.011</td></tr> <tr><td>400</td><td>0.012</td></tr> </tbody> </table>					Time (sec)	Displacement (ft)	0	0.001	20	0.0015	40	0.002	60	0.0025	80	0.003	100	0.0035	120	0.004	140	0.0045	160	0.005	180	0.0055	200	0.006	220	0.0065	240	0.007	260	0.0075	280	0.008	300	0.0085	320	0.009	340	0.0095	360	0.01	380	0.011	400	0.012
Time (sec)	Displacement (ft)																																																
0	0.001																																																
20	0.0015																																																
40	0.002																																																
60	0.0025																																																
80	0.003																																																
100	0.0035																																																
120	0.004																																																
140	0.0045																																																
160	0.005																																																
180	0.0055																																																
200	0.006																																																
220	0.0065																																																
240	0.007																																																
260	0.0075																																																
280	0.008																																																
300	0.0085																																																
320	0.009																																																
340	0.0095																																																
360	0.01																																																
380	0.011																																																
400	0.012																																																

Initial Displacement: 3.84 ft
 Total Well Penetration Depth: 7.64 ft
 Casing Radius: 0.083 ft

HENRY'S DRY CLEANER

Data Set: I:\...\GEO4_out2.aqt
 Date: 01/28/13 Time: 14:47:48

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$$K = 12.43 \text{ ft/day}$$

$$y_0 = 0.05595 \text{ ft}$$

AQUIFER DATA

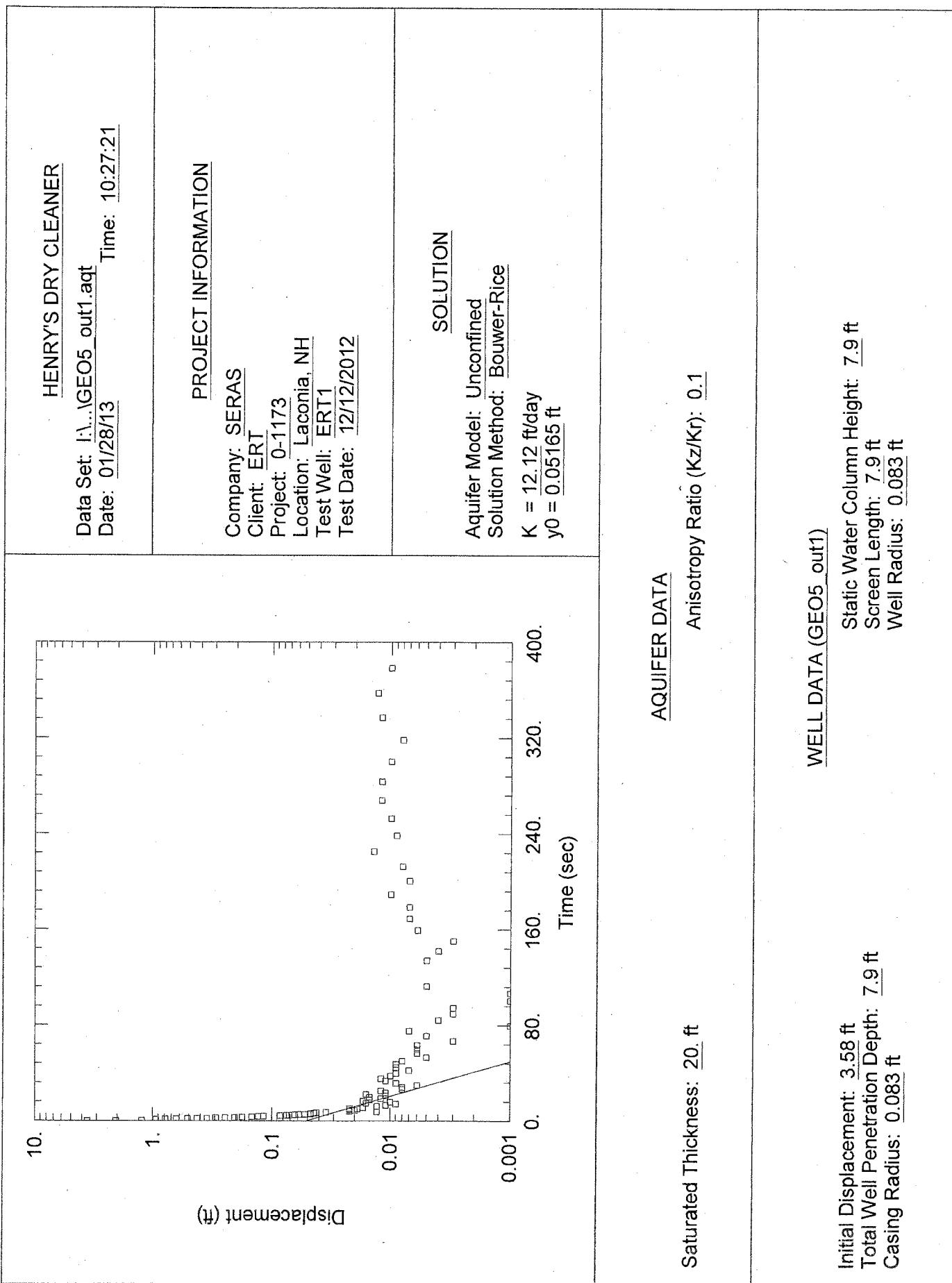
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO4_out2)

Initial Displacement: 3.84 ft
 Total Well Penetration Depth: 7.64 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft
 Screen Length: 7.64 ft
 Well Radius: 0.083 ft

<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: I:\...\GEO5_in1.agt Date: 01/28/13 Time: 10:27:23</p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: SERAS Client: ERT Project: 0-1173 Location: Laconia, NH Test Well: ERT1 Test Date: 12/12/2012</p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: Unconfined Solution Method: Bouwer-Rice $K = 10.42 \text{ ft/day}$ $y_0 = 0.05591 \text{ ft}$</p>																																												
<table border="1"> <caption>Data points estimated from the graph</caption> <thead> <tr> <th>Time (sec)</th> <th>Displacement (ft)</th> </tr> </thead> <tbody> <tr><td>0</td><td>0.001</td></tr> <tr><td>20</td><td>0.002</td></tr> <tr><td>40</td><td>0.003</td></tr> <tr><td>60</td><td>0.004</td></tr> <tr><td>80</td><td>0.005</td></tr> <tr><td>100</td><td>0.006</td></tr> <tr><td>120</td><td>0.007</td></tr> <tr><td>140</td><td>0.008</td></tr> <tr><td>160</td><td>0.009</td></tr> <tr><td>180</td><td>0.010</td></tr> <tr><td>200</td><td>0.012</td></tr> <tr><td>220</td><td>0.014</td></tr> <tr><td>240</td><td>0.016</td></tr> <tr><td>260</td><td>0.018</td></tr> <tr><td>280</td><td>0.020</td></tr> <tr><td>300</td><td>0.022</td></tr> <tr><td>320</td><td>0.025</td></tr> <tr><td>340</td><td>0.028</td></tr> <tr><td>360</td><td>0.030</td></tr> <tr><td>380</td><td>0.032</td></tr> <tr><td>400</td><td>0.035</td></tr> </tbody> </table>			Time (sec)	Displacement (ft)	0	0.001	20	0.002	40	0.003	60	0.004	80	0.005	100	0.006	120	0.007	140	0.008	160	0.009	180	0.010	200	0.012	220	0.014	240	0.016	260	0.018	280	0.020	300	0.022	320	0.025	340	0.028	360	0.030	380	0.032	400	0.035
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		<p><u>WELL DATA (GEO5_in1)</u></p> <p>Initial Displacement: 3.58 ft Total Well Penetration Depth: 7.9 ft Casing Radius: 0.083 ft</p>																																												



HENRY'S DRY CLEANER

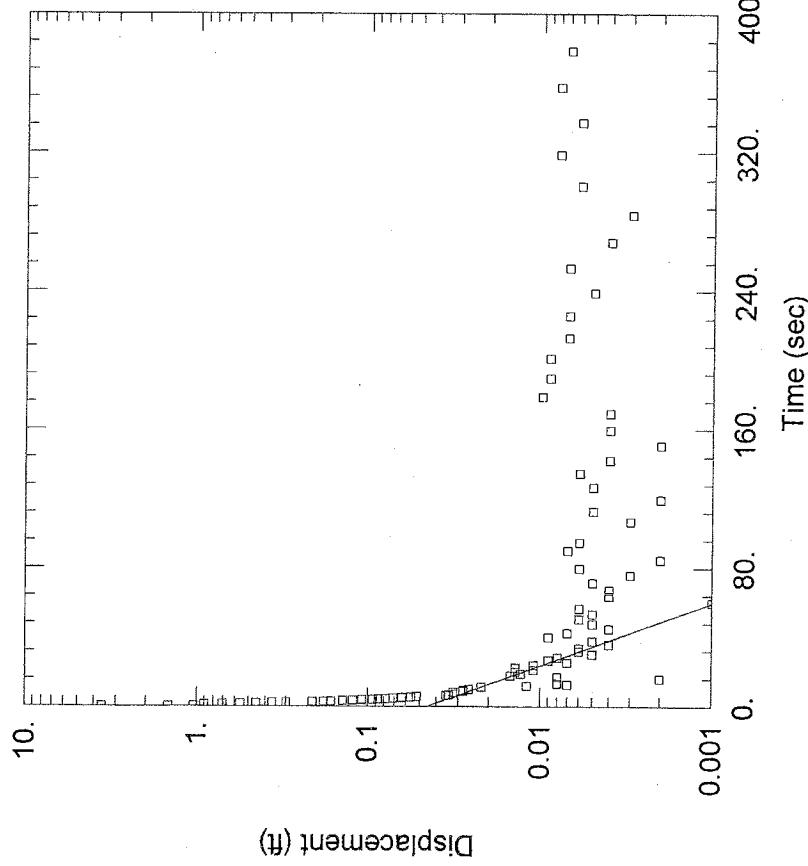
Data Set: I:\...\GEO5_out2.aqt
 Date: 01/28/13 Time: 10:27:21

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 9.753 \text{ ft/day}$
 $y_0 = 0.04539 \text{ ft}$



Saturated Thickness: 20. ft

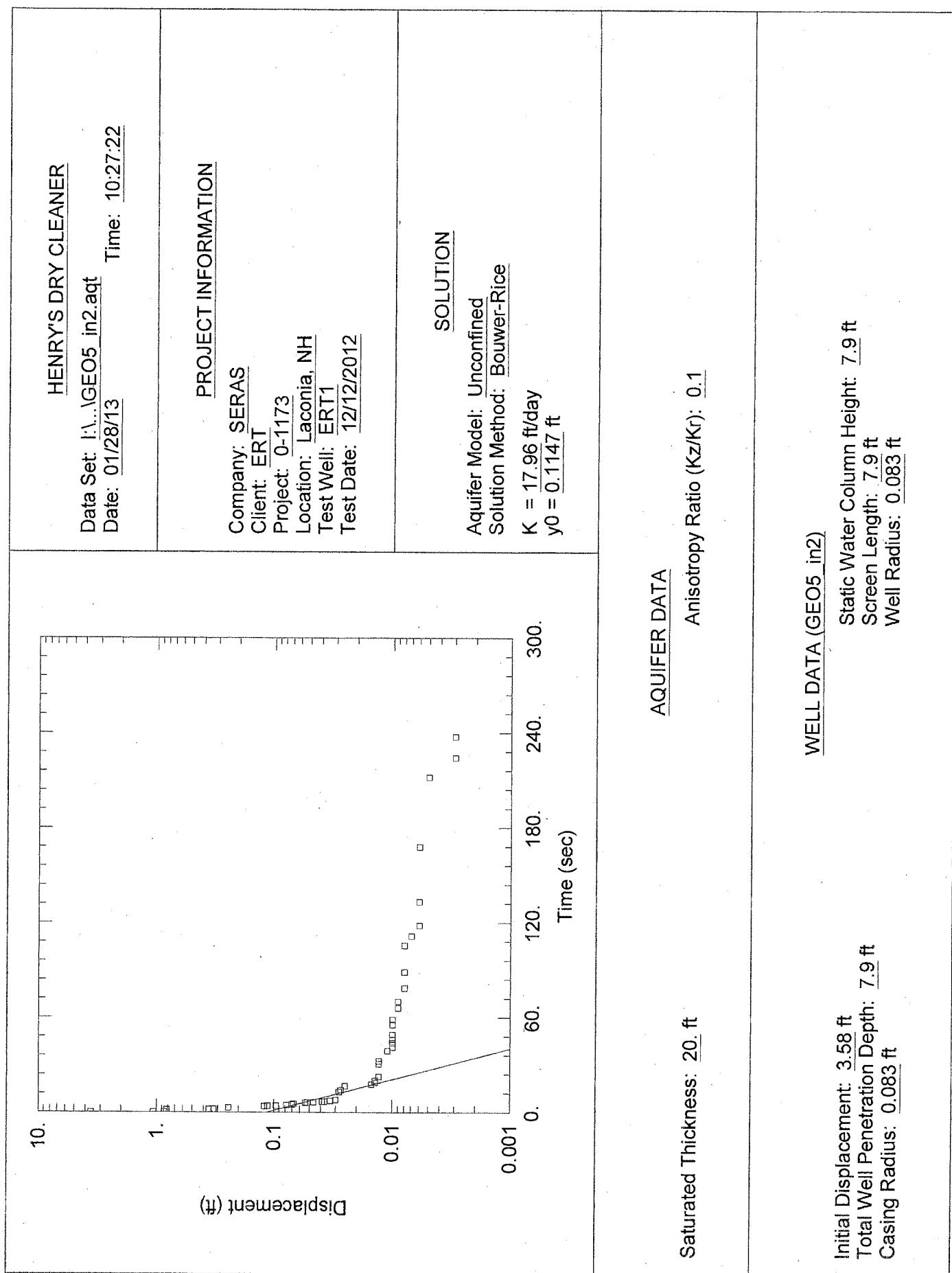
AQUIFER DATA

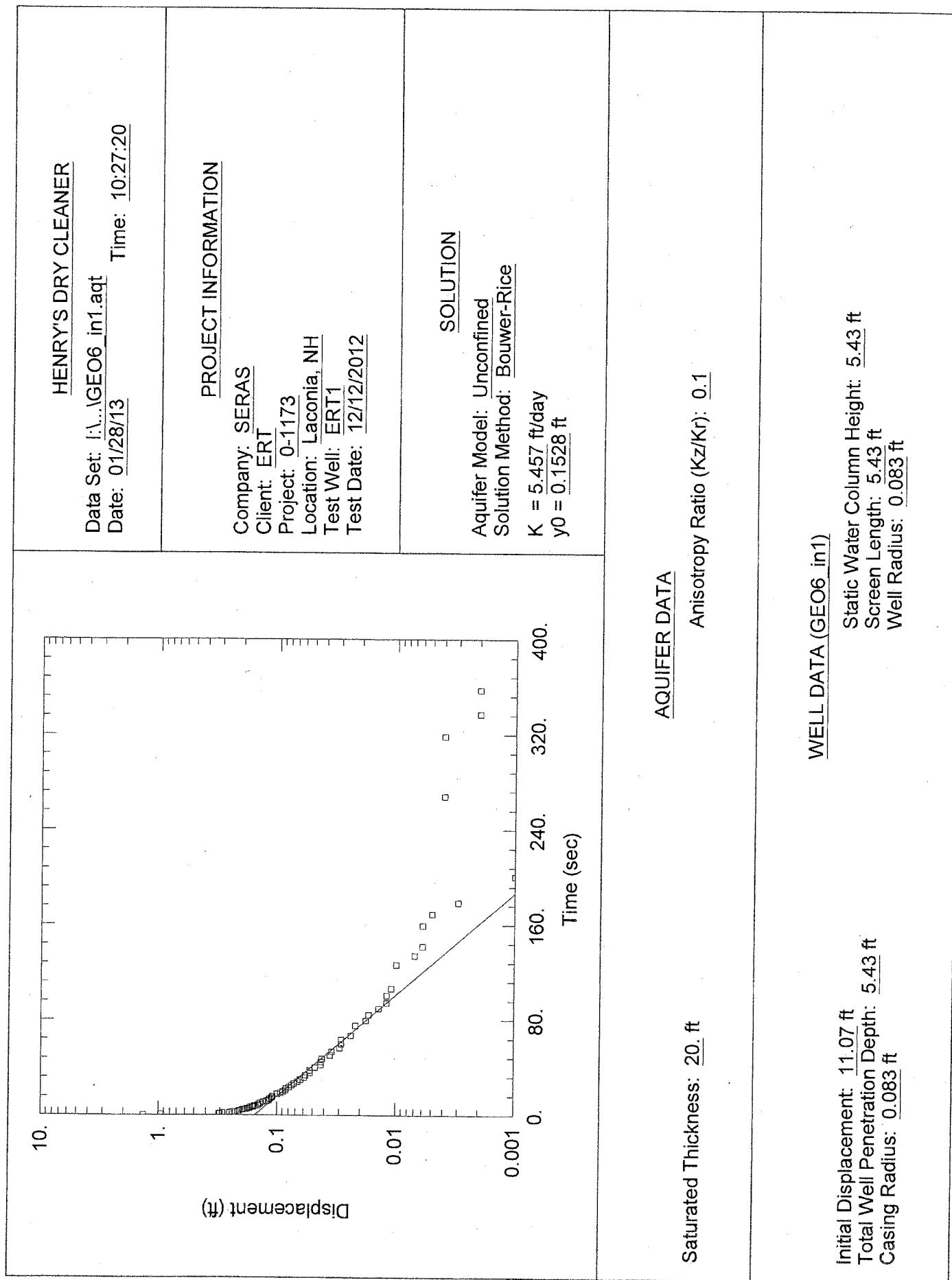
Anisotropy Ratio (Kz/Kr): 0.1

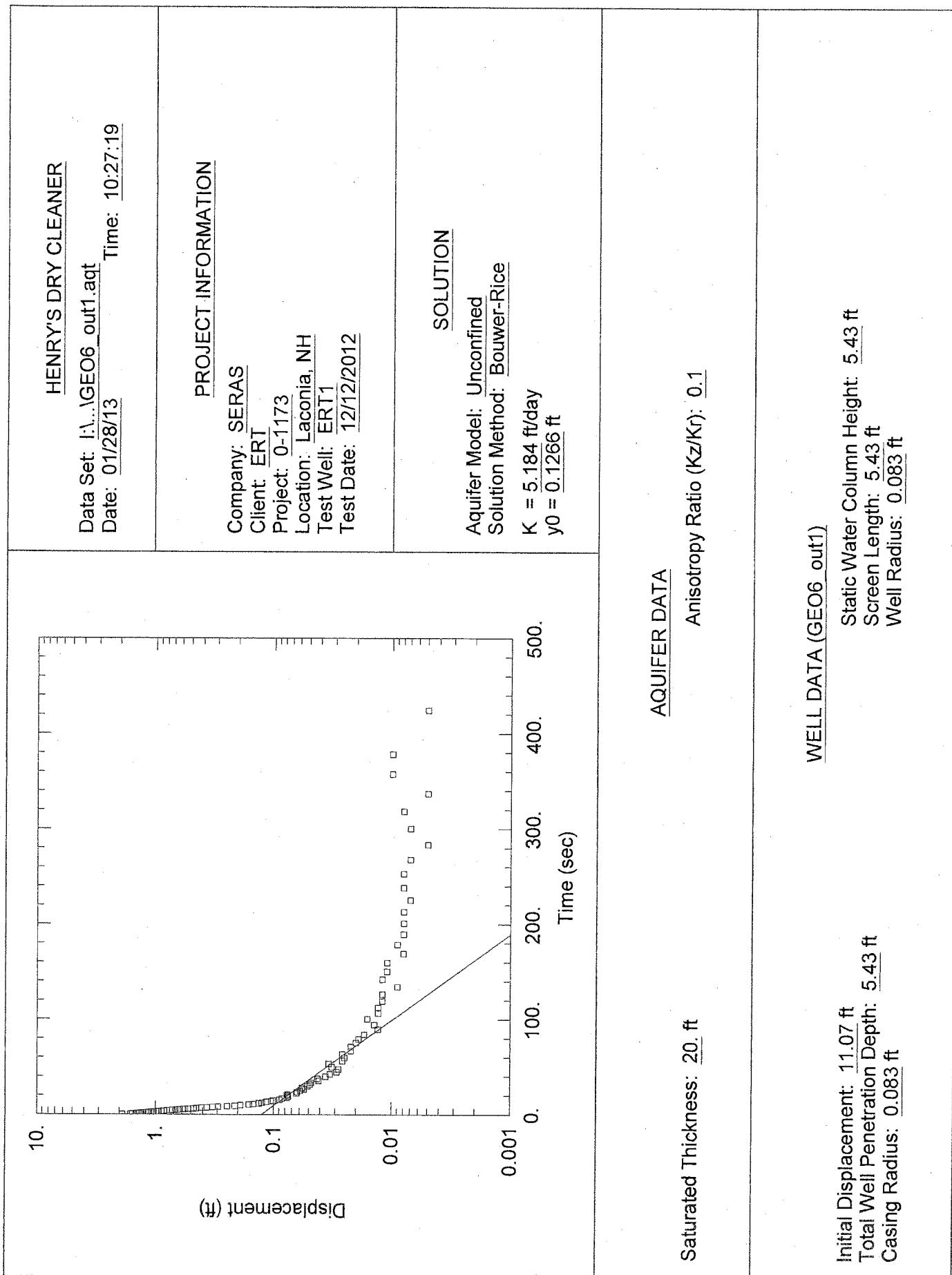
Initial Displacement: 3.58 ft
 Total Well Penetration Depth: 7.9 ft
 Casing Radius: 0.083 ft

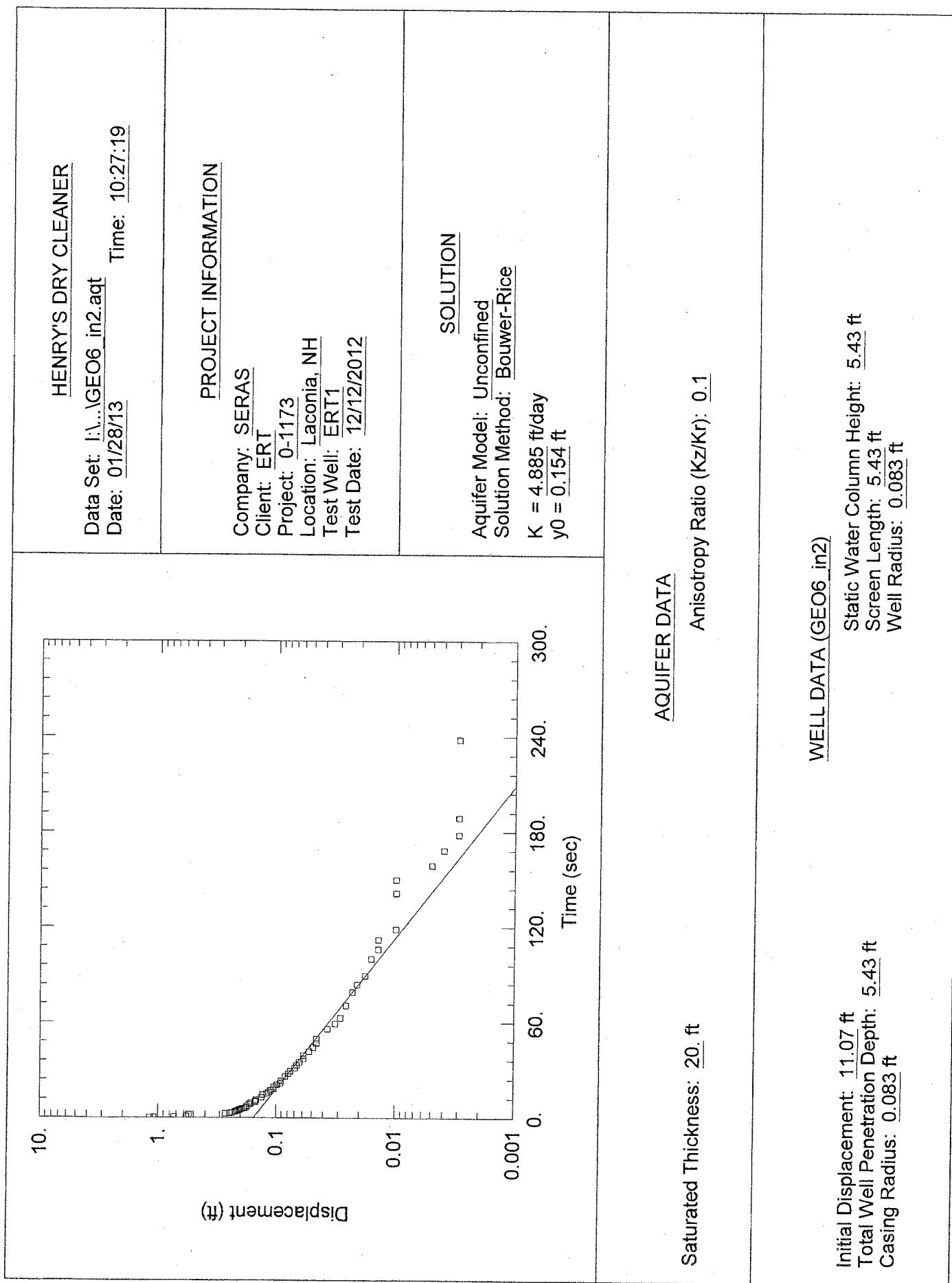
WELL DATA (GEO5_out2)

Static Water Column Height: 7.9 ft
 Screen Length: 7.9 ft
 Well Radius: 0.083 ft









HENRY'S DRY CLEANER

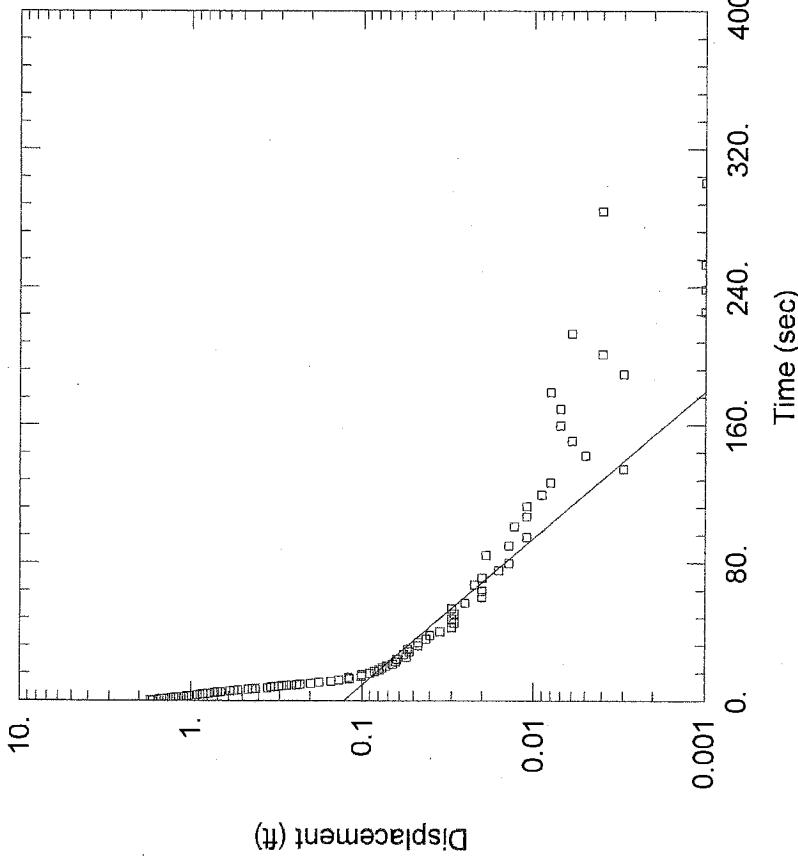
Data Set: I:\...\GEO6_out2.aqt
 Date: 01/28/13 Time: 10:27:18

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 5.474 \text{ ft/day}$
 $y_0 = 0.1276 \text{ ft}$

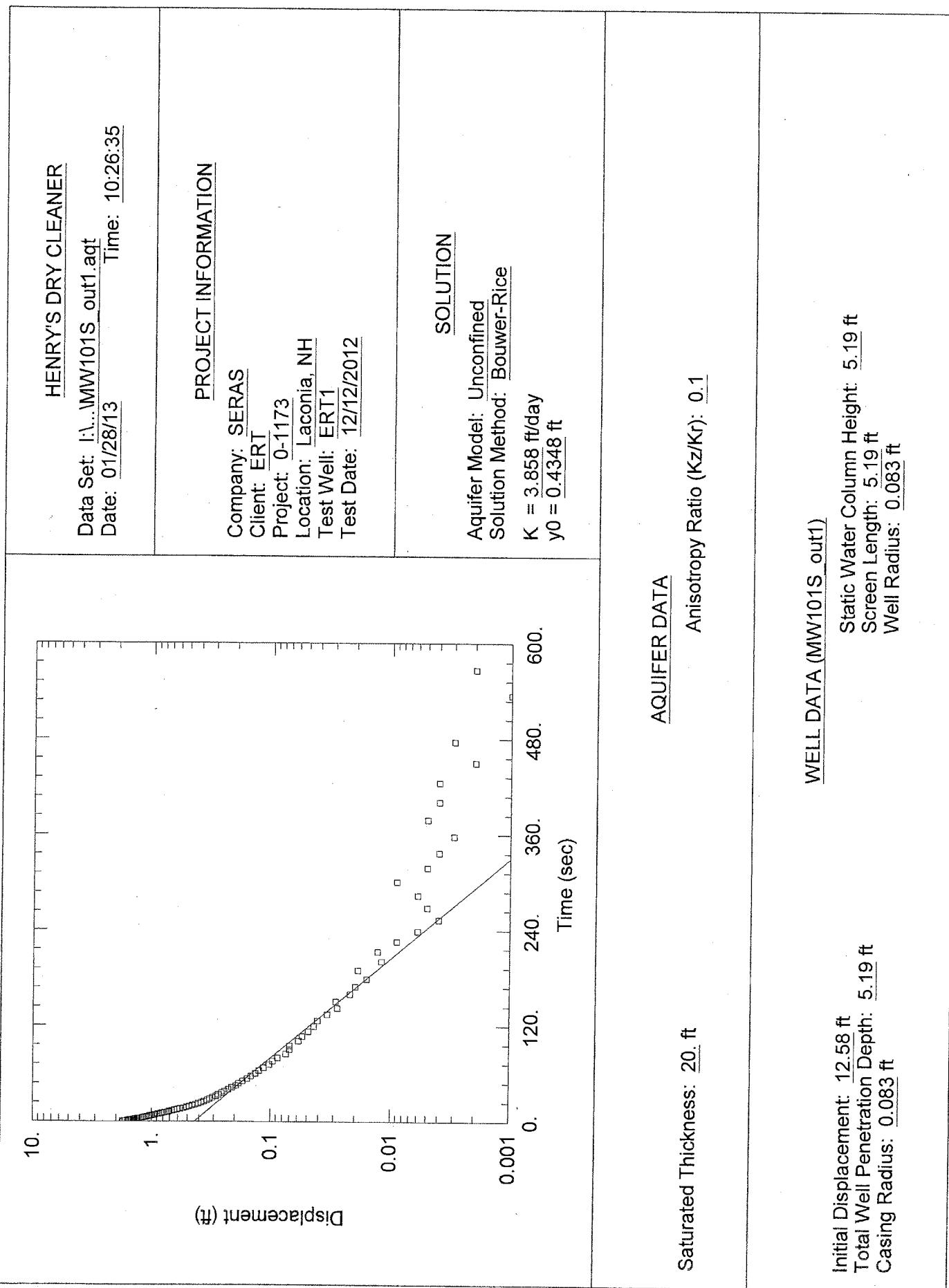
AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 0.1

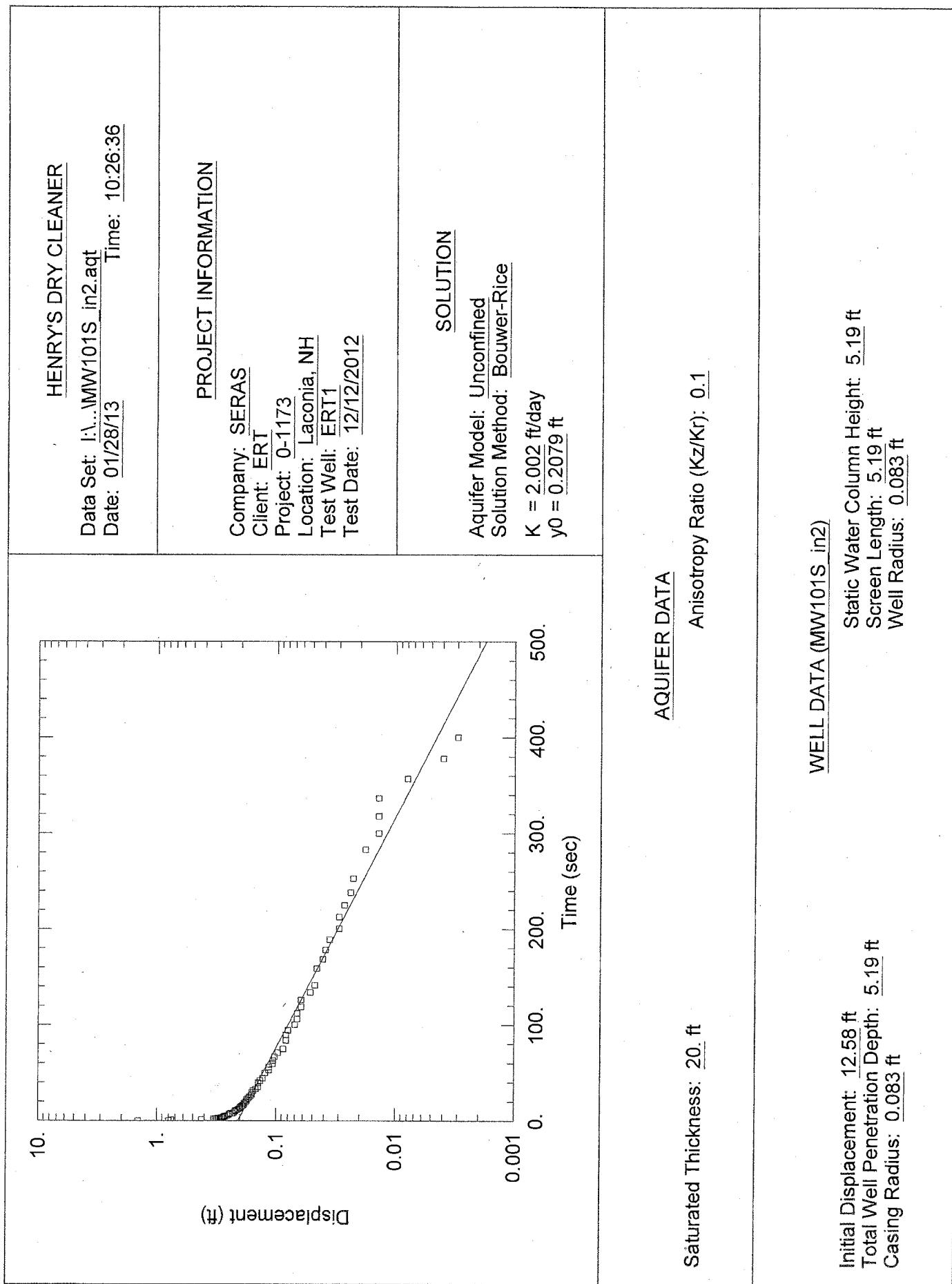
WELL DATA (GEO6_out2)

Static Water Column Height: 5.43 ft
 Screen Length: 5.43 ft
 Well Radius: 0.083 ft

Initial Displacement: 11.07 ft
 Total Well Penetration Depth: 5.43 ft
 Casing Radius: 0.083 ft



<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: <u>I:\...\MW101S_in1.aqt</u> Date: <u>01/28/13</u> Time: <u>10:26:37</u></p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u></p> $K = \frac{2.592}{0.2183} \text{ ft/day}$ $y_0 = 0.2183 \text{ ft}$	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_x): <u>0.1</u></p>	<p><u>WELL DATA (MW101S_in1)</u></p> <p>Saturated Thickness: <u>20. ft</u></p> <p>Initial Displacement: <u>12.58 ft</u> Total Well Penetration Depth: <u>5.19 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>5.19 ft</u> Screen Length: <u>5.19 ft</u> Well Radius: <u>0.083 ft</u></p>



10.

1.

Displacement (ft)

0.1

0.001

0.01

0.

100.

200.

300.

400.

500.

Time (sec)

Saturated Thickness: 20. ft

WELL DATA (MW101S.in2)

Initial Displacement: 12.58 ft
 Total Well Penetration Depth: 5.19 ft
 Casing Radius: 0.083 ft

HENRY'S DRY CLEANER

Data Set: I:\...\MW101S_out2.aqt
 Date: 01/28/13 Time: 10:26:34

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

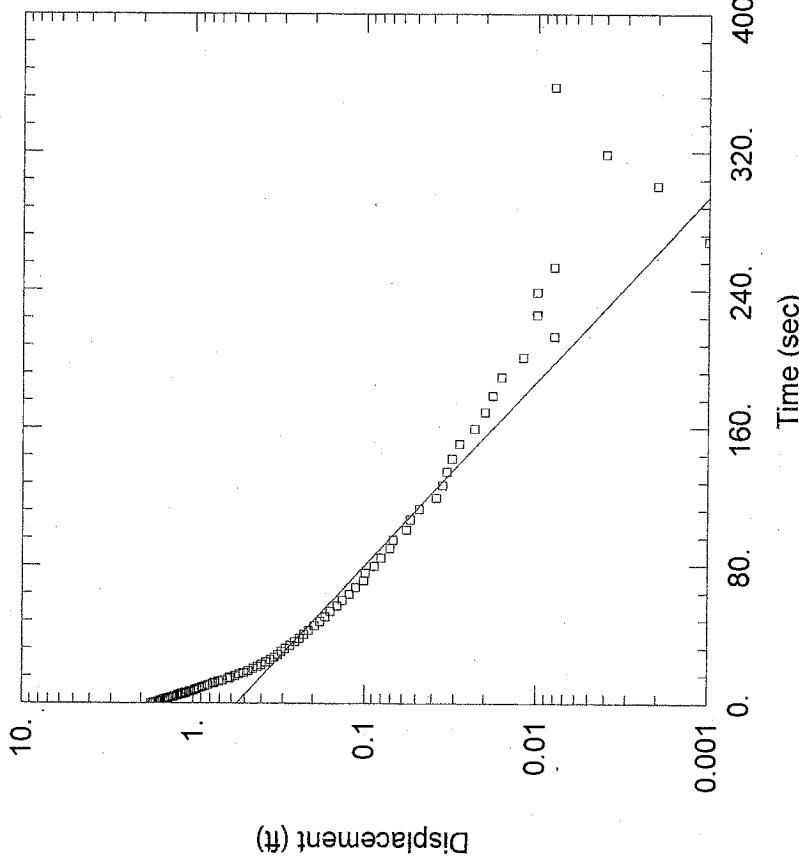
Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.512 \text{ ft/day}$
 $y_0 = 0.5595 \text{ ft}$

AQUIFER DATA

Anisotropy Ratio (K_z/K_r): 0.1

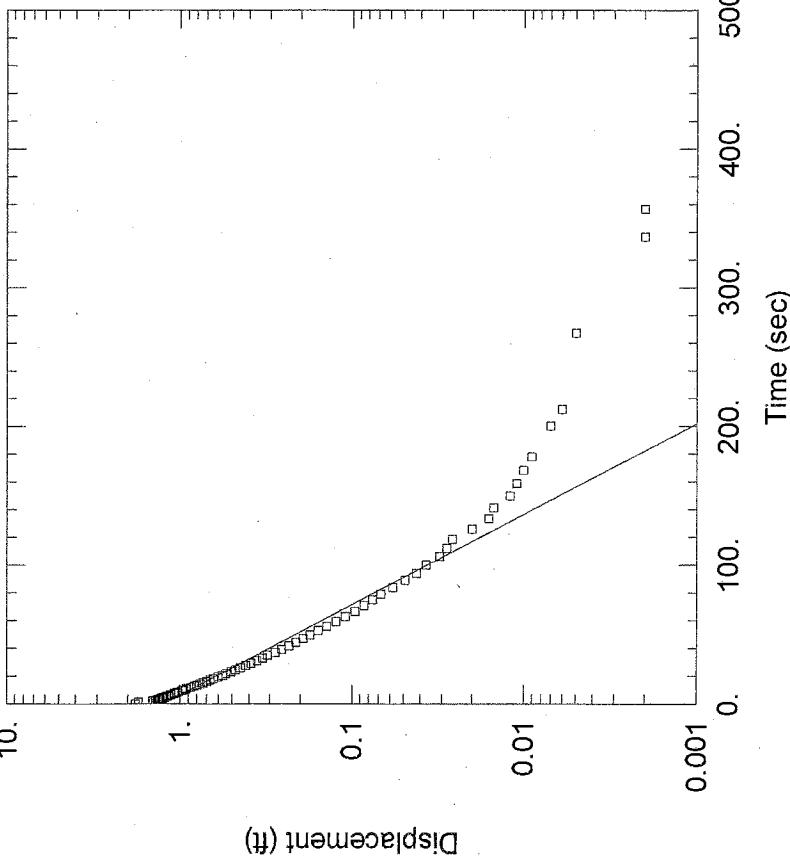
WELL DATA (MW101S_out2)

Initial Displacement: 12.58 ft
 Total Well Penetration Depth: 5.19 ft
 Casing Radius: 0.083 ft
 Static Water Column Height: 5.19 ft
 Screen Length: 5.19 ft
 Well Radius: 0.083 ft



Saturated Thickness: 20. ft

10.

HENRY'S DRY CLEANER

Data Set: I:\...\MW101D_in1.aqt
 Date: 01/28/13 Time: 10:27:18

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.731 \text{ ft/day}$
 $y_0 = 1.244 \text{ ft}$

Saturated Thickness: 25. ft

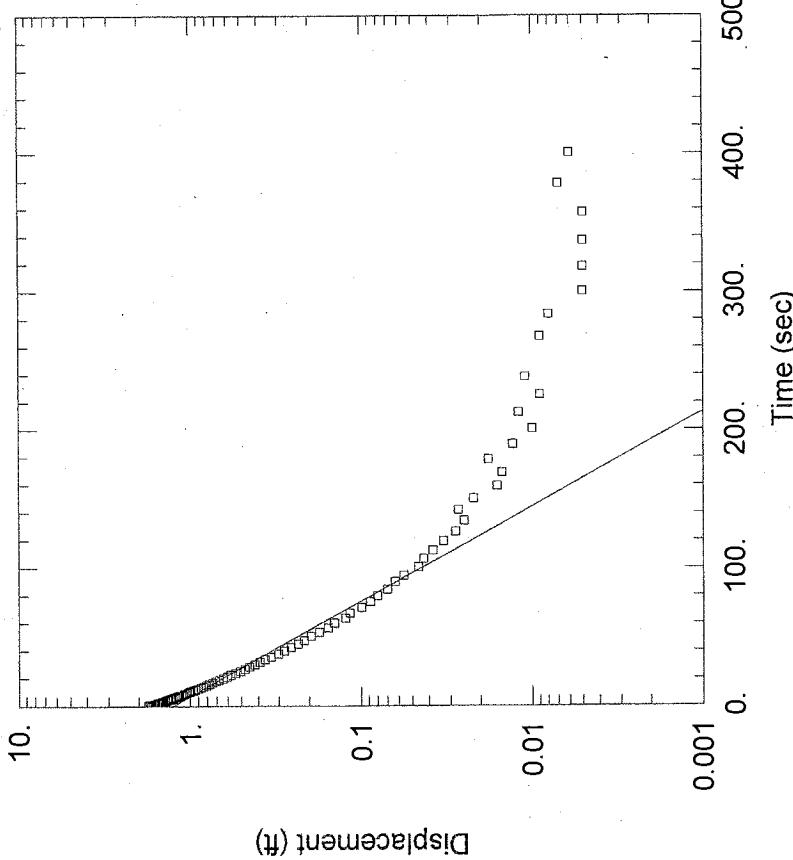
AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW101D_in1)

Initial Displacement: 12.63 ft
 Total Well Penetration Depth: 9.37 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 9.37 ft
 Screen Length: 9.37 ft
 Well Radius: 0.083 ft

HENRY'S DRY CLEANER

Data Set !:\..\MW101D.out1.aqt
 Date: 01/28/13 Time: 10:27:17

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.496 \text{ ft/day}$
 $y_0 = 1.272 \text{ ft}$

AQUIFER DATA

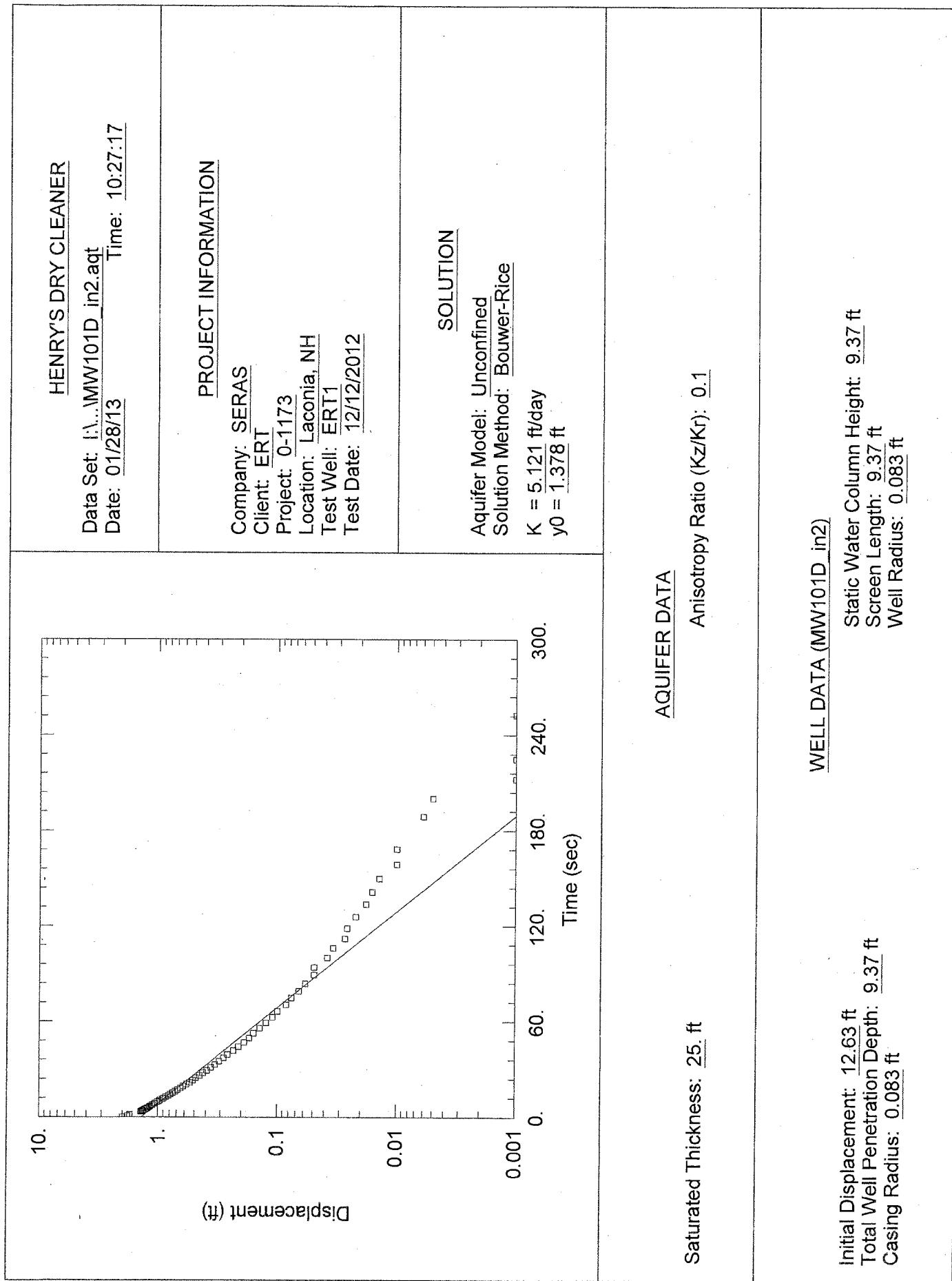
Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW101D.out1)

Static Water Column Height: 9.37 ft
 Screen Length: 9.37 ft
 Well Radius: 0.083 ft

Initial Displacement: 12.63 ft
 Total Well Penetration Depth: 9.37 ft
 Casing Radius: 0.083 ft

Saturated Thickness: 25. ft



HENRY'S DRY CLEANER

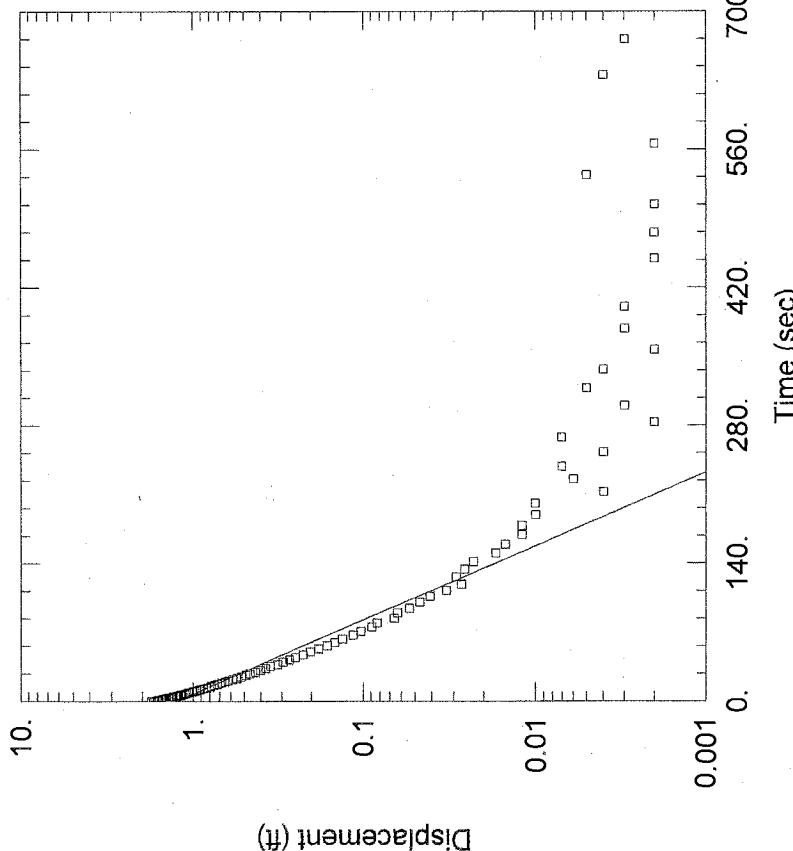
Data Set: I:\..\MW101D\out2.aqt
 Date: 01/28/13 Time: 10:27:16

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: O-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.116 \text{ ft/day}$
 $y_0 = 1.263 \text{ ft}$

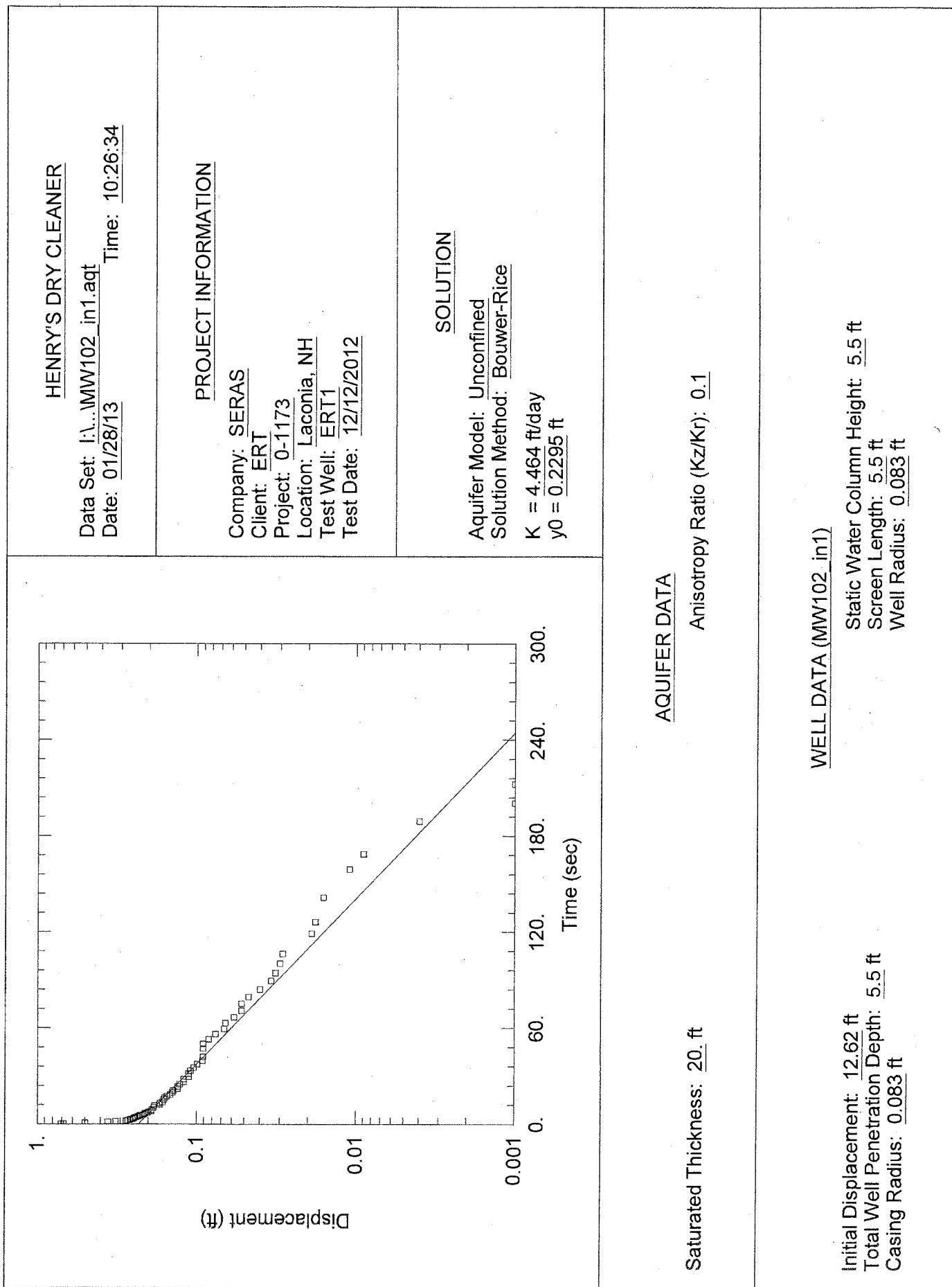
AQUIFER DATA

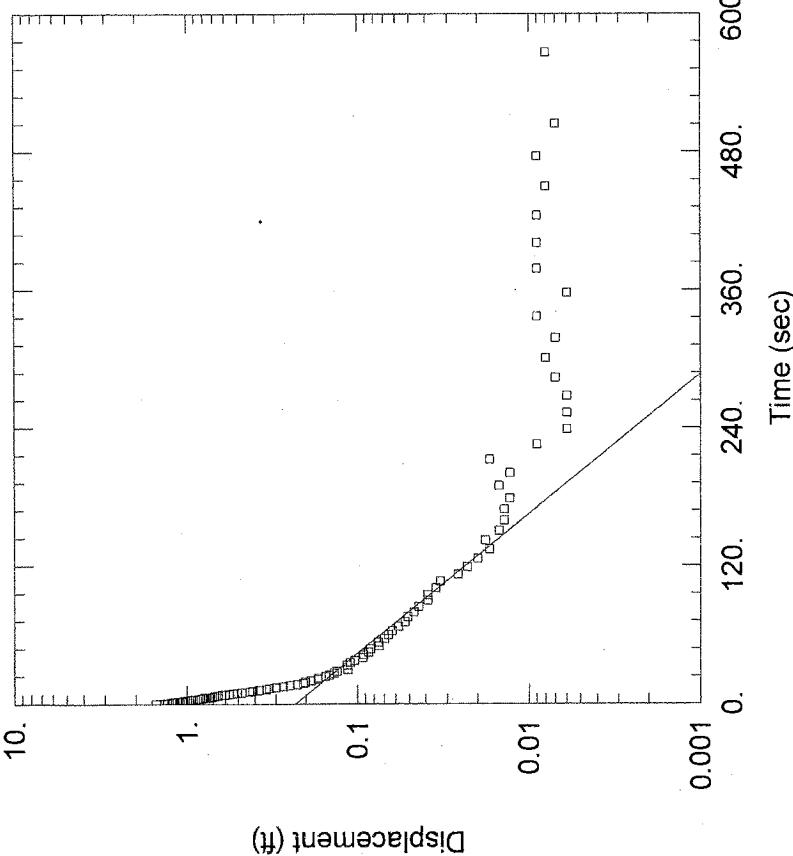
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW101D\out2)

Static Water Column Height: 9.37 ft
 Screen Length: 9.37 ft
 Well Radius: 0.083 ft

Initial Displacement: 12.63 ft
 Total Well Penetration Depth: 9.37 ft
 Casing Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW102_out1.aqt
 Date: 01/28/13 Time: 10:26:33

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.803 \text{ ft/day}$
 $y_0 = 0.2294 \text{ ft}$

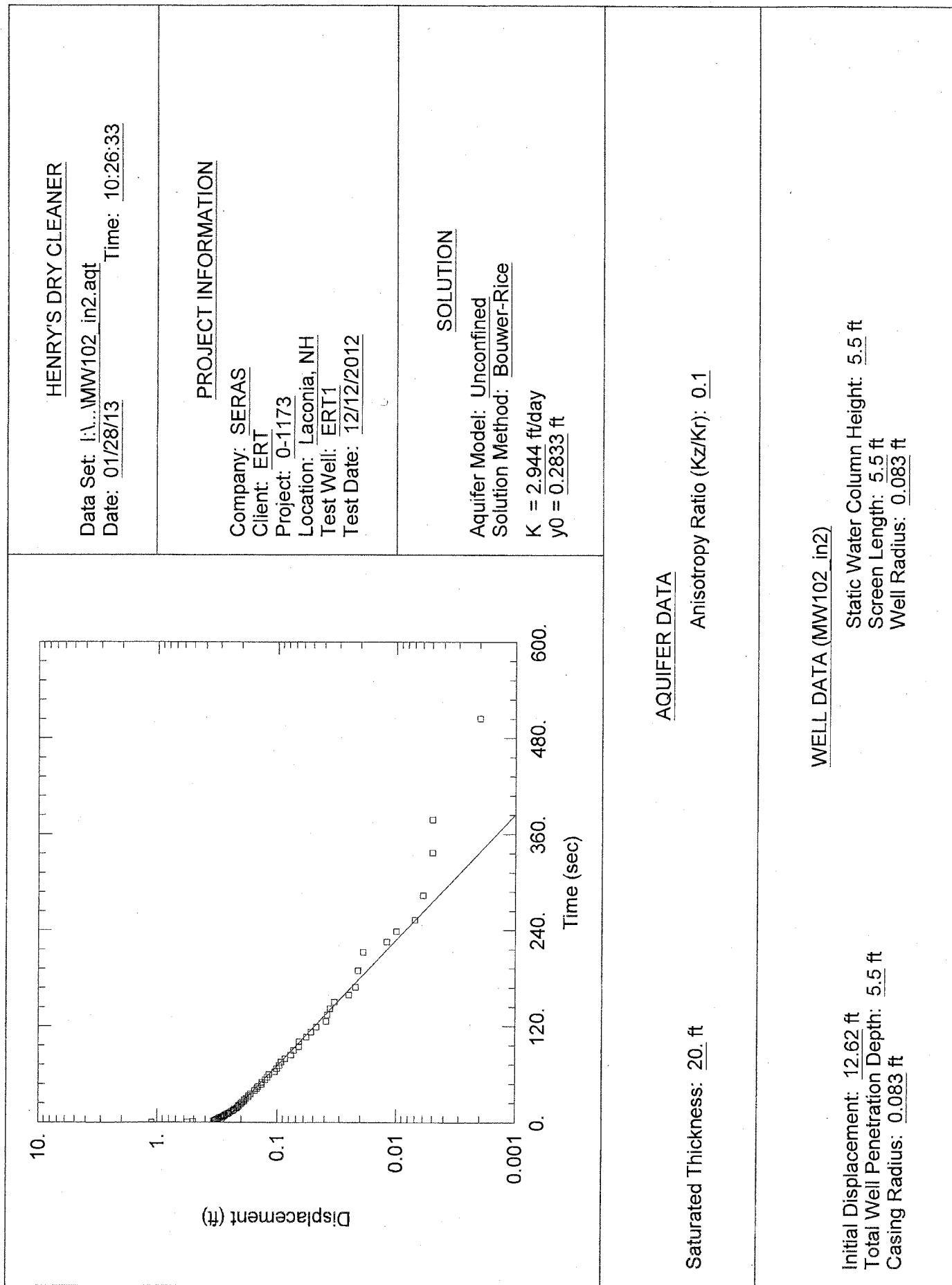
AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW102_out1)

Initial Displacement: 12.62 ft
 Total Well Penetration Depth: 5.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.5 ft
 Screen Length: 5.5 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

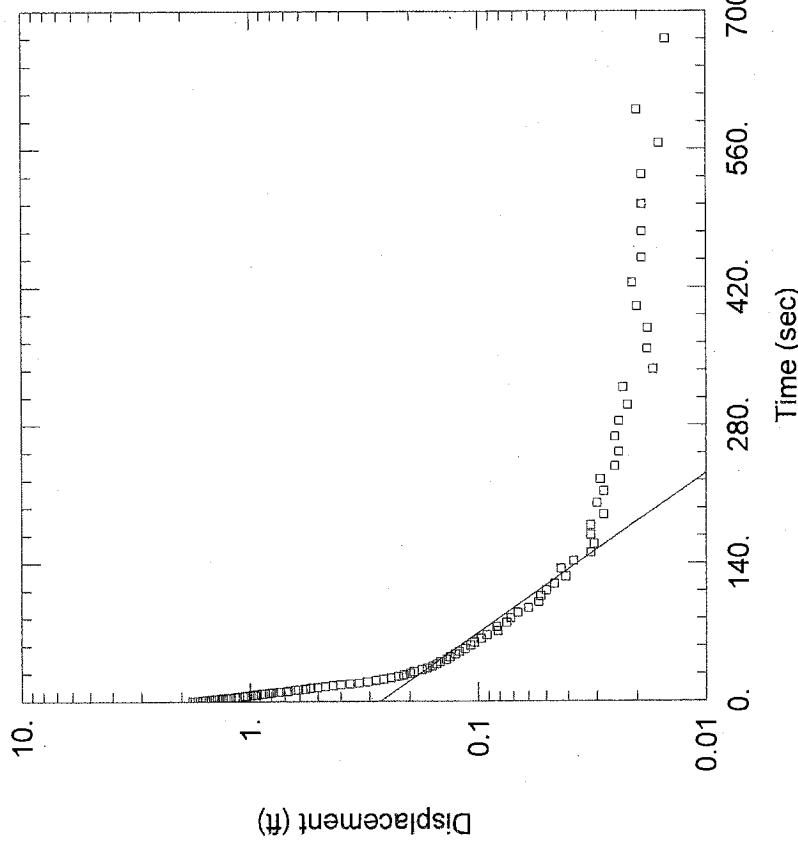
Data Set: I:\...\MW102_out2.aqt
 Date: 01/28/13 Time: 10:26:32

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 2.85 \text{ ft/day}$
 $y_0 = 0.2681 \text{ ft}$

