

**RECR – 5**

**Enersource Refinery**

**Investigation Report**

**6/29/12**



**INTERA Incorporated**  
6000 Uptown Blvd, NE  
Suite 220  
Albuquerque, NM 87110  
Telephone: (505) 246-1600  
Fax: (505) 246-2600

June 29, 2012

Mr. Jim Griswold, Hydrologist  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: 2012 Site Investigation Report, Former Enersource Facility  
Monument, Lea County, New Mexico

Dear Mr. Griswold,

INTERA has prepared the enclosed investigation report for the above-referenced project. We are enclosing two hardcopies and two electronic copies. Please do not hesitate to me at (505) 246-1600 if you have any questions or require further information and thank you for the work.

Sincerely,

**INTERA Incorporated**

A handwritten signature in blue ink, appearing to read "Joe A. Galemore". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Joe A. Galemore  
Senior Project Managert

Enclosure

FILE: NMGSD.M002.ENER

# 2012 SITE INVESTIGATION REPORT

## Former Enersource Facility

### Monument, Lea County, New Mexico



***Prepared for:***



New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

***Prepared by:***



INTERA Incorporated  
6000 Uptown Boulevard, NE  
Suite 220  
Albuquerque, New Mexico 87110

**June 29, 2012**



---

## TABLE OF CONTENTS

<b>FIGURES.....</b>	<b>ii</b>
<b>TABLES.....</b>	<b>ii</b>
<b>APPENDICES .....</b>	<b>iii</b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>iv</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Investigation Setting .....	1
1.1.1 Adjacent Property Land Use.....	3
1.2 Site Historical Operations .....	3
1.3 Previous Investigations .....	4
1.3.1 2006 Phase I Remediation .....	4
1.3.2 2007 Phase II Remediation.....	5
1.3.3 2009 Remedial Investigation and Removal Action .....	5
1.3.4 2011 Groundwater Sampling .....	6
1.4 Contaminants of Concern and Additional Data Requirements .....	7
1.5 Scope of Work and Work Plan Deviations .....	7
<b>2.0 FIELD ACTIVITIES.....</b>	<b>9</b>
2.1 Soil Boring Advancement, Soil Screening, and Soil Sampling .....	9
2.1.1 HSA Borings .....	10
2.2 Monitoring Well Installation and Development .....	11
2.3 Monitoring Well Surveying and Sampling .....	12
2.4 LNAPL Bail Down/Recovery Test.....	13
<b>3.0 DISCUSSION OF FINDINGS .....</b>	<b>14</b>
3.1 Hydrogeology .....	14
3.1.1 Stratigraphy .....	14
3.1.2 Groundwater Conditions.....	16
3.2 Distribution of Contaminants in Soil .....	18
3.2.1 VOC Soil Screening Results.....	18
3.2.2 Laboratory Results.....	19
3.3 Distribution of Contaminants in Groundwater.....	23
3.4 Distribution of LNAPL .....	24
3.5 LNAPL Baildown/Recovery Test Analysis.....	25
<b>4.0 CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>27</b>
<b>5.0 REFERENCES.....</b>	<b>29</b>





---

## FIGURES

Figure 1	Site Location Map
Figure 2a	Site Plan
Figure 2b	2009 Soil Boring and Confirmation Sample Locations
Figure 3	Groundwater Elevations, May 22, 2012
Figure 4	Maximum VOC Concentrations in Shallow Soil by Heated-Headspace Method
Figure 5	Maximum VOC Concentrations in Subsurface Soil (>6 ft bgs) by Heated-Headspace Method
Figure 6	Distribution of TPH in Shallow Soil (0 to 6 ft bgs)
Figure 7	Distribution of Benzene in Shallow Soil (0 to 6 ft bgs)
Figure 8	Distribution of BTEX in Shallow Soil (0 to 6 ft bgs)
Figure 9	Distribution of Chloride in Shallow Soil (0 to 6 ft bgs)
Figure 10	Distribution of TPH in Subsurface Soil (> 6 ft bgs)
Figure 11	Distribution of Benzene in Subsurface Soil (>6 ft bgs)
Figure 12	Distribution of BTEX in Subsurface Soil (>6 ft bgs)
Figure 13	Distribution of Chloride in Subsurface Soil (>6 ft bgs)
Figure 14	Distribution of Contaminants in Groundwater, May 2012

## TABLES

Table 1	Soil Screening PID Results
Table 2	Summary of Analytical Chemistry Results – Soil
Table 3	Monitoring Well Construction Details
Table 4	Fluid Level Gauging Results
Table 5	Summary of Analytical Chemistry Results – Groundwater



---

## APPENDICES

Appendix A	Historic Aerial Photographs
Appendix B	Field Notes
Appendix C	Photographic Documentation
Appendix D	Land Access Agreement, Performance Bond, and Damage Bond
Appendix E	Log of Borings, Monitoring Well Construction Diagrams, and OSE Well Permits
Appendix F	Laboratory Reports
Appendix G	2012 Geodetic Survey Report
Appendix H	LNAPL Bail Down/Recovery Test



---

## ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethyl benzene, and total xylenes
COC	contaminant of concern
DO	dissolved oxygen
DPT	direct-push technology
DRO	diesel range organics
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane
EPA	U.S. Environmental Protection Agency
ft	feet <i>or</i> foot
GIS	geographic information system
GRO	gasoline range organics
HEAL	Hall Environmental Analysis Laboratory
HSA	hollow-stem auger
INTERA	INTERA Incorporated
LNAPL	light non-aqueous phase liquids
µg/L	micrograms per liter
µS/cm	microsiemens per centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRO	motor oil range organics
MW	monitoring well
NMWQCC	New Mexico Water Quality Control Commission
OCD	Oil Conservation Division (New Mexico Energy, Minerals, and Natural Resources Department)
OD	outer diameter
ORP	oxidation reduction potential
OSE	Office of the State Engineer



---

PA	Price Agreement
PAH	polynuclear aromatic hydrocarbon
PID	photoionization detector
PO	purchase order
ppm	parts per million
PVC	polyvinyl chloride
RA	removal action
RI	remedial investigation
RL	reporting limit
ROC	Rice Operating Company
Site	former Enersource facility
SLO	New Mexico State Land Office
SVOC	semi-volatile organic compound
SWD	salt water disposal
TD	total depth
TDS	total dissolved solids
TOC	top of PVC casing
TPH	total petroleum hydrocarbons
USGS	U.S. Geological Survey
VOC	volatile organic compound



---

## 1.0 INTRODUCTION

INTERA Incorporated (INTERA) has completed an additional site investigation at the former Enersource Facility (Site) and adjacent properties for the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division (OCD). The services were conducted under General Services Department Price Agreement number # 10-805-00-07208 (PA). The term of the PA is August 16, 2011, through August 15, 2012. Authorization to conduct this work was provided by OCD purchase order (PO) number 52100-0000034718 dated March 9, 2012.

The Site, located in Monument, Lea County, New Mexico, covers approximately 9.65 acres in an area utilized for oil and gas exploration/production and cattle ranching. Historical operations at the Site include use as an oil refinery and later, under Enersource operations, as a crude oil reclamation facility. Results of several remedial investigations completed at the Site since 2006 indicate contamination related to hydrocarbon storage and processing have impacted soil and groundwater at the Site as well as adjacent properties. The purpose of the 2012 investigation was to further delineate the southern, eastern, and western limits of dissolved-phased petroleum (specifically benzene) and light non-aqueous phase liquid (LNAPL) contamination observed at the Site and determine the impact to adjacent properties.

This report summarizes the 2012 field investigation activities and presents associated analytical results and recommendations for additional Site investigation and remediation. For reference, a description of the physical setting of the 2012 area of investigation (i.e., the Site and adjacent properties) as well as a brief summary of the operational and investigative history of the Site is provided in the following subsections.

### 1.1 Investigation Setting

The area of investigation, located in the northwest quarter of Section 1, Township 20 South, Range 36 East, in Lea County, New Mexico, lies within the High Plains section of the Great Plains physiographic province. The High Plains is predominantly used for rangeland and agriculture and land in the vicinity of the Site is also used for oil and gas production. Figure 1 illustrates the location of the Site on the Monument North and Monument South 7.5 minute Quadrangles, U.S. Geological Survey Topographic Maps (USGS, 1985a and 1985b).

The Site is at an elevation of approximately 3,580 feet (ft) above mean sea level (amsl). The ground surface slopes down from northwest to southeast at a gradient of approximately 0.003 ft/ft (16 ft/mile). Monument Draw, a northwest to southeast flowing intermittent stream, is located about 2½ miles south of the Site. Current conditions (as of 2011) of the area of investigation are presented on Figure 2a.

Soils in the area of investigation have a high to medium-high permeability and are well drained. Annual precipitation rates average approximately 15 inches and mean annual temperature is about 60 degrees Fahrenheit. The majority of the precipitation occurs in the summer monsoon months. Lake evaporation rates range from 60 to 70 inches per year (Leedshill-Herkenhoff, Inc., et al. 2000).

Surface geology of the area of investigation consists of a thin layer of recently deposited wind-blown sands and silts (Leedshill-Herkenhoff, Inc., et al. 2000). Below this layer resides the Ogallala Formation, which consists of sand, silt, clay, gravel, and caliche and is up to 350 ft thick in some areas. The regional aquifer, the Ogallala Aquifer, occurs in this formation. A general description of the Ogallala Formation is provided below (Leedshill-Herkenhoff, Inc., et al. 2000):

*Sand, fine- to coarse-grained quartz, silty in part, cemented locally by calcite and silica, locally crossbedded, various shades of gray and red. Minor silt and clay with caliche nodules, massive, white, gray, olive green, maroon. Gravel, not everywhere present, composed of pebbles and cobbles of quartz, quartzite, minor chert, igneous rock, metamorphic rock, limestone, and abraded Gryphaea in intraformational channel deposits and in basal conglomerate. Caliche, sandy, pisolitic, forms caprock, may include some caliche of Pleistocene age. Where stippled pattern shown, overlain sporadically by 14 to 30 inches of brownish gray to brown to reddish brown, calcareous sand and silt of pre-Illinoian age....*

The area of investigation is located within the Lea County Underground Water Basin, which obtains water from the Ogallala Aquifer. As of 1998, depth to water at the area of investigation was estimated to be 40 ft below ground surface (bgs) and the groundwater flow direction was generally to the southeast (Leedshill-Herkenhoff, Inc., et al. 2000).

A search of the Office of the State Engineer (OSE) WATERS database (OSE, 2012) and the OSE geographic information system (GIS) well location shapefile (OSE/ISC, 2011) revealed eight permitted water wells within 1 mile of the Site and two within Section 1 (Figure 1). Some discrepancies between the WATERS database and GIS shapefile were revealed pertaining to primary use of these wells and are noted below. The two closest wells included in the database are a domestic supply well (listed as a sanitary well in the WATERS database) located approximately 2,000 ft north of the Site and an exploratory well owned by Climax Chemical located approximately 2,000 ft northwest of the Site; no information concerning depth to water was provided in the WATERS database. The next two closest wells listed in the database include a domestic supply well (listed as a domestic and livestock watering well in the WATERS database) located about 3,000 ft east of the Site and a prospecting or development of natural

resources well located about 3,000 ft southeast of the Site. The WATERS database lists the depth to water in the domestic water supply well as 40 ft bgs (OSE, 2012); no information concerning depth to water at the prospecting well was provided. Other water wells may be located in the area that are either not permitted by the OSE or not sufficiently described in the database to allow for accurate mapping.

#### **1.1.1 Adjacent Property Land Use**

The Site is surrounded by land and facilities utilized by multiple agents and landowners primarily for oil and gas operations and, less so, cattle ranching. The Versado Gas Processing Plant (OCD remediation permit # 1R-281) is located immediately adjacent to the Site's northern property boundary and the El Paso Natural Gas operates a facility within 300 ft of the eastern property boundary (Figure 1 and Figure 2a). Open land immediately to the south, east, and west of the Site is owned and operated by the New Mexico State Land Office (SLO), which actively leases the land for cattle ranching and oil and gas production. Numerous pipelines and oil and gas wells are located on this property. In addition, Rice Operating Company (ROC) maintains and operates a Salt Water Disposal (SWD) system related to oil and gas production that consists of pipelines, wells, and facilities throughout the area (RECS, 2011). As a result, numerous oil/gas production wells, storage tanks, and pipelines associated with these operations are in the vicinity of the area of investigation.

Remediation of LNAPL was reportedly occurring at the Versado Plant (Wrangham, personal communication, 2006); however, no files associated with remediation permit # 1R-281 were found in the OCD online document review service was accessed. Remediation of chloride is also ongoing in the immediate area (RECS, 2011). Two wells associated with corrective actions for chloride contamination (a production/remediation well [Rice Well MW-1] and a monitoring well [Rice Well MW-2]) are located near the former SWD end-of-line pipeline junction box, EME C-1 EOL. Although not catalogued in the OSE database, the wells were identified during field reconnaissance and are located approximately 200 ft to the south of the Site (Figure 1 and Figure 2a). In addition, the Climax Chemical Company, which is a U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System site, reportedly contains chloride concentrations greater than 10,000 milligrams per liter (mg/L) in groundwater (RECS, 2011). The Climax Chemical Company Site is located approximately 1-mile to the northwest of the area of investigation.

### **1.2 Site Historical Operations**

All information presented in this section is based on a review of historical aerial photographs and property ownership records (obtained from the Lea County Courthouse) and interviews with local residents and OCD personnel (INTERA, 2009). A more comprehensive description of the



project history is provided in INTERA's *Phase I and II Remediation Report* (INTERA, 2007). Copies of historical aerial photographs are provided in Appendix A.

Based on historical aerial photographs, significant development at the Site occurred after 1949 (INTERA, 2009). The aerial photograph circa 1949 depicts the Site as largely undeveloped with only a single large tank straddling the Site boundary. Development (bermed ponds [?]) is noted approximately 150 ft south of the south Site boundary (Appendix A). The 1966 and 1978 photographs depict numerous (> 25) aboveground storage tanks (ASTs) located within or slightly outside the Site boundary. The Site tanks are arranged into two groups, an eastern and a western cluster. In general, the tanks located in the western cluster are larger than the tanks in the eastern cluster. This photograph also shows more, but similar, development south of the Site relative to that observed in the 1949 (Appendix A).

The two clusters of tanks are separated by a central area that contains buildings and, based on the shape of the shadows, tall narrow structures. Mr. Larry Parker, a long-time resident of Lea County and former employee of Controlled Recovery Incorporated, stated that the Site was used as a jet fuel refinery (INTERA, 2009). Therefore, these tall, narrow structures formerly located in the central part of the Site may have been cracking or distillation towers. Given the larger tank sizes, the western part of the property was probably used for crude storage, and the eastern cluster for product storage. A tractor trailer truck can be seen in the 1978 aerial photograph just north of the central processing area; this area may have been used for product loading. A large AST is noted approximately 100 ft south of the southwestern property boundary and three smaller ASTs are noted approximately 200 ft south of the south-central Site boundary.

It is unknown how long refinery operations occurred at the Site. Based on information obtained from the Lea County Tax Assessor, Enersource became the property owner in 1985. It is believed that Enersource used the facility to reclaim crude oil until sometime prior to 2006 when INTERA was contracted by OCD. Mr. Parker stated that the structures formerly located in the central part of the Site were dismantled and sold for scrap. The structures and materials that were not sold were buried in the west-central portion of the Site. It is unknown when this occurred. As discussed below, this waste has since been removed from the Site.

## **1.3 Previous Investigations**

### **1.3.1 2006 Phase I Remediation**

INTERA was contracted in 2006 to test the existing ASTs and fluids/sludge for naturally occurring radioactive materials and subsequently remove these materials from the Site. The ASTs and some underground piping were removed from the Site and disposed of at an offsite facility in the summer of 2006. During the removal action, eight soil samples were collected and



analyzed for the presence of total petroleum hydrocarbons (TPH)-diesel range organics (DRO), TPH-motor oil range organics (MRO), and chlorides. Reported concentrations for TPH-DRO in the soil samples ranged from 2,900 to 9,400 milligrams per kilogram (mg/kg); TPH-MRO was detected in only a single soil sample at 6,000 mg/kg. Reported concentrations for chloride in the soil samples ranged from 4.7 to 570 mg/kg.

### **1.3.2 2007 Phase II Remediation**

In April 2007, a geophysical survey was performed to identify buried metal objects at the Site. The survey revealed the presence of several thousand feet of underground piping and large metal objects scattered throughout the Site. From May to June 2007, INTERA and its subcontractor removed these subsurface materials and disposed of them at an offsite facility. Trenching performed during the piping removal, as well as soil sampling activities performed as part of previous removal actions, revealed the presence of contaminated soils in several Site areas (INTERA, 2007).

### **1.3.3 2009 Remedial Investigation and Removal Action**

In June 2009, INTERA completed a Remedial Investigation and Removal Action (RI/RA) at the Site (INTERA, 2009). The intent of the RI was to collect sufficient soil and groundwater data to (1) characterize the extent of hydrocarbon contamination at the Site, and (2) support the development of any future Site remediation. The intent of the RA was to remove contaminated soil beneath an abandoned pit on New Mexico State Land Office property located immediately southwest of the Site.

From June 9 to June 18, 2009, 45 soil borings (DPB-01–DPB-45) were advanced to an average total depth (TD) of 7.5 ft bgs using direct push technology (DPT) drilling and sampling methods. In addition, 6 borings (MW-01–MW-06) were advanced using hollow stem auger (HSA) drilling and sampling methods to approximately 45 ft bgs (i.e., approximately 10 ft below the water table). These 6 borings were then converted to single screen 4-inch polyvinyl chloride (PVC), flush threaded, schedule 40, groundwater monitoring wells. The 2009 drilling and sampling locations are illustrated on Figure 2b.

A total of 118 soil samples were collected from the DPT borings and 27 soil samples were collected from the HSA borings. All soil samples were submitted for analysis of TPH-DRO, TPH-MRO, and TPH-gasoline range organics (GRO) by EPA Method 8015B; BTEX (benzene, toluene, ethyl benzene, and total xylenes) by EPA Method 8260B; and chlorides by EPA Method 300.0. In addition, 10 percent of the samples containing the highest concentrations of TPH were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Five groundwater samples were collected on June 26 and 27, 2009, and submitted for analysis of VOCs by EPA method 8260B, polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8310, chlorides by



EPA Method 300.0, and total dissolved solids (TDS) by EPA method SM 2540C. A groundwater sample was not collected at MW-03 as LNAPL was present on the water table at a thickness of 1.42 ft.

Analytical results of the 2009 RI sampling effort indicate that an area greater than two acres contains TPH in shallow soils (i.e., surface to 6 ft bgs) at concentrations above New Mexico Environment Department and OCD action levels (INTERA, 2009). Benzene, BTEX, and chlorides at concentrations above action levels are also present in shallow soils, but within smaller areas. The shallow soils most impacted by benzene are located in the following areas: pit, central processing, product loading, and eastern AST (Figure 2a).

Analytical results obtained primarily from samples collected during HSA drilling indicate that subsurface Site soils (i.e., > 6 ft bgs) are also generally impacted by TPH, benzene, BTEX, and chlorides over a large area; however, specifics regarding the extent of subsurface contamination at the Site could not be determined due to a limited subsurface sampling dataset (INTERA, 2009).

Results of the initial groundwater sampling event indicate that dissolved-phase benzene is present in Site groundwater at concentrations that are one to two orders of magnitude above New Mexico Water Quality Control Commission (NMWQCC) standards (INTERA, 2009).

Excavation of the pit located in the southwest corner of the Site was initiated on June 8, 2009 and confirmation samples were collected from June 23 to June 25, 2009. Pit excavation was completed to a depth of 10 ft bgs and removed approximately 4,000 cubic yards of contaminated soil. The excavated soil was disposed of at a nearby landfill as the presence of high chloride concentrations precluded disposal at a landfarm. Results of the 2009 confirmation soil sampling indicate that soil containing TPH (and possibly benzene, BTEX, and chloride) above action levels remains below and along the side walls of the excavation (INTERA, 2009).

#### **1.3.4 2011 Groundwater Sampling**

A second round of groundwater sampling was initiated for the six Site monitoring wells in January 2011 (INTERA, 2011) (Figure 2b). LNAPL was again observed in MW-03 at a thickness of 0.33 ft, therefore, only five groundwater samples were collected and submitted for the analysis of VOCs by EPA method 8260B, chlorides by EPA method 300.0, and TDS by EPA method SM 2540C.

Results of the 2011 sampling event reported dissolved-phase benzene at concentrations exceeding the NMWQCC standard of 10 micrograms per liter ( $\mu\text{g/L}$ ): 2,600  $\mu\text{g/L}$  at MW-02, 480  $\mu\text{g/L}$  at MW-05, and 6,200  $\mu\text{g/L}$  at MW-06. Ethylbenzene, total xylenes, 1,2-dichloroethane

(EDC), and total naphthalenes were also detected above reporting limits (RLs) in groundwater, but at concentrations below the respective NMWQCC standard. Based on these results, it was determined that the extent of dissolved-phase benzene was not well defined in the southern or northeastern portions of the Site. In addition, contamination has likely migrated offsite to the south, and the extent of LNAPL is also not defined.

#### **1.4 Contaminants of Concern and Additional Data Requirements**

Based on known historical Site operations as well as Site investigative findings to date, the following constituents are identified as contaminants of concern (COCs) for soils at the Former Enersource Facility: VOCs (particularly BTEX), semi-volatile organic compounds (SVOCs) (specifically PAHs), TPH, and chloride. VOCs (particularly benzene and EDC), SVOCs, and chloride are also identified as COCs in groundwater. In addition, 1,2-dibromoethane (EDB) was identified as a contaminant of potential concern in groundwater for the 2012 investigation.

Results of the 2009 RI/RA indicated that a release, or releases, of hydrocarbons at the former Famariss Energy Refinery and/or Enersource facility impacted soil and groundwater at the Site. The presence of TPH-GRO and EDC, coupled with the high benzene to BTEX concentration ratios, indicate that a portion of the release was refined product or gas condensate. The high TPH-DRO and TPH-MRO concentrations suggest that a release of crude oil also occurred at the Site. However, additional subsurface data was required to establish the extent of subsurface contamination.

Results of both the 2009 and 2011 groundwater sampling events indicate that a hydrocarbon-type release(s) in the vicinity of the Site impacted groundwater quality. Benzene, chloride, and total naphthalenes are all present in the groundwater at concentrations exceeding their respective NMWQCC standard and EDC and ethylbenzene concentrations were detected above RLs. LNAPL was also observed on the surface of the water table at MW-03 during both sampling events. However, additional data was required to further establish the extent of groundwater contamination, particularly for the southern and northeastern portions of the Site. In addition, EDB was added as a Site contaminant of potential concern for groundwater for the 2012 investigation due to its potential use as a lead scavenger in fuel.

#### **1.5 Scope of Work and Work Plan Deviations**

To address additional data requirements and to evaluate options for the recovery of LNAPL at the former Enersource facility and surrounding area, a scope of work was submitted to OCD on February 24, 2012, for the following activities (INTERA, 2012):

- Obtain site access for SLO property.

- Clear underground utilities.
- Drill and sample up to five soil borings south (downgradient), west, and east of the previously installed wells (Round 1).
- Drill and sample up to four additional soil borings south and east of Round 1 borings if VOC contamination is observed during Round 1 drilling (Round 2).
- Install and develop of up to nine groundwater monitoring wells.
- Complete one event of groundwater sampling for all new and previously existing monitoring wells in the area of investigation.
- Perform a baildown/recovery test at MW-03 to determine the recovery rate of LNAPL.

All activities were completed as described in the scope of work with the following exceptions:

- A total of eight soil borings were drilled and sampled instead of the proposed nine. An additional boring was not drilled and sampled east of MW-07 due to the close proximity of active underground pipelines.
- Since only eight borings were drilled during the 2012 investigation, only eight monitoring wells were installed and developed.
- MW-13 and MW-14 was sampled immediately after development instead of waiting the required.
- A groundwater sample was not collected at MW-02 and MW-03 due to the presence of LNAPL.
- 25, labeled drums containing drill cutting are currently onsite pending final disposition. The specific number of drums located at each well site is provided in the field notes contained in Appendix B.

## **2.0 FIELD ACTIVITIES**

2012 Site investigation field activities were performed from May 8 to May 28, 2012. Field notes and photographs are provided in Appendices B and C, respectively. Details of the field activities are provided in the following subsections.

Prior to the initiation of any ground-breaking activities in the field, a series of field planning and readiness activities had to be completed including: procurement of performance bond for the OCD, land access agreement (including damage bond), utility locates, Site health and safety and quality assurance plans, and well permits. Since the proposed monitoring well locations for the 2012 investigation were outside the Site property boundary, facility-tenant agreements between respective property owners (SLO) and OCD had to be in-place to gain access to all projected drilling and sampling locations. In addition, for all locations where exploration of the subsurface was proposed, a utility locate had to be performed and clearance obtained from all respective overseeing parties (i.e., Chevron, Apache, Northern Natural Gas, Southern Union Plains, RICE, NM Gas, El Paso Natural Gas, DCP Midstream, Transwestern, Holly energy) to ensure no live structures/facilities were encountered or damaged during the investigation. A work plan detailing the Site health and safety plan, quality assurance plan, control procedures, the management of all investigation-derived waste, and the 2012 scope of work was completed and made readily available throughout execution of the field activities. As the OSE requires that monitoring wells be permitted prior to drilling, well permits were applied for and obtained prior to any well installation and development. The SLO Application for Water Easement, the SLO approval letter, the OCD performance bond, and the SLO damage bond are provided in Appendix D; completed OSE well permits are provided in Appendix E.

### **2.1 Soil Boring Advancement, Soil Screening, and Soil Sampling**

From May 9 to 15, 2012, a total of five soil borings (MW-07–MW-11) were advanced using HSA drilling and sampling methods as part of the Round 1 drilling and sampling campaign, and groundwater monitoring wells were installed. On May 16, 2012, boring MW-12 was advanced south (downgradient) of MW-11 and MW-07 as part of the Round 2 drilling and sampling campaign, and a groundwater monitoring well was installed. On May 25, 2012, boring MW-14 was advanced south (downgradient) of MW-08 and MW-09 as part of the Round 2 drilling and sampling campaign, and a groundwater monitoring well was installed. On May 26, 2012, boring MW-13 was advanced south (downgradient) of MW-10 as part of the Round 2 drilling and sampling campaign, and a groundwater monitoring well was installed. Drilling of a Round 2 boring downgradient of MW-07 was not completed due to the close proximity active underground pipelines (see deviations, section 1.5 above). All 2012 drilling and sampling locations are depicted on Figure 2a. Additional details regarding the drilling, sampling, and



screening methods implemented during the 2012 investigation are provided below. Details regarding decontamination and other quality assurance methods utilized during the 2012 investigation are provided in the work plan (INTERA, 2012).

### **2.1.1 HSA Borings**

All soil borings (MW-07–MW-14) were initially drilled using a CME 85 HSA drill rig equipped with a 7 <sup>5</sup>/<sub>8</sub>-inch outer diameter (OD) auger bit and a 5-ft-long continuous core barrel sampler. After completing sample collection, Round 1 borings (MW-07–MW-11) were overreamed with a 10-inch OD auger outfitted with a wooden plug to accommodate the installation of 4-inch wells. Round 2 borings were completed as 2-inch wells. Target TD for borings was 50 ft bgs, approximately 10 ft below the anticipated water table. Final TDs ranged from 48–51 ft bgs. Completed boring logs for MW-07–MW-14 are provided in Appendix E.

Prior to initiating drilling, all boring locations were hand augered with a post-hole digger to approximately 5 ft bgs to ensure that no underground structures (e.g., utilities) were encountered. During boring advancement, soil was continuously cored using a 5-ft-long continuous core barrel sampler. Upon collection, all core was visually inspected for signs of contamination (e.g., staining), lithologically logged, and field screened for the presence of VOCs using a hand-held photoionization detector (PID) equipped with a 10.6 electron volt lamp. VOC field screening data was collected utilizing the heated-headspace technique. All core observations and measurements were then recorded in the field notebook (Appendix B) and/or on the appropriate soil boring log (Appendix E). A summary of the VOC field screening results obtained for MW-07–MW-14 are provided in Table 1.

From each location, a single soil sample was collected and placed in a laboratory-provided container, preserved as appropriate, and submitted under chain of custody to Hall Environmental Analysis Laboratory, Inc. (HEAL) of Albuquerque, New Mexico. Analytical samples from each location were selected based on field screening results (i.e., the sample having the highest PID reading) and/or staining/olfactory observations. All soil samples were submitted for the analysis of the following:

- VOCs by EPA Method 8260B (with methanol extraction)
- TPH-GRO, TPH-DRO, and TPH-MRO by EPA Method 8015B (with methanol extraction for TPH-GRO)
- SVOCs by EPA Method 8270C Selective Ion Monitoring
- Chloride by EPA method 300.0



Analytical results of the 2012 soil sampling are summarized on Table 2. Copies of the full analytical chemistry laboratory reports are provided in Appendix F.

In accordance with the work plan, drilling and sampling equipment were decontaminated prior to commencement of drilling and between borings, and the PID was calibrated daily (INTERA, 2012). The management and disposal of all drill cuttings and core generated during boring advancement not selected for offsite laboratory sample analysis was determined by corresponding VOC field screening results. Drill cuttings with PID readings less than 100 parts per million (ppm) were spread thin on the ground adjacent to the soil boring. Drill cuttings with corresponding PID readings greater than 100 ppm were drummed and staged onsite, pending final disposition.

## **2.2 Monitoring Well Installation and Development**

Upon completion of soil field screening and sampling activities, each boring was completed as a single screen, flush-threaded, schedule 40, PVC groundwater monitoring well (Figure 2a). Wells MW-07–MW-11 were completed as 4-inch wells and MW-12–MW-14 were completed as 2-inch wells.

Each well was installed with 15 ft of 0.020-inch slot screen with an end cap and blank casing to the surface. The annular space of each well was backfilled with 10/20 gradation silica sand (filter pack) to approximately 2 ft above the top of the well screen, and 2.5–4 ft of hydrated bentonite chips were then placed above the filter pack, followed by cement/bentonite grout to 3 ft below grade. Surface completion for all wells consists of an above-ground, sloped, 3 ft by 3 ft concrete pad and a protective metal standpipe with locking cover. Details regarding well construction and completion are summarized on Table 3. Well completion diagrams for MW-07–MW-14 are provided in Appendix E.

Upon completion, each well was developed using a mini monsoon pump to remove fines and to clean the sand filter pack. Wells MW-07–MW-14 were purged until water quality parameters (turbidity, pH, and specific conductance) stabilized within three readings. Approximate volumes of water removed (in gallons) from the wells are as follows: 32 (MW-07), 30 (MW-08), 28 (MW-09), 61 (MW-10), 30 (MW-11), 60 (MW-12), 60 (MW-13), and 60 (MW-14). All data collected during well development were recorded, as appropriate, on the well development sheets and in the field logbook (Appendix B).

Per the approved investigation-derived waste management plan outlined in the scope of work, all wastewater produced during well development was discharged to an on-site impervious surface and allowed to evaporate (INTERA, 2012).

## 2.3 Monitoring Well Surveying and Sampling

For all new wells, the location and elevation of the north side of the top of the PVC casing (TOC) and ground surface elevation were surveyed by John West surveying on May 30, 2012. The north side of the TOC was used as a reference point for all monitoring well fluid level and total depth measurements. Well elevations for all wells in the area of investigation are reported in Tables 3 and 4. The completed survey report from John West surveying is provided in Appendix G.

A decontaminated interface probe was used to measure fluid levels in wells MW-01 and MW-03–MW-11 on May 22, 2012 and in MW-02 on May 23, 2012. Fluid levels were measured in wells MW-12–MW-14 immediately upon surface completion on May 26, 2012 (MW-12) and on May 28, 2012 (MW-13 and MW-14). Results were documented in the field logbook and/or on the monitoring well gauging data log provided in Appendix B and summarized in Table 4.

On May 22, 2012, LNAPL was observed on the surface of the water table at MW-03 and measured 1.80 ft thick; LNAPL was also observed on the surface of the water table at MW-02, but an accurate measurement of LNAPL thickness (0.52 ft) was not successfully obtained until May 23, 2012 (Table 4).

Between May 22 and May 28, 2012, a single round of groundwater samples was collected from 12 of the 14 area of investigation monitoring wells (MW-01 and MW-04–MW-14) using a flow through cell, field water quality meter (YSI 556 MPS), and a low-flow sampler (Solonist bladder pump) and/or disposable bailer. Groundwater samples were not collected at wells MW-02 and MW-03 due to the presence of LNAPL. Wells sampled using the low-flow bladder pump (MW-01–MW-12) were purged until the water quality parameters (dissolved oxygen, oxidation-reduction potential, temperature, specific conductance, and pH) stabilized. MW-13 and MW-14 were sampled using a disposable bailer immediately after development. For these wells, a minimum of five casing volumes of groundwater were purged prior to sample collection (see Section 2.2 above). Throughout purging and sampling, fluid level depths and water quality parameters were measured and recorded in the field logbook, the low-flow sampling log, and/or the well development sheets. All field logs related to groundwater sampling are provided in Appendix B.

All 12 groundwater samples were placed in laboratory-provided containers, preserved as appropriate, and submitted under chain of custody to HEAL for the following analysis:

- VOCs (and total naphthalenes) by EPA Method 8260B
- EDB by EPA Method 504.1





- 
- Dissolved chloride by EPA Method 300.0
  - TDS by modified method SM 2540C

Analytical results of the 2012 groundwater sampling are summarized on Table 5. A copy of the full analytical chemistry laboratory report is provided in Appendix F.

## **2.4 LNAPL Bail Down/Recovery Test**

An LNAPL baildown/recovery test was completed at monitoring well MW-03 to determine the recovery rate of LNAPL. Approximately 3.25 gallons of LNAPL and approximately 0.75 gallons of water were evacuated using a disposable bailer in a 45-minute period. Recovered LNAPL was poured back down MW-03 at the completion of the baildown/recovery test. Field personnel monitored the recharge rate by taking depth-to-product and depth-to-water measurements. Frequent measurements were observed during the first half hour after LNAPL removal and every hour thereafter. The depth-to-product and depth-to-water measurements are summarized in Appendix H, Table H-1 and Figure H-1.

### **3.0 DISCUSSION OF FINDINGS**

This section presents a review of the 2012 Investigation findings and associated analytical results. All 2012 analytical data are evaluated in conjunction with applicable analytical data obtained during previous investigations to assist in evaluating the nature and extent of contamination at the area of investigation. For the purposes of this discussion, the 2012 investigation data are evaluated with respect to further understanding the following three investigation components: (1) hydrogeology, (2) distribution of contaminants in soil, and (3) distribution of contaminants in groundwater. Details regarding these components are provided in the following subsections.

#### **3.1 Hydrogeology**

Current knowledge of hydrogeology in the area of investigation is based on (1) a review of applicable regional geologic studies, and (2) observations and measurements reported for soils and groundwater during the 2012 Investigation. Additional details regarding the area of investigation hydrogeology can be found on the completed 2012 boring logs and monitoring well completion diagrams provided in Appendix E.

##### **3.1.1 Stratigraphy**

In general, three stratigraphic units were encountered in the 51 ft of subsurface penetrated during installation of the 2012 borings:

- Unit 1: Sand with variable amounts of silt and clay.
- Unit 2: Silty, fine-grained sand with discontinuous layers of caliche and clay.
- Unit 3: Interbedded clay and sand with variable amounts of clay.

These units are consistent with the stratigraphic units observed during the 2009 RI drilling campaign and described as part of the RI/RA report (INTERA, 2009).

For the 2012 borings, surface and near-surface soils (Unit 1) consisted of fine- to medium-grained, poorly graded sands with variable amounts of silt and clay and trace gravel, and typically appeared brown to reddish-brown in color with little to no cementation (i.e., loose) and no associated odors (e.g., hydrocarbon). The apparent thickness of Unit 1 ranged from 3.5 ft bgs in MW-12 to approximately 35 ft bgs in MW-11, but more typically was observed in just the first 5 to 10 ft bgs of the boring. The observance of such a high degree of variability of unit thickness over such a small area can be accounted for as follows:

- The contact between Unit 1 and Unit 2 appears gradational.
- The characterization of caliche in the field, the dominant characteristic defining Unit 2, is somewhat subjective as the degree of caliche development can vary greatly over a small area. In addition, the caliche observed in the area of investigation appears very discontinuous in both occurrence and thickness and varies in amount of intermixed sand.

Unit 2, as observed in the 2012 borings, varied from pinkish-white to reddish-brown, dry to moist, with sand to silty sands, and was defined either by the presence of (1) laminar caliche layers ranging in thickness from 1 inch (MW-11) to massive units of up to 24.5 ft (MW-09), or (2) caliche nodules. Apparent average thickness of Unit 2 observed in the 2012 borings was 44 ft; however, most of the 2012 borings either showed a gradational Unit 1/Unit 2 contact (i.e., MW-08, MW-11) or Unit 2 was still encountered at TD (i.e., MW-07 and MW-11–MW-13). The presence of caliche was first noted at 5.5 ft bgs at MW-07; 13 ft bgs at MW-08; 14 ft bgs at MW-09; 7.5 ft bgs at MW-10; 33.5 ft bgs at MW-11; 4 ft bgs at MW-12; and 6 ft bgs at MW-13 and MW-14. Ft-thick caliche layers were observed in MW-08–MW-10, MW-13, and MW-14, whereas only caliche nodules and/or inch-thick laminar caliche ribbons were observed sporadically in MW-07, MW-11, and MW-12. Caliche was most prominent in MW-09, encountered at 14.0 ft bgs to 38.5 ft bgs, and was capped by a 3-ft-thick layer of strongly cemented, reddish-brown clay. A clay layer was also observed directly coupled with caliche in MW-08, but only below the caliche. These observations are consistent with the variability observed in the occurrence of Unit 2 in 2009 RI borings (INTERA, 2009) and suggest that caliche is lens shaped and is more prevalent on the western edge of the area of investigation and locally pinches out towards the east.