AQUIFER DATA

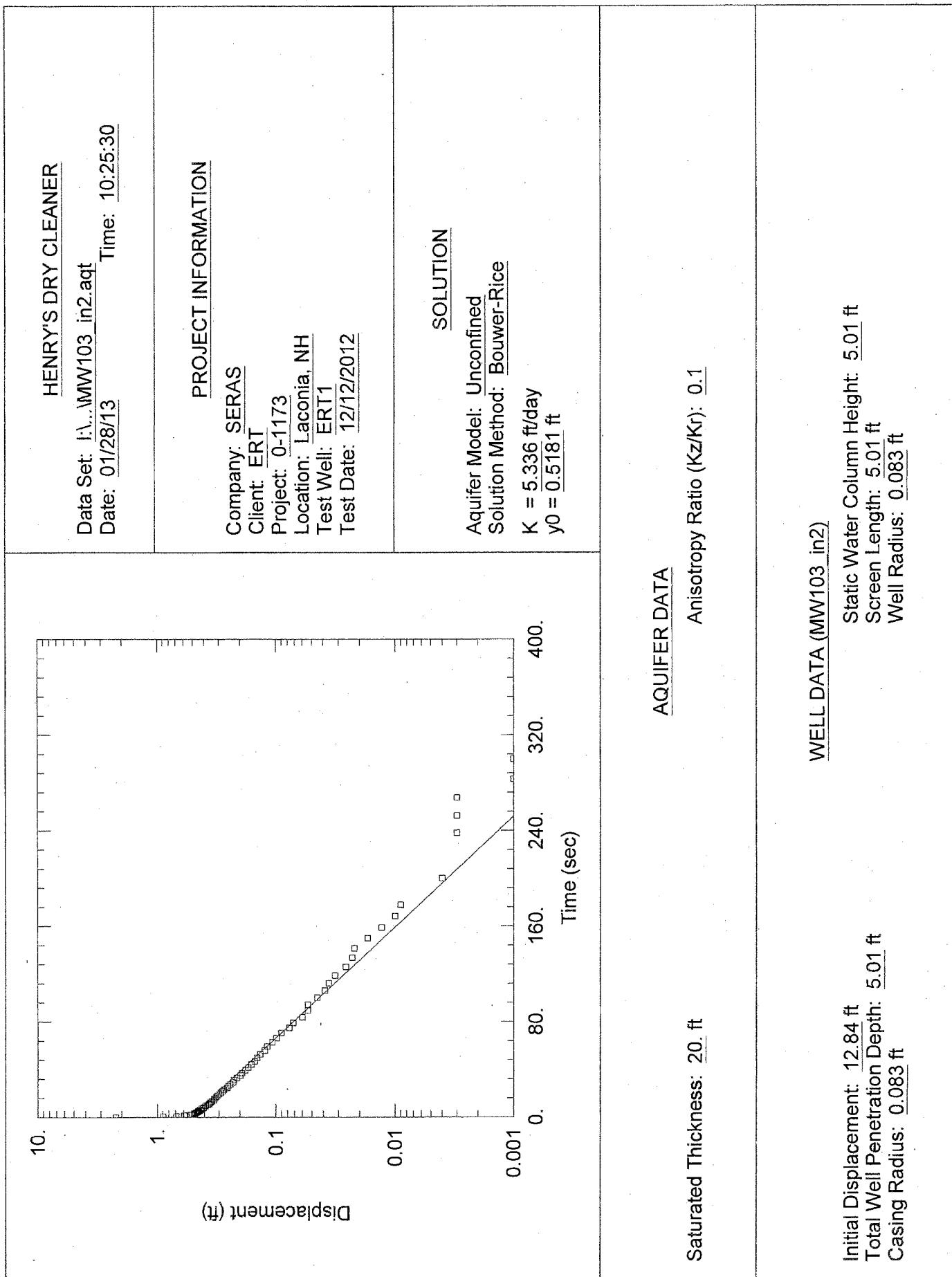
Anisotropy Ratio (K_z/K_x): 0.1

WELL DATA (MW102_out2)

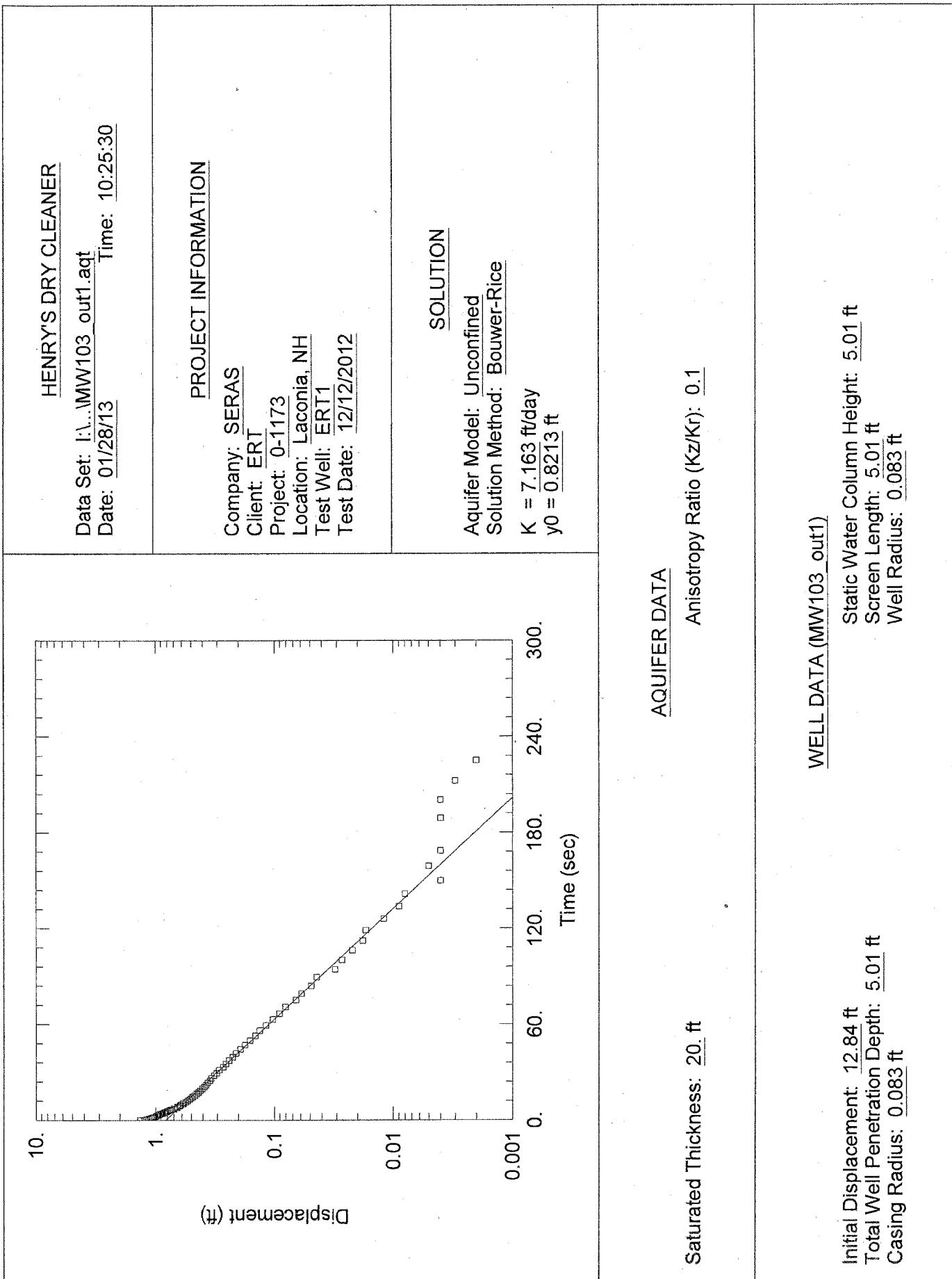
Initial Displacement: 12.62 ft
 Total Well Penetration Depth: 5.5 ft
 Casing Radius: 0.083 ft
 Static Water Column Height: 5.5 ft
 Screen Length: 5.5 ft
 Well Radius: 0.083 ft

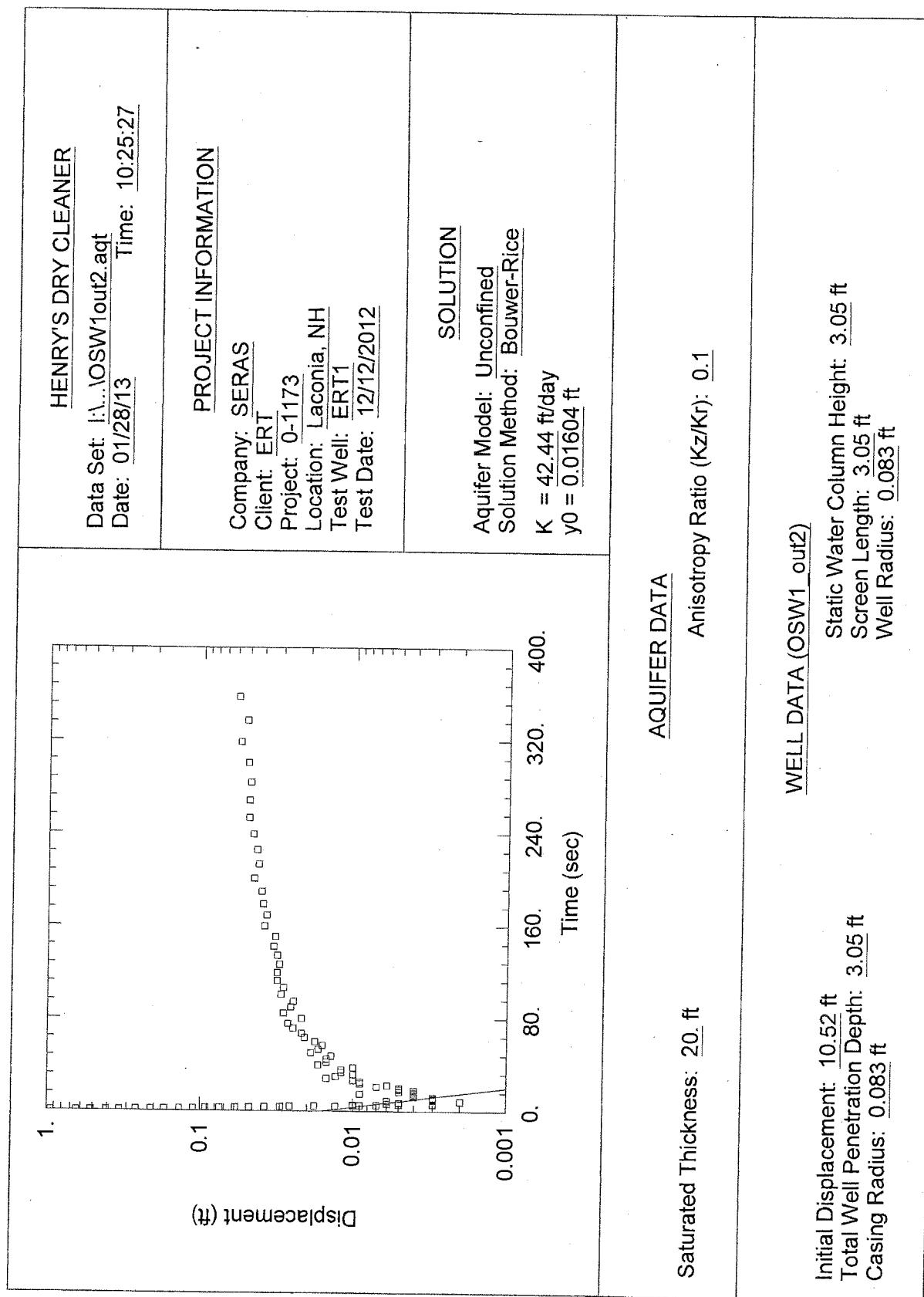
Saturated Thickness: 20. ft

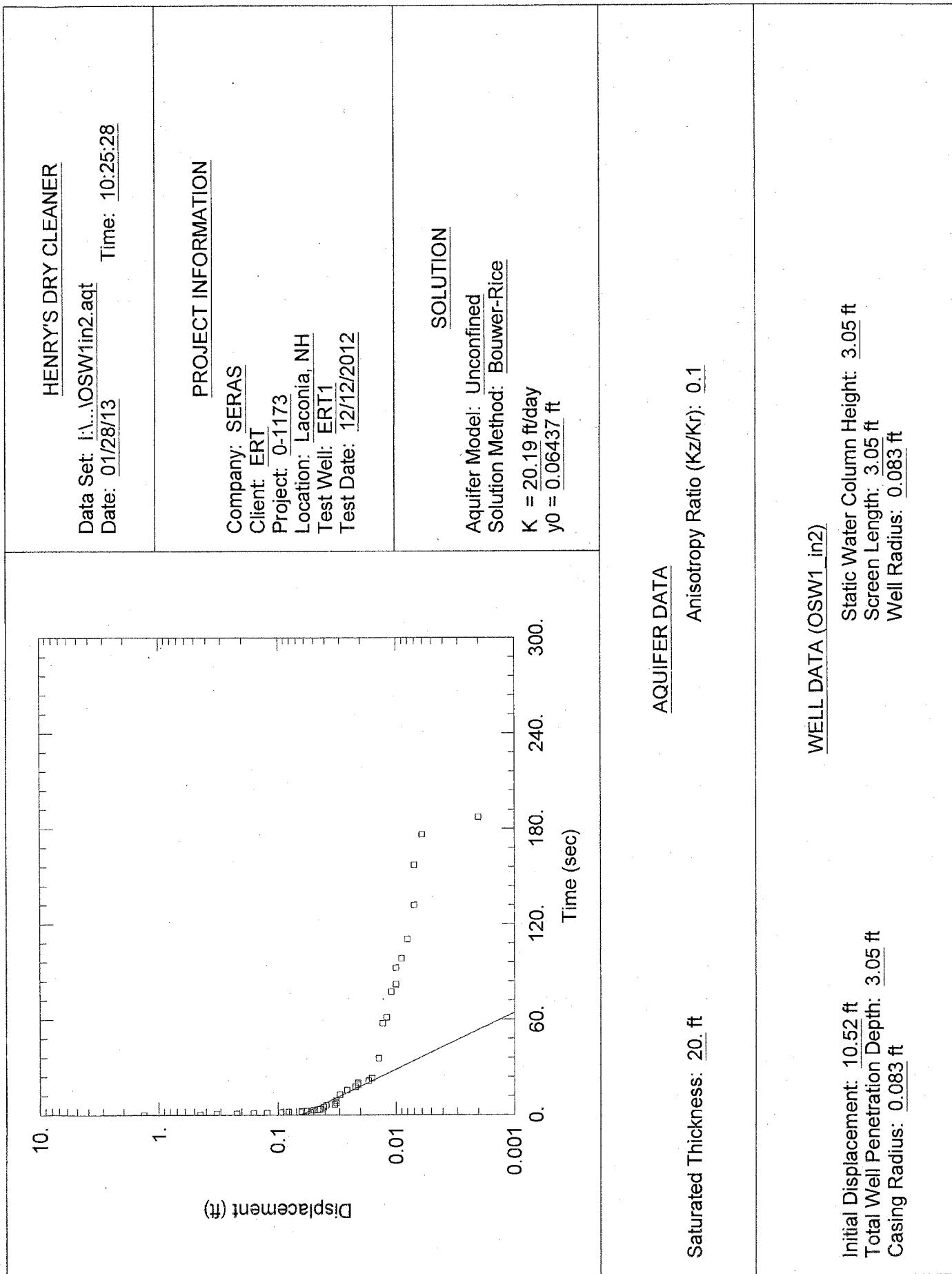
<p>HENRY'S DRY CLEANER</p> <p>Data Set: <u>1:\MW103_out2.aqt</u> Date: <u>01/28/13</u> Time: <u>10:25:29</u></p>	<p>PROJECT INFORMATION</p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p>SOLUTION</p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = 5.198 \text{ ft/day}$ $y_0 = 1.153 \text{ ft}$</p>	<p>AQUIFER DATA</p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p>	<p>WELL DATA (MW103_out2)</p> <p>Initial Displacement: <u>12.84 ft</u> Total Well Penetration Depth: <u>5.01 ft</u> Casing Radius: <u>0.083 ft</u></p> <p>Static Water Column Height: <u>5.01 ft</u> Screen Length: <u>5.01 ft</u> Well Radius: <u>0.083 ft</u></p>
	<p>Saturated Thickness: <u>20 ft</u></p>			

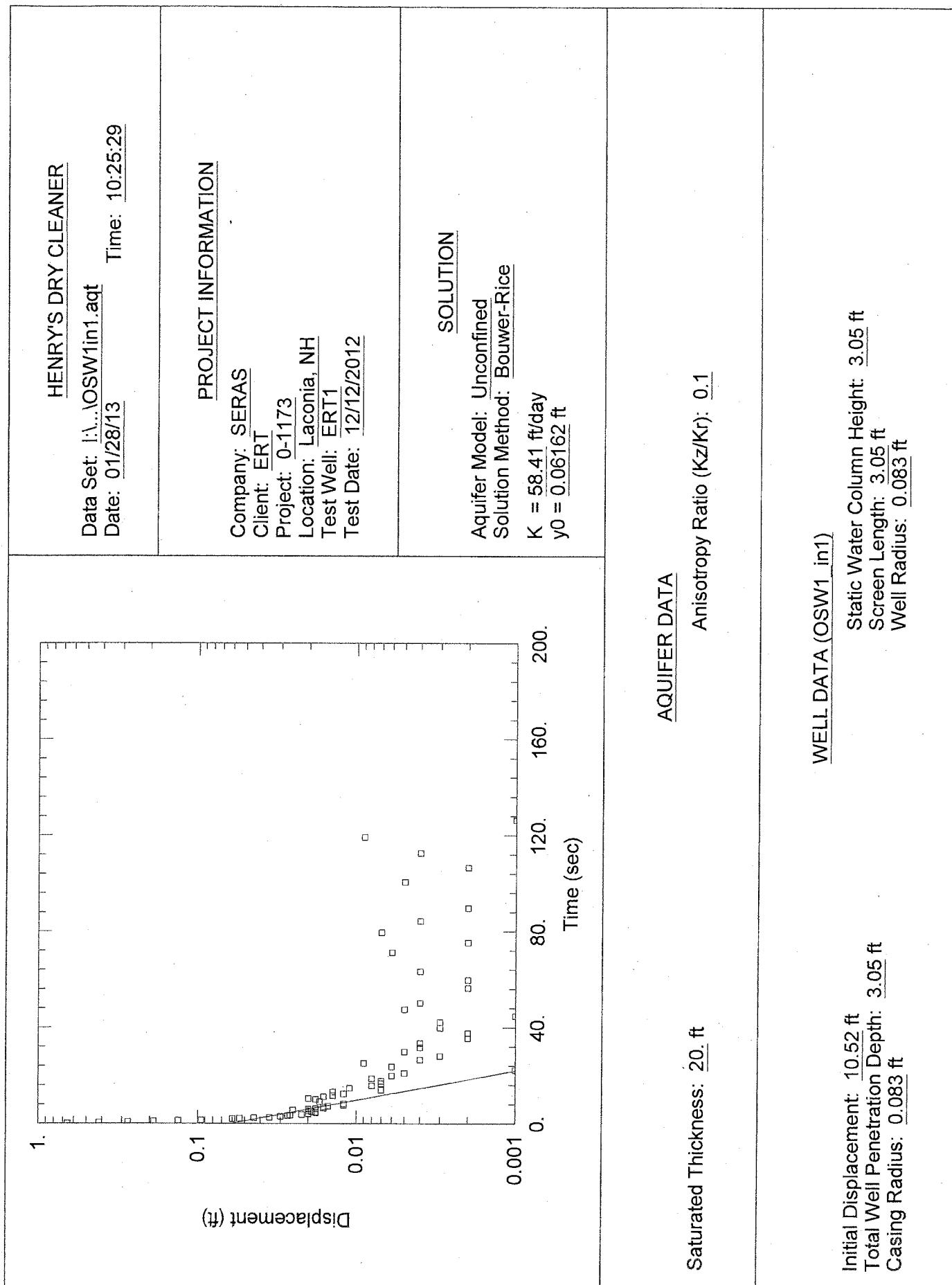


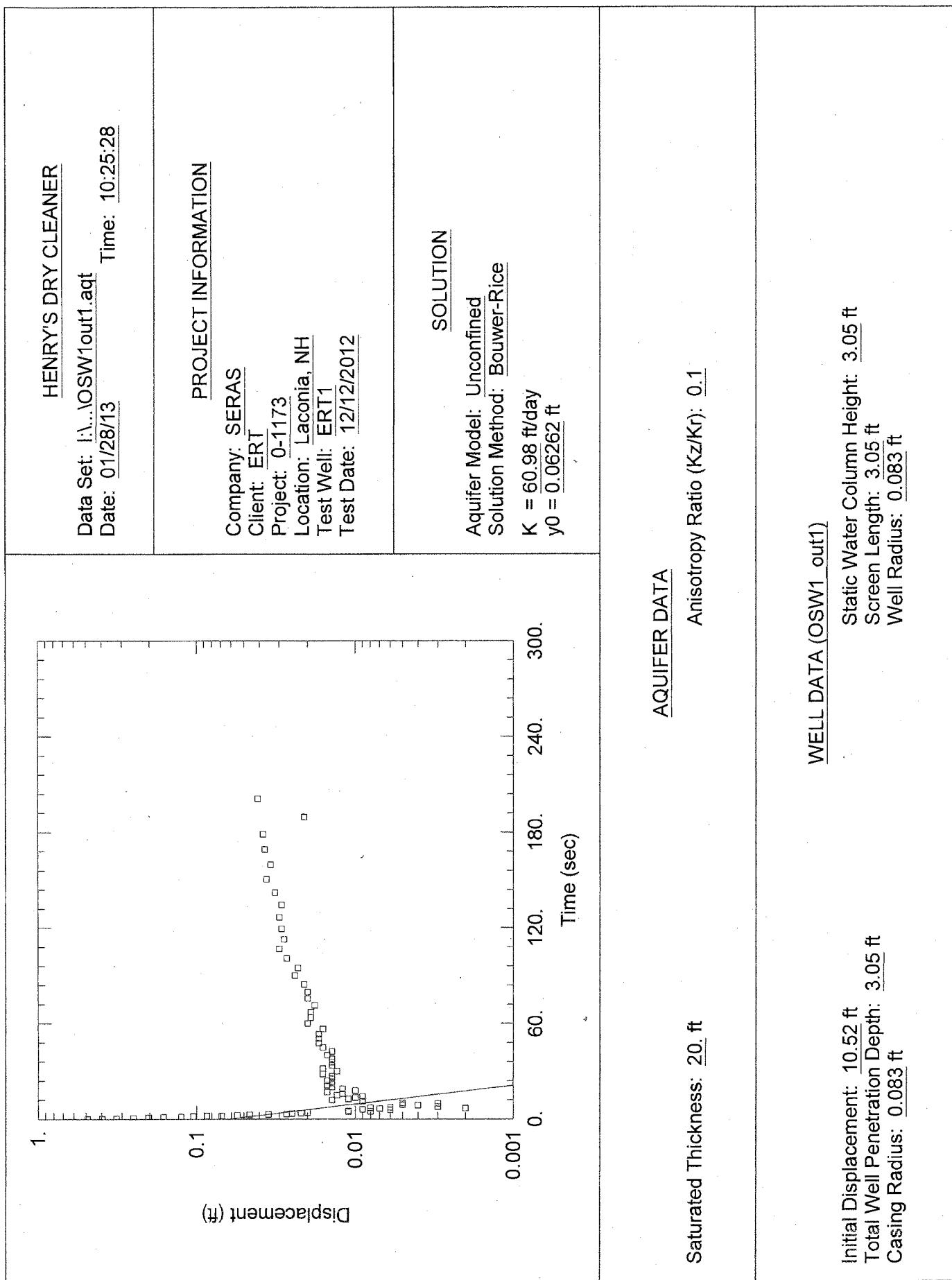
<p><u>HENRY'S DRY CLEANER</u></p> <p>Data Set: <u>I:\..\MW103\in1.aqt</u> Date: <u>01/28/13</u> Time: <u>10:25:31</u></p>	<p><u>PROJECT INFORMATION</u></p> <p>Company: <u>SERAS</u> Client: <u>ERT</u> Project: <u>0-1173</u> Location: <u>Laconia, NH</u> Test Well: <u>ERT1</u> Test Date: <u>12/12/2012</u></p>	<p><u>SOLUTION</u></p> <p>Aquifer Model: <u>Unconfined</u> Solution Method: <u>Bouwer-Rice</u> $K = \frac{7.401}{0.3638}$ ft/day $y_0 = 0.3638$ ft</p>	<p><u>AQUIFER DATA</u></p> <p>Anisotropy Ratio (K_z/K_r): <u>0.1</u></p>	<p><u>WELL DATA (MW103 in1)</u></p> <p>Initial Displacement: <u>12.84</u> ft Total Well Penetration Depth: <u>5.01</u> ft Casing Radius: <u>0.083</u> ft</p> <p>Static Water Column Height: <u>5.01</u> ft Screen Length: <u>5.01</u> ft Well Radius: <u>0.083</u> ft</p>
	<p>Saturated Thickness: <u>20.</u> ft</p>			

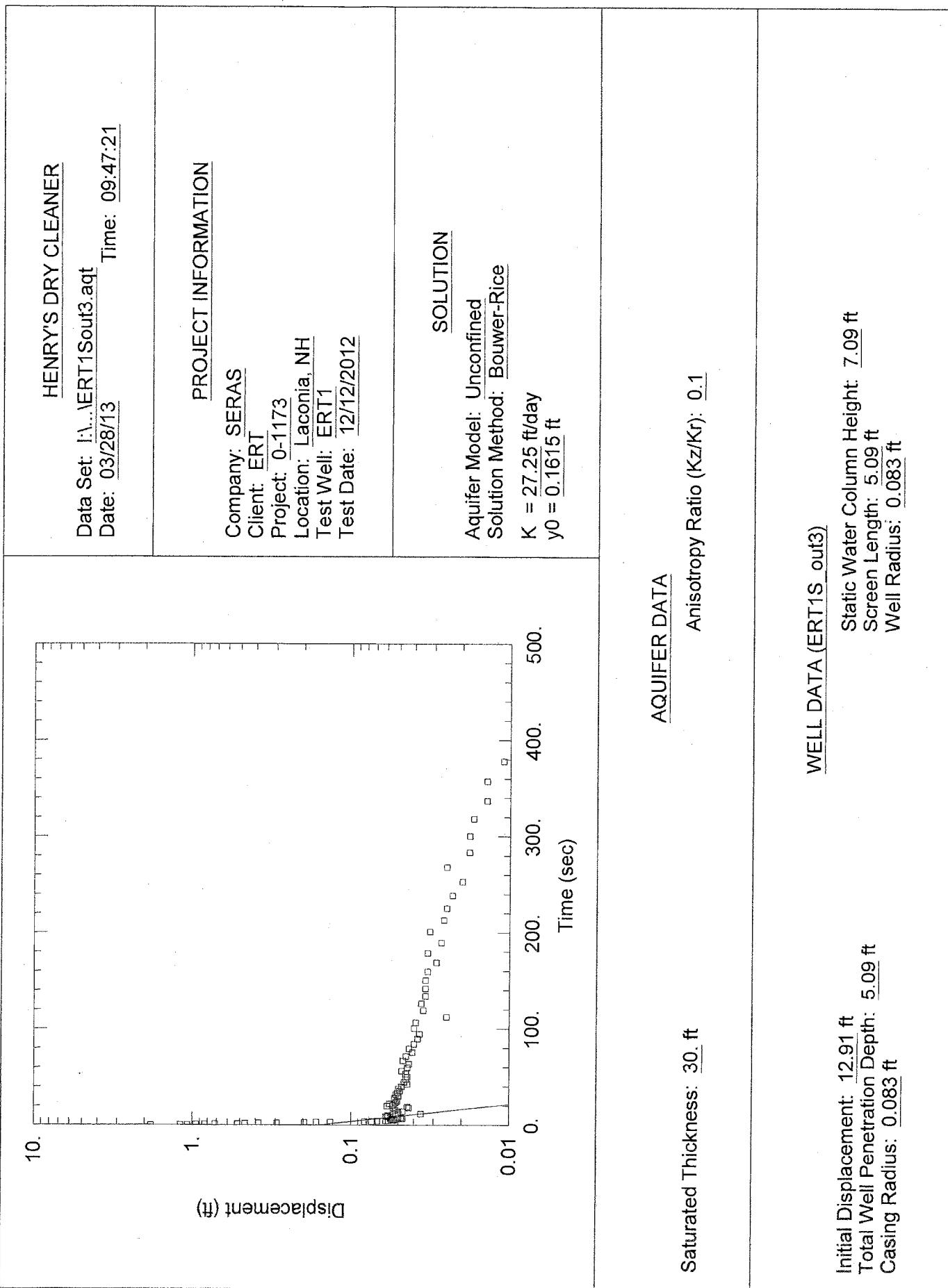


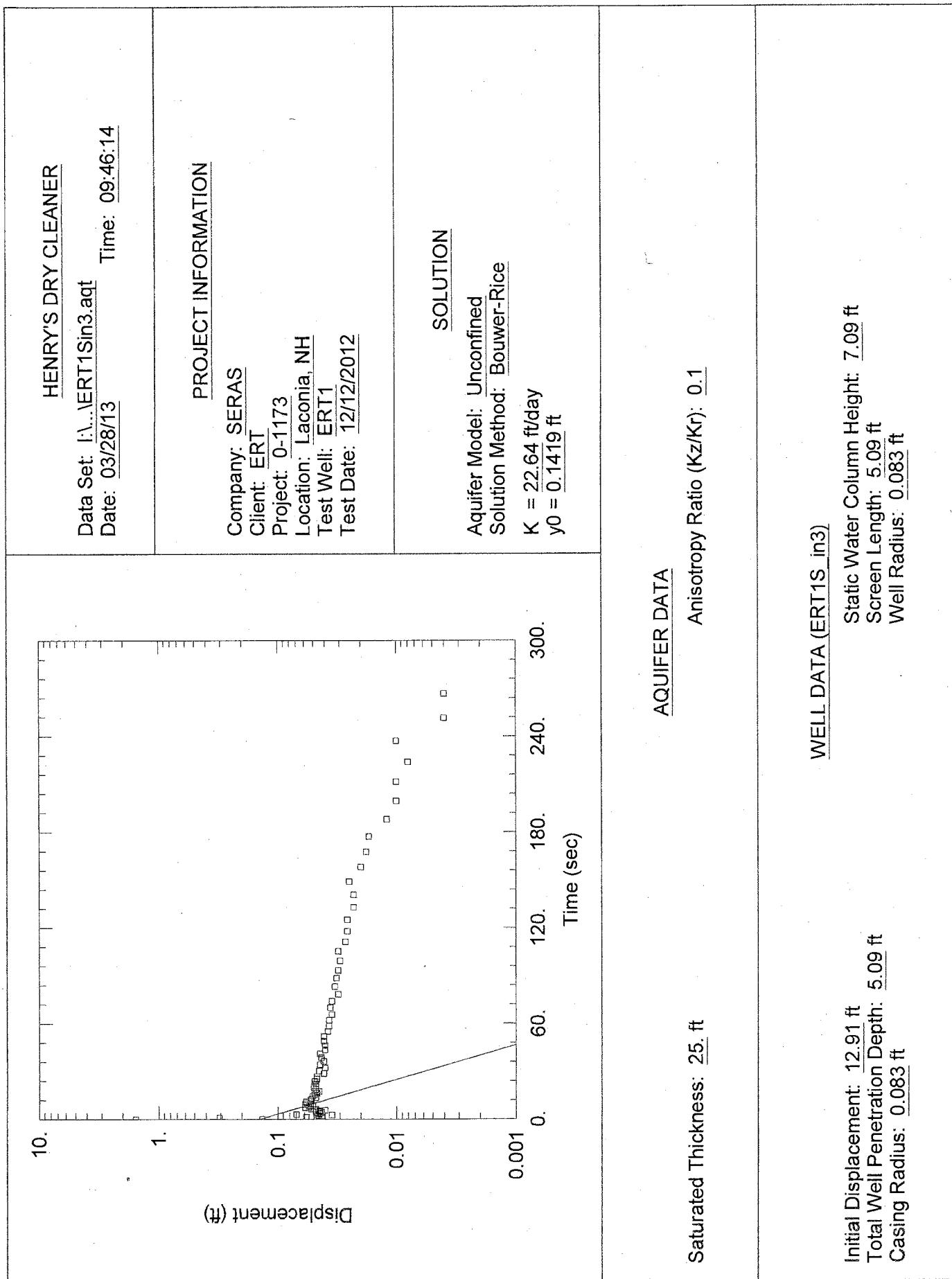












FINAL

Attachment C



Lockheed Martin Information Systems & Global Services
Environmental Services SERAS
2890 Woodbridge Avenue, Building 209 Annex
Edison, NJ 08837-3679
Telephone 732-321-4200 Facsimile 732-494-4021

DATE: September 12, 2013

TO: Terrence Johnson, U.S. EPA/ERT Work Assignment Manager

THROUGH: Rick Leuser, SERAS Deputy Program Manager

FROM: David Edgerton, SERAS Task Leader

SUBJECT: ADDENDUM TO THE SOURCE INVESTIGATION AND CONCEPTUAL SITE MODEL (CSM) OF THE HENRY'S DRY CLEANERS CHLORINATED SOLVENT SITE, LACONIA, NEW HAMPSHIRE: TECHNICAL MEMORANDUM
SERAS WA#0-173

1.0 INTRODUCTION

Henry's Dry Cleaners (Site) is at 36 Pleasant Street in Laconia, New Hampshire (Figure 1). The study area for the source investigation encompasses the Site, Goodwill Industries (GWI) and Former Allen Rogers Mill (FARM) properties, and the Winnipesaukee River (River). The GWI property is directly east of the Site and the FARM property is to the south (Figure 2). The River flows along the southern boundary of the FARM property (Figures 1 and 2).

1.1 Objectives

The Environmental Protection Agency (EPA) Region 1 requested assistance from the EPA Environmental Response Team (ERT) to complete a supplementary source investigation of the Site to close data gaps from an earlier investigation (SERAS, 2012a). The objectives of this investigation were to improve the plume definition across the study area, better characterize the lithology and hydraulic properties of the glaciofluvial aquifer, and incorporate this information into the conceptual site model (CSM). The objectives were achieved by completing the following tasks.

1. Installed three well clusters (three or four wells per cluster) near the source on the Site and GWI property.
2. Installed a monitor well across the water table near the triplet monitor well (NW3-A/B/C) to complete a vertical profile of the aquifer on the FARM property.
3. Logged wells for lithology and stratigraphic control.
4. Performed detailed screening for CVOCs in soils collected from each borehole using a gas chromatograph (GC) to identify the depth of contamination and appropriate well screen intervals.
5. Performed slug tests on monitor wells to determine the range of hydraulic conductivities in the study area.

6. Evaluated the impact of the PCE plume on the River through porewater and surface water sampling.
7. Updated the CSM to include the new data.

1.2 Background

The Site includes a one-story building and a small paved parking lot (Figure 2). A review of the historical Sanborn Maps shows the Site has operated as a dry cleaner since 1948 (EDR, 2012). The FARM property is hydraulically downgradient of the Site and a former industrial facility that was redeveloped into condominiums (Heynen, 1986; CPI, 2004 and 2006).

The FARM property has a history of petroleum hydrocarbon contamination in both soils and shallow groundwater. From 1986 to 2006, several groundwater investigations were performed on the FARM property (Heynen, 1986; CPI, 2004 and 2006; SCI, 2010). During these investigations, the chlorinated solvents (CVOCs): tetrachloroethene (PCE) and associated PCE degradation products (trichloroethene (TCE), cis-1,2-dichloroethene (c1,2-DCE) and vinyl chloride (VC)) were identified in groundwater at concentrations exceeding the New Hampshire Department of Environmental Services (NHDES) Class A Groundwater Quality Standard (AGQS) (NHDES, 2007).

In 2008, the NHDES requested assistance from the Region 1 Site Assessment Program, Technical and Enforcement Support Section to conduct a PCE source investigation for the FARM property. The highest concentrations in groundwater and soil were found directly south of the Henry's Dry Cleaners (HDC) building with CVOC concentrations in groundwater ranging up to 24,000 micrograms per liter ($\mu\text{g/L}$) PCE, 28 $\mu\text{g/L}$ TCE, and 370 $\mu\text{g/L}$ c1,2-DCE; soil concentrations up to 30,000 micrograms per kilogram ($\mu\text{g/kg}$) PCE and 140 $\mu\text{g/kg}$ (TCE). This indicated a PCE source exists on the Site but other CVOC sources on the FARM property were not eliminated, requiring further investigations.

1.3 ERT and Region 1 Investigation (March 2012)

In March 2012, the Region 1 Emergency Planning and Response Branch requested assistance from the ERT to complete a source investigation of the Site and FARM property (SERAS, 2012a and 2012b). Results from that investigation confirmed a PCE source on the Site; there was no evidence for additional PCE sources on the FARM property.

Analytical results for soil samples range up to 69,700 $\mu\text{g/kg}$ PCE with concentrations increasing toward the south side of the HDC building, and exceeding or approaching the saturation threshold concentration for PCE (C^T_{PCE}) (SERAS, 2012a). These results suggest a dense non-aqueous phase liquid (DNAPL) source may be present at the Site (Kueper and Davies, 2009), and it was concluded the release point(s) and bulk of the source underlies the HDC and possibly GWI buildings (SERAS, 2012a). Very low PCE concentrations in soils from the FARM property indicated a separate PCE source on that property is unlikely.

The source investigation was supplemented with groundwater and sub-slab soil gas sampling. The highest PCE concentration (15,000 $\mu\text{g/L}$) in groundwater was identified in monitor well MW101-D, directly south of the HDC building (Figure 2). The groundwater concentration was 10 percent (%) of the solubility of PCE, exceeding the EPA 1 % rule (EPA, 1993), and a second indicator that a DNAPL source exists on the Site. Finally, the soil gas investigation identified very high concentrations of CVOC vapors beneath the HDC and GWI buildings, providing further evidence the bulk of the source mass underlies the HDC building, and likely extends beneath the GWI building (SERAS, 2012b).

The PCE plume exited the Site in a southerly direction, consistent with the direction of groundwater flow (SERAS, 2012a). Dissolved PCE concentrations decrease hydraulically downgradient towards the

River, and the very high PCE concentration (11,000 µg/L) observed on the FARM property (monitor well NW3-C) is attributed to the source on the Site (SERAS, 2012a).

2.0 SITE CHARACTERISTICS

2.1 Winnipesaukee Watershed

The study area is in the Winnipesaukee Watershed, which is often referred to as the Lakes Region. The Lakes Region is situated in the eastern foothills of the White Mountains, covering approximately 381 square miles (mi^2) and consisting of 273 lakes (Figure 1). Lake Winnipesaukee (Lake) is the largest with an aerial extent of 72 mi^2 and approximate length of 28 miles. The maximum depth of the Lake is 180 feet.

The Lake is surrounded by the White Mountains to the west and north, Ossipee Mountains to the east, and Belknap Mountains to the south (Figure 1). The Site is southwest of the Lake and west of the Belknap Mountains. Streams enter the Lake from all directions. The Lake drains through Paugus Bay into Opechee Lake at the town of Lakeport. Overflow from Opechee Lake enters the River at the town of Laconia, and flows southwest, past the Site (Figures 1 and 2) and into Lake Winnisquam. Overflow from Lake Winnisquam is released back into the River on the east side of the town of Tilton, and flows along a southwesterly course until it discharges into the Merrimack River (Figure 1).

2.2 Geologic History

The Lakes Region was sculpted during the Wisconsin Glacial Epoch. Prior to the glaciation, the drainage system along the east slope of the White Mountains was well developed with the Connecticut and Merrimack Rivers entrenched in their current channels (Billings, 1980; Goldthwait and others, 1951). The proto-Cocheco River drained the Lakes Region, flowing southeast through Squam Lake, the Lake and exiting through Alton Bay at the southeast end of the Lake as depicted in Figure 3 (Ayotte, 1997).

At the height of the Wisconsin event, the ice sheet covering New Hampshire was a mile thick. After reaching its maximum, the ice sheet slowly began to recede but persisted in the New England region because of the mountainous terrain. Throughout New England, withdrawal of the ice sheet was chaotic with isolated masses of stagnant ice trapped in valleys far from the receding ice front (Koteff and Pessl, 1981; Ayotte, 1997).

In the Belknap Mountains (directly east of the Site), a large mass of stagnant ice detached from the ice front and dammed the proto-Cocheco River forming the Lake between the two ice masses (Stewart, 1961; Ayotte, 1997; Argue and others, 2005). As the ice front receded north, the Lake expanded and built two glaciodeltaic systems, one at the northwest end of the Lake near Squam Lake, and the other at the southeast end of the Lake in Alton Bay (Figure 3). The glaciodeltaic system in Alton Bay completely closed-off southeasterly drainage through the proto-Cocheco River. As the ice front withdrew north, the stagnant ice mass shrunk exposing the Belknap Mountains. Meltwater released from the stagnant ice mass both filled the Lake and spilled over the west slope of the Belknap Mountains depositing a thick section of glacial outwash across the study area (Figure 4).

At its maximum, the Lake extended northward beyond Squam Lake and reached a height of 590 feet above sea level (asl) before overflowing and filling Opechee Lake near the town of Lakeport (Figure 3). Opechee Lake soon overflowed and cut the River channel through the town of Laconia and the study area before discharging into Lake Winnisquam. Lake Winnisquam soon overflowed and the River extended its channel southwest to the Merrimack River. The process dropped the Lake to its present height of 504 feet asl (Ayotte, 1997).

3.0 METHODOLOGY

This supplementary source investigation was performed under the supervision of the ERT Work Assignment Manager (WAM) by personnel from the SERAS and Region 1 - START contracts.

3.1 Borehole Drilling and Installation of Monitor Wells

GeoSearch, Inc. (Fitchburg, Massachusetts) was subcontracted to install three triplet and three single monitor wells to augment the existing monitor well network. The drilling subcontractor installed the wells 2012 using a CME-85 hollow-stem auger (HSA) drilling rig on two mobilizations, September 12 to 20, 2012 and October 10 and 11. One triplet (ERT1-S/I/D) was installed on the Site, two triplets with adjacent singles (ERT2-S/Ia/Ib/D, and ERT3-S/Ia/Ib/D) were installed on the GWI property, and one well (ERT4) was installed on the FARM property (Figure 2). The borings were logged by Region 1 START and attached as Appendix A (Weston, 2013). Well construction details and lithologies of the screened intervals are summarized in Table 1.

Two single wells (ERT2-Ib and ERT3-Ib) were installed next to ERT2-S/Ia/D and ERT3-S/Ia/D, respectively, to better delineate the PCE plume extents near the source. The triplets were constructed within the same borehole. The shallow (labeled "S") monitor wells were screened from 8 to 18 feet intermediate (labeled "I or Ia") wells were screened from approximately 36 to 46 feet, and deep (labeled "D") wells were screened from approximately 68 to 78 feet. The two monitor wells labeled "Ib" were screened from approximately 50 to 60 feet. One well (ERT4) was installed adjacent to the triplet (NW3-A/B/C) monitor wells and screened across the water table from 2 to 12 feet. The four nested wells on the FARM property define the vertical extent of the dissolved phase PCE plume, hydraulically downgradient of the Site.

The monitor wells were constructed with ten feet of 2-inch diameter, 0.10-inch slotted polyvinyl chloride (PVC) screen and blank riser, and completed with flushmounted vaults. All drilling equipment was steam-cleaned with hot, high-pressure water before drilling was initiated at each location. Construction details for the 12 newly installed and 14 existing monitor wells are summarized in Table 1.

3.2 Hydraulic Conductivity Testing

Horizontal hydraulic conductivities (K_h) were estimated from slug tests performed on the 12 newly installed and 11 of 14 the existing monitor wells in the study area (Figure 2; Table 1). Slug tests were performed by monitoring the changes in water level in a well following the instantaneous addition/removal (slugin/slugout) of a 4-foot long, 1½-inch diameter PVC slug. Water levels were measured on a logarithmic scale during the tests, using an electronic data logger (Level Troll® 700). Up to three slugin/slugout tests were performed at each well to ensure the results were reproducible (Appendix B).

Slug test data were processed using AqteSolve® Pro ver. 4.0 (Rockware, Inc.) and analyzed using the Bouwer-Rice (1976 and 1986) solution to estimate K_h for each well (Freeze and Cherry, 1979). The average K_h value for the slugin/slugout tests performed at each well is listed in Table 1.

3.3 Soil Sampling and Analysis

Continuous soil samples were collected using HSA split-spoons from the surface to the target depths in boreholes ERT1 through ERT4 (Figure 2). The Region 1 Office of Environmental Measure and Evaluation (OEME) mobile laboratory screened 174 soil samples for PCE and TCE using a field portable GC. Analytical results are summarized in Table 2.

3.4 Groundwater Monitoring, Sampling and Analysis

Water levels from 23 monitor wells were gaged prior to sampling, and the data used to determine shallow groundwater flow contours, and horizontal and vertical hydraulic gradients across the study area (Table 1). Twenty-eight groundwater samples, including two duplicates were collected from 26 monitoring wells and submitted for analysis (Table 3). Groundwater samples were analyzed for CVOCs using a gas chromatograph/mass spectrometer (GC/MS) at the fixed Region 1 OEME Laboratory (North Chelmsford, Massachusetts). Analytical results for the most recent (EPA, 2012a and 2012b) and historic groundwater sampling events are summarized in Table 3.

3.5 Porewater and River Water Study

Porewater, diffusion bag and surface water grab samples were collected from the River (Figure 2). Samples collected from the River (i.e., porewater, diffusion bag and surface water) were analyzed for CVOCs at the fixed Region 1 OEME laboratory and summarized in Table 4 (EPA, 2012c, 2012d and 2012e).

Stainless steel piezometers were deployed at 15 locations in the River bottom, along the southern boundary of the FARM property, but only 13 porewater samples (two duplicates) were collected. Porewater samples from locations ERT-PW11 and ERT-PW12 contained persistent vapor bubbles and were discarded. Passive diffusion bags were installed at six locations but only five samples (one duplicate) were collected. Passive diffusion bags for locations PD-4 and PD-5 were damaged during the test period and samples could not be retrieved from those locations. One surface water sample was collected upriver of the FARM property and a second where the plume is suspected to discharge into the River (Figure 2).

4.0 RESULTS AND DISCUSSION

4.1 Site Hydrostratigraphy (Well Logs)

A conceptual overview of boring logs ERT1, ERT2 and ERT3 is displayed on Figure 5 with the complete boring logs attached as Appendix A (Weston, 2013). The boring logs show the underlying soil layers or strata (aquifer) are discontinuous, poorly to moderately sorted sand and gravels that interfinger with very well sorted silt to fine sands. The strata are vertically and horizontally heterogeneous, which is characteristic of outwash deposits. The general trend of the hydrostratigraphic zones is a “fining” downward with the finer grain soils becoming more prevalent nearer to the bedrock interface (Figure 5). The outwash deposit in the study area is approximately 70 feet thick, and overlies the lower Devonian Littleton Formation.

The depositional environment of an outwash deposits is extremely variable due to seasonal variations in the volume of meltwater released from the ice front, which results in a heterogeneous composite of silt to cobble bearing sediments. Poorly to moderately sorted sands and gravels represent anastomosing channel flow (braided streamlets) across broad flood plains. The flood plain deposits are represented by the very well sorted silt and fine sands that were deposited when the volume of meltwater exceeded the streamlet channels. In the study area, the outwash clasts are also heterogeneous, consisting of either quartz-biotite gneiss, presumably scoured from the underlying bedrock (Littleton Formation), or granitoids (White Mountain Granitoid Suite) transported by the ice from the surrounding mountains (Figure 4).

4.2 PCE and TCE Soil Contamination

Soil screening results for PCE and TCE are presented in Table 2 and summarized as:

- A total of 165 soil samples were collected from boreholes ERT1, ERT2 and ERT3 on the Site and GWI property (Table 2 and Figure 2). Forty-three of these soil samples exceeded the NHDES Leaching Based Soil Concentration (LBSC) for PCE of 1,810 µg/kg.
- Borehole ERT1 had relatively low PCE concentrations (up to 2,261 µg/kg) in soils with the lowest found in the shallow and deep zones, indicating the borehole is downgradient of the source (Table 2). For this reason, elevated PCE concentrations in groundwater collected from monitor wells ERT1-S/I are the result of the PCE plume (dissolved phase) migrating through the coarser grained sediments and subsequent absorption to those sediments (Table 3).
- In borehole ERT2, the 22 to 59-foot interval averages 4,060 µg/kg PCE with the highest concentration (37,800 µg/kg PCE) found during this sampling exercise at the 58 to 59-foot interval. However, the shallow and deep intervals in borehole ERT2 have PCE concentrations that are an order of magnitude lower than the intermediate zone (Table 2). This probably indicates the heterogeneity of the glaciofluvial aquifer enabled the source to migrate from a shallow release point on the Site at least 80 feet southeast on to the GWI property (Table 2).
- In borehole ERT3, the PCE concentration for soils in the 20 to 53-foot interval averages 3,290 µg/kg with the second highest concentration (9,450 µg/kg PCE) found during this sampling exercise at the 20 to 21-foot interval (Table 2). Analytical results from ERT3 indicate the source could have migrated beneath the GWI building, south-southeast (75 feet) of the Site to this location or relatively near to it.
- Soil concentrations for 11 samples from borehole ERT4 on the FARM property were low (ranging up to 223 µg/kg) but comparable to samples from similar depths that were collected from ERT1 through ERT3 (Table 2 and Figure 2). These results support earlier findings that high dissolved phase PCE concentrations on the FARM property can be attributed to the upgradient source on the Site, and it is unlikely that a separate PCE source exists on the FARM property.
- TCE was below the detection limit in all samples.

Threshold PCE Soil Concentration and Evaluation of DNAPL Source

A site specific C_{PCE}^T of 69,700 µg/kg for soils was estimated (SERAS, 2012a) to determine if PCE concentrations (C_{PCE}) can be attributed to the presence of DNAPL. The likelihood of DNAPL at the Site can be deduced by the departure of the C_{PCE}/C_{PCE}^T ratio from unity (Kueper and Davies, 2009). The C_{PCE}/C_{PCE}^T ratio is interpreted as (SERAS, 2012a):

- much greater than (>>) 1, then DNAPL is present,
- greater than (>) 1, then DNAPL is highly probable,
- > 0.1 but < 1, then DNAPL may be present but could be masked by sampling,
- < 0.1, then DNAPL is unlikely present.

Detailed soil C_{PCE} profiles were constructed for boreholes ERT1 through ERT4 (Table 2). Eight locations had a C_{PCE}/C_{PCE}^T ratio > 0.1, suggesting a DNAPL could be present with some level of uncertainty (Table 2). The highest C_{PCE}/C_{PCE}^T ratio (0.614) occurs in borehole ERT2 at the 58 to 59-foot interval. This C_{PCE}/C_{PCE}^T ratio is relatively close to unity, increasing the likelihood the source migrated to this location from a shallow release point on the Site. Two other soil samples from borehole ERT2, collected from approximate depths of 41 and 52 feet have a C_{PCE}/C_{PCE}^T ratio > 0.1. The remaining five soil samples with C_{PCE}/C_{PCE}^T ratios > 0.1 were collected from borehole ERT3 at approximate depths of 21, 38, 39, 40 and 53 feet (Table 2). Very low C_{PCE}/C_{PCE}^T ratios (<< 0.1) for

soils relative to PCE concentrations in groundwater samples collected from the shallow aquifer (ERT1-S, ERT2-S, ERT3-S and MW101-S) supports the assessment that the release point and most likely the residual PCE source mass is beneath the HDC building (SERAS, 2012a).

The C_{PCE}/C^T_{PCE} ratio that approaches unity indicates a contiguous source (DNAPL) exists at the Site and GWI property. The source release point is most likely into the shallow unsaturated zone beneath the south end of the HDC building. The density of the DNAPL drove it laterally and vertically into the heterogeneous aquifer along a tortuous path. This is suggested by a moderately high soil concentration and marginally elevated C_{PCE}/C^T_{PCE} ratio (> 0.1) from borehole ERT2. Analytical results for soils from borehole ERT2 indicate the source migrated southeast from the Site at least 80 feet laterally and to a depth of 59 feet on to the GWI property, where it encountered finer grained soils that inhibited further vertical penetration (Figure 5).

Very low soil concentrations (up to 223 $\mu\text{g/kg}$) and associated C_{PCE}/C^T_{PCE} ratios ($<< 0.1$) from borehole ERT4, and FARM property in general (SERAS, 2012a), support the previous assessment that a PCE source on the FARM property is unlikely.

4.3 Groundwater Hydrology

The monitor well network in the Site vicinity consists of 26 wells based on relative surveyed elevations performed by the Region START contractor. Fourteen wells (ERT1-S, ERT2-S, ERT3-S, ERT4, MW101-S, MW102, MW103, OSW-1, and GEO-1 through GEO-6) monitor the shallow aquifer (475 to 489 feet asl) at or just below the water table (Table 1). One single well (MW101-D) and three nested well clusters (ERT1-I/D, ERT2-Ia/Ib/D, and ERT3-Ia/Ib/D) monitor the intermediate and deep aquifers (420 and 463 feet asl) on the Site and GWI property. One nested well cluster (NW3-A/B/C) monitors the upper, center and lower intermediate aquifer (444 and 463 feet asl) on the FARM property (Table 3).

Horizontal Groundwater Flow

Water level data from 14 monitor wells screened at or near the water table were used to generate a groundwater elevation map of the study area (Figure 6). Consistent with the previous assessment (SERAS, 2012a), groundwater flows southward from the Site toward the River (Figure 6) at an average horizontal hydraulic gradient of 0.006 foot per feet (ft/ft). However, the horizontal hydraulic gradient is steepest near the Site, begins to decline on the GWI property, and becomes increasingly gentler on the FARM property and toward the River (Figure 6).

Vertical Gradient

Water level data from nested well clusters on the Site and GWI property (ERT1-S/I/D, ERT2-S/Ia/Ib/D and ERT3-S/Ia/Ib/D), and FARM property (ERT4 and NW3-C/B/A) were used to estimate the vertical hydraulic gradient in the study area (Table 1).

The vertical hydraulic gradient on the Site is upward from the intermediate aquifer (ERT1-I) to the water table (ERT1-S), and upward from the deep (ERT1-D) to intermediate aquifers (ERT1-I). The vertical gradient on the GWI property varies in direction and magnitude, ranging from -0.040 to 0.197 ft/ft but is generally upward (Table 1). The vertical gradient is upward from the upper intermediate aquifer (ERT2-Ia and ERT3-Ia) to the water table (ERT2-S and ERT3-S); downward from the upper intermediate (ERT2-Ia and ERT3-Ia) to lower intermediate (ERT2-Ib and ERT3-Ib); and returns to strongly upward from the deep (ERT2-D and ERT3-D) to the lower intermediate aquifers (ERT2-Ib and ERT3-Ib).

At the well cluster on the FARM property, the vertical hydraulic gradient varies in direction and magnitude, even more so than on the GWI property (Table 1). The vertical gradient is downward from

the water table (ERT4) to upper intermediate aquifer (NW3-C); upward from the upper (NW3-C) to middle intermediate (NW3-B) aquifers; and returns to downward from the middle (NW3-B) to lower intermediate (NW3-A) aquifers (Table 1). The downward vertical gradient from the middle to lower intermediate aquifer (443 to 448 feet asl) is within the same hydrostratigraphic zone as the lower intermediate aquifer on the GWI property. The net vertical gradient near the River is inferred to be upward since CVOC contaminants are discharging into the River (see Section 4.5).

Horizontal Hydraulic Conductivity

In addition to the hydraulic gradient, the horizontal hydraulic conductivity (K_h) of the aquifer is the other important component of groundwater flow. Slug tests were used to determine the K_h field characteristics of the heterogeneous aquifer, which are displayed on Figure 7. Analytical results of the slug tests indicate the K_h ranges from 1.0 to 14.5 feet per day (ft/day) and are listed on Table 1.

At the Site, low K_h (1 to 5 ft/day) values near the water table (ERT1-S, MW101-S and MW102) indicate a shallow semi-confining zone underlies the source release point (Table 1). The semi-confining zone in the shallow aquifer is discontinuous because K_h values (9 to 15 ft/day) are greater in monitor wells (ERT2-S, ERT3-S and OSW-1) on the GWI property, which are also screened in the shallow aquifer (Table 1).

There is also an interrelationship between the distribution of the K_h field in the shallow aquifer (Figure 7) and horizontal hydraulic gradient (Figure 6). The most northerly wells (MW103, MW101-S and ERT1-S) have the lowest K_h values and steepest hydraulic gradient. Shallow monitor wells on the GWI property (ERT2-S, ERT3-S and OSW-1) have higher K_h values (Figure 7) and a gentler hydraulic gradient (Figure 6). Assuming groundwater flow across the study area is at or near steady-state conditions, the relationship between observed K_h values and horizontal hydraulic gradient is expected (i.e., low K_h in the areas with high horizontal gradient and vice versa).

4.4 Chlorinated Solvent Plumes

Recent (EPA, 2012a and 2012b) and historical analytical results for PCE and CVOC degradation products for groundwater are summarized in Table 3, and displayed on Figure 8. The PCE plume configuration for the November 2012 sampling event is drawn on Figure 9. PCE is the major contaminant, even though, low concentrations of PCE degradation products (e.g., TCE, c1,2-DCE and VC) are present. A summary of the analytical results are:

Plume Extents at the Site and GWI Property

The contaminant plume emanates from a PCE source on the Site and GWI property, supporting the earlier assessment that a PCE source exists on the Site (SERAS, 2012a). Near the PCE source the plume has the following characteristics.

- Monitor well MW103 is approximately 100 feet hydraulically upgradient of the triplet ERT1-S/I/D, and pair MW101-S/D monitor wells. Analytical results for MW103 were below the detection limits for CVOCs, while ERT1-S/I and MW101-D have high to very high CVOC concentrations.
- The highest PCE concentrations in the study area were detected in monitor wells MW101-D (16,000 µg/L) screened in the upper intermediate aquifer, and ERT2-Ia/Ib (12,000 and 14,000 µg/L, respectively) screened in the upper and lower intermediate aquifer (Figure 8). These concentrations (10 % of PCE solubility) are ten times the EPA 1 % rule (EPA, 1993), providing a second indicator that a DNAPL source is present at the Site.

- Three lines of evidence suggest monitor wells ERT1-S/I/D and possibly MW101-S/D are proximal to the source: the absence of PCE in soils below a depth of 41 feet in borehole ERT1 (Table 2); moderately high PCE concentrations found in monitor wells ERT1-S/I and a very low PCE concentration found in monitor well ERT1-D (Table 3); a strong upward vertical hydraulic gradient prevents penetration of the PCE plume into the deep aquifer (Table 1). This evidence indicates the source release point is probably beneath the HDC building about 25 feet north of ERT1-S/I/D (Figure 9).
- Four lines of evidence indicate the source (DNAPL) was driven by density from the shallow unsaturated zone beneath the HDC building both laterally and vertically, as dictated by the heterogeneity of the aquifer. These lines of evidence are: high soil concentrations (up to 37,800 µg/kg PCE) from intermediate depths (445 to 478 feet asl) and an elevated C_{PCE}/C^T_{PCE} ratio (0.614) in borehole ERT2; very high dissolved phase PCE concentrations found in intermediate monitor wells ERT2-Ia/Ib (12,000 and 14,000 µg/L PCE, respectively) and moderately high PCE concentrations in ERT2-D (2,300 µg/L PCE) indicating the strong upward vertical hydraulic gradient did not prevent penetration of the PCE plume into the deep aquifer. Even though the hydraulic gradient is strongly upwards, the likely presence of a proximal source and the resultant steep concentration gradient drives the dissolve plume deeper (dispersion), overcoming the upward hydraulic gradient. These lines of evidence indicate monitor wells ERT2-Ia/Ib intersect the source in the intermediate aquifer about 80 feet southeast of the shallow release point beneath the HDC building (Table 3).

This evidence also applies to ERT3-Ia, which indicates the well triplet (ERT3-S/Ia/Ib/D) is either very near, or intersects the source margin (Table 3). The data shows borehole ERT3 has moderately high soil concentrations (up to 9,450 µg/kg PCE) and marginally elevated C_{PCE}/C^T_{PCE} ratios (> 0.1) for soils from the shallow to intermediate depths (458 to 478 feet asl) (Table 2); monitor well ERT3-Ia has high dissolved phase PCE (4,200 µg/L PCE) and ERT3-Ib/D have moderately high PCE concentrations (1,700 and 2,200 µg/L PCE, respectively) indicating the strong upward vertical hydraulic gradient did not prevent dispersion of the PCE plume into the deep aquifer.

The relationship among soil and groundwater concentrations at the Site and GWI property (note: high PCE concentrations in groundwater coincide with high PCE concentrations in soils and vice versa) indicates the source morphology/configuration is a product of the DNAPL being driven by density along a tortuous path, both laterally and vertically into the heterogeneous aquifer. The actual dimensions of the source cannot be determined due to existing structures but evidence from boreholes ERT1 through ERT3 indicates the source extends from beneath the HDC building at least 80 feet laterally under the GWI building to the southeast, and reaches a depth of at least 59 feet below the GWI parking lot.

- Two important characteristics control plume extents, source morphology/configuration and groundwater flow. Plume extents on the Site and GWI property are controlled predominantly by source morphology/configuration and to a lesser extent groundwater flow. Dissolved phase PCE concentrations in monitor wells (ERT1-S/I and MW101-D) at the Site, show the plume is primarily in the shallow and intermediate aquifers (452 to 490 feet asl) but found in the deep aquifer (438 to 490 feet asl) on the GWI property (ERT2-S/Ia/Ib/D and ERT3-S/Ia/Ib/D) where it reaches a maximum thickness of approximately 50 feet (Table 3). On both the Site and GWI property, PCE concentrations from groundwater and soil correlate (e.g., high PCE concentrations in groundwater coincide with high PCE in soils from the screened interval), as a result the plume extents probably approximate the source configuration/morphology.

- The dissolved phase PCE plume emanates from the Site in a southeasterly orientation on to the GWI property before rotating to a southerly direction, consistent with groundwater flow (Figure 9).

Plume Extents on the FARM Property

The plume exits the GWI property on to the FARM property where it eventually discharges into the River and has the following characteristics (Figure 9). .

- Downgradient of the source, groundwater flow becomes the dominant mechanism for controlling the plume extents. Near the nested wells (ERT4 and NW3-A/B/C) on the FARM property, PCE concentrations (Table 3) indicate the plume has thinned to approximately 25 feet, and found primarily within the upper intermediate aquifer (453 to 462 feet asl), indicating the plume thins in response to the upward vertical hydraulic gradient (Table 1). The plume eventually discharges into the River (Figures 9 and 11), lending further evidence of strong upwelling on the FARM property.
- Between the July and November 2012 groundwater sampling events, dissolved phase PCE concentration in NW3-C on the FARM property decreased by approximately half. Large fluctuations in PCE concentrations between sampling events, indicates that particular well is not near a source.
- The PCE to PCE degradation products (e.g., TCE, c1,2-DCE and VC) ratio decreases with distance away from the source (Figure 10). This is an indicator of biological attenuation within the plume.

4.5 Porewater and Surface Water

Analytical results (EPA, 2012c, 2012d and 2012e) for CVOCs in porewater and surface water from the River are summarized in Table 4 and displayed on Figure 11. Analytical results show:

- Porewater samples collected upriver (ERT-PW2) and downriver (ERT-PW5 through ERT-PW10, and ERT-PW13) of the FARM property are non-detect for CVOCs (Table 4 and Figure 11).
- CVOCs were detected in porewater samples collected near the leading edge of the plume (ERT-PW1, ERT-PW3 and ERT-PW4), suggesting upwelling is driving the plume into the River (Figure 11).
- Porewater from location ERT-PW4 (1,800 µg/L), exceeds the freshwater chronic criteria for the protection of aquatic life (840 µg/L), the most stringent NHDEC Surface Water Quality Criteria for Toxic Substances (WQCTS) (NHCAR, 1995).
- CVOCs identified in porewater (ERT-PW1, ERT-PW3 and ERT-PW4) are one to three orders of magnitude greater than the nearest monitor wells (GEO-1 through GEO-5), suggesting those monitor wells are screened above the center of the plume.
- Surface water samples (SW1 and SW2) were below the detection limits for CVOCs, suggesting that contaminated porewater is rapidly diluted below the NHDEC WQCTS (NHCAR, 1995) after discharged into the River.

5.0 CONCEPTUAL SITE MODEL SUMMARY

Several converging lines of evidence (MIP responses, soil, groundwater, and soil gas) from this and the previous source investigations (SERAS, 2012a and 2012b) supports a PCE source at the Site. There is no evidence to support a PCE source on the FARM property.

- The PCE source release point is most likely in the shallow, unsaturated zone beneath the HDC building. From here, the source was driven by density along a tortuous path into the heterogeneous aquifer. The source extends southeast from the release point beneath the HDC building, and extends at least 80 feet under the GWI building and into the GWI parking lot, where it is found in the intermediate aquifer (borehole ERT2 and monitor wells ERT2-Ia/Ib). The heterogeneity of the aquifer is probably the most important aspect in determining the overall source morphology/configuration.
- On the Site and GWI property, the PCE plume orientation (southeast) and thickness (50 feet) is a function of the source morphology/configuration (Table 3). Downgradient of the source, the PCE plume is controlled by groundwater flow; the orientation of the plume is consistent with the southerly direction of groundwater flow; a strong upward hydraulic gradient both reduces the thickness of the plume (25 feet) on the FARM property, and prevents penetration into the deep aquifer (Tables 3 and 4).
- The low soil concentrations in borehole ERT4 combined with the low MIP response and low soil concentrations from the previous assessment of the FARM property (SERAS 2012a), and large fluctuations in dissolved phase PCE concentrations in monitor well NW3-C in successive sampling events (July and November 2012) provides strong evidence that a PCE source on the FARM property is unlikely (Table 2).
- Dissolved PCE concentrations decrease monotonically downgradient of the Site, consistent with earlier results, providing further evidence the source at Site is the only contributor to the plume (Table 3 and Figure 8).
- The PCE to PCE degradation products (e.g., TCE, c1,2-DCE and VC) ratio decreases with distance away from the source (Figure 10). This is an indicator of biological attenuation within the plume.
- CVOCs were not detected in surface water samples, indicating that after mixing groundwater discharged into the River are diluted below the NHDEC WQCTS, the most stringent surface water standard (Figure 11).

6.0 RECOMMENDATIONS

1. It is impractical to fully define the source because the presence of the HDC and GWI buildings. Hence, a source treatment strategy (e.g. chemical oxidation, thermal conductive heating, etc.) is not recommended because the mass and configuration/morphology of the source are unknown. However, a plume containment strategy, such as a reactive barrier for the Site and GWI property could be further evaluated to prevent plume migration on to the FARM property and ultimately into the River.
2. An indoor vapor mitigation strategy may also be explored to reduce worker exposure at the HDC and GWI buildings.

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cc: Central File - WA # 0-1173
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SERAS Program Manager (cover page only)

FINAL

TABLES

TABLE 1
WELL CONSTRUCTION SPECIFICATIONS AND WATER LEVELS
HENRY'S DRY CLEANERS CHLORINATED SOLVENT SITE
LACONIA, NEW HAMPSHIRE

Well	Easting (ft)	Northing (ft)	Top-of-Casing ft asl	Dia (inch)	Screen Length (ft)	Depth (ft)	Hydraulic Zone (ft asl)	12/11-13/2012				Water-Bearing Unit ¹
								DTW (ft)	ft amsl	K _{cond} (ft/day)	i _v [-]	
ERT1-S	1,036,066.1	374,557.8	497.91	2	10	18.50	479	489	12.14	485.77	1.1	---
ERT1-I			497.93	2	10	46.50	451	461	11.60	486.33	13.7	0.020
ERT1-D			497.92	2	10	77.50	420	430	9.10	488.82	2.8	0.080
ERT2-S	1,036,143.9	374,512.3	498.02	2	10	18.50	480	490	12.72	485.30	9.6	---
ERT2-la			497.97	2	10	45.50	453	463	12.28	485.69	1.0	0.014
ERT2-lb			497.40	2	10	60.00	438	448	12.29	485.11	3.4	-0.040
ERT2-D			497.97	2	10	78.50	420	430	9.22	488.75	8.0	0.197
ERT3-S	1,036,114.5	374,499.6	497.70	2	10	18.50	479	489	12.41	485.29	11.4	---
ERT3-la			497.72	2	10	46.50	451	461	11.93	485.79	7.7	0.018
ERT3-lb			497.67	2	10	59.00	439	449	12.18	485.49	6.6	-0.024
ERT3-D			497.71	2	10	78.50	419	429	8.86	488.85	12.9	0.172
ERT4	1,036,099.8	374,181.4	487.55	2	10	11.48	476	486	3.56	483.99	2.0	---
NW-3C	1,036,110.8	374,187.0	487.39	0.75	5	29.91	457	462	3.64	483.75	---	-0.013
NW-3B			487.39	0.75	5	34.70	453	458	3.31	484.08	---	0.069
NW-3A			487.39	0.75	5	44.10	443	448	3.40	483.99	---	-0.010
GEO-1	1,036,202.1	374,054.0	486.47	2	10	12.00	474	484	2.85	483.62	5.9	---
GEO-2	1,036,202.9	374,084.8	486.84	2	10	11.32	476	486	3.26	483.58	9.4	---
GEO-3	1,036,158.4	374,030.1	486.71	2	10	11.70	475	485	3.20	483.51	11.8	---
GEO-4	1,036,248.9	374,073.7	486.78	2	10	11.48	475	485	3.16	483.62	12.3	---
GEO-5	1,036,280.6	374,097.8	486.74	2	10	11.65	475	485	3.10	483.64	11.3	---
GEO-6	1,036,246.0	374,388.5	495.51	2	10	16.80	479	489	10.81	484.70	5.3	---
MW-101S	1,036,084.7	374,574.9	498.02	2	10	17.65	480	490	12.20	485.82	3.3	---
MW-101D	1,036,081.3	374,577.3	498.06	2	5	21.85	476	481	12.33	485.73	3.7	---
MW-102	1,036,055.7	374,551.4	497.76	2	5	17.70	480	485	12.30	485.46	3.6	---
MW-103	1,036,145.7	374,708.8	501.38	2	5	17.60	484	489	12.41	488.97	6.3	---
OSW-1	1,036,079.1	374,466.6	495.49	2	10	13.90	482	492	10.25	485.24	12.6	---

ft = feet, ft asl = feet above sea level, DTW = Depth in feet to water from top-of-casing, i_v = vertical gradient, --- = cannot be measured

1. Water bearing units are approximated from the nearest soil boring (Weston, 2012) to each well.

TABLE 2
SOIL SCREENING RESULTS FOR ERT1 & ERT2
HENRY'S DRY CLEANERS CHLORINATED SOLVENT SITE
LACONIA, NEW HAMPSHIRE

ERT1								ERT2							
Date Collected	Depth		CVOC ($\mu\text{g}/\text{kg}$) ¹				PCE	TCE	Saturation Index (C_{PCE}/C^T_{PCE})	DNAPL Present	CVOC ($\mu\text{g}/\text{kg}$) ¹				
			ft-bgs	ft-amsl	61,566	---					PCE	TCE	61,566	---	
9/13/12	2 to 3	496 to 495	36		15	U	0.001		No				2 to 3	496 to 495	1,480
	3 to 4	495 to 494	13		15	U	0		No				3 to 4	495 to 494	110
	4 to 5	494 to 493	10	U	15	U	0		No				NR	NR	---
	5 to 6	493 to 492	10	U	15	U	0		No				NR	NR	---
	6 to 7	492 to 491	920		15	U	0.015		No				NR	NR	---
	7 to 8	491 to 490	10	U	15	U	0		No				NR	NR	---
	8 to 9	490 to 489	15		15	U	0		No				NR	NR	---
	9 to 10	489 to 488	10	U	15	U	0		No				8 to 9	490 to 489	1,600
	10 to 11	488 to 487	10	U	15	U	0		No				NR	NR	---
	11 to 12	487 to 486	10	U	15	U	0		No				NR	NR	---
	12 to 13	486 to 485	159		15	U	0.003		No				NR	NR	---
	13 to 14	485 to 484	46		15	U	0.001		No				NR	NR	---
	14 to 15	484 to 483	283		15	U	0.005		No				NR	NR	---
	15 to 16	483 to 482	633		15	U	0.010		No				NR	NR	---
	16 to 17	482 to 481	306		15	U	0.005		No				NR	NR	---
	17 to 18	481 to 480	308		15	U	0.005		No				17 to 18	481 to 480	52
	18 to 19	480 to 479	77		15	U	0.001		No				NR	NR	---
	19 to 20	479 to 478	30		15	U	0		No				NR	NR	---
	20 to 21	478 to 477	53		15	U	0.001		No				NR	NR	---
	21 to 22	477 to 476	1,600		15	U	0.026		No				NR	NR	---
	22 to 23	476 to 475	141		15	U	0.002		No				22 to 23	476 to 475	2,280
	23 to 24	475 to 474	84		15	U	0.001		No				23 to 24	475 to 474	600
	24 to 25	474 to 472	19		15	U	0		No				24 to 25	474 to 472	700
	26 to 27	472 to 470	10	U	15	U	0		No				25 to 26	472 to 470	1,090
	28 to 29	470 to 469	17		15	U	0		No				26 to 27	470 to 469	980
	29 to 30	469 to 468	10	U	15	U	0		No				27 to 28	469 to 468	844
	30 to 31	468 to 467	44		15	U	0.001		No				28 to 29	468 to 467	2,020
	31 to 32	467 to 466	10	U	15	U	0		No				29 to 30	467 to 466	920
	32 to 33	466 to 465	10	U	15	U	0		No				30 to 31	466 to 465	2,620
	33 to 34	465 to 463	10	U	15	U	0		No				31 to 32	465 to 463	1,730
	35 to 36	463 to 462	10	U	15	U	0		No				32 to 33	463 to 462	2,400
	36 to 37	462 to 461	38		15	U	0.001		No				35 to 36	462 to 461	4,050
	37 to 38	461 to 460	31		15	U	0.001		No				36 to 37	461 to 460	3,220
	38 to 39	460 to 459	37		15	U	0.001		No				37 to 38	460 to 459	4,860
	39 to 40	459 to 458	38		15	U	0.001		No				38 to 39	459 to 458	4,460
	40 to 41	458 to 457	2,261		15	U	0.037		No				39 to 40	458 to 457	4,490
	41 to 42	457 to 456	9	J	15	U	0.000		No				40 to 41	457 to 456	7,360
	42 to 43	456 to 455	25		15	U	0.000		No				41 to 42	456 to 455	5,190
9/14/12	43 to 44	455 to 454	21		15	U	0.000		No				42 to 43	455 to 454	4,230
	44 to 45	454 to 453	313		15	U	0.005		No				43 to 44	454 to 453	1,930
	45 to 46	453 to 452	155		15	U	0.003		No				44 to 45	453 to 452	2,010
	46 to 47	452 to 451	30		15	U	0.000		No				45 to 46	452 to 451	2,650
	47 to 48	451 to 450	164		15	U	0.003		No				46 to 47	451 to 450	1,990
	48 to 49	450 to 449	120		15	U	0.002		No				48 to 49	450 to 449	1,997
	49 to 50	449 to 448	16		15	U	0.000		No				49 to 50	449 to 448	2,659
	50 to 51	448 to 447	90		15	U	0.001		No				50 to 51	448 to 447	1,365
	51 to 52	447 to 444	59		15	U	0.001		No				51 to 52	447 to 444	8,523
	54 to 55	444 to 443	24		15	U	0		No				52 to 54	444 to 443	4,085
	55 to 56	443 to 442	10	U	15	U	0		No				54 to 56	444 to 442	2,700
	56 to 57	442 to 441	19		15	U	0		No				NR	NR	---
	57 to 58	441 to 440	10	U	15	U	0		No				NR	NR	---
	58 to 59	440 to 438	10	U	15	U	0		No				58 to 59	440 to 439	37,800
	60 to 61	438 to 436	10	U	15	U	0		No				60 to 61	438 to 437	390
	62 to 63	436 to 435	10	U	15	U	0		No				61 to 62	437 to 436	642
	63 to 64	435 to 434	10	U	15	U	0		No				62 to 63	436 to 435	337
	64 to 65	434 to 432	10	U	15	U	0		No				64 to 65	434 to 433	654
	66 to 67	432 to 431	10	U	15	U	0		No				66 to 67	432 to 431	1,134
	67 to 68	431 to 430	10	U	15	U	0		No				67 to 68	431 to 430	624
	68 to 69	430 to 429	10	U	15	U	0		No				68 to 69	430 to 429	716
	69 to 70	429 to 428	10	U	15	U	0		No				69 to 70	429 to 428	666
	70 to 71	428 to 426	10	U	15	U	0		No				70 to 73	428 to 425	NR
	72 to 73	426 to 425	10	U	15	U	0		No				73 to 75	425 to 423	NR
	73 to 74	425 to 420	NR		Weathered Bedrock								75 to 80	423 to 418	NR
	78 to 79	420 to 419	NR		Hard Bedrock										

ft = feet, ft asl = feet above sea level, DTW = Depth in feet to water from top-of-casing, i_v = vertical gradient, --- = cannot be measured

NR = No recovery, --- = No measurement, CVOC = Chlorinated Volatile Organic Compounds, PCE = Tetrachloroethene, TCE = Trichloroethene,

DNAPL = Dense Non-Aqueous Phase Liquid

1. Soil screening analysis performed by EPA Region 1 - Office of Environmental Measurement and Evaluation - Mobile Laboratory (OEME-ML)

= Exceeds = Exceeds the NHDES Leaching Based Soil Concentration (LBSC) of 1,810 $\mu\text{g}/\text{kg}$ PCE

TABLE 2 (cont'd)
SOIL SCREENING RESULTS FOR ERT3 & ERT4
HENRY'S DRY CLEANERS CHLORINATED SOLVENT SITE
LACONIA, NEW HAMPSHIRE

ERT3							ERT4										
Date Collected	Depth		CVOC ($\mu\text{g}/\text{kg}$) ¹				Depth		CVOC ($\mu\text{g}/\text{kg}$) ¹								
			PCE		TCE				PCE		TCE						
	ft-bgs	ft-asl	61,566		---				61,566		---						
9/10/12	2 to 3	496 to 495	1,531		15	U	0.025		No	0 to 1	498 to 497	10	U	25	U	0	No
	3 to 4	495 to 494	16		15	U	0		No	1 to 2	497 to 496	10	U	25	U	0	No
	4 to 5	494 to 493	104		15	U	0.002		No	2 to 3	496 to 495	10	U	25	U	0	No
	5 to 6	493 to 492	27		15	U	0		No	3 to 4	495 to 494	10	U	25	U	0	No
	6 to 7	492 to 491	9		15	U	0		No	4 to 5	494 to 493	10	U	25	U	0	No
	7 to 8	491 to 490	10	U	15	U	0		No	5 to 6	493 to 492	10	U	25	U	0	No
	8 to 10	490 to 489	16		15	U	0		No	6 to 7	492 to 491	10	U	25	U	0	No
	10 to 11	488 to 487	104		15	U	0.002		No	8 to 9	490 to 489	27		25	U	0	No
	11 to 12	487 to 486	68		15	U	0.001		No	10 to 11	488 to 487	128		25	U	0.002	No
	12 to 14	486 to 485	11		15	U	0		No	11 to 12	487 to 486	223		25	U	0.004	No
	14 to 16	484 to 483	14		15	U	0		No								
	16 to 17	482 to 481	8	J	15	U	0		No								
	17 to 18	481 to 480	7	J	15	U	0		No								
	18 to 20	480 to 479	623		15	U	0.010		No								
	20 to 21	478 to 477	9,450		15	U	0.153	Maybe									
	21 to 22	477 to 476	204		15	U	0.003		No								
	22 to 24	476 to 475	4,332		15	U	0.070		No								
	24 to 26	474 to 472	2,920		15	U	0.047		No								
	26 to 28	472 to 470	687		15	U	0.011		No								
	28 to 29	470 to 469	4,920		15	U	0.080		No								
	29 to 30	469 to 468	3,374		15	U	0.055		No								
	30 to 32	468 to 466	2,723		15	U	0.044		No								
	32 to 33	466 to 465	2,626		15	U	0.043		No								
	33 to 34	465 to 464	1,430		15	U	0.023		No								
	35 to 36	463 to 462	289		15	U	0.005		No								
	36 to 37	462 to 461	2,074		15	U	0.034		No								
	37 to 38	461 to 460	6,092		15	U	0.099	Maybe									
	38 to 39	460 to 459	6,915		15	U	0.112	Maybe									
	39 to 40	459 to 458	8,416		15	U	0.137	Maybe									
	40 to 42	458 to 456	5,610		15	U	0.091		No								
	NR	NR	---		---		---		---								
	44 to 45	454 to 453	116		15	U	0.002		No								
	45 to 46	453 to 452	4,472		15	U	0.073		No								
9/11/12	46 to 47	452 to 451	352		15	U	0.006		No								
	47 to 48	451 to 450	3,138		15	U	0.051		No								
	48 to 49	450 to 449	755		15	U	0.012		No								
	49 to 50	449 to 448	3,927		15	U	0.064		No								
	50 to 51	448 to 447	90		15	U	0.001		No								
	51 to 52	447 to 446	1,015		15	U	0.016		No								
	52 to 53	446 to 445	6,250		15	U	0.102	Maybe									
9/12/12	54 to 55	444 to 443	701		15	U	0.011		No								
	55 to 56	443 to 442	757		15	U	0.012		No								
	56 to 57	442 to 441	298		15	U	0.005		No								
	58 to 59	440 to 439	1,312		15	U	0.021		No								
	60 to 61	438 to 437	774		15	U	0.013		No								
	62 to 63	436 to 435	332		15	U	0.005		No								
	63 to 64	435 to 434	586		15	U	0.010		No								
	64 to 65	434 to 433	57		15	U	0.001		No								
	66 to 67	432 to 431	1,491		15	U	0.024		No								
	67 to 68	431 to 430	1,343		15	U	0.022		No								
	68 to 69	430 to 429	631		15	U	0.010		No								
	69 to 70	429 to 428	1,831		15	U	0.030		No								
	NR	NR	---		---		---		---								
	73 to 75	425 to 423	NR		Weathered Bedrock												
	75 to 80	423 to 418	NR		Hard Bedrock												

ft = feet, ft asl = feet above sea level, DTW = Depth in feet to water from top-of-casing, i_v = vertical gradient, --- = cannot be measured

NR = No recovery, --- = No measurement, CVOC = Chlorinated Volatile Organic Compounds, PCE = Tetrachloroethene, TCE = Trichloroethene,

DNAPL = Dense Non-Aqueous Phase Liquid

1. Soil screening analysis performed by EPA Region 1 - Office of Environmental Measurement and Evaluation - Mobile Laboratory (OEME-ML)

= Exceeds = Exceeds the NHDES Leaching Based Soil Concentration (LBSC) of 1,810 $\mu\text{g}/\text{kg}$ PCE

TABLE 3
SUMMARY OF ANALYTICAL RESULTS FOR CVOCs IN GROUNDWATER
HENRY'S DRY CLEANERS CHLORINATED SOLVENT SITE
LACONIA, NEW HAMPSHIRE

Well	Sample Date	Easting (ft)	Northing (ft)	PCE	TCE	c1,2-DCE	t1,2-DCE	Vinyl Chloride	TOTAL CVOCs	PCE:CVOC	Comments
		NHDES AGQS		5	5	70	100	2			
ERT4	Nov-12	1,036,110.8	374,187.0	1,600	140	270	50U	50U	2,010	0.80	FARM Site across the WT
NW-3C	Jul-12			11,000	250U	250U	250U	250U	11,000	1	FARM Site shallow
	Nov-12			6,500	200U	200U	200U	200U	6,500	1	
NW-3B	Jul-12			3,700	200U	200U	200U	200U	3,700	1	FARM Site intermediate
	Nov-12			5,200	200U	200U	200U	200U	5,200	1	
NW-3A	Jul-12			1U	1U	1U	1U	1U	0	0	FARM Site deep
	Nov-12			1U	1U	1U	1U	1U	0	0	
GEO-1	Jul-12	1,036,202.3	374,050.8	70	120	220	5U	41	451	0.16	Winnipesaukee River
	Nov-12			75	88	180	5U	55	398	0.19	
GEO-2	Jul-12	1,036,202.9	374,084.8	1U	1U	3.2	1U	2.3	5.5	0	Winnipesaukee River
	Nov-12			1U	1U	1U	1U	1U	0	0	
GEO-3	Jul-12	1,036,158.6	374,026.9	1U	9.2	4.2	260	78	351	0	Winnipesaukee River
	Nov-12			1U	1U	54	1U	15	69	0	
GEO-4	Jul-12	1,036,248.9	374,073.7	150	140	110	5U	63	463	0.32	Winnipesaukee River
	Nov-12			79	210	140	5U	94	523	0.15	
GEO-5	Jul-12	1,036,280.6	374,097.8	1U	1U	1U	1U	1U	0	0	Winnipesaukee River
	Nov-12			1U	1.3	1.4	1U	1.9	4.6	0	
GEO-6	Jul-12	1,036,246.0	374,388.5	1U	1U	1U	1U	1U	0	0	Parking Lot East of Building #3
	Nov-12			1U	1U	1U	1U	1U	0	0	
OSW-1	Jul-12	1,036,079.1	374,466.6	6,400	200U	200U	280	200U	6,680	0.96	Parking Lot GWI
	Nov-12			2,300	100U	100U	100U	100U	2,300	1	
MW-101S	Jul-12	1,036,084.7	374,574.9	70	3.4	ND	32	5U	105	0.66	HDC site
	Nov-12			120	12	33	5U	5U	165	0.73	
MW-101D	Jul-12	1,036,081.3	374,577.3	15,000	500U	500U	500U	500U	15,000	1	HDC site
	Nov-12			16,000	500U	500U	500U	500U	16,000	1	
MW-102	Jul-12	1,036,055.7	374,551.4	420	10	370	20U	20U	800	0.53	HDC site
	Nov-12			420	12	380	20U	20U	812	0.52	
				660	20U	140	20U	20U	800	0.83	
MW-103	Jul-12	1,036,145.7	374,708.8	1U	1U	1U	1U	1U	0	0	Upgradient Well HDC
	Nov-12			1U	1U	1U	1U	1U	0	0	
ERT1-S	Nov-12	1,036,066.1	374,557.8	3,000	100U	100U	100U	100U	3,000	1	South of HDC, WT (ERT1-A)
ERT1-I	Nov-12			2,800	100U	100U	100U	100U	2,800	1	South of HDC, intermediate (ERT1-B)
ERT1-D	Nov-12			2,600	20U	20U	20U	20U	2,600	1	South of HDC, deep (ERT1-C)
ERT2-S	Nov-12			1,800	59	61	50U	50U	1,920	0.94	East of GWI shallow (ERT2-A)
ERT2-1a	Nov-12	1,036,143.9	374,512.3	12,000	380	510	250U	250U	12,890	0.93	East of GWI intermediate (ERT2-B)
ERT2-1b	Nov-12			14,000	500U	500U	500U	500U	14,000	1	East of GWI intermediate (ERT2-IB)
ERT2-D	Nov-12			2,300	100U	100U	100U	100U	2,300	1	East of GWI deep (ERT2-C)
ERT3-S	Nov-12			2,600	100U	100U	100U	100U	2,600	1	GWI loading dock, shallow (ERT3-A)
ERT3-1a	Nov-12	1,036,114.5	374,499.6	4,200	200U	200U	200U	200U	4,200	1	GWI loading dock, intermediate (ERT3-B)
ERT3-1b	Nov-12			1,700	50U	50U	50U	50U	1,700	1	GWI loading dock, intermediate (ERT3-IB)
ERT3-D	Nov-12			1,500	50U	50U	50U	50U	1,500	1	GWI loading dock, deep (ERT3-C)
				2,200	100U	100U	100U	100U	2,200	1	GWI loading dock, deep (ERT3-C)

= Exceeds the NHDES Aqueous Groundwater Quality Standard, TCE = trichloroethene, t1,2-DCE = trans-1,2-dichloroethene, c1,2-DCE = cis-1,2-dichloroethene

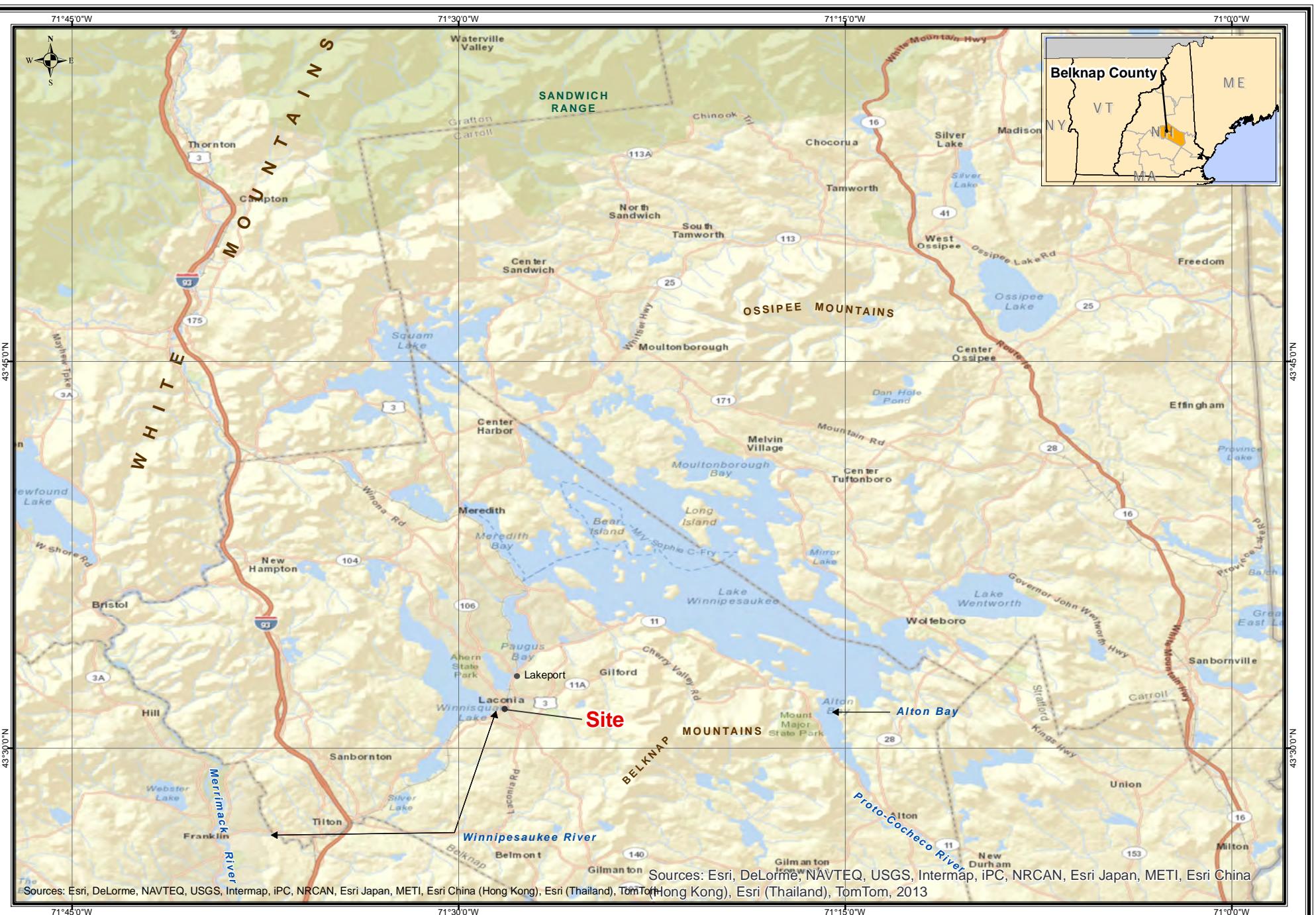
TABLE 4
SUMMARY OF ANALYTICAL RESULTS FOR POREWATER & SURFACE WATER FROM THE WINNIPESAUKEE RIVER
HENRY'S DRY CLEANERS CHLORINATED SOLVENT SITE
LACONIA, NEW HAMPSHIRE

Well	Sample Date	Easting (ft)	Northing (ft)	PCE	TCE	c1,2-DCE	Vinyl Chloride	TOTAL CVOCs	PCE:CVOC	Comments
		NHDES AGQS		5	5	70	2			
ERT-PW1	Oct-12	1,036,356.0	374,041.9	330	24	5U	5U	354	0.93	mouth of Perley Canal
ERT-PW2	Oct-12	1,036,482.8	374,122.3	1U	1U	1U	1U	1U	0	upgradient of FARM property
ERT-PW3	Oct-12	1,036,209.5	373,992.3	25	10U	680	10U	705	0.04	leading edge of CVOC plume
				23	10U	650	10U	673	0.03	
ERT-PW4	Oct-12	1,036,248.7	374,009.0	1,800	230	110	50U	2,140	0.84	leading edge of CVOC plume
ERT-PW5	Oct-12	1,036,171.0	373,971.0	1U	1U	1U	1U	1U	0	leading edge of CVOC plume
ERT-PW6	Oct-12	1,036,061.2	373,938.6	1U	1U	1U	1U	1U	0	FARM Site deep
ERT-PW7	Oct-12	1,035,990.9	373,905.8	1U	1U	1U	1U	1U	0	downgradient of CVOC plume
				1U	1U	1U	1U	1U	0	
ERT-PW8	Oct-12	1,035,915.2	373,887.8	1U	1U	1U	1U	1U	0	downgradient of CVOC plume
ERT-PW9	Oct-12	1,035,830.4	373,853.2	1U	1U	1U	1U	1U	0	downgradient of CVOC plume
ERT-PW10	Oct-12	1,035,710.6	373,846.1	1U	1U	1U	1U	1U	0	downgradient of FARM Site
ERT-PW11	Oct-12	1,035,562.9	373,891.9	ns	ns	ns	ns	ns	ns	persistent vapor bubbles in samples
ERT-PW12	Oct-12	1,035,543.6	373,924.4	ns	ns	ns	ns	ns	ns	persistent vapor bubbles in samples
ERT-PW13	Oct-12	1,035,616.7	373,915.1	1U	1U	1U	1U	1U	0	downgradient of FARM Site
ERT-SW1	Oct-12	1,036,523.0	374,114.4	1U	1U	1U	1U	1U	0	Winnipesaukee River
ERT-SW2	Oct-12	1,036,248.5	373,997.5	1U	1U	1U	1U	1U	0	Winnipesaukee River
PD-01	Oct-12	1,036,120.8	373,955.7	1U	1U	1U	1U	1U	0	diffusion bag collocated w/ ERT-PW5
PD-02	Oct-12	1,036,186.5	373,992.7	1U	1U	1U	1U	1U	0	diffusion bag collocated w/ ERT-PW3
PD-03	Oct-12	1,035,989.9	373,919.7	1U	1U	8.0	1.7	9.7	0	diffusion bag collocated w/ ERT-PW7
PD-04	Oct-12	1,035,908.8	373,892.9	ns	ns	ns	ns	ns	ns	diffusion bag destroyed
PD-05	Oct-12	1,035,830.2	373,843.4	ns	ns	ns	ns	ns	ns	diffusion bag destroyed
PD-06	Oct-12	1,035,717.9	373,874.3	1U	1U	1U	1U	1U	0	diffusion bag collocated w/ ERT-PW10
PD-20	Oct-12	1,036,186.5	373,992.7	1U	1U	1U	1U	1U	0	diffusion bag duplicated of PD-02

= Exceeds the NHDES Aqueous Groundwater Quality Standard, TCE = trichloroethene, c1,2-DCE = cis-1,2-dichloroethene, ns = no sample collected

FINAL

FIGURES



Map created using ESRI map data sources.

Map Creation Date: 02 May 2013

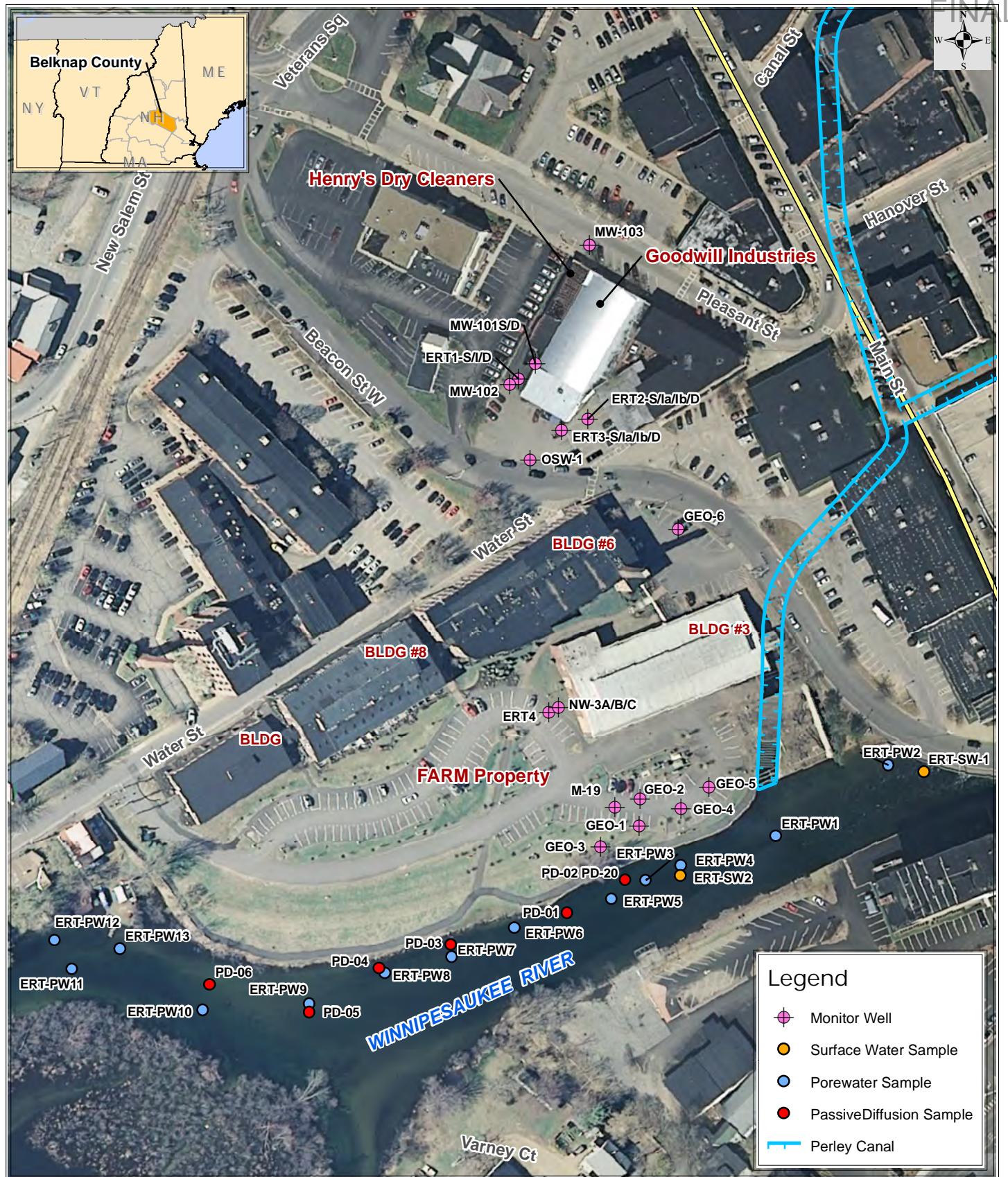
Data: g:\arcviewprojects\SERAS01\00-173

MXD file: g:\arcinforprojects\SERAS01\SER00173_Henry_DryCleaners_Site\173_TM2013_Lake_Region_f1

0 30,000
Feet

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W.A.# 0-173

Figure 1
Lake Region
Henry's Dry Cleaners Site
Laconia, New Hampshire



Map created using 2010 Orthoimagery data from USGS,
Sampling data in November 2012

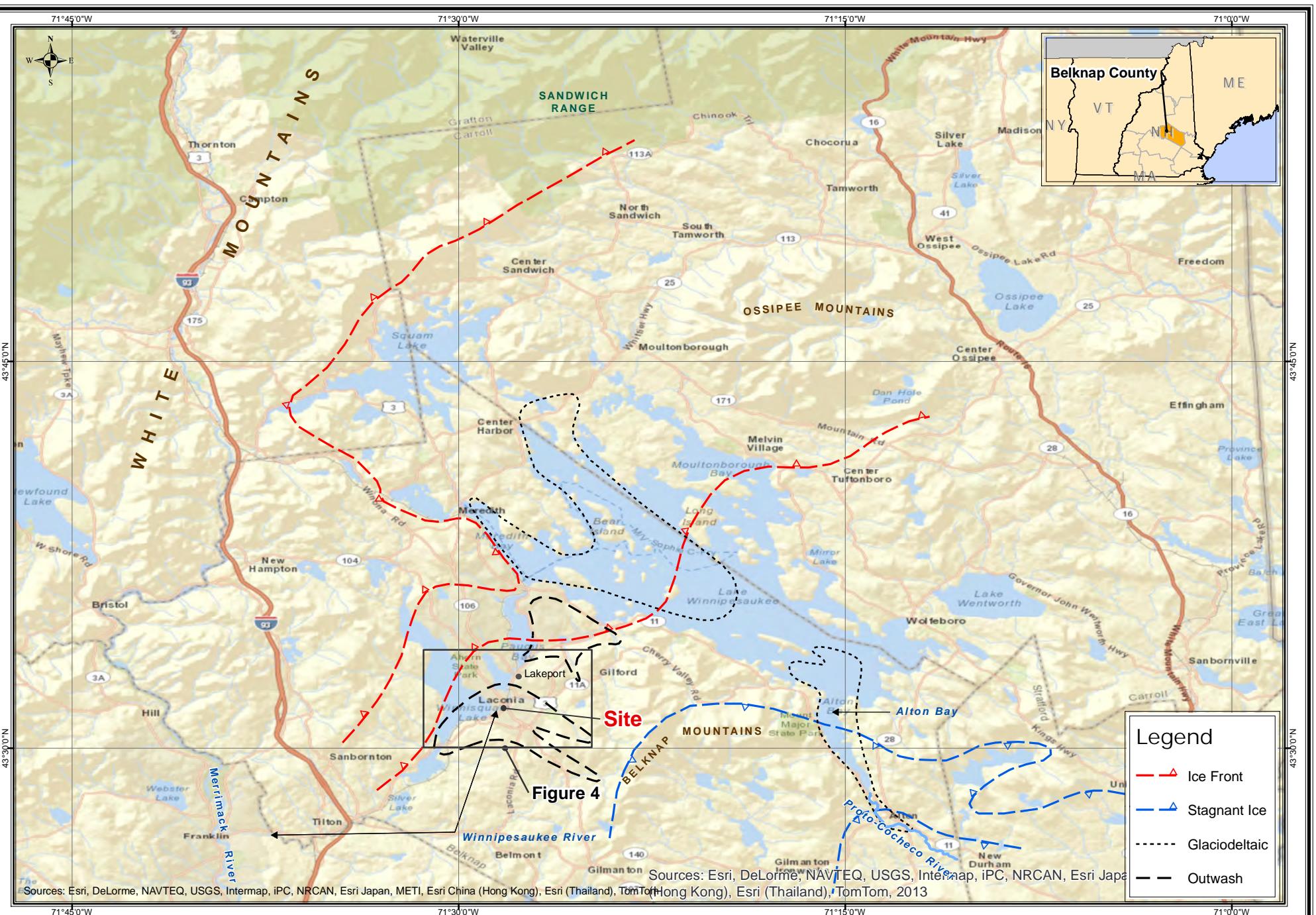
Map Creation Date: 06 May 2013

Coordinate system: New Hampshire

FIPS: 2800
Datum: NAD83
Units: Feet

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W A # 0-173

Figure 2
Sample Locations
Henry's Dry Cleaners Site
Laconia, New Hampshire



Map created using ESRI map data sources.

Map Creation Date: 02 May 2013

Data: g:\arcviewprojects\SERAS01\00-173

MXD file: g:\arcinforprojects\SERAS01\SER00173_Henry_DryCleaners_Site\173_TM2013_Deglaciation_of_Lake_Region_f3

Note:

IF1, IF2 = Receding Ice Front location for period 1&2.
SI1, SI2 = Receding Stagnant Ice for period 1&2.

0

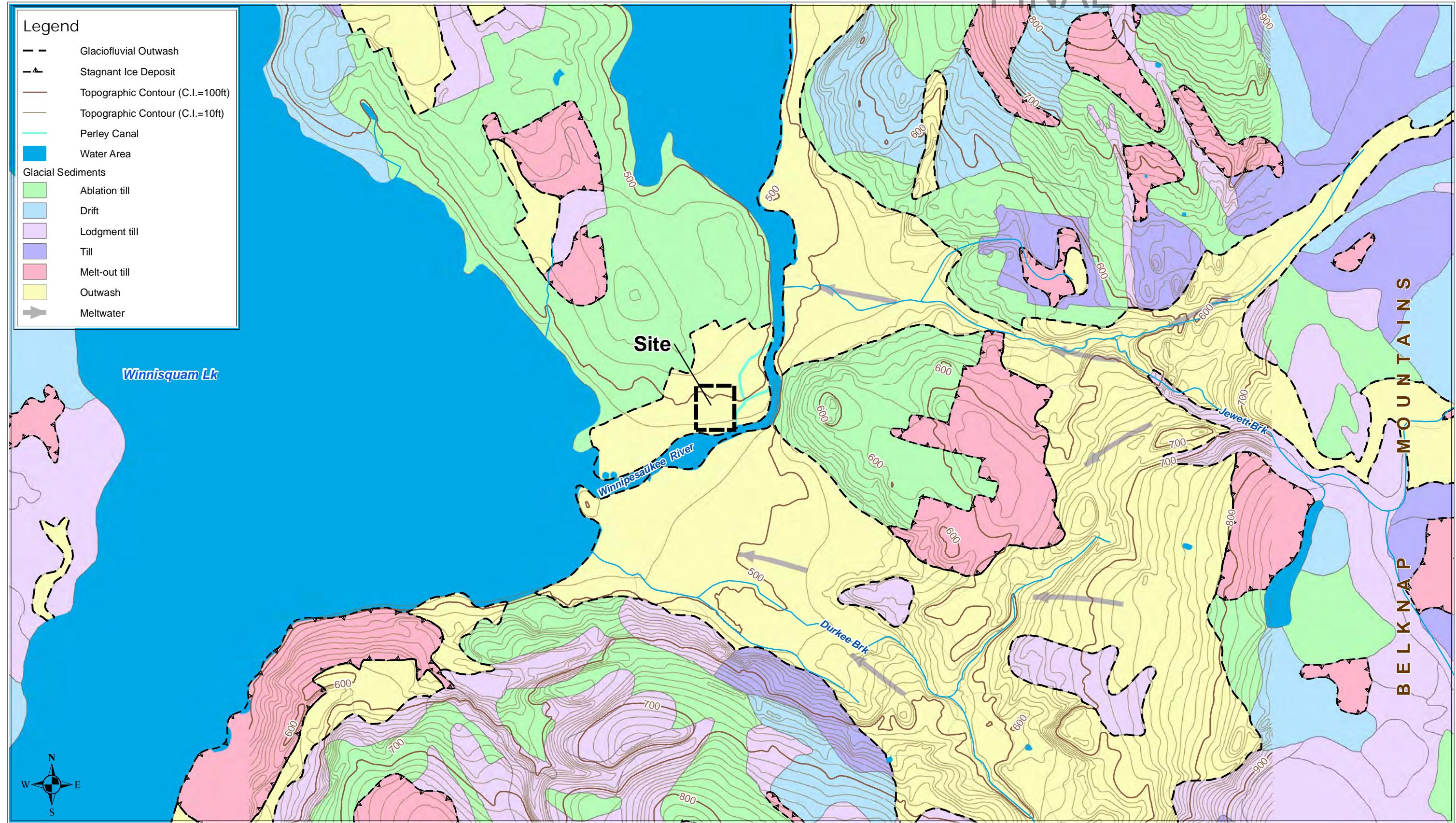
30,000

Feet

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Figure 3
Deglaciation of Lake Region
Henry's Dry Cleaners Site
Laconia, New Hampshire

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W.A.# 0-173

Figure 4
Glacial Geology
Henry's Dry Cleaners Site
Laconia, New Hampshire

Depth (ft bg)	PCE (mg/kg)	Well Log	ERT 1	PCE (mg/kg)	Well Log	ERT 2	PCE (mg/kg)	Well Log	ERT 3
0									
5	36 13 ND ND 920 ND 15		0-8.5ft: Lt brn to or, crse sand and pebbles (gravels). Poorly sorted. Section coarseens downward.	1,480 110		0-13.0ft: Lt brn to dk brn, med to crse sand w/ trace pebbles. Moderately to poorly sorted. Section coarseens downward.	1,531 16 ND 27 9 ND 16		0-12.0ft: Or-brn, fn to med sand w/ trace pebbles (gravels). Moderately sorted. Strata is poorly sorted. Strata is heterogeneous.
10	ND ND ND 159 46		8.5-18.0ft: Lt to dk brn, crse to fn sand w/ some pebbles (gravels). Moderately to poorly sorted. Gravels become less coarse near the bottom	1,600			ND ND 68		
15	283 633 306 308 77 30 53			52		13.0-33.0ft: Brn, gy and green, fn to med sand w/ trace pebbles. Moderately sorted. Strata is heterogeneous.	11 14 8 7 623 204		12-24.0ft: Or to dk brn, med to crse sand w/ trace pebbles and silt. Moderately to poorly sorted. Strata is very heterogeneous strata
20	1,500 141 83 19 ND		18.0-36.0ft: Lt to dk brn, fn to med sand that is interbedded/interfingered w/crse sand and pebbles (gravels). Gravel zones are <1 ft thick. Finer grain zones are moderately sorted and coarse grain zones are poorly sorted. Gravels become less coarse near the bottom. Strata is very heterogeneous.	2,280 600 700 1,090 980 844			9,450 4,332 2,920 687 4,920 3,374 2,626 430 289		
25	283 633 306 308 77 30 53			2,020 920 2,620 1,730 2,400		33.0-43.0ft: Brn, med sand. Well sorted. Heaving sand formation	2,074 6,092 6,915 8,415 5,610		35.0-38ft: Lt brn, pebbles to cobbles (grainoid). Poorly sorted.
30	17 ND 38 31 37 38			4,050 3,220 4,860 4,460 4,490 7,360 5,190 4,230 1,930 2,010 2,650 1,990			116 4,472 352 3,138 755 3,927 90 1,015 6,250		38.0-48.0ft: Lt gy, silt to fn sand. Very well sorted.
35	ND 38 31 37 38			43.0-50.0ft: Lt gy to brn, fn sand to pebbles (gravel). Poorly sorted					
40	2,261 9 25 21		39.0-44.0ft: Lt gy to brn, fn to med sand. Well sorted	2,700					
45	313 155 30 164 120 16 90			37,800 9,670		50.0-72.0ft: Lt to lt brn, fn to med sand w/ trace pebbles. Well to moderately sorted.	1,312 774 332 586 57		48-52.0ft: Lt brn to dk brn, med to crse sand w/ trace pebbles and silt. Moderately to poorly sorted.
50	59		44.0-60.0ft: Lt to dk gy, med to crse sand. Moderately sorted.	1,997 2,659 1,356 8,523 4,085			701 757 298		
55	24 ND 19 ND ND						1,312 774 332 586 57		
60	ND								
65	ND ND ND ND ND		60.0-72.0ft: Lt to dk gy, silt to med sand. Well sorted.	654 1,134 624 716 666 527					
70	ND ND			265		72.0-80.0ft: Bedrock, quartz-biotite gneiss (Littleton Formation)			52.0-71.0ft: Lt to dk gy, silt to fn sand w/ trace pebbles. Well sorted.
75	ND		73.0-80.0ft: Bedrock, quartz-biotite gneiss (Littleton Formation)						71.0-80.0ft: Bedrock, quartz-biotite gneiss (Littleton Formation)
80									

ft bg = feet below grade, PCE = tetrachloroethene, mg/kg = milligrams per kilogram

= Exceeds the NHDES Leaching Based Soil Concentration (LBSC) of 1,810 µg/kg PCE

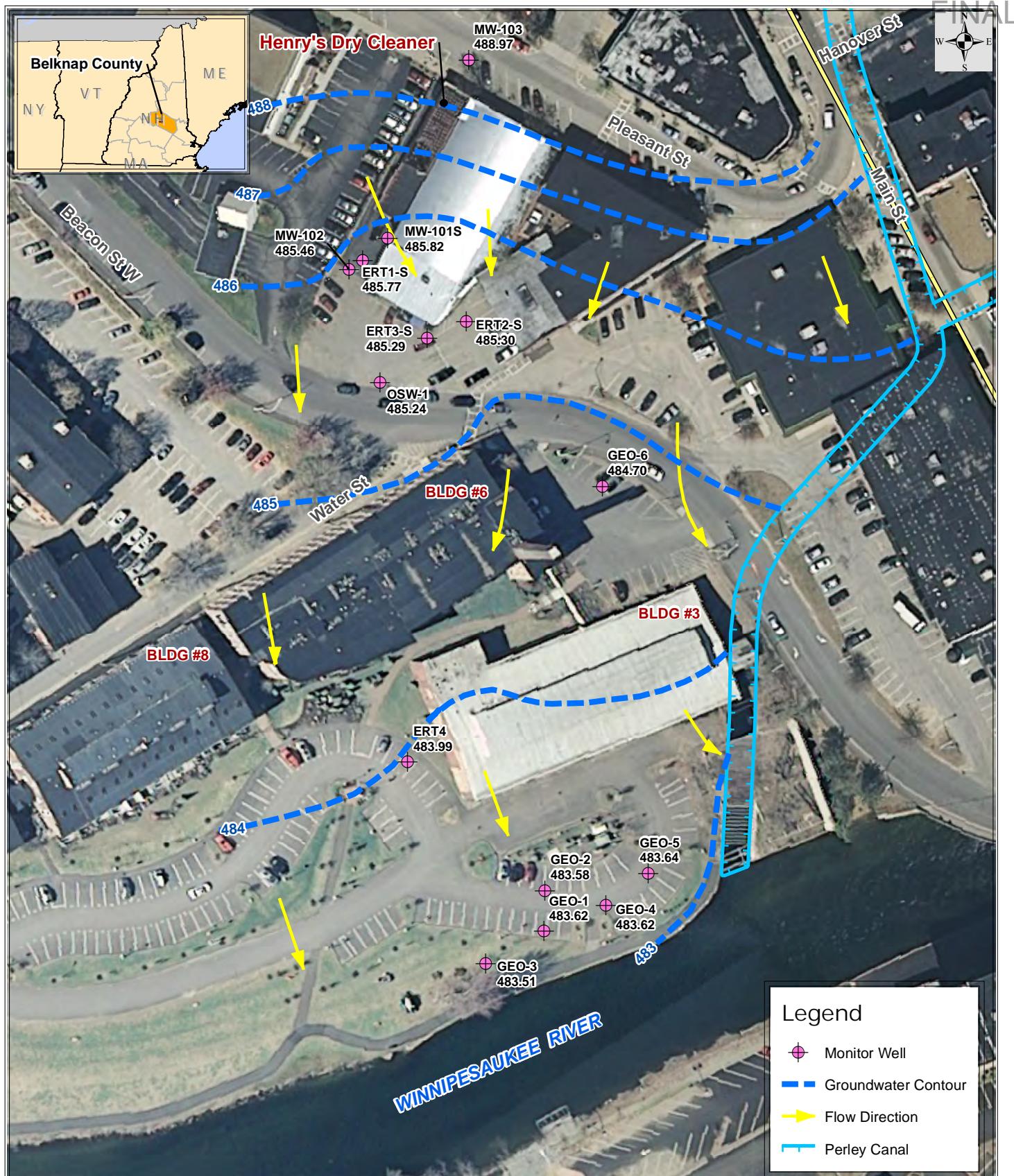
silt fine sand medium sand coarse sand pebbles cobbles

NOTE:

Complete Boring Logs attached as Appendix A

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Figure 5
 Schematic Boring Logs
 Henry's Dry Cleaners
 Laconia, New Hampshire



Map created using 2010 Orthoimagery data from USGS.
Sampling data in November 2012

Map Creation Date: 20 February 2013

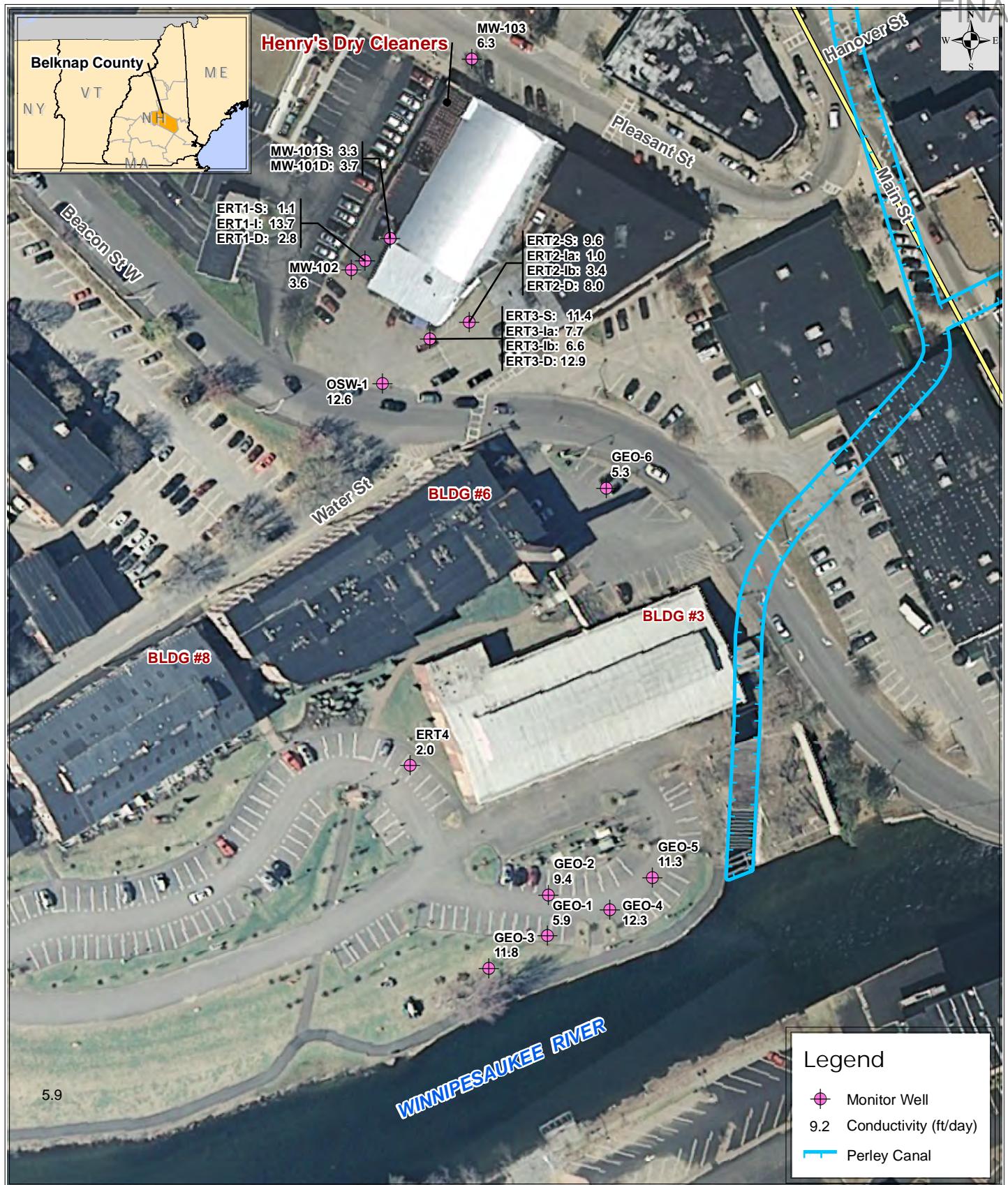
Coordinate system: New Hampshire State Plane
FIPS: 2800
Datum: NAD83
Units: Feet

0 100 200
Feet

Data: g:\arcviewprojects\SERAS01\00-173
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173_TM2013_Groundwater_Elevation_Contour_F6

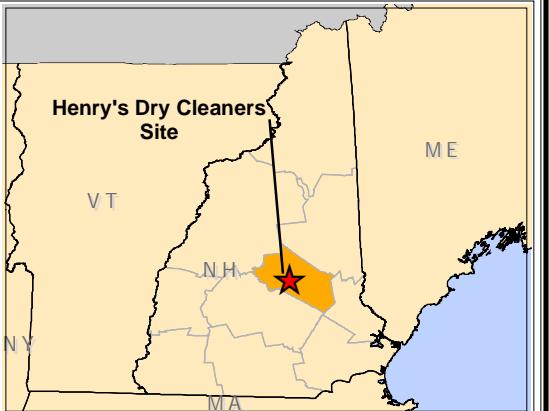
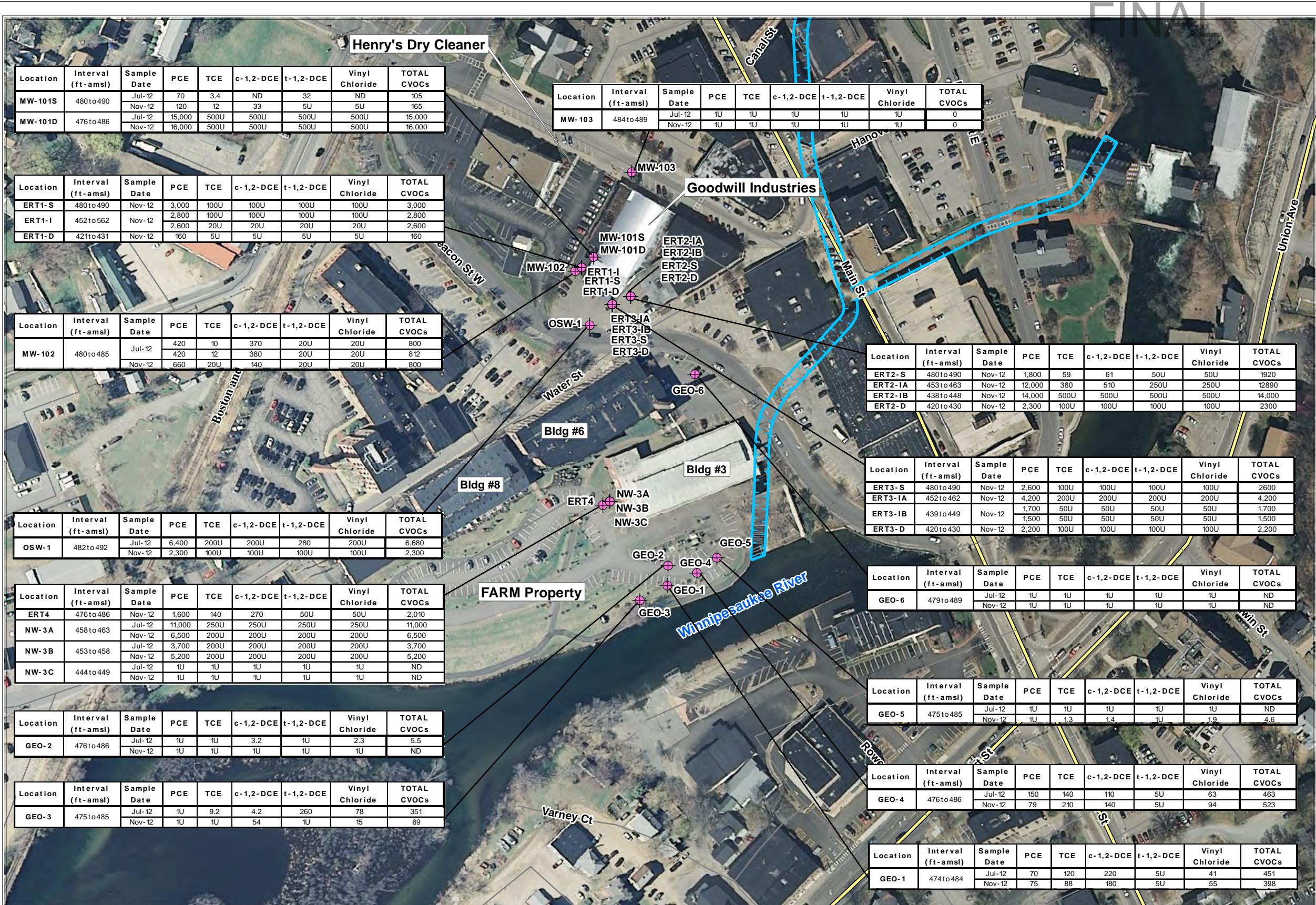
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Figure 6
Groundwater Elevation Contours
Henry's Dry Cleaners Site
Laconia, New Hampshire



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Figure 7
Hydraulic Conductivity
Henry's Dry Cleaners Site
Laconia, New Hampshire



N
W E
S
Magnetic North

Legend
● Monitor Well
— Perley Canal

0 160 320 Feet

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W.A.# 0-173

Figure 8
Analytical Results for Groundwater
Henry's Dry Cleaners Site
Laconia, New Hampshire

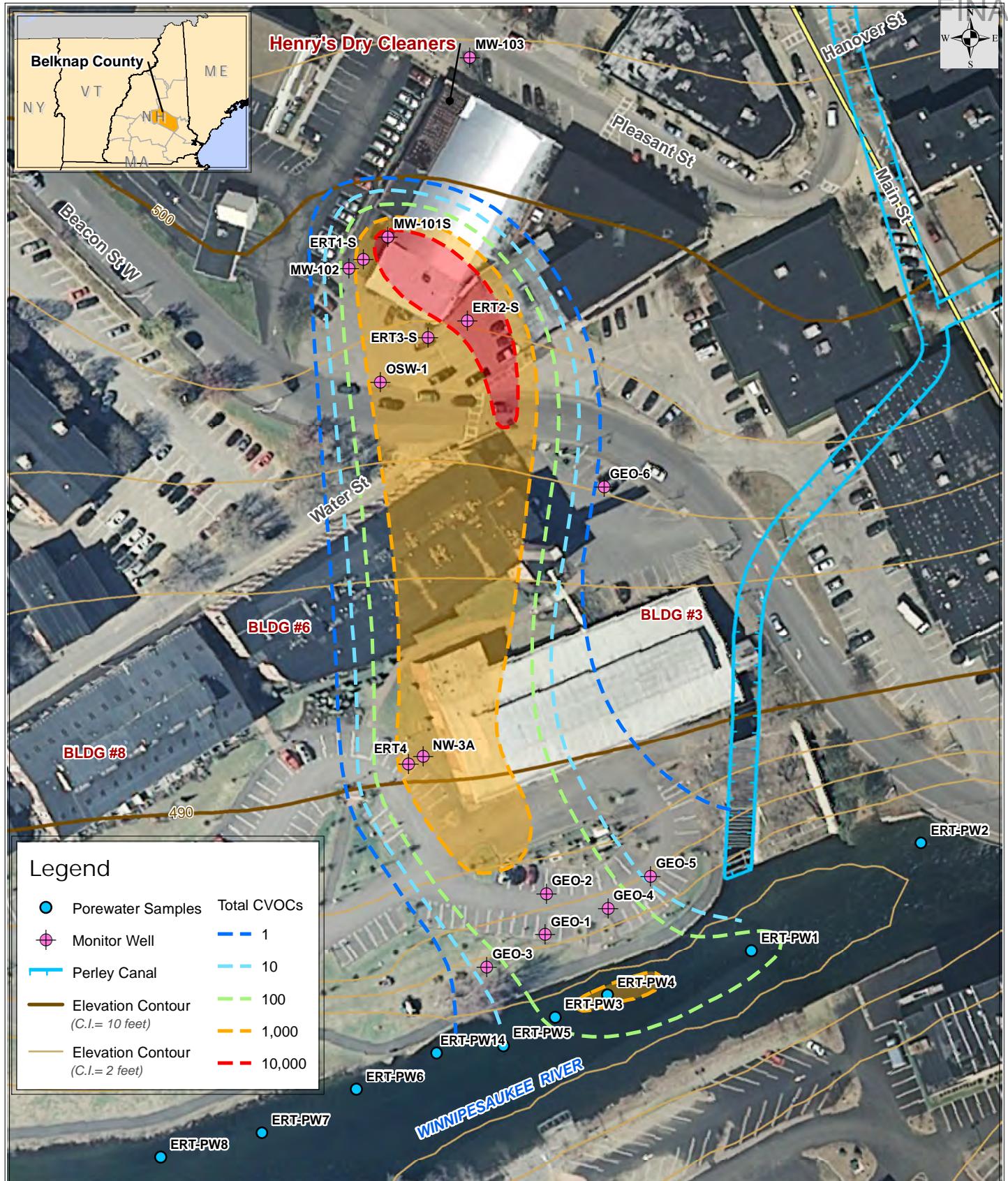
Map created using 2010 Orthoimagery data from USGS.