The deepest unit observed, Unit 3, was first encountered in borings MW-08 (at 44 ft bgs), MW-09 (at 38.5 ft bgs), MW-10 (at 38 ft bgs), and MW-14 (at 39 ft bgs). Unit 3 is generally defined by the presence of interbedded sands with variable clay content and/or clay with little to no caliche. Sand layers ranged from 1–5 ft thick and varied from fine-grained, poorly graded sandy clay/clayey sand to fine- to medium-grained, well-graded sands. Unit 3 sand beds defined the Unit 2/Unit 3 contact at MW-09 and MW-10. At MW-08, the inferred Unit 2/Unit 3 contact was defined by a layer of wet, reddish-brown lean clay with strong hydrocarbon odor at least 5 ft thick (to TD). A layer of reddish-brown lean clay was also observed in MW-09 and MW-10 at 45 ft bgs and 43.5 ft bgs, respectively, and ranged in apparent thickness from 1.5 ft thick in MW-10 to at least 4 ft thick (to TD) at MW-09. Caliche nodules in trace amounts were intermittent throughout several of the Unit 3 layers and were not relegated to only sand-rich or clay-rich layers.

Indications of hydrocarbon contamination were most prevalent throughout Unit 2, and generally appeared to be coupled with the onset of a prominent caliche presence (except at MW-11 where little caliche was encountered) and moist to wet soil conditions. Hydrocarbon odors and/or staining (gray to black) were observed in the soils collected from all the borings. Strong hydrocarbon odors were observed in most borings starting around 14 ft bgs (9 ft bgs in MW-07) and continued to be observed to some degree throughout Unit 2, which, at MW-07 and MW-11–MW-13, was at TD. At MW-10, hydrocarbon odor was observed to be strong throughout the sandy layers of Unit 2, weak in a lean clay layer inferred as the Unit 2/Unit 3 contact, and not present in the Unit 3 silty sands below the clay. Hydrocarbon odor was also noted as strong in the Unit 2 sands and weak in the underlying lean clay layer inferred as the Unit 2/Unit 3 contact at MW-09; however, as drilling did not advance past this clay layer, it cannot be determined to what extent hydrocarbon contamination exists in the Unit 3 sands inferred below the clay. Black hydrocarbon staining was observed in moist, silty sand at MW-08 at 37.3–38 ft bgs and at MW-14 at 38.2 ft bgs in the immediate vicinity of contact with the water table.

Groundwater was also encountered in Unit 2 in primarily sand- or silty sand-dominant layers except at MW-09, where caliche was dominant. Groundwater occurrence appeared coincident with strong hydrocarbon odor or staining except at MW-11 or MW-12 where neither was noted. Details regarding groundwater conditions for the area of investigation are discussed further in the following subsection.

### **3.1.2 Groundwater Conditions**

The water table was encountered in the 2012 wells at approximately 38 ft bgs (range: 37 ft bgs [MW-09]–39 ft bgs [MW-11]) within Unit 2. This reported water table depth is approximately 3 ft deeper than where the average water table was reported as encountered (i.e., 35 ft bgs) during the installation of wells MW-01–MW-06 in 2009 (INTERA, 2009). Current water table elevation readings for wells MW-01 and MW-04–MW-11, as recorded on May 22, 2012, ranged from 3541.42 ft amsl at MW-11 to 3544.49 ft amsl at MW-01, and averaged 3543.23 ft amsl (Table 4). Although water table elevation readings for wells MW-12–MW-14 were measured a few days subsequent to the other wells in the area of investigation, the fluid level readings for these wells appear consistent with the May 22 readings (Table 4). Based on this data, the 2009 wells can only account for an additional average of 4 ft of fluctuation in the local water table before running a risk of the 2009 wells going dry.

According to the 2012 groundwater elevation data, estimated groundwater flow direction is to the southeast (Figure 3), which is generally consistent with the groundwater flow direction calculated in 2009 from wells MW-01–MW-06; however, the calculated 2012 hydraulic gradient of 0.005 ft/ft is greater than the hydraulic gradient of 0.002 ft/ft calculated in 2009. This increase

likely reflects the change in hydraulic gradient inferred immediately downgradient from MW-10 with preferential flow towards MW-14 from both the east and west as illustrated on Figure 3. It is also important to note that the Rice Well MW-1, a remediation well, is located immediately downgradient from the area containing LNAPL and may have promoted LNAPL migration to the southeast.

The groundwater quality parameters temperature, specific conductivity, and pH, were recorded for all wells during groundwater sampling activities. Additionally, dissolved oxygen (DO) and oxidation reduction potential (ORP) were recorded for those wells that were sampled using low-flow sampling techniques (i.e., monitoring wells MW-01 and MW-03–MW-12). Site minimum, maximum, and average water quality parameters, which were measured after stabilization was reached, are reported below. The minimum temperature recorded was 21.57 degrees Celsius (MW-04), the maximum recorded was 24.4 degrees Celsius (MW-12), and the Site average was calculated as 22.48 degrees Celsius (73 degrees Fahrenheit). The minimum pH measured was 6.43 (MW-13), the maximum measured was 7.38 (MW-01), and the Site average was calculated as 6.91. The minimum specific conductivity recorded was 7,462 microsiemens per centimeter ( $\mu\text{S}/\text{cm}$ ) (MW-07), the maximum was recorded as 24,504  $\mu\text{S}/\text{cm}$  (MW-13), and the Site average was 17,845  $\mu\text{S}/\text{cm}$ . The minimum DO measured was 0.06 mg/L (MW-09), the maximum measured was 0.86 mg/L (MW-04), and the Site average was 0.31 mg/L. The minimum ORP recorded was -139 millivolts (mV) (MW-06), the maximum recorded was 19.8 mV (MW-01), and the Site average was calculated as -42.1 mV.

The DO and ORP values recorded during sampling indicate that Site groundwater is under anoxic conditions. It is not uncommon to see anoxic conditions in highly contaminated portions of petroleum hydrocarbon plumes with aerobic conditions at the perimeter. The greatest DO and ORP concentrations exist at the northern perimeter of the plume, although these values are still considered anoxic. The lowest DO value was recorded at MW-09, which corresponds to the highest benzene and BTEX values. The maximum specific conductivity reading was recorded at MW-13, which corresponds to the highest chloride detection.

LNAPL was observed to be present on the water table at both MW-02 and MW-03, and on May 22 and 23, 2012, LNAPL thickness was measured at 1.80 ft at MW-03 and 0.52 ft at MW-02, respectively (Table 4). LNAPL has periodically been observed at MW-03 since well installation in 2009, but 2012 marks the first time LNAPL has been observed at MW-02. Further discussion regarding the distribution of COCs in soils and groundwater at the area of investigation are presented in the following sections.

## 3.2 Distribution of Contaminants in Soil

### 3.2.1 VOC Soil Screening Results

As summarized in Section 2.1.1, field screening of soil samples for the presence of VOCs was performed during the 2012 soil sampling activities and the results are summarized in Table 1. Figures 4 and 5 depict the distribution of VOCs in shallow (< 10 ft bgs) and deep (> 6 ft bgs) soil for the Site, respectively. For the purposes of overall Site characterization, VOC data collected during the 2009 investigation are included in the evaluation.

As illustrated by Figure 4, the shallow soils most impacted by VOCs (i.e., > 100 ppm) are mainly located in the central east end of the property, which supports the current interpretation that this area of the Site historically hosted product and additive processing and storage operations (see Section 1.2). The highest PID reading in Site shallow soil remains a 2009 PID reading of 3,575 ppm measured at 4.0 ft bgs during the installation of MW-05. Shallow soils collected immediately to the west (MW-06, MW-08, DPB-01, DPB-02) and south (MW-12–MW-14) of the impacted area show a marked decrease in observed VOC concentrations to non-detectable or near non-detectable levels (range: 0.0–1.3 ppm). These results suggest the lateral extent of VOC contamination in Site shallow soils is bounded to the west and south of the property. In addition, the data suggest the transport of VOCs potentially present near the surface offsite by surficial processes (e.g., wind, surface flow) appears not likely a concern as the overall Site topographic gradient, though shallow, decreases to the south. Shallow soils sampled directly to the north of the property line also show a decrease in VOC concentrations indicating that the lateral extent is most likely bounded to the north as well. However, the lateral extent of VOC contamination in shallow soils to the east of the property does not appear defined. Data collected from MW-07 and MW-11 indicate VOCs are still present at elevated concentrations in Site shallow soils, reported at 246 ppm and 107 ppm, respectively. Further east of these locations, however, are the property and structures associated with numerous underground pipelines and the El Paso Natural Gas facility.

As illustrated by Figure 5, Site soils are impacted by VOCs at depth and, based solely on field screening data, the vertical extent of VOC contamination appears not defined. Maximum PID readings of over 1,000 ppm (range: 1,266 ppm at MW-07 to 2,117 ppm at MW-10) were recorded in the soils collected from all 2012 borings as follows:

- North end of the area of investigation (i.e., MW-07 and MW-08) at a depth interval of 14–19 ft bgs.
- South end of the area of investigation (MW-09, MW-10, MW-13, and MW-14) at a depth interval of 19–29 ft bgs.

- Southeast (downgradient) end of the area of investigation (MW-11 and MW-12) at a depth interval of 29–34 ft bgs.

These elevated PID readings closely correlate with the first observance of hydrocarbon contamination observed in the borings as well as a dominant caliche presence. The highest PID reading in deep soil, however, remains the 2009 PID reading of 4,358+ ppm measured at 14 ft bgs at DPB-05, located in the south central portion of the property.

Consequently, a reduction in PID readings appears to be coincident upon encountering the water table. At all 2012 locations, PID readings showed a decreasing trend to lower concentrations after approximately 40 ft bgs (below the observed water table) (Table 1). At MW-10, MW-13, and MW-14, PID readings decreased to near non-detectable levels at 41 ft bgs, 44 ft bgs, and 48 ft bgs, respectively, indicating the vertical extent of VOC contamination is defined along the southern edge of the investigation area. These “clean” intervals appear to correlate closely with the first presence of a clay- or caliche-rich unit below the water table, suggesting that these clay-rich layers (when submerged) might act as partial barriers and preferentially impede further vertical migration of VOCs in soils. Locations MW-09, MW-10, and MW-12 also showed a decreasing trend, but significant levels of VOCs were still measured at TD (20–30 ppm). At MW-07 and MW-08, PID readings were still elevated (~100 ppm) at TD. These data indicate that the vertical extent of VOC contamination remains undefined towards the north, east, and west of the Site. These observations also strongly suggest a close link exists between subsurface VOC contamination in the soils and the water table.

VOCs were also analyzed in Site soils at an offsite laboratory by U.S. EPA Method 8260B, and the analytical results of the 2012 soils (Table 2) indicate that VOC concentrations are much less than anticipated from observed PID field screening results (Table 1). Details regarding the analytical laboratory results for 2012 soils are discussed further below.

### **3.2.2 Laboratory Results**

Previous investigations identified VOCs (particularly BTEX), SVOCs (specifically PAHs), TPH, and chloride as COCs in Site soils that require additional investigation. As a result, a total of eight soil samples were collected from the 2012 borings (one from each location) at depths ranging from 14–34 ft bgs and submitted for the offsite analysis of VOCs; TPH-GRO, TPH-DRO, and TPH-MRO; SVOCs; and chloride (Section 2.1.1). Since the depths at which 2012 soil samples were collected for offsite analysis were determined by field screening results and visual/olfactory indications, no samples were collected at the near surface; therefore, no new analytical data were obtained for shallow soil (<10 ft bgs) characterization. A summary of the 2009–2012 analytical chemistry results for Site soils is provided in Table 2. The spatial



distribution of TPH, benzene, BTEX, and chloride in shallow (< 6 ft bgs) and deep (> 6 ft bgs) soil is presented in Figures 6–9 and 10–13, respectively.

#### **3.2.2.1 Shallow soils**

As presented on Figures 6–9, shallow Site soils collected in 2009 indicate the presence of TPH, benzene, BTEX, and chloride. The highest concentration of TPH in shallow soil (41,000 mg/kg) was measured in a sample collected at 2.5 ft bgs from DPB-40, located in the north central section of the Site. The petroleum hydrocarbons in this sample were all TPH-DRO and TPH-MRO. The highest TPH-GRO concentration was 1,400 mg/kg and was measured in a sample collected at 3.5 ft bgs at DPB-30, located in the south-central portion of the Site. The highest concentration of benzene and BTEX measured was 19 mg/kg and 95 mg/kg, respectively, at 2 ft bgs at DPB-27, located in the south-central portion of the area of investigation. The highest concentration of chloride in shallow soil was 980 mg/kg, reported in a sample collected at 6.0 ft bgs in DPB-07, located on the west end of the Site.

TPH appears to be the primary COC for shallow soils, impacting an on-site area (i.e., within the Site boundary) covering approximately 100,000 square feet (approximately 2.3 acres) and extending offsite into the 2012 area of investigation. Elevated levels (i.e., >500 mg/kg) of TPH were primarily observed in shallow soils collected from the east end of the Site and continued to be observed at elevated levels in samples collected from perimeter locations north and south/southeast of Site property. A pocket of isolated TPH-impacted soils (DPB-07) was also identified in the west-central end of the Site, north of the pit. Confirmation sampling, performed as part of the 2009 RA, also verified that elevated levels of TPH remain in the soils comprising the south and west walls of the excavation (INTERA, 2009). These data indicate that the lateral extent of TPH contamination is not defined towards the north, east, and south of the area of investigation.

The area impacted by benzene and BTEX (Figures 7 and 8) is much smaller than the area impacted by TPH and appears more concentrated to particular process areas. Benzene was detected in a total of seven shallow soil samples collected in 2009, and reported concentrations ranged from 0.22–19 mg/kg. Although smaller areas, the general distribution of shallow soils impacted by benzene appears similar to the areas impacted by TPH and include: (1) areas to the north and south of the former pit, (2) the south end of the inferred central processing area extending south into the 2012 area of investigation (southeast of MW-02), and (3) an isolated pocket on-site, in the west-central area around the concrete basin. BTEX appears to have impacted an even smaller area of the Site, but again, the distribution of elevated BTEX (<50 mg/kg) in shallow Site soils appears to coincide with area(s) also impacted by benzene and TPH. Elevated concentrations of BTEX were reported in two soil samples: the first sample, taken from



the south-central end of the Site at DPB-30, had a BTEX concentration of 66.8 mg/kg, and the second sample, taken from the 2012 area of investigation immediately south of DPB-30, had a BTEX concentration of 95 mg/kg. These data indicate that the lateral extent of benzene and BTEX contamination is not defined downgradient (south/southeast) of the Site.

Elevated concentrations of chloride (>500 mg/kg) were reported in seven shallow soil samples and ranged from 510–980 mg/kg (Figure 9). The distribution of chloride-impacted shallow soil generally coincides with the presence of elevated TPH and includes: (1) an area in the southwest part of the Site, inferred at the eastern AST area; (2) an isolated pocket (DPB-07) in the west-central end of the Site, north of the pit; and (3) an offsite location in the 2012 area of investigation, southeast of MW-02. These data indicate that the lateral extent of chloride contamination is not defined downgradient (south/southeast) of the Site.

#### **3.2.2.2 Deep Soils**

As presented on Figures 10, 12, and 13, the 2012 analytical results support the 2009 findings that deeper soils (> 6 ft bgs) in the area of investigation are also impacted by TPH, BTEX, and chloride. Benzene, however, was not detected in subsurface soils above the RL during the 2012 investigation (Figure 11).

Analytical results obtained from the soil samples collected at MW-07–MW-14 indicate that TPH is present at depths correlating to high PID readings, with reported TPH concentrations ranging from 143 mg/kg at MW-08 to 2,900 mg/kg at MW-07 (Figure 10). TPH detected at MW-08 consisted mainly of TPH-GRO components, whereas the TPH detected at MW-07, MW-11, MW-12, and MW-14 consisted mainly of TPH-DRO and TPH-MRO components. MW-08 is located immediately west (upgradient) of the Site (inferred west AST area), whereas the other locations are downgradient (south and west) of the Site (inferred east AST area). TPH detected at MW-09, MW-10, and MW-13, located south of the west end of the Site (inferred west AST area) were a mixture of GRO and DRO/MRO.

Since the 2012 soil samples were selected for laboratory analysis based on PID readings and other field observations, all eight samples were collected at similar depth intervals and most likely reflect the same zone of contamination. The presence of elevated TPH in this zone (>10 ft bgs) is consistent with the limited data collected from the same zone during the 2009 RI (e.g., DPB-02, -03, -05, -09, and -16). Only a single soil sample was collected from each location during the 2012 investigation so conclusions concerning the extent of TPH contamination are equivocal; however, given the volatile nature of the contamination in this zone, TPH concentrations likely mirror VOC concentrations as determined by heated headspace analysis techniques. A review of the 2009 subsurface soil data indicates that, below the impacted zone, TPH concentrations in soil

appear to markedly decrease (Figure 10). Reported TPH concentrations at 40 ft bgs at MW-02 and 42 ft bgs at MW-03 are 7.2 mg/kg and 86.5 mg/kg, respectively. At similar depths in MW-01, MW-04, MW-05, and MW-06 (41.0 ft bgs, 43.5 ft bgs, 41 ft bgs, and 43.0 ft bgs respectively), TPH concentrations were reported as below the RL of 50 mg/kg. These data suggest that the vertical extent of TPH contamination is defined; however, how far the TPH contamination zone extends laterally away from the area of investigation remains undefined.

Benzene was not detected above RLs in any of the 2012 soil samples collected; however, benzene was detected in nine 2009 soil samples (Figure 11). Reported benzene concentrations in the 2009 samples ranged from 0.2 mg/kg at 35 ft bgs to 56 mg/kg at 10 ft bgs, both collected from MW-02. For the 2009 locations where multiple depths were sampled (MW-01–MW-06), benzene was not reported above the RLs at depth, suggesting that the vertical extent of benzene contamination is defined. In addition, 2012 data reported in samples collected at similar depths to 2009 samples (i.e., 20–35 ft bgs) indicate a decreasing trend of benzene concentrations laterally downgradient. For example, the 2009 reported benzene concentration of 15 mg/kg in a soil sample collected at 20 ft bgs at MW-02 shows a decrease downgradient at MW-14, where the 2012 soil sample collected at 19–23 ft bgs reported benzene concentrations below the RL. However, additional data are required to adequately determine the lateral extent of benzene in the impacted zone.

Although benzene (and toluene) was not detected in the 2012 soil samples, the presence of BTEX was reported in 6 of the 8 samples collected due to the presence of xylenes and ethylbenzene above RLs (Table 2). Detected 2012 BTEX concentrations ranged from 0.56 mg/kg at MW-11 (29–34 ft bgs) to 35 mg/kg at MW-10 (24–29 ft bgs) (Figure 12). These 2012 reported concentrations for BTEX are less than the BTEX concentrations observed at similar depths during the 2009 RI, which reported elevated BTEX concentrations (>50 mg/kg) at MW-02 and MW-03 of 249 mg/kg at 20 ft bgs and 56 mg/kg at 35 ft bgs, respectively. These data may indicate a decreasing trend laterally of BTEX in the zone of contamination; however, a definitive assessment of the lateral extent of BTEX in the impacted zone cannot be performed due to a limited dataset. A review of the 2009 subsurface soil data indicates that, below the impacted zone, BTEX was not detected above RLs (MW-01–MW-06). These data suggest that the vertical extent of BTEX contamination in soil is defined.

Analytical results obtained from the 2102 soil samples collected at MW-07–MW-14, indicate chloride is also present in the deep soils and at depth (TD of 50 ft bgs). The presence of chloride was reported in six of eight soil samples with detected concentrations ranging from 31 mg/kg at MW-07 to 570 mg/kg at MW-08 (Figure 13); chloride was not detected in samples collected from MW-10 and MW-14. These 2012 reported concentrations are in the range of chloride

concentrations reported in the 2009 samples, suggesting that the lateral extent of contamination remains undefined. In addition, a review of the 2009 subsurface soil data indicates that chloride concentrations generally increase with depth at all locations (MW-01–MW-06), with the greatest chloride concentrations reported in samples collected at or near TD. These data suggest that the vertical extent of chloride contamination remains undefined.

### **3.3 Distribution of Contaminants in Groundwater**

Previous investigations identified VOCs (particularly benzene), SVOCs, and chloride as COCs in Site groundwater requiring additional investigation. As a result, a total of twelve samples were collected from Site monitoring wells MW-01 and MW-04–MW-14 and submitted for the offsite analysis of VOCs, EDB, dissolved chloride, and TDS (Section 2.3). Groundwater was not sampled at MW-02 and MW-03 due to the presence of LNAPL (see section below). A summary of the 2009–2012 analytical chemistry results for groundwater encountered at the area of investigation is provided in Table 5. The spatial distribution of contaminants in groundwater is presented on Figure 14.

Analytical results indicate that concentrations of benzene and chloride in excess of NMWQCC standards (10 µg/L and 250 mg/L, respectively) are present in the groundwater across the Site. EDC was also detected at concentrations exceeding the NMWQCC standard of 10 µg/L in two of the groundwater samples (34 µg/L at MW-11 and 55 µg/L at MW-12). EDB was not detected above the RL in any of the 2012 samples.

Detected benzene concentrations in groundwater (above the RL) ranged from 1.4 µg/L at MW-04, the most upgradient well, to 2,900 µg/L at MW-14, the farthest downgradient well, and averaged 867 µg/L. Overall, the 2012 reported benzene concentrations appear to increase downgradient (northwest to southeast), and benzene is present in the most downgradient wells MW-12 and MW-14 at concentrations an order of magnitude greater than in the wells MW-11 and MW-10, located immediately upgradient (1,900–2,900 µg/L versus 40–65 µg/L). Benzene concentrations are markedly less in perimeter wells MW-07 and MW-08, located on the northeast and northwest ends of the property, respectively; however, elevated concentrations of benzene are still observed at MW-06 and MW-09, perimeter wells located along the southwestern end of the property. These observations indicate that the extent of benzene contamination in groundwater appears relatively bounded to the north, northeast, and northwest, but remains largely undefined to the southwest and downgradient (southeast) of the area of investigation.

The ratio of benzene concentrations to BTEX concentrations was high in all the 2012 groundwater samples, ranging from 45% at MW-01 to 100% at MW-04, MW-06, and MW-13, and averaged 73% (Figure 14 and Table 5). High benzene: BTEX concentrations at the source

typically indicate a gas condensate contaminant source; however, the presence of EDC, a lead scavenger additive, suggests a motor fuel or avgas type release. It should be noted that no EDB was detected at concentrations above the laboratory RL of 0.010 ug/L.

Chloride contamination in the groundwater appears pervasive. Reported chloride concentrations in Site groundwater ranged from 1,700 mg/L at MW-07 to 8,600 mg/L at MW-13 and averaged 5,100 mg/L. Based on these observations, the extent of chloride contamination remains undefined.

### **3.4 Distribution of LNAPL**

During the 2012 investigation, LNAPL was observed on the water table at wells MW-02 and MW-03 at a thickness of 0.52 ft and 1.8 ft, respectively. Since installation in 2009, LNAPL has been observed at MW-03 during four out of five sampling events, and ranged in measurable thickness from 0.33 ft (January 2011) to 1.80 ft (May 2012) (Table 4). The 2012 investigation is the first time LNAPL has been observed at MW-02.

LNAPL has also been observed at other monitoring wells located in the near vicinity of the Site, specifically, at Rice monitoring well MW-2, located immediately downgradient of MW-03 and MW-02 (Jim Griswold Personal Communication, June 2012). In addition, LNAPL remediation is reportedly ongoing at the Versado Plant, located immediately north of the Site. These data suggest that LNAPL contamination is prevalent in the area and that an LNAPL plume(s) appears to be present beneath the southeastern edge of the Site and extends offsite (downgradient) towards the southeast (in the direction of groundwater flow).

As discussed above, elevated benzene concentrations in groundwater are most prominent in the most downgradient wells, MW-12 and MW-14, and secondly, in wells MW-06 and MW-09. Based on the current groundwater flow direction and gradient calculated for the area of investigation (Figure 3), wells MW-12 and MW-14 are directly downgradient of MW-02, MW-03, and Rice well MW-2. It is probable that these elevated benzene concentrations reflect the fringe effects of LNAPL plume migration offsite to the southeast; therefore, it is anticipated that these wells will show evidence of product over time.

Elevated benzene concentrations in groundwater samples collected at MW-06, combined with the evidence of a highly contaminated area observed in shallow soil immediately north of the pit (e.g., DPB-07), might also indicate another LNAPL release occurred towards the north/west end of the Site. Therefore, a second LNAPL plume may be present beneath the southwest section of the Site and extend offsite (downgradient) towards the southeast (in the direction of groundwater flow and MW-14). Regardless of what the exact geometry(ies) of the LNAPL plume(s) is, the

presence of LNAPL in the area of investigation is definitive, and elevated benzene concentrations reported at MW-09 likely reflect fringe effects, bounding the extent of the LNAPL plume to the southwest.

### **3.5 LNAPL Baildown/Recovery Test Analysis**

Calculations associated with the analysis of the LNAPL baildown/recovery test are provided in Appendix H. As indicated in Appendix H, LNAPL recovered to 60% of its original thickness within the first nine hours of the test and recovered to 100% of its original thickness during the approximately 80-hour baildown/recovery test (see Table H-1 and Figure H-2 in Appendix H). As illustrated, the LNAPL recovery rate is at its greatest during the first 30 minutes following the removal of the LNAPL (see Figure H-3). It is important to note that MW-03 has not been developed due to the presence of LNAPL, which may impact the baildown/recovery test results.

Two baildown test analyses were completed with the Site data collected. The first analysis utilized baildown test results to determine LNAPL recovery rates for potential future LNAPL recovery activities. The method used to determine the LNAPL recovery rate is described in the EPA document “How to Effectively Recover Free Product at Leaking Underground Storage Tank Sites” (EPA, 1996). The method first calculates the 80% recovery LNAPL thickness. The next step extrapolates the time it would take to recover to 80% using Site baildown test data. Using this time and the volume of LNAPL per foot of well screen, the average LNAPL recovery rate to 80% recovery can be calculated. The calculation is provided in Appendix H.

Using the Site data, 80% recovery is equivalent to an LNAPL thickness of 1.46 ft. Looking at Site data in Table H-1, the time it would take to return to 80% LNAPL recovery was interpolated to be 1,335 minutes. Using this information, the average LNAPL recovery rate to 80% recovery is 1.02 gallons/day.

The second analysis utilized baildown test results to calculate an LNAPL transmissivity. The baildown test data was analyzed with the Bouwer-Rice method (1976) for an unconfined aquifer using the commercial software package AQTESOLV<sup>®</sup> (HydroSOLVE, 2009) to estimate *K* values. The Bouwer-Rice method is applicable to LNAPL baildown tests if a correction factor is applied to determine the transmissivity of the LNAPL system. An analytical solution was fitted to data that represented most of the observed head change while avoiding early time changes attributed to the sand pack and late time changes that spanned small head changes. An LNAPL correction factor was applied to the estimated *K* value to account for the specific gravity of the LNAPL (Huntley, 2000; ASTM, 2011). A correction factor of 4.55 was calculated using an average density of gasoline and diesel fuel (Charbeneau et al., 1999).



---

Using Site data and applying the LNAPL correction factor, the Site LNAPL hydraulic conductivity and transmissivity is equal 0.38 ft/day ( $1.3 \times 10^{-4}$  cm/sec) to 0.70 ft<sup>2</sup>/day ( $7.4 \times 10^{-3}$  cm<sup>2</sup>/sec), respectively. The AQTESOLV report and associated calculations are provided in Appendix H.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

The 2012 investigation of the hydrocarbon release at the Enersource Facility has provided the following insights into the nature, extent, and magnitude of contamination:

- The contaminants of concern in soil and groundwater include BTEX, EDC, TPH (GRO, DRO, and MRO), naphthalene (including 1- and 2-methylnaphthalene), and chloride.
- Contamination of soil in the interval between 0 and 10 ft bgs extends to the south of the Site to adjacent properties (Figures 4, 6, 7, 8 and 9). The contamination appears to emanate from the former pit and/or former pipelines located in the west and southwest portion of the Site; an area located in the vicinity of MW-02 in the south central portion of the Site; and the areas in the eastern portion of the Site that contained numerous ASTs, and an area believed to be used for product loading. Soil screening results from shallow soils indicate that the contamination is partially defined to the south; however the following uncertainties exist:
  - Extent of contamination in the north central area of Site, including areas offsite
  - Extent of contamination southwest of the pit
  - Extent of contamination between the southern edge of pit and MW-09
  - Extent of contamination between DPB-27 and MW-14
  - Extent of contamination to the east and southeast

Once a regulatory standard is promulgated, actionable soil contamination may be evaluated.

- Contamination of soil below 6 ft bgs coincides with the extent of groundwater contamination and appears to be more pervasive in the central and eastern areas of the Site, where the caliche is less developed; however, more evaluation of this possible correlation is needed.
- Groundwater elevations have dropped between 3 to over 4 feet in monitoring wells MW-1–MW-6 since January 2011.
- Mobile LNAPL is present in the southeastern portion of the Site (Figure 14). The limits of the LNAPL plume are uncertain to the east. Although the western and southern limits of the LNAPL plume are drawn with some degree of certainty, given the long period of time that occurred before LNAPL appeared in MW-02 and the high dissolved-phase concentrations of benzene that exist to the south and west, these limits may change with time as more data are collected from nearby monitoring wells.



- The nature of the LNAPL needs to be determined and the potential for a source located east of the Enersource Facility investigated.
- The extent of groundwater contamination appears to be, for the most part, defined to the north, northwest, and northeast, and possibly to the southwest. It is not defined in other directions. The existence of benzene at concentrations  $> 1,000 \mu\text{g/L}$  in MW-09, 12, and 14 suggests that LNAPL is present nearby. The limits of EDC, a highly mobile chemical, are undefined to the southeast, and the highest concentration of EDC measured to date is in the farthest downgradient well.
- The analysis of the baildown/recovery test using the EPA method indicated that the average recovery rate to 80% recovery is 1.02 gallons/day. This recovery rate suggests that LNAPL recovery by skimming is not a viable remediation option. The analysis of the baildown/recovery test using the Bouwer-Rice method results in an LNAPL transmissivity of  $0.70 \text{ ft}^2/\text{day}$ . LNAPL transmissivities are a good performance metric. It is reported that if LNAPL transmissivities are below  $0.8 \text{ ft}^2/\text{day}$ , then a pneumatic or hydraulic LNAPL recovery system is no longer an effective remediation technology (ITRC, 2009).

Based on these results, INTERA recommends the following:

- Develop cross sections illustrating the relationship between stratigraphy and the extent of soil contamination.
- Continue groundwater monitoring.
- Install additional wells east, south, and southeast of the current monitoring well network.
- Evaluate the efficacy of a vacuum enhanced LNAPL recovery system and/or SVE system to remove LNAPL at the Site and adjoining properties.



## 5.0 REFERENCES

- ASTM, 2011. Standard Guide for Estimation of LNAPL Transmissivity. E2856-11.
- Bouwer, H. and R.C. Rice, 1976, A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells, *Water Resources Research*, 12 (1976):423-28.
- Charbeneau, R.J., R.T. Johns, L.W. Lake, and M.J. McAdams, III. 1999. Free-Product Recovery of Petroleum Hydrocarbon Liquids. API Publication No. 4682.
- Griswold, J. 2012. Personal Communication. June.
- Huntley, David. 2000. Analytic Determination of Hydrocarbon Transmissivity from Baildown Tests. *Ground Water*, vo. 38, No.1, pp. 46-52.
- HydroSOLVE, 2009, AQTESOLVE for Windows Professional, version 4.50: Reston, Virginia, HydroSOLVE Inc.
- INTERA, 2007. "Phase I and II Remediation, Former Enersource Facility, Monument, Lea County, New Mexico." Prepared for New Mexico Energy, Minerals and Natural Resources Department, New Mexico Oil Conservation Division. June 29, 2007.
- . 2009. "Remedial Investigation and Removal Action Report, Former Enersource Facility, Monument, Lea County, New Mexico." Prepared for New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division. December 4, 2009.
- . 2011. January 2011 Groundwater Monitoring Report, Former Enersource Facility, Monument, Lea County, New Mexico. Prepared for New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division. March 9, 2011.
- . 2012. "Work Plan and Cost Estimate for Additional Site Investigation, Former Enersource Facility, Monument, Lea County, New Mexico." Submitted to State of New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation Division. February 24, 2012.
- ITRC, 2009. Evaluating LNAPL Remedial Technologies for Achieving Project Goals. December.
- Leedshill-Herkenhoff, Inc., John Shomaker & Associates, Inc. and Montgomery & Andrews, P.A., 2000. "Lea County Regional Water Plan." Prepared for the Lea County Water Users Association. December 7.



---

New Mexico Office of the State Engineer (OSE), 2012. WATERS Database, New Mexico Water Rights Reporting System, <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html> (accessed June 28, 2012).

New Mexico Office of the State Engineer/Interstate Stream Commission (OSE/ISC), 2011. ose\_pod, Geospatial\_Data\_Presentation\_Form: vector digital data. July 7. Online\_Linkage: [\\WRXP0700\C\\$\Projects\\_CN\WATERS\\_queries\2011\\_June\GIS\\_layers\ose\\_pod\\_current.mdb](\\WRXP0700\C$\Projects_CN\WATERS_queries\2011_June\GIS_layers\ose_pod_current.mdb).

Rice Environmental Consulting & Safety (RECS), 2011. ICP Report, Rice Operating Company – EME SWD System, EME C-1 EOL (1R427-320): UL/C sec. 1 T20S R36E. Report submitted to Mr. Edward Hansen, New Mexico Energy, Minerals & Natural Resources Division, Oil Conservation Division, Environmental Bureau. February 18.

U.S. Environmental Protection Agency (EPA), 1996. How to Effectively Recover Free Product at Leaking Underground Storage Tank Sites: A Guide for State Regulators. September.

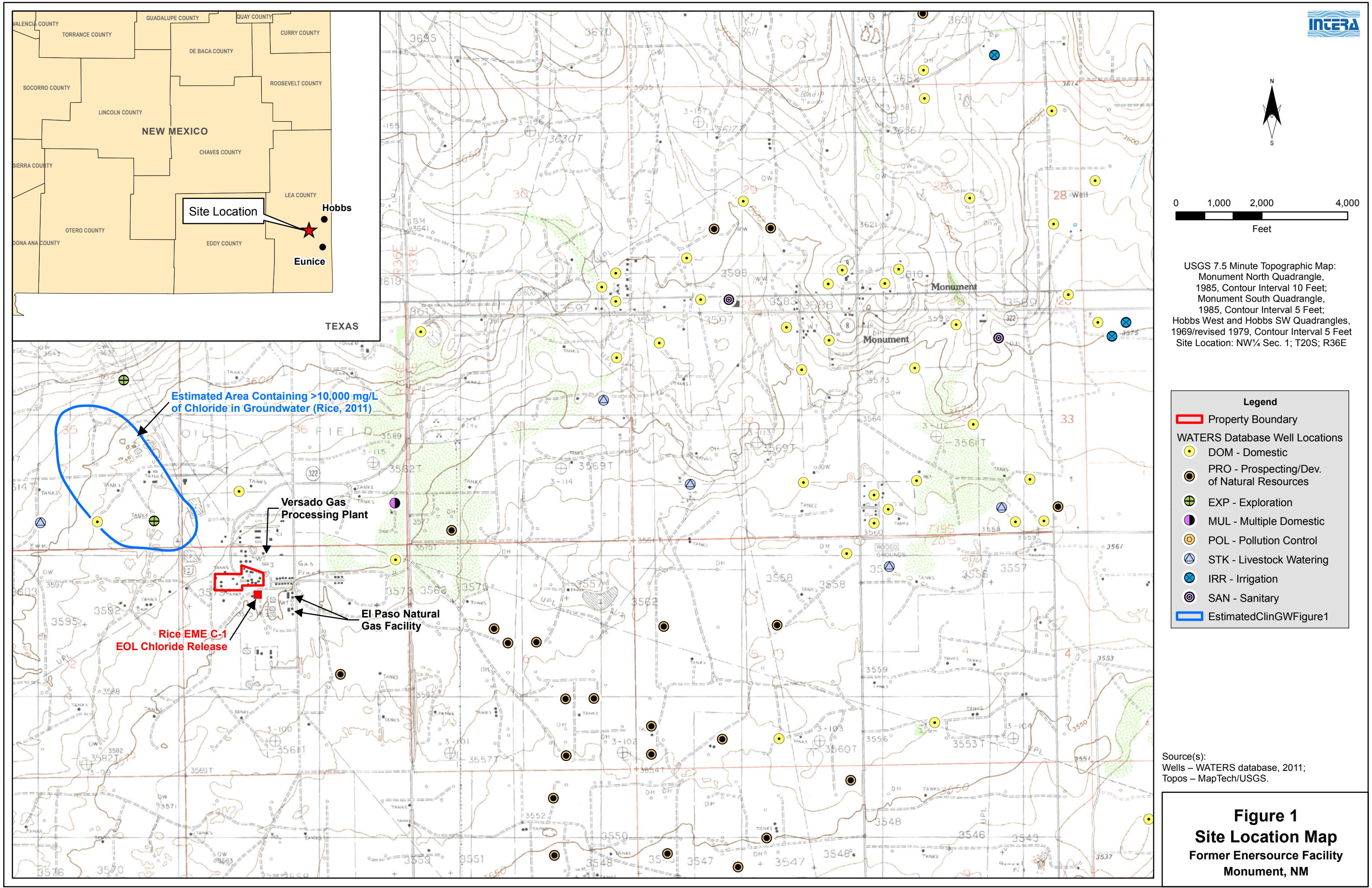
U.S. Geological Survey (USGS), 1985a. Monument North Quadrangle, New Mexico—Lea Co. [Map]. 1:24,000. 7.5-Minute Series. Washington, D.C.: USGS, 1985.

———. 1985b. Monument South Quadrangle, New Mexico—Lea Co. [Map]. 1:24,000. 7.5-Minute Series. Washington, D.C.: USGS, 1985.

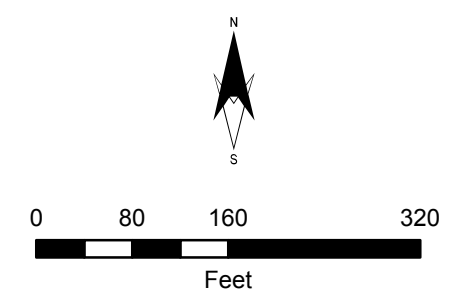
Wrangham, Cal, 2006. Personal communication. Targa Resources (current operator of the Versado Plant).