Map Creation Date: 01 February 2013

Coordinate system: New Hampshire State Plane
FIPS: 2800
Datum: NAD83

Units: Feet

Data: g:\arcviewprojects\SERAS01\00-173
MXD file: G:\ArcInfoProjects\SERAS01\SER00173_Henry_DryCleaners_Site\173_TM2013_GW_Analytical_Results_F8



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Figure 9
Groundwater Total CVOCS
Henry's Dry Cleaners Site
Laconia, New Hampshire

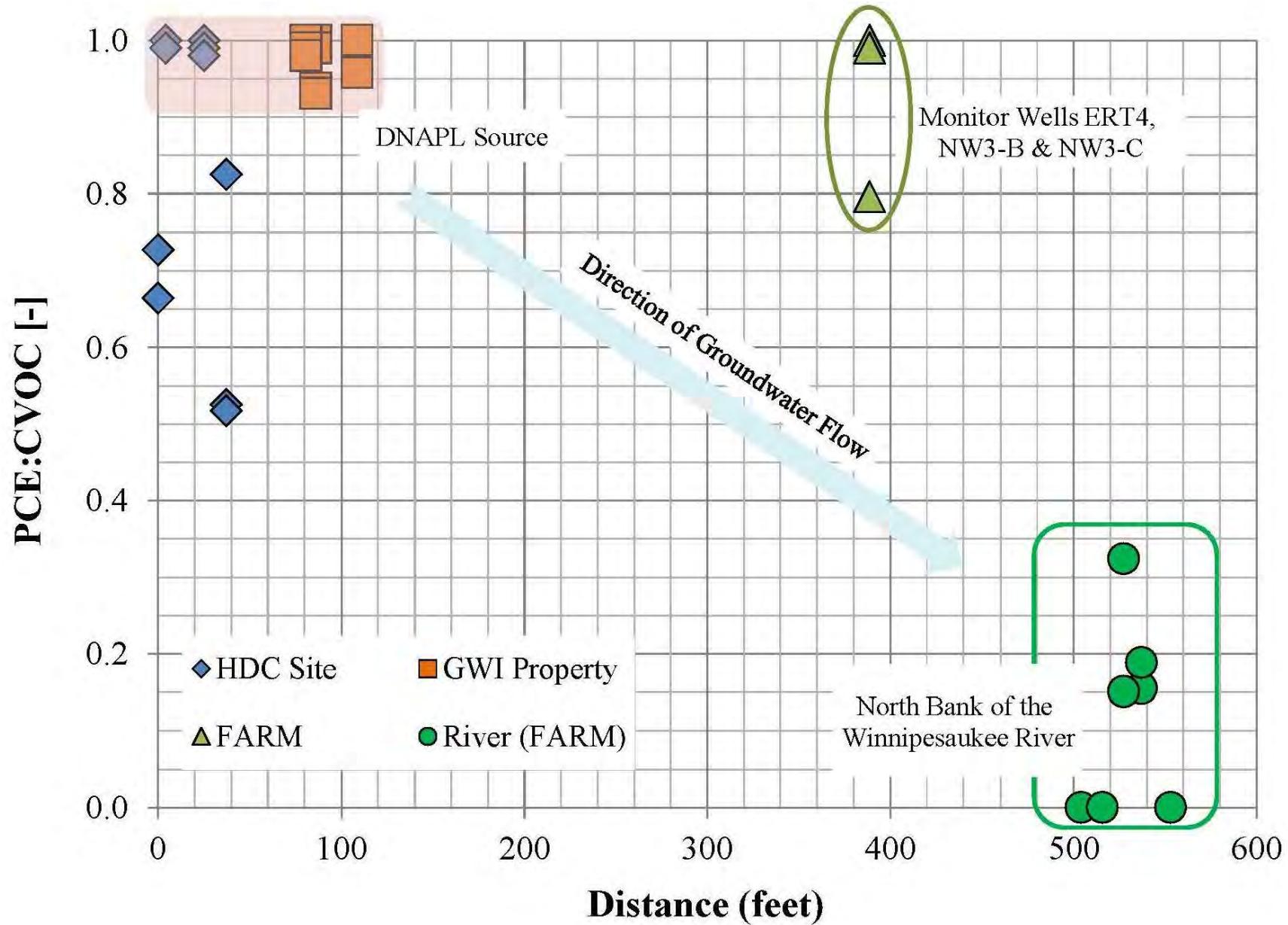
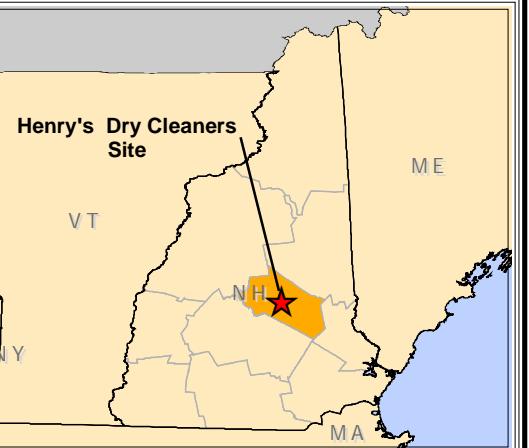
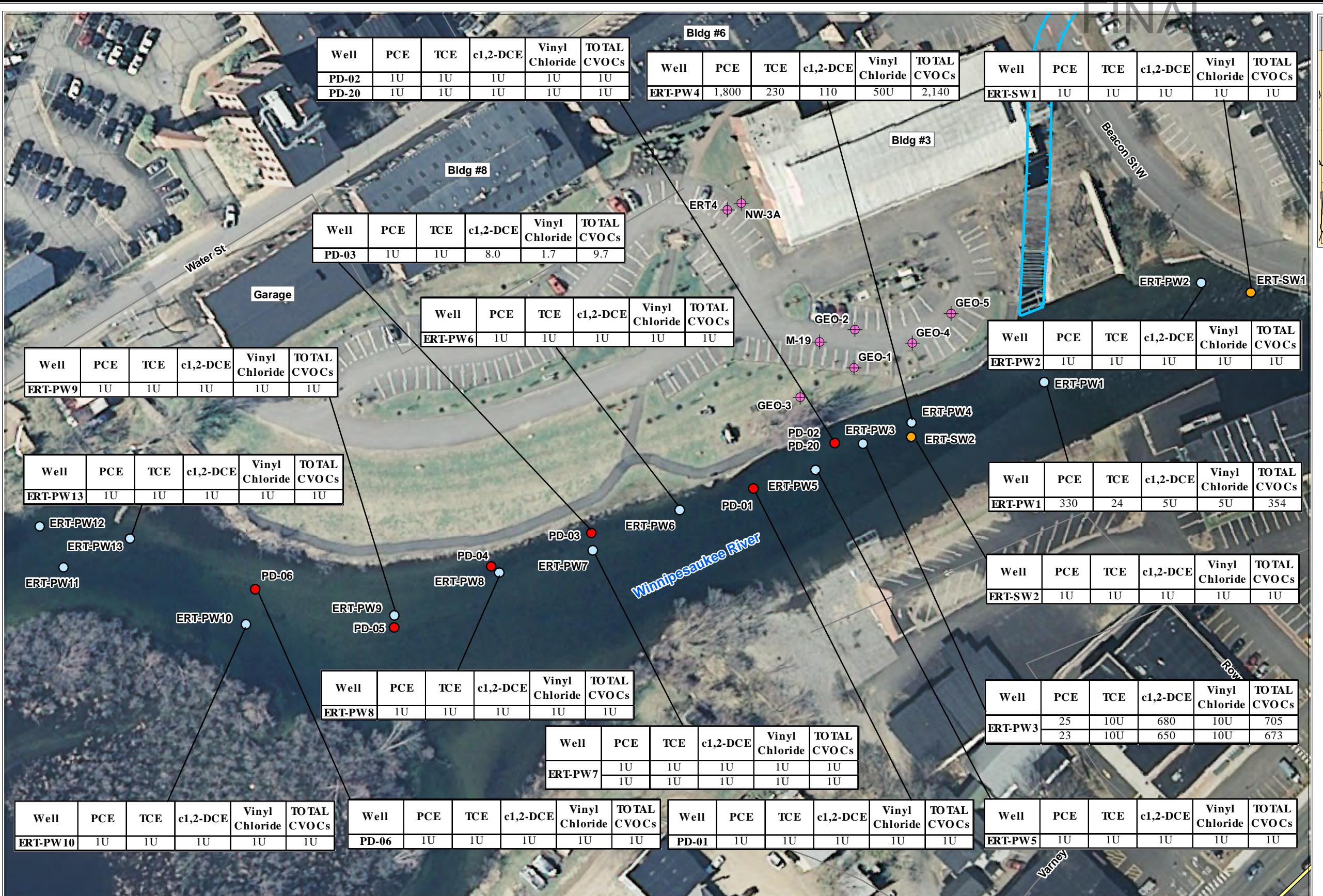


Figure 10
CVOC Breakdown Products
Henry's Dry Cleaners
Laconia, New Hampshire



Legend

- Porewater Sample
 - Passive Diffusion Sample
 - Surface Water Sample
 - Monitor Well
- Perley Canal

Note:
No samples were collected from locations ERT-PW11, ERT-PW12, PD-04 & PD-05.

Map created using 2010 Orthoimagery data from USGS,

Map Creation Date: 22 April 2013

Coordinate system: New Hampshire State Plane
FIPS: 2800
Datum: NAD83
Units: Feet

Data: g:\arcviewprojects\SERAS01\00-173
MXD file: G:\ArcInfoProjects\SERAS01\SER00173_Henry_DryCleaners_Site\173_TM2013_Analytical_Result_W_River_F11

NOTE: Concentrations are in $\mu\text{g/L}$

PCE = Tetrachloroethene

TCE = Trichloroethelene

c1,2-DCE = cis 1,2 Dichloroethelene

U = Non-Detect

0 80 160
Feet
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EP-W-09-031
W.A.# 0-173

Figure 11
Analytical Results for the Winnipesaukee River
Henry's Dry Cleaners Site
Laconia, New Hampshire

APPENDIX A
Borehole Logs (Weston, 2013)

**Henry's Dry Cleaners Site
Laconia, New Hampshire**

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG			Page 1 of 4			
Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)				
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)		
Date Drilled		Sept. 12 - 17, 2012		Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91		
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-1B (inter)	19-Sep-12	12.15		
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93		
Drill Rig Type		CME-85		Surface Elevation						
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density
					0 - 3"	3 - 15"	0 - 13"			
2		NA	NA	NA	No soil samples collected. Soil sampling began at 2 - 4 interval.			NA	NA	NA
4		1	1-2-3-4	15	0 - 3" Dark brown, fine-to-medium SAND, trace coarse-to-fine gravel (brick fragments). Dry.	3 - 15" Light brown-orange brown, coarse-to-fine SAND, little fine gravel (rocks). Dry.		0	36/ND	Very Loose
6		2	1-3-5-6	13	0 - 13" Light brown-orange brown, coarse-to-fine SAND, little fine gravel. Dry.			0.6	13/ND	
8		3	3-3-4-5	23	0 - 6" Lt. brown, fine-to-coarse SAND , trace fine gravel and silt. Dry.	6 - 8" Black, coarse GRAVEL. Dry.	8 - 23" Lt. brown-orange brown, coarse-to-fine SAND , trace fine gravel. Moist.	0	ND/ND	Loose
10		4	2-4-4-5	17	0 - 5" Lt. brown, fine-to-coarse SAND , trace fine gravel and silt. Moist.	5 - 8" Lt. brown, coarse GRAVEL (rocks) and fine-to-coarse SAND. Moist.	8 - 17" Lt. brown, fine-to-coarse SAND , little coarse gravel (rocks). Moist.	0	920/ND	
12		5	5-7-9-11	18	0 - 13" Lt. brown, coarse-to-fine GRAVEL and coarse-to-fine SAND, trace silt. Moist.	13 - 15" Black, fine-to-coarse GRAVEL and fine-to-coarse SAND. Dry.	15 - 18" Rusty brown, fine-to-coarse GRAVEL and fine-to-coarse SAND. Dry.	2.1	ND/ND	Loose
14		6	15-21-24-23	8	0 - 5" Lt. brown, fine-to-coarse GRAVEL and fine-to-coarse SAND. Dry.	5 - 7" Rusty-brown, fine-to-coarse SAND, little fine-to-coarse gravel. Dry.	7 - 8" Gray, fine-to-medium SAND , trace fine gravel. Dry.	0	159/ND	
16		7	15-15-17-12	17	0 - 3" Brown-gray, f-to-c SAND, trace f-to-c gravel and silt. Wet.	3 - 10" Rusty-brown, c-to-f SAND, little c-to-f gravel. Wet.	10 - 13" Olive-gray, SILT. Wet.	0.5	283/ND	Dense
18		8	12-13-15-19	14	0 - 14" Rusty-brown, gray, and grayish brown, coarse-to-fine GRAVEL (subangular and subrounded granitic and metamorphic rock fragments). Wet.			0	633/ND	
20		9	7-13-15-19	18	0 - 16" Lt. brown- dark brown, fine-to-medium SAND (mottled). Wet.	16 - 18" Black, medium-to-coarse SAND, trace fine gravel. Wet.		0	306/ND	Medium Dense
22		10	6-12-13-16	16	0 - 10" Lt. brown and rusty brown, fine-to-medium SAND, coarse-to-fine gravel (subangular and subrounded metamorphic rock fragments). Wet.	10 - 16" Olive-gray, fine-to-medium SAND (sorted). Wet.		0	308/ND	
24		11	11-11-13-15	10	0 - 10" Brown, coarse-to-fine SAND and coarse-to-fine GRAVEL (subangular and subrounded), trace silt. Wet.			0	77/ND	Medium Dense
26		12	55-120R (3 in)	9	0 - 3" Brown and rusty-brown, fine-to-coarse SAND, trace f. gravel. Wet.	3 - 5" White, coarse GRAVEL (granitic rock fragments), little fine-to-medium SAND. Wet.	5 - 9" Brownish-gray, fine-to-medium SAND, little coarse gravel. Wet.	0	53/ND	
								0.2	1600/ND	Medium Dense
								0	141/ND	Medium Dense
								0.2	84/ND	Very Dense
								0	19/ND	Very Dense

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 2 of 4			
Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)					
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)			
Date Drilled		Sept. 12 - 17, 2012			Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91		
Drilling Company		GeoSearch, Inc.			Method	SS	ERT-1B (inter)	19-Sep-12	12.15		
Drilling Foreman		Chris Stamos			Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93		
Drill Rig Type		CME-85			Surface Elevation						
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)									
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE	Density	
								PID (ppm)	Field Lab (ppb)		
28		13	26-60-120R (0 in)	10	0 - 10" Light brown, coarse-to-fine SAND, little coarse-to-fine gravel (subangular and subrounded). Wet.			0	ND/ND	Very Dense	
		14	28-38-48-78	24	0 - 19" Light brown, fine-to-coarse SAND and coarse-to-fine GRAVEL, trace silt. Very stiff. Wet. 19 - 24" Light brown, fine-to-medium SAND (well sorted), trace silt. Wet.			0	17/ND	Very Dense	
30		15	65-85-92-120R (4 in)	22	0 - 2" Light brown, fine SAND, trace silt. Wet. 2 - 7" Rusty-brown, coarse-to-fine SAND, little fine gravel. Wet. 7 - 16" Light brown, f-to-m SAND, some c-to-f gravel (subangular). Wet. 16 - 22" Light brown, fine SAND (mottled, well sorted). Wet.			0	44/ND	Very Dense	
32		16	10-20-38-45	18	0 - 6" Light brown, fine-to-medium SAND (sorted), trace fine gravel and silt. Wet. 6 - 18" Rusty brown, fine-to-coarse SAND (sorted), trace silt. Wet.			0	ND/ND	Very Dense	
34		17	13-13-32-43	24	0 - 24" Orange-brown and rusty brown, coarse-to-fine SAND (sorted), trace fine gravel and silt. Wet.			0	17/ND	Dense	
36		18	3-3-13-50	16	0 - 12" Orange-brown, fine-to-coarse GRAVEL and fine-to-coarse SAND, trace silt. Wet. 12 - 16" Orange-brown, fine-to-medium SAND (sorted), trace silt. Wet.			0	38/ND	Medium Dense	
38		19	18-6-15-40	21	0 - 17" Brown, fine-to-coarse SAND, trace fine gravel and silt. Wet. 17 - 21" Brown, fine-to-medium SAND (sorted), trace silt. Wet. Drilled to 0 - 40 feet bgs using hollow stem augers and from 40 - 72 feet using drive and wash.			0	31/ND	Medium Dense	
40		20	19-38-49-51	16	0 - 10" Brown, fine-to-medium SAND, trace fine-to-coarse gravel (subangular). Wet. 10 - 16" Gray, fine SAND (sorted), trace silt. Wet.			0	37/ND	Very Dense	
42		21	30-49-58-75	20	0 - 7" Light gray, coarse-to-medium SAND (sorted), trace fine gravel and silt. Wet. 7 - 20" Light gray, fine SAND (well sorted). Wet.			0	38/ND	Very Dense	
44		22	15-56-94-67	16	0 - 8" Light gray, very coarse-to-medium SAND, trace silt. Wet. 8 - 16" Light gray, medium SAND (well sorted), trace silt. Wet.			0	2261/ND	Very Dense	
46		23	42-95-96-120R (5 in)	21	0 - 21" Light gray, coarse-to-fine SAND (well sorted), trace silt. Wet.			0	25/ND	Very Dense	
48		24	30-59-116-120R (4 in)	22	0 - 22" Light gray, very coarse-to-fine SAND (well sorted), trace silt. Wet.			0	21/ND	Very Dense	
50		25	4-11-11-47	19	0 - 17" Light gray and grayish-brown, very coarse-to-medium SAND, some fine gravel, trace silt. Wet. 17 - 19" Light gray, medium SAND, trace silt. Wet.			0	30/ND	Medium Dense	
52								0	164/ND	Very Dense	
								0	120/ND	Very Dense	
								0	90/ND	Medium Dense	
								0	16/ND	Very Dense	
								0	59/ND	Medium Dense	

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 3 of 4			
Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)					
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)			
Date Drilled		Sept. 12 - 17, 2012			Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91		
Drilling Company		GeoSearch, Inc.			Method	SS	ERT-1B (inter)	19-Sep-12	12.15		
Drilling Foreman		Chris Stamos			Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93		
Drill Rig Type		CME-85			Surface Elevation						
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)									
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)				VOCs	PCE/TCE	
									PID (ppm)	Field Lab (ppb)	Density
—		26	120R (0 in)	0	No recovery.				NA	NA	NA
54		27	42-89-95-100	18	0 - 18" Light gray, fine-to-coarse SAND (well sorted), trace fine gravel. Wet.				0	24/ND	Very Dense
56		28	42-81-120R (5 in)	23	0 - 9" Light gray, very coarse-to-medium SAND, trace fine-to-coarse gravel and silt. Wet. 9 - 23" Light gray, medium SAND (well sorted), trace silt. Wet.				0	ND/ND	
58		29	91-92-120R (4 in)	16	0 - 16" Light gray, medium SAND (well sorted), trace silt. Wet.				0	19/ND	Very Dense
60		30	120R (3 in)	3	0 - 3" Light gray, fine-to-medium SAND and fine GRAVEL, trace silt. Wet.				0	ND/ND	
62		31	46-67-120R (5 in)	14	0 - 14" Light greenish-gray, fine-to-medium SAND, trace fine gravel and silt. Moist.				0	ND/ND	Very Dense
64		32	39-52-93-117	13	0 - 13" Light greenish-gray, coarse-to-medium SAND, trace fine-to-coarse gravel. Moist.				0	ND/ND	
66		33	21-48-71-120R (4 in)	22	0 - 16" Light gray, very coarse-to-medium SAND (well sorted), trace fine gravel. Wet. 16 - 22" Light brown, fine-to-medium SAND (0.25-in oxidation streak on top), trace fine gravel and silt. Wet.				0	ND/ND	Very Dense
68		34	24-28-68-96	19	0 - 4" Orange-brown, c-to-m SAND (sorted), trace f gravel and silt. Wet. 4 - 16" Light gray, coarse-to-medium SAND, trace fine-to-coarse gravel (granitic) and silt. Wet. 16 - 19" Gray, very fine SAND and SILT, trace fine gravel. Wet.				0	ND/ND	
70		35	35-71-120R (1 in)	24	0 - 18" Slough (Orange-brown, c-to-m SAND (sorted), trace f gravel and silt. Wet. 18 - 24" Gray, fine SAND and SILT (very stiff), trace fine-to-coarse gravel (schist and granitic). Moist. Weathered bedrock?)				0	ND/ND	Very Dense
72		36	89-111-100-120R (4 in)	20	0 - 7" Slough (Orange-brown and gray, coarse-to-medium SAND, little fine-to-coarse gravel). Wet. 7 - 22" Dark brown, fine-to-coarse SAND, some coarse-to-fine gravel. Wet. Weathered bedrock?				0	ND/ND	
74		NA	NA	NA	Rollerbit from 72 - 77 feet. Encountered soft materials at 78 feet and advance split spoon from 78 - 80 feet.				NA	NA	
76		NA	NA	NA	Rollerbit to 78 feet.				NA	NA	
78											

Weston Solutions, Inc.

SOIL BORING/WELL COMPLETION LOG

Page 4 of 4

Project		Henry's Dry Cleaners		Boring ID	ERT-1	Groundwater Levels (bgs)		
Location		Laconia, NH		Well ID	ERT-1	Well Interval	Date	Feet (bgs)
Date Drilled		Sept. 12 - 17, 2012		Drilling Method	HSA/D&W	ERT-1A (shallow)	19-Sep-12	12.91
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-1B (inter)	19-Sep-12	12.15
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-1C (deep)	19-Sep-12	9.93
Drill Rig Type		CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
—		37	117-120R (4 in)	10	0 - 3" Slough. 3 - 10" Dark brown, coarse GRAVEL (angular), little coarse sand. Wet. Weathered bedrock?	0	ND/ND	Very Dense
80						NA	NA	
—		38	120R (4 in)	0	No recovery.	NA	NA	NA
82								
—					Competent bedrock at 80 feet.			
84					-End of Boring at 80 feet-			

Well Construction Details:

			Shallow	Interm.	Deep
			Feet below ground surface		
	Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen	8 - 18	36 - 46	67 - 77
	Riser	2-in diameter, Schedule 40 PVC riser	0.45 - 8	0.45 - 36	0.45 - 67
	Filter sand	Filter sand	6 - 18.5	34 - 46.5	65 - 82
	Bentonite seal	Bentonite seal	4 - 6	30 - 34	61 - 65
	Bentonite/sand mix	Alternating bentonite/sand	-----	18.5 - 30	46.5 - 61
	Sand	Sand	1 - 4		
	Concrete	Concrete	0 - 1		

bgs = below ground surface

PID = Photo-ionization Detector

NA = Not Applicable

ppm = parts per million

SS = Split Spoon (2-in diameter)

ppb = parts per billion

MC = Macrocore (5-ft)

ND = Non detect

HSA = Hollow Stem Augers

NA = Not applicable

D&W = Drive and Wash

PCE = Tetrachloroethylene

R = Refusal

TCE = Trichloroethylene

Rec. = Recovery

VOCs = Volatile Organic Compounds

WOH = Weight of hammer

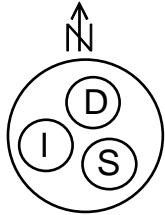
f = fine

c = coarse

m = medium

- 1) Used 2-inch diameter split spoons with 140-lb auto-hammer.
 2) N = 120R (x in) = Refusal where 120 blow counts were applied and split spoon advanced x inches.
 3) Soil samples from 2 - 76 ft bgs were collected from standard split spoons using combination hollow stem auger/drive and wash drilling method by GeoSearch Inc., between September 12 - 17, 2012, in a boring co-located approximately 3 feet from MIP-13.

Well Configuration



Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 1 of 4			
Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels (bgs)					
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet (bgs)			
Date Drilled		March 30/Sept. 10 - 12, 2012		Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18			
Drilling Company		Stone Env./GeoSearch, Inc.		Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5			
Drilling Foreman		Mike Jordan/Chris Stamos		Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57			
Drill Rig Type		Geoprobe/CME-85		Surface Elevation							
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)									
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)				VOCs PCE/TCE		
									PID (ppm) Field Lab (ppb)		
2		NA	NA	24	0 - 2" Brown, medium-to-coarse SAND, some coarse-to-fine gravel. Dry. 2 - 5" Rusty-brown, medium-to-coarse SAND, trace coarse-to-fine gravel. Dry. 5 - 9" Yellow-brown, fine SAND. Dry. 9 - 16" Black, fine SAND, little silt, trace gravel. Dry. 16 - 24" Brown, medium-to-coarse SAND, trace fine gravel. Dry.				0 (top) 0 (length) 0 (bot)	1480/ND 2 - 3 ft	NA
4		NA	NA	32	0 - 4" Dark brown, fine-to-coarse SAND, trace fine gravel. Dry. 4 - 12" Yellow brown, fine-to-medium SAND, trace fine gravel. Dry. 12 - 16" Light brown, medium-to-very coarse SAND, trace fine gravel. Dry. 16 - 32" Light brown, medium SAND (well sorted). Moist				0 (top)	110/ND 3 - 4 ft	NA
6		NA	NA	35	0 - 3" Reddish-brown, medium-to-coarse SAND, little coarse-to-fine gravel. Moist. 3 - 6" Yellow brown, medium SAND, trace fine gravel. Moist. 6 - 10" Black, medium SAND, little silt. Moist. 10 - 35" Light brown, fine-to-medium SAND, trace fine gravel. Moist				0 (length)	1600/ND 8 - 9 ft	NA
8		NA	NA	36	0 - 8" Brown, medium-to-coarse SAND, little coarse-to-fine gravel. Wet. 8 - 17" Light brown, medium-to-coarse SAND. Saturated at 13 ft. 17 - 34" Rusty-brown, fine-to-medium SAND, trace silt and fine gravel. Wet. 34 - 34.5" Black, coarse SAND and fine gravel. Wet. 34.5 - 36" Rusty-brown, fine-to-medium SAND, trace silt and fine gravel. Wet.				0 (bottom)	0 (top) 0 (length)	NA
10		NA	NA	31	0 - 10" Brown, medium-to-coarse SAND, trace fine-to-coarse gravel. Wet. 10 - 14" Reddish-brown, medium SAND, trace fine gravel. Wet. 10 - 16" Black, fine-to-medium SAND. Wet. 16 - 19" Greenish-gray, fine SAND, little silt. Wet. 19 - 25" Brownish-red, fine-to-medium SAND, trace silt and fine gravel. Wet. 25 - 31" Gray, fine SAND and coarse GRAVEL, little silt. Wet.				0 (bottom)	0 (top) 0 (length) 0 (bottom)	NA
12		NA	NA	48	0 - 3" Brown, fine SAND. Moist 3 - 13" Rusty-brown, medium-to-coarse SAND, little coarse-to-fine gravel. Wet. 13 - 27" Gray, medium SAND, little coarse-to-fine gravel. Wet.				0 (top) 0 (length)	600/ND 23 - 24 ft 700/ND 24 - 25 ft 1090/ND 25 - 26 ft	NA
14									2280/ND 22 - 23 ft		
16											
18											
20											
22											
24											
26											

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 2 of 4		
Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels*				
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet*		
Date Drilled		March 30/Sept. 10 - 12, 2012			Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18	
Drilling Company		Stone Env./GeoSearch, Inc.			Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5	
Drilling Foreman		Mike Jordan/Chris Stamos			Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57	
Drill Rig Type		Geoprobe/CME-85			Surface Elevation					
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Construction		Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE
									PID (ppm)	Field Lab
28			NA	NA	48	27 - 46" Greenish-gray, medium SAND, little fine-to-coarse gravel. Wet. 46 - 48" Greenish-gray, fine SAND. Moist.			0 (bottom)	980/ND 26 - 27 ft 844/ND 27 - 28 ft
30			NA	NA	34	0 - 8" Brown, fine-to-medium SAND, trace fine gravel. Wet. 8 - 10" Brownish-gray, coarse-to-fine GRAVEL, little medium-to-coarse sand. Wet. 10 - 17" Greenish-gray, medium SAND, trace fine gravel and silt. Wet. 17 - 34" Gray, fine-to-medium SAND, little coarse-to-fine gravel. Wet.			0 (top)	2020/ND 28 - 29 ft 920/ND 29 - 30 ft 2620/ND 30 - 31 ft 1730/ND 31 - 32 ft 2400/ND 32 - 33 ft
32									0 (bottom)	
34			NA	NA	50	0 - 25" Heaving sands (Brown, medium-to-coarse SAND, trace silt and fine gravel. Wet.).			1.1 (top)	
36			NA	NA	50	25 - 50' Gray, fine-to-medium SAND, trace coarse gravel. Wet.			0 (length)	4050/ND 35 - 36 ft 3220/ND 36 - 37 ft 4860/ND 37 - 38 ft
38									0 (bottom)	
40			NA	NA	30	0 - 7" Heaving sands (Brown, medium-to-coarse SAND, trace silt and fine gravel. Wet.).			1.1 (top)	4460/ND 38 - 39 ft 4490/ND 39 - 40 ft 7360/ND 40 - 41 ft 5190/ND 41 - 42 ft 4230/ND 42 - 43 ft
42						7 - 30" Light gray, fine SAND, trace silt (well sorted). Wet.			0 (length)	
44			NA	NA	44	0 - 18" Light gray and brown, medium SAND, trace silt. Wet. 18 - 28" Light gray, fine SAND, some coarse gravel. Wet. 28 - 44" Light gray, medium SAND. Wet. Soil samples from 0 - 46 ft bgs were collected from macrocores advanced using a combination hollow stem auger (HSA)/direct push drilling method; and samples from 46 - 78 ft bgs were collected using combination HSA/drive & wash method.			0.8 (top)	1930/ND 43 - 44 ft 2010/ND 44 - 45 ft 0 (length)
46									0 (bottom)	2650/ND 445 - 46
48			1	9-13-16-21	10	0 - 10" Light gray, fine-to-coarse SAND, some coarse-to-fine gravel (subangular), trace silt. Very moist.			0	1990/ND
50			2	56-89-120R (5-in)	24	0 - 11" Light gray, very coarse SAND (sorted), some fine-to-coarse gravel (subrounded and subangular), 11 - 16" Light gray, fine SAND, trace silt. Very moist. 16 - 24" Same as 0 - 11" interval.			0	1997/ND
52			3	8-72-120R (5-in)	10	0 - 10" Light gray, fine-to-medium SAND (well sorted), trace silt. Wet.			0	2659/ND
									0	1356/ND
									0	8523/ND

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 3 of 4				
Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels*						
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet*				
Date Drilled		March 30/Sept. 10 - 12, 2012			Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18			
Drilling Company		Stone Env./GeoSearch, Inc.			Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5			
Drilling Foreman		Mike Jordan/Chris Stamos			Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57			
Drill Rig Type		Geoprobe/CME-85			Surface Elevation							
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)										
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)					VOCs PID (ppm)	PCE/TCE Field Lab	Density
—		4	58-120R (2-in)	6	0 - 6 " Light gray, fine-to-medium SAND, trace fine-to-coarse gravel (schist) and silt. Wet. Roller bit from 53 - 54 feet.					0	4085/ND	Very Dense
54		5	120R (4-in)	4	0 - 4 " Light gray, fine-to-medium SAND (sorted), trace silt. Wet.					0	NA	
56					Bottom of hole collapsed. Advance 4-inch casing and clean out boring to 58 feet using drive and wash.					NA	NA	NA
58					NA NA					NA	NA	
60		6	94-120R (4-inch)	10	0 - 8 " Light gray, fine SAND (well-sorted), trace silt. Wet. 8 - 10" Light gray, SILT, little clay. Wet.					161	37800/N D	Very Dense
62		7	67-122-120R (5-in)	14	8 - 10" Light gray, SILT, little clay. Wet.					NA	9760/ND	
64		8	56-120R (5-in)	11	0 - 14" Light gray, medium-to-fine SAND, trace fine-to-coarse gravel (granitic) and silt. Abundant muscovite flakes present. Wet.					0	390/ND	Very Dense
66		9	67-120R (3-in)	9	0 - 5" Slough 5 - 11" Light gray, medium-to-fine SAND, trace fine-to-coarse gravel (granitic and metamorphic) and silt. Abundant muscovite flakes present. Wet.					0	642/ND	
68		10	63-119-116-120R (4-in)	18	0 - 9" Light gray, fine-to-medium SAND, trace fine gravel and silt. Wet.					0	337/ND	Very Dense
70		11	39-68-99-120R (5-in)	18	0 - 18" Light gray, medium-to-fine SAND, trace coarse gravel (Subangular, schist) and silt. Abundant muscovite flakes present. Moist.					0	NA	
72		12	47-120R (3-in)	8	0 - 18" Light gray and light brown, fine-to-medium SAND, trace fine gravel (schist). Abundant muscovite flakes present. Moist. Weathered bedrock?					0	654/ND	Very Dense
74		13	120-120R (2-in)	6	0 - 8" Light gray and light brown, fine-to-medium SAND, trace fine gravel (schist). Abundant muscovite flakes and black grains (hornblende?) present. Moist. Weathered bedrock?					0	NA	
76					0 - 6" Light gray and light brown, fine-to-coarse GRAVEL (schist) and fine-to-coarse SAND, trace silt. Moist.					0	265/ND	Very Dense
78					Hit hard surface at 74 feet. Roller bit from 74 - 80 feet. Cuttings consist of pulverized schist, containing abundant muscovite and hornblende(?) fragments.							

Weston Solutions, Inc.

SOIL BORING/WELL COMPLETION LOG

Page 4 of 4

Project		Henry's Dry Cleaners		Boring ID	MIP-16/ERT-2	Groundwater Levels*		
Location		Laconia, NH		Well ID	ERT-2	Well Interval	Date	Feet*
Date Drilled		March 30/Sept. 10 - 12, 2012		Drilling Method	HSA/D&W	ERT-2A (shallow)	19-Sep-12	13.18
Drilling Company		Stone Env./GeoSearch, Inc.		Method	MC/SS	ERT-2B (inter)	19-Sep-12	12.5
Drilling Foreman		Mike Jordan/Chris Stamos		Total Depth	80 feet	ERT-2C (deep)	19-Sep-12	9.57
Drill Rig Type		Geoprobe/CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PCE/TCE
								PID (ppm) Field Lab (ppb)
—					Attempt to drive split spoon at 80 feet. N = 120R (0.5-in).			
80					-End of Boring at 80 feet-			
—								
82								Very Dense

Well Construction Details:

		Shallow	Interm.	Deep
	Feet below ground surface			
Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen	8 - 18	35 - 45	68 - 78
Riser	2-in diameter, Schedule 40 PVC riser	0.3 - 8	0.3 - 35	0.4 - 68
Filter sand	Filter sand	6 - 18	33 - 46	66 - 80
Bentonite seal	Bentonite seal	4 - 6	29 - 33	61 - 66
Bentonite/sand mix	Alternating bentonite/sand	-----	18 - 31	46 - 61
Sand	Sand	1 - 4		
Concrete	Concrete	0 - 1		

bgs = below ground surface

PID = Photo-ionization Detector

NA = Not Applicable

ppm = parts per million

SS = Split Spoon (2-in diameter)

ppb = parts per billion

MC = Macrocore (5-ft)

ND = Non detect

Top of water table

HSA = Hollow Stem Augers

NA = Not applicable

D&W = Drive and Wash

PCE = Tetrachloroethylene

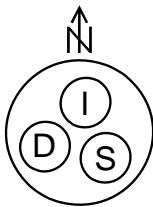
R = Refusal

TCE = Trichloroethylene

Rec. = Recovery

VOCs = Volatile Organic Compounds

WOH = Weight of hammer



Well Configuration

- 1) Used 2-inch diameter split spoons with 140-lb auto-hammer.
- 2) N = 120R (x in) = Refusal where 120 blow counts were applied and split spoon advanced x inches.
- 3) Soil samples from 0 - 46 ft bgs were collected from macrocores advanced using a combination hollow stem auger/direct push drilling method by Stone Environmental Inc., on March 30, 2012 in boring designated as SB-16 (MIP-16). Soil samples from 46 - 78 ft bgs were collected from standard split spoons using combination hollow stem auger/drive and wash drilling method by GeoSearch Inc., between September 10 - 12, 2012, in a boring co-located approximately 4 feet from SB-16 (MIP-16).

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG			Page 1 of 4	
Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)		
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)
Date Drilled		Sept. 18 - 20, 2012		Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-3B (inter)	19-Sep-12	12.45
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78
Drill Rig Type		CME-85		Surface Elevation				
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)						
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PCE/TCE
								PID (ppm) Field Lab (ppb)
2		NA	NA	NA	No soil samples collected. Soil sampling began at 2 - 4 interval.			NA NA NA
4		1	2-1-2-5	22	0 - 6" Dark brown, fine SAND and SILT, trace fine gravel. Dry. 6-12" Brown, fine-to-medium SAND, trace fine gravel and silt. Moist. 12 - 22" Orange-brown, medium-to-coarse SAND, trace fine gravel. Moist.			0 1531/ND 0 16/ND
6		2	4-4-3-5	11	0 - 11" Orange-brown, very coarse-to-medium SAND, trace fine gravel. Moist.			0 ND/ND 0 27/ND
8		3	6-6-7-5	12	0 - 12" Orange-brown, medium-to-coarse SAND, trace fine gravel and silt. Moist.			7.8 9/ND 0 ND/ND
10		4	2-3-2-2	6	0 - 6" Orange-brown, fine-to-medium SAND (sorted), trace silt. Very moist.			0 16/ND
12		5	2-4-5-7	16	0 - 16" Orange-brown, medium-to-fine SAND, trace silt and fine gravel. Very moist.			0 ND/ND 0 68/ND
14		6	2-3-4-3	5	0 - 5" Orange-brown, fine-to-coarse GRAVEL and coarse-to-medium SAND, trace silt. Wet.			1.3 11/ND
16		7	2-5-5-7	6	0 - 6" Orange-brown, very coarse-to-medium SAND (sorted), trace fine gravel and silt. Wet.			0 14/ND
18		8	4-4-5-5	11	0 - 11" Orange-brown, coarse-to-medium SAND (sorted), trace fine gravel and silt. Wet.			0 8/ND 2.3 7/ND
20		9	3-6-8-9	10	0 - 10" Orange-brown and brown, very coarse-to-medium SAND, trace fine gravel and silt. Wet.			0 623/ND
22		10	8-8-12-12	13	0 - 8" Brown, c-to-m SAND, trace c-to-f gravel, trace silt. Wet. 8 - 8.5" Black, medium SAND. Wet. 8.5 - 9" Rusty-brown, medium SAND. Wet. 9 - 13" Brown, medium-to-coarse SAND, trace fine gravel and silt. Wet.			0.6 204/ND 0 9450/ND
24		11	6-6-13-17	5	0 - 5" Brown and brown, fine-to-medium SAND, trace fine gravel and silt. Wet.			2.8 4332/ND
26		12	2-4-4-6	5	0 - 2" Rusty-brown, fine-to-medium SAND, trace silt. Wet. 2 - 5" Light brown, fine-to-medium SAND, trace fine gravel and silt. Wet.			9.1 2920/ND

Weston Solutions, Inc.				SOIL BORING/WELL COMPLETION LOG				Page 2 of 4				
Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)						
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)				
Date Drilled		Sept. 18 - 20, 2012			Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11			
Drilling Company		GeoSearch, Inc.			Method	SS	ERT-3B (inter)	19-Sep-12	12.45			
Drilling Foreman		Chris Stamos			Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78			
Drill Rig Type		CME-85			Surface Elevation							
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)										
Depth (ft bgs)	Well Construction		Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE		
									PID (ppm)	Field Lab (ppb)	Density	
28			13	7-7-11-17	6	0 - 6"	Brown, fine SAND, some coarse-to-fine gravel (subangular). Wet.			8.7	687/ND	Medium Dense
30			14	29-30-41-40	17	0 - 17"	Light brown, medium SAND, trace fine gravel and silt. Moist.			0	4920/ND	Very Dense
32			15	16-120R (2 in)	6	0 - 6"	Light brown, fine SAND, trace fine gravel. Wet.			25	3374/ND	
34			16	13-41-61R (2 in)	12	0 - 12"	Rusty-brown and light brown, fine-to-medium SAND, little coarse gravel (granitic). Wet. Cobble stuck in cutting shoe.			0	2626/ND	Very Dense
36			17	14-19	7	Roller bit through boulder/cobble 35 - 36 feet. Split spoon advanced from 35 - 36 feet.			NA	NA	NA	
38			18	7-8-12-9	13	0 - 7"	Light brown, coarse GRAVEL (angular, granitic), little coarse-to-fine sand, trace silt. Wet.			0	289/ND	
40			19	2-7-6-11	12	0 - 12"	0 - 2" Brown, coarse GRAVEL, trace fine-to-medium sand and silt. Wet. 2 - 13" Brown, SILT and fine SAND, trace fine gravel. Wet.			0	2074/ND	Medium Dense
42			20	8-12-16-17	9	0 - 9"	Light gray, fine-to-medium SAND (well sorted). Wet.			1.5	6092/ND	
44			NA	NA	0	No recovery, cobble stuck in cutting shoe.			0	6915/ND	Medium Dense	
46			21	6-11-15-17	11	0 - 11"	Light gray, fine SAND, trace fine gravel and silt. Wet.			10	8416/ND	
48			22	16-28-38-120R (3 in)	14	0 - 14"	Light gray, fine SAND, trace fine gravel and silt. Wet.			0	5610/ND	Medium Dense
50			23	10-15-18-18	13	0 - 13"	Light gray, medium-to-coarse SAND, trace fine gravel and silt. Wet.			17	352/ND	Very Dense
52			24	5-9-17-19	11	0 - 11"	Light gray, medium-to-fine SAND, trace fine gravel and silt. Wet.			8.6	3138/ND	
									0	755/ND	Dense	
									25	3927/ND		
									12	90/ND	Medium Dense	
									0	1015/ND		

Weston Solutions, Inc.			SOIL BORING/WELL COMPLETION LOG				Page 3 of 4		
Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)			
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)	
Date Drilled		Sept. 18 - 20, 2012		Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11	
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-3B (inter)	19-Sep-12	12.45	
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78	
Drill Rig Type		CME-85		Surface Elevation					
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)							
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs PCE/TCE	
								PID (ppm) Field Lab (ppb)	
—		25	36-120R (1 in)	5	0 - 5" Light gray, SILT, trace fine gravel and clay. Very moist.			0.7 6250/ND	
54		26	25-120R (4 in)	10	0 - 10" Light gray, fine SAND, trace fine gravel and silt. Wet.			NA NA	
—		27	120R (4 in)	10	0 - 4" Light gray, fine SAND, trace fine gravel and silt. Wet.			0 701/ND	
56		28	120R (6 in)	2	0 - 2" Light gray, SILT. Wet.			1.6 757/ND	
—		29	28-120R (3 in)	5	0 - 5" Light gray, fine SAND, trace fine gravel and silt. Wet.			0.4 298/ND	
58		30	14-19-22-22	18	0 - 6" Light gray, fine SAND, trace fine gravel and silt. Wet. 6 - 18" Light gray, very coarse SAND, trace fine gravel and silt. Wet.			NA NA	
—		31	4-12-120R(2 in)	5	0 - 5" Light gray, very coarse SAND and fine-to-coarse GRAVEL, trace silt. Wet.			0.6 1312/ND	
60		32	4-12-12-15	10	0 - 10" Light gray, SILT, trace fine gravel. Wet.			NA NA	
—		33	4-7-19-19	13	0 - 13" Brownish-gray, SILT, little coarse gravel (schist rock fragments). Wet.			0 774/ND	
62		NA	120R (3 in)	0	No recovery.			0 332/ND	
—		NA	120R (2 in)	0	No recovery.			0 586/ND	
64		NA	120R (2 in)	0	No recovery.			0 57/ND	
—		NA	NA	NA				NA NA	
66		NA	NA	NA				Very Dense	
—		NA	NA	NA				Medium Dense	
68		NA	NA	NA				Medium Dense	
—		NA	NA	NA				Medium Dense	
70		NA	NA	NA				Medium Dense	
—		NA	NA	NA				Medium Dense	
72		NA	NA	NA				Medium Dense	
—		NA	NA	NA				Medium Dense	
74		NA	NA	NA				Medium Dense	
—		NA	NA	NA				Medium Dense	
76		NA	NA	NA	Competent bedrock at 76 feet.			NA NA NA	
—		NA	NA	NA	Roller bit to 78 feet.			NA NA NA	
78		NA	NA	NA				NA NA NA	

Weston Solutions, Inc.

SOIL BORING/WELL COMPLETION LOG

Page 4 of 4

Project		Henry's Dry Cleaners		Boring ID	ERT-3	Groundwater Levels (bgs)				
Location		Laconia, NH		Well ID	ERT-3	Well Interval	Date	Feet (bgs)		
Date Drilled		Sept. 18 - 20, 2012		Drilling Method	HSA/D&W	ERT-3A (shallow)	19-Sep-12	13.11		
Drilling Company		GeoSearch, Inc.		Method	SS	ERT-3B (inter)	19-Sep-12	12.45		
Drilling Foreman		Chris Stamos		Total Depth	80 feet	ERT-3C (deep)	19-Sep-12	9.78		
Drill Rig Type		CME-85		Surface Elevation						
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)								
Depth (ft bgs)	Well Construction	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE	
					PID (ppm)	Field Lab (ppb)	Density			
—		NA	NA	NA	Roller bit to 80 feet.			NA	NA	NA
80	—				-End of Boring at 80 feet-					
—	—									
82	—									

Well Construction Details:

					Shallow	Interm.	Deep
					Feet below ground surface		
	Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen			8 - 18	36 - 46	68 - 78
	Riser	2-in diameter, Schedule 40 PVC riser			0.3 - 8	0.25 - 36	0.3 - 8
	Filter sand	Filter sand			6 - 18.5	34 - 46.5	66 - 80
	Bentonite seal	Bentonite seal			4 - 6	32 - 34	62 - 66
	Bentonite/sand mix	Alternating bentonite/sand			-----	18.5 - 32	46.5 - 66
	Sand	Sand			1 - 4		
	Concrete	Concrete			0 - 1		

bgs = below ground surface

PID = Photo-ionization Detector



Top of water table

NA = Not Applicable

ppm = parts per million



Sediment Trap

SS = Split Spoon (2-in diameter)

ppb = parts per billion

MC = Macrocore (5-ft)

ND = Non detect

HSA = Hollow Stem Augers

NA = Not applicable

D&W = Drive and Wash

PCE = Tetrachloroethylene

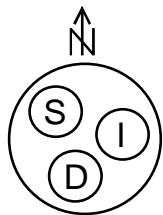
R = Refusal

TCE = Trichloroethylene

Rec. = Recovery

VOCs = Volatile Organic Compounds

WOH = Weight of hammer



Well Configuration

- 1) Used 2-inch diameter split spoons with 140-lb auto-hammer.
- 2) N = 120R (x in) = Refusal where 120 blow counts were applied and split spoon advanced x inches.
- 3) Soil samples from 2 - 76 ft bgs were collected from standard split spoons using combination hollow stem auger/drive and wash drilling method by GeoSearch Inc., between September 18 - 20, 2012, in a boring co-located approximately 3 feet from MIP-5.

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 1 of 1										
Project	Henry's Dry Cleaners		Boring ID	ERT-4		Groundwater Levels (bgs)											
Location	Laconia, NH		Well ID	ERT-4		Well Interval	Date	Feet (bgs)									
Date Drilled	Sept. 20, 2012		Drilling Method	Hollow Stem Augers		ERT-4	20-Sep-12	4.25									
Drilling Company	Geosearch, Inc.		Method	SS													
Drilling Foreman	Chris Stamos		Total Depth	12 feet													
Drill Rig Type	CME-85		Surface Elevation														
Logged by		George Mavris - Weston, Superfund Technical Assessment and Response Team (START)															
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)			VOCs	PCE/TCE	Density							
								PID (ppm)	Field Lab (ppb)								
2		1	2-1-2-5	15	0 - 3" Dark brown, fine SAND and SILT, trace roots (topsoil). Dry. 3 - 5" Brown, fine SAND, trace fine gravel. Moist. 5 - 10" Black, fine SAND, trace fine gravel (degraded oil). Moist. 10 - 15" Dark brown, fine SAND, trace fine gravel. Moist.			3	111/ND	Very Loose							
								0	ND/ND								
					0 - 10" Brown and black, fine-to-medium SAND, trace fine gravel and silt. Moist. 10 - 20" Gray and black, medium-to-fine SAND, trace fine gravel and silt. Moist.			0	ND/ND	Medium Dense							
								1.4	ND/ND								
					0 - 10" Light gray, medium-to-fine SAND, trace fine-to-coarse gravel and silt. Wet. 12 - 14" Light gray, SILT, trace clay. Wet.			0	ND/ND	Loose							
								0.6	ND/ND								
					0 - 8" Gray, medium-to-fine SAND, trace fine-to-coarse gravel and silt. Wet. 8 - 12" Black, coarse GRAVEL (wood fragments), little fine-to-medium sand. Wet. 12 - 14" Orange brown, c-to-m SAND, little f-to-c gravel, trace silt. Wet.			0	ND/ND	Loose							
								0.1	ND/ND								
								46	27/ND	Medium Dense							
10		5	2-9-15-12	14				0	ND/ND								
								0	ND/ND								
12		6	8-15-6-8	14	0 - 14" Orange brown, coarse-to-fine GRAVEL and very coarse-to-medium SAND, trace silt. Wet.			0	128/ND	Medium Dense							
								0.6	223/ND								
-End of Boring at 12 feet-																	
<p> Screen 2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen (2 - 12 feet) Riser 2-in diameter, Schedule 40 PVC riser (0.3 - 2 feet) Filter sand 1.5 - 12 feet Bentonite seal 1.0 - 1.5 feet Concrete 0 - 1.0 feet </p>																	
<p> Top of water table Sediment Trap </p>																	
<p style="text-align: center;"> bgs = below ground surface SS = Split Spoon (2-in diameter) Rec. = Recovery c = coarse m = medium f = fine </p>																	
<p style="text-align: center;"> PID = Photo-ionization Detector ppm = parts per million ppb = parts per billion ND = Non detect PCE = Tetrachloroethylene TCE = Trichloroethylene VOCs = Volatile Organic Compounds </p>																	
<p style="text-align: center;"> 1) Used 2-inch diameter split spoons with 140-lb auto-hammer. 2) ERT-4 located approximately 4 feet southwest of MIP-17. </p>																	

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 1 of 3						
Project		Henry's Dry Cleaners		Boring ID	ERT-2-IB	Groundwater Levels (bgs)							
Location		Laconia, NH		Well ID	ERT-2-IB	Date		Feet (bgs)					
Date Drilled		Oct. 10, 2012		Drilling Method	Drive and Wash	10-Oct-12		12.29					
Drilling Company		Geosearch, Inc.		Method	None								
Drilling Foreman		Chris Stamos		Total Depth	60 feet								
Drill Rig Type		CME-85		Surface Elevation									
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)											
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)				VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density		
2		NA	NA	NA	No soil sampling conducted. See ERT-2 for soil descriptions.				NA	NA	NA		
4													
6													
8													
10													
12													
14													
16													
18													
20													
22													
24													
26													

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 2 of 3		
Project		Henry's Dry Cleaners		Boring ID	ERT-2-IB	Groundwater Levels (bgs)			
Location		Laconia, NH		Well ID	ERT-2-IB	Date	Feet (bgs)		
Date Drilled		Oct. 10, 2012		Drilling Method	Drive and Wash	10-Oct-12	12.29		
Drilling Company		Geosearch, Inc.		Method	None				
Drilling Foreman		Chris Stamos		Total Depth	60 feet				
Drill Rig Type		CME-85		Surface Elevation					
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)							
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density	
						PID (ppm)	Field Lab (ppb)		
28									
30									
32									
34									
36									
38									
40									
42									
44									
46									
48									
50									
52									

Weston Solutions, Inc.

SOIL BORING/WELL COMPLETION LOG

Page 3 of 3

Project	Henry's Dry Cleaners			Boring ID	ERT-2-IB	Groundwater Levels (bgs)		
Location	Laconia, NH			Well ID	ERT-2-IB	Date		Feet (bgs)
Date Drilled	Oct. 10, 2012			Drilling Method	Drive and Wash	10-Oct-12		12.29
Drilling Company	Geosearch, Inc.			Method	None			
Drilling Foreman	Chris Stamos			Total Depth	60 feet			
Drill Rig Type	CME-85			Surface Elevation				
Logged by	Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)							
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
54								
56								
58								
60					-End of Boring at 60 feet-			
62								
		Screen	2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen (50 - 60 feet)					
		Riser	2-in diameter, Schedule 40 PVC riser (0.9 - 50 feet)					
		Filter sand	48 - 60 feet					
		Bentonite seal	46 - 48 feet					
		Grout	1.0 - 46 feet					
		Concrete	0 - 1.0 feet					
					bgs = below ground surface	PID = Photo-ionization Detector		
					Rec. = Recovery	ppm = parts per million		
					Top of water table	PCE = Tetrachloroethylene		
					Sediment Trap	TCE = Trichloroethylene		
						ND = Non detect		
						VOCs = Volatile Organic Compounds		
ERT-2-IB is co-located next to ERT-2.								

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 1 of 3						
Project		Henry's Dry Cleaners		Boring ID	ERT-3-IB	Groundwater Levels (bgs)							
Location		Laconia, NH		Well ID	ERT-3-IB	Date		Feet (bgs)					
Date Drilled		Oct. 11, 2012		Drilling Method	Drive and Wash	11-Oct-12		12.18					
Drilling Company		Geosearch, Inc.		Method	None								
Drilling Foreman		Chris Stamos		Total Depth	59 feet								
Drill Rig Type		CME-85		Surface Elevation									
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)											
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)				VOCs PID (ppm)	PCE/TCE Field Lab (ppb)	Density		
2		NA	NA	NA	No soil sampling conducted. See ERT-3 for soil descriptions.				NA	NA	NA		
4													
6													
8													
10													
12													
14													
16													
18													
20													
22													
24													
26													

Weston Solutions, Inc.		SOIL BORING/WELL COMPLETION LOG					Page 2 of 3		
Project		Henry's Dry Cleaners		Boring ID	ERT-3-IB	Groundwater Levels (bgs)			
Location		Laconia, NH		Well ID	ERT-3-IB	Date	Feet (bgs)		
Date Drilled		Oct. 11, 2012		Drilling Method	Drive and Wash	11-Oct-12	12.18		
Drilling Company		Geosearch, Inc.		Method	None				
Drilling Foreman		Chris Stamos		Total Depth	59 feet				
Drill Rig Type		CME-85		Surface Elevation					
Logged by		Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)							
Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density	
						PID (ppm)	Field Lab (ppb)		
28									
30									
32									
34									
36									
38									
40									
42									
44									
46									
48									
50									
52									

Weston Solutions, Inc.

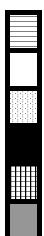
SOIL BORING/WELL COMPLETION LOG

Page 3 of 3

Project	Henry's Dry Cleaners	Boring ID	ERT-3-IB	Groundwater Levels (bgs)	
Location	Laconia, NH	Well ID	ERT-3-IB	Date	
Date Drilled	Oct. 11, 2012	Drilling Method	Drive and Wash	11-Oct-12	
Drilling Company	Geosearch, Inc.	Method	None	12.18	
Drilling Foreman	Chris Stamos	Total Depth	59 feet		
Drill Rig Type	CME-85	Surface Elevation			

Logged by Colin Cardin - Weston, Superfund Technical Assessment and Response Team (START)

Depth (ft bgs)	Well Constr.	Split Spoon No.	N (Blow Counts)	Rec. (in)	Soil Description (Burmister Soil Classification System)	VOCs	PCE/TCE	Density
						PID (ppm)	Field Lab (ppb)	
54								
56								
58								
60					-End of Boring at 59 feet-			



- Screen 2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen (49 - 59 feet)
- Riser 2-in diameter, Schedule 40 PVC riser (0.1 - 49 feet)
- Filter sand 47 - 59 feet
- Bentonite seal 45 - 47 feet
- Grout 1.0 - 45 feet
- Concrete 0 - 1.0 feet



Top of water table
Sediment Trap

bgs = below ground surface

Rec. = Recovery

PCE = Tetrachloroethylene

TCE = Trichloroethylene

PID = Photo-ionization Detector

ppm = parts per million

ppb = parts per billion

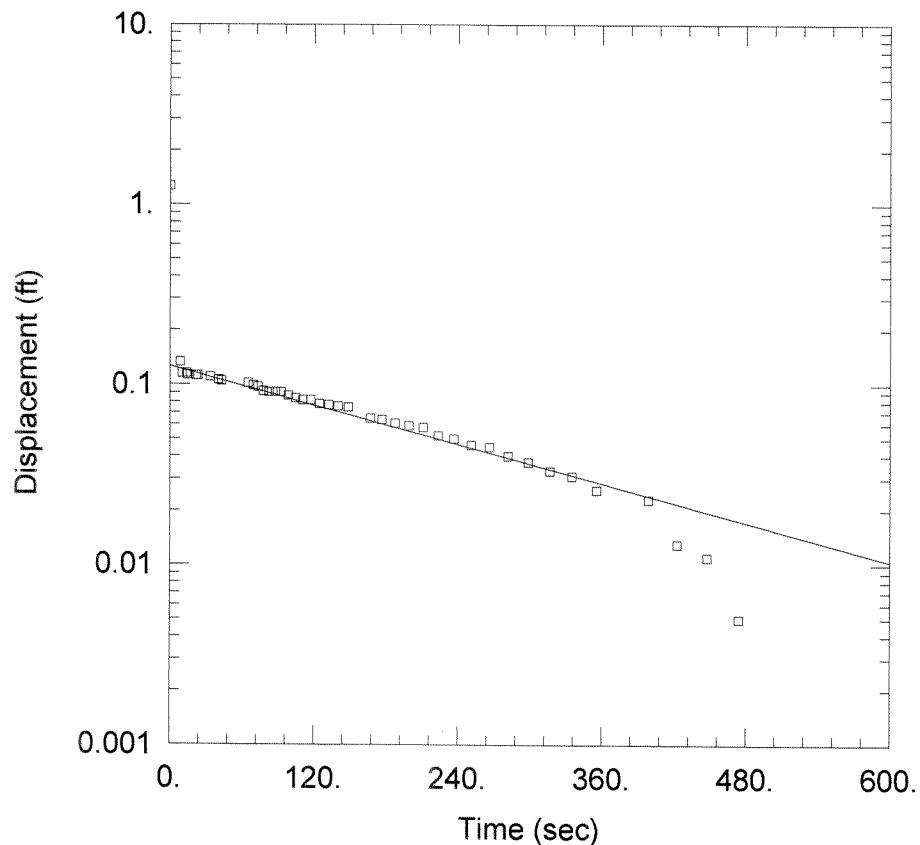
ND = Non detect

VOCs = Volatile Organic Compounds

ERT-3-IB is co-located next to ERT-3.