## FIGURES









**Legend**

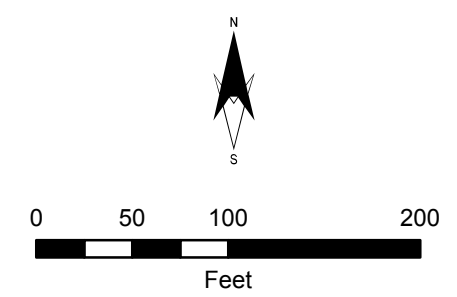
- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- Monitoring Well Installed by Others
- 2009 Soil Boring Location
- Barbed Wire Fence
- Property Boundary
- Excavation Area
- Investigation and Process Area

Notes:  
 \* = Estimated locations based on field reconnaissance.

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

**Figure 2a**  
**Site Plan**  
 Former Enersource Facility  
 Monument, NM





**Legend**

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- Monitoring Well Installed by Others
- Confirmation Sample Location
- 2009 Soil Boring Location
- Barbed Wire Fence
- Property Boundary
- Excavation Area
- Investigation and Process Area

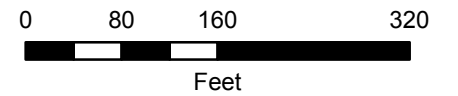
Notes:  
 \* = Estimated locations based on field reconnaissance.

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

**Figure 2b**  
**2009 Soil Boring and Confirmation Sample Locations**  
 Former Enersource Facility Monument, NM







### Legend

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- Monitoring Well Installed by Others
- Estimated Groundwater Flow Direction, May 2012
- Groundwater Elevation Contour (ft, amsl)
- Property Boundary

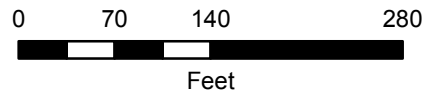
Notes:  
 \* = Estimated locations based on field reconnaissance.  
 a = Groundwater elevation corrected for presence of LNAPL.  
 b = Measured on 5/23/2012.  
 c = Measured on 5/26/2012.  
 d = Measured on 5/28/2012.

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

**Figure 3**  
**Groundwater Elevations**  
**May 22, 2012**  
**Former Enersource Facility**  
**Monument, NM**







### Legend

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area
- Estimated Areal Extent of VOC Contamination in Shallow Soil
- (Dashed where Inferred)

Collected May 2012

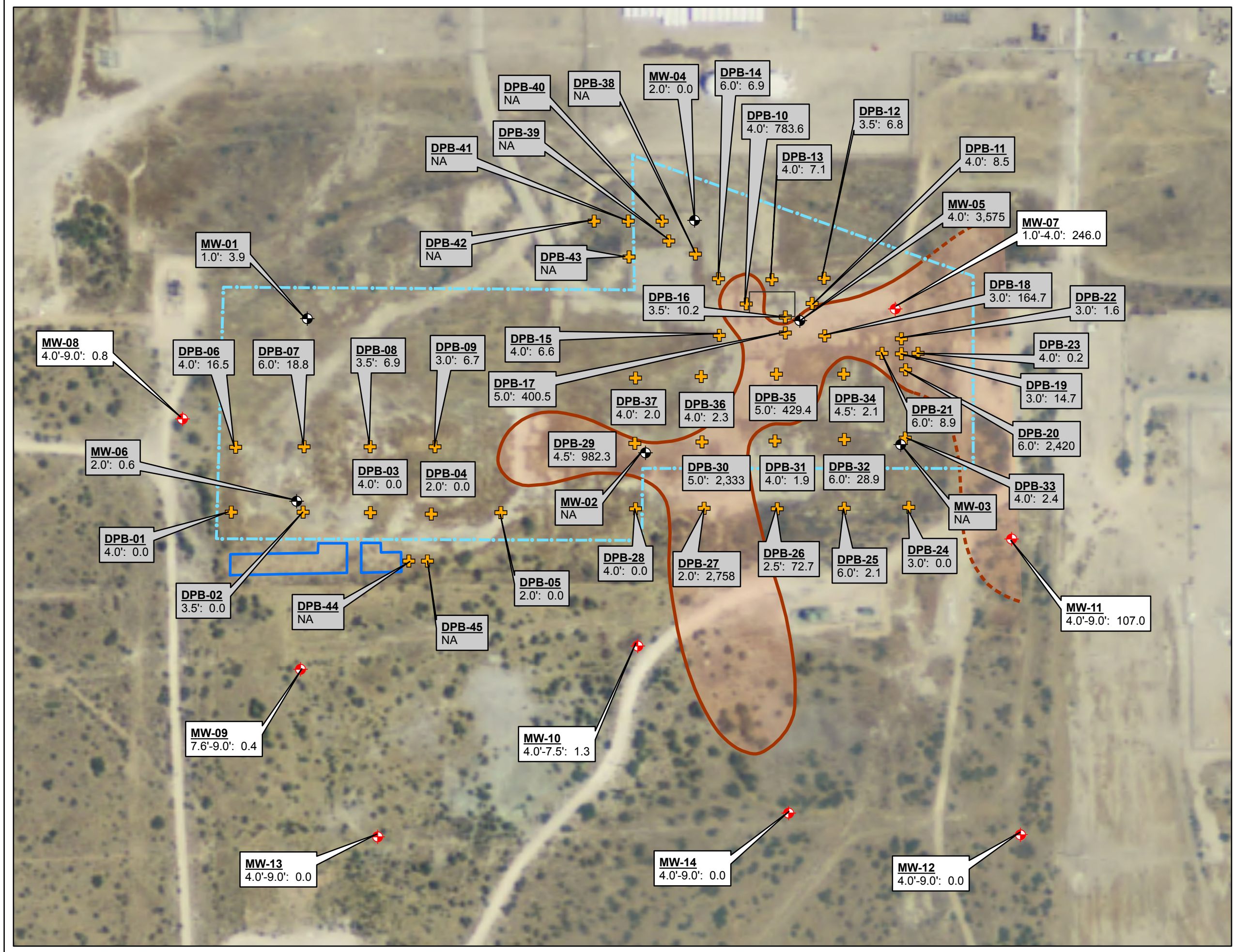
**Sample Location**  
Depth, feet bgs: Result

Collected June 2009

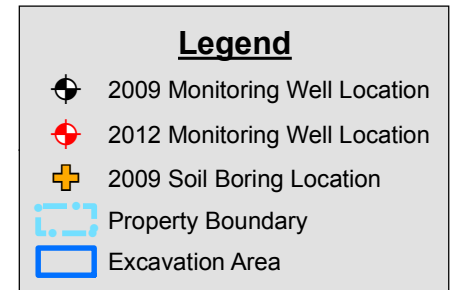
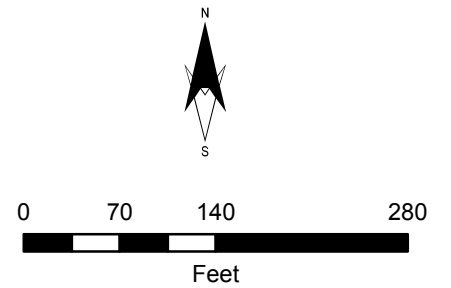
**Sample Location**  
Depth, feet bgs: Result

Note(s):  
 1. Results are in ppmv as measured by FID/PID  
 2. NA = FID Not Available for screening  
 Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West  
 Surveying Co., Hobbs, NM.

**Figure 4**  
**Maximum VOC**  
**Concentrations in Shallow**  
**Soil by**  
**Heated-Headspace Method**  
**Former Enersource Facility**  
**Monument, NM**







Collected May 2012

**Sample Location**  
Depth, feet bgs: Result

Collected June 2009

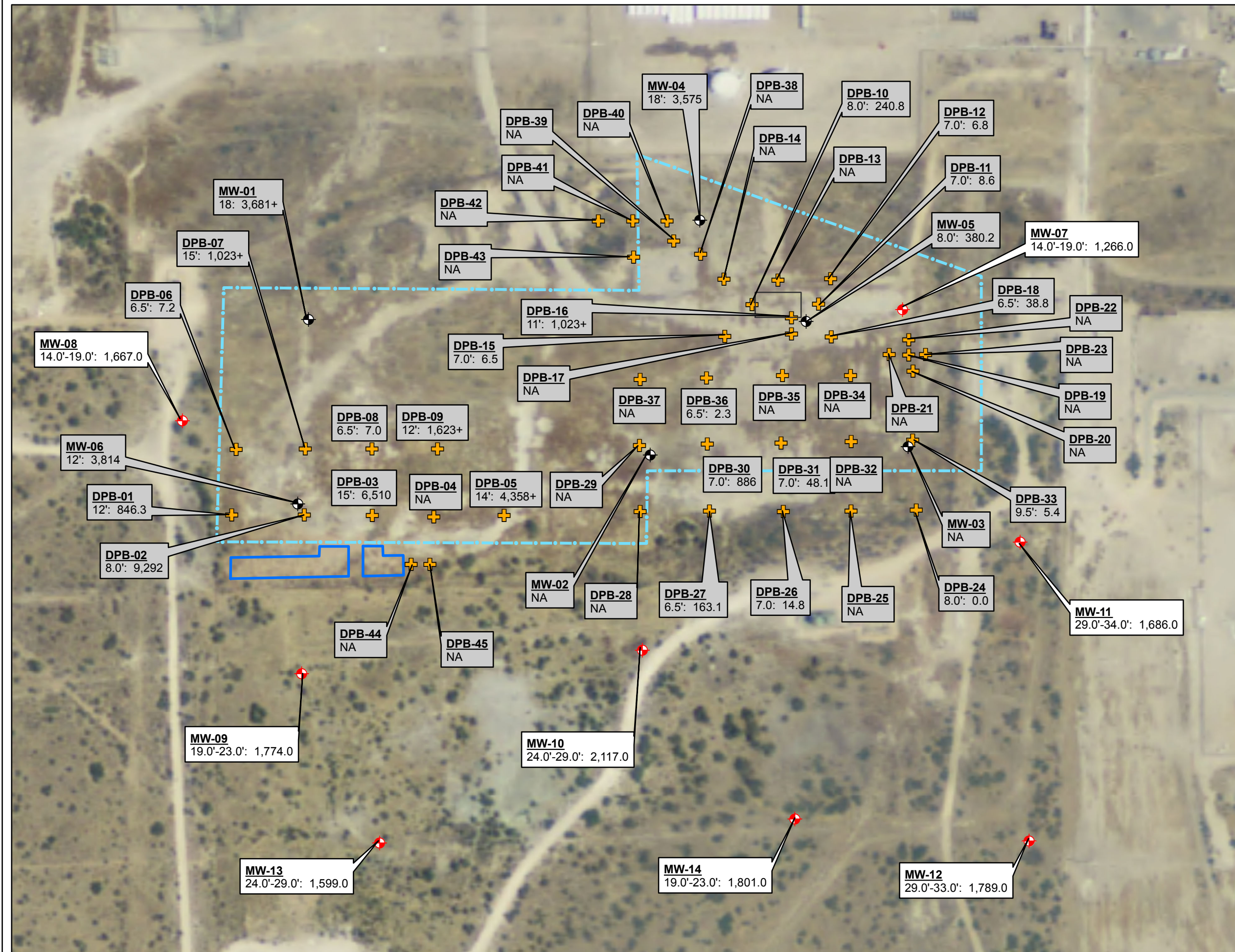
**Sample Location**  
Depth, feet bgs: Result

Note(s):

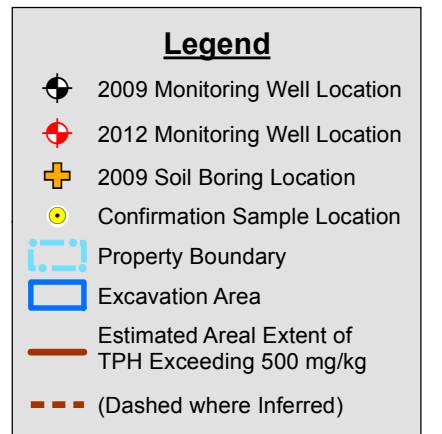
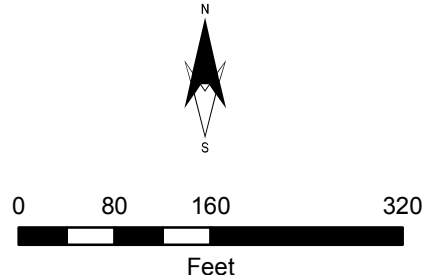
1. Results are in ppmv as measured by FID/PID
2. NA = FID Not Available for screening or boring terminated above 6 feet

Source(s): 2011 aerial photo – EDAC;  
Property boundary/monitoring wells – John West  
Surveying Co., Hobbs, NM.

**Figure 5**  
**Maximum VOC**  
**Concentrations in**  
**Subsurface Soil**  
**(>6 ft bgs) by**  
**Heated-Headspace Method**  
**Former Enersource Facility**  
**Monument, NM**







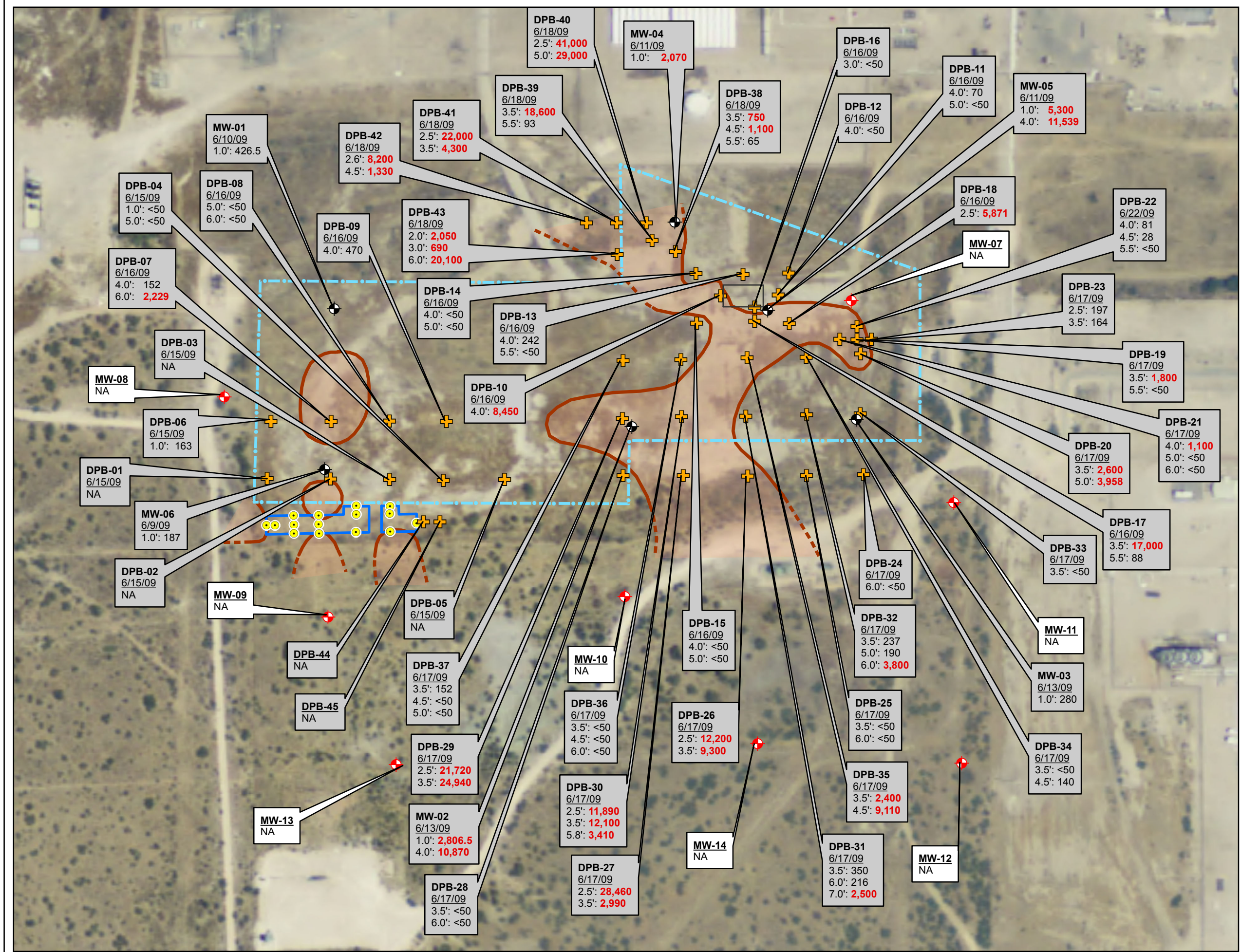
Collected May 2012  
**Sample Location**  
 Depth, feet bgs: Result

Collected June 2009  
**Sample Location**  
 Depth, feet bgs: Result

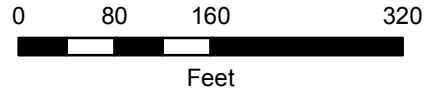
- Notes:
1. Results are in mg/Kg
  2. **Red** indicates TPH concentration above 500 mg/kg
  3. NA = Not Applicable

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West  
 Surveying Co., Hobbs, NM.

**Figure 6**  
**Distribution of TPH in**  
**Shallow Soil (0 to 6 ft bgs)**  
**Former Enersource Facility**  
**Monument, NM**







**Legend**

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area
- Estimated Areal Extent of Detected Benzene
- (Dashed where Inferred)

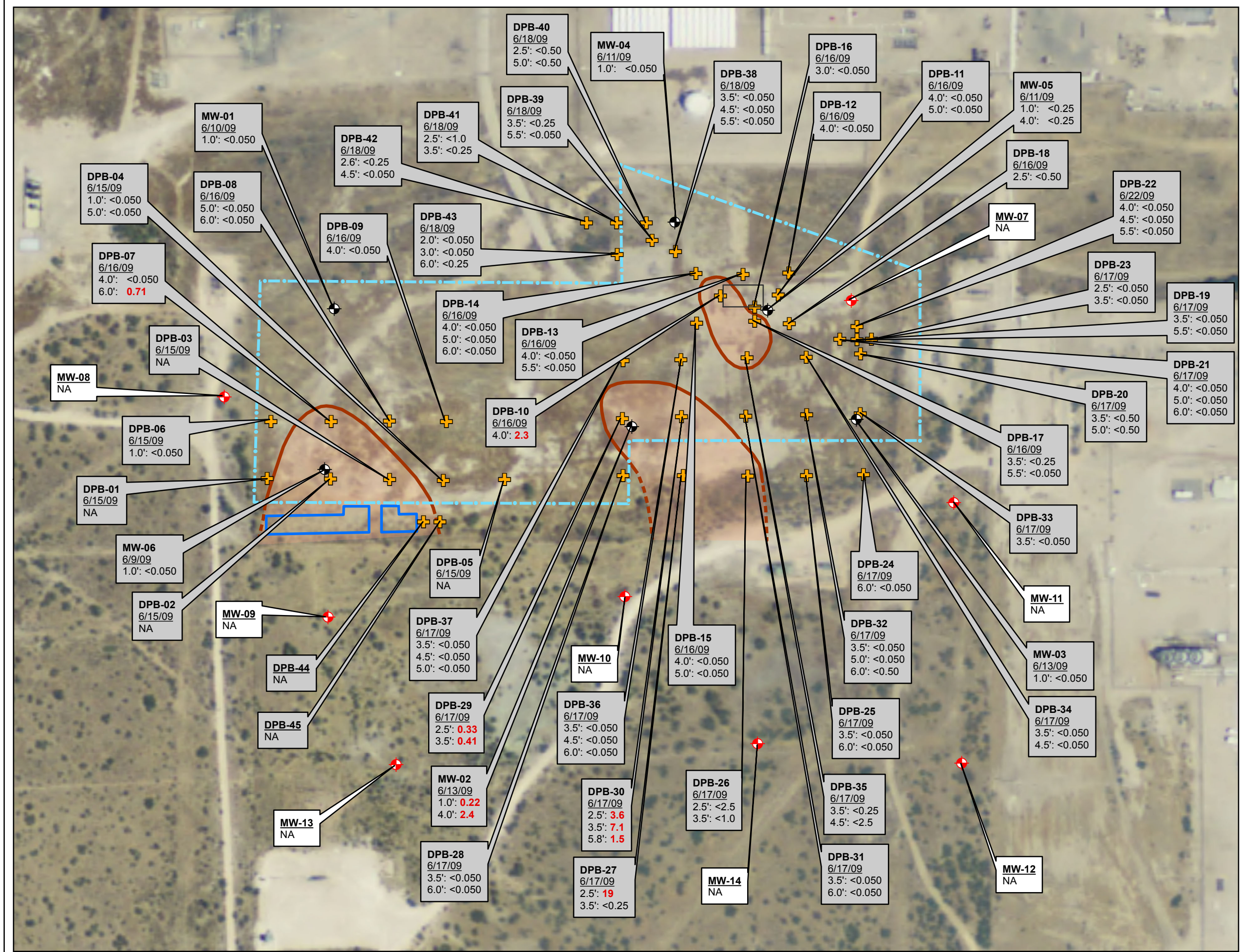
Collected May 2012  
**Sample Location**  
 Depth, feet bgs: Result

Collected June 2009  
**Sample Location**  
 Depth, feet bgs: Result

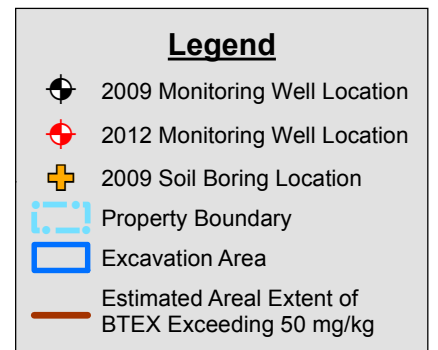
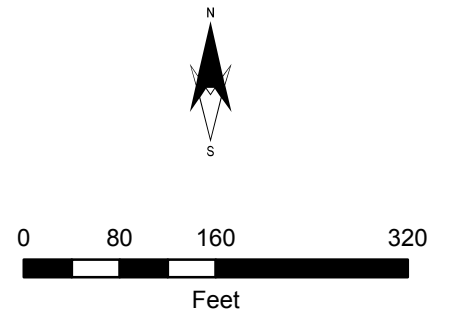
- Notes:
1. Results are in mg/Kg
  2. **Bold** indicates Benzene concentration above reporting limit
  3. NA = Not Applicable

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West  
 Surveying Co., Hobbs, NM.

**Figure 7**  
**Distribution of Benzene**  
**in Shallow Soil**  
**(0 to 6 ft bgs)**  
**Former Enersource Facility**  
**Monument, NM**







Collected May 2012

**Sample Location**  
Depth, feet bgs: Result

Collected June 2009

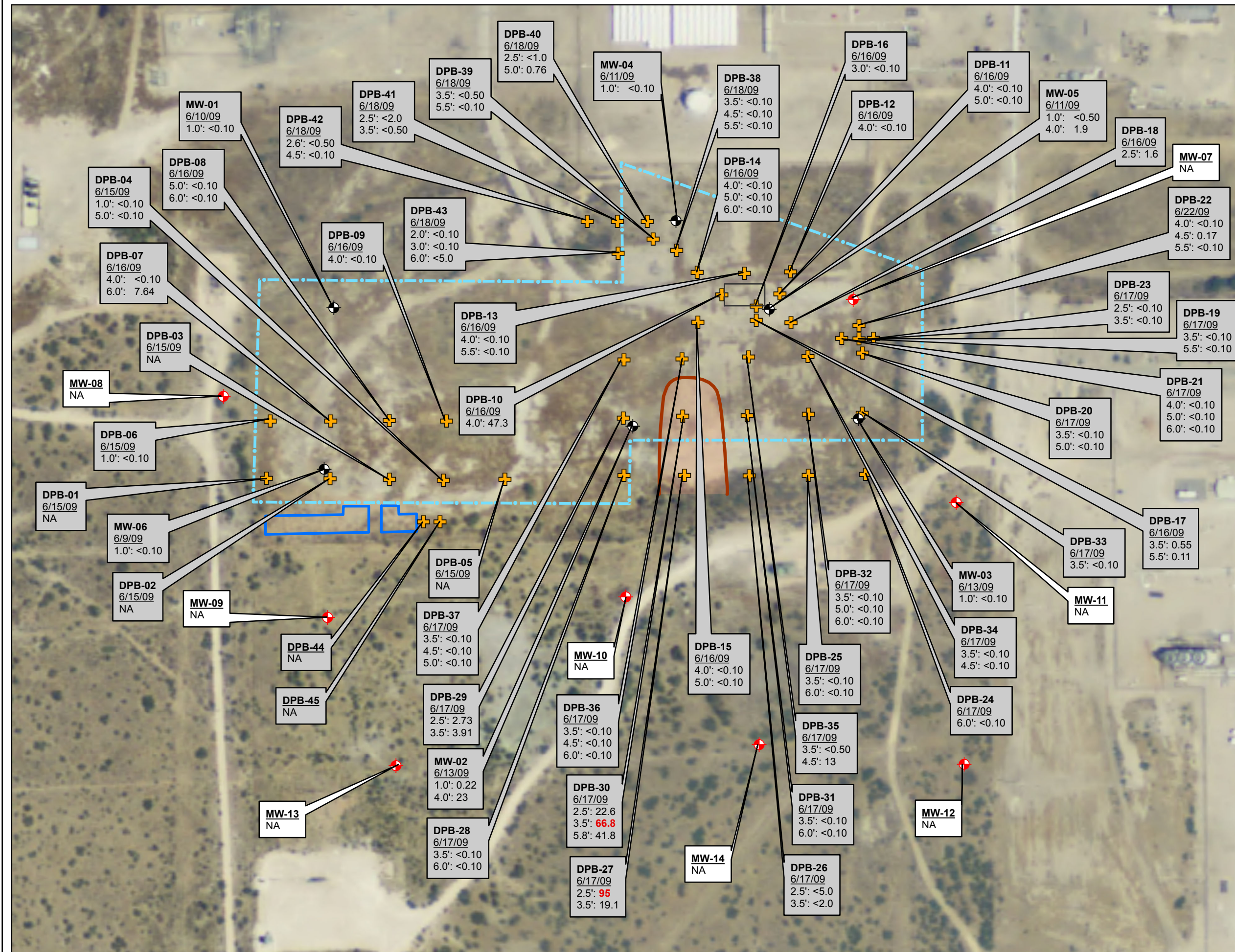
**Sample Location**  
Depth, feet bgs: Result

Notes:

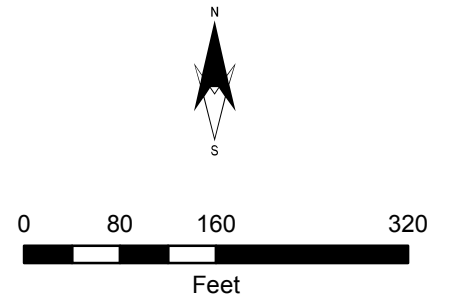
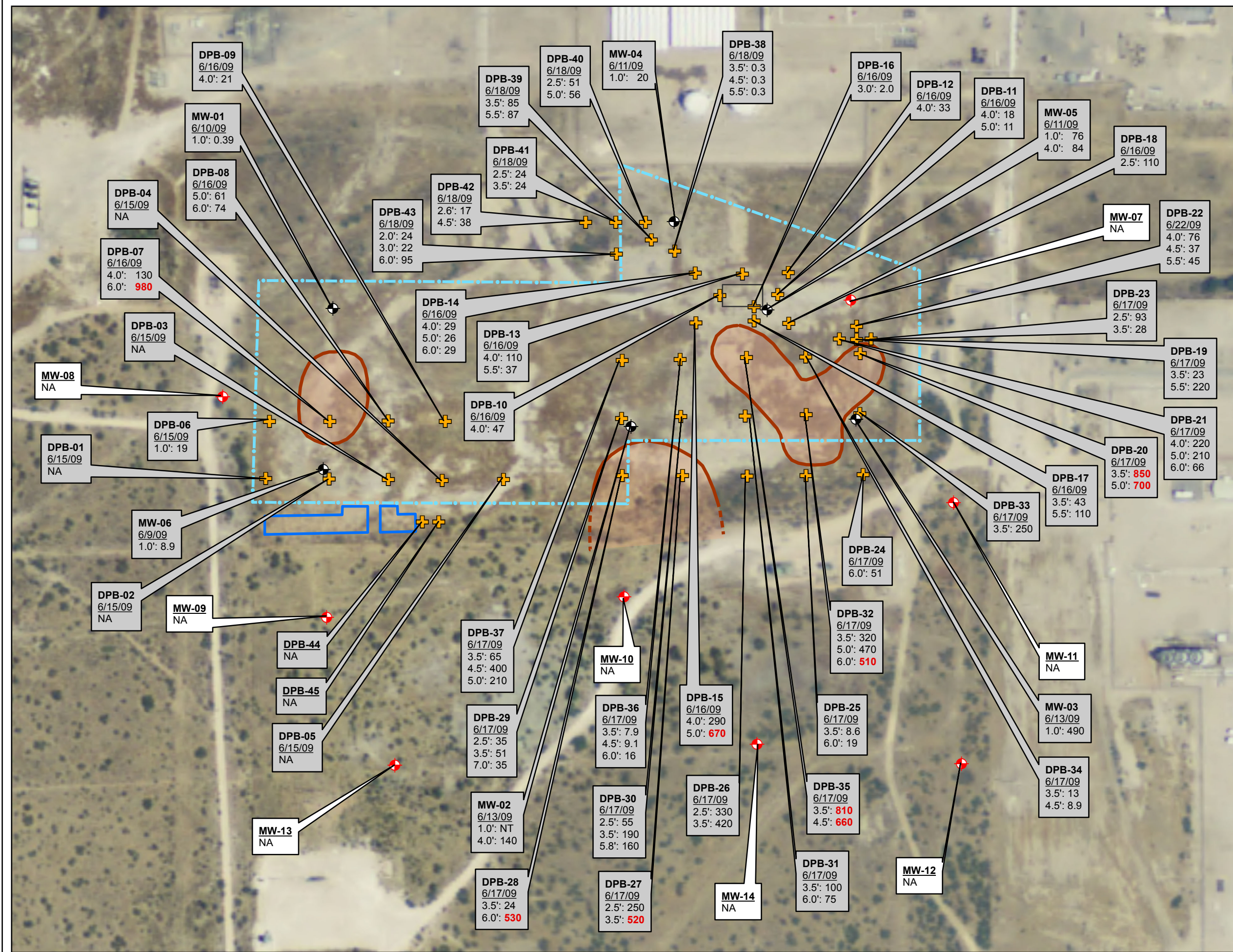
- Results are in mg/Kg
- Bold** indicates BTEX concentration above 50 mg/kg
- NA = Not Applicable
- Σ BTEX = Sum of Benzene, Toulene, Ethyl benzene, and total Xylenes concentrations

Source(s): 2011 aerial photo – EDAC;  
Property boundary/monitoring wells – John West  
Surveying Co., Hobbs, NM.

**Figure 8**  
**Distribution of BTEX in**  
**Shallow Soil (0 to 6 ft bgs)**  
**Former Enersource Facility**  
**Monument, NM**







**Legend**

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area
- Estimated Areal Extent of Chloride Exceeding 500 mg/kg
- (Dashed where Inferred)

Collected May 2012

**Sample Location**  
Depth, feet bgs: Result

Collected June 2009

**Sample Location**  
Depth, feet bgs: Result

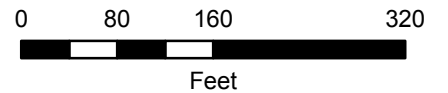
Notes:

- Results are in mg/Kg
- Bold** indicates Chloride concentration above 500 mg/kg
- NA = Not Applicable

Source(s): 2011 aerial photo – EDAC;  
Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

**Figure 9**  
**Distribution of Chloride in Shallow Soil (0 to 6 ft bgs)**  
**Former Enersource Facility Monument, NM**





### Legend

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area

Collected May 2012

**Sample Location**  
Depth, feet bgs: Result

Collected June 2009

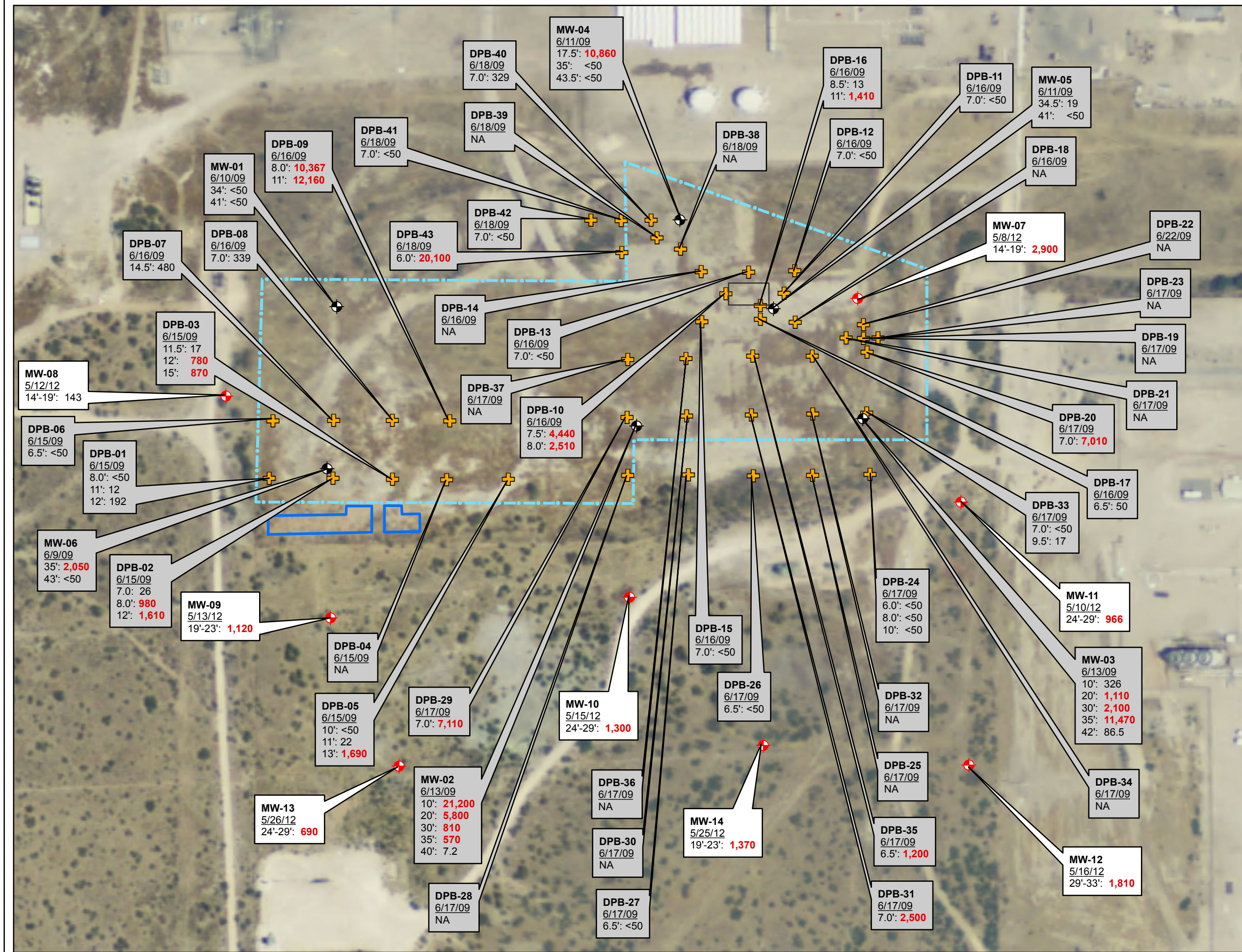
**Sample Location**  
Depth, feet bgs: Result

#### Notes:

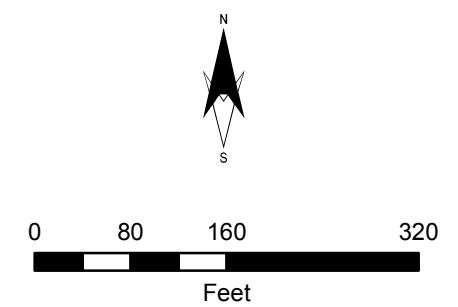
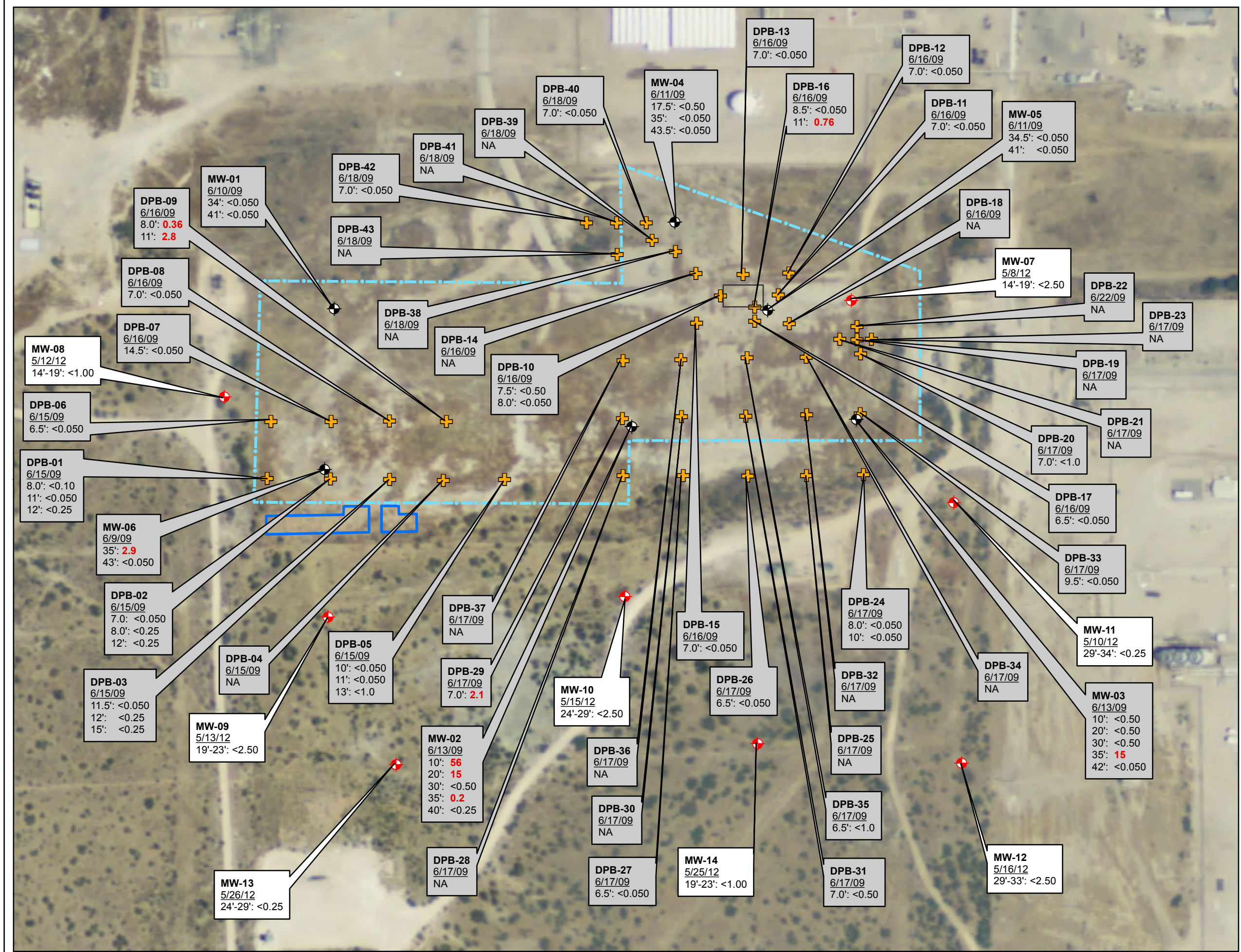
1. Results are in mg/Kg
2. **Bold** indicates TPH concentration above 500 mg/kg
3. NA = Not Applicable

Source(s): 2011 aerial photo – EDAC;  
Property boundary/monitoring wells – John West  
Surveying Co., Hobbs, NM.

**Figure 10**  
**Distribution of TPH in**  
**Subsurface Soil (>6 ft bgs)**  
**Former Enersource Facility**  
**Monument, NM**







**Legend**

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area

Collected May 2012  
**Sample Location**  
 Depth, feet bgs: Result

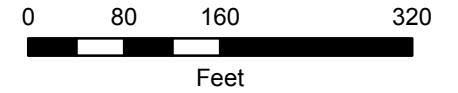
Collected June 2009  
**Sample Location**  
 Depth, feet bgs: Result

Notes:  
 1. Results are in mg/Kg  
 2. **Bold** indicates Benzene concentration above reporting limit  
 3. NA = Not Applicable

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West  
 Surveying Co., Hobbs, NM.

**Figure 11**  
**Distribution of Benzene in**  
**Subsurface Soil (>6 ft bgs)**  
 Former Enersource Facility  
 Monument, NM





### Legend

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area

Collected May 2012

**Sample Location**  
Depth, feet bgs: Result

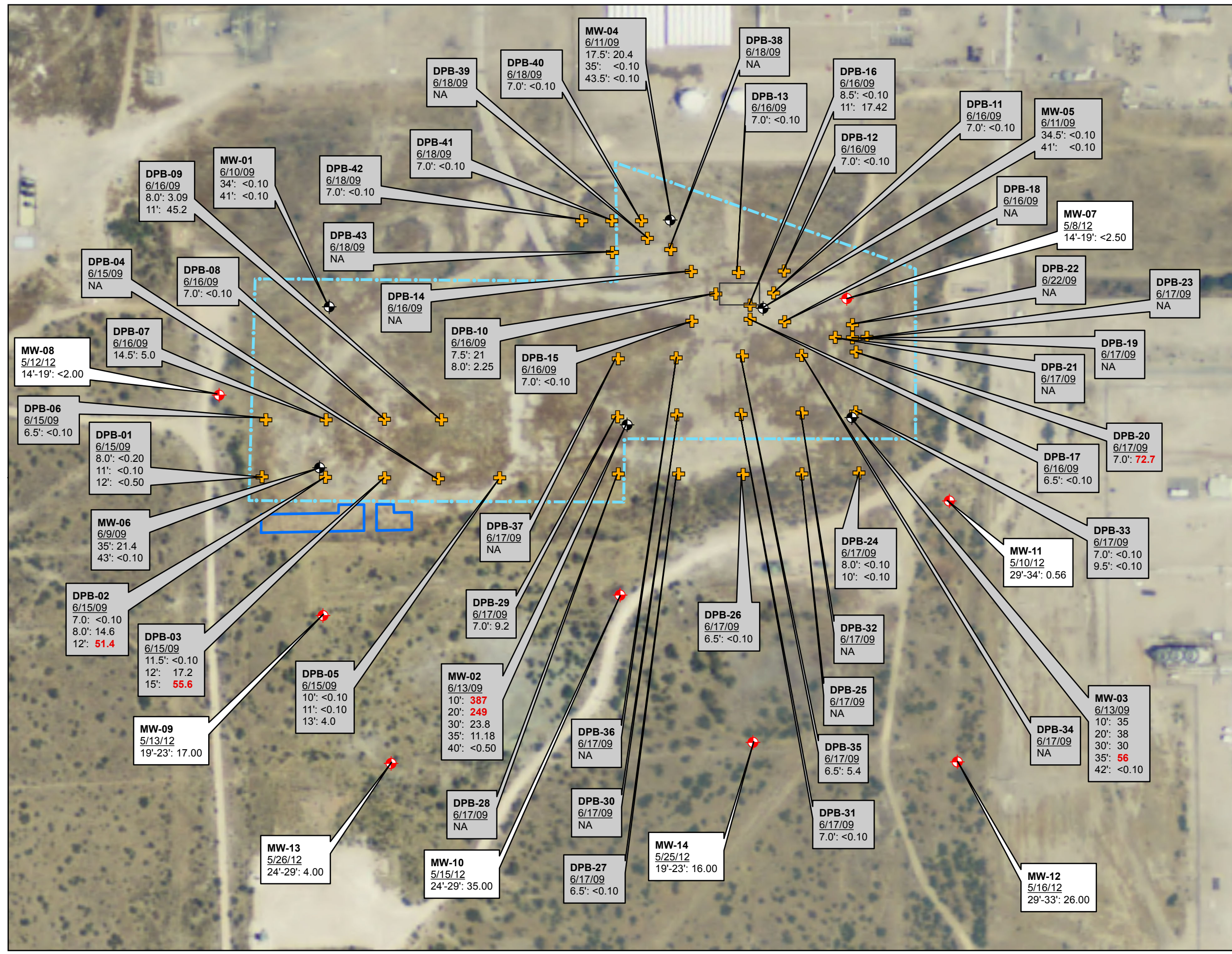
Collected June 2009

**Sample Location**  
Depth, feet bgs: Result

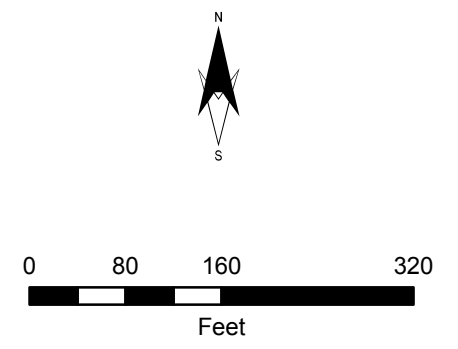
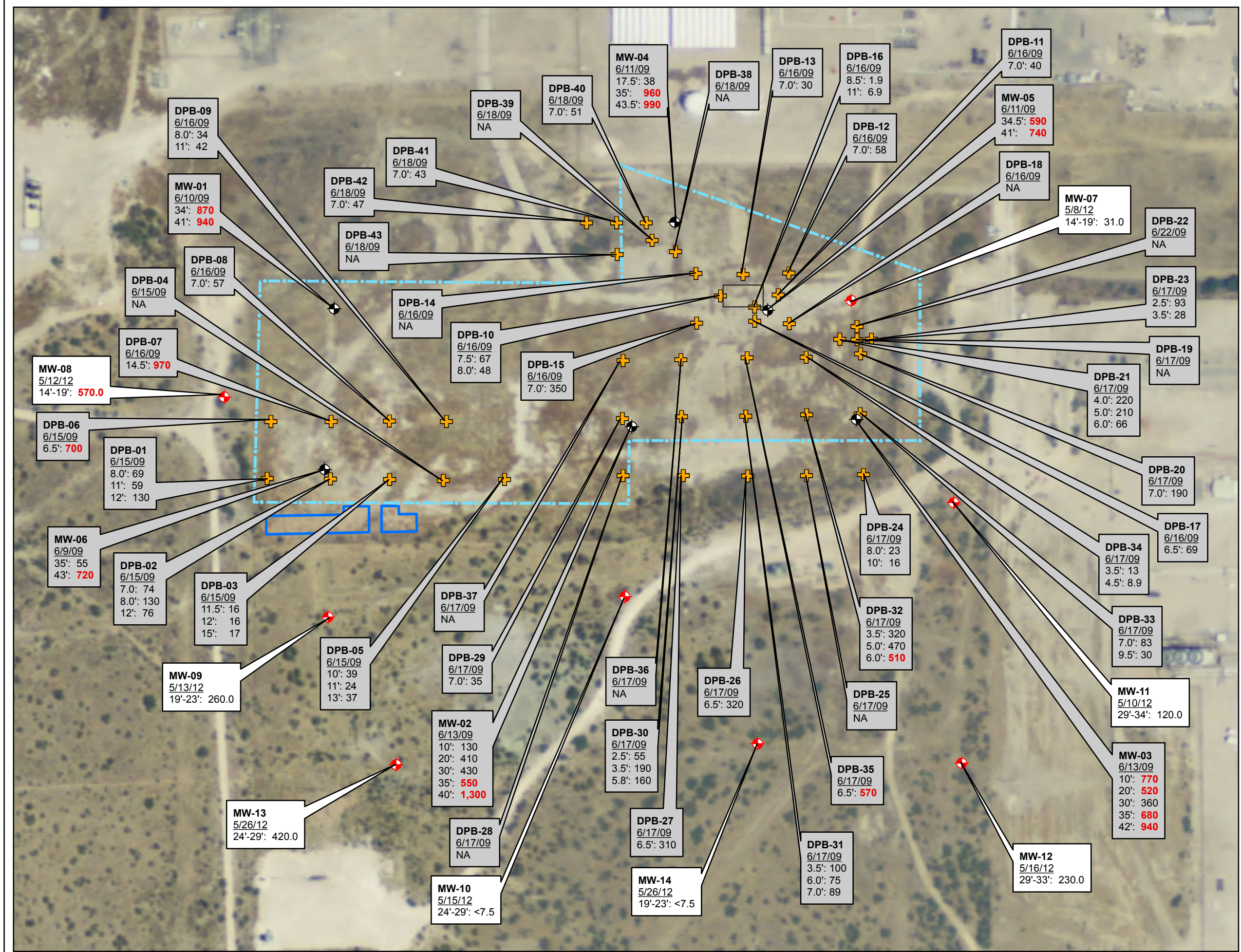
- Notes:
- Results are in mg/Kg
  - Bold** indicates BTEX concentration above 50 mg/kg
  - NA = Not Applicable
  3. Σ BTEX = Sum of Benzene, Toulene, Ethyl benzene, and total Xylenes concentrations

Source(s): 2011 aerial photo – EDAC;  
Property boundary/monitoring wells – John West  
Surveying Co., Hobbs, NM.

**Figure 12**  
**Distribution of BTEX in**  
**Subsurface Soil (>6 ft bgs)**  
**Former Enersource Facility**  
**Monument, NM**







**Legend**

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- 2009 Soil Boring Location
- Property Boundary
- Excavation Area

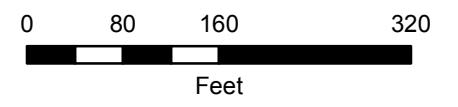
Collected May 2012  
**Sample Location**  
 Depth, feet bgs: Result

Collected June 2009  
**Sample Location**  
 Depth, feet bgs: Result

Notes:  
 1. Results are in mg/kg  
 2. **Bold** indicates Chloride concentration above 500 mg/kg  
 3. NA = Not Applicable  
 Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

**Figure 13**  
**Distribution of Chloride in Subsurface Soil (>6 ft bgs)**  
 Former Enersource Facility  
 Monument, NM





### Legend

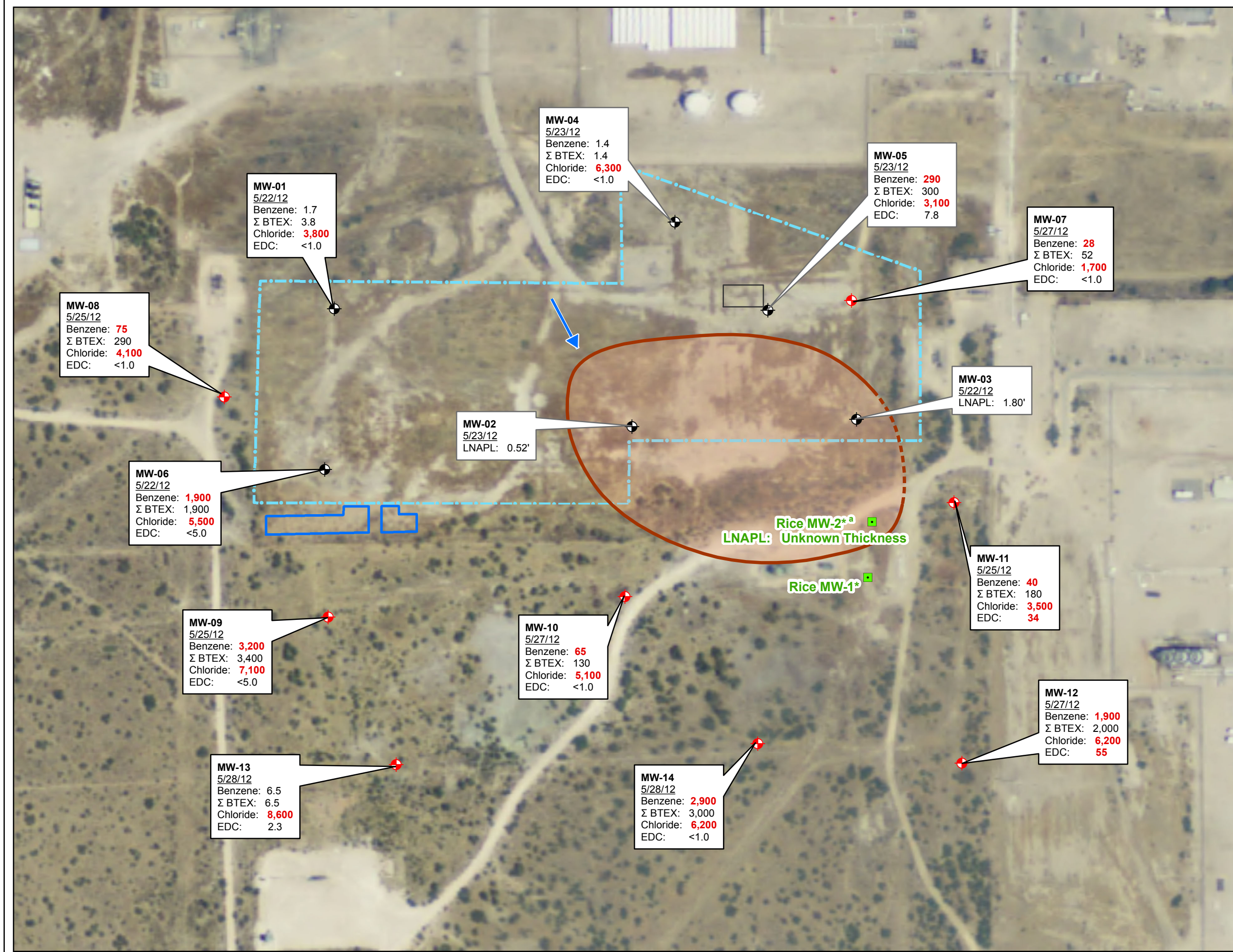
- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- Monitoring Well Installed by Others
- Estimated Groundwater Flow Direction, May 2012
- Property Boundary
- Excavation Area
- Estimated Areal Extent of LNAPL
- (Dashed where Inferred)

**Sample Location**  
**Sample Date**  
**Analyte: Result**

- Notes:
- Results are in µg/L except Chloride (mg/L)
  - Bold** indicates concentration above NMWQCC Standard
  - Σ BTEX = Sum of Benzene, Toluene, Ethyl benzene, and total Xylenes concentrations
  - \* = Estimated locations based on field reconnaissance.
  - <sup>a</sup> = Presence of LNAPL is based on verbal information from OCD

Source(s): 2011 aerial photo – EDAC;  
 Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

**Figure 14**  
**Distribution of**  
**Contaminants in**  
**Groundwater, May 2012**  
**Former Enersource Facility**  
**Monument, NM**





## TABLES

**TABLE 1**  
**Soil Screening PID Results**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Borhole ID	Date	Sample Interval (ft bgs)	PID Reading (ppm)
MW-07	5/9/2012	0' - 1'	NA
		1' - 4'	246
		4' - 9'	33.9
		9' - 14'	203
		14' - 19'	1,266
		19' - 24'	1,242
		24' - 29'	945
		29' - 34'	312
		34' - 39'	590
		39' - 41.5'	17.6
		41.5' - 44'	10.9
		44' - 49'	99.9
MW-08	5/12/2012	0' - 4'	NA
		4' - 9'	0.8
		9' - 14'	0.1
		14' - 19'	1,667
		19' - 23.5'	1,666
		24' - 29'	1,629
		29' - 33'	1,601
		33' - 34'	1,601
		34' - 38'	1,619
		38' - 39'	261
		39' - 42.4'	319
		42.4' - 44'	50.5
MW-09	5/13/2012	44' - 46'	196
		46' - 49'	90.8
		0' - 4'	NA
		4' - 7.6'	0
		7.6' - 9'	0.4
		9' - 11'	0
		11' - 14'	0
		14' - 19'	987
	5/14/2012	19' - 23'	1,774
		23' - 24'	1,638
		24' - 29'	1,365
		29' - 34'	1,207
		34' - 38.5'	464
		38.5' - 39'	653
		39' - 39.5'	98.6
		39.5' - 44'	142
		44' - 45'	149
		45' - 49'	33.4

**TABLE 1**  
**Soil Screening PID Results**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Borhole ID	Date	Sample Interval (ft bgs)	PID Reading (ppm)
MW-10	5/15/2012	0' - 4'	NA
		4' - 7.5'	1.3
		7.5' - 9'	0
		9' - 12.6'	0
		12.6' - 14'	131
		14' - 14.5'	1,905
		14.5' - 19'	1,400
		19' - 24'	1,985
		24' - 29'	2,117
		29' - 34'	1,889
		34' - 38.5'	1,318
		38.5' - 39'	93.6
		39' - 42.5'	79.5
		42.5' - 44'	3.5
		44' - 49'	NA
		49' - 50'	NA
MW-11	5/9/2012	0' - 4'	NA
		4' - 9'	107
		9' - 14'	56.7
		14' - 19'	1,406
		19' - 22.7'	1,681
	5/10/2012	22.7' - 24'	1,419
		24' - 29'	1,488
		29' - 34'	1,686
		34' - 39'	1,440
		39' - 41.5'	87
		41.5' - 44'	28.5
		44' - 49'	30.7
MW-12	5/16/2012	0' - 4'	NA
		4' - 9'	0
		9' - 14'	0
		14' - 19'	477
		19' - 24'	1,324
		24' - 29'	1,727
		29' - 33'	1,789
		33' - 34'	1,749
		34' - 38'	1,788
		38' - 39'	932
		39' - 44'	81.2
		44' - 49'	22.4



**TABLE 1**  
**Soil Screening PID Results**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Borhole ID	Date	Sample Interval (ft bgs)	PID Reading (ppm)
MW-13	5/26/2012	0' - 4'	NA
		4' - 9'	0
		9' - 12.9'	0
		12.9' - 14'	5.7
		14' - 19'	<b>530</b>
		19' - 24'	<b>1,517</b>
		24' - 29'	<b>1,599</b>
		29' - 34'	<b>227</b>
		34' - 35'	94
		35' - 37'	NR
		37' - 38.5'	18.7
		38.5' - 39'	6.9
		39' - 44'	33
		44' - 48'	0
MW-14	5/25/2012	0' - 4'	NA
		4' - 6'	0
		6' - 9'	0
		9' - 14'	<b>190</b>
		14' - 15'	<b>1,301</b>
		15' - 19'	<b>1,450</b>
		19' - 23'	<b>1,801</b>
		23' - 24'	<b>1,440</b>
		24' - 26'	<b>1,728</b>
		26' - 29'	<b>1,614</b>
		29' - 34'	<b>1,728</b>
		34' - 37'	NR
		37' - 38'	<b>1356</b>
		38' - 39'	<b>588</b>
		39' - 42'	<b>108</b>
		42' - 44'	36.9
		44' - 48'	19.1
		48' - 50'	3.8

**Notes:**

**Bolding** indicates PID results exceeding 100 ppm

NA = Not analyzed

NR = No recovery

PID = Photoionization Detector with 10.6 electron volt lamp calibrated to 100 ppmv isobutylene

ft bgs = feet below ground surface

ppm = parts per million

ppmv = parts per million by volume

**TABLE 2**  
**Summary of Analytical Chemistry Results - Soil**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)															
			TPH GRO	TPH DRO + MRO	Total TPH	Benzene <sup>1</sup>	Toluene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>	Total BTEX <sup>1,2</sup>	MTBE <sup>1</sup>	EDC <sup>1</sup>	EDB <sup>3</sup>	Total Naphthalenes <sup>1,4</sup>	Total Naphthalenes <sup>4,5</sup>	Fluorene <sup>5</sup>	Phenanthrene <sup>5</sup>	Chloride
			TPH			VOCs									PAHs			Inorganic
DPB-01	6/15/2009	8.0	< 5.0	< 50	< 50	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.10	< 0.10	< 0.10	< 0.40	-	-	-	69
		11.0	< 5.0	12	12	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	59
		12.0	42	150	192	< 0.25	< 0.25	0.32	< 0.50	0.32	< 0.25	< 0.25	< 0.25	< 1.0	-	-	-	130
DPB-02	6/15/2009	7.0	< 5.0	26	26	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	74
		8.0	360	620	980	< 0.25	< 0.25	3.6	11	14.6	< 0.25	< 0.25	< 0.25	5.11	-	-	-	130
		12.0	670	940	1610	< 0.25	2.4	14	35	51.4	< 0.25	< 0.25	< 0.25	6.3	-	-	-	76
DPB-03	6/15/2009	11.5	< 5.0	17	17	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	16
		12.0	250	530	780	< 0.25	0.8	4.4	12	17.2	< 0.25	< 0.25	< 0.25	3.44	-	-	-	16
		15.0	300	570	870	< 0.25	5.6	14	36	55.6	< 0.25	< 0.25	< 0.25	3.8	-	-	-	17
DPB-04	6/15/2009	1.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	18
		5.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	14
DPB-05	6/15/2009	10.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	39
		11.0	< 5.0	22	22	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	24
		13.0	390	1300	1690	< 1.0	< 1.0	1.6	2.4	4	< 1.0	< 1.0	< 1.0	< 4.0	-	-	-	37
DPB-06	6/15/2009	1.0	< 5.0	163	163	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	19
		6.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	700
DPB-07	6/16/2009	4.0	< 5.0	152	152	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	130
		6.0	99	2130	2229	0.71	0.33	2.7	3.9	7.64	< 0.25	< 0.25	< 0.25	< 1.0	-	-	-	980
		14.5	150	330	480	< 0.050	< 0.050	1.1	3.9	5	< 0.050	< 0.050	< 0.050	0.88	-	-	-	970
DPB-08	6/16/2009	5.0	180	159	339	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	61
		6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	74
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	57
DPB-09	6/16/2009	4.0	< 5.0	470	470	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	21
		8.0	67	10300	10367	0.36	0.083	1.7	0.95	3.09	< 0.050	< 0.050	< 0.050	1.9	-	-	-	34
		11.0	460	11700	12160	2.8	6.4	18	18	45.2	< 0.50	< 0.50	< 0.50	15.8	-	-	-	42
DPB-10	6/16/2009	4.0	650	7800	8450	2.3	< 0.25	18	27	47.3	< 0.25	< 0.25	< 0.25	21.8	-	-	-	47
		7.5	340	4100	4440	< 0.50	< 0.50	7	14	21	< 0.50	< 0.50	< 0.50	31.5	-	-	-	67
		8.0	310	2200	2510	< 0.050	0.073	0.68	1.5	2.25	< 0.050	< 0.050	< 0.050	2.52	-	-	-	48
DPB-11	6/16/2009	4.0	< 5.0	70	70	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	18
		5.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	11
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	40
DPB-12	6/16/2009	4.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	33
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	58

**TABLE 2**  
**Summary of Analytical Chemistry Results - Soil**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)															
			TPH GRO	TPH DRO + MRO	Total TPH	Benzene <sup>1</sup>	Toluene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>	Total BTEX <sup>1,2</sup>	MTBE <sup>1</sup>	EDC <sup>1</sup>	EDB <sup>3</sup>	Total Naphthalenes <sup>1,4</sup>	Total Naphthalenes <sup>4,5</sup>	Fluorene <sup>5</sup>	Phenanthrene <sup>5</sup>	Chloride
			TPH			VOCs									PAHs			Inorganic
DPB-13	6/16/2009	4.0	< 5.0	242	242	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	110
		5.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	37
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	30
DPB-14	6/16/2009	4.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	29
		5.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	26
		6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	29
DPB-15	6/16/2009	4.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	290
		5.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	670
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	350
DPB-16	6/16/2009	3.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	2
		8.5	< 5.0	13	13	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	1.9
		11.0	310	1100	1410	0.76	4.9	15	49	17.42	< 0.50	< 0.50	< 0.50	15.5	-	-	-	6.9
DPB-17	6/16/2009	3.5	< 250	17000	17000	< 0.25	< 0.25	0.55	< 0.50	0.55	< 0.25	< 0.25	< 0.25	14.1	-	-	-	43
		5.5	< 5.0	88	88	< 0.050	< 0.050	< 0.050	0.11	0.11	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	110
		6.5	< 5.0	50	50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	69
DPB-18	6/16/2009	2.5	71	5800	5871	< 0.50	< 0.50	< 0.50	1.6	1.6	< 0.50	< 0.50	< 0.50	2.6	-	-	-	110
DPB-19	6/17/2009	3.5	< 5.0	1800	1800	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	23
		5.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	220
DPB-20	6/17/2009	3.5	< 50	2600	2600	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 2.0	-	-	-	850
		5.0	58	3900	3958	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	13.5	-	-	-	700
		7.0	610	6400	7010	< 1.0	2.7	14	56	72.7	< 1.0	< 1.0	< 1.0	46.9	-	-	-	190
DPB-21	6/17/2009	4.0	< 5.0	1130	1130	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	220
		5.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	210
		6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	66
DPB-22	6/17/2009	4.0	< 5.0	81	81	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	76
		4.5	< 5.0	28	28	< 0.050	< 0.050	< 0.050	0.17	0.17	< 0.050	< 0.050	< 0.050	0.33	-	-	-	37
		5.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	45
DPB-23	6/17/2009	2.5	< 5.0	164	164	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	93
		3.5	< 5.0	197	197	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	28
DPB-24	6/17/2009	6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	51
		8.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	23
		10.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	16
DPB-25	6/17/2009	3.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	8.6
		6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	19

**TABLE 2**  
**Summary of Analytical Chemistry Results - Soil**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)															
			TPH GRO	TPH DRO + MRO	Total TPH	Benzene <sup>1</sup>	Toluene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>	Total BTEX <sup>1,2</sup>	MTBE <sup>1</sup>	EDC <sup>1</sup>	EDB <sup>3</sup>	Total Naphthalenes <sup>1,4</sup>	Total Naphthalenes <sup>4,5</sup>	Fluorene <sup>5</sup>	Phenanthrene <sup>5</sup>	Chloride
			TPH			VOCs									PAHs			Inorganic
DPB-26	6/17/2009	2.5	< 250	12200	<b>12200</b>	< 2.5	< 2.5	< 2.5	< 5.0	< 5.0	< 2.5	< 2.5	< 2.5	< 10	-	-	-	330
		3.5	< 100	9300	<b>9300</b>	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 4.0	-	-	-	420
		6.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	320
DPB-27	6/17/2009	2.0	660	27800	<b>28460</b>	<b>19</b>	29	14	33	<b>95</b>	< 0.50	< 0.50	< 0.50	4.5	-	-	-	250
		3.5	340	2650	<b>2990</b>	< 0.25	2.2	4.9	12	19.1	< 0.25	< 0.25	< 0.25	3.6	-	-	-	520
		6.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	310
DPB-28	6/17/2009	3.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	24
		6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	<b>530</b>
DPB-29	6/17/2009	2.5	220	21500	<b>21720</b>	<b>0.33</b>	< 0.25	2.4	< 0.50	2.73	< 0.25	< 0.25	< 0.25	6.3	-	-	-	35
		3.5	240	24700	<b>24940</b>	<b>0.41</b>	< 0.25	3.5	< 0.50	3.91	< 0.25	< 0.25	< 0.25	8.5	-	-	-	51
		7.0	210	6900	<b>7110</b>	<b>2.1</b>	< 0.25	5.7	1.4	9.2	< 0.25	< 0.25	< 0.25	5.14	-	-	-	35
DPB-30	6/17/2009	2.5	690	11200	<b>11890</b>	<b>3.6</b>	< 0.50	9.8	9.2	22.6	< 0.50	< 0.50	< 0.50	11.3	-	-	-	55
		3.5	1400	10700	<b>12100</b>	<b>7.1</b>	1.7	21	37	<b>66.8</b>	< 0.50	< 0.50	< 0.50	33.9	-	-	-	190
		5.8	810	2600	<b>3410</b>	<b>1.5</b>	2.3	11	27	41.8	< 0.50	< 0.50	< 0.50	21.6	-	-	-	160
DPB-31	6/17/2009	3.5	< 5.0	350	350	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	100
		6.0	< 5.0	216	216	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	75
		7.0	< 50	2500	<b>2500</b>	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 2.0	-	-	-	89
DPB-32	6/17/2009	3.5	< 5.0	237	237	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	320
		5.0	< 5.0	190	190	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	470
		6.0	< 50	3800	<b>3800</b>	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 2.0	-	-	-	<b>510</b>
DPB-33	6/17/2009	3.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	250
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	83
		9.5	< 5.0	17	17	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	30
DPB-34	6/17/2009	3.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	13
		4.5	< 5.0	140	140	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	8.9
DPB-35	6/17/2009	3.5	< 25	2400	<b>2400</b>	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	< 0.25	< 0.25	< 0.25	< 1.0	-	-	-	<b>810</b>
		4.5	410	8700	<b>9110</b>	< 2.5	< 2.5	< 2.5	13	13	< 2.5	< 2.5	< 2.5	57	-	-	-	<b>660</b>
		6.5	< 100	1200	<b>1200</b>	< 1.0	< 1.0	1	4.4	5.4	< 1.0	< 1.0	< 1.0	17.7	-	-	-	570
DPB-36	6/17/2009	3.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	7.9
		4.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	9.1
		6.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	16
DPB-37	6/17/2009	3.5	< 5.0	152	152	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	65
		4.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	400
		5.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	210

**TABLE 2**  
**Summary of Analytical Chemistry Results - Soil**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)															
			TPH GRO	TPH DRO + MRO	Total TPH	Benzene <sup>1</sup>	Toluene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>	Total BTEX <sup>1,2</sup>	MTBE <sup>1</sup>	EDC <sup>1</sup>	EDB <sup>3</sup>	Total Naphthalenes <sup>1,4</sup>	Total Naphthalenes <sup>4,5</sup>	Fluorene <sup>5</sup>	Phenanthrene <sup>5</sup>	Chloride
			TPH			VOCs									PAHs			Inorganic
DPB-38	6/18/2009	3.5	< 5.0	750	750	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	17
		4.5	< 5.0	1110	1110	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	50
		5.5	< 5.0	65	65	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	56
DPB-39	6/18/2009	3.5	< 100	18600	18600	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	-	-	-	-	-	-	-	85
		5.5	< 5.0	93	93	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	87
DPB-40	6/18/2009	2.5	< 100	41000	41000	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	-	-	-	-	-	-	-	51
		5.0	< 100	29000	29000	< 0.50	< 0.50	0.76	< 1.0	0.76	-	-	-	-	-	-	-	56
		7.0	< 5.0	329	329	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	51
DPB-41	6/18/2009	2.5	< 50	4300	4300	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	-	-	-	-	-	-	-	24
		3.5	100	21900	22000	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	-	-	-	-	-	-	-	24
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	43
DPB-42	6/18/2009	2.6	< 100	8200	8200	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	-	-	-	-	-	-	-	17
		4.5	< 5.0	1330	1330	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	38
		7.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	47
DPB-43	6/18/2009	2.0	< 5.0	690	690	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	22
		3.0	< 100	20100	20100	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	-	-	-	-	-	-	-	95
		6.0	< 5.0	2050	2050	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	-	-	-	-	-	-	-	24
East	6/8/2009	-	<50	366	366	<0.05	<0.05	<0.05	<0.3	<0.3	-	-	-	-	-	-	-	592
MW-01	6/10/2009	1.0	6.5	420	426.5	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	0.39
		34.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	870
		41.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	940
MW-02	6/13/2009	1.0	6.5	2800	2806.5	0.22	< 0.050	< 0.050	< 0.10	0.22	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	-
		4.0	370	10500	10870	2.4	< 0.50	13	7.6	23	< 0.50	< 0.50	< 0.50	18.5	-	-	-	140
		10.0	4000	17200	21200	56	11	120	200	387	< 2.5	< 2.5	< 2.5	56	-	-	-	130
		20.0	2300	3500	5800	15	< 2.5	84	150	249	< 2.5	< 2.5	< 2.5	< 10	-	-	-	410
		30.0	280	530	810	< 0.50	< 0.50	9.8	14	23.8	< 0.50	< 0.50	< 0.50	8.2	-	-	-	430
		35.0	150	420	570	0.2	0.08	4.6	6.3	11.18	< 0.050	< 0.050	< 0.050	1.83	-	-	-	550
		40.0	7.2	< 50	7.2	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	< 0.25	< 0.25	< 0.25	< 1.0	-	-	-	1300
MW-03	6/12/2009	1.0	< 5.0	280	280	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	490
		10.0	300	26	326	< 0.50	< 0.50	12	23	35	< 0.50	< 0.50	< 0.50	8.7	-	-	-	770
		20.0	300	810	1110	< 0.50	< 0.50	13	25	38	< 0.50	< 0.50	< 0.50	11.1	-	-	-	520
		30.0	< 250	2100	2100	< 0.50	< 0.50	9	21	30	< 0.50	< 0.50	< 0.50	18.6	-	-	-	360
		35.5	470	11000	11470	15	< 1.0	20	21	56	< 1.0	< 1.0	< 1.0	32.1	-	-	-	680
		42.0	5.5	81	86.5	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	940

**TABLE 2**  
**Summary of Analytical Chemistry Results - Soil**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)															
			TPH GRO	TPH DRO + MRO	Total TPH	Benzene <sup>1</sup>	Toluene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>	Total BTEX <sup>1,2</sup>	MTBE <sup>1</sup>	EDC <sup>1</sup>	EDB <sup>3</sup>	Total Naphthalenes <sup>1,4</sup>	Total Naphthalenes <sup>4,5</sup>	Fluorene <sup>5</sup>	Phenanthrene <sup>5</sup>	Chloride
			TPH			VOCs									PAHs			Inorganic
MW-04	6/11/2009	1.0	< 5.0	2070	2070	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	20
		17.5	360	10500	10860	< 0.50	< 0.50	13	7.4	20.4	< 0.50	< 0.50	< 0.50	30.7	-	-	-	38
		35.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	960
		43.5	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	990
MW-05	6/11/2009	1.0	< 10	5300	5300	< 0.25	< 0.25	< 0.25	< 0.50	< 0.50	< 0.25	< 0.25	< 0.25	< 1.0	-	-	-	76
		4.0	39	11500	11539	< 0.25	< 0.25	< 0.25	1.9	1.9	< 0.25	< 0.25	< 0.25	1	-	-	-	84
		34.5	< 5.0	19	19	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	590
		41.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	740
MW-06	6/9/2009	1.0	< 5.0	187	187	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	8.9
	35.0	350	1700	2050	2.9	< 0.25	14	4.5	21.4	< 0.25	< 0.25	< 0.25	3	-	-	-	55	
	6/10/2009	43.0	< 5.0	< 50	< 50	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.20	-	-	-	720
N35E15-10	6/9/2009	10.0	<10	<10	<10	<0.05	<0.05	<0.05	<0.3	<0.3	-	-	-	-	-	-	-	2240
N35E15-15	6/9/2009	15.0	345	959	1304	0.737	1.4	7.91	14.6	24.647	-	-	-	-	-	-	-	3120
West	6/8/2009		<10	<10	<10	<0.05	<0.05	<0.05	<0.3	<0.3	-	-	-	-	-	-	-	96
CS1	6/23/2009	5.0	420	5400	5820	-	-	-	-	-	-	-	-	-	-	-	-	-
CS2	6/23/2009	5.0	< 5.0	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-
CS3	6/23/2009	10.0	1200	5000	6200	-	-	-	-	-	-	-	-	-	-	-	-	-
CS4	6/23/2009	5.0	< 5.0	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-
CS5	6/23/2009	5.0	79	1720	1799	-	-	-	-	-	-	-	-	-	-	-	-	-
CS6	6/23/2009	10.0	96	1490	1586	-	-	-	-	-	-	-	-	-	-	-	-	-
CS7	6/23/2009	5.0	360	3500	3860	-	-	-	-	-	-	-	-	-	-	-	-	-
CS13	6/24/2009	5.0	< 10	56	56	-	-	-	-	-	-	-	-	-	-	-	-	-
CS15	6/25/2009	5.0	< 5.0	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-
CS19	6/25/2009	5.0	< 5.0	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-
CS21	6/25/2009	5.0	< 50	1170	1170	-	-	-	-	-	-	-	-	-	-	-	-	-
CS22	6/25/2009	10.0	420	210	630	-	-	-	-	-	-	-	-	-	-	-	-	-
CS23	6/25/2009	5.0	< 5.0	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-
CS24	6/25/2009	20.0	510	530	1040	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-07	5/8/2012	14'-19'	<250	2900	2900	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<10	18	<0.20	0.90	31
MW-08	5/12/2012	14'-19'	100	43	143	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<4.0	<0.20	<0.20	<0.20	570
MW-09	5/13/2012	19'-23'	490	630	1120	<2.5	<2.5	4.8	12	17	<2.5	<2.5	<2.5	<10	6.5	<0.20	<0.20	260
MW-10	5/15/2012	24'-29'	520	780	1300	<2.5	<2.5	10	25	35	<2.5	<2.5	<2.5	<10	8.9	<0.20	<0.20	<7.5
MW-11	5/10/2012	29'-34'	56	910	966	<0.25	<0.25	<0.25	0.56	0.56	<0.25	<0.25	<0.25	6.5	8.6	<0.20	0.46	120
MW-12	5/16/2012	29'-33'	310	1500	1810	<2.5	<2.5	5.8	20	26	<2.5	<2.5	<2.5	<10	18	<0.20	0.30	230