**APPENDIX B
SLUG TEST ANALYSIS**

**Henry's Dry Cleaners Site
Laconia, New Hampshire**



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Sin1.aqt

Date: 06/10/13

Time: 16:19:06

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 0.8836 \text{ ft/day}$

$y_0 = 0.126 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 25. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT1S_in1)

Initial Displacement: 12.91 ft

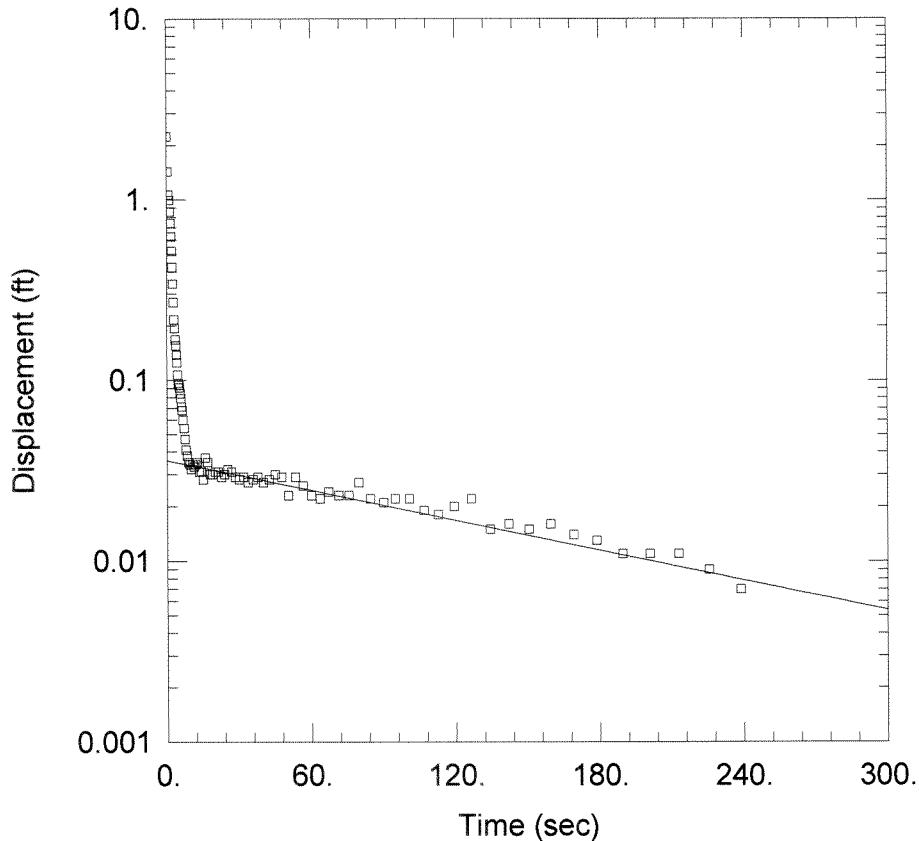
Total Well Penetration Depth: 5.09 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.09 ft

Screen Length: 5.09 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Sout1.agt
 Date: 06/10/13 Time: 16:19:09

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 1.342 \text{ ft/day}$
 $y_0 = 0.03574 \text{ ft}$

AQUIFER DATA

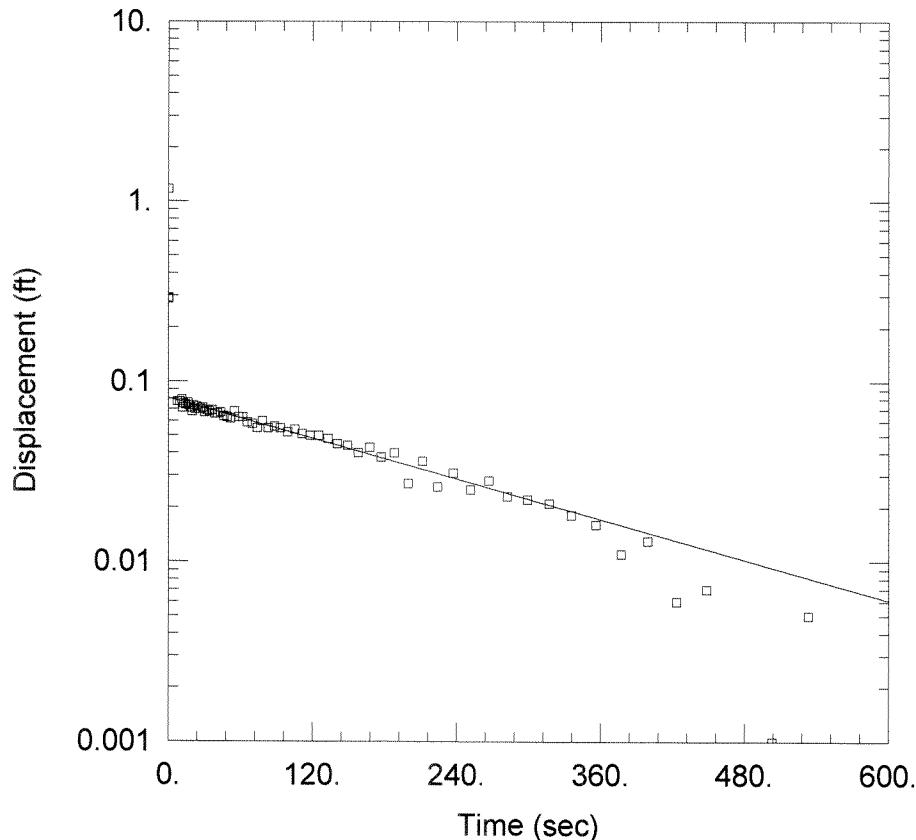
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1S_out1)

Initial Displacement: 12.91 ft
 Total Well Penetration Depth: 5.09 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.09 ft
 Screen Length: 5.09 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Sin2.aqt

Date: 06/10/13

Time: 16:19:07

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 0.9156 ft/day

y0 = 0.08068 ft

AQUIFER DATA

Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1S_in2)

Initial Displacement: 12.91 ft

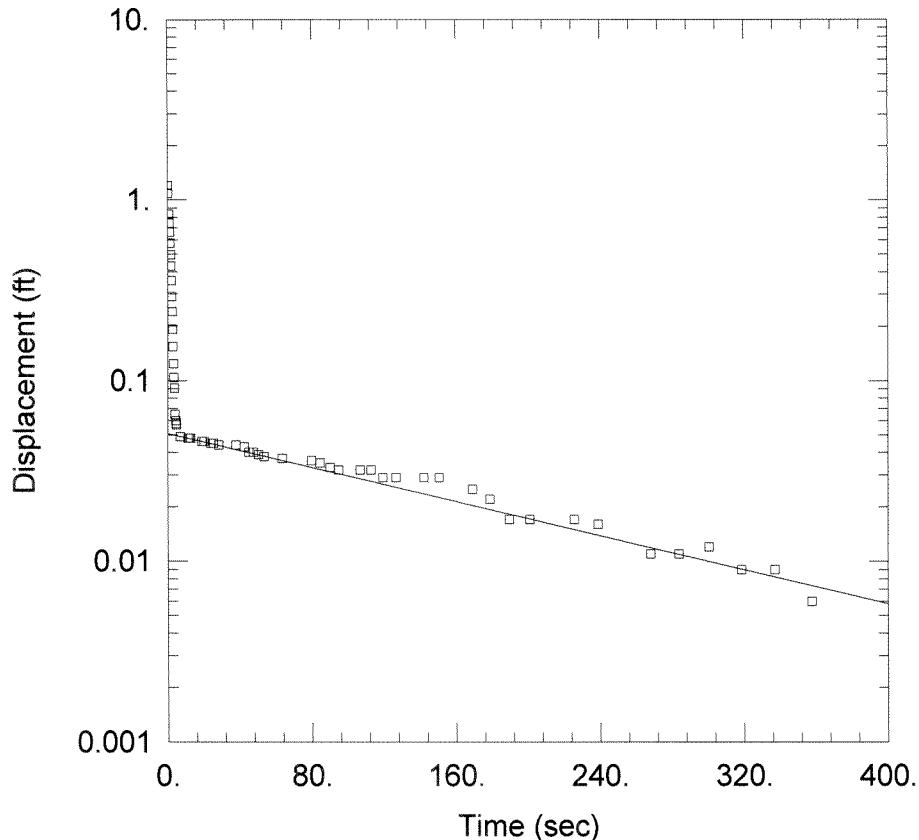
Total Well Penetration Depth: 5.09 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.09 ft

Screen Length: 5.09 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Sout2.aqt
 Date: 06/10/13 Time: 16:19:11

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 1.153 \text{ ft/day}$
 $y_0 = 0.05086 \text{ ft}$

AQUIFER DATA

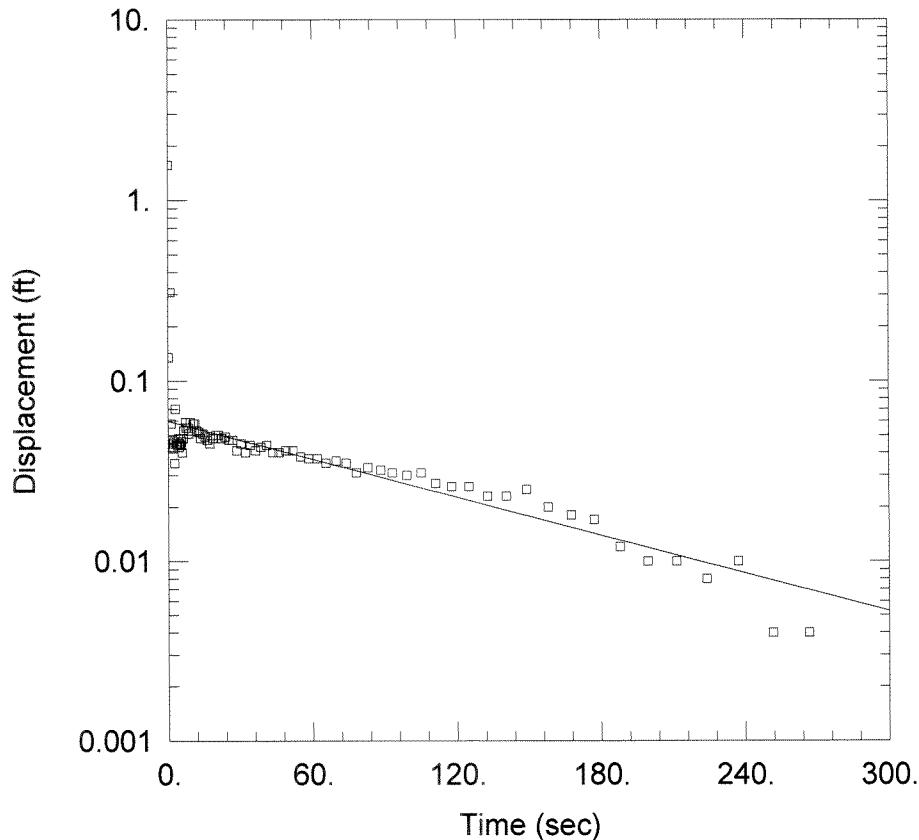
Saturated Thickness: 30. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1S_out2)

Initial Displacement: 12.91 ft
 Total Well Penetration Depth: 5.09 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.09 ft
 Screen Length: 5.09 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Sin3.aqt
 Date: 06/10/13 Time: 16:19:08

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 1.719 \text{ ft/day}$
 $y_0 = 0.05973 \text{ ft}$

AQUIFER DATA

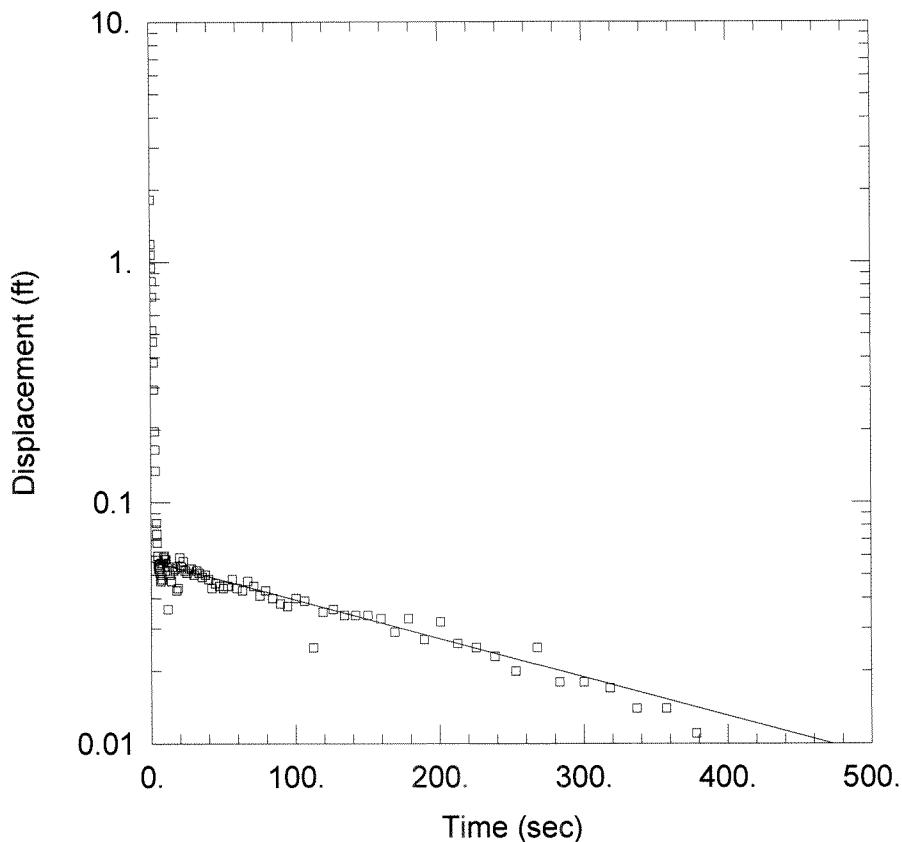
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1S_in3)

Initial Displacement: 12.91 ft
 Total Well Penetration Depth: 5.09 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.09 ft
 Screen Length: 5.09 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Sout3.aqt
 Date: 06/10/13 Time: 16:19:13

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 0.7821 \text{ ft/day}$
 $y_0 = 0.05691 \text{ ft}$

AQUIFER DATA

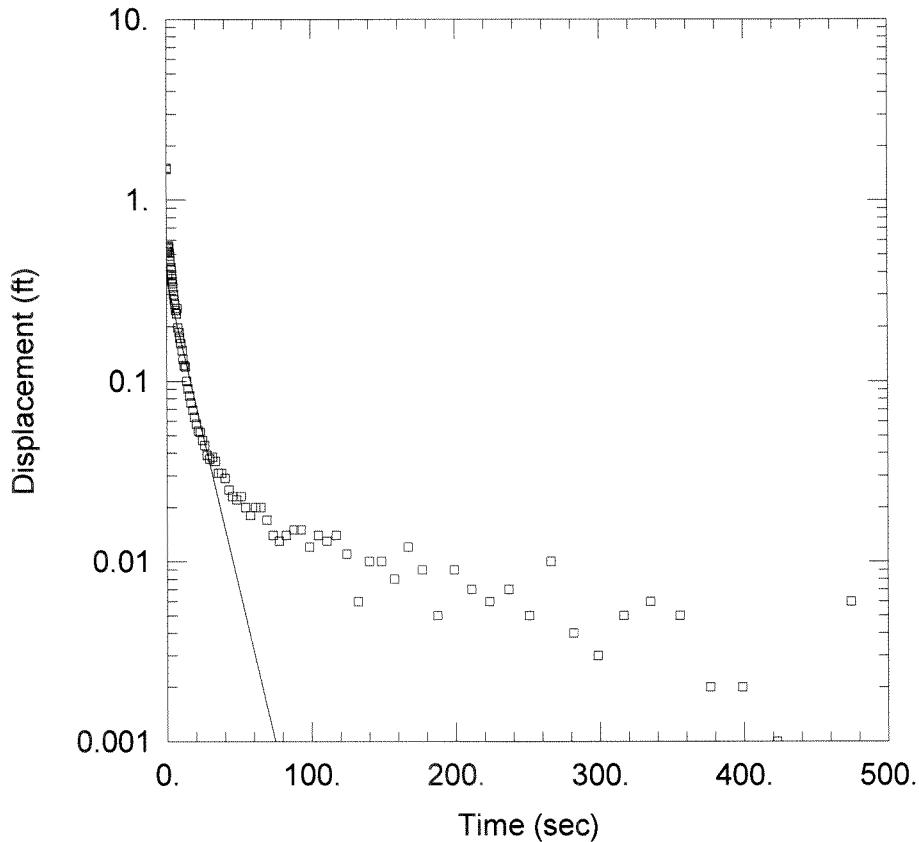
Saturated Thickness: 30 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1S_out3)

Initial Displacement: 12.91 ft
 Total Well Penetration Depth: 5.09 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.09 ft
 Screen Length: 5.09 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1\ERT1in1.aqt

Date: 06/10/13

Time: 16:42:32

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 11.64 ft/day

y0 = 0.3622 ft

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1I_in1)

Initial Displacement: 12.15 ft

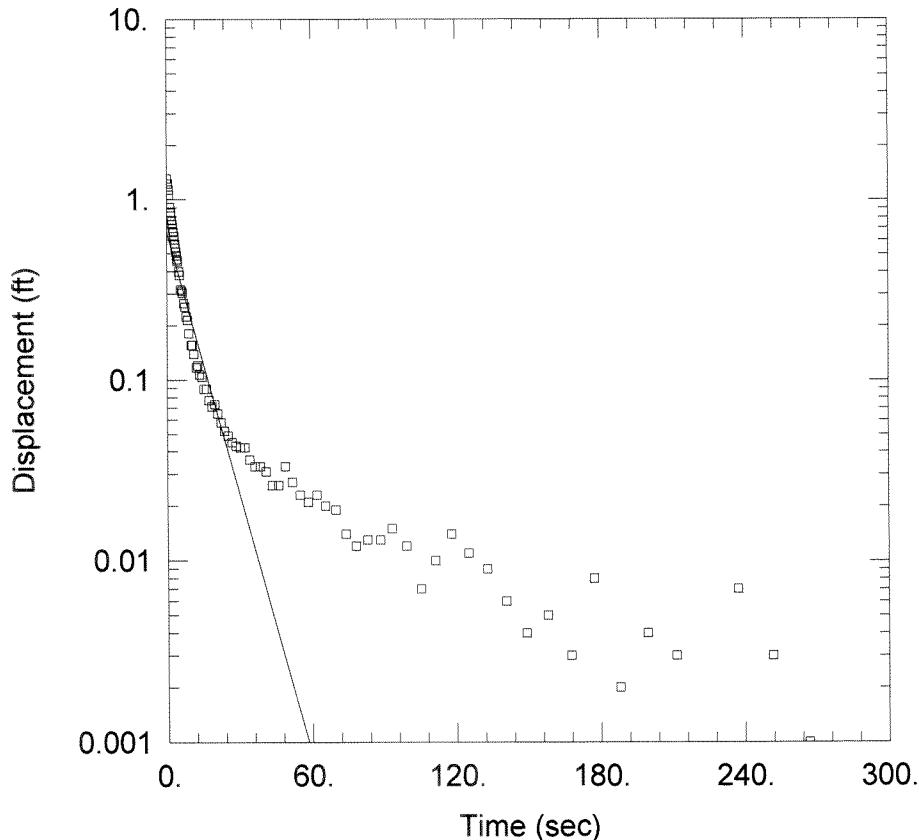
Total Well Penetration Depth: 34. ft

Casing Radius: 0.083 ft

Static Water Column Height: 34. ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1\out1.aqt
 Date: 06/10/13 Time: 16:42:33

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 16.44 \text{ ft/day}$
 $y_0 = 0.6567 \text{ ft}$

AQUIFER DATA

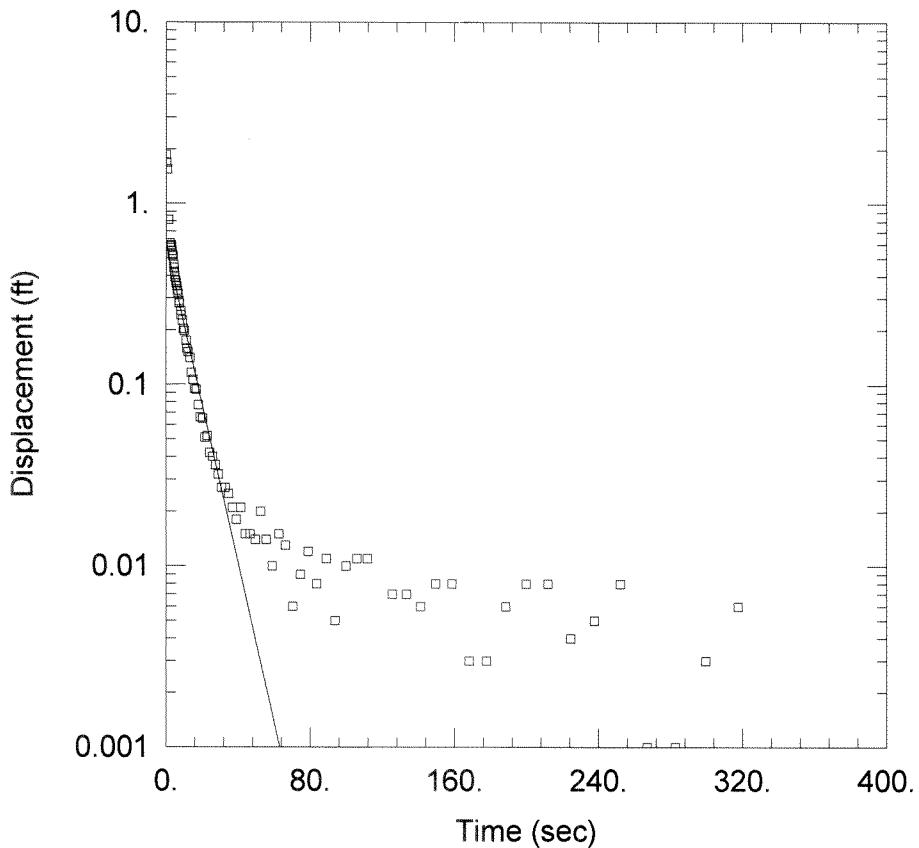
Saturated Thickness: 50. ft

Anisotropy Ratio (K_z/K_r): 0.1

Initial Displacement: 12.15 ft
 Total Well Penetration Depth: 34. ft
 Casing Radius: 0.083 ft

WELL DATA (ERT1_out1)

Static Water Column Height: 34. ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1\ERT1in2.aqt

Date: 06/10/13

Time: 16:42:32

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 14.9 \text{ ft/day}$

$y_0 = 0.5869 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT1I_in2)

Initial Displacement: 12.15 ft

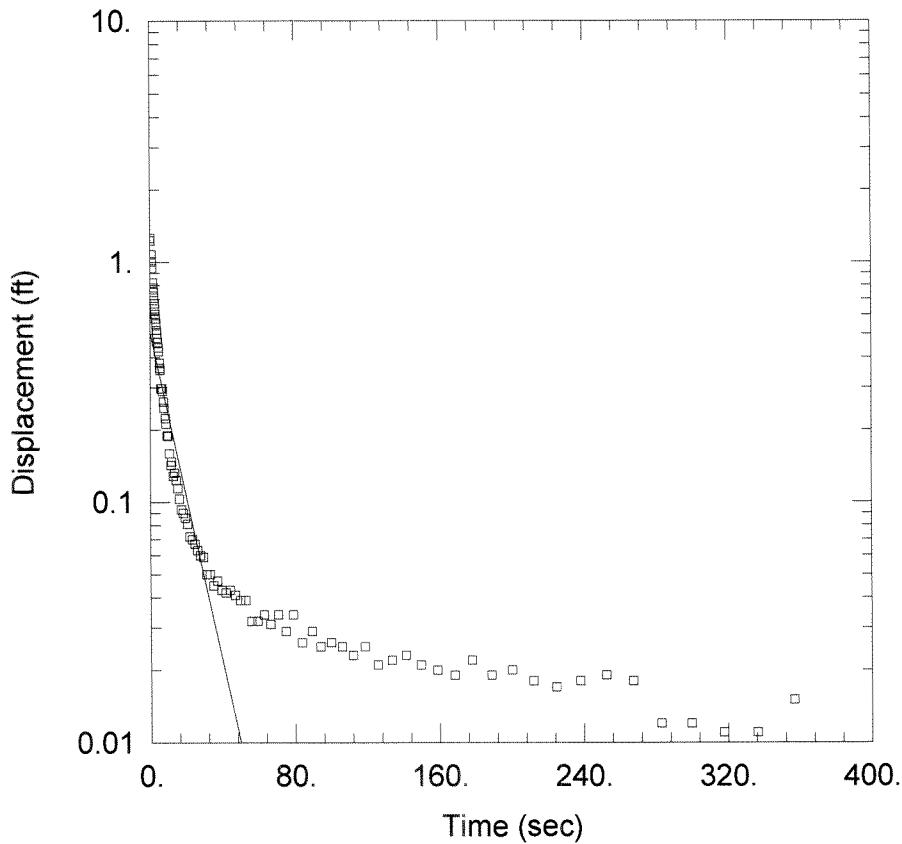
Total Well Penetration Depth: 34. ft

Casing Radius: 0.083 ft

Static Water Column Height: 34. ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1\out2.aqt

Date: 06/10/13

Time: 16:42:34

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 11.68 \text{ ft/day}$

$y_0 = 0.5081 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT1\out2)

Initial Displacement: 12.15 ft

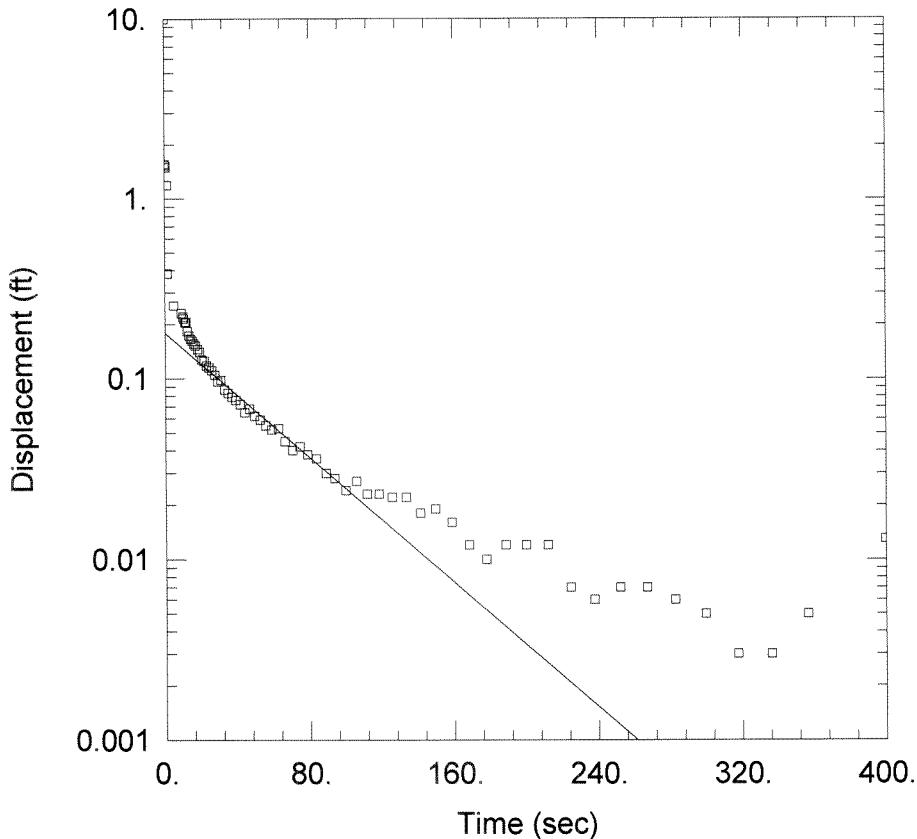
Total Well Penetration Depth: 34. ft

Casing Radius: 0.083 ft

Static Water Column Height: 34. ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Din1.aqt

Date: 06/10/13

Time: 16:33:53

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 3.131 \text{ ft/day}$

$y_0 = 0.1782 \text{ ft}$

AQUIFER DATA

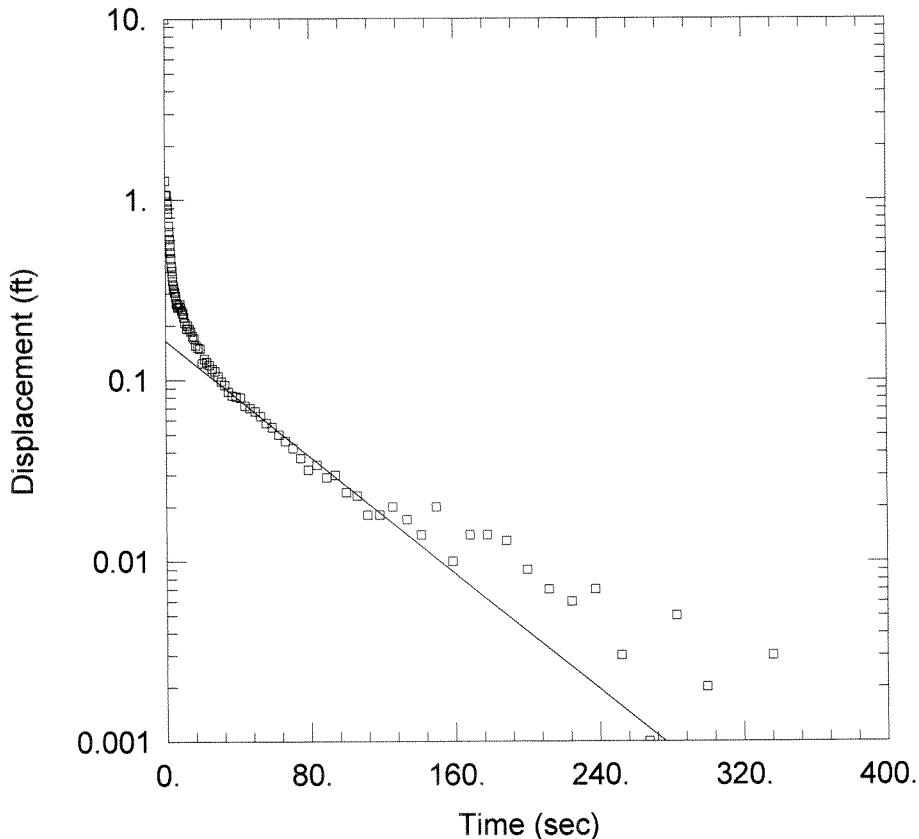
Saturated Thickness: 80. ft

Anisotropy Ratio (K_z/K_r): 0.1

Initial Displacement: 9.93 ft
 Total Well Penetration Depth: 67. ft
 Casing Radius: 0.083 ft

WELL DATA (ERT1D_in1)

Static Water Column Height: 67. ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Dout1.aqt
 Date: 06/10/13 Time: 16:33:55

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 2.917 \text{ ft/day}$
 $y_0 = 0.1645 \text{ ft}$

AQUIFER DATA

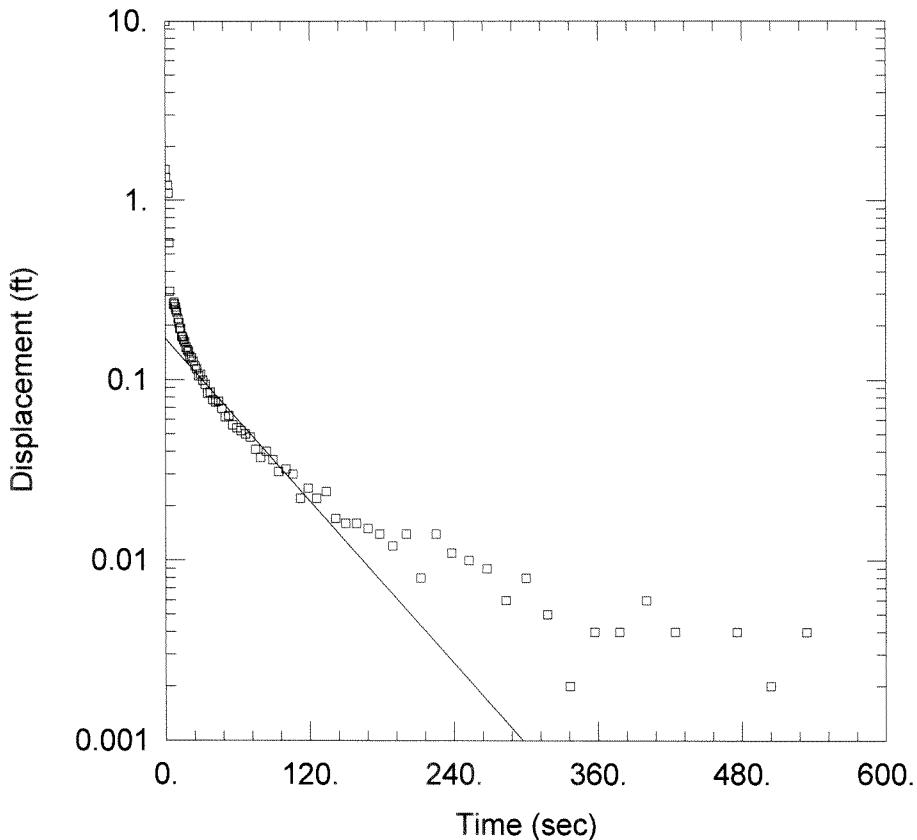
Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

Initial Displacement: 9.93 ft
 Total Well Penetration Depth: 67. ft
 Casing Radius: 0.083 ft

WELL DATA (ERT1D_out1)

Static Water Column Height: 67. ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Din2.act
Date: 06/10/13 Time: 16:33:54

PROJECT INFORMATION

Company: SERAS
Client: ERT
Project: 0-1173
Location: Laconia, NH
Test Well: ERT1
Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $K = 2.726 \text{ ft/day}$
 $y_0 = 0.1691 \text{ ft}$

AQUIFER DATA

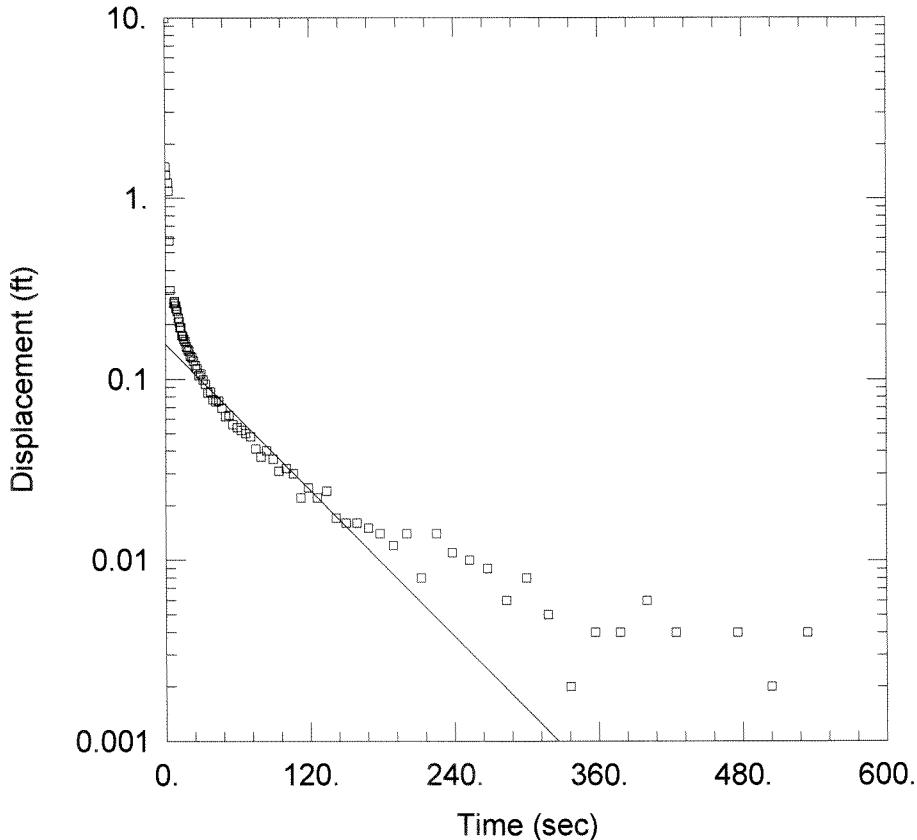
Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1D_in2)

Initial Displacement: 9.93 ft
Total Well Penetration Depth: 67. ft
Casing Radius: 0.083 ft

Static Water Column Height: 67. ft
Screen Length: 10. ft
Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT1Dout2.aqt
 Date: 06/10/13 Time: 16:33:56

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 2.443 \text{ ft/day}$
 $y_0 = 0.1554 \text{ ft}$

AQUIFER DATA

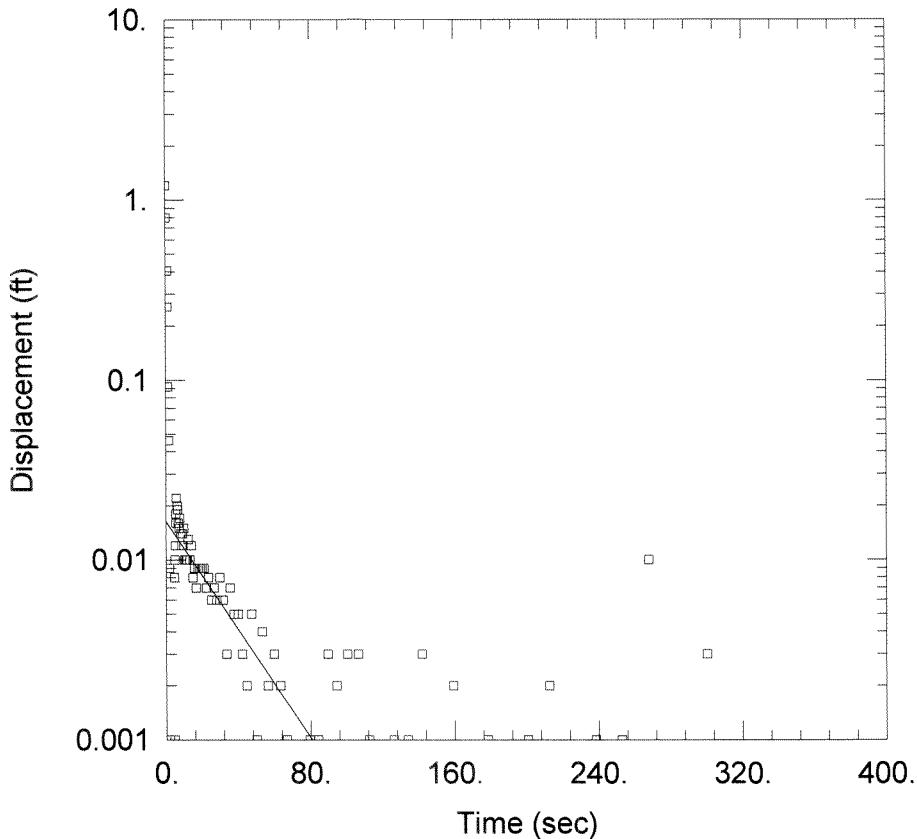
Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT1D_out1)

Initial Displacement: 9.93 ft
 Total Well Penetration Depth: 67. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 67. ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2Sin1.aqt

Date: 06/10/13

Time: 16:21:23

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 7.764 ft/day

y0 = 0.01633 ft

AQUIFER DATA

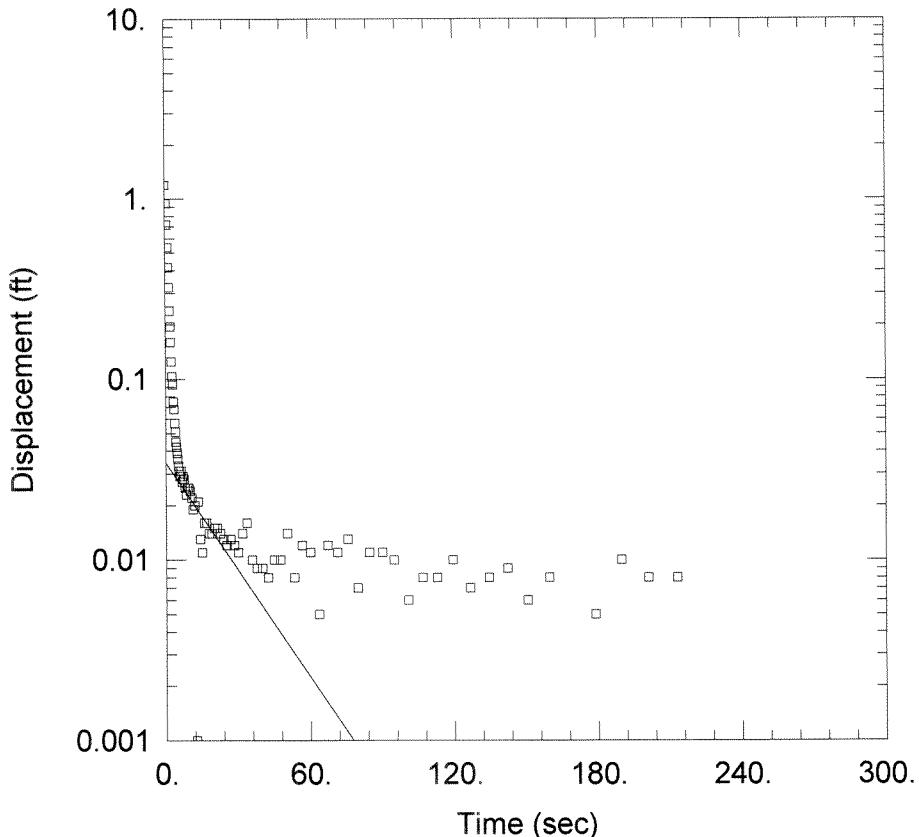
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

Initial Displacement: 13.18 ft
 Total Well Penetration Depth: 4.73 ft
 Casing Radius: 0.083 ft

WELL DATA (ERT2S_in1)

Static Water Column Height: 5.32 ft
 Screen Length: 4.73 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2Sout1.aqt
 Date: 06/10/13 Time: 16:20:42

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 10.21 \text{ ft/day}$
 $y_0 = 0.03425 \text{ ft}$

AQUIFER DATA

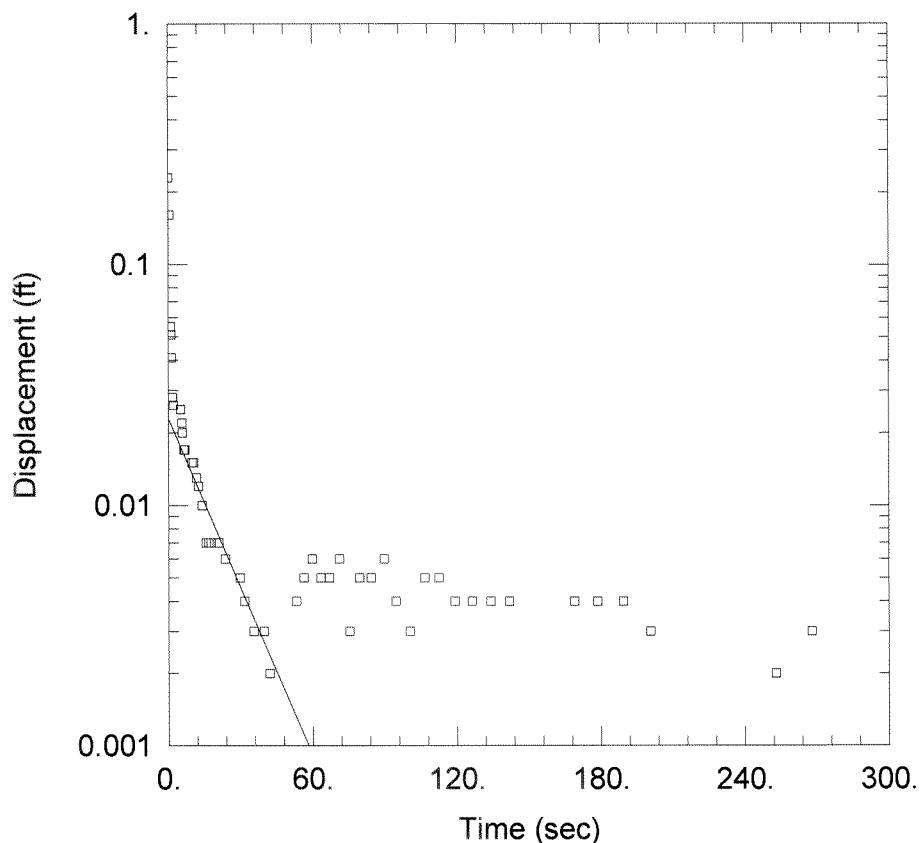
Saturated Thickness: 25. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT2S_out1)

Initial Displacement: 13.18 ft
 Total Well Penetration Depth: 4.73 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.32 ft
 Screen Length: 4.73 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2Sin2.aqt
 Date: 06/10/13 Time: 16:20:41

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 12.08 \text{ ft/day}$
 $y_0 = 0.02284 \text{ ft}$

AQUIFER DATA

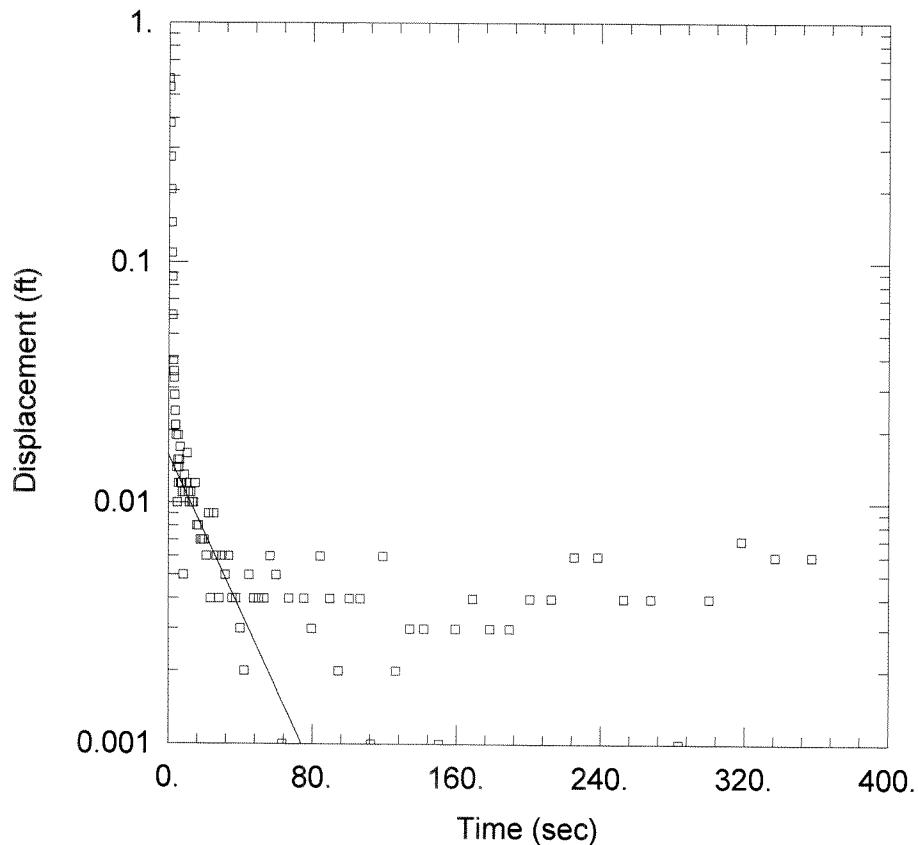
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2S_in2)

Initial Displacement: 13.18 ft
 Total Well Penetration Depth: 4.73 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.32 ft
 Screen Length: 4.73 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2Sout2.aqt
 Date: 06/10/13 Time: 16:20:44

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 8.377 \text{ ft/day}$
 $y_0 = 0.01572 \text{ ft}$

AQUIFER DATA

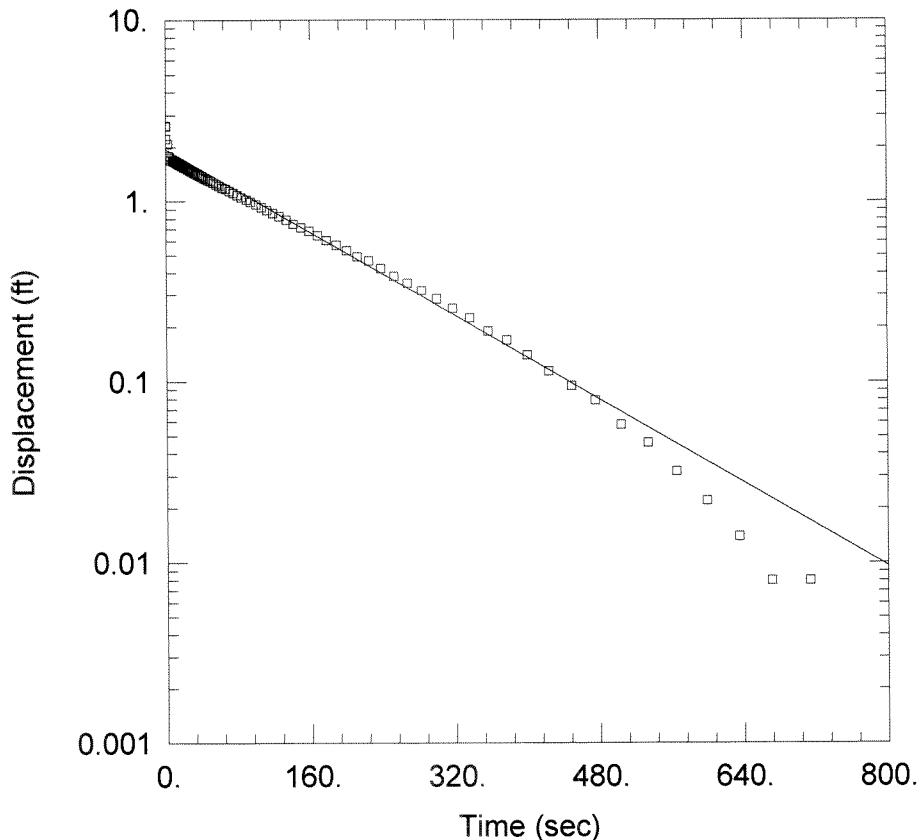
Saturated Thickness: 25. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT2S_out2)

Initial Displacement: 13.18 ft
 Total Well Penetration Depth: 4.73 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.32 ft
 Screen Length: 4.73 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2\la-in1.agt
 Date: 06/10/13 Time: 16:41:03

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 0.9745 \text{ ft/day}$
 $y_0 = 1.942 \text{ ft}$

AQUIFER DATA

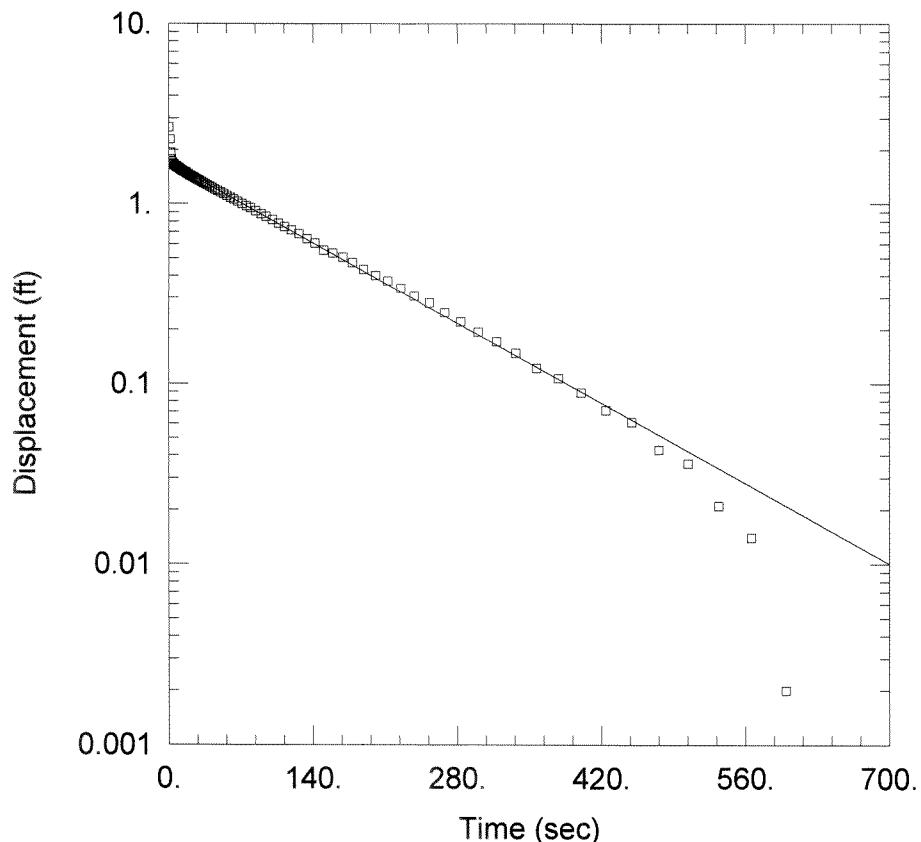
Saturated Thickness: 50. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT2\la_in1)

Initial Displacement: 12.5 ft
 Total Well Penetration Depth: 32.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2\la-out1.aqt
 Date: 06/10/13 Time: 16:41:04

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 1.074 \text{ ft/day}$
 $y_0 = 1.683 \text{ ft}$

AQUIFER DATA

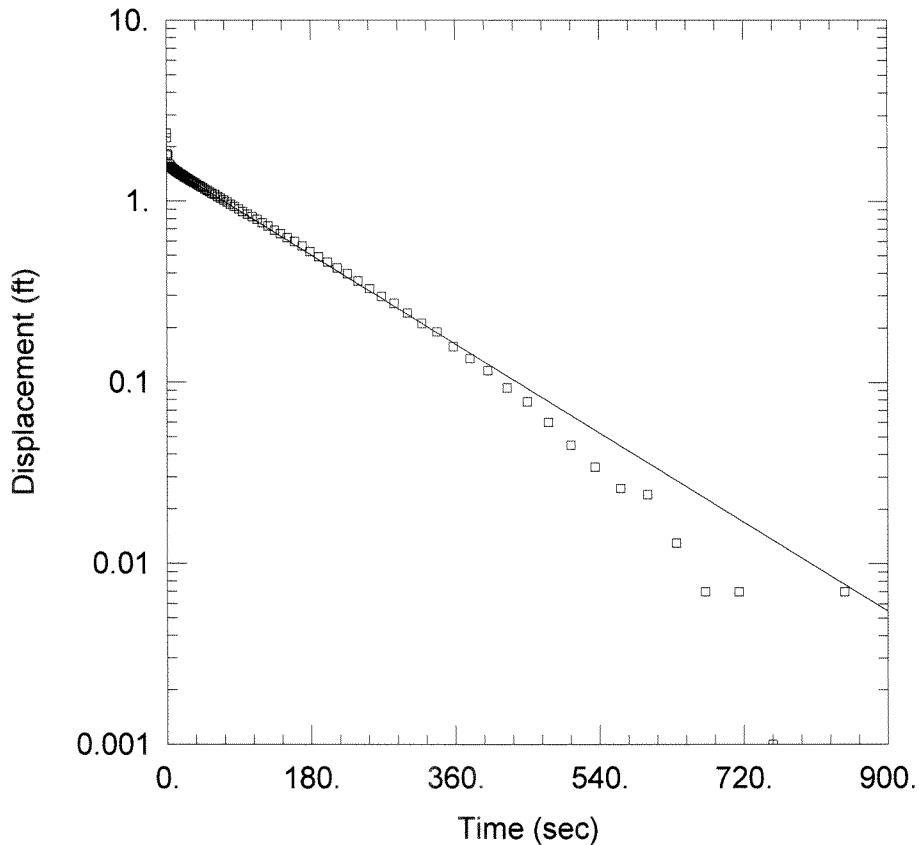
Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2\la_out1)

Initial Displacement: 12.5 ft
 Total Well Penetration Depth: 32.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2la-in2.agt
 Date: 06/10/13 Time: 16:41:04

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 0.9223 \text{ ft/day}$
 $y_0 = 1.561 \text{ ft}$

AQUIFER DATA

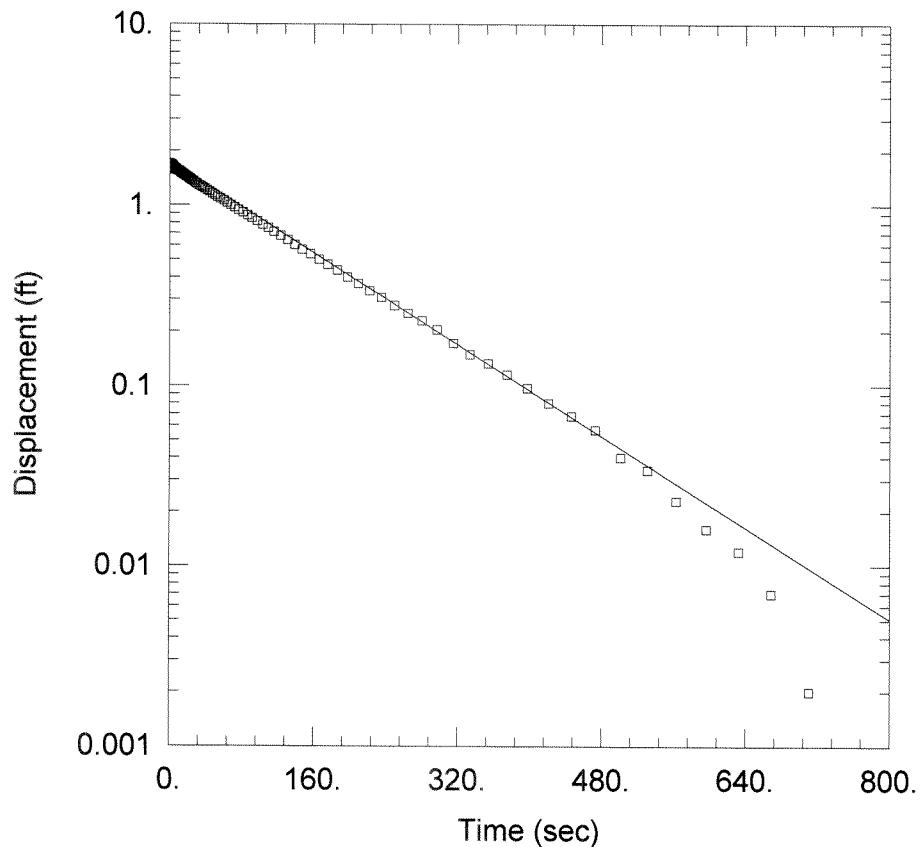
Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2la-in2)

Initial Displacement: 12.5 ft
 Total Well Penetration Depth: 32.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2\la-out2.aqt

Date: 06/10/13

Time: 16:41:05

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 1.073 \text{ ft/day}$

$y_0 = 1.752 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2\la_out2)

Initial Displacement: 12.5 ft

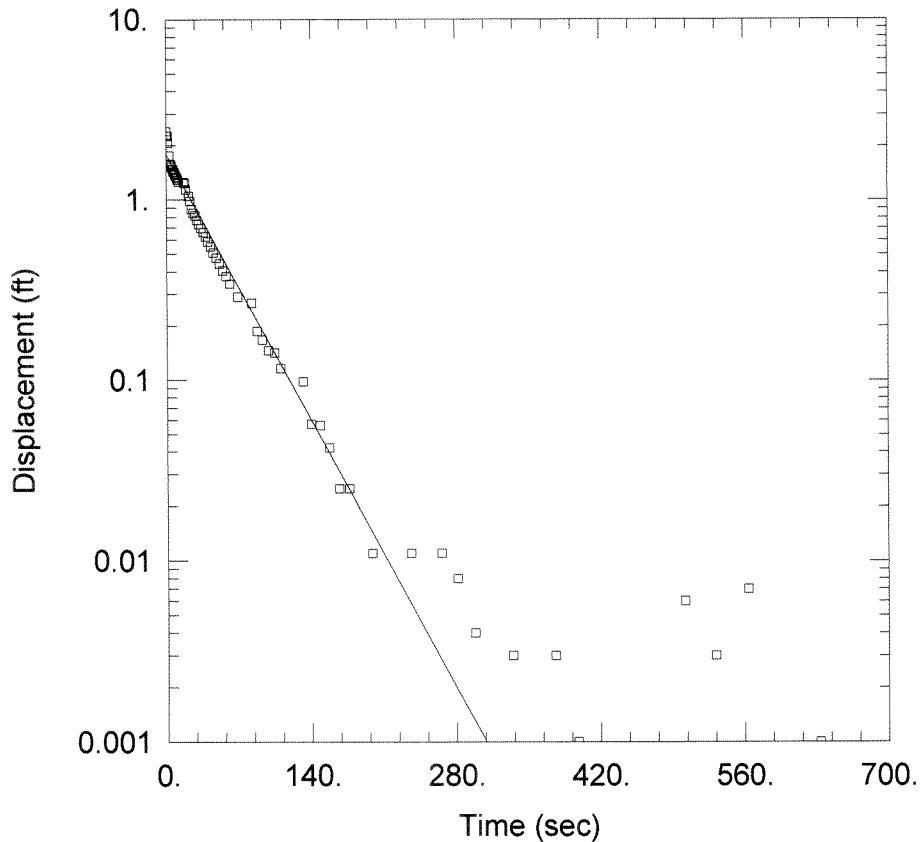
Total Well Penetration Depth: 32.5 ft

Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2lb-in1.agt
 Date: 06/10/13 Time: 16:41:05

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.701 \text{ ft/day}$
 $y_0 = 1.77 \text{ ft}$

AQUIFER DATA

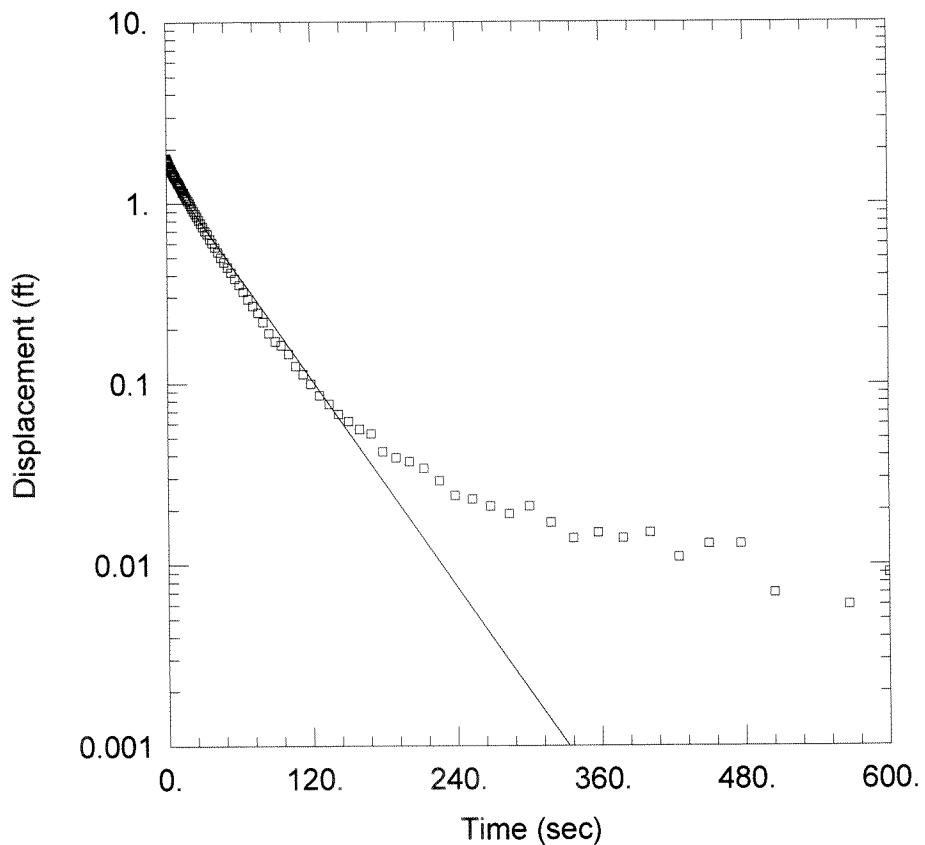
Saturated Thickness: 65. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2lb_in1)

Initial Displacement: 12.29 ft
 Total Well Penetration Depth: 47.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 47.7 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2lb-out1.aqt
 Date: 06/10/13 Time: 16:41:06

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.35 \text{ ft/day}$
 $y_0 = 1.463 \text{ ft}$

AQUIFER DATA

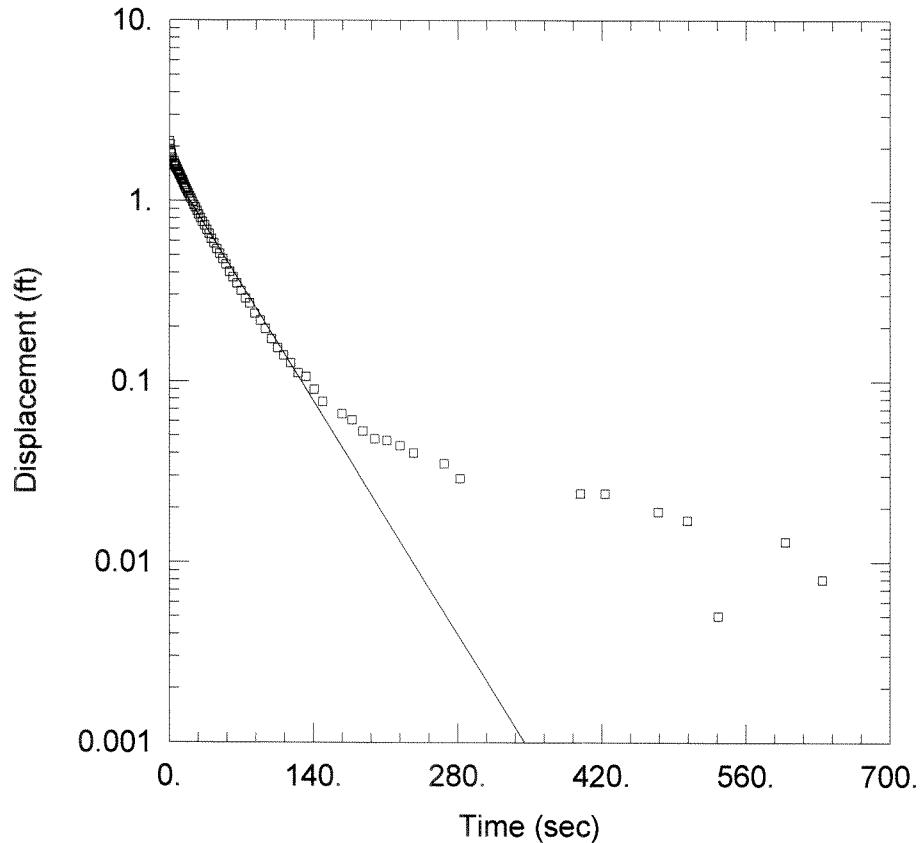
Saturated Thickness: 65. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2lb_out1)

Initial Displacement: 12.29 ft
 Total Well Penetration Depth: 47.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 47.7 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2lb-in2.aqt
 Date: 06/10/13 Time: 16:41:06

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.246 \text{ ft/day}$
 $y_0 = 1.523 \text{ ft}$

AQUIFER DATA

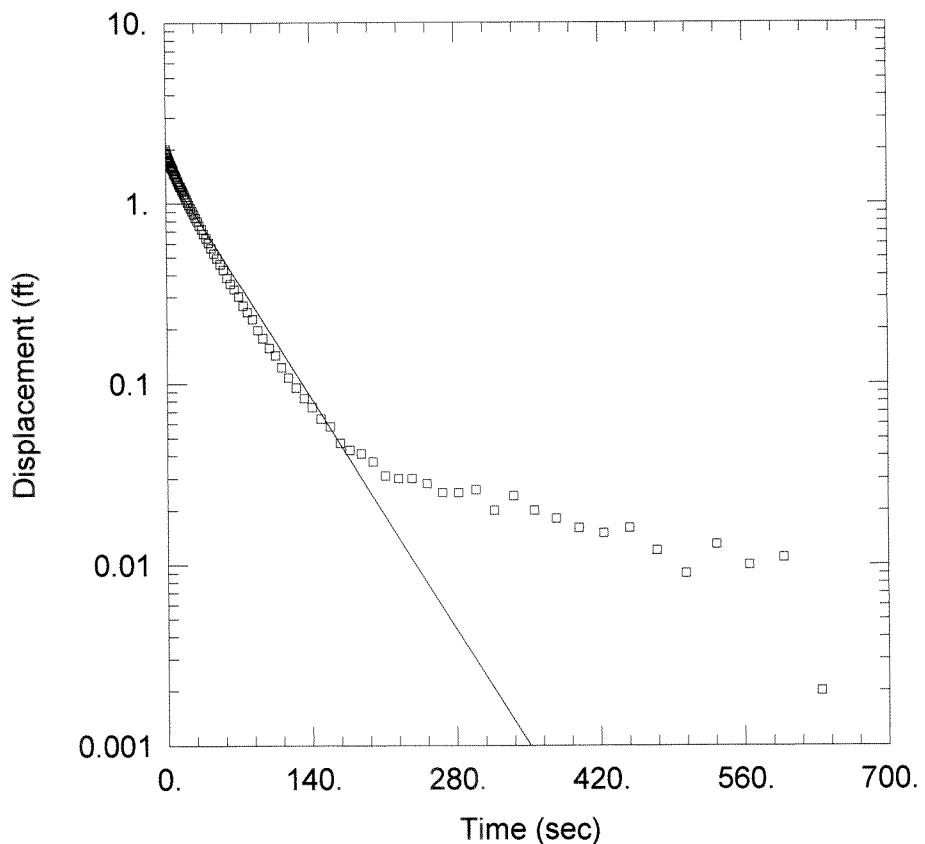
Saturated Thickness: 65. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2lb_in2)

Initial Displacement: 12.29 ft
 Total Well Penetration Depth: 47.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 47.7 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2lb-out2.aqt
 Date: 06/10/13 Time: 16:41:07

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.2 \text{ ft/day}$
 $y_0 = 1.553 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 65. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2lb_out2)

Initial Displacement: 12.29 ft

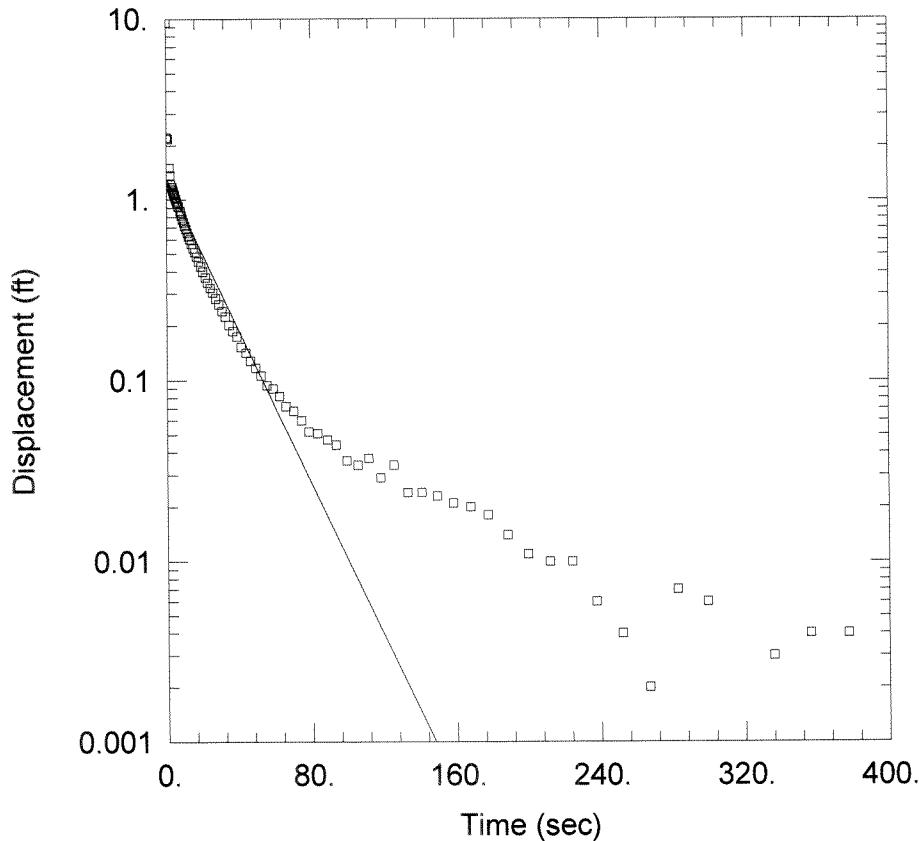
Total Well Penetration Depth: 47.7 ft

Casing Radius: 0.083 ft

Static Water Column Height: 47.7 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2D_in1.aqt
 Date: 06/10/13 Time: 16:41:01

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 7.689 \text{ ft/day}$
 $y_0 = 1.303 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2D_in1)

Initial Displacement: 9.57 ft

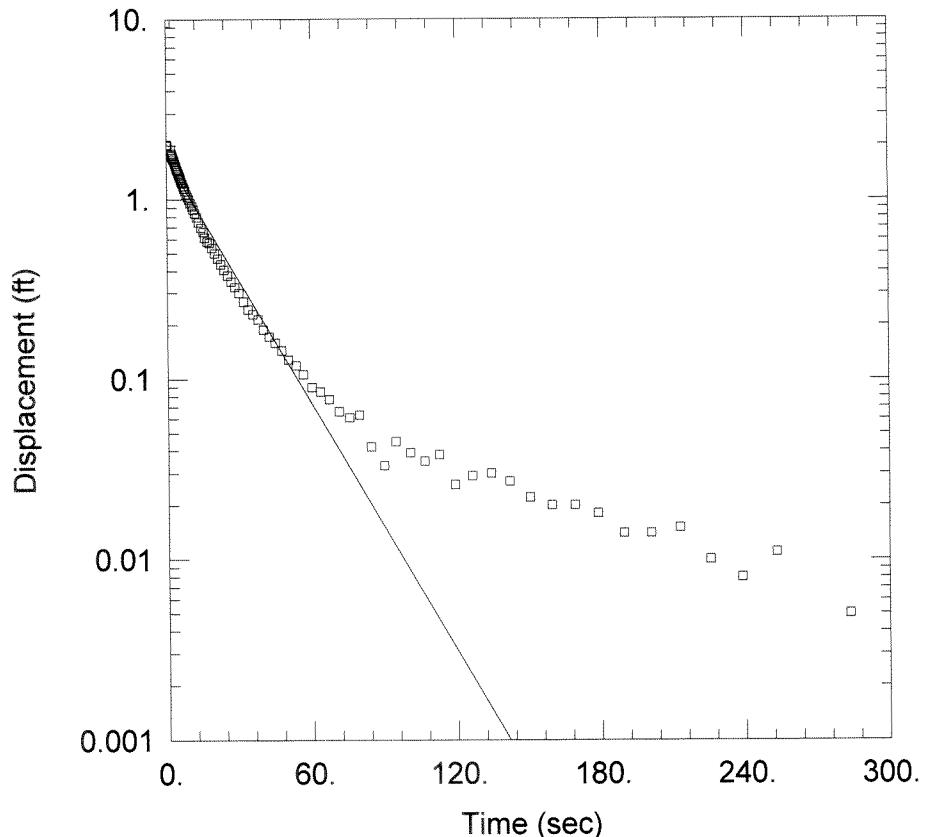
Total Well Penetration Depth: 69.43 ft

Casing Radius: 0.083 ft

Static Water Column Height: 69.43 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2D_out1.aqt
 Date: 06/10/13 Time: 16:41:02

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 8.315 \text{ ft/day}$
 $y_0 = 1.683 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 80 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2D_in1)

Initial Displacement: 9.57 ft

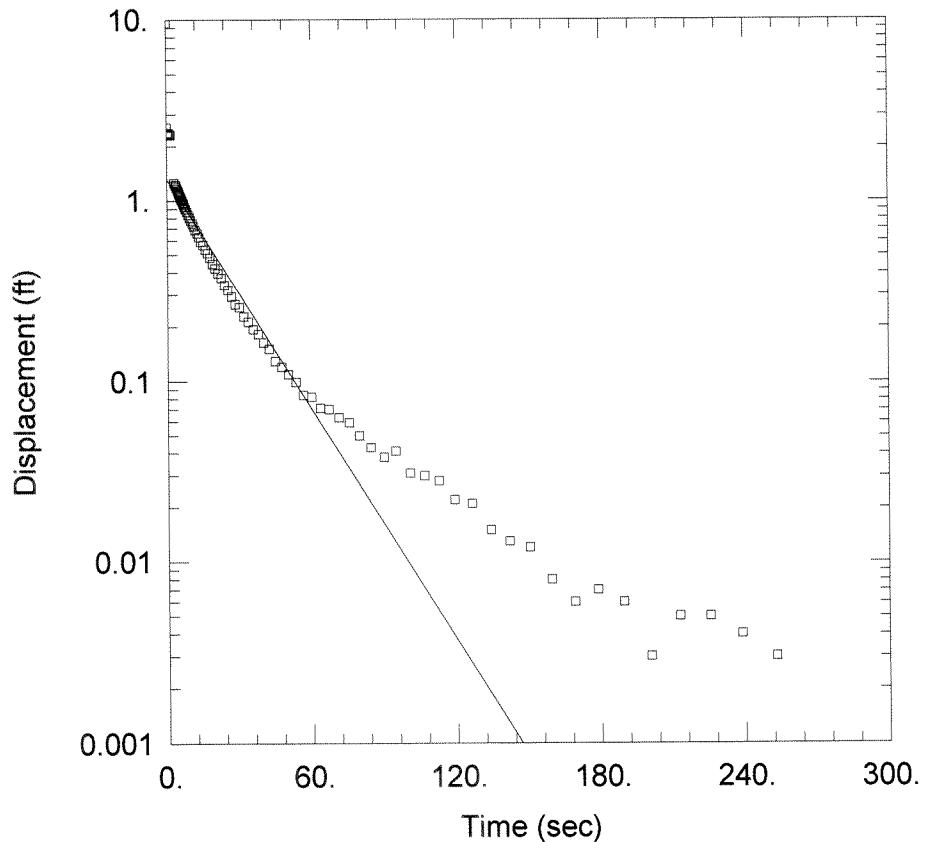
Total Well Penetration Depth: 69.43 ft

Casing Radius: 0.083 ft

Static Water Column Height: 69.43 ft

Screen Length: 10 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT2D_in2.aqt
 Date: 06/10/13 Time: 16:41:01

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 7.758 \text{ ft/day}$
 $y_0 = 1.313 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2D_in2)

Initial Displacement: 9.57 ft

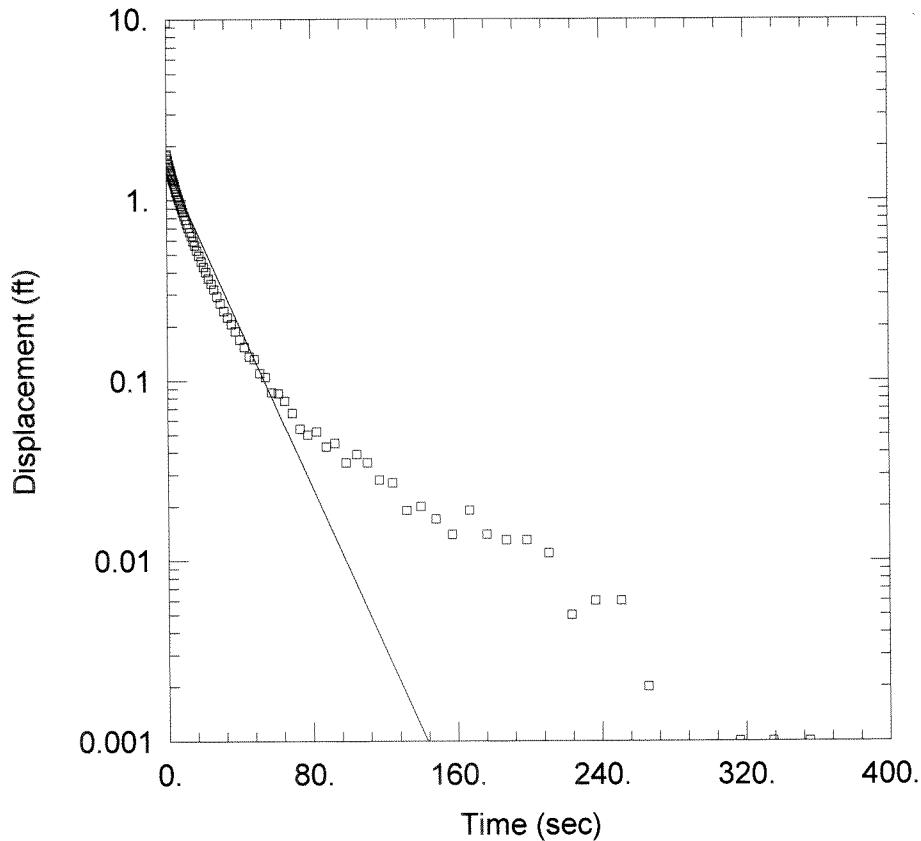
Total Well Penetration Depth: 69.43 ft

Casing Radius: 0.083 ft

Static Water Column Height: 69.43 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\ERT2D_out2.aqt
 Date: 06/10/13 Time: 16:41:03

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 8.14 \text{ ft/day}$
 $y_0 = 1.561 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT2D_in2)

Initial Displacement: 9.57 ft

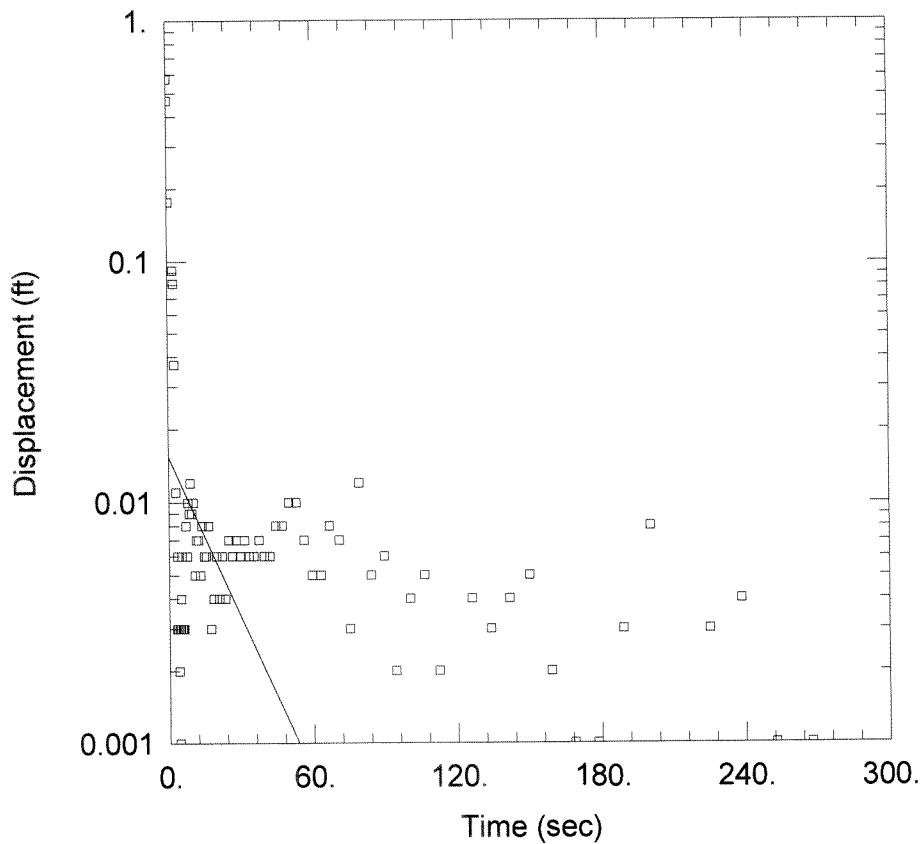
Total Well Penetration Depth: 69.43 ft

Casing Radius: 0.083 ft

Static Water Column Height: 69.43 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3Sin1.aqt

Date: 06/10/13

Time: 16:21:54

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 11.66 ft/day

y₀ = 0.01538 ft

AQUIFER DATA

Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3S_in1)

Initial Displacement: 13.11 ft

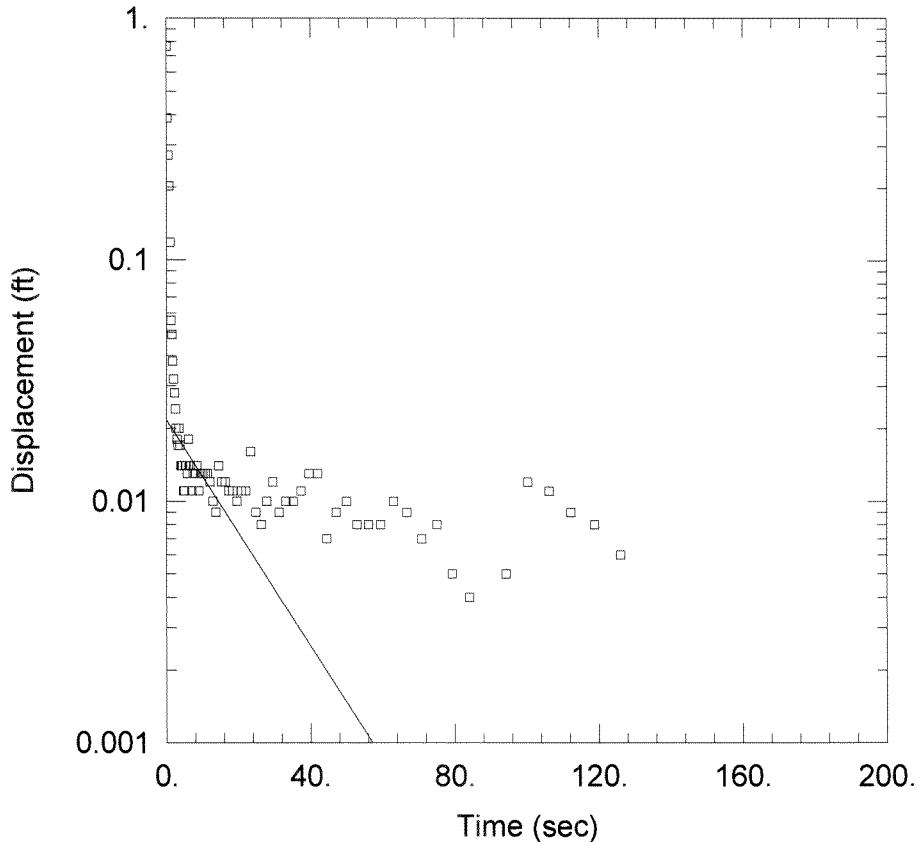
Total Well Penetration Depth: 4.61 ft

Casing Radius: 0.083 ft

Static Water Column Height: 5.39 ft

Screen Length: 4.61 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3Sout1.aqt
 Date: 06/10/13 Time: 16:21:56

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 12.31 \text{ ft/day}$
 $y_0 = 0.02162 \text{ ft}$

AQUIFER DATA

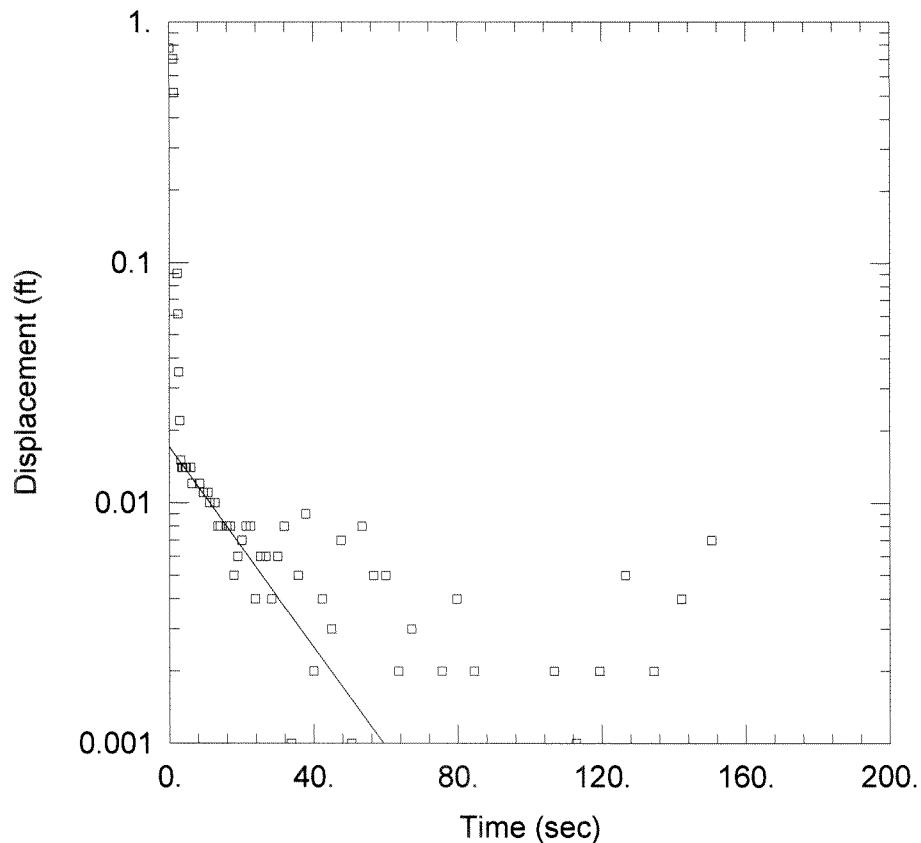
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3S_out)

Initial Displacement: 13.11 ft
 Total Well Penetration Depth: 4.61 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.39 ft
 Screen Length: 4.61 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3Sin2.aqt

Date: 06/10/13

Time: 16:21:55

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 10.96 \text{ ft/day}$

$y_0 = 0.01708 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3S_in2)

Initial Displacement: 13.11 ft

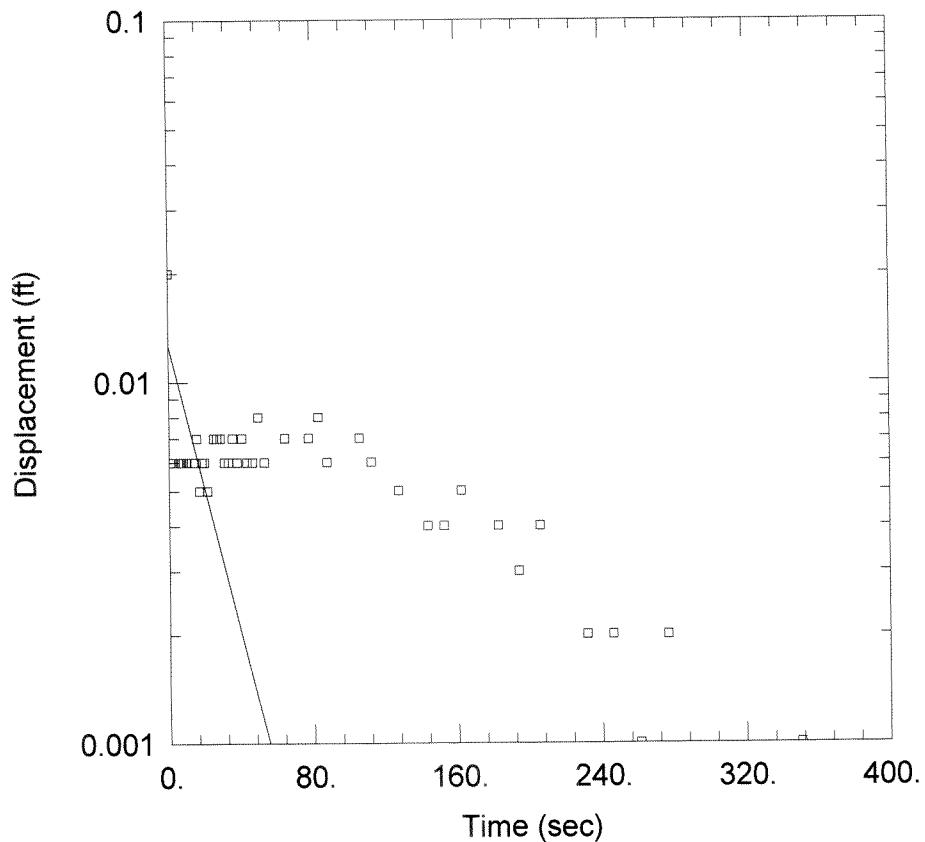
Total Well Penetration Depth: 4.61 ft

Casing Radius: 0.083 ft

Static Water Column Height: 5.39 ft

Screen Length: 4.61 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3Sout2.aqt
 Date: 06/11/13 Time: 10:53:31

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 10.55 \text{ ft/day}$
 $y_0 = 0.01259 \text{ ft}$

AQUIFER DATA

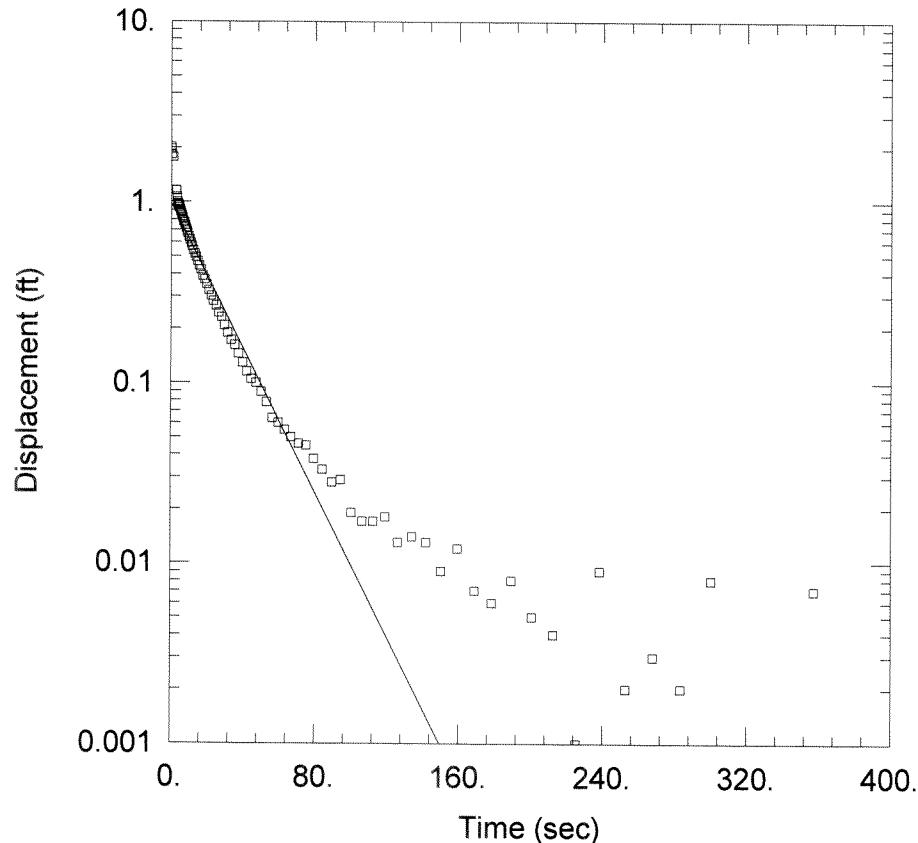
Saturated Thickness: 25. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT3S_out2)

Initial Displacement: 13.11 ft
 Total Well Penetration Depth: 4.61 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.39 ft
 Screen Length: 4.61 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3la_in1.aqt
 Date: 06/10/13 Time: 16:41:44

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.83 \text{ ft/day}$
 $y_0 = 0.9802 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3la_in1)

Initial Displacement: 12.45 ft

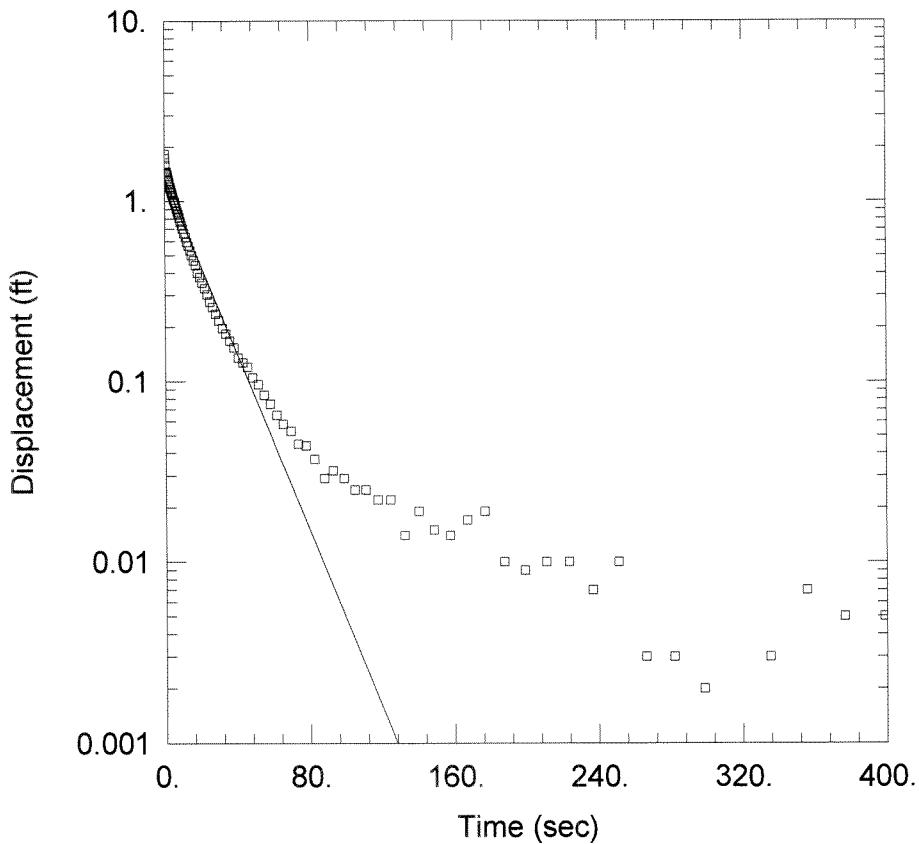
Total Well Penetration Depth: 35.55 ft

Casing Radius: 0.083 ft

Static Water Column Height: 35.55 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3la_out1.aqt
 Date: 06/10/13 Time: 16:41:45

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 8.34 \text{ ft/day}$
 $y_0 = 1.335 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT3la_out1)

Initial Displacement: 12.45 ft

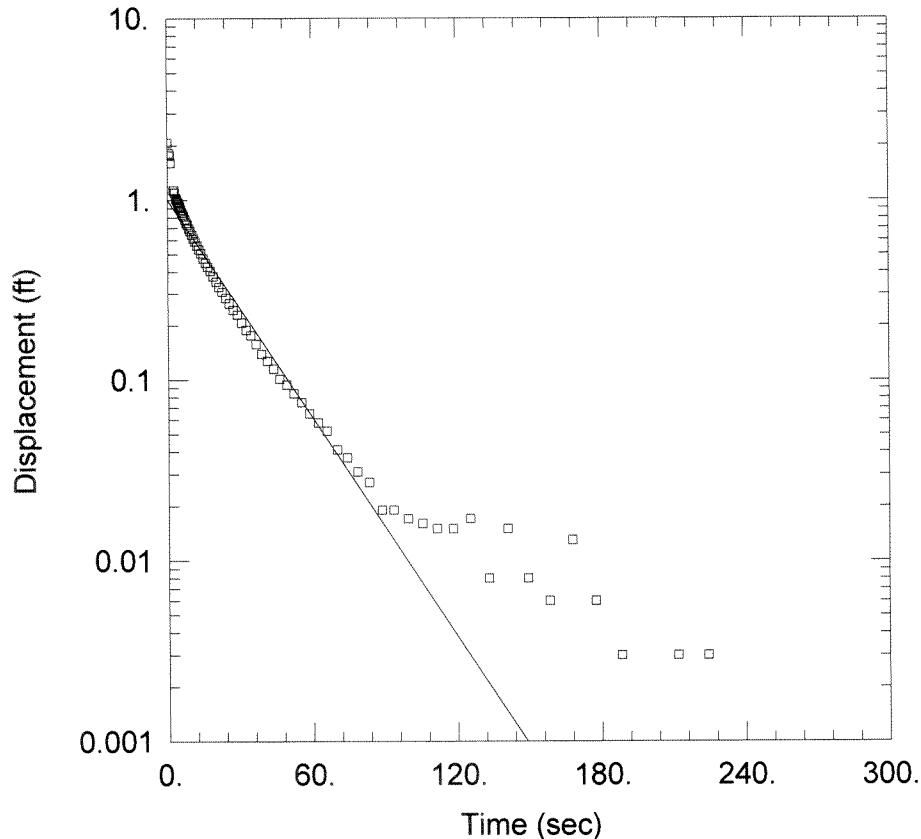
Total Well Penetration Depth: 35.55 ft

Casing Radius: 0.083 ft

Static Water Column Height: 35.55 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3la_in2.aqt
 Date: 06/10/13 Time: 16:41:45

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.881 \text{ ft/day}$
 $y_0 = 1. \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3la_out1)

Initial Displacement: 12.45 ft

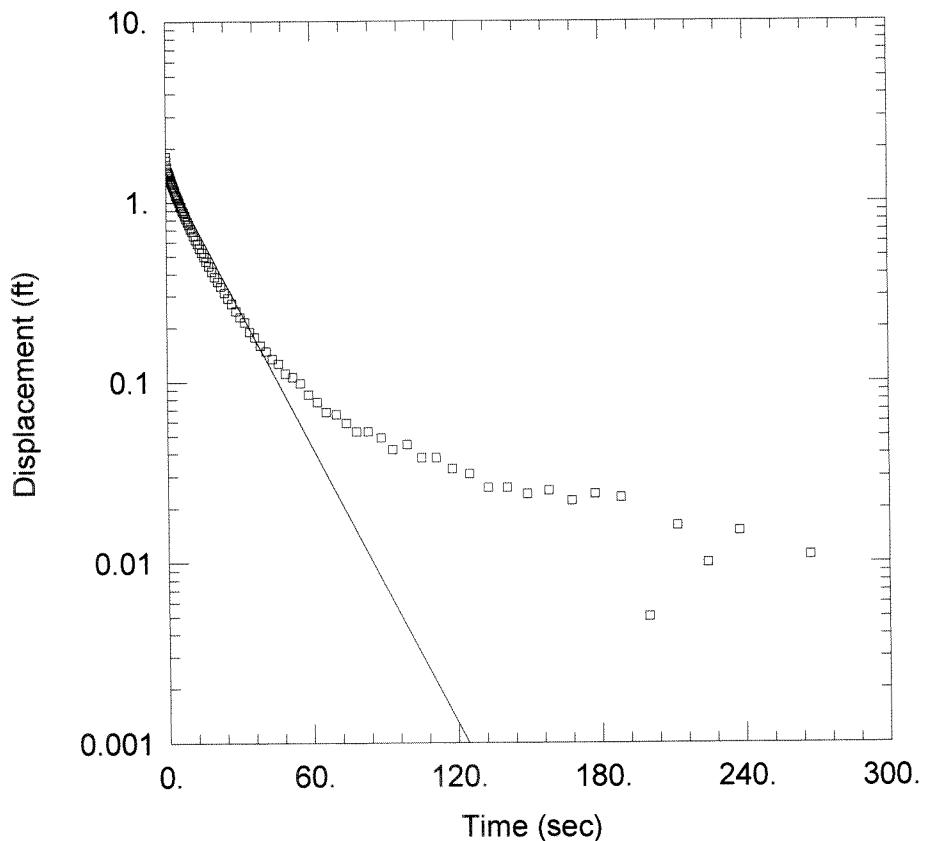
Static Water Column Height: 35.55 ft

Total Well Penetration Depth: 35.55 ft

Screen Length: 10. ft

Casing Radius: 0.083 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3la_out2.aqt
 Date: 06/10/13 Time: 16:41:46

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 8.72 \text{ ft/day}$
 $y_0 = 1.49 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3la_out2)

Initial Displacement: 12.45 ft

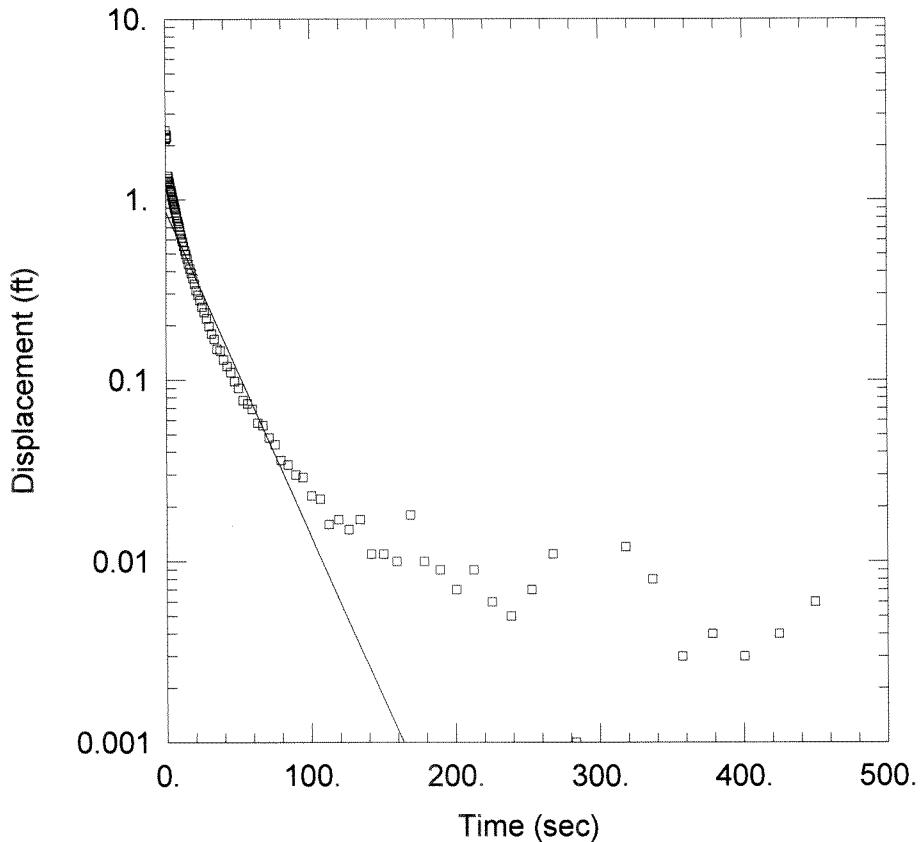
Total Well Penetration Depth: 35.55 ft

Casing Radius: 0.083 ft

Static Water Column Height: 35.55 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3lb_in1.aqt
 Date: 06/10/13 Time: 16:41:47

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.286 \text{ ft/day}$
 $y_0 = 0.856 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 60. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT3lb_in1)

Initial Displacement: 12.18 ft

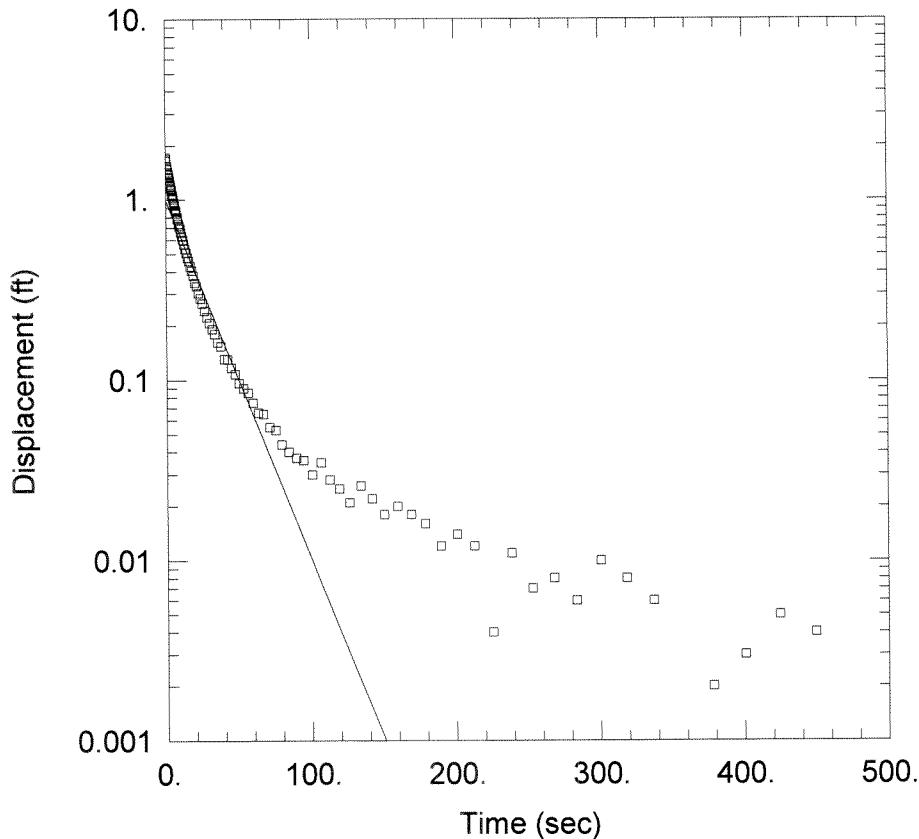
Total Well Penetration Depth: 46.82 ft

Casing Radius: 0.083 ft

Static Water Column Height: 46.82 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3lb_out1.aqt
 Date: 06/10/13 Time: 16:41:48

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.985 \text{ ft/day}$
 $y_0 = 0.9897 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 60. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3lb_out1)

Initial Displacement: 12.18 ft

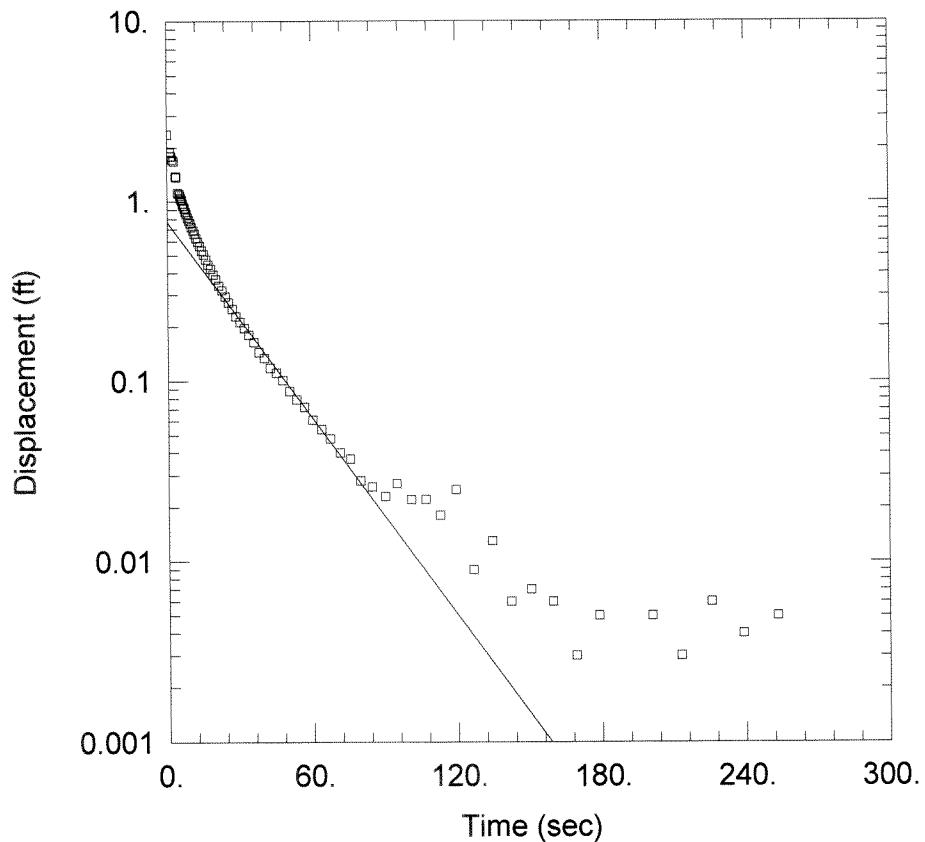
Total Well Penetration Depth: 46.82 ft

Casing Radius: 0.083 ft

Static Water Column Height: 46.82 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3lb_in2.act
Date: 06/10/13 Time: 16:41:47

PROJECT INFORMATION

Company: SERAS
Client: ERT
Project: 0-1173
Location: Laconia, NH
Test Well: ERT1
Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

AQUIFER DATA

Saturated Thickness: 60. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3lb_in2)

Initial Displacement: 12.18 ft

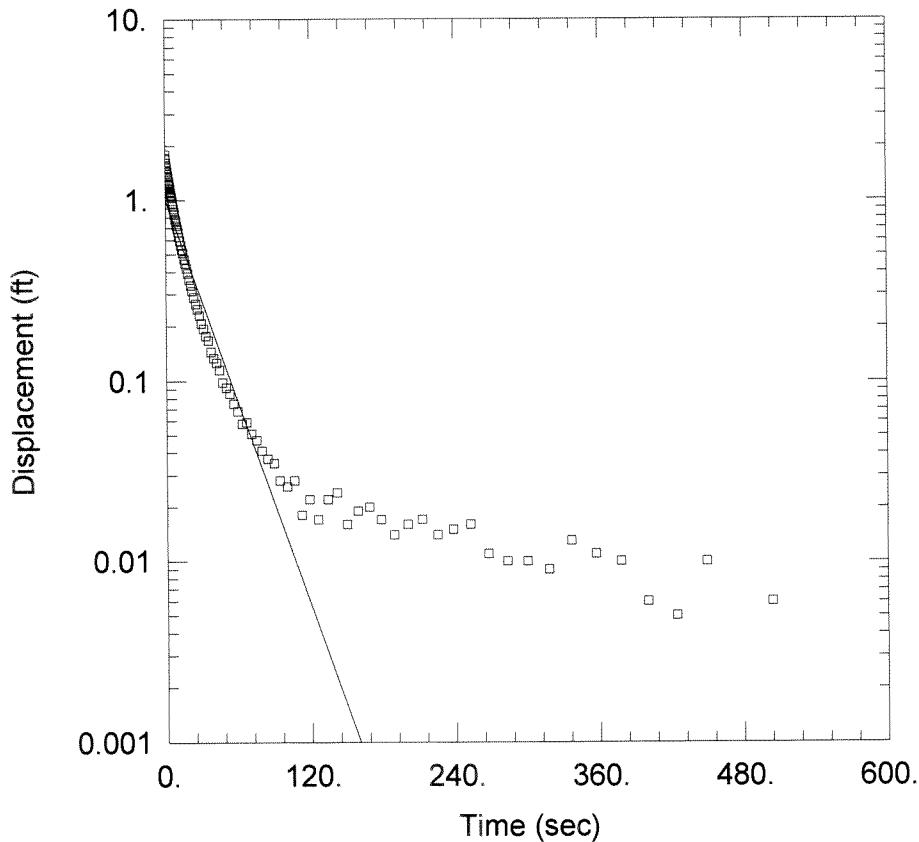
Total Well Penetration Depth: 46.82 ft

Casing Radius: 0.083 ft

Static Water Column Height: 46.82 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3lb_out2.aqt
 Date: 06/10/13 Time: 16:41:48

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.582 \text{ ft/day}$
 $y_0 = 0.9962 \text{ ft}$

AQUIFER DATA

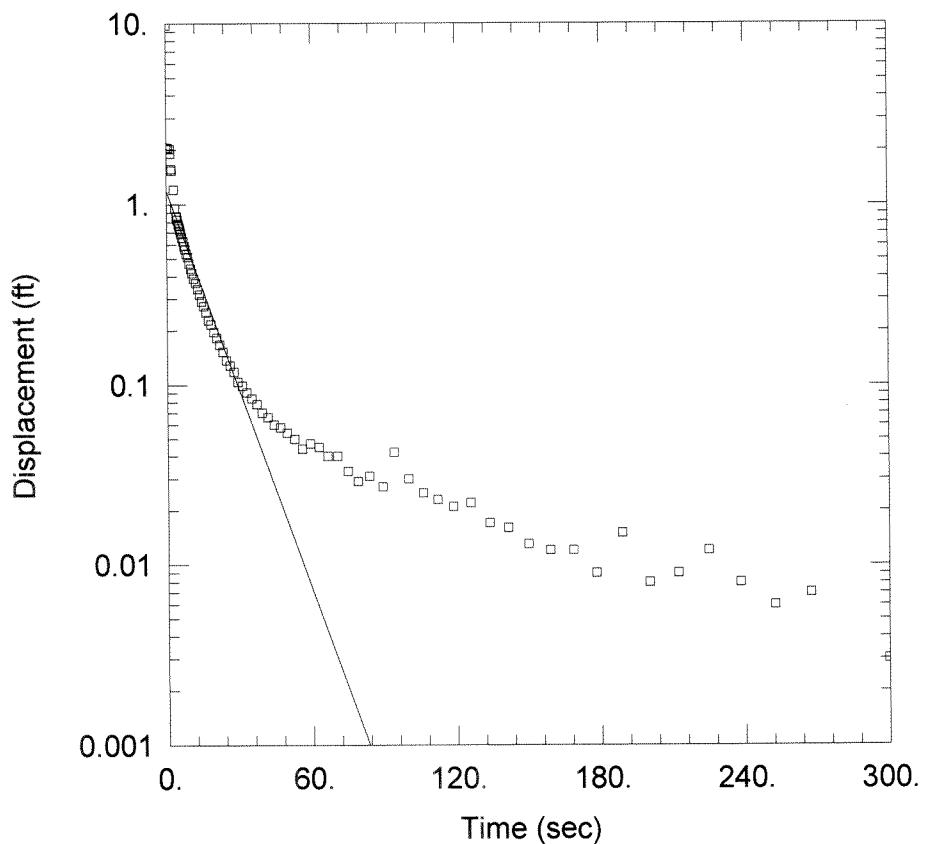
Saturated Thickness: 60. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3lb_out2)

Initial Displacement: 12.18 ft
 Total Well Penetration Depth: 46.82 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 46.82 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3D_in1.aqt
 Date: 06/10/13 Time: 16:41:42

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 13.51 \text{ ft/day}$
 $y_0 = 1.186 \text{ ft}$

AQUIFER DATA

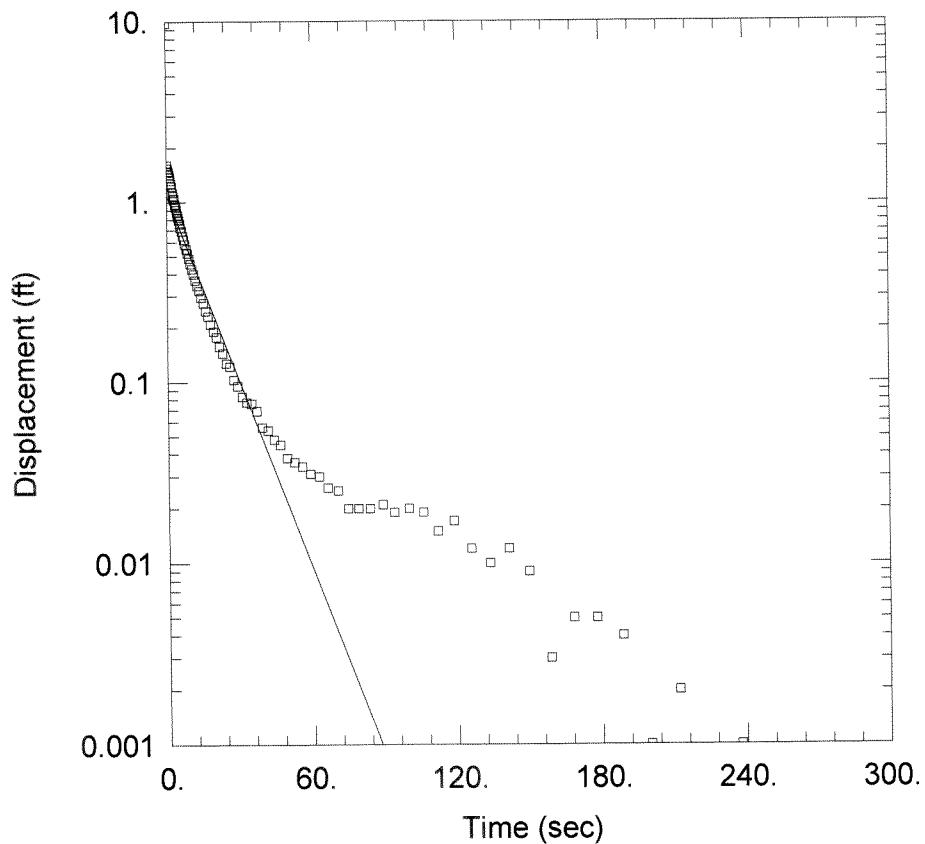
Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3D_in1)

Initial Displacement: 9.78 ft
 Total Well Penetration Depth: 70.22 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 70.22 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3D_out1.aqt
 Date: 06/10/13 Time: 16:41:43

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 12.64 \text{ ft/day}$
 $y_0 = 1.087 \text{ ft}$

AQUIFER DATA

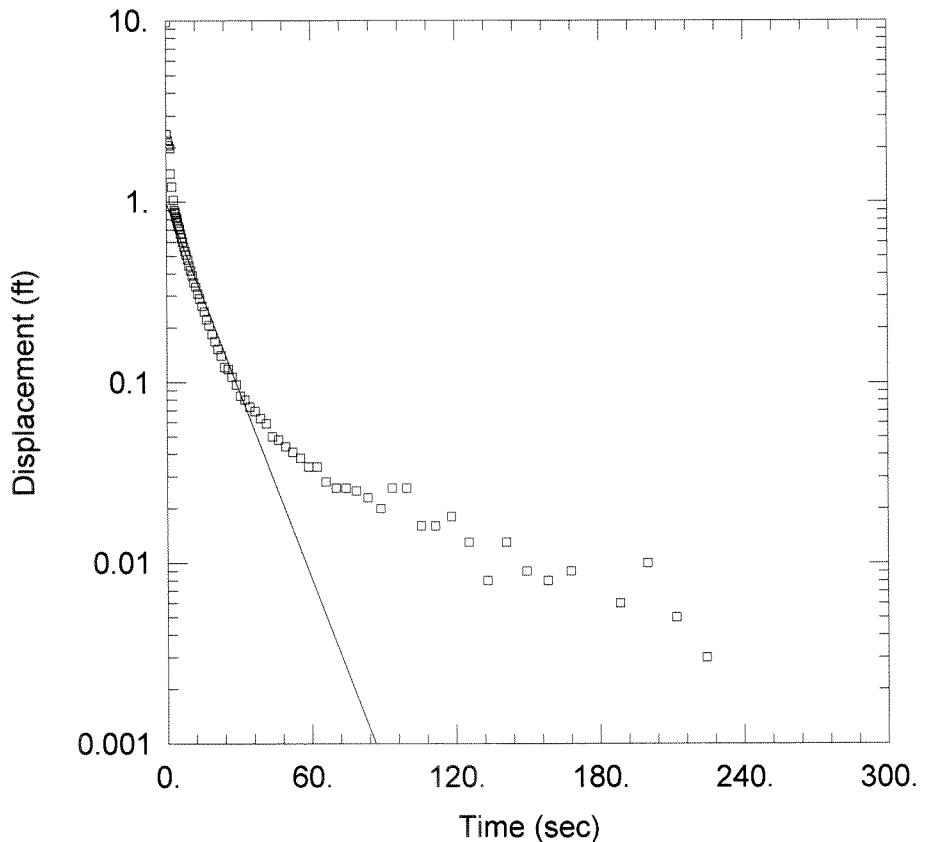
Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3D_out1)

Initial Displacement: 9.78 ft
 Total Well Penetration Depth: 70.22 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 70.22 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3D_in2.aqt
 Date: 06/10/13 Time: 16:41:43

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 12.67 \text{ ft/day}$
 $y_0 = 0.9802 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3D_in2)

Initial Displacement: 9.78 ft

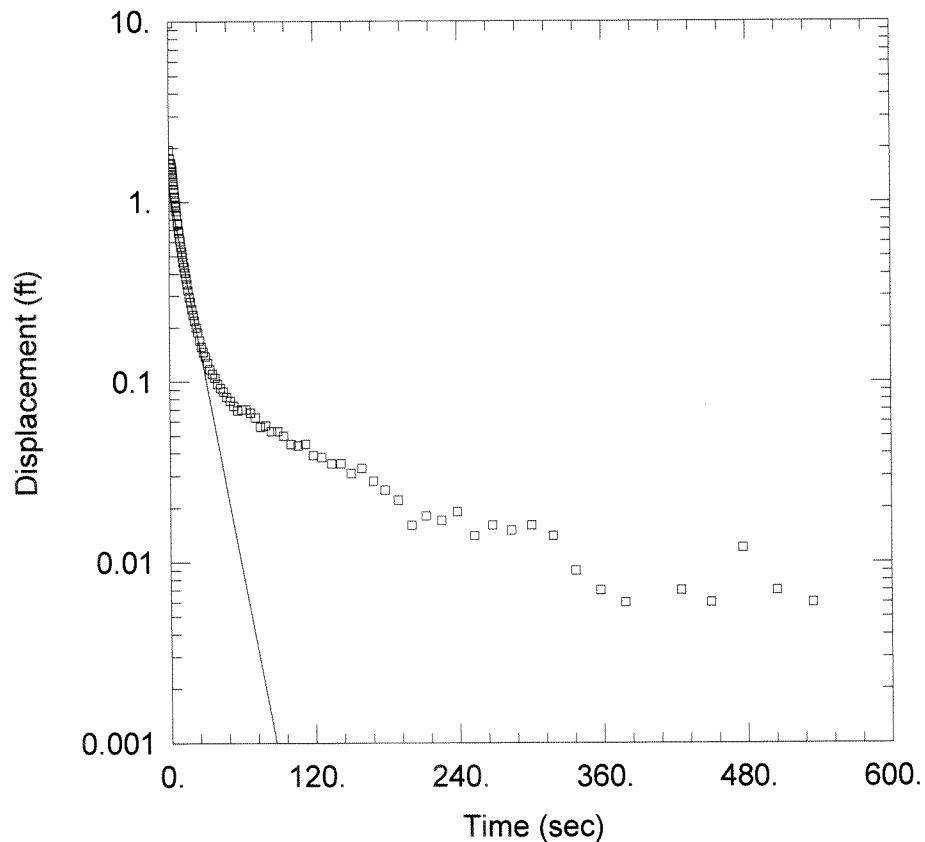
Total Well Penetration Depth: 70.22 ft

Casing Radius: 0.083 ft

Static Water Column Height: 70.22 ft

Screen Length: 10. ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT3D_out2.aqt
 Date: 06/10/13 Time: 16:41:44

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 12.92 \text{ ft/day}$
 $y_0 = 1.181 \text{ ft}$

AQUIFER DATA

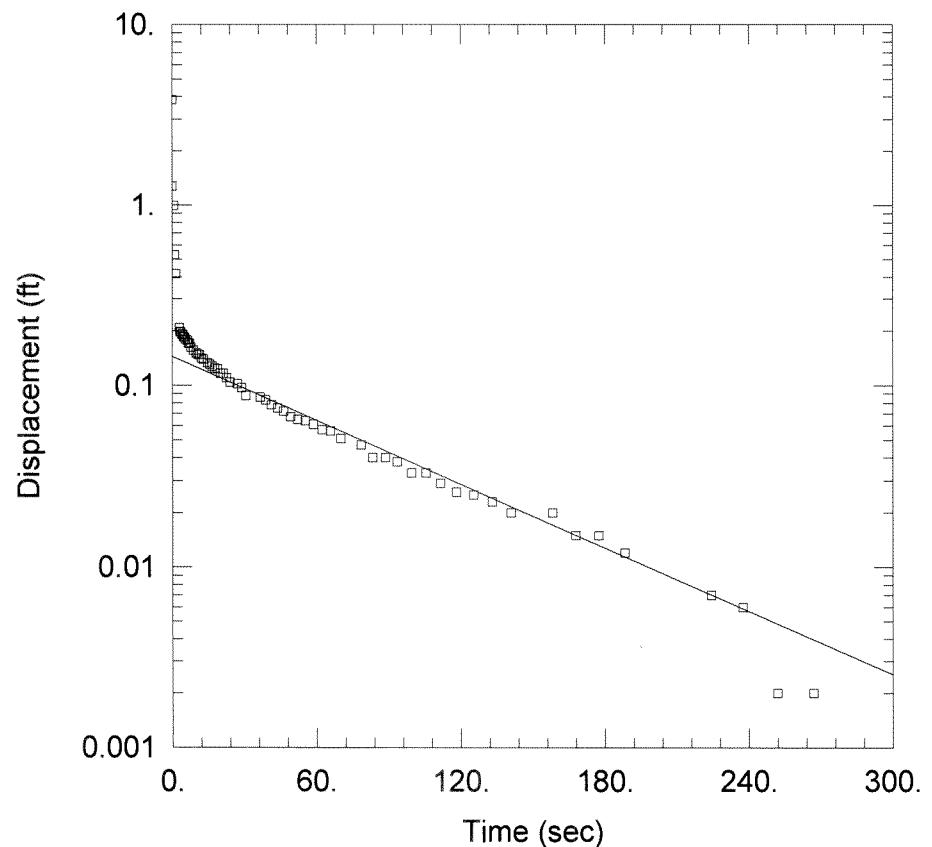
Saturated Thickness: 80. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT3D_out2)

Initial Displacement: 9.78 ft
 Total Well Penetration Depth: 70.22 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 70.22 ft
 Screen Length: 10. ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT4in1.aqt

Date: 06/10/13

Time: 16:42:30

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 2.106 \text{ ft/day}$

$y_0 = 0.1438 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT4_in1)

Initial Displacement: 3.84 ft

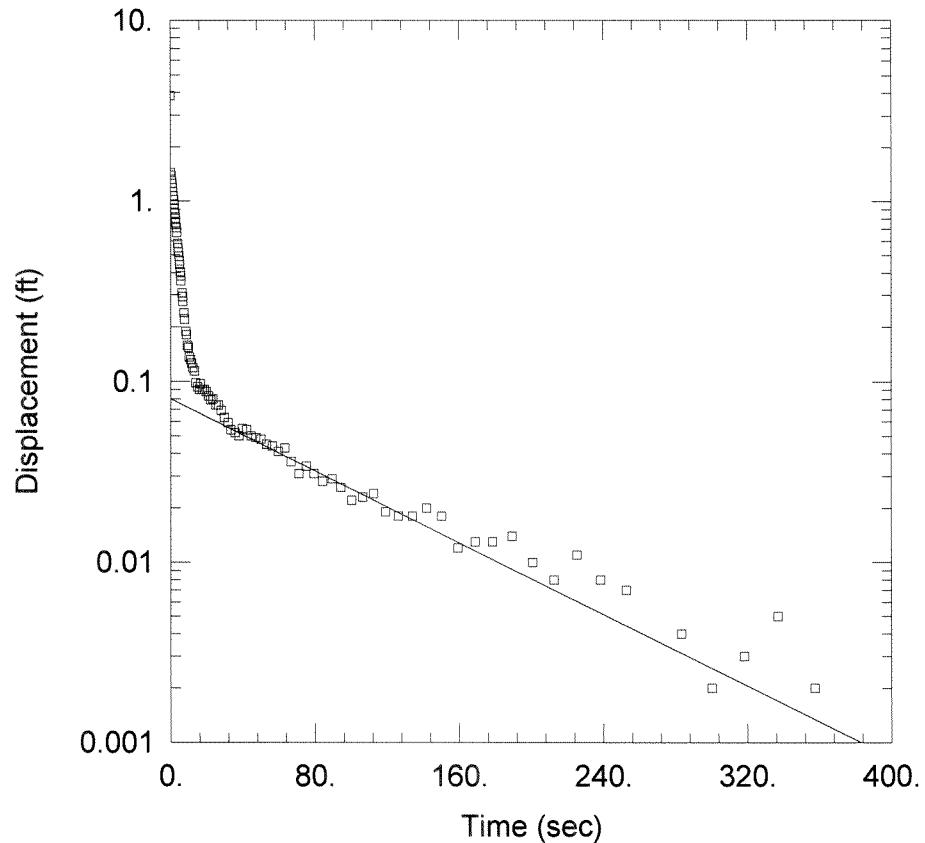
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT4out1.aqt

Date: 06/10/13

Time: 16:42:31

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 1.791 \text{ ft/day}$

$y_0 = 0.0801 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT4_out1)

Initial Displacement: 3.84 ft

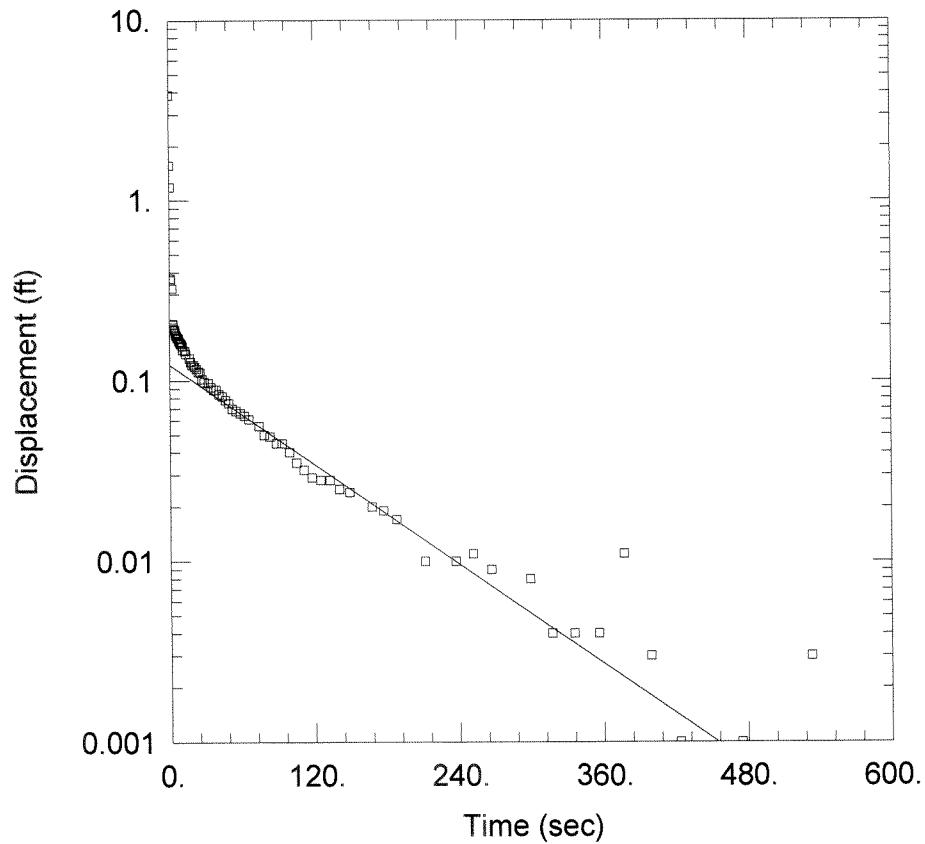
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT4in2.aqt