TABLE 2  
Summary of Analytical Chemistry Results - Soil  
2012 Site Investigation Report  
Former Enersource Facility - Monument, Lea County, New Mexico

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)															
			TPH GRO	TPH DRO + MRO	Total TPH	Benzene <sup>1</sup>	Toluene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>	Total BTEX <sup>1,2</sup>	MTBE <sup>1</sup>	EDC <sup>1</sup>	EDB <sup>3</sup>	Total Naphthalenes <sup>1,4</sup>	Total Naphthalenes <sup>4,5</sup>	Fluorene <sup>5</sup>	Phenanthrene <sup>5</sup>	Chloride
			TPH			VOCs									PAHs			Inorganic
MW-13	5/26/2012	24'-29'	240	450	690	<0.25	<0.25	2.0	2.0	4.0	<0.25	<0.25	0.27	<1.0	2.3	0.046	0.063	420
MW-14	5/25/2012	19'-23'	370	1000	1370	<1.0	<1.0	5.4	11	16	<1.0	<1.0	<1.0	12	7.5	0.063	0.050	<7.5

**Notes:**  
- = Not Tested or Not Applicable  
**Bolding** indicates values in excess of the soil standards.  
1 = Analyzed by EPA Method 8260B  
2 = Total BTEX includes sum of benzene, toluene, ethylbenzene, and total xylenes. RL for BTEX = highest RL for individual compounds; when summing detections, values listed as "<" RL are assumed to be 0.  
3 = Analyzed by EPA Method 8260B  
4 = Total naphthalenes includes the sum of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. RL for Total Naphthalenes = highest RL for individual compounds; when summing detections, values listed as "<" RL are  
5 = Analyzed by EPA Method 8270C Selective Ion Monitoring  
a = ≤ 6 feet bgs = 500  
b = > 6 feet bgs = 1,000  
bgs = below ground surface  
BTEX = benzene, toluene, ethyl benzene, and total xylenes  
CS = confirmatory sample  
DPB = direct push boring  
DRO = diesel range organics  
EDB = 1,2-dibromoethane  
EDC = 1,2-dichloroethane  
EPA = U.S. Environmental Protection Agency  
GRO = gasoline range organics  
mg/kg = milligrams per kilogram  
MRO = motor oil range organics  
MTBE = methyl tertiary-butyl ether  
MW = monitoring well  
OCD Standard = Site-Specific standard established by Oil Conservation Division  
RL = Reporting Detection Limit  
TPH = Total Petroleum Hydrocarbons



**TABLE 3**  
**Monitoring Well Construction Details**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Well ID	Installation Date	Well Diameter (inches)	Screen Interval (ft bgs)	Total Depth (ft bgs)	Northing <sup>a</sup> (ft)	Easting <sup>a</sup> (ft)	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Total Depth (ft amsl)
MW-01	6/11/2009	4	27' - 42'	42	586267.1	814178.7	3580.40	3582.43	3553.40	3538.40	3538.40
MW-02	6/14/2009	4	29' - 44'	44	586065.4	814687.7	3580.00	3582.94	3551.00	3536.00	3536.00
MW-03	6/13/2009	4	30' - 45'	45	586077.6	815072.1	3578.84	3581.84	3548.84	3533.84	3533.84
MW-04	6/11/2009	4	28' - 43'	43	586414.9	814761.8	3581.10	3583.33	3553.10	3538.10	3538.10
MW-05	6/12/2009	4	28' - 43'	43	586264.3	814920.2	3580.18	3582.10	3552.18	3537.18	3537.18
MW-06	6/10/2009	4	28' - 43'	43	585992.1	814162.5	3579.35	3582.48	3551.35	3536.35	3536.35
MW-07	5/11/2012	4	33' - 48'	48	586281.5	815063.6	3579.02	3582.14	3546.02	3531.02	3531.02
MW-08	5/13/2012	4	34' - 49'	49	586116.1	813990.6	3580.90	3584.11	3546.90	3531.90	3531.90
MW-09	5/14/2012	4	34' - 49'	49	585739.6	814168.4	3579.22	3582.21	3545.22	3530.22	3530.22
MW-10	5/16/2012	4	34' - 49'	49	585774.3	814676.1	3577.01	3580.23	3543.01	3528.01	3528.01
MW-11	5/11/2012	4	34' - 49'	49	585935.7	815238.7	3577.75	3580.91	3543.75	3528.75	3528.75
MW-12	5/16/2012	2	32' - 47'	47	585489.6	815252.4	3575.73	3578.81	3543.73	3528.73	3528.73
MW-13	5/26/2012	2	32' - 47'	47	585487.1	814284.5	3577.04	3579.95	3545.04	3530.04	3530.04
MW-14	5/25/2012	2	35' - 50'	50	585523.1	814903.3	3575.99	3578.82	3540.99	3525.99	3525.99

**Notes:**

a = Datum for northing and easting coordinates is "New Mexico East Zone, North American Datum of 1983"

amsl = above mean sea level

bgs = below ground surface

ft = feet



**TABLE 4**  
**Fluid Level Gauging Results**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Well ID	Gauging Date	Top of Casing Elevation (ft amsl)	Ground Surface Elevation (ft amsl)	Screen Interval (ft bgs)	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	LNAPL Thickness (ft)	Potentiometric Surface Elevation (ft amsl) <sup>1</sup>
MW-01	6/12/2009	3582.43	3580.40	27' - 42'	-	36.99	-	3545.44
	6/22/2009	3582.43	3580.40	27' - 42'	-	36.98	-	3545.45
	6/25/2009	3582.43	3580.40	27' - 42'	-	36.98	-	3545.45
	6/26/2009	3582.43	3580.40	27' - 42'	-	36.97	-	3545.46
	1/26/2011	3582.43	3580.40	27' - 42'	-	33.90	-	3548.53
	5/22/2012	3582.43	3580.40	27' - 42'	-	37.94	-	3544.49
MW-02	6/22/2009	3582.94	3580.00	29' - 44'	-	38.58	-	3544.36
	6/25/2009	3582.94	3580.00	29' - 44'	-	38.58	-	3544.36
	6/26/2009	3582.94	3580.00	29' - 44'	-	38.52	-	3544.42
	1/26/2011	3582.94	3580.00	29' - 44'	-	35.90	-	3547.04
	5/23/2012	3582.94	3580.00	29' - 44'	39.48	40.00	0.52	3543.33
MW-03	6/22/2009	3581.84	3578.84	30' - 45'	37.96	37.96	0.00	3543.88
	6/24/2009	3581.84	3578.84	30' - 45'	-	37.94	-	3543.90
	6/25/2009	3581.84	3578.84	30' - 45'	37.98	39.40	1.42	3543.51
	1/26/2011	3581.84	3578.84	30' - 45'	35.79	36.12	0.33	3545.97
	5/22/2012	3581.84	3578.84	30' - 45'	39.00	40.80	1.80	3542.39

**TABLE 4**  
**Fluid Level Gauging Results**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Well ID	Gauging Date	Top of Casing Elevation (ft amsl)	Ground Surface Elevation (ft amsl)	Screen Interval (ft bgs)	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	LNAPL Thickness (ft)	Potentiometric Surface Elevation (ft amsl) <sup>1</sup>
MW-04	6/12/2009	3583.33	3581.10	28' - 43'	-	38.13	-	3545.20
	6/22/2009	3583.33	3581.10	28' - 43'	-	38.02	-	3545.31
	6/25/2009	3583.33	3581.10	28' - 43'	-	37.99	-	3545.34
	6/26/2009	3583.33	3581.10	28' - 43'	-	37.98	-	3545.35
	1/26/2011	3583.33	3581.10	28' - 43'	-	34.64	-	3548.69
	5/22/2012	3583.33	3581.10	28' - 43'	-	39.08	-	3544.25
MW-05	6/12/2009	3582.10	3580.18	28' - 43'	-	37.56	-	3544.54
	6/22/2009	3582.10	3580.18	28' - 43'	-	37.50	-	3544.60
	6/25/2009	3582.10	3580.18	28' - 43'	-	37.49	-	3544.61
	6/26/2009	3582.10	3580.18	28' - 43'	-	37.47	-	3544.63
	1/26/2011	3582.10	3580.18	28' - 43'	-	34.58	-	3547.52
	5/22/2012	3582.10	3580.18	28' - 43'	-	38.52	-	3543.58
MW-06	6/12/2009	3582.48	3579.35	28' - 43'	-	37.37	-	3545.11
	6/22/2009	3582.48	3579.35	28' - 43'	-	37.57	-	3544.91
	6/24/2009	3582.48	3579.35	28' - 43'	-	37.58	-	3544.90
	6/25/2009	3582.48	3579.35	28' - 43'	-	37.58	-	3544.90

**TABLE 4**  
**Fluid Level Gauging Results**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Well ID	Gauging Date	Top of Casing Elevation (ft amsl)	Ground Surface Elevation (ft amsl)	Screen Interval (ft bgs)	Depth to LNAPL (ft btoc)	Depth to Water (ft btoc)	LNAPL Thickness (ft)	Potentiometric Surface Elevation (ft amsl) <sup>1</sup>
MW-06, continued	6/27/2009	3582.48	3579.35	28' - 43'	-	37.58	-	3544.90
	1/26/2011	3582.48	3579.35	28' - 43'	-	35.35	-	3547.13
	5/22/2012	3582.48	3579.35	28' - 43'	-	38.73	-	3543.75
MW-07	5/22/2012	3582.14	3579.02	33' - 48'	-	38.90	-	3543.24
MW-08	5/22/2012	3584.11	3580.90	34' - 49'	-	40.24	-	3543.87
MW-09	5/22/2012	3582.21	3579.22	34' - 49'	-	39.49	-	3542.72
MW-10	5/22/2012	3580.23	3577.01	34' - 49'	-	37.91	-	3542.32
MW-11	5/22/2012	3580.91	3577.75	34' - 49'	-	39.49	-	3541.42
MW-12	5/26/2012	3578.81	3575.73	32' - 47'	-	38.99	-	3539.82
MW-13	5/28/2012	3579.95	3577.04	32' - 47'	-	38.45	-	3541.50
MW-14	5/28/2012	3578.82	3575.99	35' - 50'	-	39.14	-	3539.68

**Notes:**

- = Data not available or not present

1 = Value calculated from: Potentiometric Surface Elevation = Top of Casing Elevation - Depth to Water + (Product Thickness \* 0.75)

amsl = above mean sea level

bgs = below ground surface

btoc = below top of casing

ft = feet



**TABLE 5**  
**Summary of Analytical Chemistry Results - Groundwater**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Monitoring Well ID	Sample Date	VOCs								Chloride	Total Dissolved Solids <sup>c</sup>
		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX <sup>a</sup>	EDB	EDC	Total Naphthalenes <sup>b</sup>		
NMWQCC Standards		10	750	750	620	NE	0.1	10	30	250 <sup>d</sup>	1000 <sup>d</sup>
MW-01	6/26/2009	7.9	< 1.0	9.5	7.2	24.6	-	< 1.0	< 4.0	7,900	-
	1/26/2011	2.6	<1.0	7.5	<1.5	10.1	-	<1.0	<4.0	5,900	14,500
	5/22/2012	1.7	<1.0	2.1	<1.5	3.8	<0.010	<1.0	<4.0	3,800	11,800
MW-02	6/26/2009	2,000	< 5.0	400	180	2,580	-	< 5.0	< 20	7,700	-
	1/27/2011	2,600	<1.0	180	39	2,819	-	<1.0	6	7,400	16,300
	5/22/2012	LANPL - NOT SAMPLED									
MW-03	6/26/2009	LNAPL - NOT SAMPLED									
	1/26/2011	LNAPL - NOT SAMPLED									
	5/22/2012	LNAPL - NOT SAMPLED									
MW-04	6/26/2009	< 1.0	< 1.0	< 1.0	< 1.5	< 1.5	-	< 1.0	< 4.0	7,800	-
	1/27/2011	3.3	<1.0	2.4	<1.5	5.7	-	<1.0	<4.0	5,200	12,500
	5/23/2012	1.4	<1.0	<1.0	<1.5	1.4	<0.010	<1.0	<4.0	6,300	13,300
MW-05	6/26/2009	330	15	58	120	523	-	3.4	58	5,700	-
	1/27/2011	480	<1.0	20	3.7	504	-	6.9	<4.0	2,900	7,740
	5/23/2012	290	<5.0	7.2	<7.5	300	<0.010	7.8	<20	3,100	8,230
MW-06	6/27/2009	3,100	22	280	170	3,572	-	< 5.0	< 20	5,300	-
	1/26/2011	6,200	<1.0	640	28	6,868	-	<1.0	5.1	6,200	15,500
	5/22/2012	1,900	<5.0	20	18	1,900	<0.010	<5.0	<20	5,500	14,200
MW-07	5/27/2012	28	3.6	6.9	13	52	<0.010	<1.0	16.9	1,700	4,630
MW-08	5/25/2012	75	14	1.8	200	290	<0.010	<1.0	6.3	4,100	12,100
MW-09	5/25/2012	3,200	33	71	100	3,400	<0.010	<5.0	<20	7,100	15,900
MW-10	5/27/2012	65	1.1	26	42	130	<0.010	<1.0	13	5,100	12,500
MW-11	5/25/2012	40	14	27	98	180	<0.010	34	34.5	3,500	7,970
MW-12	5/27/2012	1,900	<5.0	33	60	2,000	<0.010	55	<20	6,200	13,800
MW-13	5/28/2012	6.5	<1.0	<1.0	<1.5	6.5	<0.010	2.3	<4.0	8,600	18,800
MW-14	5/28/2012	2,900	2.7	72	69	3,000	<0.010	<1.0	20.2	6,200	13,400

**TABLE 5**  
**Summary of Analytical Chemistry Results - Groundwater**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

**Notes:**

- = Not Tested or Not Applicable

**Bolding** indicates values in excess of the groundwater standards.

a = Total BTEX includes sum of benzene, toluene, ethylbenzene, and total xylenes. RL for BTEX = highest RL for individual compounds; when summing detections, values listed as "<" RL are assumed to be 0.

b = Total naphthalenes includes the sum of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. RL for Total Naphthalenes = highest RL for individual compounds; when summing detections, values listed as "<" RL are assumed to be 0.

c = Samples were not filtered during the 2011 field sampling event

d = NMWQCC standard for domestic water supply

Chloride= by EPA Method 300.0

BTEX = benzene, toluene, ethyl benzene, and total xylenes

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

µg/L = micrograms per liter

mg/L = milligrams per liter

NE = None Established

NMWQCC = Groundwater Standards as defined by the State of New Mexico Water Quality Control Commission (NMWQCC, 2002)

RL = Reporting Detection Limit

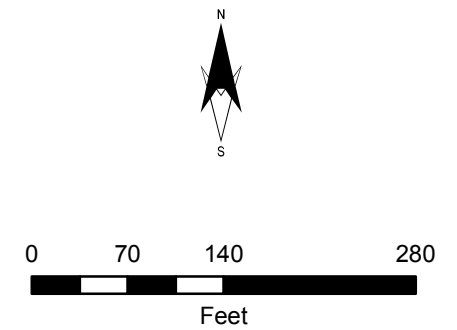
TDS = Total Dissolved Solids by SM2540C MOD

VOCs = volatile organic compounds by EPA Method 8260B except for EDB, which was analyzed by EPA Method 504.1


## **APPENDIX A**

### **Historical Aerial Photographs**





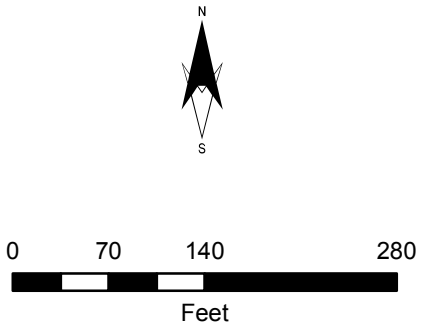
**Legend**

 Property Boundary


**Appendix A1**  
**Historical Aerial - 1949**  
Former Enersource Facility  
Monument, NM





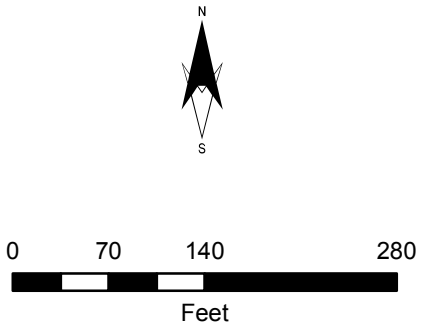


**Legend**


 Property Boundary

**Appendix A2**  
**Historical Aerial - 1966**  
Former Enersource Facility  
Monument, NM





**Legend**

 Property Boundary

**Appendix A3**  
**Historical Aerial - 1978**  
Former Enersource Facility  
Monument, NM



## **APPENDIX B**

### **Field Notes**

5/8/12

HSA  
Drilling

LD

1245: Lee Dalton on-site

1300: Tricia Johnson on-site

1400: Precision Sampling (Joan + Alex)  
on-site

Travel to all proposed well locations to check that they are located correctly + that there are not any utility issues. MW-7, 8, 9, 12 + 15 are located near poorly marked pipeline locations. I've called Targa, Holly Energy, Apache, + Rice (saltwater pipeline). - They have markers in the area.

1600: Tricia off-site

↳ Precision off loading material.

1640: Move rig to MW-7.

1650: Precision off-site

↳ Lee to Targa office to see about line locating tomorrow. The office is closed - call Sam Hodges - 575-631-7658. leave message

5/8/12

HSA  
Drilling

LD

700: Lee on-site

↳ Precision on-site / warning of rig.

↳ ME 85

Conduct TGS/Calibrate PID

730: Post hole dig 5' @ MW-7.

Objective: Drill <sup>continuous</sup> sample MW-7, meet Targa, Apache + Holly Energy to review pipeline locations.

810: Richard (Holly Energy) cleared all locations via telephone. They don't have any pipelines out here.

830: Begin HSA (7 5/8" OD) Drilling MW-7

900-1000: Stand by - Lee meeting w/ Targa + Apache to identify potential pipeline hazards associated w/ our MW locations.

1030: John (Precision) on-site

1140-1210: Lunch / John off-site

1430: TD @ 49' bgs (1 @ 37.7' bgs) - MW-7  
↳ Trip out 7 5/8" Auger.



5/9/12 HSA Drilling AD

1455: Augers are out - clean up.

Precision is waiting on 10" plugs  
(due to arrive @ hotel today).

before we can overream + install  
a 4" well. Will move to  
MW-11 + begin drilling.

1525: Set up @ MW-11.

1535: Post hole dig  $\phi$ -5' bgs

1550: Begin HSA (7 5/8" OD) drilling.

1700: stop for the day (TD) @ 24' bgs

↳ Precision off-site

1720: Lew off-site.

Notes: MW- $\phi$ 7  $\rightarrow$  (14-19' bgs).

@ 1010 in 2/4oz soil jars ...  
+ 2/20mL meq vials for:

VOC's by 8260B

TPH (GRO, DRO + MRO) by 8015B

PAH's by 8270

CI<sup>-</sup> by 9056A

↳ All sample jars were labeled +  
placed on ice.

↳ Drill cuttings >100 ppm (headspace)  
were dewatered for disposal.

5/10/12 HSA Drilling AD

$\phi$ 701: Lew on-site

↳ met Brad w/ El Paso N.G.  
to check out 2 locations that  
are near their pipelines. - OK  
MW-12 + MW-15.

$\phi$ 73 $\phi$ : Precision on-site

Objective: Finish drilling @ MW-11,  
install wells @ MW-11 + MW- $\phi$ 7.

Weather: Raining + 56°F.

Conduct TGSM/Calibrate PID

0820: Continue drilling HSA once  
El Paso cleared their lines near  
by.

1150: TD @ ~~49'~~<sup>50'</sup> bgs (MW-11).  $\Sigma$  = 39' bgs

1200: Stop work ~~order~~<sup>AD</sup> Notice given  
by NM one call for 2 hrs.

Based on locations given to  
NM one call by Intera not all  
utility companies were contacted  
to mark lines. Therefore, an

5/10/12 HSA Drilling LD

cont.

emergency locate request was submitted by NM One Call that requires a 2 hr stop work period to allow utilities to mark their lines.

↳ Precision offsite for lunch/supplies.

1215: Contact Joe Galemore to inform him of the "Stop Work Notice".

1350: Precision on-site

Note: Since the Emergency one call was submitted I have heard from or met w/

OK El Paso N.G.

OK Apache

OK NM Gas

OK DCP Midstream

OK Rice

} newly contacted since initial one call

1420: Apache off-site

↳ Precision continues to trip out 7 5/8" Auger & will then overdrill

5/10/12 HSA Drilling AD

cont.

using 10" Auger.

1450: Begin HSA (10" OD) drilling.

1520: Shut down - Lightning

1540 - lightning strike & pouring rain

1550: Build a berm around mw #7 borehole to keep <sup>rain</sup> water out

1620: All crew off-site

↳ The site is underwater & it's still raining.

Notes: Drilled to 30' w/ the 10" auger.

↳ mw-11 Soil Sample collected @ 29' (as described on 5/9/11). (from 29-34' bgs)

↳ Drill cuttings >100 ppm were drummed for disposal.

5/11/12

HSA  
Drilling

LD

0700: Lee on-site

↳ Precision on-site

Objective: Install 4" wells @  
mw-11 + mw-7, down HSA,  
contact utility companies that  
I haven't heard back from  
as a result of the Emergency.  
one call issued yesterday  
@ Noon. - {Chevron, Northern  
Natural gas, Southern union,  
Plains + Transwestern}.

Conduct TGSM

0720: ~~First~~<sup>AD</sup> overrunning borehole (10" <sup>od</sup>).

0747: TD borehole @ 50' bgs.

↳ prep to install 4" well.

Call from Joe Greigo (El Paso) -  
he needs me to call NM one call  
+ have a ticket sent to him  
for their records - per one call  
operator.

5/11/12

HSA  
Drilling

LD

Contacted

- Chevron - left message (432-687-7567)
- N. Nat. Gas - OK - lines to north  
of Targa facility.
- S. Union - Spotter coming out
- Plains - left message (432-686-1767)
- Transwestern - left message (832-668-1136)  
{(575)-631-2586}

Precision has installed the well  
+ has begun to backfill w/ 10/20  
sand. The well will be hung  
during backfilling. - See next page for  
the As-Built.

1245: Have met w/ Southern union,  
Plains + Transwestern to review  
pipeline locations w/ respect to  
our proposed MW locations.  
Based on a Plains pipeline  
location moved MW-09 south  
15'.

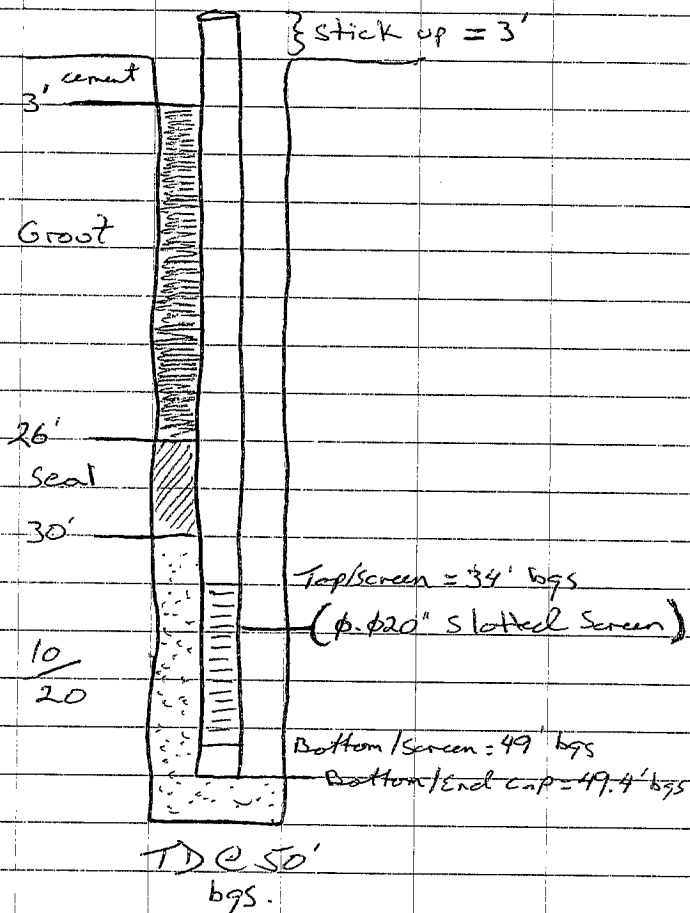
↳ Precision has backfilled the  
well w/ 10/20 sand + installed 2

5/11/12

HSA  
Drilling

LD

MW-11 As-Built {4" SCH. 40 - PVC}



5/11/12

HSA  
Drilling

LD

~~cont~~ the bentonite seal (hydrated) <sup>10 gallons</sup>

Notes Have been slowed today by multiple H<sub>2</sub>S Alarms going off @ Targa. Our well materials are being stored @ Enersource, which cannot be entered w/o going through the Targa Plant. The support truck got stuck outside of the Plant while getting well materials for 20 minutes.

1310: Juan to get fuel for the rig while Alex drums super (10") to overream MW-φ7.

↳ Lee labels drums @ MW-φ7 & MW-11 & ✓ GPS MW locations

1440: Juan on-site

1500: Set up @ MW-φ7 to overream w/ 10" HSA

1507: Begin drilling HSA (10")



5/11/12

HSA  
Drilling

LD

Dale's Spoke w/ Willie (Chevron)  
(575) 209- $\phi\phi\phi$ 3. He will  
be out after 3pm today to  
spot utility.

1610: TD @ MW- $\phi$ 7 w/ 10" Auger  
↳ 50' bgs.

↳ knock out wooden plug +  
prep to install MW. As-Built →

1641: Well installed - backfilling w/  
10/20 sand.

1715 - 1730: Maintenance rig - would start.

1818: Backfill w/ bentonite  $\frac{3}{4}$ " chips  
+ hydrate w/ 10 gallons of water  
↳ clean up

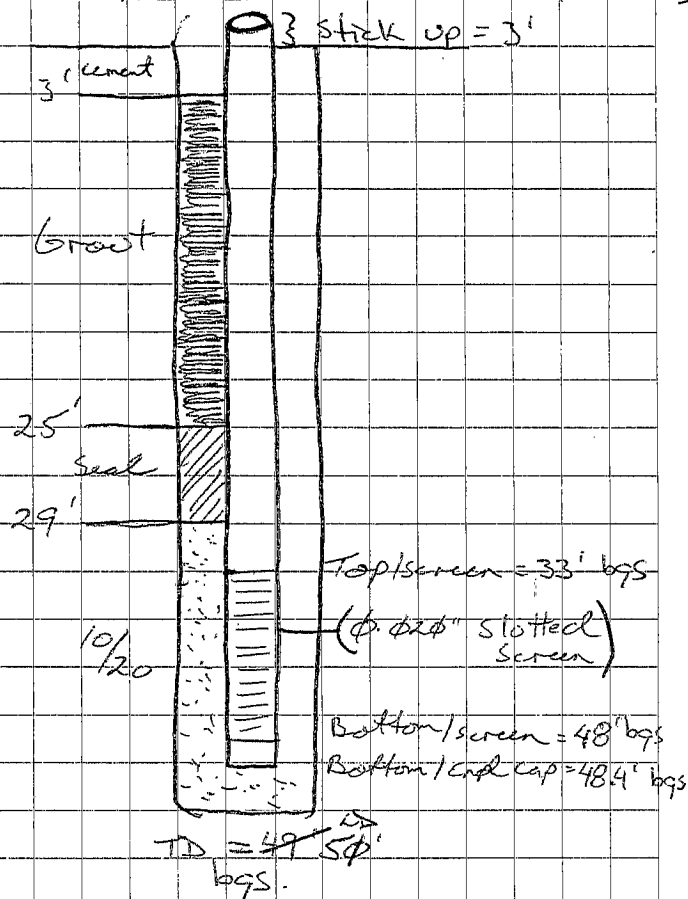
1830: All crew off-site.

5/11/12

HSA  
Drilling

LD

MW- $\phi$ 7 As-Built {4" SCH. 40 - PVC}





5/12/12

HSA  
Drilling

LD

0700: Precision on-site

↳ Trip out 20' of HSA + decom

0720: Lu on-site - picked up ice

Conduct TGSM/Calibrate PID

Objective: Meet w/ Willie (Chevron)  
to go over their pipeline locations.  
HSA drill @ MW-08 & install  
a well.

0750: Willie (Chevron) on-site  
↳ (575-209-0003)

Lu & Willie go to MW locations  
8, 9, + 13 to see if there is  
a conflict w/ their pipeline - OK

0820: Willie off-site

↳ Precision is drawing up.

0845: Move to MW-08 / set up.

0915: Support truck is stuck in the  
mud.

1015: Support truck freed up / move trailer.

5/12/12

HSA  
Drilling

LD

cont.

into position next to the rig.

1020: Post hole dig  $\phi$ -4.5' bgs -  
clear area/borehole using the  
Schonstedt.

1045: Begin HSA ( $7\frac{5}{8}$ " OD) drilling  
@ MW-08

1140-1210: Lunch.

1600: TD MW-08 @ 50' bgs ( $\nabla = 38.5'$   
bgs)  
↳ Trip out  $7\frac{5}{8}$ " HSA & will  
then overream using the 10" HSA.

1710: Joe Galemore on-site.

1830: Have overreamed the borehole  
down to 35' bgs / clean up  
site

↳ All crew off-site.

Note: MW-08 sampled collected @ 1345  
(from 14-19' bgs)  
(as described on 5/9/12). Cutting >100  
ppm were drummed.

5/13/12

HSA  
Drilling

LD

0700: Precision on-site

0710: Lu on-site.

Conduct TGSM/Calibrate PID

Objective: Finish overreaming  
mw-φ8 + install well. Begin  
drilling @ mw-φ9.

0730: continue overreaming mwφ8  
(10" OD).

0820: TD mw-φ8 @ 50' bgs.

↳ Prep to install MW. (As Built) →

1030: Well installed + backfilled w/  
10/20 sand + bentonite Seal (Hydrated)

1050: Lu to Home Depot for visqueen

↳ Precision cleans up @ mw-φ8

1100: met Joe @ Plant Entrance - Joe

will pickup visqueen

↳ Precision decommission Auger.

1200: Joe on-site.

Lu + Joe ✓ all MW locations  
not yet drilled.

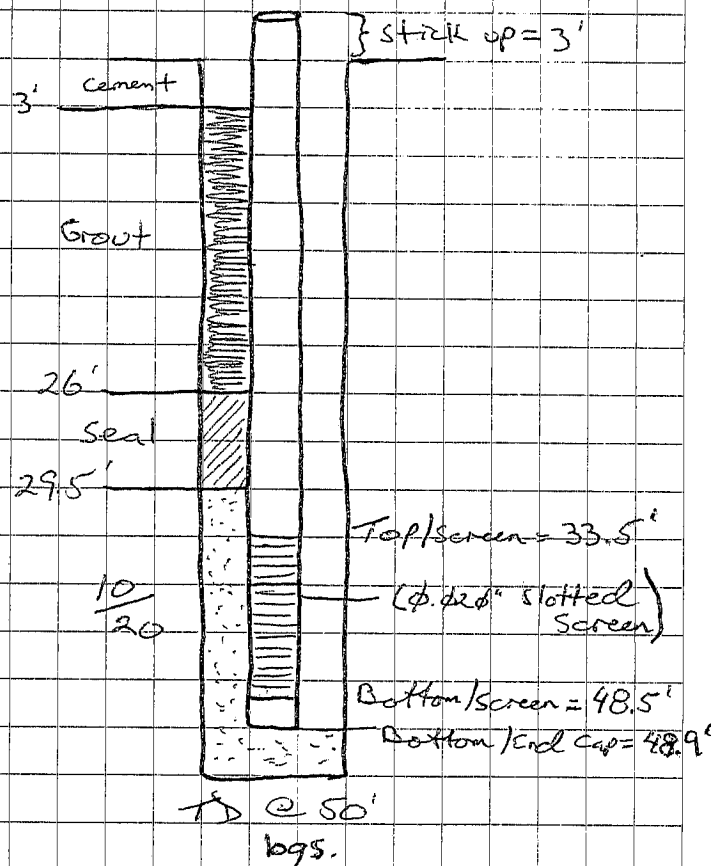
1300: Joe off-site.

5/13/12

HSA  
Drilling

LD

MW-φ8 As-Built (4" SCH 40-PR)



5/13/12 HSA Drilling LD  
1330: set up @ MW-~~49~~.

- The support truck got stuck for about 15 min.

1420: Post hole dig @ MW-49

The Schonstedt was picking up something. We therefore opted to move ~ 5' south of current location & will post hole dig & ✓ w/ Schonstedt.

1445: Rob Sengebush on-site

1520: Have cleared MW-49 borehole to 6' bgs. Will drill down to 10' bgs & read again w/ the Schonstedt.

1540: Rob off-site

1600: Have cleared to 10' bgs w/ the Schonstedt. - continue drilling w/ 7 5/8" OD - HSA

Hard drilling beginning @ 9' bgs - slow drilling.

5/13/12 HSA Drilling LD

1800: Stop for the day - current TD @ 24' bgs.  
↳ Precision off-site

1815: Leave off-site.

### Notes:

↳ MW-49 sample collected @ 1745 (as described on 5/9/12). (from 19-23' bgs)

↳ Cuttings > 100 ppm were drummed.

5/14/12

HSA  
Drilling

LD

0700: Lee on-site

↳ Precision on-site

Objective: Continue drilling @ mw-09  
& install a well.

Weather: Raining & 55°F.

Conduct TGS/Calibrate PID

0711: Continue HSA (7 5/8" OD)  
drilling.

0735: SLO (Sonnenaker) on-site  
to GPS locations.

0745: Sonnenaker off-site.

0915: Shut down - Lightning

0922: Lightning

0952: Continue drilling.

1100: TD MW-09 @ 50' bgs - Trip  
out 7 5/8 HSA & prep to  
overream.

1150: Augers out.

↳ Lunch

5/14/12

HSA  
Drilling

LD

1220: Begin overreaming MW-09 (10" OD)

1430: Well installed (see next page  
for As-Built) & begin backfilling  
w/ 10/20 sand.

1500: Rig out of fuel.

1510: Juan off-site to get fuel

↳ Lee & Alex to hand clear other  
MW locations. - (MW-10 & MW-15).

1625: Juan on-site

Note: There have been multiple  
lightning strikes over the past  
hour & it's raining

↳ Last lightning struck @ ~~16~~<sup>15</sup> 1610.

1640: Continue backfilling.

1745: Done for the day - Need  
to get the support truck unstuck.

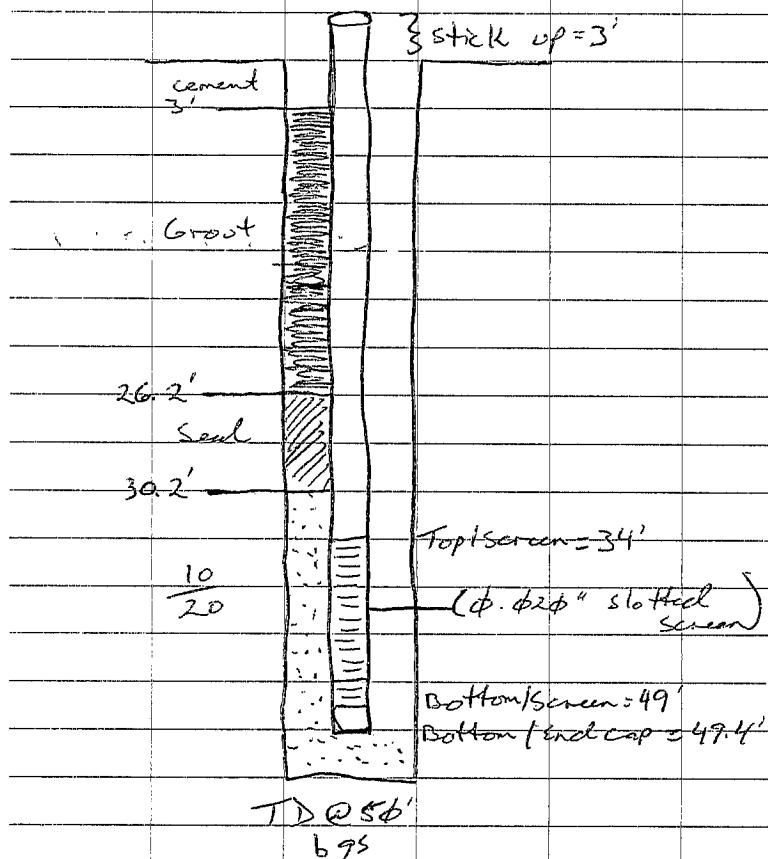
1750: All crew off-site.



5/14/12

HSA  
Drilling

LD

MW- $\phi 9$  As-Built (4" SCH. 4  $\phi$ , PVC)

5/15/12

HSA  
Drilling

LD

 $\phi 700$ : Lee on-site

↳ Precision on-site

Conduct TSSM / Calibrate PID.

Objective: Trip out Augers @  
MW- $\phi 9$ . Begin drilling @ MW-10.Weather: clear, cool (54°F) + breezy $\phi 717$ : Continue to trip out 10' augers. $\phi 900$ : Precision to clear 7 5/8" Augers.↳ Rig set up @ MW-1 $\phi$ .

1100: Set up @ MW-10.

1120: Begin HSA (7 5/8" OD) drilling

↳ Will clear the borehole down  
to 9' bgs w/ The Schonstedt.

1150: Lunch

1220: Continue drilling.

1445: John Aquino on-site w/ 7 5/8"

Auger + drums → off local  
equipment.

1530: John off-site - continue drilling.

5/15/12

HSA  
Drilling

LD

1730: TD MW-10 @ 50' bgs ( $\nabla = 38.5'$  bgs). Begin to trip out Augers - will overream tomorrow w/ 10" Augers.  
↳ Alex to clean 10" Augers.