Date: 06/10/13

Time: 16:42:30

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 1.654 \text{ ft/day}$

$y_0 = 0.1221 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (ERT4_in2)

Initial Displacement: 3.84 ft

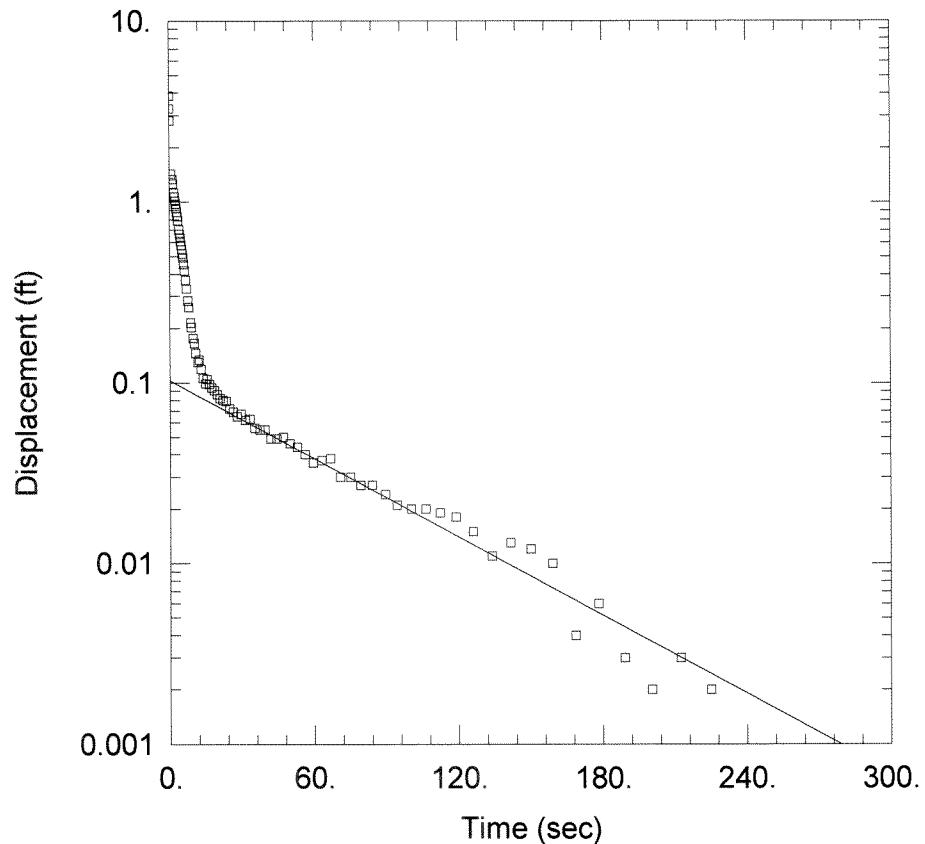
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\ERT4out2.act

Date: 06/10/13

Time: 16:42:32

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 2.597 \text{ ft/day}$

$y_0 = 0.1027 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (ERT4_out2)

Initial Displacement: 3.84 ft

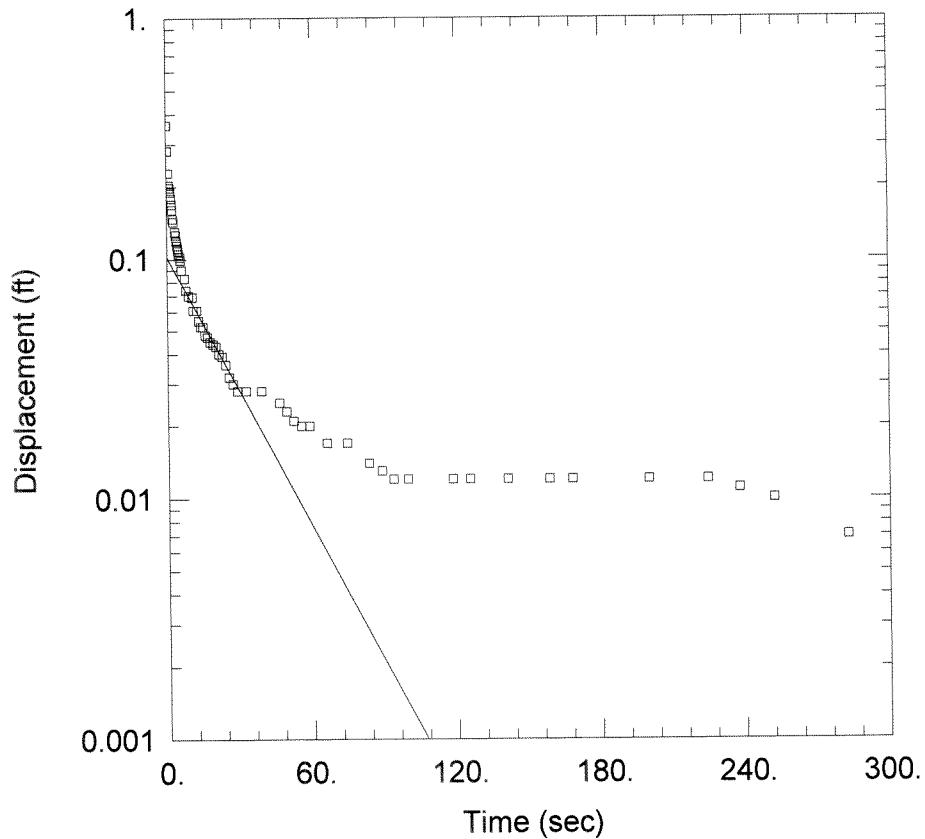
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO1_in1.aqt

Date: 06/10/13

Time: 16:42:34

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 6.131 \text{ ft/day}$

$y_0 = 0.1018 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO1_in1)

Initial Displacement: 3.3 ft

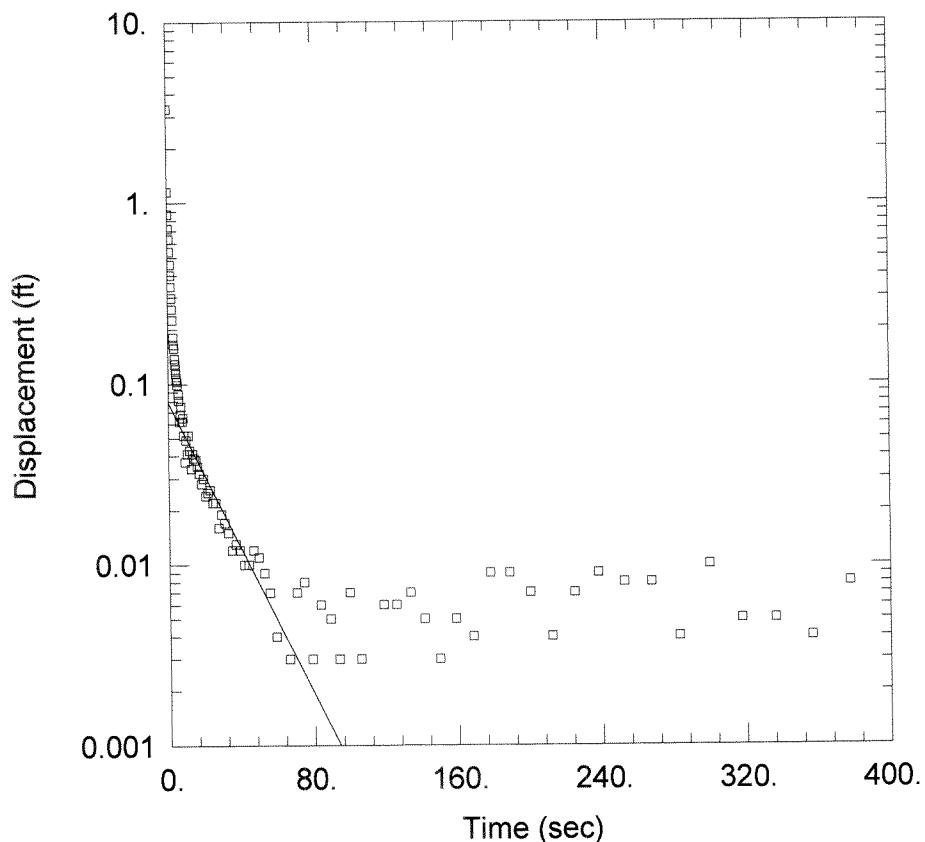
Total Well Penetration Depth: 8.7 ft

Casing Radius: 0.083 ft

Static Water Column Height: 8.7 ft

Screen Length: 8.7 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO1_out1.aqt

Date: 06/10/13

Time: 16:42:35

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 6.587 \text{ ft/day}$

$y_0 = 0.07864 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO1_out1)

Initial Displacement: 3.3 ft

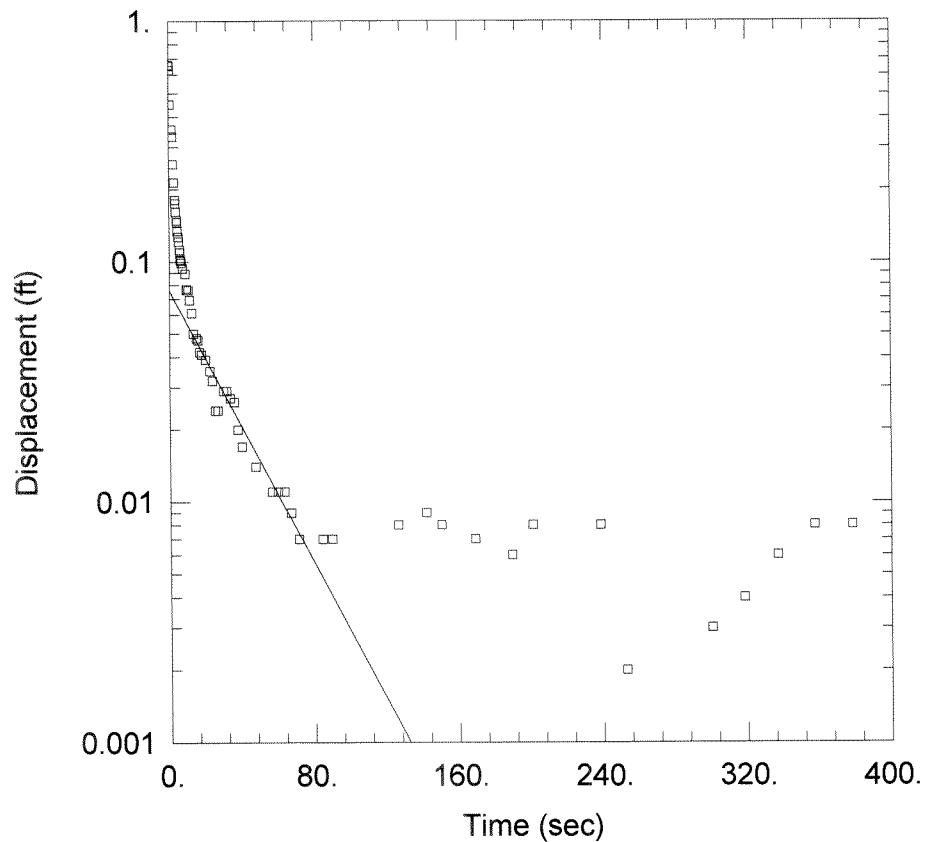
Total Well Penetration Depth: 8.7 ft

Casing Radius: 0.083 ft

Static Water Column Height: 8.7 ft

Screen Length: 8.7 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO1_in2.aqt

Date: 06/10/13

Time: 16:42:35

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 4.63 \text{ ft/day}$

$y_0 = 0.07543 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

Initial Displacement: 3.3 ft

Total Well Penetration Depth: 8.7 ft

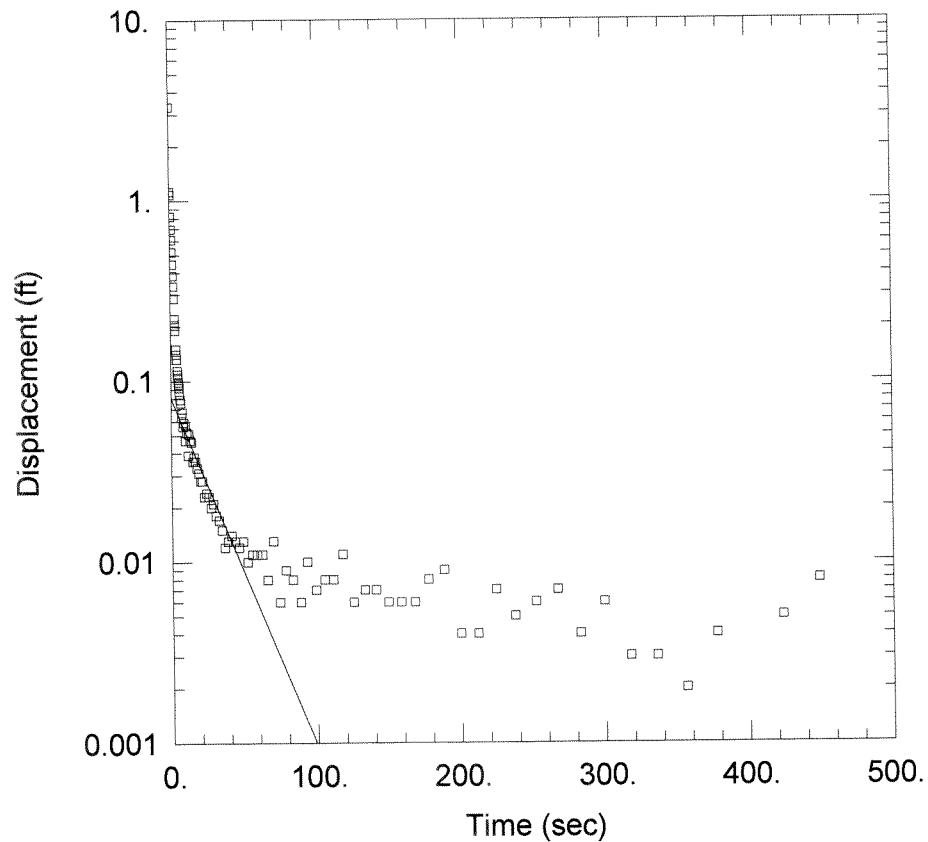
Casing Radius: 0.083 ft

WELL DATA (GEO1_in2)

Static Water Column Height: 8.7 ft

Screen Length: 8.7 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO1_out2.aqt
 Date: 06/10/13 Time: 16:42:35

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.297 \text{ ft/day}$
 $y_0 = 0.08023 \text{ ft}$

AQUIFER DATA

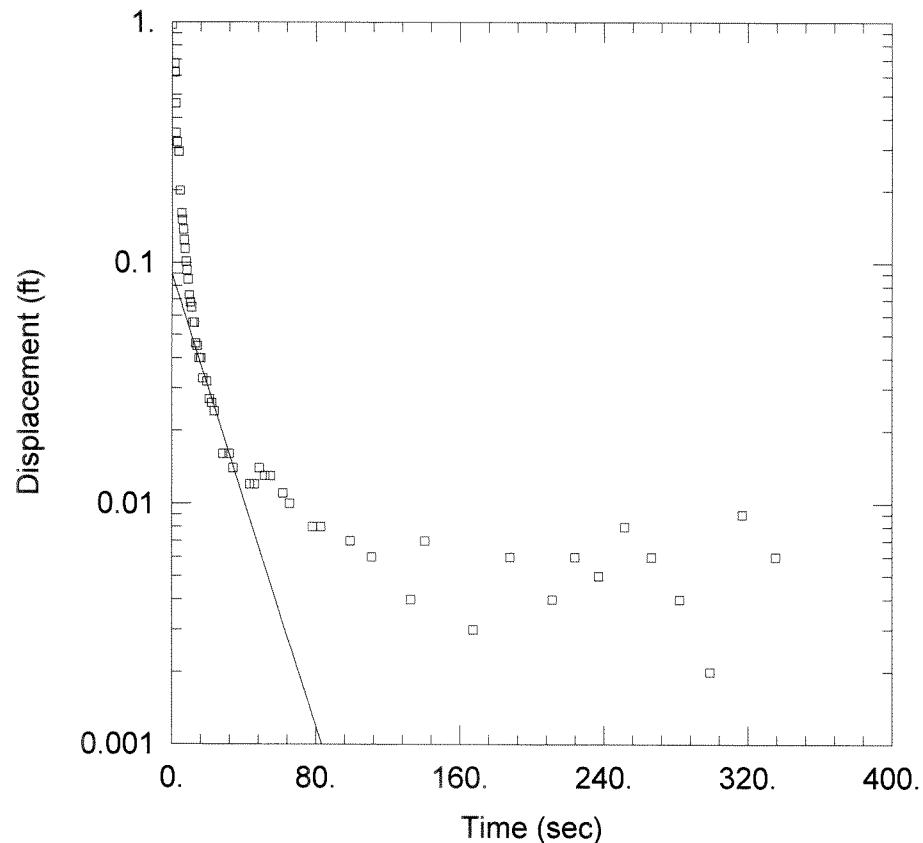
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO1_out2)

Initial Displacement: 3.3 ft
 Total Well Penetration Depth: 8.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 8.7 ft
 Screen Length: 8.7 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO2_in1.aqt

Date: 06/10/13

Time: 16:23:23

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 8.438 \text{ ft/day}$

$y_0 = 0.08929 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (GEO2_in1)

Initial Displacement: 3.65 ft

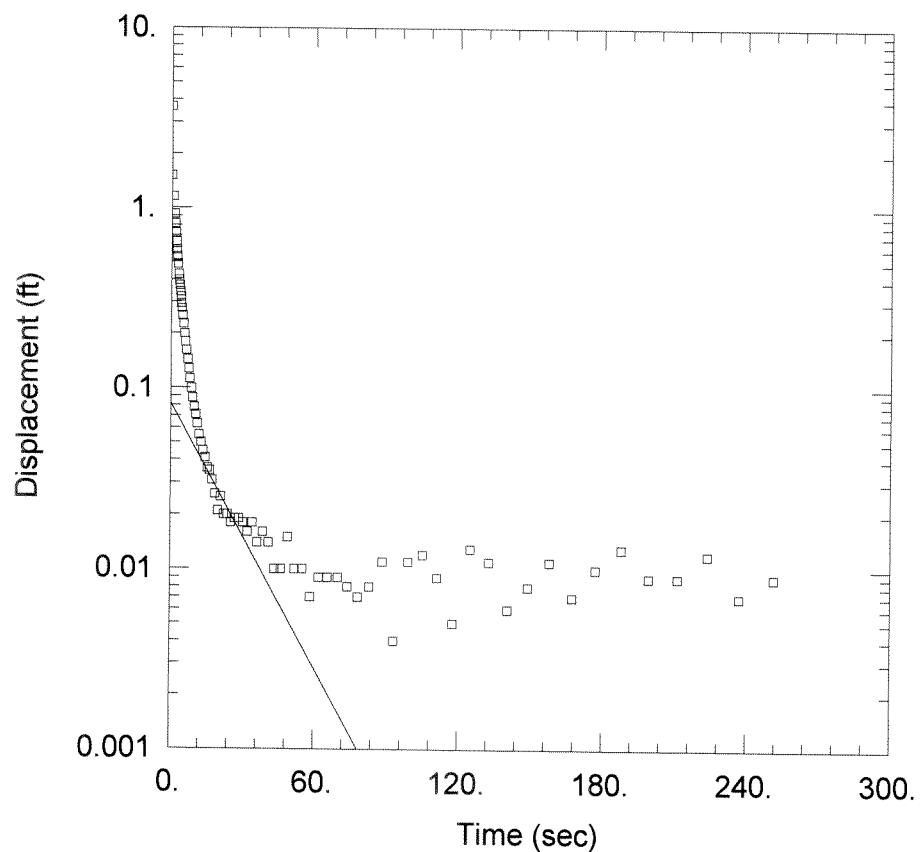
Total Well Penetration Depth: 7.65 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.65 ft

Screen Length: 7.65 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO2_out1.aqt

Date: 06/10/13

Time: 16:23:24

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 8.773 \text{ ft/day}$

$y_0 = 0.08185 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (GEO2_out1)

Initial Displacement: 3.65 ft

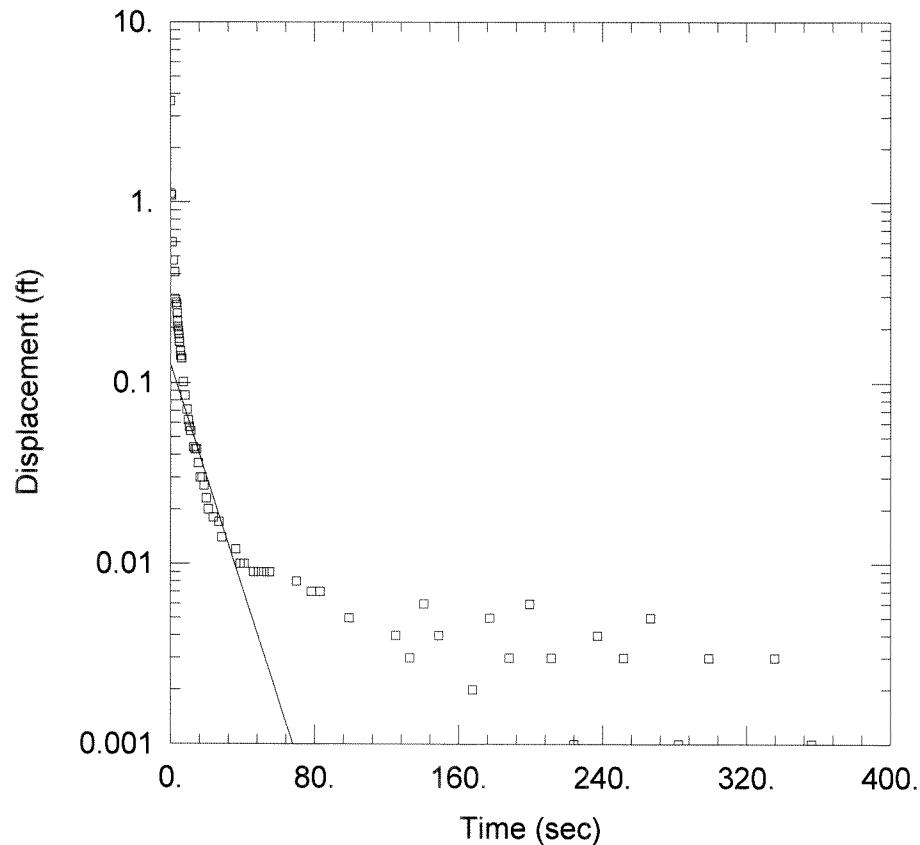
Total Well Penetration Depth: 7.65 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.65 ft

Screen Length: 7.65 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO2_in2.aqt

Date: 06/10/13

Time: 16:23:23

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 11.12 \text{ ft/day}$

$y_0 = 0.1253 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO2_in2)

Initial Displacement: 3.65 ft

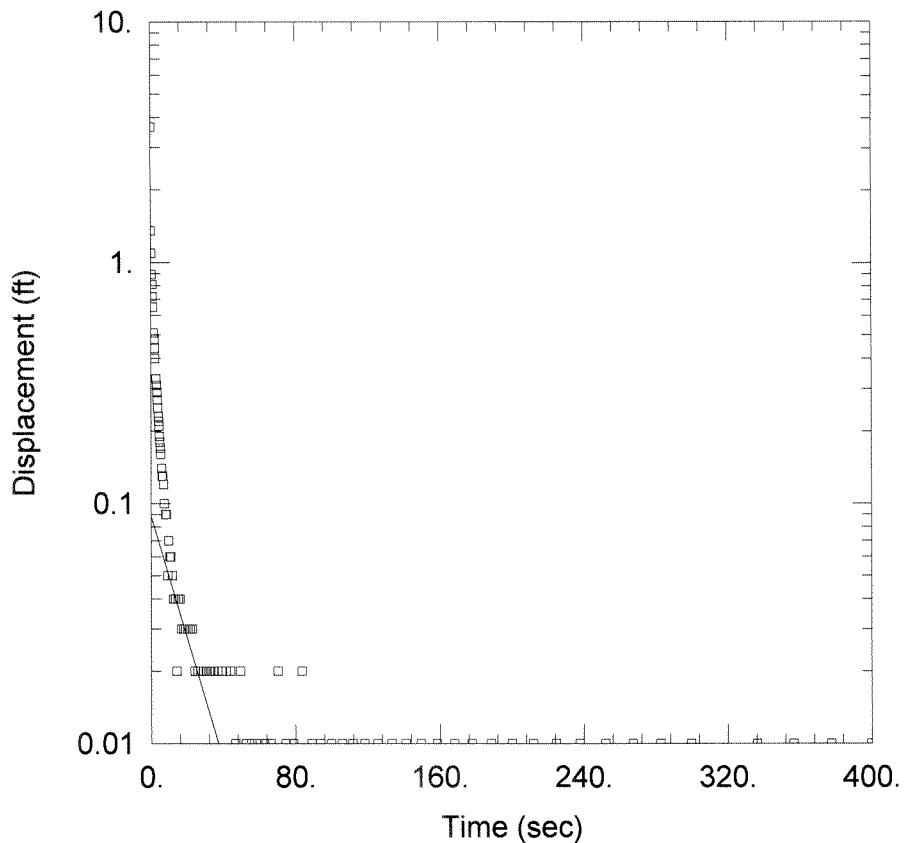
Total Well Penetration Depth: 7.65 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.65 ft

Screen Length: 7.65 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO2_out2.aqt

Date: 06/10/13

Time: 16:23:24

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 9.161 \text{ ft/day}$

$y_0 = 0.08824 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (GEO2_out2)

Initial Displacement: 3.65 ft

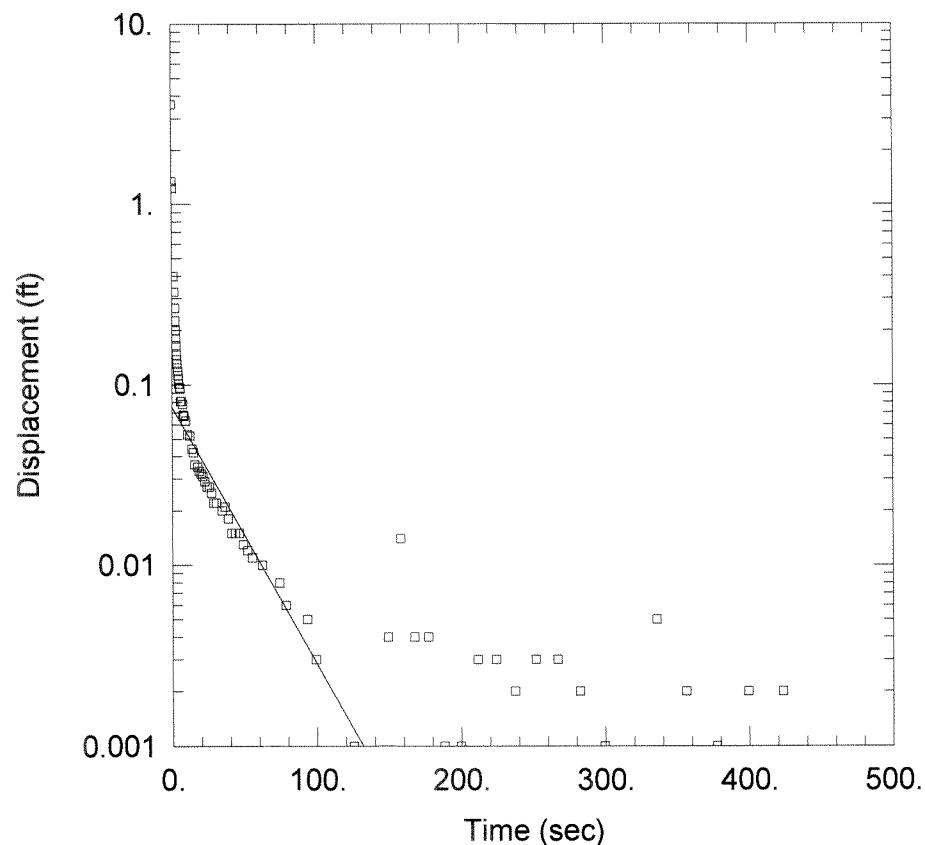
Total Well Penetration Depth: 7.65 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.65 ft

Screen Length: 7.65 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO3_in1.aqt

Date: 06/10/13

Time: 16:43:24

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 4.893 \text{ ft/day}$

$y_0 = 0.07487 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO3_in1)

Initial Displacement: 3.59 ft

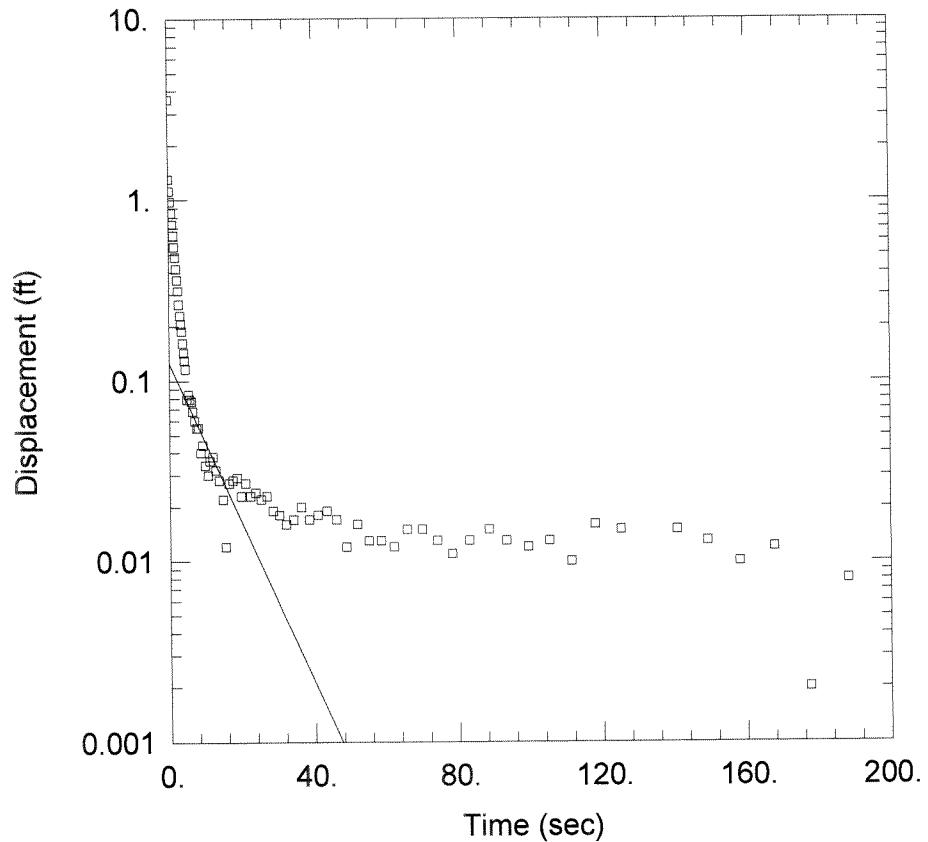
Total Well Penetration Depth: 8.1 ft

Casing Radius: 0.083 ft

Static Water Column Height: 8.1 ft

Screen Length: 8.1 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO3_out1.aqt

Date: 06/11/13

Time: 11:16:54

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 15.24 \text{ ft/day}$

$y_0 = 0.1252 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO3_out1)

Initial Displacement: 3.59 ft

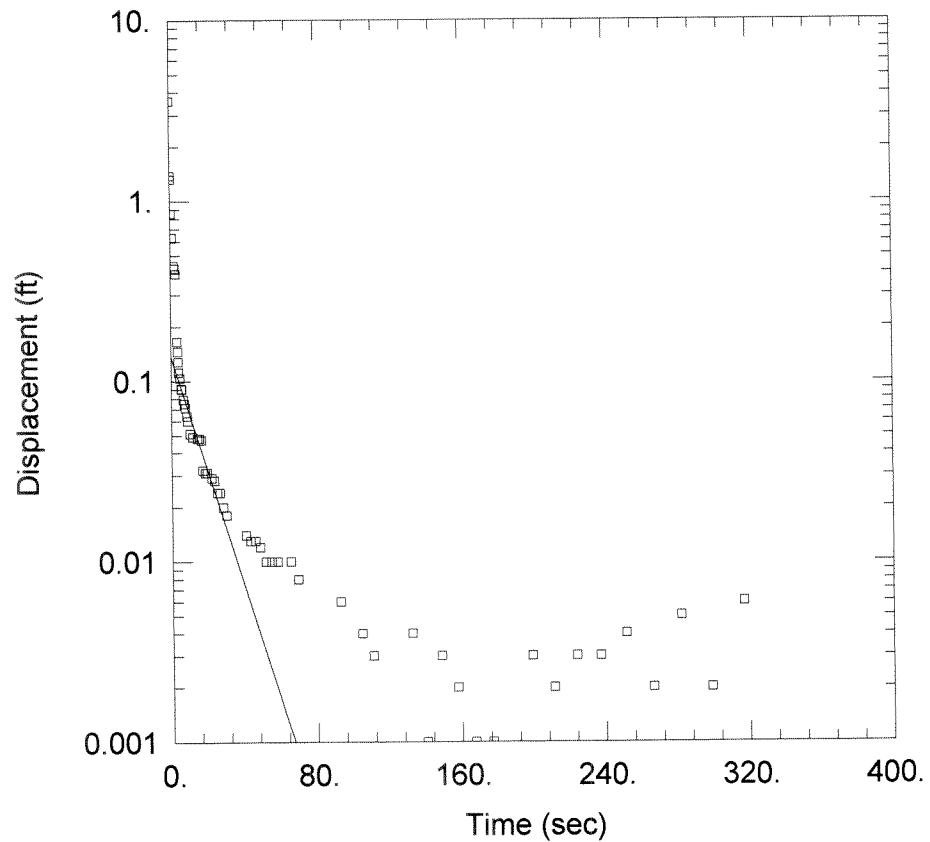
Total Well Penetration Depth: 8.1 ft

Casing Radius: 0.083 ft

Static Water Column Height: 8.1 ft

Screen Length: 8.1 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO3_in2.aqt

Date: 06/10/13

Time: 16:43:25

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 10.95 \text{ ft/day}$

$y_0 = 0.136 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO3_in2)

Initial Displacement: 3.59 ft

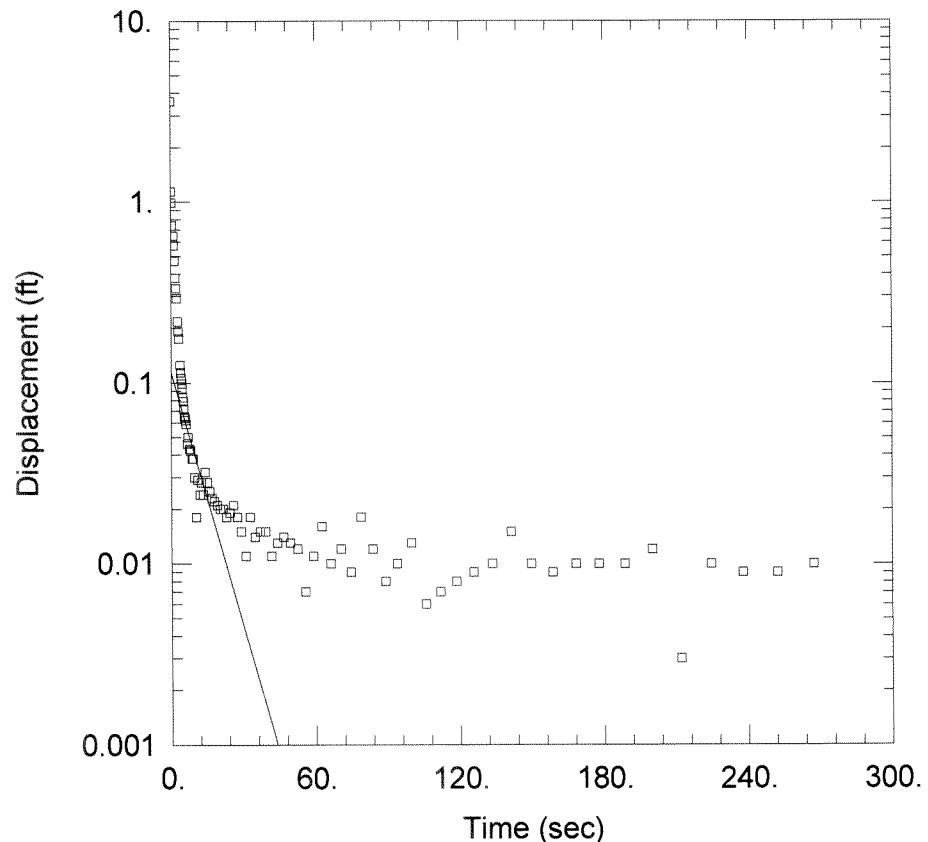
Total Well Penetration Depth: 8.1 ft

Casing Radius: 0.083 ft

Static Water Column Height: 8.1 ft

Screen Length: 8.1 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO3_out2.aqt
 Date: 06/10/13 Time: 16:43:26

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 16.19 \text{ ft/day}$
 $y_0 = 0.1139 \text{ ft}$

AQUIFER DATA

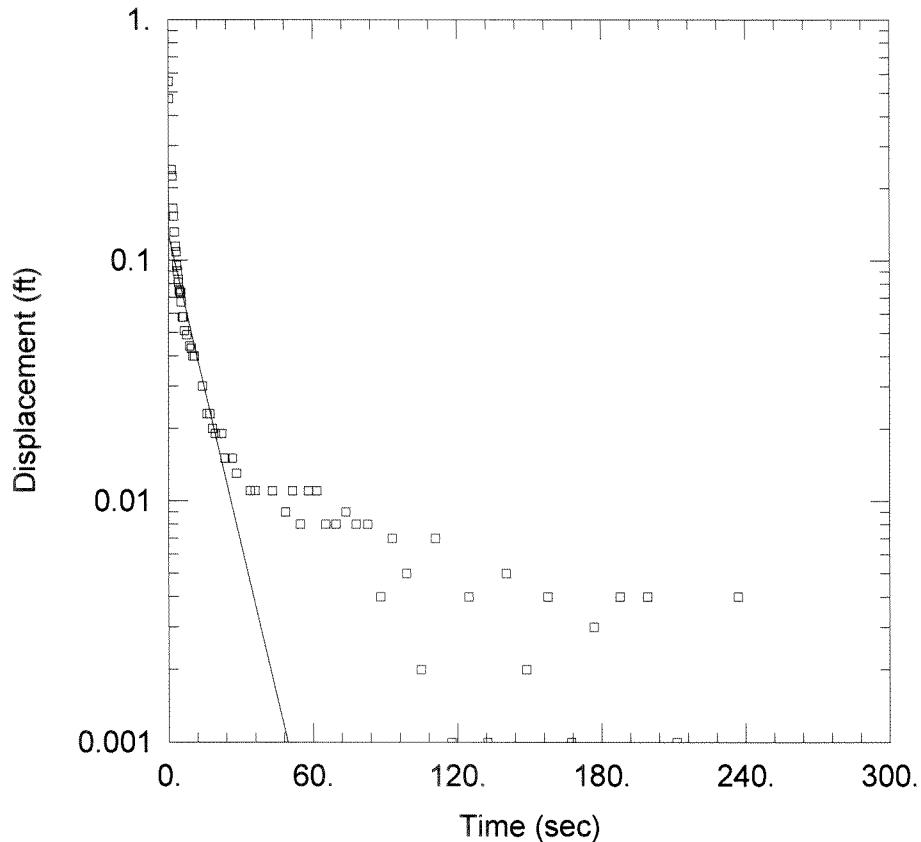
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO3_out2)

Initial Displacement: 3.59 ft
 Total Well Penetration Depth: 8.1 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 8.1 ft
 Screen Length: 8.1 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO4_in1.aqt

Date: 06/10/13

Time: 16:43:26

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 15.32 \text{ ft/day}$

$y_0 = 0.1268 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO4_in1)

Initial Displacement: 3.84 ft

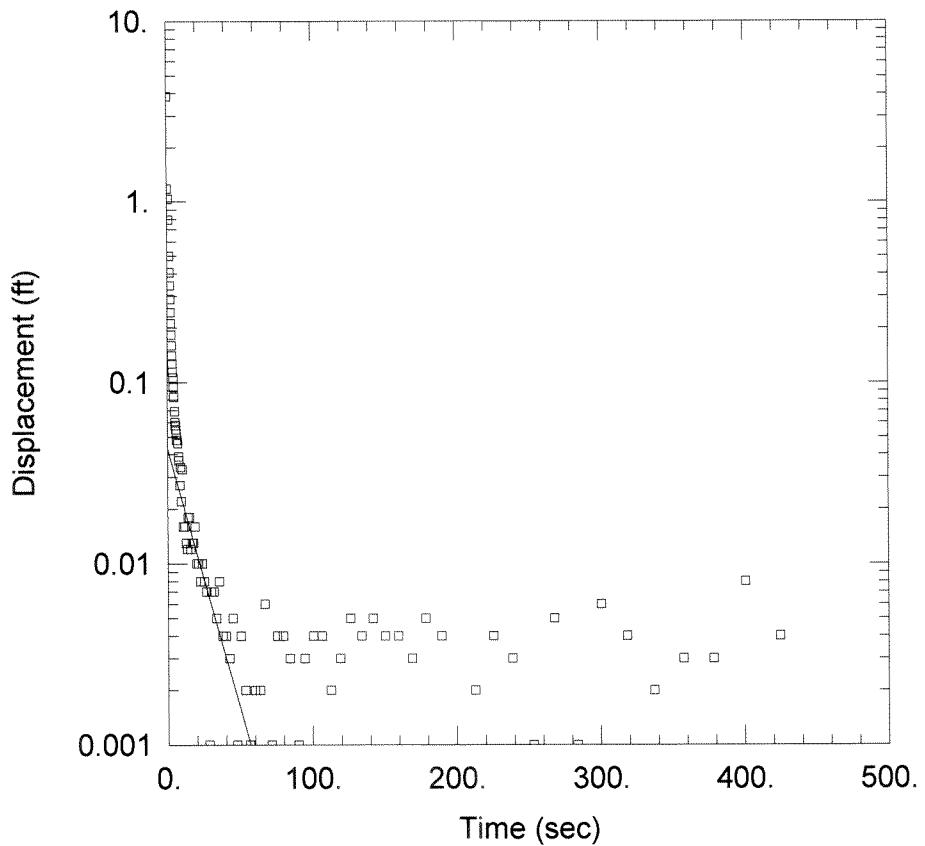
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO4_out1.aqt
 Date: 06/10/13 Time: 16:43:27

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 10.34 \text{ ft/day}$
 $y_0 = 0.04277 \text{ ft}$

AQUIFER DATA

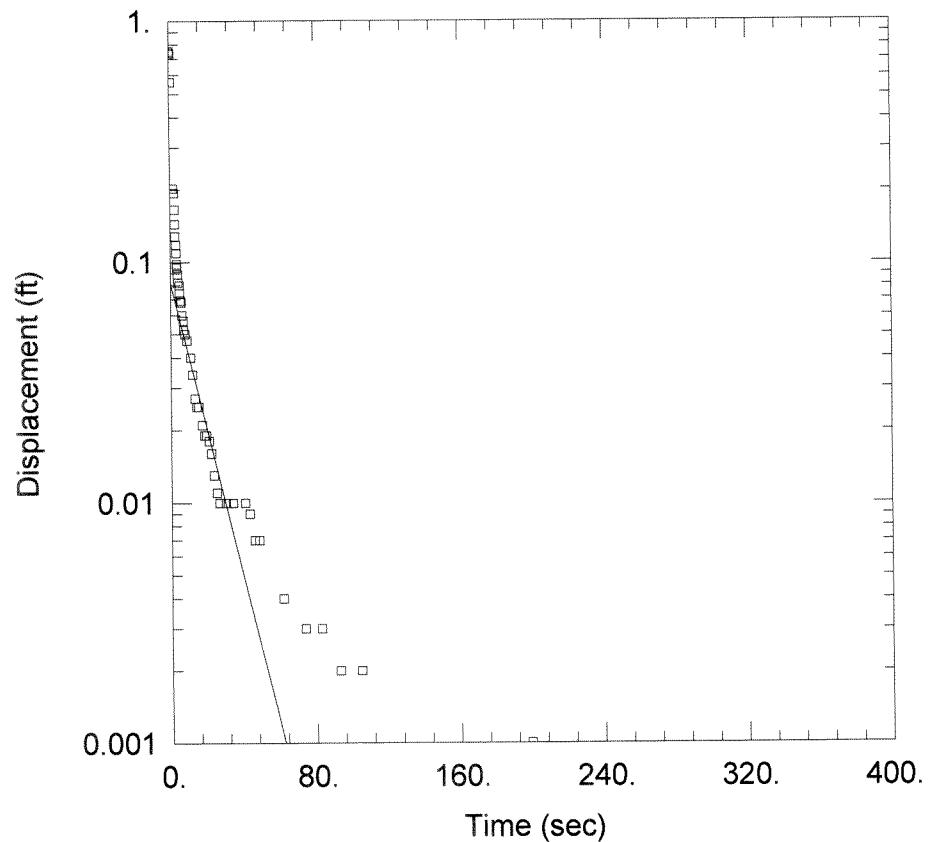
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO4_out1)

Initial Displacement: 3.84 ft
 Total Well Penetration Depth: 7.64 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft
 Screen Length: 7.64 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO4_in2.aqt

Date: 06/10/13

Time: 16:43:27

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 11.04 ft/day

y0 = 0.08155 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO4_in2)

Initial Displacement: 3.84 ft

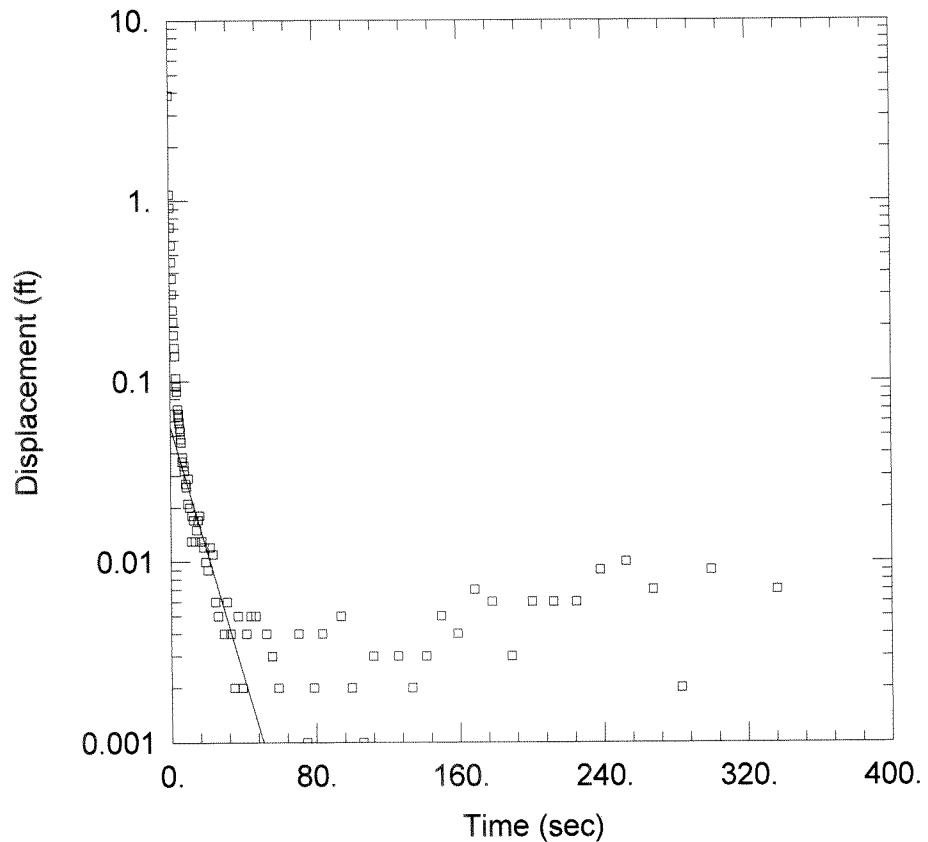
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO4_out2.aqt

Date: 06/10/13

Time: 16:43:28

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 12.43 ft/day

y0 = 0.05595 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO4_out2)

Initial Displacement: 3.84 ft

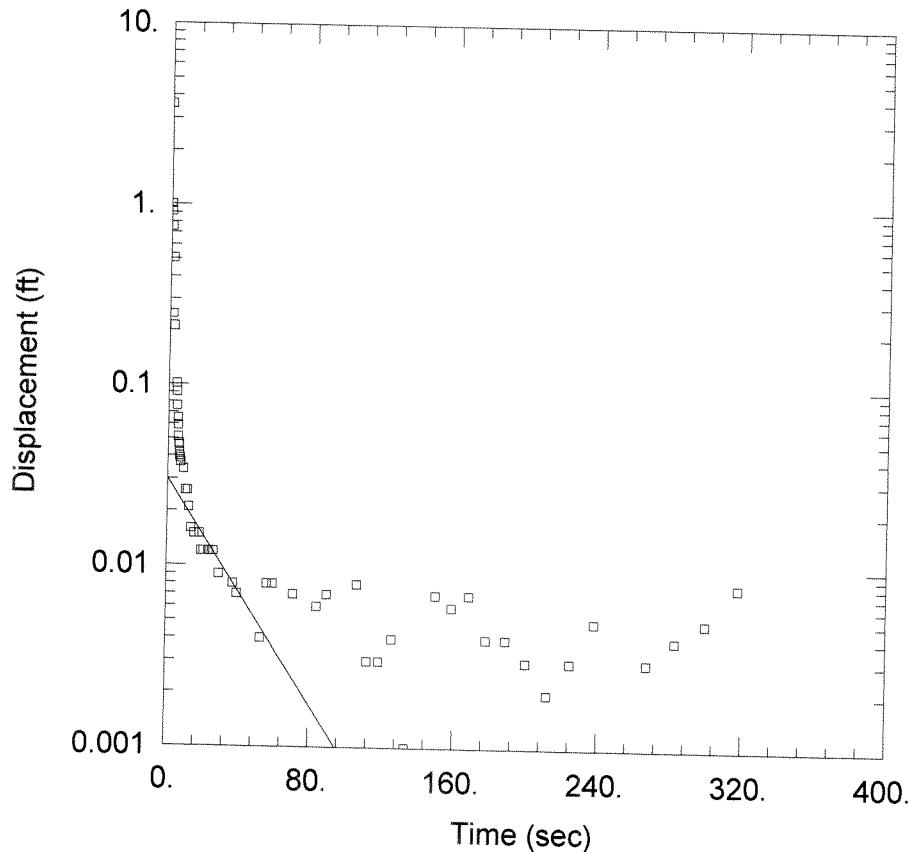
Total Well Penetration Depth: 7.64 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.64 ft

Screen Length: 7.64 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO5_in1.aqt

Date: 06/10/13

Time: 16:24:50

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 5.465 ft/day

y0 = 0.03008 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO5_in1)

Initial Displacement: 3.58 ft

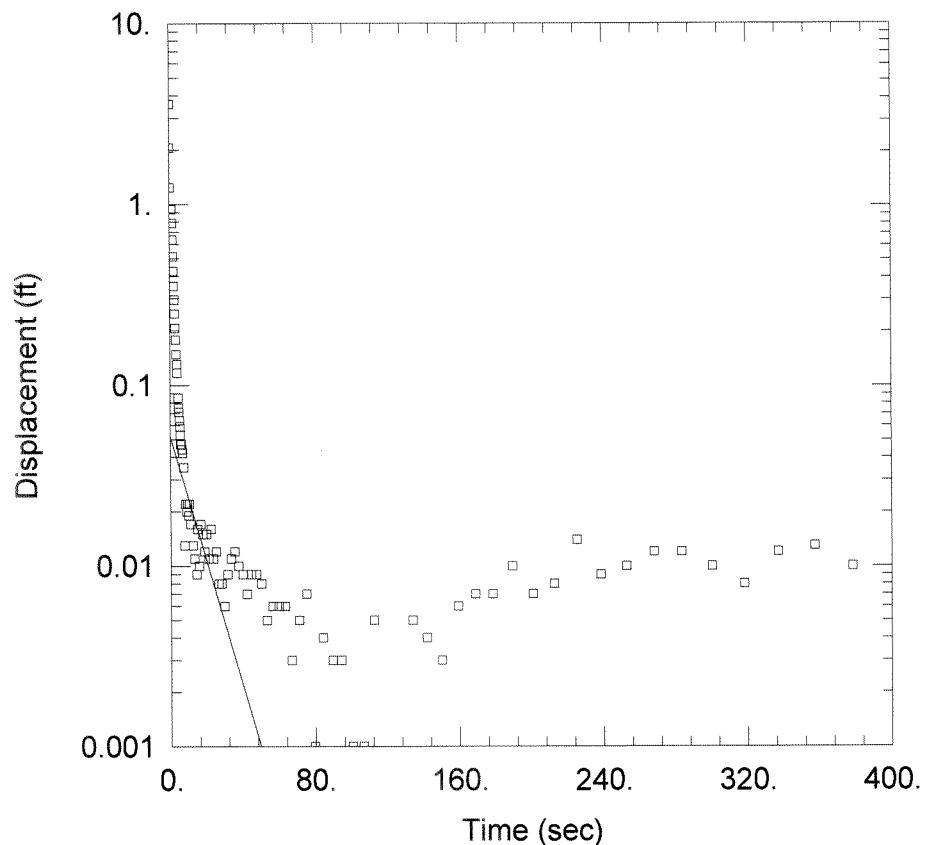
Total Well Penetration Depth: 7.9 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.9 ft

Screen Length: 7.9 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO5_out1.aqt

Date: 06/10/13

Time: 17:09:41

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 12.12 ft/day

y0 = 0.05165 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO5_out1)

Initial Displacement: 3.58 ft

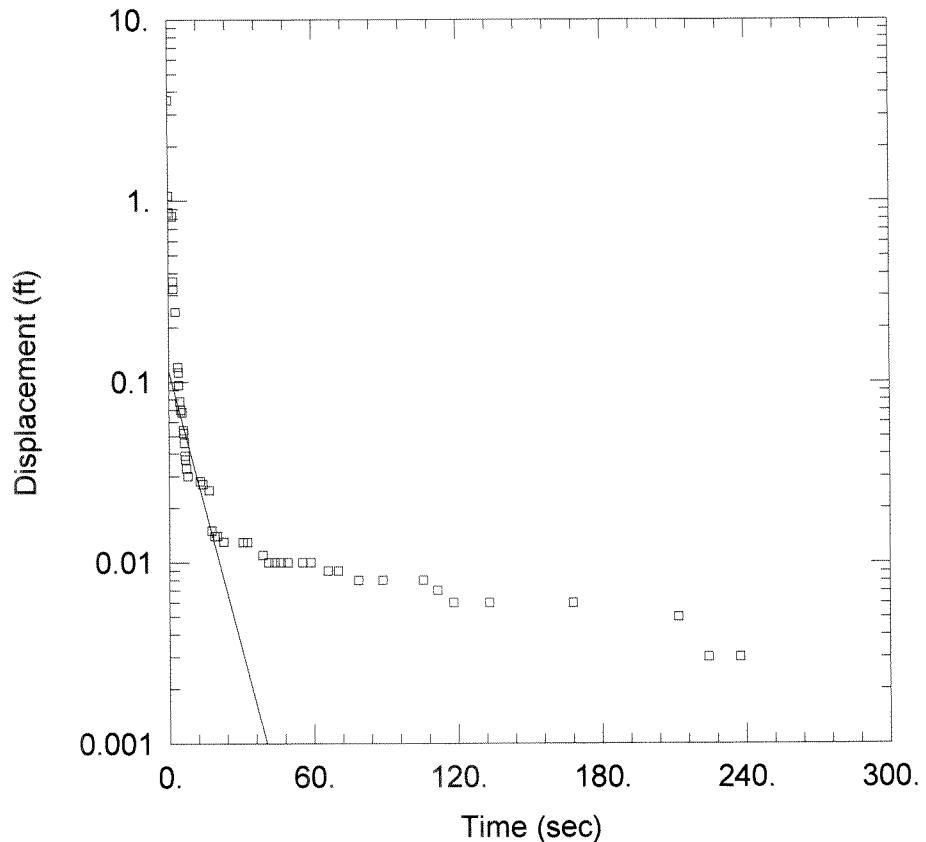
Total Well Penetration Depth: 7.9 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.9 ft

Screen Length: 7.9 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO5_in2.aqt

Date: 06/10/13

Time: 17:09:40

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 17.96 ft/day

y0 = 0.1147 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO5_in2)

Initial Displacement: 3.58 ft

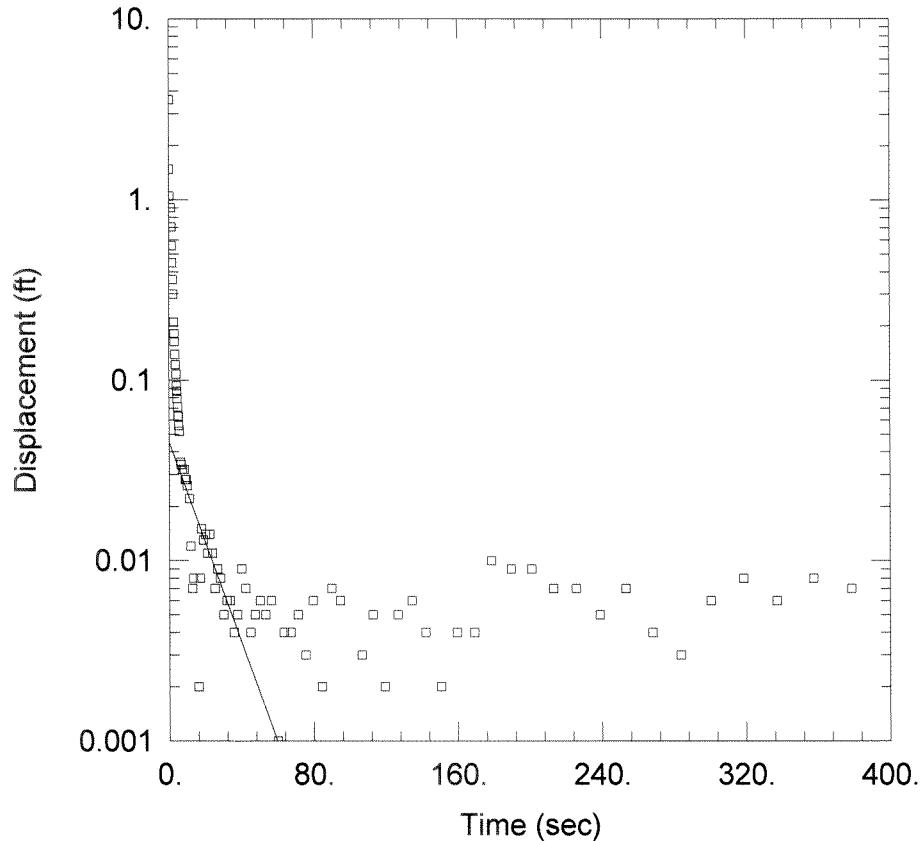
Total Well Penetration Depth: 7.9 ft

Casing Radius: 0.083 ft

Static Water Column Height: 7.9 ft

Screen Length: 7.9 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO5_out2.aqt

Date: 06/10/13

Time: 17:09:41

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 9.753 \text{ ft/day}$

$y_0 = 0.04539 \text{ ft}$

AQUIFER DATA

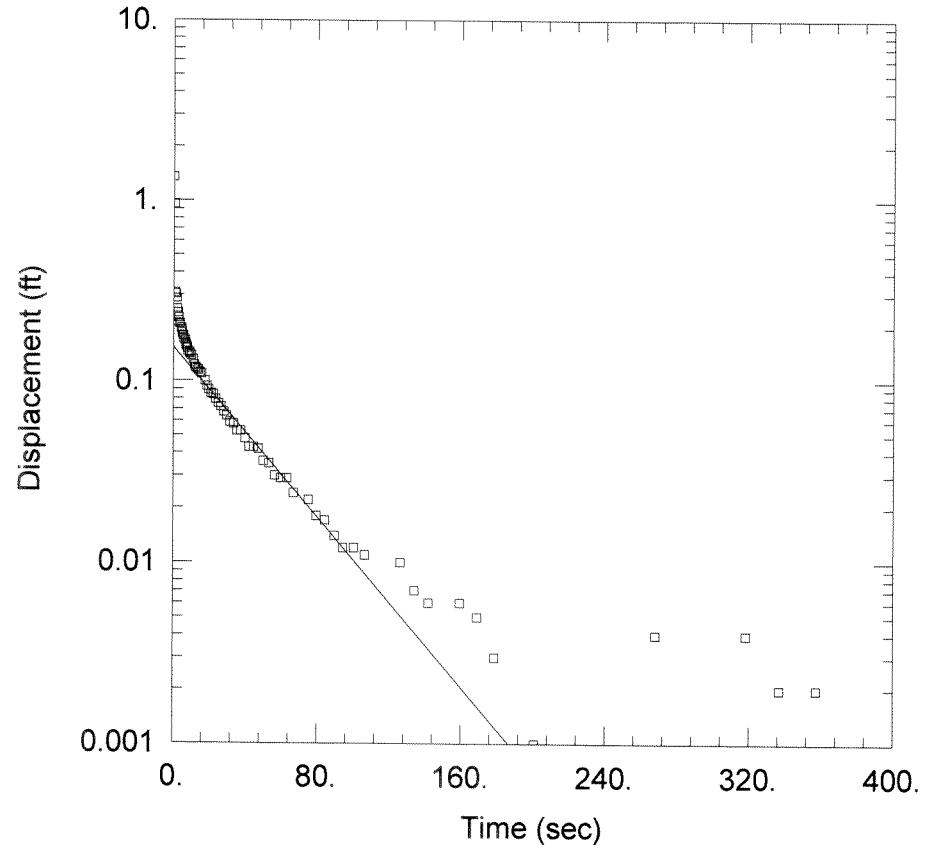
Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

Initial Displacement: 3.58 ft
 Total Well Penetration Depth: 7.9 ft
 Casing Radius: 0.083 ft

WELL DATA (GEO5_out2)

Static Water Column Height: 7.9 ft
 Screen Length: 7.9 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO6_in1.aqt

Date: 06/10/13

Time: 17:09:42

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 5.457 ft/day

y0 = 0.1528 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO6_in1)

Initial Displacement: 11.07 ft

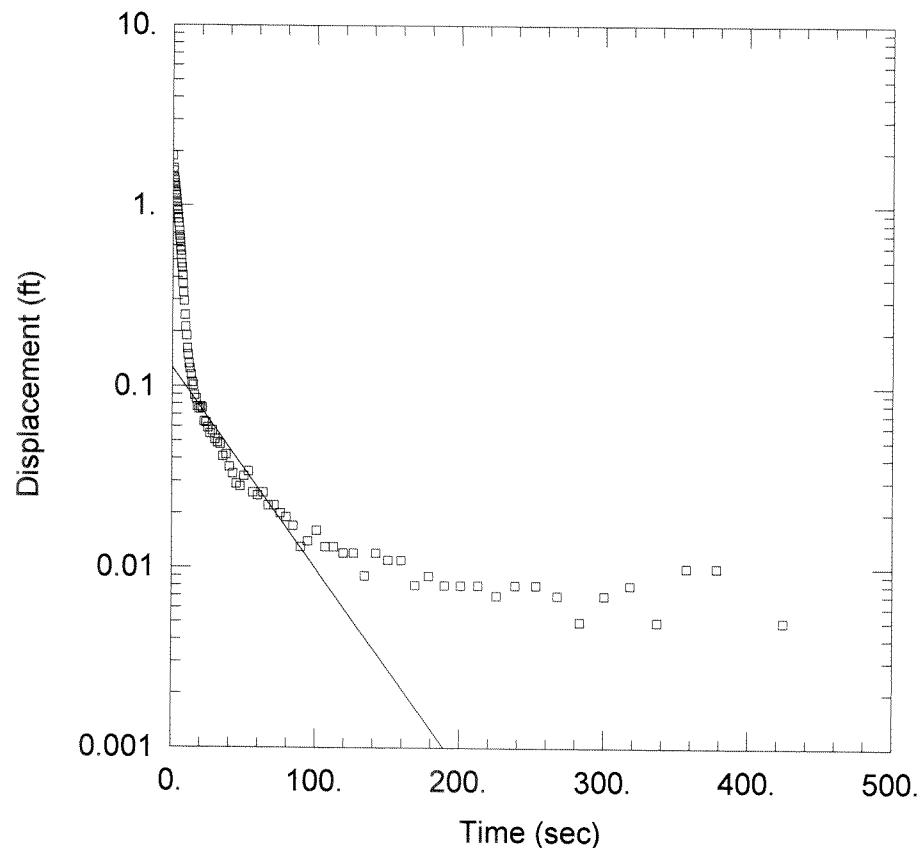
Total Well Penetration Depth: 5.43 ft

Casing Radius: 0.083 ft

Static Water Column Height: 5.43 ft

Screen Length: 5.43 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO6_out1.aqt
 Date: 06/10/13 Time: 17:09:43