1640: Out of water - Precision will get water in town tonight & finish clean in the a.m.

1650: All crew off-site.

### Notes:

MW-10 sample collected @ 1540 (as described on 5/9/12) from (24-<sup>25</sup> 29' bgs).

Cuttings >100 ppm were drummed.

5/16/12

HSA  
Drilling

LD

0700: Len on-site  
↳ Precision on-site

Objective: Overream MW-10 w/ 10" OD - HSA & install well.  
Begin drilling @ MW-~~10~~<sup>15</sup>.

Conduct TQSM/Calibrate PID.

0710: Precision finishes cleaning 10" Auger

0800: Begin overreaming @ MW-10 (10" OD HSA).

0925: TD @ 50' bgs  
↳ prep to install well @ MW-10 (see next page for As-built).

1020: MW-10 installed - begin back-filling w/ 10/20 sand.

1140: Filter pack & seal (hydrated w/ 15 gallons of water)

1145 : Lunch

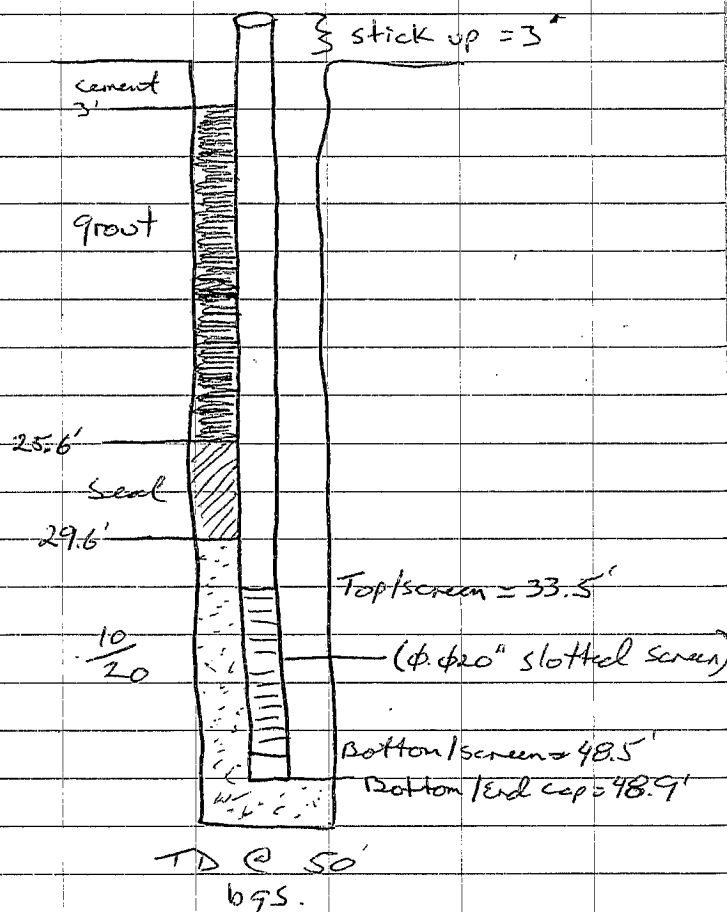
1215 : clean up & move to MW-15

5/16/12

HSA  
Drilling

AD

MW-10. As-Built (4" sch. 40 - PVC)



5/16/12

HSA  
Drilling

AD

1345: Drilling HSA (7 5/8" OD)  
@ MW-12<sup>W/SHIL</sup>

1700: TD MW-15 @ 49' bgs.

V = 37' bgs.1720: per Joe Galenore install  
a 2" well @ MW-151740: Well installed - begin backfilling  
w/ 10/20 silica (see next page  
for As-Built).1830: Backfill w/ bentonite &  
hydrate w/ 10 gallons of water.  
→ clean up/sewage site for  
days off.

1900: All crew off-site.



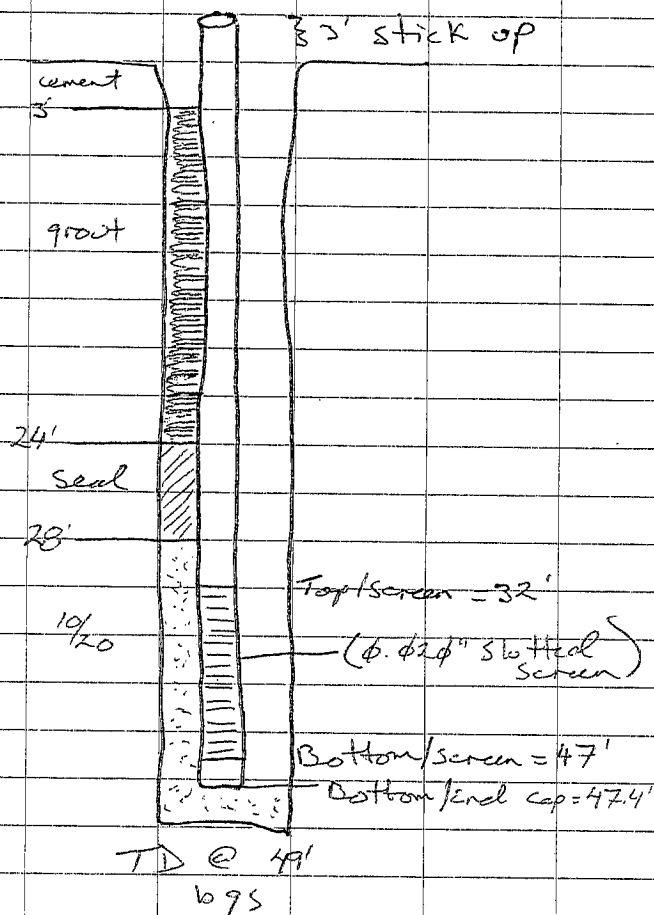
5/16/12

HSA  
Drilling

LD

5/12/12

MW-12 As-Built {2" SCH. 40-PVC}



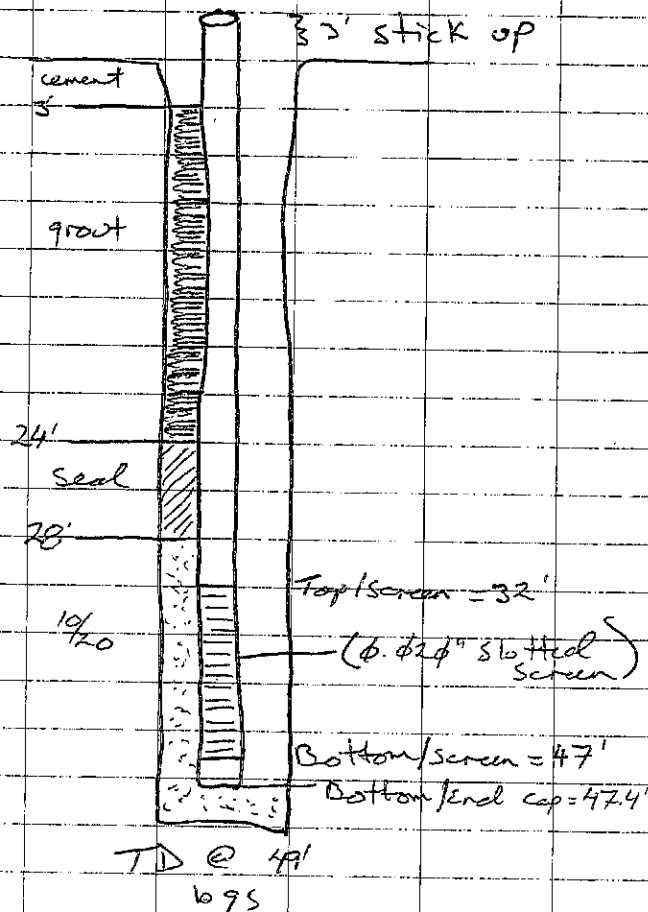
5/16/12

HSA  
Drilling

LD

5/22/12

MW-12 As-Built {2" SCH. 40 - PVC}



Low Flow Sampling

UP

5/22/12 Tuesday

Sunny, 90's, 20 mph wind

Lynde Price

0845 Meet Jeff Palmer in Monument, arm  
and caravan to site.0900 Unlock wells on Enersource property  
+ remove well caps to allow wt to  
equalize. (Existing + new wells)

0950 Begin collecting water level measurements

1155 Finished collecting water levels.

Move + MW-01 and begin setting  
up to collect GW samples using  
low flow methods and a Solinst  
Bladder pump. Calibrate YSI.1545 Collect Sample from MW-01:

3 VOA's - VOC's (EPA 8260B)

1 VOA - Ethylene Dibromide (EPA 504.1)

500 ml plastic - Dissolved Chloride (EPA 300.0)

TDS - (SM 2540 C)

- Filtered

5/22/12

## Low Flow Sampling

CP

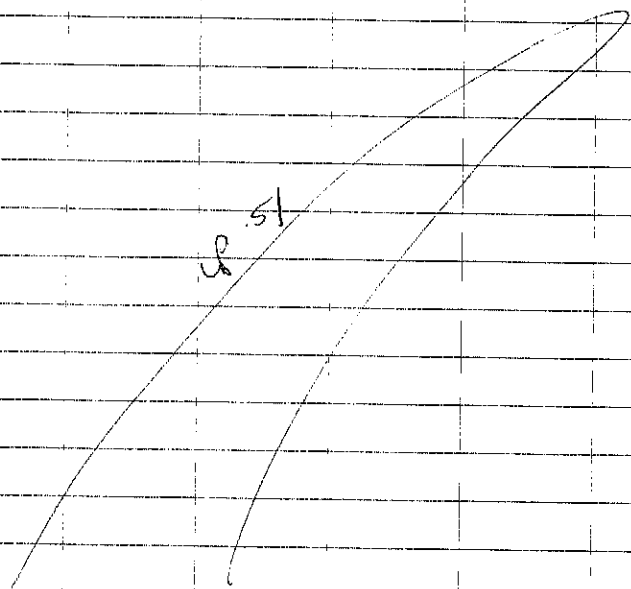
1555 Cleaned up around MW-01 and moved to MW-06.

~~1745~~  
1815 Started pumping at MW-06.  
CP

1815 Began sampling.

1830 Finished sampling + began deconning pump and de-mudding.

1915 Lynde + Jeff off-site



## Low Flow Sampling

CP

Wednesday May 23, 2012

Hazy, windy, 90-100"

L. Prior, J. Palmer

0815 Lynde + Jeff on-site. Jeff stopped by the hardware store to buy a new fitting for the water line on the bladder pump. He switches it out.

0830 Begin setting up at MW-04  
Calibrate YSI.

1040 Sample MW-04 for VOCs, EDB, Diss. Chlorides, + TDS.

1055 Begin Deconning equipment + cleaning up around MW-04.

1200 Move over to MW-05 + set up to sample.

Ivan + Alex on-site. Need to find water for their tank so they can grow the wells. They talk to someone from Targa next door, Todd Young, but Todd needs confirmation from our OGD contact.

cont. →



5/23/12

## Low Flow Sampling

Joe Galemore is called and he contacts Jim Griswald from OCD. We get permission to obtain water. Jim + Alex fill up. They start grouting new wells.

1325

Start Bladder pump @ MW-05  
Jim Griswald on-site. Jim calls Joe G. and they decide we do not need to sample the Rice well because it's located very close to our newly installed wells that we are planning on sampling.

1345

Jim Griswald off-site.

Sample MW-05.

1415

Decon pump + YSI. Clean up area.

1440

Head to MW-02 to measure water level + product again. Product was discovered in this well so Joe Galemore wanted a bailer sent down-hole to obtain a visual. Will not sample this well.

UP 5/23/12

## Low Flow Sampling

UP

MW-02: DTW: 40.00' bTDC

DTL: 39.48

- Dark liquid was sitting on top of water.

1500

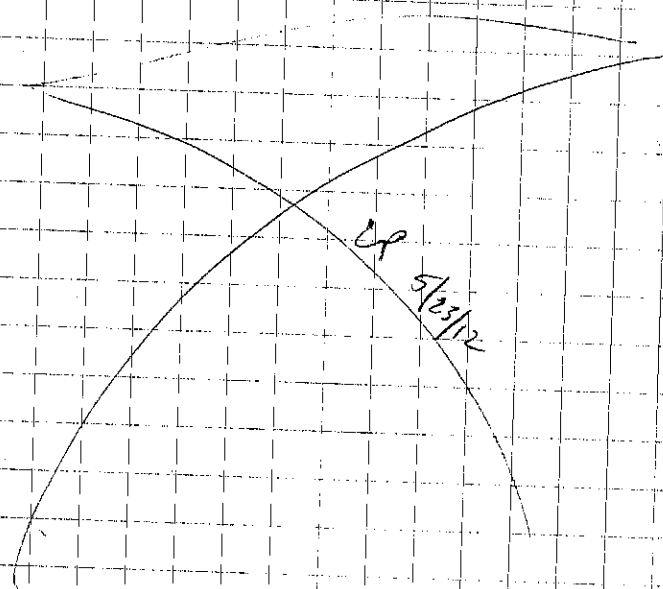
Drive to drillers to determine their status. They have a couple more wells to grout.

1600

Drillers are finished grouting new wells.

1615

Lynde, Jeff, + drillers off-site



5/24/12

LNAPL Baildown Test &  
Well Development

LP

5/24/12

LNAPL Baildown test &  
Well Development

LP

May 24, 2012 Thursday

Sunny, windy (20-30 mph), 90's-100

Lynde Price - Jeff Palmer

0730 Lynde + Jeff on-site, head to MW-03  
to begin LNAPL baildown test. Set up first

0745 Driller on-site. Head to MW-12 to pull auger &  
grout well.

0823 Initial measurements: DTW: 40.84  
DTP: 39.02

0830 Begin bail-down. Notes: It is difficult  
to collect just product in the bailer. Some  
water is in the bailer each time it's  
pulled up. A 3" bailer is being used.

0915 Begin recovery. Jeff is recording results  
on data sheet. Once a minute for first  
minute, once every 5 minutes for 30 minutes,  
once every hour for 8 hrs. He will be  
there all day.

0930 Head to MW-07 to set up to  
develop the well. Precision will develop.

Calibrate the YSI: Cond, pH 4, 7, 10

1451

4.0 7.0 10.0

1035 Start development. Using Mini  
Monsoon pump from the drillers,  
they are performing the development.

Will remove 3 well casings of water  
~~out~~ and measure water quality  
parameters (Temp, Cond, & pH) until  
they stabilize w/in 3 readings.

1220 Finish developing. Pump had to be  
mended twice so it took longer than  
anticipated. Decon the pump &  
tubing & move to next well.

1310 Begin developing MW-11. Need to  
remove  $\approx 2$  leg.

1423 Finished. Removed 30g. Water is clear.  
Decon pump and move to next well.

1455 Begin developing MW-08. Need to  
remove  $\approx 25$ g.

1615 Finished. Removed  $\approx 30$ g. Water is clear.  
Decon pump & move to next well.

5/24/12

LNAPL Build down Test &  
Well Development

CP

1640 Begin developing MW-09. Need to  
remove ~26g.

1820 Finished. Removed ~28g. Water is  
clear. Decom pump.

1830 Jeff has finished recording build down  
measurement. Decom's interface probe  
and drops it off in Lynde's truck.

Jeff + drillers off-site.

Lynde calls Joe G. to give him  
update. Decide to split tasks for  
tmrow. Lynde will log sample boring,  
Jeff will sample <sup>up</sup> GW monitor wells.

1845 Lynde off-site

~~CP~~  
5/24/12  
\* Per Conversation with L. Price on 5/21/12  
3.75 gal of LNAPL removed and  
0.25 gal of H<sub>2</sub>O removed during build down Test

Low Flow Sampling &  
GW well Installation

CP

Friday May 25, 2012

Sunny w/ smokey haze, windy (30mph), 90's-100.  
Lynde Price, Jeff Palmer

0715

Lynde + Jeff on-site. Head to MW-11  
to set up for low flow sampling. Calibrate  
YSI.

Since Jeff will be GW sampling, all that  
equipment is left with him.

0730

Drillers on-site. Head to MW-14 location  
+ begin setting up. Conduct H+S meeting.

0859

Pump is started. Jeff begins recording  
water quality parameters.

0905

Lynde heads to MW-11 to log the  
lithology of the bore hole for the well install.  
Set up for drilling & calibrate PID.  
Drillers have post hole dug to ~5' to be  
safe about underground utilities.

0930

Begin drilling. Drill slowly up to 10'  
to be careful with utilities.



5/25/12

Low flow sampling &  
HSA Drilling

UP 5/25/12

Low flow Sampling &  
HSA Drilling

14

0943 Jeff collects water sample from MW-11.  
Begins deconning equip + cleaning p.

1100 Jeff shows up to the rig @ MW-14  
and lets us know he's heading to  
MW-09 to set up to sample.

1115 Jeff heads to MW-09.

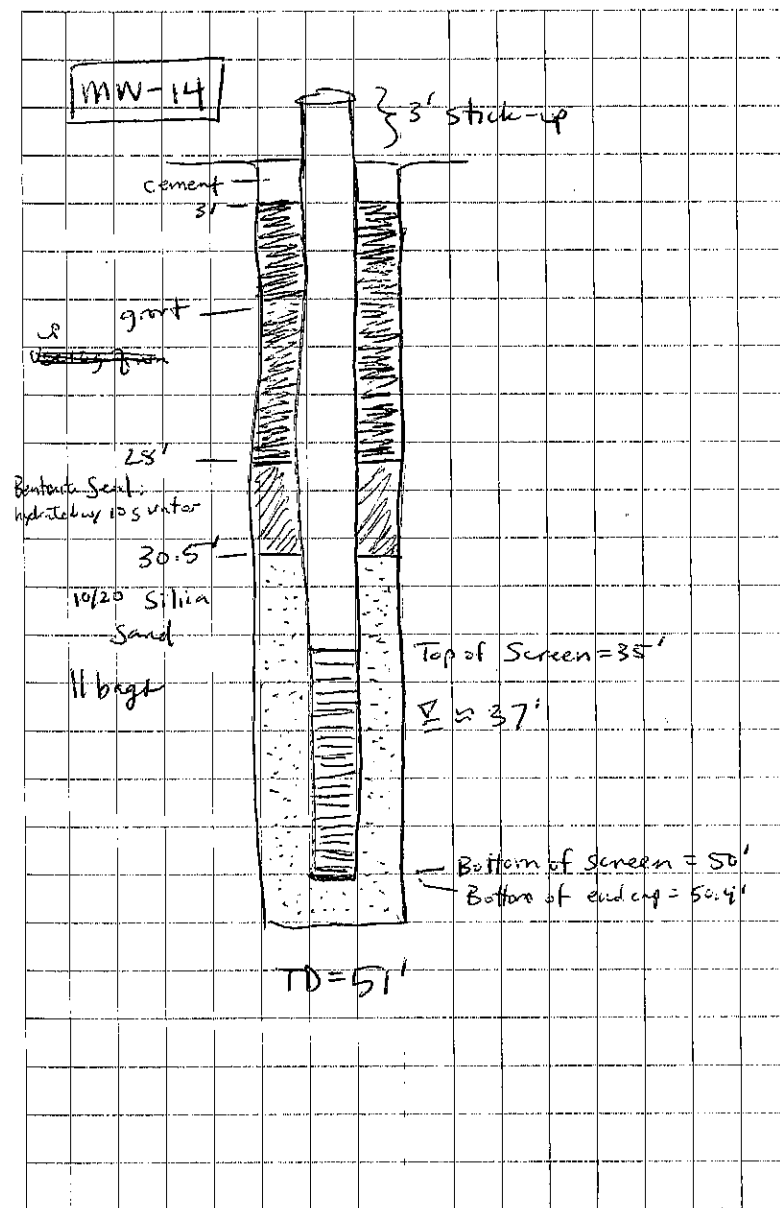
1145 Lunch Break for drillers. Lynde  
heads to MW-09 to help Jeff  
set the pump in the water column.

1225 Pump on, Jeff begins recording  
parameters. Lynde heads back to  
MW-14 to continue logging. Break over.

1331 Jeff collects GW sample from MW-09.  
Decons equip + will head to MW-08.

1440 Finished drilling.  
TD = 51' bgs

Prep to install well.



5/25/12

Low Flow Sampling +  
HSA Sampling

LP

1530 Well is installed. Need more water for bentonite seal so drillers go fill their tank on-site.

1545 Lynde heads to MW-08 + help Jeff set pump for sampling.

1625 Pump on, Jeff begins recording parameters

1635 Lynde heads back to MW-14. Drillers back + hydrating seal. ~log.

1700 Head to location of MW-13 to begin setting up. Post hole dig to 4' bgs.

1718 Jeff collects GW sample from MW-08.

1800 Drillers off-site. Lynde heads to MW-08 to help Jeff de-con + clean up.

1830 Lynde + Jeff offsite.

5/26/12

Well Development,  
HSA Drilling

LP

Saturday May 26, 2012

Sunny, Windy, 90's.

Lynde Price, Lee Dalton

0700 Lynde + Lee on-site. Transfer gear so Lee can log soil + sample soil today.

0705 Drillers on-site

0715 Alex leaves to pick up the trailer + bring to MW-13. Juan has a new purge pump for developing wells (Mini Monsoon). He begins attaching new tubing + prepping it for use.

0800 Jeff Palmer on-site. Drops off box of bailers that were left in his truck.

0815 Jeff off-site and heading home.

0845 Conduct H+S meeting. Lynde heads to MW-10 to develop the well + Lee + Drillers begin working on MW-13.

0900 Calibrate YSI, PID

5/26/12

Well Development &  
HSA Drilling

0915 Begin development.

1034 Finished. Removed approx 60 g.  
Flow rate of new pump was about 1 g/min  
Decommed pump - YSI, packed up,  
moved to MW-12.

1115 Begin development of MW-12

1218 Finished. Removed ~ 60 g. Decommed  
Pump - YSI.

1230 Head to MW-13. They <sup>are</sup> at ~~at~~ the  
water table ~ 37/36'. Taking lunch.

1245 Finish lunch.

1430 Finished drilling well + begin  
well install

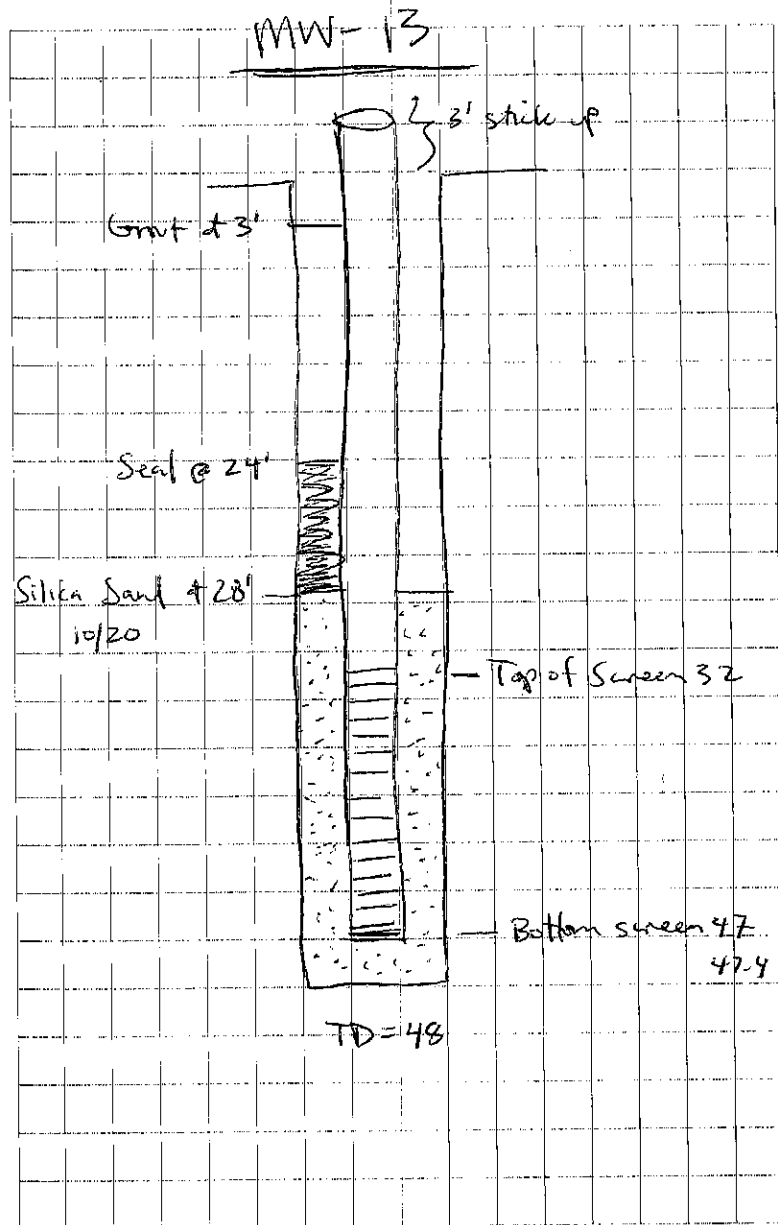
1530 Finished well install + started  
prepping for well completions.  
Will complete tomorrow.

1630 Lynda, Lee, drills off-site.

LP 5/26/12

Well Development &amp; HSA Drilling

LP





Sunday May 27, 2012

Sunny, 90's, windy (15-20 mph)

Lynde Price, Lee Dalton

0730 Lynde + Lee on-site. Begin setting up to low flow sample MW-07.

Drillers on-site. They head to MW-13 to grout the well, & decon the augers.

0745 Calibrate YSI: Conductivity = 1.431  
pH7 = 7.0 pH4 = 4.0 pH10.0 = 9.56

0830 Juan calls to let us know he's going to leave the site to pick up concrete for the completion. Alex will stay on-site & cont. working.

0853 Begin pumping & recording water quality parameters.

0945 Sampled MW-07.  
VOCs, EDB, Diss Chloride, TDS  
Juan on-site

1000 Begin deconning equip & cleaning up.

CP

5/27/12

Low Flow Sample

CP

1045 Head to MW-12 to set up for sampling

1127 <sup>11</sup>~~10~~ Pump on. Begin collecting water quality parameters.

1230 Collect sample @ MW-12

1250 Decon equipment. Juan + Alex show up to make the well completion

1330 Head to MW-10 to set up for sampling

1400 Call Joe Golemore to request developing & sampling MW-13 + MW-14 by purging & well casing & bailing. This would save time by not waiting 12-24 hrs after development to sample by low flow methods. He agreed that we can go ahead with this. If there is not an odor in the water we need to re-think this but if there is, we know this is representative formation water

1510 Pump on and begin recording water level measurements.

5/27/12

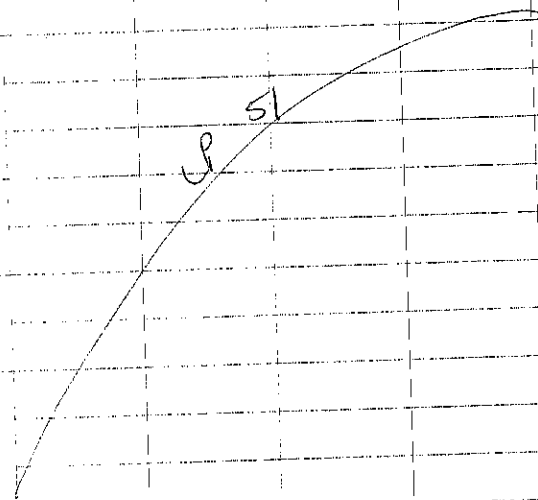
## Low Flow Sample

LP

1550 Collect sample

1605 Begin deconning equip. Decide  
to set up to collect Equip  
Rinsate sample from Bladder Pump1630 Juan & Alex (Precision) stop by to  
talk about tomorrow's plan @ VC#1.1730 Collect Equip Rinsate sample  
Pack up.

1800 Lynda, Lee, Drillers off-site.



5/28/12

## Develop &amp; Sample

LP

Monday May 28, 2012

Sunny, windy, 70's

Lynda Prior

0800 Lynda on-site. Set up at MW-13  
Calibrated YSI. Will develop w/ pump &  
use bailer to sample.0900 Realised Lee had the bailers in the  
back of his truck so called him &  
made a plan to pick them up.

0915 Lynda off-site

1030 Lynda on-site w/ bailers

1015 Collect water level measurement: 38.45'

1023 Pump on  
WL during pumping = 40.35'  
Pump rate < 1 g/min1210 Collect Sample. Approx 60g purged.  
VOCs, EDB, Diss. Chloride, TDS.Decon & move to MW-14

9/28/12

Develop &amp; Sample

CP

1353

Pump on at MW-14.

1540

Collect Sample. Approx 60 g purged.  
Flow rate has slowed slightly.

1555

Decon + clean up. Precision back  
on site and builds last well completion.

1615

Drive around to do a drum count  
from the new wells, label wells,  
+ lock new wells.

MW-07 = 4 drums

MW-08 = 4 drums

MW-09 = 2 drums

MW-10 = 4 drums

MW-11 = 4 drums

MW-12 = 3 drums

MW-13 = 2 drums

MW-14 = 2 drums

Total = 25 drums

Drums are labeled.

1800

Lynch, Lee, + Driller off site.





## WELL DEVELOPMENT & GENERAL DATA

PROJECT NAME: Enersource WELL NO.: MW-07  
PROJECT NO.: \_\_\_\_\_ DATE: 5/24/12 FORM COMPLETED BY: CP

### WELL CONSTRUCTION

TOTAL DEPTH BELOW MEASURING POINT (BMP) (FT): 52 BOREHOLE DIAMETER (IN): \_\_\_\_\_  
TOTAL DEPTH BELOW LAND SURFACE (BLS) (FT): 50 WELL DIAMETER INSIDE (IN): 4"  
WELL PROTECTOR: ☐ YES ☐ NO PADLOCK NO.: \_\_\_\_\_ WELL DIAMETER OUTSIDE (IN): \_\_\_\_\_  
SAND PACK INTERVAL (BLS) (FT): 29-50 bgs SCREEN INTERVAL (BLS) (FT): 48' bgs - 33' bgs

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 5/21/12 1010  
MEASURING POINT: \_\_\_\_\_ ELEV.: \_\_\_\_\_  
WATER LEVEL INSTRUMENT USED: Heron IP  
INITIAL WATER LEVEL (BMP) (FT): 38.89  
LINEAR FEET OF WATER: 13.11  
LINEAR FEET SATURATED GRAVEL PACK: \_\_\_\_\_

ITEM	WATER VOLUME	
	FT <sup>3</sup>	GAL
Well Casing		
Sand Pack		
Drilling Fluids		
TOTAL		

NOTE: Quantities are to be calculated prior to development

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Purge Pump (Mini Monsoon)  
WATER VOLUME TO BE REMOVED (GAL): 25.95 WATER VOLUME ACTUALLY REMOVED (GAL): 32g  
TIME DEVELOPMENT STARTED: 1025 TIME DEVELOPMENT COMPLETED: 1220

NOTE: Development is to be performed in accordance with Standard Operating Procedure

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
<u>5/24/12</u>	<u>YSI</u>		<u>Cond, pH 9, 7, 10</u>	<u>CP</u>	

### WATER QUALITY READINGS DURING DEVELOPMENT

DATE/TIME	TOTAL WATER PURGED (gal)	TEMP °C °F	CONDUCTIVITY (µS)/cm	pH	TECH	COMMENTS
<u>5/24/12 1204</u>	<u>27g</u>	<u>23.53</u>	<u>7487</u>	<u>7.34</u>	<u>CP</u>	<u>slight odor, milky</u>
<u>1213</u>	<u>30g</u>	<u>23.50</u>	<u>7499</u>	<u>7.39</u>		
	<u>31g</u>	<u>23.20</u>	<u>7500</u>	<u>7.38</u>		<u>clear, slight hydrocarbon odor</u>

COMMENTS: We had to fix the pump twice during



## WELL DEVELOPMENT & GENERAL DATA

PROJECT NAME: Enersource WELL NO.: MMW-08  
PROJECT NO.: \_\_\_\_\_ DATE: 5/24/12 FORM COMPLETED BY: LP

### WELL CONSTRUCTION

TOTAL DEPTH BELOW MEASURING POINT (BMP) (FT): 53 BOREHOLE DIAMETER (IN): \_\_\_\_\_  
TOTAL DEPTH BELOW LAND SURFACE (BLS) (FT): 50 WELL DIAMETER INSIDE (IN): 4"  
WELL PROTECTOR: ☐ YES ☐ NO PADLOCK NO.: \_\_\_\_\_ WELL DIAMETER OUTSIDE (IN): \_\_\_\_\_  
SAND PACK INTERVAL (BLS) (FT): 29.5'-50' bgs SCREEN INTERVAL (BLS) (FT): 48.5'-29.5' bgs

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: \_\_\_\_\_  
MEASURING POINT: \_\_\_\_\_ ELEV.: \_\_\_\_\_  
WATER LEVEL INSTRUMENT USED: Heron LP  
INITIAL WATER LEVEL (BMP) (FT): 40.24'  
LINEAR FEET OF WATER: 12.76  
LINEAR FEET SATURATED GRAVEL PACK: \_\_\_\_\_

ITEM	WATER VOLUME	
	FT <sup>3</sup>	GAL
Well Casing		
Sand Pack		
Drilling Fluids		
TOTAL		

NOTE: Quantities are to be calculated prior to development

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Purge Pump (Mini Monsoon)  
WATER VOLUME TO BE REMOVED (GAL): 225g WATER VOLUME ACTUALLY REMOVED (GAL): 32g  
TIME DEVELOPMENT STARTED: 1455 TIME DEVELOPMENT COMPLETED: 1615

NOTE: Development is to be performed in accordance with Standard Operating Procedure

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
	<u>YSI</u>				

### WATER QUALITY READINGS DURING DEVELOPMENT

DATE/TIME	TOTAL WATER PURGED (gal)	TEMP °C °F	CONDUCTIVITY (µS)	pH	TECH	COMMENTS
<u>1615</u>	<u>27g</u>	<u>23.66</u>	<u>21705</u>	<u>7.45</u>	<u>LP</u>	<u>Clear, no odor, no sheen</u>
<u>1618</u>	<u>28g</u>	<u>22.41</u>	<u>21215</u>	<u>7.26</u>	<u>LP</u>	<u>"</u>
<u>1621</u>	<u>29g</u>	<u>22.01</u>	<u>21163</u>	<u>7.27</u>	<u>LP</u>	<u>"</u>
<u>1624</u>	<u>30g</u>	<u>21.96</u>	<u>21154</u>	<u>7.26</u>	<u>LP</u>	<u>"</u>

COMMENTS: \_\_\_\_\_



## WELL DEVELOPMENT & GENERAL DATA

PROJECT NAME: Enersource WELL NO.: MW-09  
PROJECT NO.: \_\_\_\_\_ DATE: 5/24/12 FORM COMPLETED BY: LP

### WELL CONSTRUCTION

TOTAL DEPTH BELOW MEASURING POINT (BMP) (FT): ~53' BOREHOLE DIAMETER (IN): \_\_\_\_\_  
TOTAL DEPTH BELOW LAND SURFACE (BLS) (FT): 50' WELL DIAMETER INSIDE (IN): 4"  
WELL PROTECTOR: ☐ YES ☐ NO PADLOCK NO.: \_\_\_\_\_ WELL DIAMETER OUTSIDE (IN): \_\_\_\_\_  
SAND PACK INTERVAL (BLS) (FT): \_\_\_\_\_ SCREEN INTERVAL (BLS) (FT): 34'-49'

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 1630 5/24/12  
MEASURING POINT: \_\_\_\_\_ ELEV.: \_\_\_\_\_  
WATER LEVEL INSTRUMENT USED: Hydro 1P  
INITIAL WATER LEVEL (BMP) (FT): 39.49'  
LINEAR FEET OF WATER: 13.51'  
LINEAR FEET SATURATED GRAVEL PACK: \_\_\_\_\_

ITEM	WATER VOLUME	
	FT <sup>3</sup>	GAL
Well Casing		
Sand Pack		
Drilling Fluids		
TOTAL		

NOTE: Quantities are to be calculated prior to development

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Purge Pump (Mini Monsoon)  
WATER VOLUME TO BE REMOVED (GAL): ~26g WATER VOLUME ACTUALLY REMOVED (GAL): \_\_\_\_\_  
TIME DEVELOPMENT STARTED: 1640 TIME DEVELOPMENT COMPLETED: 1820

NOTE: Development is to be performed in accordance with Standard Operating Procedure

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
<u>5/24/12</u>	<u>YSI</u>		<u>Cal, pit 4, 7, 10</u>	<u>LP</u>	<u>Cal = 1431</u>
					<u>pH 4 = 4.0</u>

7 = 7.0  
10 = 9.56

### WATER QUALITY READINGS DURING DEVELOPMENT

DATE/TIME	TOTAL WATER PURGED (gal)	TEMP °C °F	CONDUCTIVITY (µS)	pH	TECH	COMMENTS
<u>1810</u>	<u>26.5</u>	<u>24.00</u>	<u>24849</u>	<u>7.01</u>	<u>LP</u>	<u>clear, light color, no shear</u>
<u>1813</u>	<u>~27</u>	<u>22.59</u>	<u>24903</u>	<u>7.00</u>		<u>"</u>
<u>1816</u>	<u>~27.5</u>	<u>22.41</u>	<u>24884</u>	<u>6.97</u>		<u>"</u>
<u>1819</u>	<u>~28</u>	<u>22.50</u>	<u>24860</u>	<u>6.92</u>		<u>"</u>

COMMENTS: \_\_\_\_\_





## WELL DEVELOPMENT & GENERAL DATA

PROJECT NAME: Energence WELL NO.: MW-10  
PROJECT NO.: \_\_\_\_\_ DATE: 5/26/12 FORM COMPLETED BY: CP

### WELL CONSTRUCTION

TOTAL DEPTH BELOW MEASURING POINT (BMP) (FT): 53' BOREHOLE DIAMETER (IN): 4"  
TOTAL DEPTH BELOW LAND SURFACE (BLS) (FT): 50' WELL DIAMETER INSIDE (IN): \_\_\_\_\_  
WELL PROTECTOR: ☐ YES ☐ NO PADLOCK NO.: \_\_\_\_\_ WELL DIAMETER OUTSIDE (IN): \_\_\_\_\_  
SAND PACK INTERVAL (BLS) (FT): \_\_\_\_\_ SCREEN INTERVAL (BLS) (FT): \_\_\_\_\_

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 5/26/12  
MEASURING POINT: \_\_\_\_\_ ELEV.: \_\_\_\_\_  
WATER LEVEL INSTRUMENT USED: Heron 1P  
INITIAL WATER LEVEL (BMP) (FT): 37.84'  
LINEAR FEET OF WATER: \_\_\_\_\_  
LINEAR FEET SATURATED GRAVEL PACK: \_\_\_\_\_

ITEM	WATER VOLUME	
	FT <sup>3</sup>	GAL
Well Casing		
Sand Pack		
Drilling Fluids		
TOTAL		

NOTE: Quantities are to be calculated prior to development

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Purge pump + surging (Mini Monsoon)  
WATER VOLUME TO BE REMOVED (GAL): 30 g WATER VOLUME ACTUALLY REMOVED (GAL): ~61  
TIME DEVELOPMENT STARTED: 0915 TIME DEVELOPMENT COMPLETED: 1034

NOTE: Development is to be performed in accordance with Standard Operating Procedure

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS

### WATER QUALITY READINGS DURING DEVELOPMENT

DATE/TIME	TOTAL WATER PURGED (gal)	TEMP °C °F	CONDUCTIVITY (µS)/cm	pH	TECH	COMMENTS
5/26/12 1020	~50	22.40	19614	6.55	CP	Slight H <sub>2</sub> O odor,
1024	~54	22.04	19539	6.64		"
1027	~57	22.01	19558	6.69		"
1029	~59	22.05	19560	6.68		"

with slight yellow tinge  
clear, no screen

COMMENTS: Precision bought a new Mini Monsoon so flow rate is quicker ~ 1 g/min  
Intera performed the development.



## WELL DEVELOPMENT & GENERAL DATA

PROJECT NAME: Energysource WELL NO.: MW-11  
PROJECT NO.: \_\_\_\_\_ DATE: 5/24/12 FORM COMPLETED BY: CP

### WELL CONSTRUCTION

TOTAL DEPTH BELOW MEASURING POINT (BMP) (FT): 53' BOREHOLE DIAMETER (IN): \_\_\_\_\_  
TOTAL DEPTH BELOW LAND SURFACE (BLS) (FT): 50' WELL DIAMETER INSIDE (IN): \_\_\_\_\_  
WELL PROTECTOR: ☐ YES ☐ NO PADLOCK NO.: \_\_\_\_\_ WELL DIAMETER OUTSIDE (IN): \_\_\_\_\_  
SAND PACK INTERVAL (BLS) (FT): \_\_\_\_\_ SCREEN INTERVAL (BLS) (FT): \_\_\_\_\_

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: \_\_\_\_\_  
MEASURING POINT: \_\_\_\_\_ ELEV.: \_\_\_\_\_  
WATER LEVEL INSTRUMENT USED: Heron IP  
INITIAL WATER LEVEL (BMP) (FT): 39.49  
LINEAR FEET OF WATER: 13.51  
LINEAR FEET SATURATED GRAVEL PACK: \_\_\_\_\_

ITEM	WATER VOLUME	
	FT <sup>3</sup>	GAL
Well Casing		
Sand Pack		
Drilling Fluids		
TOTAL		

NOTE: Quantities are to be calculated prior to development

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Burge Pump (Mini Monsoon)  
WATER VOLUME TO BE REMOVED (GAL): ~26 g WATER VOLUME ACTUALLY REMOVED (GAL): 30 g  
TIME DEVELOPMENT STARTED: 1310 TIME DEVELOPMENT COMPLETED: 1423

NOTE: Development is to be performed in accordance with Standard Operating Procedure

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
<u>5/24/12</u>	<u>YSI</u>		<u>Cond, pH 4, 7, 10</u>	<u>CP</u>	<u>good</u>

### WATER QUALITY READINGS DURING DEVELOPMENT

DATE/TIME	TOTAL WATER PURGED (gal)	TEMP °C °F	CONDUCTIVITY (µS)	pH	TECH	COMMENTS
<u>5/24/12 1415</u>	<u>27 g</u>	<u>23.14</u>	<u>13732</u>	<u>7.35</u>	<u>CP</u>	<u>slight r/c odor, no sheen clear</u>
<u>1418</u>	<u>28 g</u>	<u>23.26</u>	<u>13723</u>	<u>7.13</u>		<u>"</u>
<u>1420</u>	<u>29 g</u>	<u>23.10</u>	<u>13722</u>	<u>7.11</u>		<u>"</u>
<u>1423</u>	<u>30 g</u>	<u>23.07</u>	<u>13717</u>	<u>7.10</u>		<u>"</u>

COMMENTS: \_\_\_\_\_



## WELL DEVELOPMENT & GENERAL DATA

PROJECT NAME: Energarcu WELL NO.: MW-12  
PROJECT NO.: \_\_\_\_\_ DATE: 5/24/12 FORM COMPLETED BY: LP

### WELL CONSTRUCTION

TOTAL DEPTH BELOW MEASURING POINT (BMP) (FT): 52' BOREHOLE DIAMETER (IN): 2  
TOTAL DEPTH BELOW LAND SURFACE (BLS) (FT): 49' WELL DIAMETER INSIDE (IN): 2'  
WELL PROTECTOR: ☐ YES ☐ NO PADLOCK NO.: \_\_\_\_\_ WELL DIAMETER OUTSIDE (IN): \_\_\_\_\_  
SAND PACK INTERVAL (BLS) (FT): \_\_\_\_\_ SCREEN INTERVAL (BLS) (FT): \_\_\_\_\_

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 5/24/12 1100  
MEASURING POINT: \_\_\_\_\_ ELEV.: \_\_\_\_\_  
WATER LEVEL INSTRUMENT USED: Saturn Heron IP  
INITIAL WATER LEVEL (BMP) (FT): 38.99  
LINEAR FEET OF WATER: 13.01  
LINEAR FEET SATURATED GRAVEL PACK: \_\_\_\_\_

ITEM	WATER VOLUME	
	FT <sup>3</sup>	GAL
Well Casing		
Sand Pack		
Drilling Fluids		
TOTAL		

NOTE: Quantities are to be calculated prior to development

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Purge Pump + Surging (Mini Monsoon Pump)  
WATER VOLUME TO BE REMOVED (GAL): 7 WATER VOLUME ACTUALLY REMOVED (GAL): 60  
TIME DEVELOPMENT STARTED: 1115 TIME DEVELOPMENT COMPLETED: 1218

NOTE: Development is to be performed in accordance with Standard Operating Procedure

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
<u>5/24/12</u>	<u>YSI</u>		<u>Cal. pH 7, 7.10</u>	<u>LP</u>	

### WATER QUALITY READINGS DURING DEVELOPMENT

DATE/TIME	TOTAL WATER PURGED (gal)	TEMP °C °F	CONDUCTIVITY (µS)	pH	TECH	COMMENTS
<u>1214</u>	<u>56.5</u>	<u>23.45</u>	<u>21200</u>	<u>6.90</u>	<u>LP</u>	<u>clear, slight Hc</u>
<u>1216</u>	<u>58</u>	<u>23.44</u>	<u>21202</u>	<u>6.89</u>	<u>LP</u>	
<u>1217</u>	<u>59</u>	<u>23.37</u>	<u>21217</u>	<u>6.87</u>	<u>LP</u>	

COMMENTS: \_\_\_\_\_





# WELL DEVELOPMENT & Sampling

PROJECT NAME: Enersome WELL ID: MW-13  
PROJECT NO.: \_\_\_\_\_ DATE: 5/28/12  
FORM COMPLETED BY: LP

## WELL CONSTRUCTION

WELL TOTAL DEPTH - FEET BELOW TOP OF CASING (FT, BTOL): 51' BTOL  
BOREHOLE DIAMETER (FT): 2"  
WELL INNER DIAMETER (FT): 2"  
SCREEN INTERVAL (FT, BTOL): 32-47 bgs = 35-50' BTOL

## WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 5/28/12 1015  
WATER LEVEL INSTRUMENT USED: Robert Heron IP  
WATER LEVEL (FT, BTOL): 38.45  
LINEAR FEET OF WATER (FT): 12.55'

## PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

## DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Pumping (Mini Monsoon) + Bailing  
WATER VOLUME TO BE REMOVED (GAL): 6.4 WATER VOLUME ACTUALLY REMOVED (GAL): 600g  
TIME DEVELOPMENT STARTED: 1023 TIME DEVELOPMENT COMPLETED: 1155

## WATER QUALITY INSTRUMENTS

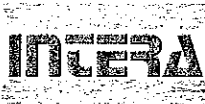
DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
<u>5/28/12</u>	<u>YSI</u>		<u>Cond, pH 4, 7, 10</u>	<u>LP</u>	<u>Cond = 1413</u>
					<u>pH 7 = 7.0</u>
					<u>pH 4 = 4.0</u>
					<u>pH 10 = 9.96</u>

Sample Method: Bailing

Sample Time: 1210

Final WL: 38.45 @ 1240



**WELL DEVELOPMENT** 1/2 Sampling

PROJECT NAME: Enersoune WELL ID: MW-14  
PROJECT NO.: \_\_\_\_\_ DATE: 5/28/12  
FORM COMPLETED BY: UP

**WELL CONSTRUCTION**

WELL TOTAL DEPTH - FEET BELOW TOP OF CASING (FT, BTOC): 59  
BOREHOLE DIAMETER (FT): \_\_\_\_\_  
WELL INNER DIAMETER (FT): 2"  
SCREEN INTERVAL (FT, BTOC): 35 - 50 bgs = 38 - 53' BTOC

**WATER VOLUME CALCULATION**

DATE/TIME OF MEASUREMENT: 39.14 1345  
WATER LEVEL INSTRUMENT USED: Seisint Heron 1A  
WATER LEVEL (FT, BTOC): 39.14  
LINEAR FEET OF WATER (FT): 13.86

**PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)**

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

**DEVELOPMENT CRITERIA**

METHOD OF DEVELOPMENT: Purge Pump (Mini Monsoon) + Bailing  
WATER VOLUME TO BE REMOVED (GAL): \_\_\_\_\_ WATER VOLUME ACTUALLY REMOVED (GAL): 60  
TIME DEVELOPMENT STARTED: 1353 TIME DEVELOPMENT COMPLETED: 1530

**WATER QUALITY INSTRUMENTS**

INSTRUMENT	CALIBRATION PERFORMED	TECH	COMMENTS
<u>YSI</u>	<u>Cond, pH 4, 7, 10</u>	<u>UP</u>	<u>Cond = 1.413, pH 4 = 4.0, pH 7 = 7.0</u> <u>pH 10 = 7.55</u>

Sampling Method: Bailing  
Sample Time: 1540  
Final WL: 39.16

Note: Well completion was not finished when well was developed + sampled. TOC was cut afterwards so WL measurement might change.





## WATER QUALITY READINGS DURING DEVELOPMENT

Stabilization = Temp.  $\pm 1^{\circ}\text{C}$ , pH  $\pm 0.2$  units, Sp. Cond.  $\pm 10\%$

COMMENTS: \_\_\_\_\_



## MONITORING WELL GAUGING DATA

Project No.: \_\_\_\_\_  
Site: \_\_\_\_\_

BMP: Below Measuring Point  
PSH: Phase Separated Hydrocarbon

# Low-Flow Sampling Logs

Site Enersource Monitoring Well ID MW-01  
 Date 5/22/12 Samplers L. Price, J. Palmer

## Monitoring Well Information

Diameter 4" Depth to Product —  
 Total Depth 44.43 Depth to Water 37.94  
 Water Column Height 6.49 Screened Interval 27-42' bgs

## Purging Information

Type of Pump Solinst Bladder Pump Water Quality Meter YSI 556 MPS  
 Depth of Pump intake 41' Depth to water after pump insertion: 37.94  
 Calibration Performed Cond, pH 4, 7, 10

## Sample Information

Sample Date/Time 5/22/15 / 1545 Sample ID MW-01  
 Samplers LP  
 Analysis VOCs, EDB, Diss Chlorides, TDS

Comments:

Signature  Date 5/22/12

13 13 13  
 44.43  
 37.94  
 6.49

2.99 7.0 9.94



[illegible]

## Low-Flow Sampling Logs

Site	<u>\$ Energsource</u>	Monitoring Well ID	<u>mw-04</u>
Date	<u>5/23/12</u>	Samplers	<u>u</u>

## Monitoring Well Information

Diameter	4"	Depth to Product	N/A
Total Depth	45.32	Depth to Water	39.07
Water Column Height	6.25	Screened Interval	


## Purging Information

Type of Pump	Solinst Bladder Pump	Water Quality Meter	YSI
Depth of Pump intake	42'	Depth to water after pump insertion:	39.08'
Calibration Performed	Cond, pH 4, 7, 10		
	1.4      4.0      7.0      9.95		

## Sample Information

Sample Date/Time 5/23/12 / 1040 Sample ID MW-04  
 Samplers JP  
 Analysis VOLs, EAB, Dissolved Chloride, TDS

Comments:

Signature  Date 5/23/12

mm-04

[illegible]



14.12  
45.34  
-38.55  
6.79

### Low-Flow Sampling Logs

Site Enersource Monitoring Well ID MW-05  
Date 5/23/12 Samplers UP

### Monitoring Well Information

Diameter 4" Depth to Product N/A  
Total Depth 45.34 Depth to Water 38.55  
Water Column Height 6.79' Screened Interval \_\_\_\_\_

### Purging Information

Type of Pump Solinst Water Quality Meter YSI  
Depth of Pump intake 42' Depth to water after pump insertion: 38.55  
Calibration Performed Cond, pH 4, 7, 10

### Sample Information

Sample Date/Time 5/23/12 1445 Sample ID MW-05  
Samplers UP  
Analysis VOCS, EDB, Dissolved Chlorides, TDS

Comments: \_\_\_\_\_

Signature Lynd R Date 5/23/12

65 1

[illegible]

# Low-Flow Sampling Logs

Site Enersource Monitoring Well ID MW-06  
 Date 5/22/12 Samplers UP

## Monitoring Well Information

Diameter 4" Depth to Product N/A  
 Total Depth 46.50' Depth to Water 38.73  
 Water Column Height 7.77' Screened Interval

## Purging Information

Type of Pump Solinst Bladder Pump Water Quality Meter YSI  
 Depth of Pump intake 42' Depth to water after pump insertion: 38.74  
 Calibration Performed cal, pH 4.7, 10

## Sample Information

Sample Date/Time 5/22/15 / 1715 Sample ID MW-06  
 Samplers UP  
 Analysis VOCs, EDB, Diss. Chloride, TDS

Comments: Pump made bubbling noises while down-h-o-b. Pump rate + water quality parameters were ok though.

Signature Lynda R Date 5/22/12

15.14,  
38.46.50  
- 38.73  
7.77



[illegible]

# Low-Flow Sampling Logs

Site Enersource

Date 5/27/12

Monitoring Well ID MW-07

Samplers LP + LD

## Monitoring Well Information

Diameter 4"

Total Depth 53'

Water Column Height 14.10

Depth to Product N/A

Depth to Water 38.90

Screened Interval 33' - 48'

## Purging Information

Type of Pump Solinst Bladder Pump

Depth of Pump Intake 4'

Calibration Performed Cont, pH 4, 7, 10

Water Quality Meter YSI

Depth to water after pump insertion: 38.89

## Sample Information

Sample Date/Time 5/27/12 0945

Samplers LP

Sample ID MW-07

Stat 853

Analysis VOCs, EDB, Diss Chloride, TDS

Comments:

Signature Lynda P

Date 5/27/12

412  
53.00  
38.90  
14.10

Gas Tank  
Pressure: 1675

(2)

[illegible]



# Low-Flow Sampling Logs

Site Enersource Monitoring Well ID MW-8  
 Date 5/25/12 Samplers \_\_\_\_\_

## Monitoring Well Information

Diameter 4" Depth to Product N/A  
 Total Depth 53' Depth to Water 40.25  
 Water Column Height 12.75' Screened Interval \_\_\_\_\_

~91  
53.00  
40.25  
12.75

## Purging Information

Type of Pump Solinst Bladder Pump Water Quality Meter YSI  
 Depth of Pump intake 46' Depth to water after pump insertion: 40.25  
 Calibration Performed Cond., pH, T, DO

## Sample Information

Sample Date/Time 5/25/12 / 17:18 Sample ID MW-08  
 Samplers \_\_\_\_\_  
 Analysis \_\_\_\_\_

Comments: \_\_\_\_\_

Signature  Date 5/25/12

MW-08

[illegible]

# Low-Flow Sampling Logs

Site 5/25/12 EnerSource  
Date \_\_\_\_\_

Monitoring Well ID MW-09  
Samplers JP

## Monitoring Well Information

Diameter 4"

Depth to Product N/A

Total Depth 53'

Depth to Water ~~39.4~~ 37.54

Water Column Height 13.51

Screened Interval 34' - 49'

<sup>12</sup>  
53.00  
37.54  
15.46

## Purging Information

Type of Pump Solinst Bladder Pump

Water Quality Meter YSI

Depth of Pump intake 45'

Depth to water after pump insertion: 32.55

Calibration Performed Y69, Cond, pH 9, 7, 10

## Sample Information

Sample Date/Time 5/25/12 / 13:31

Sample ID MW-09

Samplers \_\_\_\_\_

Analysis \_\_\_\_\_

Comments: \_\_\_\_\_

Signature 

Date 5/25/12





# Low-Flow Sampling Logs

Site Enersource Monitoring Well ID MW-10  
 Date 5/27/12 Samplers U, LD

## Monitoring Well Information

Diameter 4" Depth to Product N/A  
 Total Depth 53' bTOL 50' bgs Depth to Water 37.93  
 Water Column Height Screened Interval 33.5 - 48.5

4.91  
 53.00  
 37.93  
 15.07

## Purging Information

Type of Pump Schist Bladder Pump Water Quality Meter YSI  
 Depth of Pump intake 44' Depth to water after pump insertion: 37.93  
 Calibration Performed YSI - Cond., pH 4, 7, 10  
Ramp on - 1510

## Sample Information

Sample Date/Time 5/27/12 / 1550 Sample ID MW-10  
 Samplers U/LD  
 Analysis VOCs, EDB, Diss. Chlorides,

Comments:

Signature 5/27/12 Lynd Date 5/27/12

mw-10

1733

## Low-Flow Sampling Logs

Site Energsource Monitoring Well ID MW-11  
Date 5/25/12 Samplers JP

Monitoring Well ID MW-11  
Samplers JP

## Monitoring Well Information

Diameter 4" Depth to Product N/A

Depth to Product *N/A*

Total Depth	53'	Depth to Product	1
		Depth to Water	39.50

Depth to Product	7
Depth to Water	39.50

Water Column Height	13.50	Depth to Water	3.50
		Screened Interval	4'

Depth to Water 31.30  
Screened Interval 4'

## Purging Information

Type of Pump	Solinst Bladder Pump	Water Quality Meter	YSI
Depth of Pump Intake	15 ft	Depth to water	30 ft

Water Quality Meter Yes

Depth of Pump intake	46'	Depth to water after pump insertion:	39.50
----------------------	-----	--------------------------------------	-------

Depth to water after pump insertion: 39.50

Calibration Performed YSI - Cond, pH 4, 7, 10

Calibration Performed YSI - Cond, pH 4, 7, 10  
4.5 7.0 9.55

Pump Start 859

## Sample Information

Sample Date/Time 5/25/12 / 09:43 Sample ID MW-11

Sample ID mw-11

Samplers JP Sample ID 1

Analysis: VOCs, EDB, Dissolved Chlorides + TDS

Filtered, 250 ml plastic

Comments: \_\_\_\_\_

Signature [Signature] Date 5/25/12

Date 5/25/12

5/25/12



[illegible]

# Low-Flow Sampling Logs

Site Enersville  
Date 5/27/12

Monitoring Well ID MW-12  
Samplers UP, LD

## Monitoring Well Information

Diameter 2"  
Total Depth 52' bTOC 49' bgs  
Water Column Height  
Depth to Product N/A  
Depth to Water 38.98'  
Screened Interval 32' - 47'

## Purging Information

Type of Pump Solinst Bladder Pump  
Depth of Pump intake 44'  
Calibration Performed YSI - Cond, pH 4, 7, 10  
Water Quality Meter YSI  
Depth to water after pump insertion: 38.98'

## Sample Information

Sample Date/Time 5/27/12 1230  
Samplers  
Analysis  
Sample ID MW-12

Comments:

Pump on: 1127

Signature Lynda R

Date 5/27/12

$m w - i z$

[illegible]

Note = Sample Info from MW-13 + MW-14 is  
on the development sheets.





MONITORING WELL LNAPL Baildown Test

Project Name: Interzone Project No.: \_\_\_\_\_  
Water Level Instrument: Hydra interface probe Site: \_\_\_\_\_

WELL	DATE	TIME	DEPTH TO PSH (FT BMP)	DEPTH TO WATER (FT BMP)	TOTAL DEPTH (FT BMP)	DESCRIPTION OF MEASURING POINT	GPS COORD NORTHING	GPS COORD EASTING	GAUGER NAME	COMMENTS
MW-03	5/24/12	0823	39.02	40.84	40.84	39.33/39.49				Before BD test
		0910	39.32	39.49						
		0917	39.30	39.49						
		0918	39.29	39.49						
		0919	39.28	39.49						
		0920	39.28	39.49						
		0925	39.28	39.50						
		0930	39.27	39.52						
		0935	39.27	39.55						
		0940	39.26	39.54						
		0945	39.25	39.56						
		0950	39.25	39.58						
		1050	39.22	39.76						
		1150	39.19	39.86						Clear BD 39.22/39.76
		1250	39.17	39.94						
		1350	39.16	40.01						
		1450	39.14	40.08						
		1550	39.14	40.13						
		1650	39.14	40.19						
		1750	39.14	40.23						
	5/25/12	0730	39.10	40.55						
	5/27/12	0800	39.03	40.76						
	5/28/12	0735	39.03	40.85						

BMP: Below Measuring Point  
PSH: Phase Separated Hydrocarbon



## Sample Control Log

Project: EnergSource

Field Sample No.	Lab I.D.	Sampler Initials	Date Collected	Time Collected	Sample Media	Depth Interval	Sample Location/Coordinates	Replicate/Duplicate Sample? (Y/N)	Corresponding Field Sample No.	Composite? (Y/N)	Comments
MW-01		UP	5/22/12	1545	06						
MW-06		UP	5/22/12	1715	06						
MW-04		UP	5/23/12	1040	06						
MW-05		UP	5/23/12	1445	06						
MW-14 (19-23')		UP	5/25/12	1145	04						
MW-08		JP	5/25/12	1718	06						
MW-09		↓	5/25/12	1331	06						
MW-11		↓	5/25/12	0943	06						
MW-12		UP	5/27/12	1230	06						
MW-07		↓	5/27/12	0945	06						
MW-10		↓	5/27/12	1550	06						
Egging Rinsate		↓	5/27/12	1730	06						
Trip Blank					06						
MW-14		↓	5/28/12	1540	06						
MW-13		↓	5/28/12	1210	06						

## Sample Media

01 - SURFACE WATER, 02 - POND BOTTOM WATER, 03 - POND BOTTOM SLUDGE  
04 - SOIL, UNDERLYING SOIL, 05 - SURFACE WASTE, 06 - GROUND WATER,  
07 - TANK WASTE, 08 - NAPL, 09 - TRIP BLANK, 10 - FIELD BLANK.

MW-13 (24'-29') ↓ 5/26/12 1300 04  
MW-14 (19-23') ↓ 5/25/12 1145 04

1718  
Trip Blank Me off

## **APPENDIX C**

### **Photographic Documentation**



*No. 1 – Stained soils from MW-07.*



*No. 2 – Wet, clayey soils from MW-07.*





*No. 3 – Commencing to drill at MW-11.*



*No. 4 – CME 85 setting up to drill MW-08.*



*No. 5 – Sand/Caliche contact in MW-08 in core collected from 19 to 23.5 feet bgs.*



*No. 6 – Gray, hydrocarbon staining in MW-08 beginning at approximately 28 feet bgs.*





No. 7 – Laminations of caliche in clay underlain by caliche in MW-09.



No. 8 – Caliche laminations in silty sand from a depth of approximately 15 feet bgs in MW-10.



No. 9 – Gray stained sandy soil above red-brown clay in MW-10. Lithologic contact is at about 43 feet bgs.



No. 10 – Preparing to over-ream MW-10 from a diameter of approximately 8-inches to a diameter of approximately 10 inches.





*No. 11 – Sand with clay in MW-13 from 29 to 34 feet bgs.*

## **APPENDIX D**

### **Land Access Agreement, Performance Bond, and Damage Bond**

## **Monitoring Well Easement Procedures**

Submit application with \$100.00 application fee and \$75.00 appraisal fee. Please include a plat with legal description, quarter/quarter breakdown, coordinates and exact location of each monitoring well.

We will need a cover letter with a contact person and phone number.

We require that a damage bond be on file with The State Land Office.

Monitoring well fees are \$500.00 per well, and per year.

Monitoring well easements are issued up to five years and then will be up for renewal.

Monitoring wells are strictly for testing conditions in the ground water table and are not for producing water.

No water rights are required for monitoring wells.

Once we receive application with applications fees, cover letter and plat. It will be sent out for a site inspection. Please allow the process of a site inspection and issuing an approved easement to take about 4-6 weeks.



State of New Mexico  
COMMISSIONER OF PUBLIC LANDS  
310 Old Santa Fe Trail P.O. Box 1148  
Santa Fe, New Mexico 87504-1148

**APPLICATION FOR WATER EASEMENT**

April 19, 2012

I New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division, a resident of Santa Fe State of New Mexico, hereby submit an application for Water Easement(s), under the laws of the State of New Mexico rules and regulations of the State Land Office, for a term of five years from the date of expiration of the aforementioned water easement(s). I submit herewith a **\$30.00 application fee and \$145.00 appraisal fee**, together with an estimate of all equipment and facilities placed on the property in conjunction with the water easement(s) activities and the first year's rental offer of not less than **\$500.00 minimum for (monitoring wells)** and **\$1,000.00 minimum for (production wells)** for each well authorized by the easement(s), or for each water easement being renewed, whichever sum is greater.

A. The land covered by this application for renewal is contiguous and fully described as follows:

**Location** NW/4, Sec. 1, T.20S., R.36E. **Well Capacity** N/A **Expected Volume of Use** N/A

B. Attached is a plat showing the location of existing wells, facilities and equipment.

C.1. If the New Mexico State Engineer has designated and assigned file numbers for the water rights upon which the listed appropriations are based, please list the State Engineers water rights file number(s): N/A

C2. If the New Mexico State Engineer has not designated or assigned a file number to these appropriations, please indicate the first date of appropriation for each diversion listed above, and any changes in well-site locations, volumes of water produced, or in the purpose or use of the water.

N/A

D. Please explain the purpose of Water Easement.

Install maximum of 8 wells to monitor groundwater quality downgradient from former Enersource facility.



E. List all equipment and facilities which are anticipated to be located within the boundaries of the above designated lands in association with the continued operation of this water easement during the term of renewal applied for herein:

Maximum of 8 monitoring wells with above-grade completions consisting of metal, protective shroud, and 2'x2' concrete pad.

F. List any additional information relative to the land applied for, or use of same, not covered by the above statements:

Well locations illustrated on plat and supplement are estimates. Locations may change depending on utility locations and investigation findings.

G. If the water easement is granted, I agree to provide adequate bond to reclaim all surface damages, which could result from activities undertaken under this easement.

H. If the water easement is granted, I agree to furnish grantor copies of records and such reports and plats of your operations including, but not limited to well logs, drill cores, and other data relating to geological formations as the grantor may reasonably deem necessary for his administration of the trust lands.

I. If the water easement is granted, I agree to execute a standard Water Rights Agreement.

I, \_\_\_\_\_, do solemnly swear (or affirm) that the statements and answers to questions in this application are true and correct to the best of my knowledge and belief.

Signed: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 )ss.  
COUNTY OF \_\_\_\_\_ )

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

S  
E  
A  
L

Notary

My commission expires \_\_\_\_\_



**Ray Powell, M.S., D.V.M.**  
**COMMISSIONER**

*State of New Mexico*  
*Commissioner of Public Lands*

310 OLD SANTA FE TRAIL  
P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

**COMMISSIONER'S OFFICE**

Phone (505) 827-5760  
Fax (505) 827-5766  
[www.nmstatelands.org](http://www.nmstatelands.org)

May 3, 2012

NM Energy, Minerals and Resources Department Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Attn: Jim Griswold

Re: Confirmation of Verbal Approval – WM-244

Dear Mr. Griswold,

This letter is to document in our files, that you have requested expedited and/or emergency approval to begin construction of the project applied for under Application for Water Easement, WM-244. Verbal request has been granted and approved effective today, May 3, 2012.

**We wish to inform you, for next time that verbal approval is not normally granted. Verbal approvals are granted only if the applicant can demonstrate an emergency situation.** It is the responsibility of the applicant to submit the Application for Water Easement with sufficient time to allow for delays in the processing cycle.

If we can be of further assistance to you, please do not hesitate to contact me at (505) 827-5899 or at [pgarcia@slo.state.nm.us](mailto:pgarcia@slo.state.nm.us).

Sincerely,

A handwritten signature in dark ink, appearing to read "Philip Garcia", written over a horizontal line.

Philip Garcia, Management Analyst  
Surface Resource Division  
Right-of-Way Section



# The Bond Exchange

A Division of SUR Insurance Agency, Inc.

8601 McAlpine Park Drive, Suite 100-C • Charlotte, North Carolina 28211 • 704-366-6847 • 1-800-438-1162 • FAX 704-364-3214

April 12, 2012

The Bond Exchange  
8601 McAlpine Park Drive, Suite 100-C  
Charlotte, NC 28211

RE:

Name of Principal: INTERA INCORPORATED  
(Contractor)

Bond Number: 2157461

Obligee: STATE OF NEW MEXICO

Gentlemen:

This letter is to advise you that I understand that the bond premium on the above referenced performance/payment bond is based on the final contract price. The premium I have paid is on the original contract amount, and that any change orders and/or addendums become part of this contract. I recognize the fact that a status inquiry will be sent to close out the bond. I agree that based on the amount reported to the bond company as the final contract amount, I will be billed for any overrun at the completion of the job.

Sincerely,

\_\_\_\_\_  
Signature of Principal (Contractor)

Cynthia Ardito, Vice President, 4-13-12  
Print Name, Title and Date

Please read carefully, sign, and return to The Bond Exchange.



AIA Document A311

## Performance Bond

KNOW ALL MEN BY THESE PRESENTS, that

INTERA INCORPORATED  
1812 CENTRE CREEK DR., SUITE 300, AUSTIN, TX 78754

as Principal, hereinafter called Contractor, and

NORTH AMERICAN SPECIALTY INSURANCE COMPANY  
650 ELM STREET MANCHESTER, NH 03101

as Surety, hereinafter called Surety, are held and firmly bound unto

STATE OF NEW MEXICO  
1220 S. ST. FRANCIS DR SANTA FE, NM 87505

as Obligee, hereinafter called Owner, in the amount of

ONE HUNDRED TWELVE THOUSAND SEVEN HUNDRED SIXTY & 95/100 DOLLARS  
(\$112,760.95)

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Contractor has by written agreement dated MARCH 9, 2012, entered into a contract with Owner for

SUPPLY STAFF

in accordance with Drawings and Specifications prepared by

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.



# PERFORMANCE BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

1) Complete the Contract in accordance with its terms and conditions, or

2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or

contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

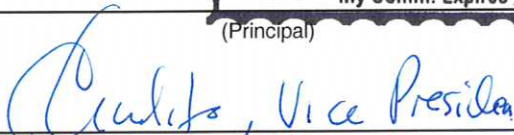
## BOND PREMIUM BASED ON FINAL CONTRACT PRICE

Signed and sealed this 12 DAY OF APRIL 2012

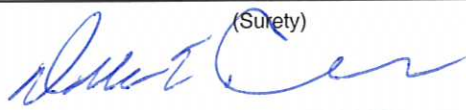
  
(Witness)

  
(Witness)



  
(Principal) (Seal)  
(Title)

NORTH AMERICAN SPECIALTY INSURANCE COMPANY

  
(Surety) (Seal)  
(Title)

Dale E. Clark ATTORNEY IN FACT



*AIA Document A311*

## Labor and Material Payment Bond

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE  
OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT

KNOW ALL MEN BY THESE PRESENTS, that

INTERA INCORPORATED  
1812 CENTRE CREEK DR., SUITE 300, AUSTIN, TX 78754

as Principal, hereinafter called Principal, and

NORTH AMERICAN SPECIALTY INSURANCE COMPANY  
650 ELM STREET MANCHESTER, NH 03101

as Surety, hereinafter called Surety, are held and firmly bound unto

STATE OF NEW MEXICO  
1220 S. ST. FRANCIS DR SANTA FE, NM 87505

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined,  
in the amount of

ONE HUNDRED TWELVE THOUSAND SEVEN HUNDRED SIXTY & 95/100 DOLLARS  
(\$112,760.95)

for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators,  
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated MARCH 9, 2012, entered into a contract with Owner for

SUPPLY STAFF

in accordance with Drawings and Specifications prepared by

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

# LABOR AND MATERIAL PAYMENT BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the principal for labor, material, or both used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment directly applicable to the Contract.

2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimants work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The owner shall not be liable for the payment of any costs or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the

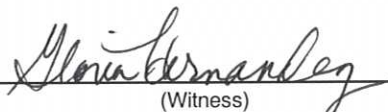
party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer..

b) After the expiration of one (1) year following the date on which principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

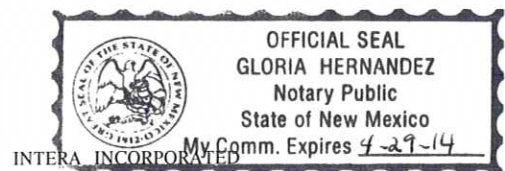
c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

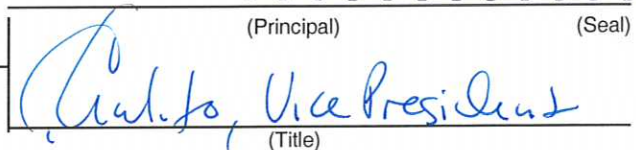
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this 12 DAY OF APRIL 2012

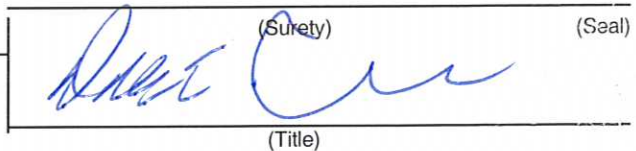
  
(Witness)

  
(Witness)



  
(Principal) (Seal)  
(Title)

NORTH AMERICAN SPECIALTY INSURANCE COMPANY

  
(Surety) (Seal)  
(Title)

Dale E. Clark ATTORNEY IN FACT



NAS SURETY GROUP

NORTH AMERICAN SPECIALTY INSURANCE COMPANY  
WASHINGTON INTERNATIONAL INSURANCE COMPANY

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT North American Specialty Insurance Company, a corporation duly organized and existing under laws of the State of New Hampshire, and having its principal office in the City of Manchester, New Hampshire, and Washington International Insurance Company, a corporation organized and existing under the laws of the State of New Hampshire and having its principal office in the City of Schaumburg, Illinois, each does hereby make, constitute and appoint:

DALE E. CLARK, DIANE GIBSON,

and ROBERT JACOBSON

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

TEN MILLION (\$10,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both North American Specialty Insurance Company and Washington International Insurance Company at meetings duly called and held on the 24<sup>th</sup> of March, 2000:

"RESOLVED, that any two of the Presidents, any Managing Director, any Senior Vice President, any Vice President, any Assistant Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Company bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Company; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Company when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By

Steven P. Anderson, President & Chief Executive Officer of Washington International Insurance Company  
& Senior Vice President of North American Specialty Insurance Company

By

David M. Layman, Senior Vice President of Washington International Insurance Company  
& Vice President of North American Specialty Insurance Company



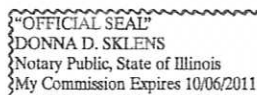
IN WITNESS WHEREOF, North American Specialty Insurance Company and Washington International Insurance Company have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers this 24<sup>th</sup> day of February, 2011.

North American Specialty Insurance Company  
Washington International Insurance Company

State of Illinois  
County of Cook

ss:

On this 24<sup>th</sup> day of February, 2011, before me, a Notary Public personally appeared Steven P. Anderson, President and CEO of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company and David M. Layman, Senior Vice President of Washington International Insurance Company and Vice President of North American Specialty Insurance Company, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



Donna D. Sklens, Notary Public

I, James A. Carpenter, the duly elected Assistant Secretary of North American Specialty Insurance Company and Washington International Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said North American Specialty Insurance Company and Washington International Insurance Company, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 12<sup>th</sup> day of April, 2012.

James A. Carpenter, Vice President & Assistant Secretary of Washington International Insurance Company &  
North American Specialty Insurance Company





NEW MEXICO STATE LAND OFFICE  
OIL CONSERVATION DIVISION

Principal Bond # 2157469

DAMAGE BOND  
RIGHT-OF-WAY OR WATER LEASE

Single Lease (Lease # \_\_\_\_\_) or Blanket Bond

**KNOW ALL MEN BY THESE PRESENTS:**

That Intera Incorporated, as Principal,  
and North American Specialty Insurance Company, of 650 Elm Street, Manchester, NH 03101  
a corporation organized, existing  
and doing business under and by virtue of laws of the State of New Mexico, as Surety, are held  
and firmly bound unto the State of New Mexico, for the use and benefits of interested holder of  
prior surface leases, licenses, rights-of-way and easements, in the total sum of \_\_\_\_\_  
One Thousand and 00/100 (\$ 1,000.00 ) Dollars, for the payment of which,  
well and truly to be made, we bind ourselves, our heirs, successors and assigns, and each and  
every one of them and us jointly and severally, firmly by these presents.

Signed with our hands and sealed with our seals this 18th day of April,  
20 12.

The conditions of the foregoing obligation are such that:

**WHEREAS**, the said principal has heretofore or may hereafter enter into water leases or  
right-of-way agreements with the State of New Mexico of various dates and periods of duration,  
covering the land described in such leases or rights-of-way; and

**WHEREAS**, all or part of said lands is embraced in grazing lease, business lease, or  
other surface lease, or is embraced in a right-of-way, easement or license granting the holder  
thereof the right to go upon or cross over the surface of said land, or to construct improvements  
thereon, as shown by the official records of the State Land Office of the State of New Mexico.