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 5.184 \text{ ft/day}$
 $y_0 = 0.1266 \text{ ft}$

AQUIFER DATA

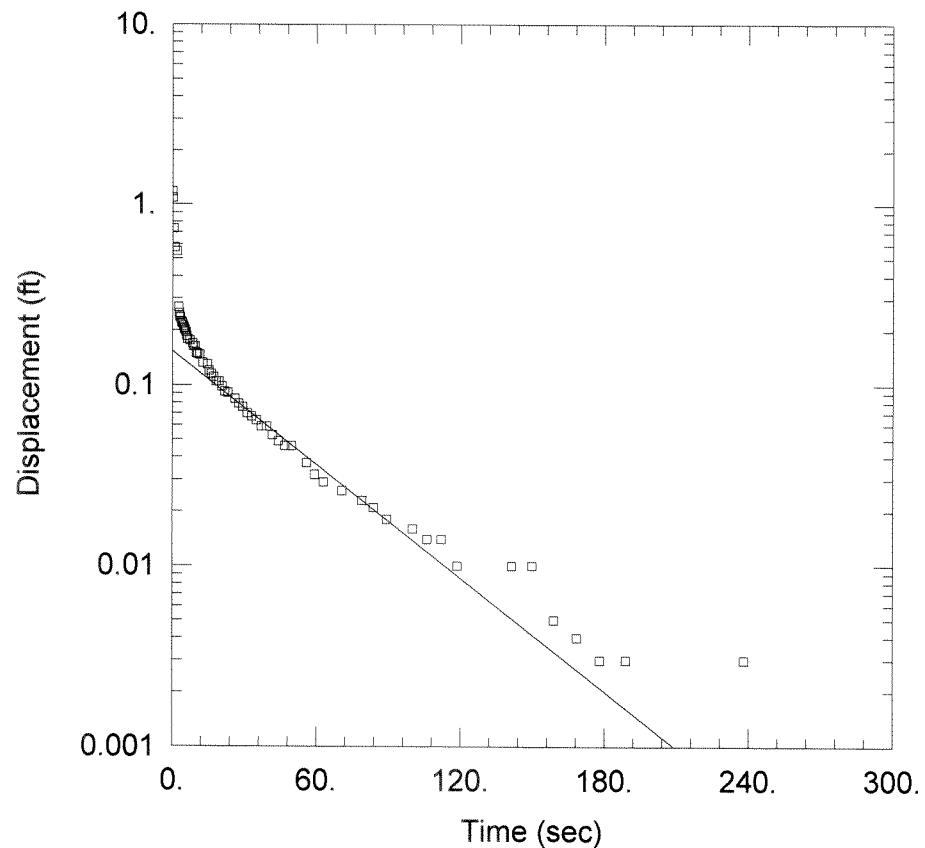
Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (GEO6_out1)

Initial Displacement: 11.07 ft
 Total Well Penetration Depth: 5.43 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.43 ft
 Screen Length: 5.43 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO6_in2.aqt

Date: 06/10/13

Time: 17:09:42

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 4.885 \text{ ft/day}$

$y_0 = 0.154 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO6_in2)

Initial Displacement: 11.07 ft

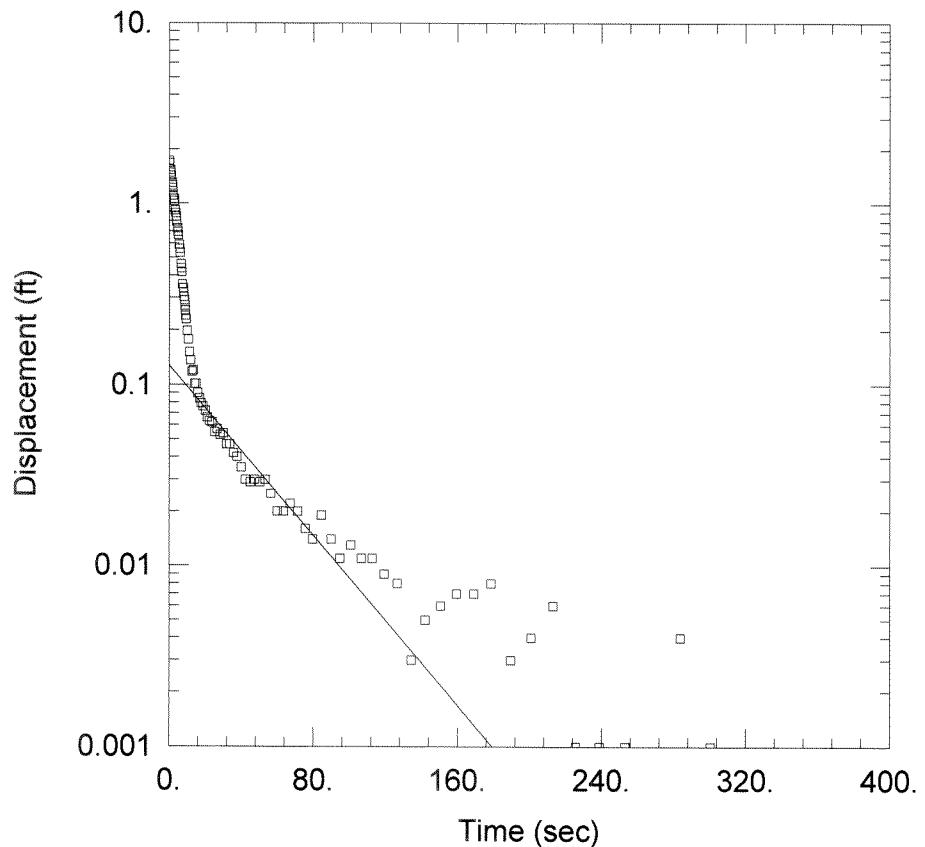
Total Well Penetration Depth: 5.43 ft

Casing Radius: 0.083 ft

Static Water Column Height: 5.43 ft

Screen Length: 5.43 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\GEO6_out2.aqt
 Date: 06/10/13 Time: 17:09:43

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 5.474 \text{ ft/day}$
 $y_0 = 0.1276 \text{ ft}$

AQUIFER DATA

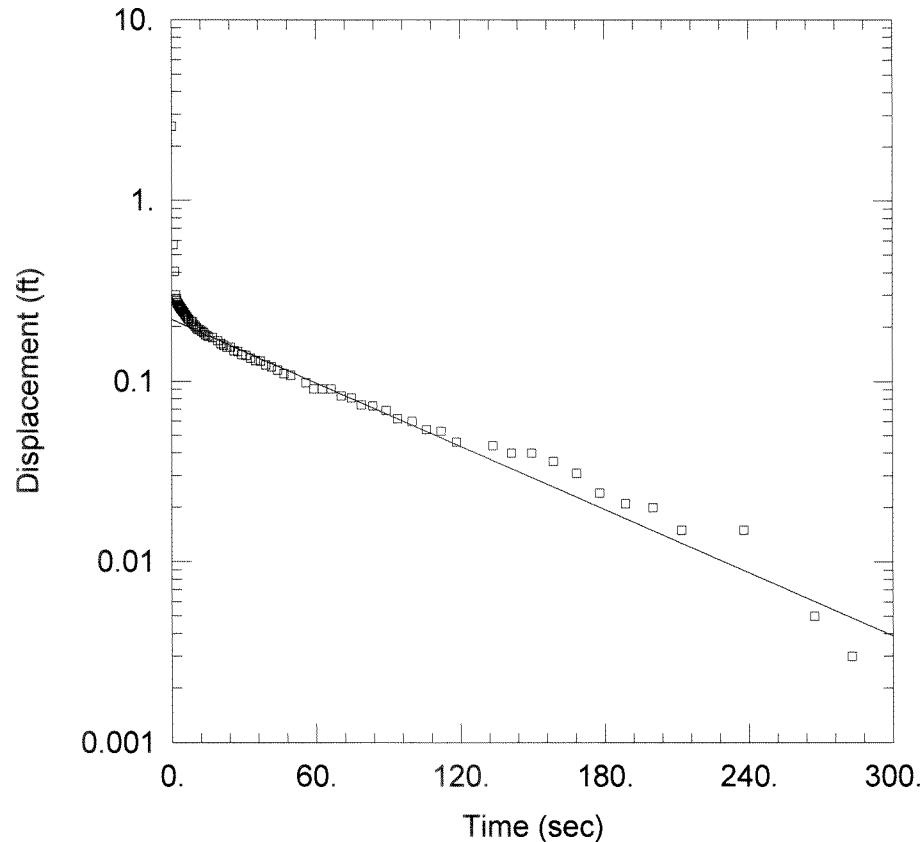
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GEO6_out2)

Initial Displacement: 11.07 ft
 Total Well Penetration Depth: 5.43 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.43 ft
 Screen Length: 5.43 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW101S_in1.aqt
Date: 06/10/13 Time: 17:10:19

PROJECT INFORMATION

Company: SERAS
Client: ERT
Project: 0-1173
Location: Laconia, NH
Test Well: ERT1
Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $K = 2.816 \text{ ft/day}$
 $y_0 = 0.2192 \text{ ft}$

AQUIFER DATA

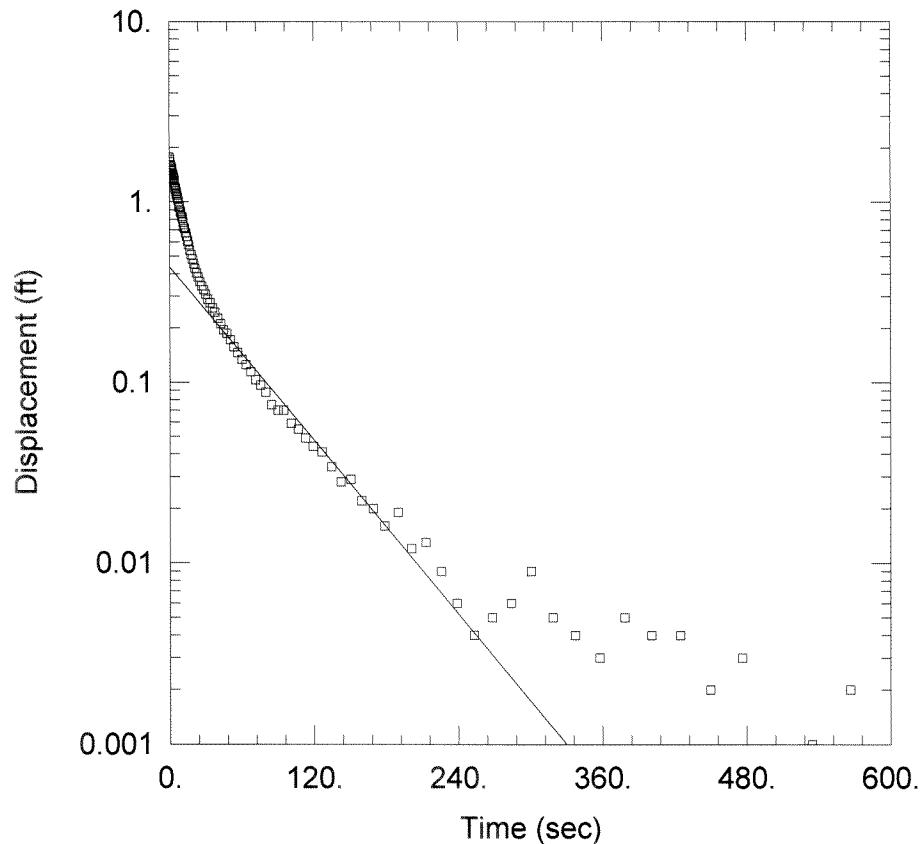
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW101S_in1)

Initial Displacement: 12.58 ft
Total Well Penetration Depth: 5.19 ft
Casing Radius: 0.083 ft

Static Water Column Height: 5.19 ft
Screen Length: 5.19 ft
Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW101S_out1.aqt
 Date: 06/10/13 Time: 17:10:20

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.858 \text{ ft/day}$
 $y_0 = 0.4348 \text{ ft}$

AQUIFER DATA

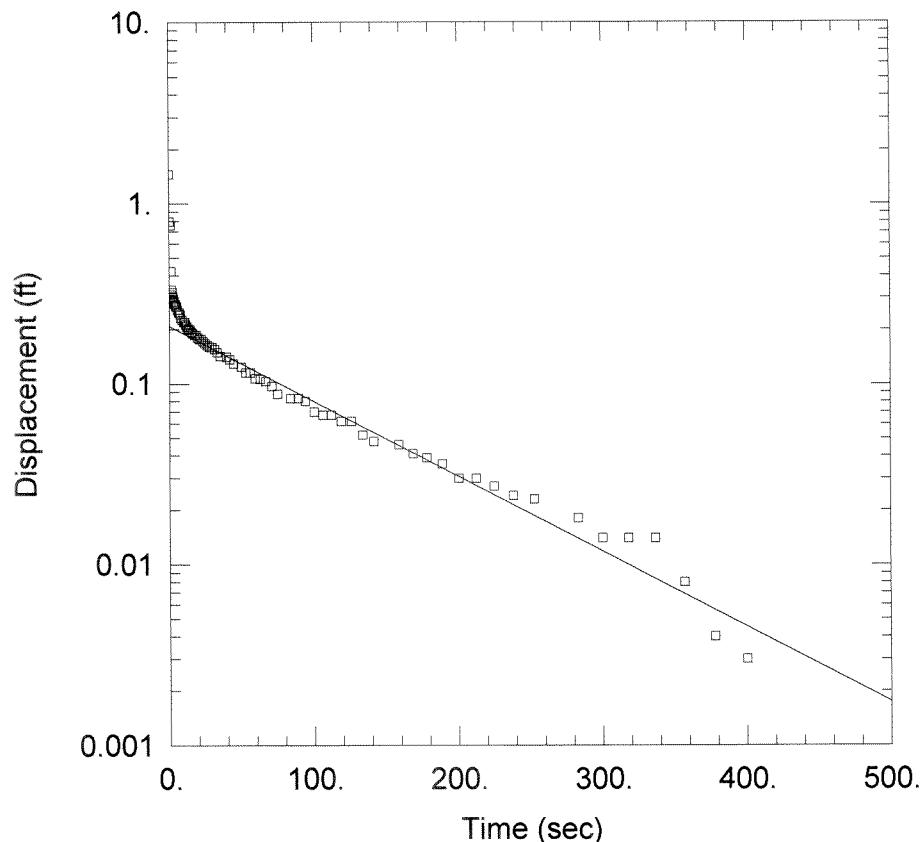
Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW101S_out1)

Initial Displacement: 12.58 ft
 Total Well Penetration Depth: 5.19 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.19 ft
 Screen Length: 5.19 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\MW101S_in2.aqt

Date: 06/10/13

Time: 17:10:19

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 2.002 \text{ ft/day}$

$y_0 = 0.2079 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW101S_in2)

Initial Displacement: 12.58 ft

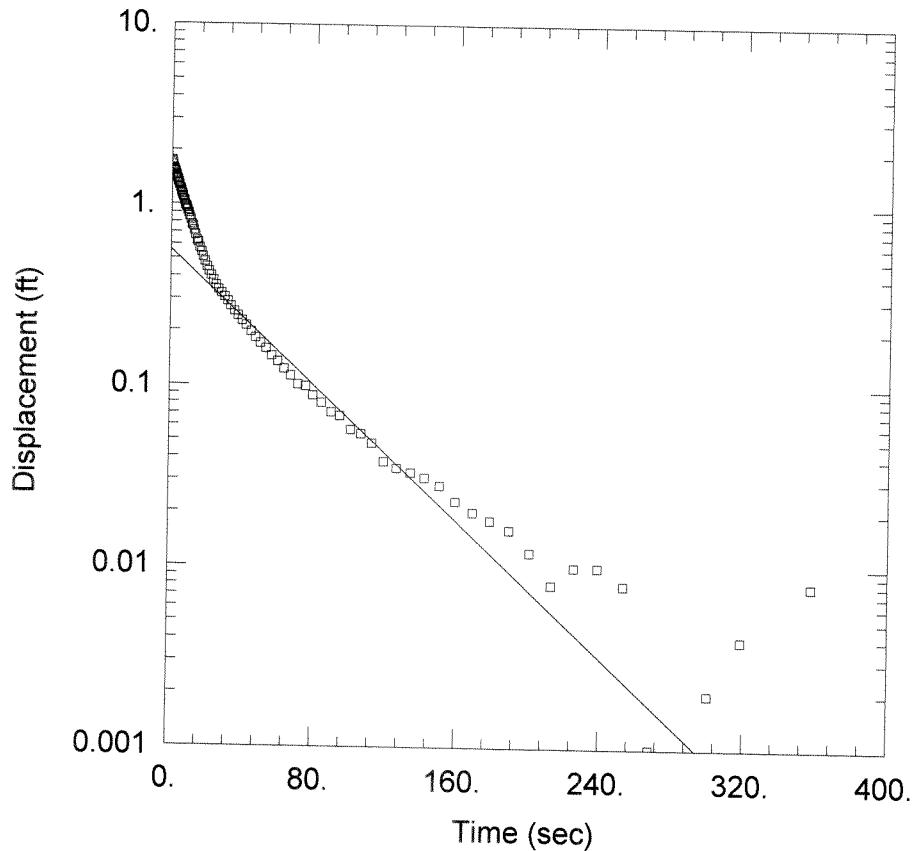
Total Well Penetration Depth: 5.19 ft

Casing Radius: 0.083 ft

Static Water Column Height: 5.19 ft

Screen Length: 5.19 ft

Well Radius: 0.083 ft



Saturated Thickness: 20. ft

AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 0.1

Initial Displacement: 12.58 ft
 Total Well Penetration Depth: 5.19 ft
 Casing Radius: 0.083 ft

WELL DATA (MW101S_out2)

Static Water Column Height: 5.19 ft
 Screen Length: 5.19 ft
 Well Radius: 0.083 ft

HENRY'S DRY CLEANER

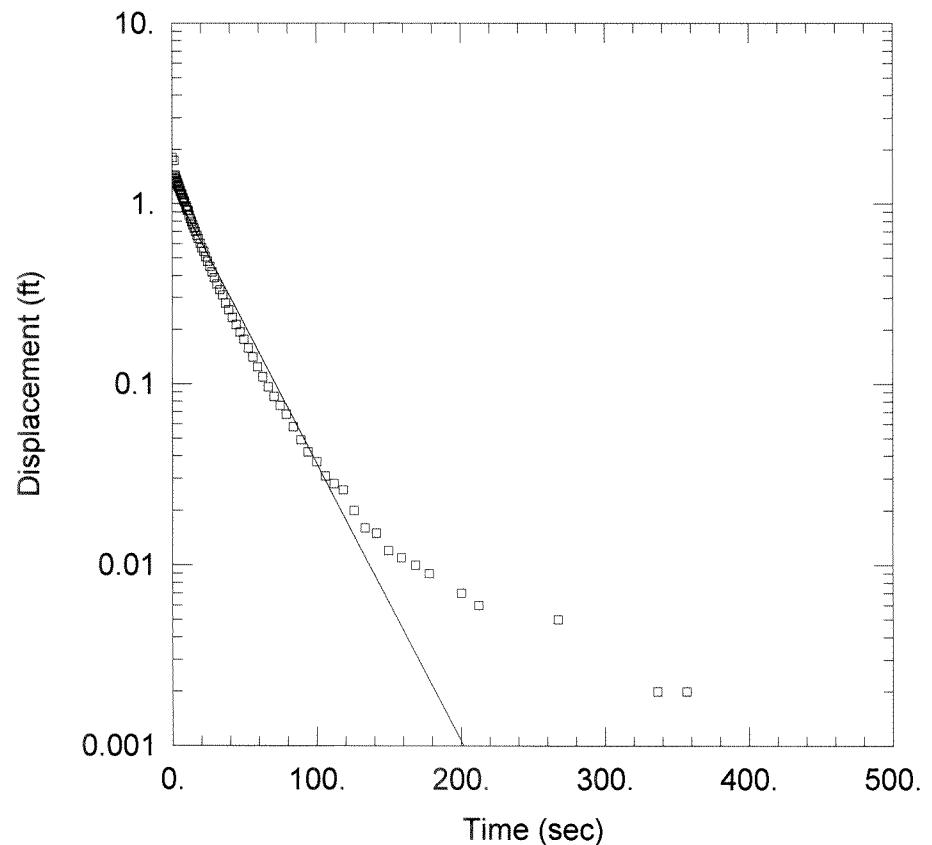
Data Set: I:\...\MW101S_out2.aqt
 Date: 06/10/13 Time: 17:10:20

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.512 \text{ ft/day}$
 $y_0 = 0.5595 \text{ ft}$



HENRY'S DRY CLEANER

Data Set: I:\MW101D_in1.aqt

Date: 06/10/13

Time: 17:10:17

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 4.731 \text{ ft/day}$

$y_0 = 1.244 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 25. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW101D_in1)

Initial Displacement: 12.63 ft

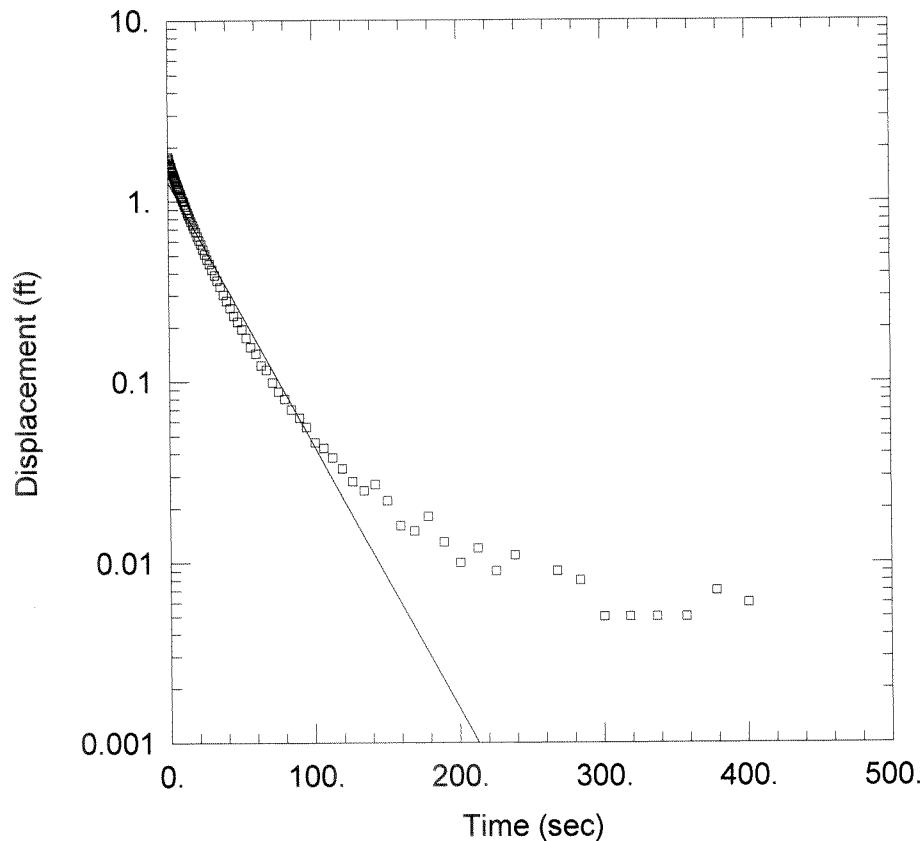
Total Well Penetration Depth: 9.37 ft

Casing Radius: 0.083 ft

Static Water Column Height: 9.37 ft

Screen Length: 9.37 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW101D_out1.aqt
 Date: 06/10/13 Time: 17:10:18

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.496 \text{ ft/day}$
 $y_0 = 1.272 \text{ ft}$

AQUIFER DATA

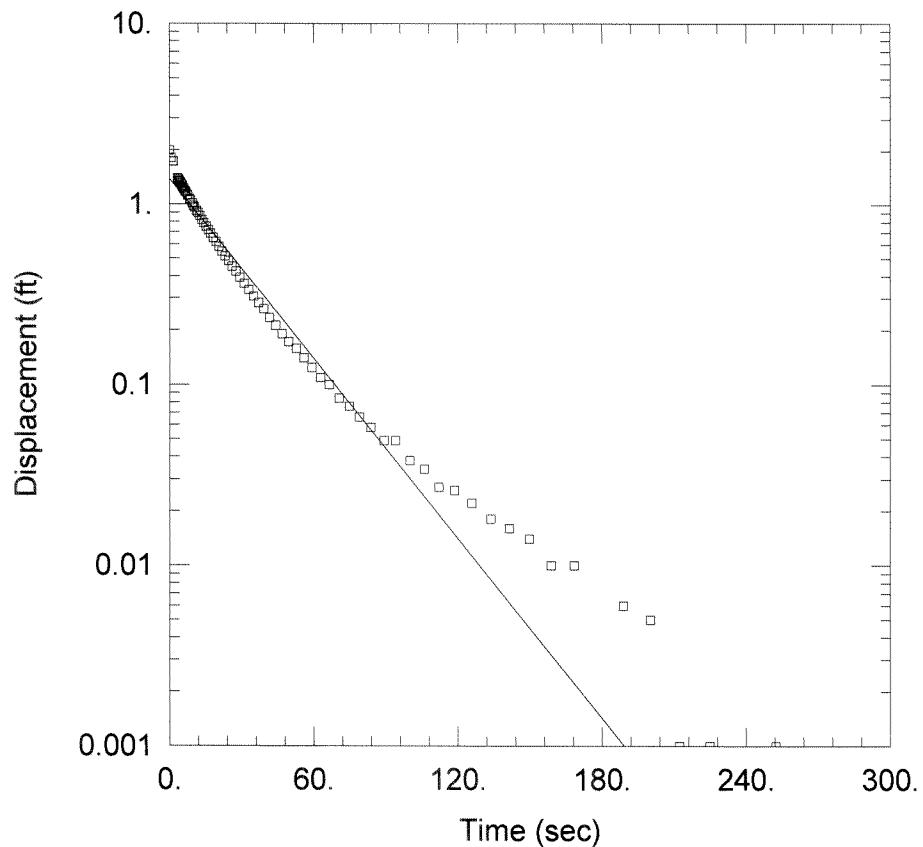
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW101D_out1)

Initial Displacement: 12.63 ft
 Total Well Penetration Depth: 9.37 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 9.37 ft
 Screen Length: 9.37 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW101D_in2.aqt
Date: 06/10/13 Time: 17:10:17

PROJECT INFORMATION

Company: SERAS
Client: ERT
Project: 0-1173
Location: Laconia, NH
Test Well: ERT1
Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $K = 5.121 \text{ ft/day}$
 $y_0 = 1.378 \text{ ft}$

AQUIFER DATA

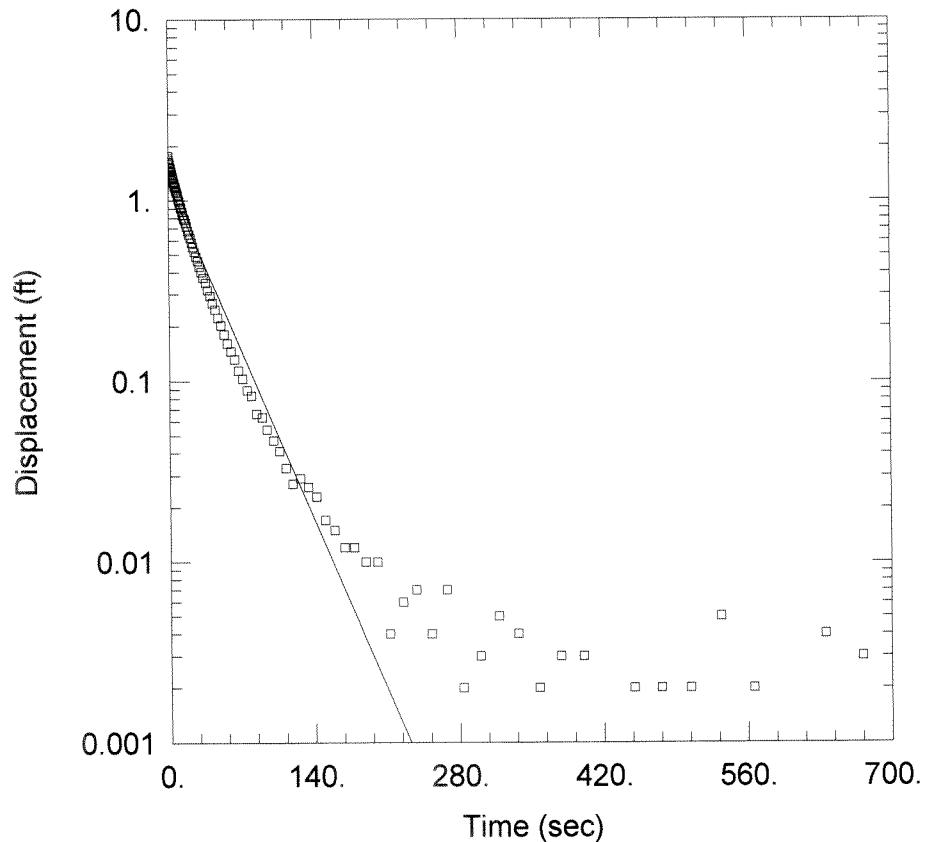
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW101D_in2)

Initial Displacement: 12.63 ft
Total Well Penetration Depth: 9.37 ft
Casing Radius: 0.083 ft

Static Water Column Height: 9.37 ft
Screen Length: 9.37 ft
Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW101D_out2.aqt
 Date: 06/10/13 Time: 17:10:18

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.116 \text{ ft/day}$
 $y_0 = 1.263 \text{ ft}$

AQUIFER DATA

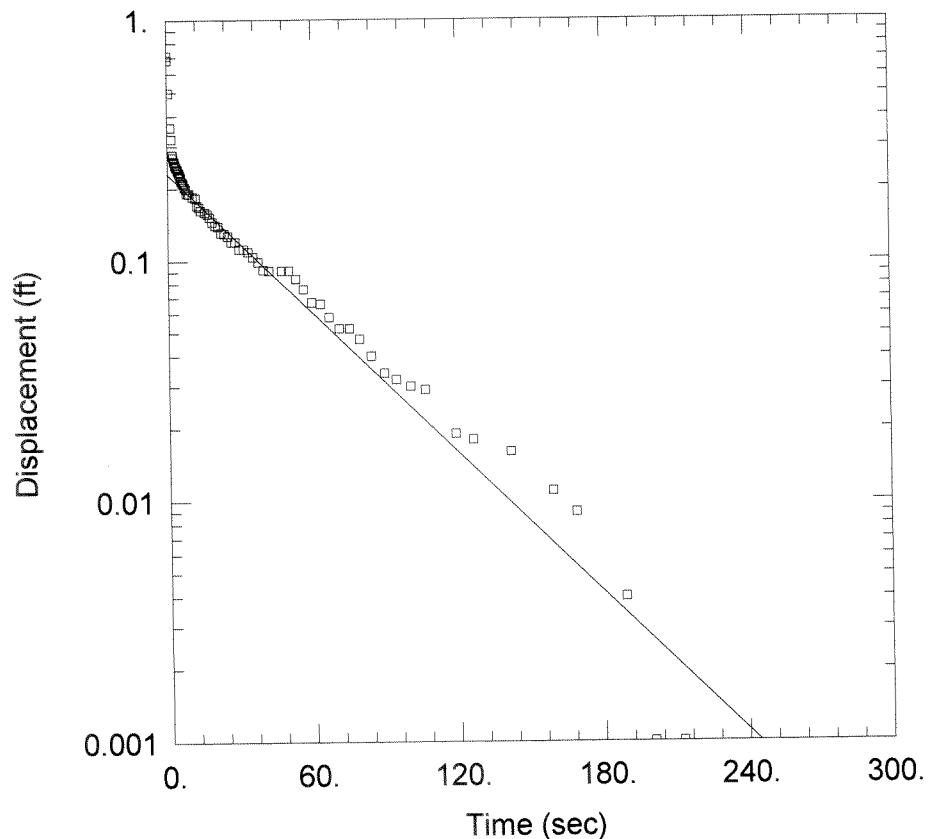
Saturated Thickness: 25. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW101D_out2)

Initial Displacement: 12.63 ft
 Total Well Penetration Depth: 9.37 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 9.37 ft
 Screen Length: 9.37 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW102_in1.agt
 Date: 06/10/13 Time: 17:10:21

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 4.464 \text{ ft/day}$
 $y_0 = 0.2295 \text{ ft}$

AQUIFER DATA

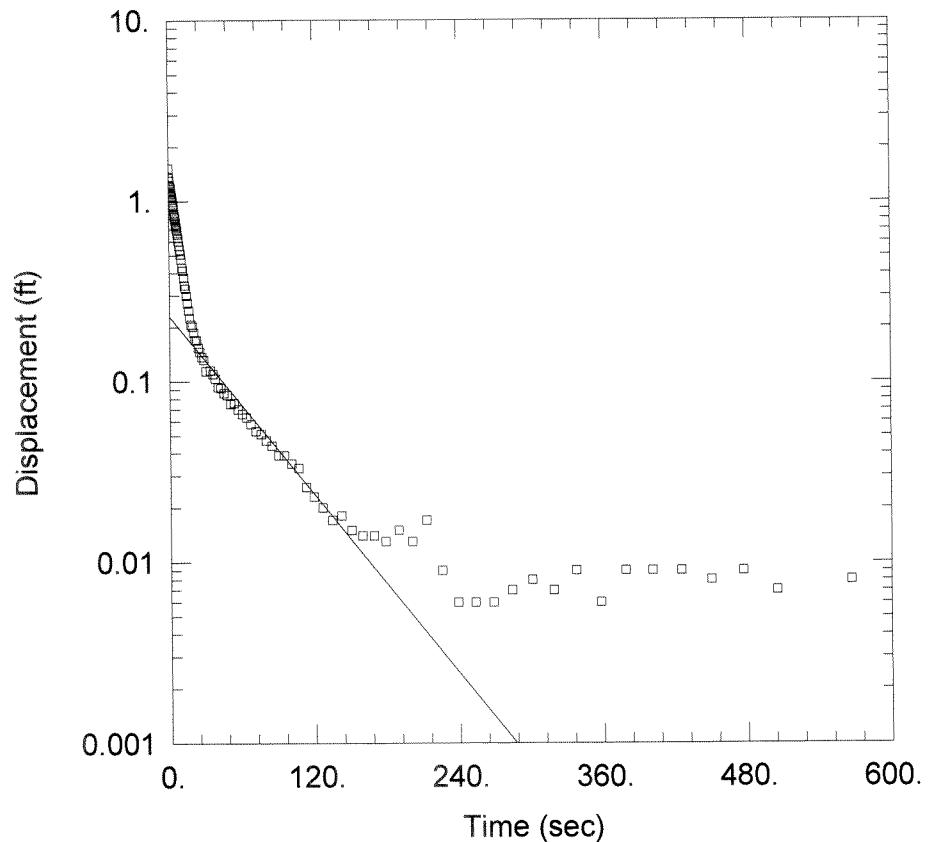
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

Initial Displacement: 12.62 ft
 Total Well Penetration Depth: 5.5 ft
 Casing Radius: 0.083 ft

WELL DATA (MW102_in1)

Static Water Column Height: 5.5 ft
 Screen Length: 5.5 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW102_out1.aqt
 Date: 06/10/13 Time: 17:10:22

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.803 \text{ ft/day}$
 $y_0 = 0.2294 \text{ ft}$

AQUIFER DATA

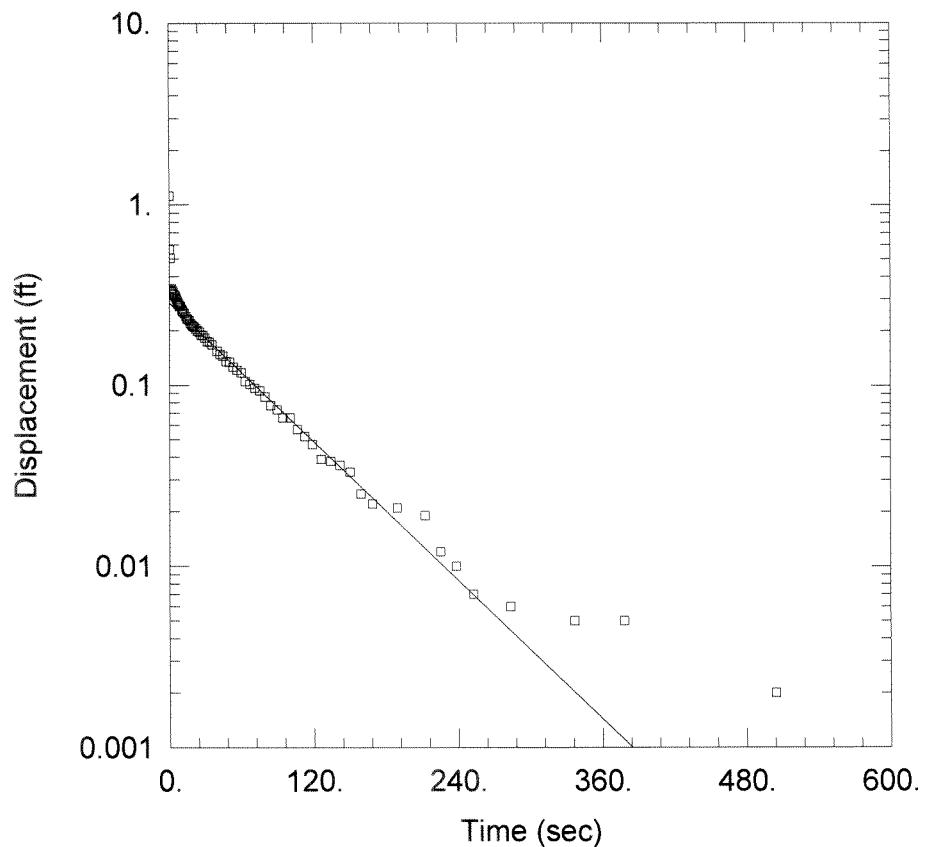
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

Initial Displacement: 12.62 ft
 Total Well Penetration Depth: 5.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.5 ft
 Screen Length: 5.5 ft
 Well Radius: 0.083 ft

WELL DATA (MW102_out1)



HENRY'S DRY CLEANER

Data Set: I:\...\MW102_in2.agt
 Date: 06/10/13 Time: 17:10:21

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 2.944 \text{ ft/day}$
 $y_0 = 0.2833 \text{ ft}$

AQUIFER DATA

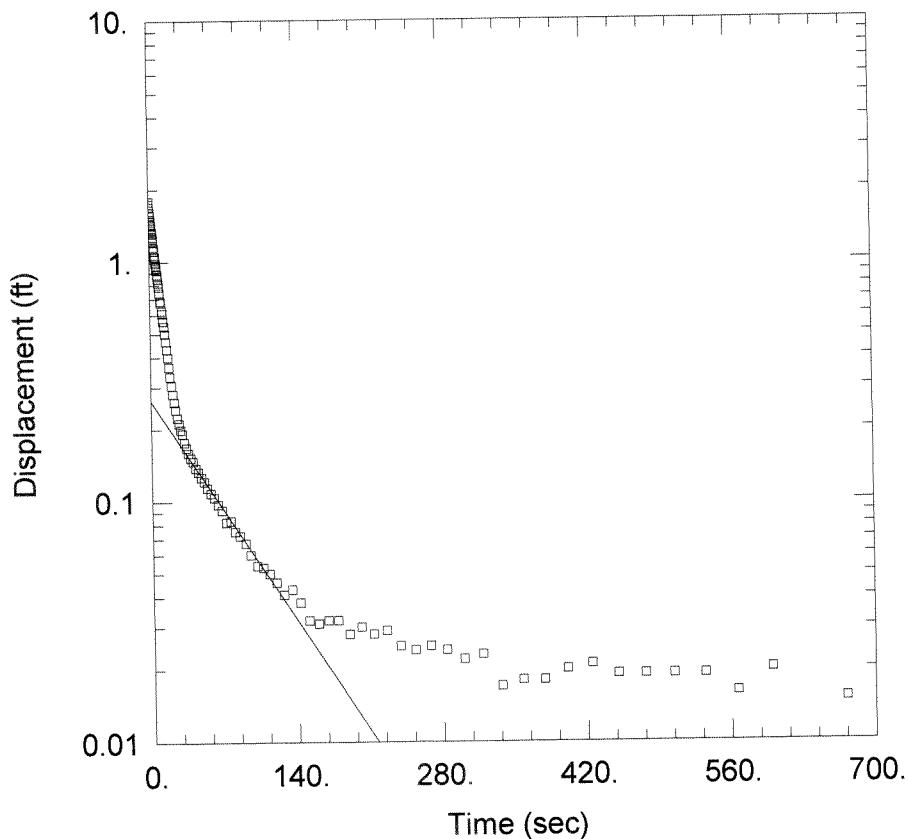
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW102_in2)

Initial Displacement: 12.62 ft
 Total Well Penetration Depth: 5.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.5 ft
 Screen Length: 5.5 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW102_out2.aqt
 Date: 06/10/13 Time: 17:10:22

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 3.026 \text{ ft/day}$
 $y_0 = 0.2624 \text{ ft}$

AQUIFER DATA

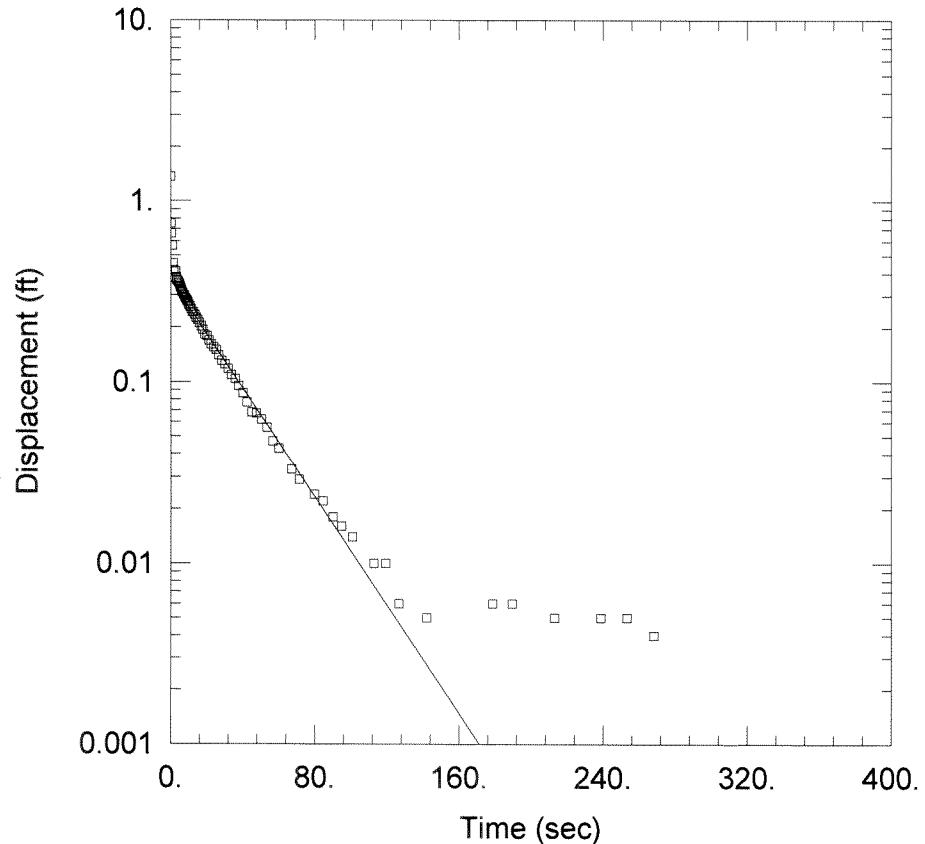
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW102_out2)

Initial Displacement: 12.62 ft
 Total Well Penetration Depth: 5.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.5 ft
 Screen Length: 5.5 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW103_in1.aqt
 Date: 06/10/13 Time: 16:44:44

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 7.401 \text{ ft/day}$
 $y_0 = 0.3638 \text{ ft}$

AQUIFER DATA

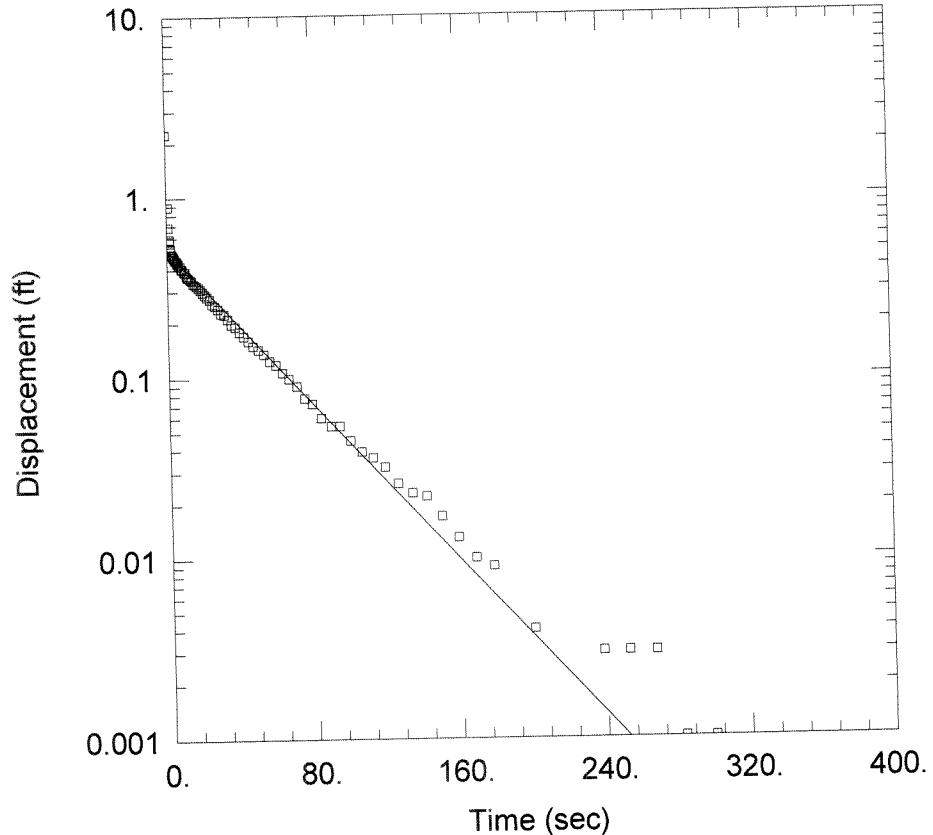
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW103_in1)

Initial Displacement: 12.84 ft
 Total Well Penetration Depth: 5.01 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.01 ft
 Screen Length: 5.01 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW103_in2.agt
 Date: 06/10/13 Time: 16:44:45

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 5.336 \text{ ft/day}$
 $y_0 = 0.5181 \text{ ft}$

AQUIFER DATA

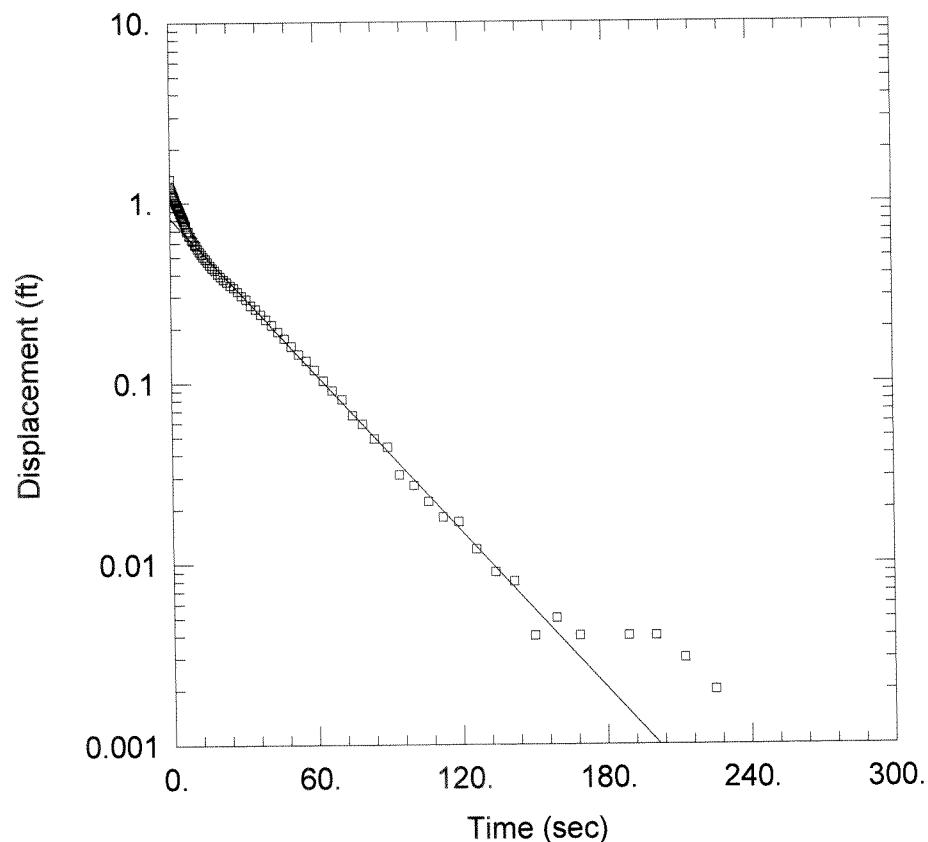
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW103_in2)

Initial Displacement: 12.84 ft
 Total Well Penetration Depth: 5.01 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.01 ft
 Screen Length: 5.01 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW103_out1.aqt
 Date: 06/10/13 Time: 16:44:46

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 7.163 \text{ ft/day}$
 $y_0 = 0.8213 \text{ ft}$

AQUIFER DATA

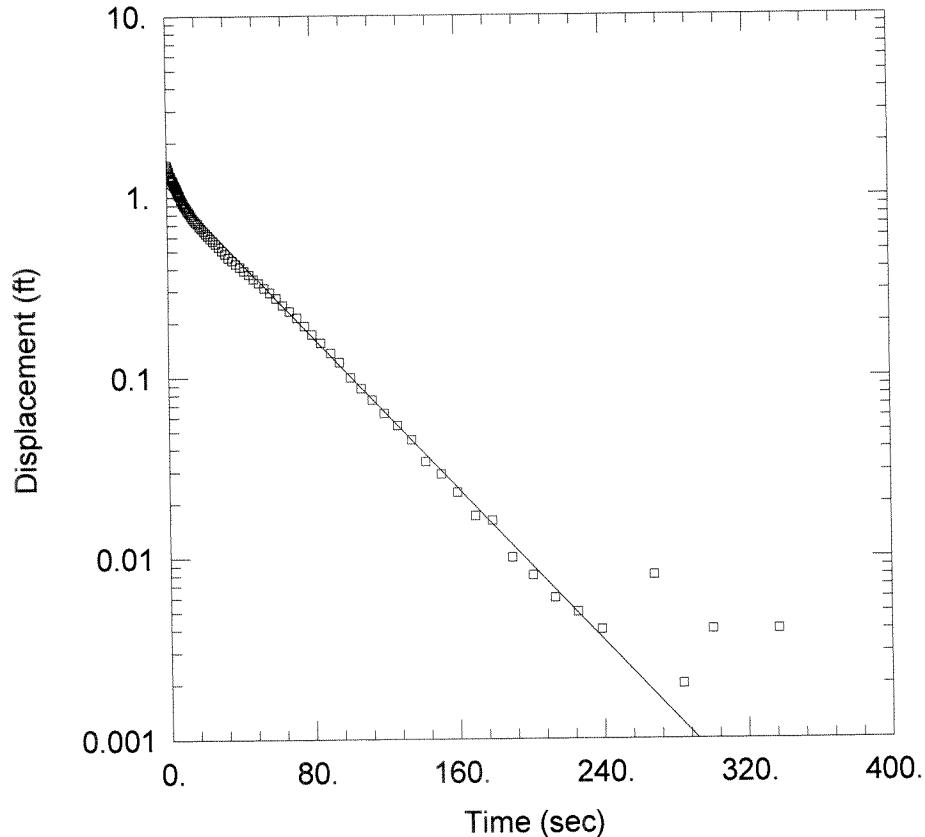
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW103_out1)

Initial Displacement: 12.84 ft
 Total Well Penetration Depth: 5.01 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.01 ft
 Screen Length: 5.01 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\MW103_out2.aqt
 Date: 06/10/13 Time: 16:44:46

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 5.198 \text{ ft/day}$
 $y_0 = 1.153 \text{ ft}$

AQUIFER DATA

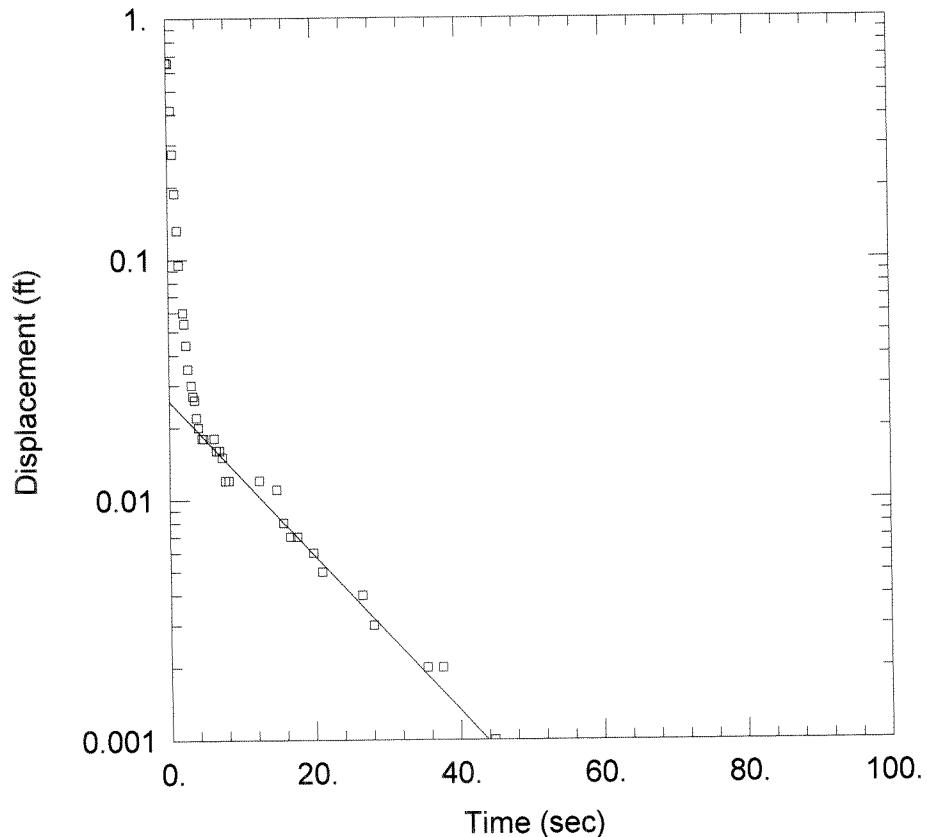
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW103_out2)

Initial Displacement: 12.84 ft
 Total Well Penetration Depth: 5.01 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 5.01 ft
 Screen Length: 5.01 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\OSW1in1.aqt

Date: 06/10/13

Time: 16:25:27

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 23.08 \text{ ft/day}$

$y_0 = 0.02571 \text{ ft}$

AQUIFER DATA

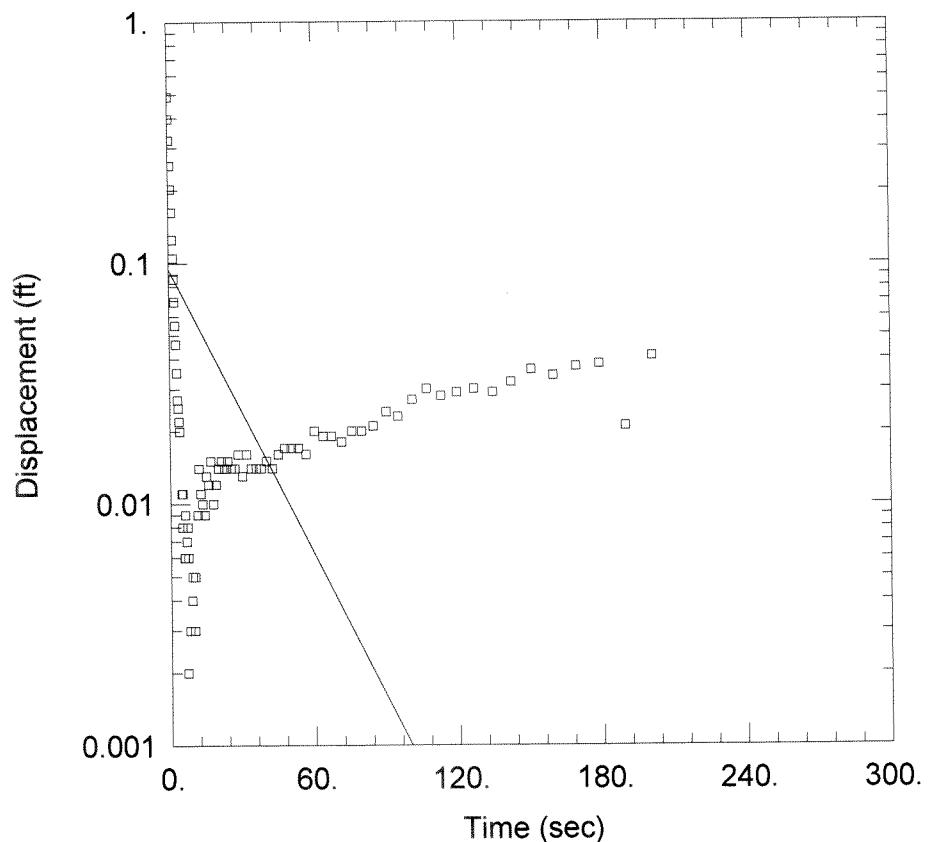
Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

Initial Displacement: 10.52 ft
 Total Well Penetration Depth: 3.05 ft
 Casing Radius: 0.083 ft

WELL DATA (OSW1_in1)

Static Water Column Height: 3.05 ft
 Screen Length: 3.05 ft
 Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\OSW1out1.aqt

Date: 06/10/13

Time: 16:25:28

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 14.19 ft/day

y0 = 0.09458 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (OSW1_out1)

Initial Displacement: 10.52 ft

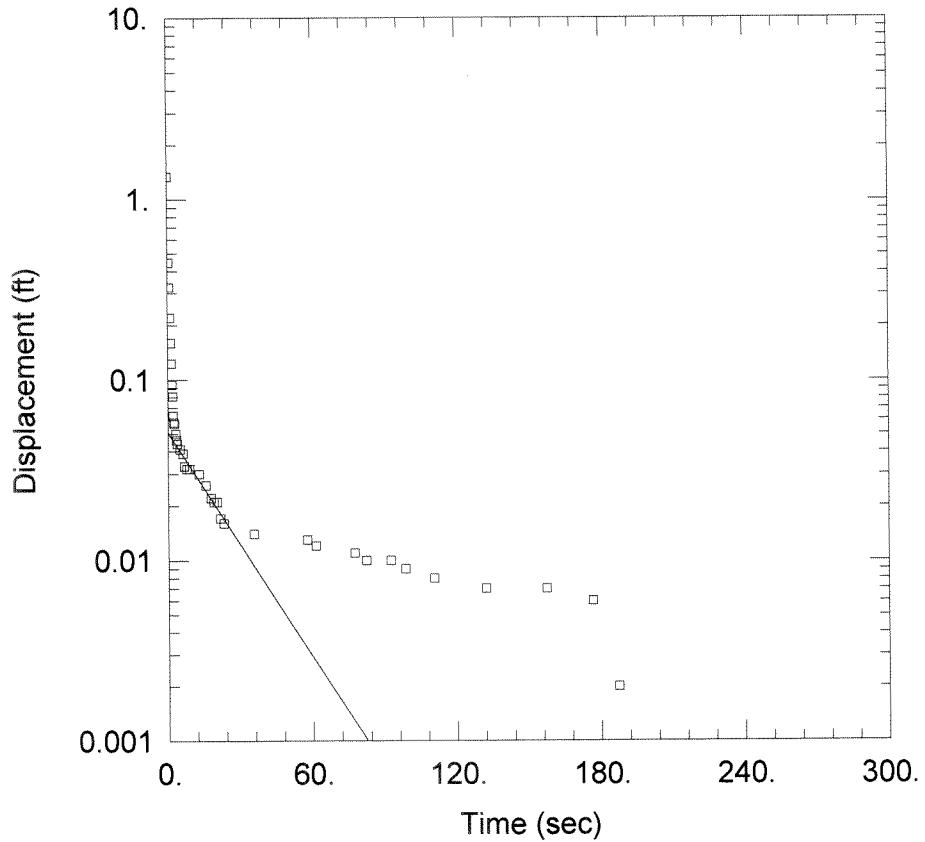
Total Well Penetration Depth: 3.05 ft

Casing Radius: 0.083 ft

Static Water Column Height: 3.05 ft

Screen Length: 3.05 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\OSW1in2.aqt

Date: 06/10/13

Time: 16:25:27

PROJECT INFORMATION

Company: SERAS

Client: ERT

Project: 0-1173

Location: Laconia, NH

Test Well: ERT1

Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 14.83 ft/day

y0 = 0.05072 ft

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (OSW1_in2)

Initial Displacement: 10.52 ft

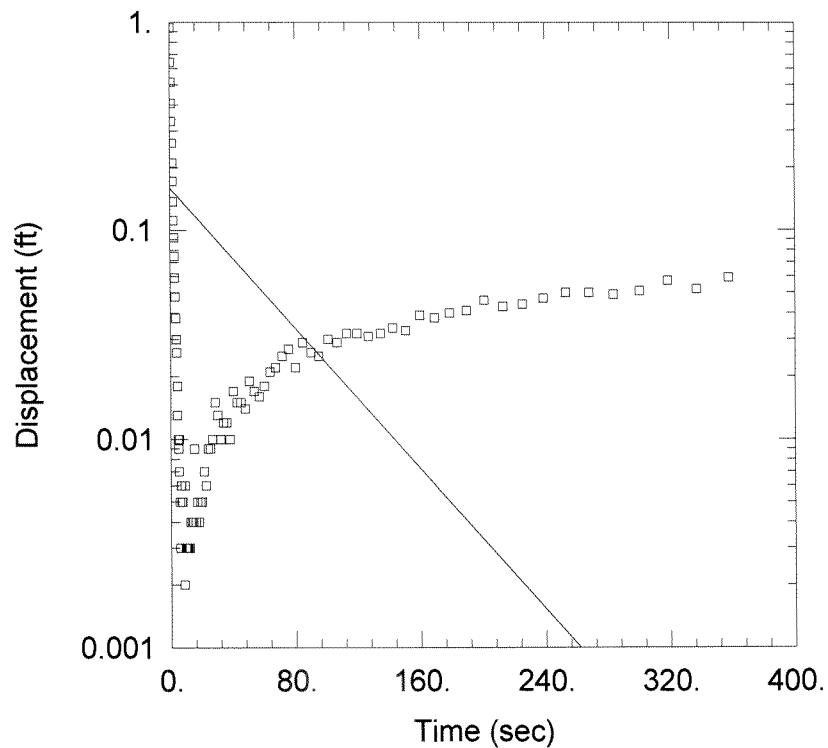
Total Well Penetration Depth: 3.05 ft

Casing Radius: 0.083 ft

Static Water Column Height: 3.05 ft

Screen Length: 3.05 ft

Well Radius: 0.083 ft



HENRY'S DRY CLEANER

Data Set: I:\...\OSW1out2.aqt
 Date: 06/10/13 Time: 16:25:29

PROJECT INFORMATION

Company: SERAS
 Client: ERT
 Project: 0-1173
 Location: Laconia, NH
 Test Well: ERT1
 Test Date: 12/12/2012

SOLUTION

Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 $K = 6.024 \text{ ft/day}$
 $y_0 = 0.1591 \text{ ft}$

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (OSW1_out2)

Initial Displacement: 10.52 ft
 Total Well Penetration Depth: 3.05 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 3.05 ft
 Screen Length: 3.05 ft
 Well Radius: 0.083 ft