**NOW, THEREFORE**, if said principal in all respects shall make good and sufficient  
recompense, satisfaction and/or payment unto the holder or his successors in interest of any said  
prior surface lease, license, or other holder of prior surface rights, for all damages to the  
livestock, water, crops, buildings, fences, pipelines, powerlines, or other tangible improvements  
on such lands as may be suffered by such prior holder or his successors in interest by reason of  
operations under said lease or right-of-way or for such damages as a court of competent  
jurisdiction may determine and fix in any action brought on this bond, then this obligation shall  
be null and void; otherwise to remain in full force and effect.

It is expressly understood and provided that said surface lessee and/or holder and owner of any prior surface right as designated herein, are hereby made obligees hereunder the same as if their names were written herein as such, and they, or each of them, may proceed or sue hereon, and it is further expressly understood and provided that the aggregate liability of the Surety for any claim or claims hereunder shall in no event exceed the specified total sum of this obligation.

\_\_\_\_\_  
Principal  
Diane Gibson Surety  
Attorney-in-Fact

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

My Commission Expires:

\_\_\_\_\_  
Notary Public  
STATE OF North Carolina )  
 ) ss.  
COUNTY OF Mecklenburg )

On this 18th day of April, 20 12, before me appeared Diane Gibson to me personally known, who, being by me duly sworn, did say that he/she is Attorney-in-Fact of North American Specialty Insurance and that the seal affixed to said instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors and the said North American Specialty Insurance Company acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

My Commission Expires:

July 23, 2015  
\_\_\_\_\_  
Wendy M. Lands Notary Public

NAS SURETY GROUP

NORTH AMERICAN SPECIALTY INSURANCE COMPANY  
WASHINGTON INTERNATIONAL INSURANCE COMPANY

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT North American Specialty Insurance Company, a corporation duly organized and existing under laws of the State of New Hampshire, and having its principal office in the City of Manchester, New Hampshire, and Washington International Insurance Company, a corporation organized and existing under the laws of the State of New Hampshire and having its principal office in the City of Schaumburg, Illinois, each does hereby make, constitute and appoint:

DALE E. CLARK, DIANE GIBSON,  
and ROBERT JACOBSON

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

TEN MILLION (\$10,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both North American Specialty Insurance Company and Washington International Insurance Company at meetings duly called and held on the 24<sup>th</sup> of March, 2000:

"RESOLVED, that any two of the Presidents, any Managing Director, any Senior Vice President, any Vice President, any Assistant Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Company bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Company; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Company when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By

Steven P. Anderson, President & Chief Executive Officer of Washington International Insurance Company  
& Senior Vice President of North American Specialty Insurance Company

By

David M. Layman, Senior Vice President of Washington International Insurance Company  
& Vice President of North American Specialty Insurance Company



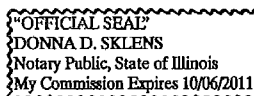
IN WITNESS WHEREOF, North American Specialty Insurance Company and Washington International Insurance Company have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers this 24<sup>th</sup> day of February, 2011.

North American Specialty Insurance Company  
Washington International Insurance Company

State of Illinois  
County of Cook

SS:

On this 24<sup>th</sup> day of February, 2011, before me, a Notary Public personally appeared Steven P. Anderson, President and CEO of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company and David M. Layman, Senior Vice President of Washington International Insurance Company and Vice President of North American Specialty Insurance Company, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



Donna D. Sklens, Notary Public

I, James A. Carpenter, the duly elected Assistant Secretary of North American Specialty Insurance Company and Washington International Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said North American Specialty Insurance Company and Washington International Insurance Company, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 18<sup>th</sup> day of April, 2012.

James A. Carpenter, Vice President & Assistant Secretary of Washington International Insurance Company &  
North American Specialty Insurance Company

## **APPENDIX E**

**Log of Borings, Monitoring Well Construction Diagrams, and  
OSE Well Permits**





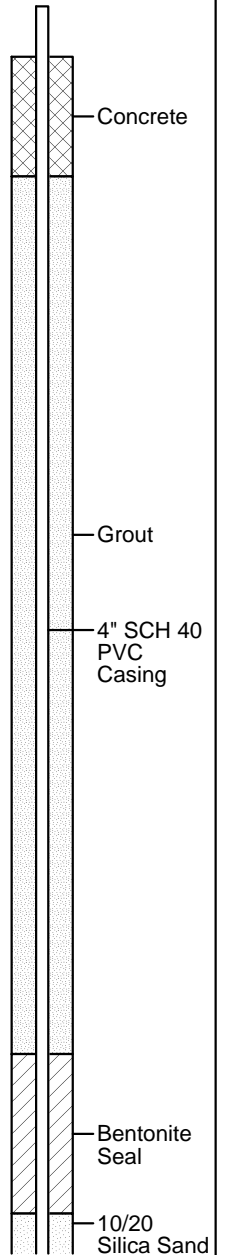
## LOG OF BORING MW-07

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/8/2012  
Date Completed : 5/11/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 37.7' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-07 TOC = 3582.14
0		NA	NA	SILTY SAND, poorly graded, light brown, very fine-grained sand, trace fine-grained gravel, soft, moderate HCL, moist	SM		
		NA	246	SAND w/ Clay, poorly graded, brown, very fine- to medium-grained sand, subangular to subrounded, firm, moderate HCL, no plasticity, moist	SP/SC		
5		50	33.9	SAND, well graded, pinkish-white, very fine- to coarse-grained sand (predominately very fine- to medium-grained), subangular to subrounded, hard, strong HCL, dry, caliche build up			
10		40	203	Reddish-brown, less caliche, trace fine-grained gravel, subrounded, trace caliche nodule (cobble size) (one in shoe), hydrocarbon odor			
15		36	1,266	Pinkish-brown, few caliche cobbles (one in shoe), strong hydrocarbon odor			
20		24	1,242		SW		
25		30	945	Gray-white			
30				Light reddish-brown, few fine-grained gravel, subrounded, moist			



## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4' bgs
3. Depth of water noted during drilling.



# LOG OF BORING MW-07

(Page 2 of 2)

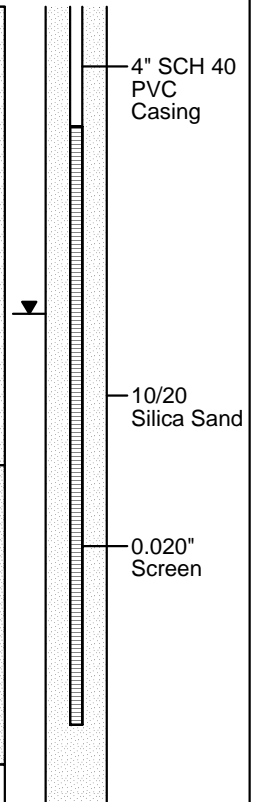
Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/8/2012  
Date Completed : 5/11/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 37.7' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-07 TOC = 3582.14
30		24	312	SAND, same as previous			
35		48	590	SAND, well graded, light- to moderate-gray, very fine- to medium-grained sand (predominately very fine- to fine-grained sand), trace coarse-grained sand, subangular to subrounded, minor clay, non plastic to low-plasticity, firm, strong HCL, strong hydrocarbon odor, moist to wet (wet beginning at 37.7' bgs)	SW		
40		100	17.6 10.9	Reddish-brown, wet [39'-41.5' PID = 17.6] [41.5'-44' PID = 10.9]			
45		100	99.9	SAND, poorly graded, reddish-brown, very fine- to fine-grained sand, trace medium- to coarse-grained sand, subrounded, little clay, non plastic to low-plasticity, trace fine-grained gravel, subrounded to rounded, weak HCL, wet	SP		
50				No Sample Collected			
55				Bottom of boring at 50' bgs			
60							



## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4' bgs
3. Depth of water noted during drilling.

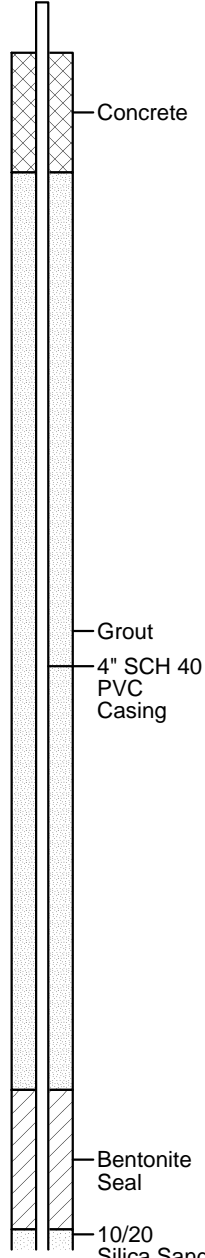
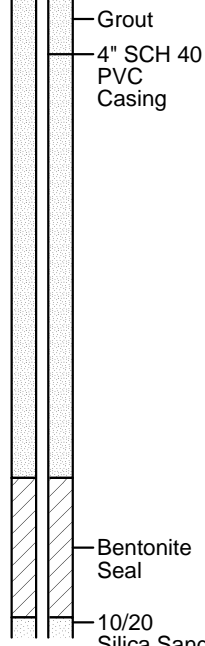


## LOG OF BORING MW-08

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/12/2012  
Date Completed : 5/13/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 38.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-08 TOC = 3584.11
0		NA	NA	SAND, poorly graded, reddish-brown, fine- to medium-grained sand (predominately fine-grained sand), subangular to subrounded, loose, moderate HCL, little silt, trace clay, no plasticity, moist	SP		
				SILTY SAND, pinkish light brown, very fine- to fine-grained sand, trace medium-grained sand, subangular to subrounded, very loose, moderate HCL	SM		
5		24	0.8	SAND, poorly graded, reddish-brown, fine- to medium-grained sand (predominately fine-grained sand), subangular to subrounded, medium dense, few silt and clay, no plasticity, moderate HCL, moist	SP		
10		70	0.1				
15		60	1,667	SILTY SAND, poorly graded, reddish-brown, very fine- to fine-grained sand, medium dense, trace clay, no plasticity, strong HCL, dry to moist, little caliche [dense, trace medium- to coarse-grained sand, subangular to subrounded, no clay, hydrocarbon odor, laminar caliche layers (13'-14' bgs)]			
20		73	1,666	Very dense, trace medium- to coarse-grained sand, subangular to subrounded, no clay, strong hydrocarbon odor (caliche 22.7'-23.5' bgs)	SM		
25		80	1,629	Not sampled SILTY SAND w/ Caliche, light gray to light brown, very dense, very fine- to fine-grained sand, strong HCL, dry, strong hydrocarbon odor from 24'-38' bgs			
30				Gray stained (28.2'-29' bgs) Trace medium-grained sand, subangular to subrounded, moist [29'-33' PID = 1,601]			

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.5' bgs; Refusal with core barrel 23.5'-24', not sampled
3. Depth to water noted during drilling



# LOG OF BORING MW-08

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/12/2012  
Date Completed : 5/13/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 38.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-08 TOC = 3584.11
30		100	1,601 1,601	SILTY SAND, same as previous  [33'-34' PID = 1,601] Moist to wet [34'-38' PID = 1,619]	SM		
35		60	1,619 261	Black stained (37.3'-38' bgs) [38'-39' PID = 261]			
40		100	319 50.5	[39'-42.4' PID = 319] CLAYEY SAND, reddish-brown, light brown, pinkish-brown and white, fine- to coarse-grained sand, subangular to subrounded, fine to coarse-grained gravel, caliche nodules, angular to rounded, dense, weak HCL, wet, trace fine-grained cobbles, caliche nodules (gravel size), subrounded	SC		
45				[42.4'-44' PID = 50.5] CALICHE w/ very fine- to fine-grained sand, white and pinkish-brown, very dense, strong HCL, dry			
		100	196 90.8	[44'-46' PID = 196] Lean CLAY, reddish-brown, few very fine-grained sand, medium plasticity, dense, wet, hydrocarbon odor from 44'-46' bgs [46'-49' PID = 90.8] Lean CLAY, red-brown, medium plasticity, very dense, strong HCL, moist to wet, hydrocarbon odor from 46'-49' bgs	CL		
50				No Sample Collected			
				Bottom of boring at 50' bgs			
55							
60							

Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.5' bgs; Refusal with core barrel 23.5'-24', not sampled
3. Depth to water noted during drilling





## LOG OF BORING MW-09

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/13/2012  
Date Completed : 5/14/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 39' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-09 TOC = 3582.21
0		NA	NA	SAND w/ Silt, poorly graded, reddish-brown, very fine- to fine-grained sand, very loose, moderate HCL, moist to wet, no odor	SP/SM		<p>Concrete</p> <p>4" SCH 40 PVC Casing</p> <p>Grout</p> <p>Bentonite Seal</p> <p>10/20 Silica Sand</p> <p>0.020" Screen</p>
5		48	0.0 0.4	[4'-7.6' PID = 0] SILTY SAND, pinkish-white, very fine- to fine-grained sand, trace medium- to coarse-grained sand, subangular to subrounded, very loose, strong HCL, moist to dry	SM		
10		100	0.0 0.0	[7.6'-9' PID = 0.4] SAND w/ Clay, poorly graded, reddish-brown, very fine- to fine-grained sand, medium dense, no plasticity, moderate HCL, moist Strong cementation, very dense, slow drilling at 19' bgs [9'-11' PID = 0]	SP/SC		
15		74	987	[11'-14' PID = 0] Fat CLAY, reddish-brown, high plasticity, very hard, strong HCL, dry, vertical carbonate stringers (above), laminar to massive carbonate horizon, trace fine-grained gravel, rounded, strong cementation (bottom 6")	CH		
20		80	1,774 1,638	CALICHE, pinkish-white, very hard, strong HCL, hydrocarbon odor, dry, blocky, strong cementation  Strong hydrocarbon odor [19'-23' PID = 1,774]			
25		100	1,365	[23'-24' PID = 1,638] Light gray, moist at 23' bgs No sample Light to dark gray and pinkish-white			
30		80	1,207	CALICHE w/ Silty Sand, light- to moderate-gray, poorly graded, fine- to coarse-grained sand (predominately fine- to medium-grained sand), angular to subrounded, little fine-grained gravel, subangular to subrounded (32.8'-33.5'), medium dense, strong HCL, moist, strong hydrocarbon odor			
35				Minor clay, no plasticity, moist [34'-38.5' PID=464]			

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-6' bgs
3. Depth to water noted during drilling



# LOG OF BORING MW-09

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/13/2012  
Date Completed : 5/14/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 39' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-09 TOC = 3582.21
35		80	464 653	CALICHE w/ Silty Sand, same as previous			
				[38.5'-39' PID=653]	SC		
40		100	98.6 142	CLAYEY SAND, poorly graded, gray, brown, reddish-brown, fine- to medium-grained sand, trace coarse-grained sand, subangular to subrounded, medium dense, no plasticity, medium cementation, weak HCL, moist to wet, strong hydrocarbon odor, fractured	SM		
				[39'-39.5' PID = 98.6]			
45		100	149 33.4	[39.5'-44' PID = 142] SILTY SAND, poorly graded, light reddish-brown, very fine- to medium-grained sand, trace coarse-grained sand, subangular to subrounded, trace clay, no plasticity, medium dense, medium cementation, weak HCL, wet, strong hydrocarbon odor, fractured	CL		
				[44'-45' PID = 149] [45'-49' PID = 33.4] Lean CLAY, reddish-brown and white, little very fine- to fine-grained sand, medium plasticity, very dense, weak HCL, wet to moist, strong hydrocarbon odor, with caliche (45'-47' bgs)			
50				No Sample Collected			
				Bottom of boring at 50' bgs			
55							
60							
65							
70							

10/20  
Silica Sand  
0.020"  
Screen

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-6' bgs
3. Depth to water noted during drilling



# LOG OF BORING MW-10

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/15/2012  
Date Completed : 5/16/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 38.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-10 TOC = 3580.23
0				SAND w/ Silt, poorly graded, reddish-brown, very fine- to fine-grained sand, very loose, no odor, moderate HCL, moist	SP/SM		
		NA	NA	SILTY SAND, pinkish-white, very fine- to fine-grained sand, trace medium- to coarse-grained sand, subangular to subrounded, loose, strong HCL, no odor, moist to dry, poorly graded [4'-7.5' PID = 1.3]	SM		Concrete
5		88	1.3 0.0				
				[7.5'-9' PID = 0] CALICHE w/ Silty Sand, poorly graded, light gray to white, very fine- to fine-grained sand, medium dense, strong HCL, no odor, dry Light gray to white, pinkish-brown at 9' bgs [9'-12.6' PID = 0]			Grout
10		100	0.0 131				
				[12.6'-14' PID = 131] CALICHE w/ Silty Sand, same as previous; light gray to pinkish-brown, very fine- to medium-grained sand (predominately very fine- to fine-grained sand), subangular to subrounded, medium dense, strong HCL, dry, hydrocarbon odor, fine-grained gravel composed of caliche nodules, angular to subrounded from 12.6'-14.5' bgs [14'-14.5' PID = 1,905]			4" SCH 40 PVC Casing
15		48	1,905 1,400				
				[14.5'-19' PID = 1,400] SILTY SAND, poorly graded, brown, dark brown, black, and white, very fine- to fine-grained sand (trace medium- to coarse-grained sand), subangular to subrounded, medium dense, moderate HCL, dry, hydrocarbon odor, vertical caliche stringers, laminar Moderate cementation (19.4'-20' bgs) with caliche (20'-24' bgs), strong hydrocarbon odor	SM		
20		100	1,985				
				Strong hydrocarbon odor, minor clay, no plasticity (caliche cobble in shoe)/little caliche			Bentonite Seal
25		56	2,117				
				With caliche, strong HCL, (33'-33.4') caliche cobble reddish-brown, (33.4'-34') moist			10/20 Silica Sand
30							

Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-5' bgs
3. Depth to water noted during drilling



# LOG OF BORING MW-10

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/15/2012  
Date Completed : 5/16/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 38.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-10 TOC = 3580.23
30		74	1,889	SILTY SAND, same as previous	SM		
35		NM	1,318 93.6	[34'-38.5' PID = 1,318] SAND w/ Clay, poorly graded, moderate gray, very fine- to fine-grained sand, trace medium- to coarse-grained sand, subangular to subrounded, no plasticity, strong HCL, moist to wet, strong hydrocarbon odor, few caliche nodules and cobbles, medium dense, round to subrounded	SP/ SC		
40		NM	79.5 3.5	[38.5'-39' PID = 93.6] SAND, well graded, moderate- to dark-gray, fine- to coarse-grained sand, subangular to subrounded, few clay, loose, no plasticity, weak HCL, wet, strong hydrocarbon odor, trace caliche nodules/caliche Fine- to coarse-grained gravel (39'-41.2' bgs), round to subrounded [39'-42.5' PID = 79.5]	SW		
45				[42.5'-44' PID = 3.5] Lean CLAY, reddish-brown, little very fine- to fine-grained sand, trace fine- to coarse-grained caliche cobbles, round to subrounded, very dense, medium plasticity, weak HCL, moist, weak hydrocarbon odor	CL		
		100	NM	SAND w/ Silt, poorly graded, reddish-brown, very fine- to fine-grained sand, trace medium- to coarse-grained sand, round to subrounded, little clay, trace fine-grained gravel, round, no plasticity, weak HCL, wet, no hydrocarbon odor	SP/ SM		
50		100	NM	No Sample Collected			
				Bottom of boring at 50' bgs			
55							
60							

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-5' bgs
3. Depth to water noted during drilling





## LOG OF BORING MW-11

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/9/2012  
Date Completed : 5/11/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 39' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-11 3580.91
0		NA	NA	SILTY SAND, light reddish-brown, very fine- to fine grained sand, loose, moderate HCL, dry SILTY SAND, poorly graded, white to light brown, very fine- to fine-grained sand, loose, strong HCL, dry			Concrete
5		30	107				
10		60	56.7	SILTY SAND, poorly graded, white to pinkish brown, very fine- to medium-grained sand (predominately very fine- to fine-grained sand), subangular to subrounded, medium dense, strong HCL, dry			Grout
15		30	1,406	Hydrocarbon odor	SM		4" SCH 40 PVC Casing
20		60	1,681 1,419	[19'-22.7' PID = 1,681]			
25		44	1,488	[22.7'-24' PID = 1,419] SILTY SAND, poorly graded, white to light brown, very fine- to fine-grained sand, trace medium- to coarse-grained sand, subangular to subrounded, trace fine-grained gravel, subrounded, dense, strong HCL, dry to moist, strong hydrocarbon odor White to light brown and gray at 24' bgs			Bentonite Seal
30	X						

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.8' bgs
3. Depth to water noted during drilling



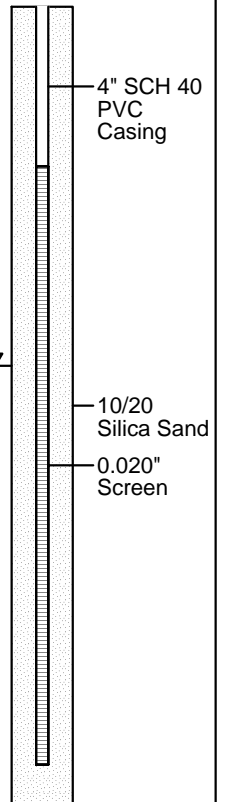
## LOG OF BORING MW-11

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/9/2012  
Date Completed : 5/11/2012  
Drilling Method : HSA 10" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 39' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-11 3580.91
30		20	1,686	SILTY SAND, same as previous	SM		
35		30	1,440	SAND w/ Silt, well graded, light reddish-brown and gray, very fine- to medium-grained sand, subangular to subrounded, few clay, no plasticity, trace fine-grained gravel, round to subrounded dense, strong HCL, moist, (caliche build up in last 6" of sampler)	SW/ SM		
40		100	87	SAND w/ Clay, well graded, reddish-brown, fine- to coarse-grained sand, subangular to subrounded, dense, high plasticity, weak HCL, wet, few fine- to coarse-grained gravel, subangular to subrounded (gravel is mainly composed of caliche nodules) Hard caliche lenses (1"-2") throughout interval			
		92	28.5				
45		100	30.7	Little fine- to coarse-grained gravel, subangular to subrounded	SW/ SC		
50				No Sample Collected			
				Bottom of boring at 50' bgs			
55							
60							



## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.8' bgs
3. Depth to water noted during drilling



## LOG OF BORING MW-12

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/16/2012  
Date Completed : 5/16/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 37' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-12 TOC = 3578.81
0		NA	NA	SAND w/ Silt, poorly graded, reddish-brown, very fine- to fine-grained sand, very loose, moderate HCL, moist to wet, no odor	SP/ SM		Concrete
5		80	0.0	SILTY SAND, pinkish-white, very fine- to fine-grained sand, trace medium- to coarse-grained sand, subangular to subrounded, very loose, strong HCL, moist to dry, no odor, with caliche Dry at 4' bgs			
10		86	0.0	Blocky, light brown and pinkish-white, weakly cemented, medium dense			
15		80	477	Reddish-brown, hydrocarbon odor, few caliche	SM		Grout 2" SCH 40 PVC Casing
20		96	1,324	Dry to moist (23.5'-24' bgs) (some caliche)			
25		95	1,727	SILTY SAND w/ Caliche, light gray (25.6'-26.5' bgs), moist beginning at 27.6' bgs			Bentonite Seal
30	X			SILTY SAND w/ Caliche, fine- to coarse- grained gravel, fine-grained cobbles, subround to rounded (29'-33' bgs) [29'-33' PID = 1,789]			10/20 Silica Sand

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.5' bgs
3. Depth to water noted during drilling



# LOG OF BORING MW-12

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/16/2012  
Date Completed : 5/16/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 37' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-12 TOC = 3578.81
30		95	1,789 1,749	SILTY SAND w/ Caliche, same as previous  [33'-34' PID = 1,749]  [34'-38' PID = 1,788]	SM		2" SCH 40 PVC Casing
35		82	1,788 932	Light gray to black, minor clay, no plasticity (wet from 37'-38' bgs)  [38'-39' PID = 932]			
40		100	81.2	SAND w/ Silt, poorly graded, reddish-brown, very fine- to fine-grained sand, trace medium- to coarse-grained sand, rounded to subrounded, trace clay, no plasticity, trace fine-grained gravel, round, medium dense, strong hydrocarbon odor, weak HCL, moist Wet, weakly cemented at 39' bgs	SP/ SM		10/20 Silica Sand  0.020" Screen
45		NM	22.4				
50				Bottom of boring at 49' bgs			
55							
60							

Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.5' bgs
3. Depth to water noted during drilling





## LOG OF BORING MW-13

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/26/2012  
Date Completed : 5/26/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 37' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-13 TOC = 3579.95	
0		NA	NA	SAND, poorly graded, brown, very fine- to medium-grained sand, subangular to subrounded, very loose, few clay, no plasticity, no odor, moderate HCL, dry to moist	SP			
5		70	0.0	SAND w/ Clay, poorly graded, brown, very fine- to medium-grained sand, subangular to subrounded, very loose, few clay, no plasticity, no odor, moderate HCL, dry to moist SILTY SAND w/ Caliche, pinkish-white to white, very fine- to medium-grained sand (predominately very fine- to fine-grained sand), subangular to subrounded, loose, no odor, strong HCL, blocky, dry [9'-12.9' PID = 0]	SP/ SC			
10		70	0.0 5.7	[12.9'-14' PID = 5.7] SAND w/ Clay, poorly graded, with caliche, reddish-brown to pinkish-white, very fine- to fine-grained sand, trace fine-grained caliche gravel, angular to subangular, loose, blocky, strong HCL, dry, trace silica cemented clods (gravel/cobble, fine) Few caliche, strong HCL, hydrocarbon odor at 14' bgs Strong hydrocarbon odor, dense with caliche at 19' bgs	SM			
15		74	530					
20		92	1,517	Hard drilling at 22'-26' bgs	SC			
25		68	1,599					
30								

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.5' bgs
3. Depth to water noted during drilling



# LOG OF BORING MW-13

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NM

Date Started : 5/26/2012  
Date Completed : 5/26/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 37' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-13 TOC = 3579.95
30		92	227	SAND w/ Clay, same as previous Moist to wet at 35' bgs (moisture may be from SP below)	SC		<p>2" SCH 40 PVC Casing</p> <p>10/20 Silica Sand</p> <p>0.020" Screen</p>
35		100	94	No Sample Collected; caliche drilled through without core barrel Hard drilling 35'-37' raised core barrel inside of augers to drill through			
		100	18.7 6.9	[37'-38.5' PID = 18.7] SAND, poorly graded, moderate gray, very fine- to fine-grained sand, loose, moderate HCL, wet, hydrocarbon odor	SP		
40		100	33	[38.5'-39' PID = 6.9] SILTY SAND w/ Caliche, pinkish-white to white, very dense, very fine- to fine-grained sand, strong HCL, dry, weak hydrocarbon odor Few zones of hard caliche layers at 39' bgs	SM		
45		100	0.0	Little zone of hard caliche layers at 44' bgs			
50				Bottom of boring at 48' bgs			
55							
60							

Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4.5' bgs
3. Depth to water noted during drilling



## LOG OF BORING MW-14

(Page 1 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/25/2012  
Date Completed : 5/25/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 37' bgs  
Logged By : L. Price

Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-14 TOC = 3578.82
0		NA	NA	Posthole 0-4' bgs			<p>Concrete</p> <p>2" SCH 40 PVC Casing</p> <p>Grout</p> <p>Bentonite Seal</p>
5		80	0.0 0.0	[4'-6' PID = 0] SAND w/ some Silt, poorly graded, pink, fine-grained sand with trace medium-grained sand, subangular, loose, strong HCL, dry	SP		
10		75	190	[6'-9' PID = 0] SILTY SAND w/ some Caliche, poorly graded, pink and reddish-brown, fine-grained sand, very dense, strong HCL, dry			
15		75	1,301 1,450	[14'-15' PID = 1,301] [15'-19' PID = 1,450] SILTY SAND, poorly graded, fine-grained sand, dark gray with some black, dense, moderately cemented from 19'-23' bgs, strong HCL, hydrocarbon odor, dry	SM		
20		75	1,801 1,440	[19'-23' PID = 1,801]			
25		50	1,728 1,614	[23'-24' PID = 1,440] SILTY SAND w/ some Caliche, poorly graded, dark gray (gray from 24' to 29' bgs) fine-grained sand, very dense, highly cemented, strong HCL, hydrocarbon odor, dry [24'-26' PID = 1,728] [26'-29' PID = 1,614]			
30				SILTY SAND w/ some Caliche, poorly graded, white (gray from 32'-34' bgs), fine-grained sand, dense, strong HCL, hydrocarbon odor, dry			

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4' bgs
3. Since getting low recovery in each 5' spoon, pushed an extra foot at the 44-50 interval
4. Depth to water noted during drilling



## LOG OF BORING MW-14

(Page 2 of 2)

Project Name:  
OCD – Enersource  
Monument, NMDate Started : 5/25/2012  
Date Completed : 5/25/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core  
Drilling Company : Precision SamplingDriller : J. Barraza  
Depth to Water : 37' bgs  
Logged By : L. Price

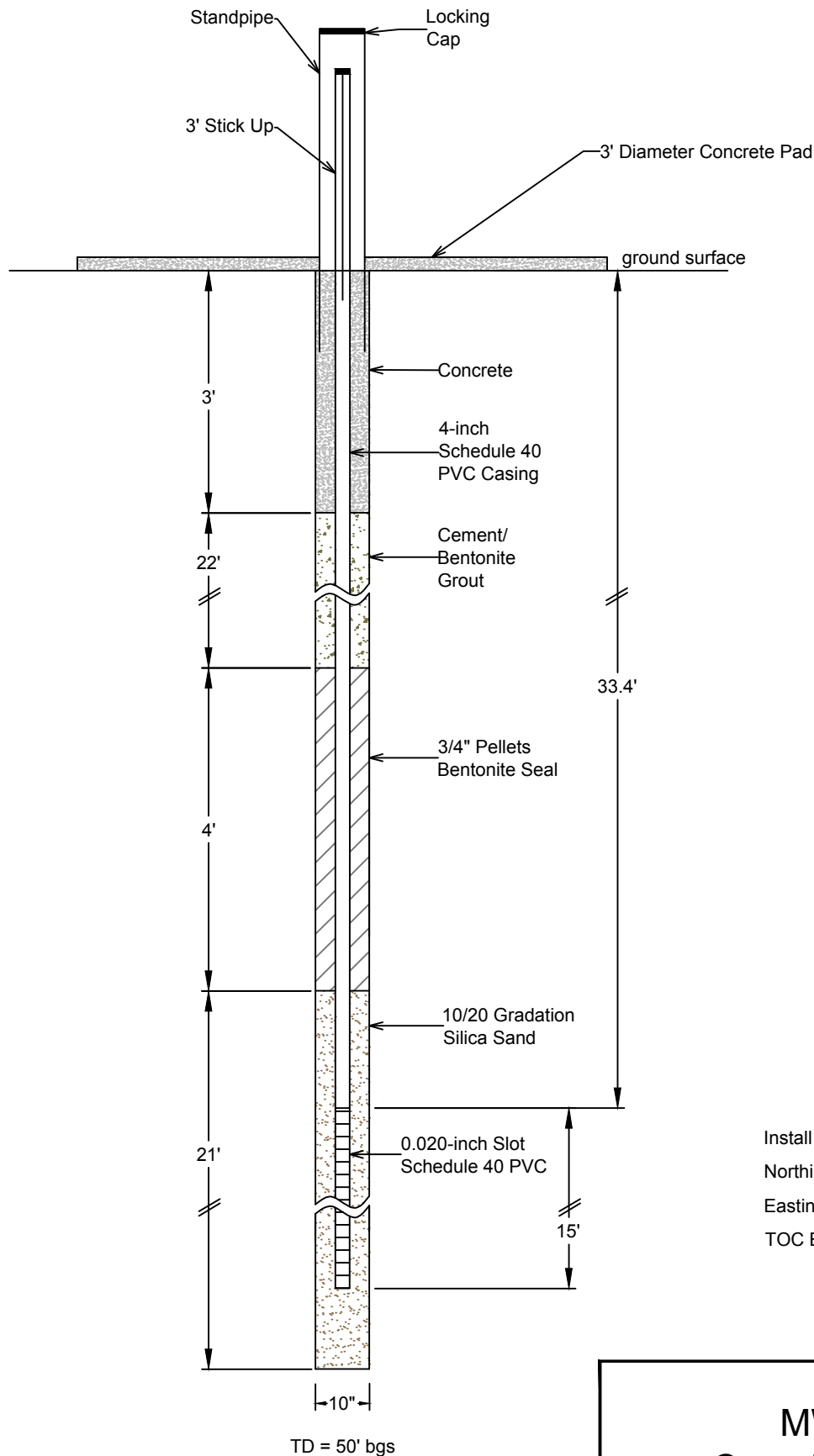
Project #: NMGSD.M002.ENER

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-14 TOC = 3578.82
30		50	1,728	SILTY SAND w/ some Caliche, same as previous			
				No recovery from 34' to 37' bgs	SM		
35		35	1,356 588	[37'-38' PID = 1,356] SILTY SAND, poorly graded, dark gray and gray, black stained soil at 38.2' bgs, fine-grained sand, some gravel, dense, weak HCL, moist to wet			
				SILTY SAND, poorly graded, reddish-brown, fine-grained sand, with caliche, very dense, well cemented, strong HCL, dry from 38'-39' bgs	SC		
40		70	108 36.9	[38'-39' PID = 588] [39'-42' PID = 108] CLAYEY SAND, poorly graded, reddish-brown, fine-grained sand with trace medium-grained sand, low plasticity, weak HCL, moist	SW		
				SAND, well graded, reddish-brown, fine- to medium-grained sand, subrounded, loose, weak HCL, wet	SC		
45				[42'-44' PID = 36.9] CLAYEY SAND w/ Gravel, poorly graded, reddish-brown, fine-grained sand, low plasticity, weak HCL, dry	SM		
		100	19.1 3.8	[44'-48' PID = 19.1] SILTY SAND w/ some Gravel, poorly graded, red, fine to medium-grained sand, loose, weak HCL, moist	SC		
				CLAYEY SAND w/ some Gravel, poorly graded, red, fine- to medium-grained sand, low plasticity, loose, weak HCL, moist	SM		
50				[48'-50' PID = 3.8] SILTY SAND, poorly graded, pink, fine-grained sand, very dense, well cemented, strong HCL, dry			
				Not sampled			
				Bottom of boring at 51' bgs			
55							
60							

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Posthole = 0'-4' bgs
3. Since getting low recovery in each 5' spoon, pushed an extra foot at the 44-50 interval
4. Depth to water noted during drilling



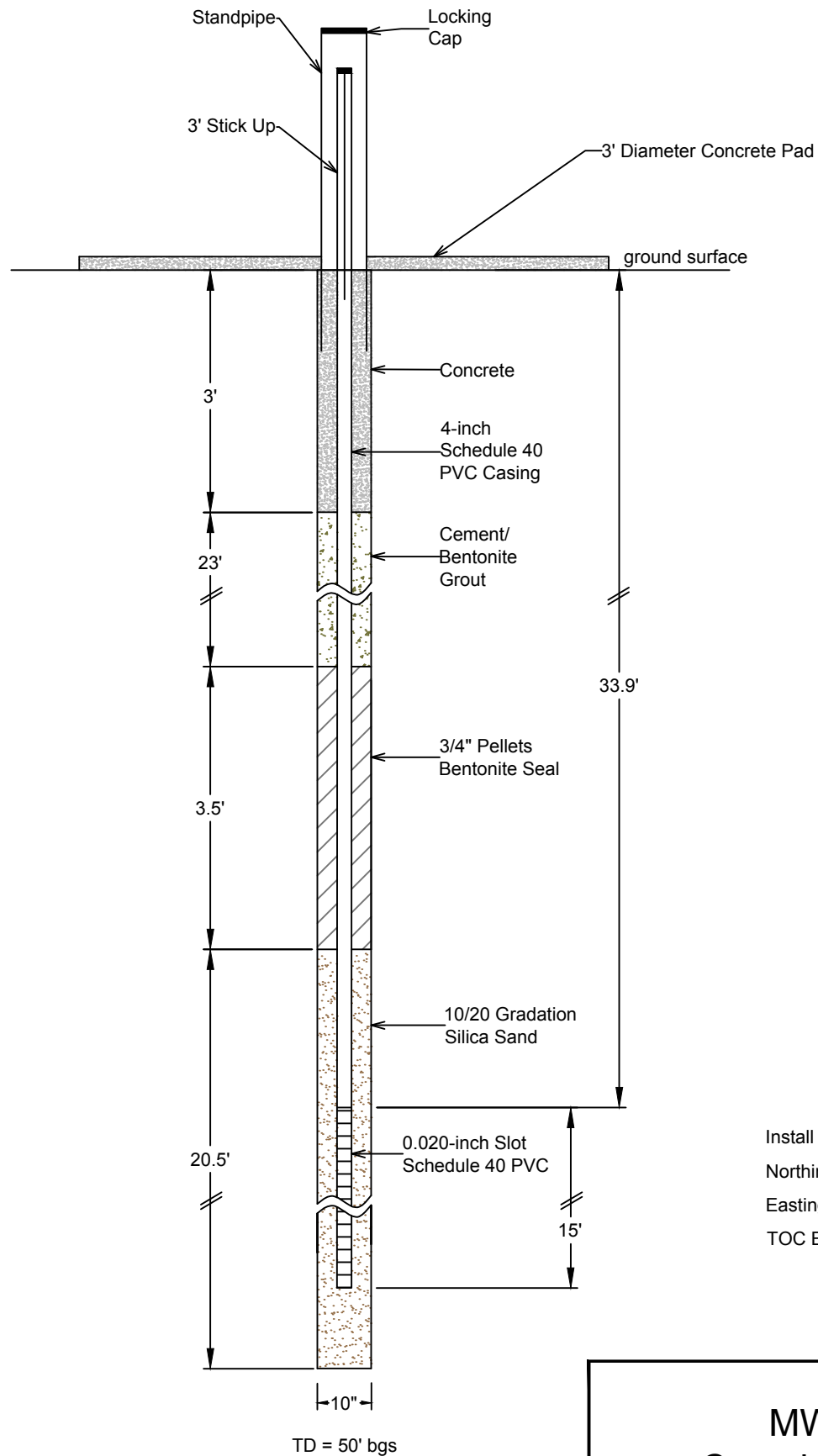


Install Date: 05/11/12  
 Northing: 585343.722  
 Easting: 856245.534  
 TOC Elevation: 3582.14

## MW-07 Well Completion Diagram

Enersource Site – Monument, NM



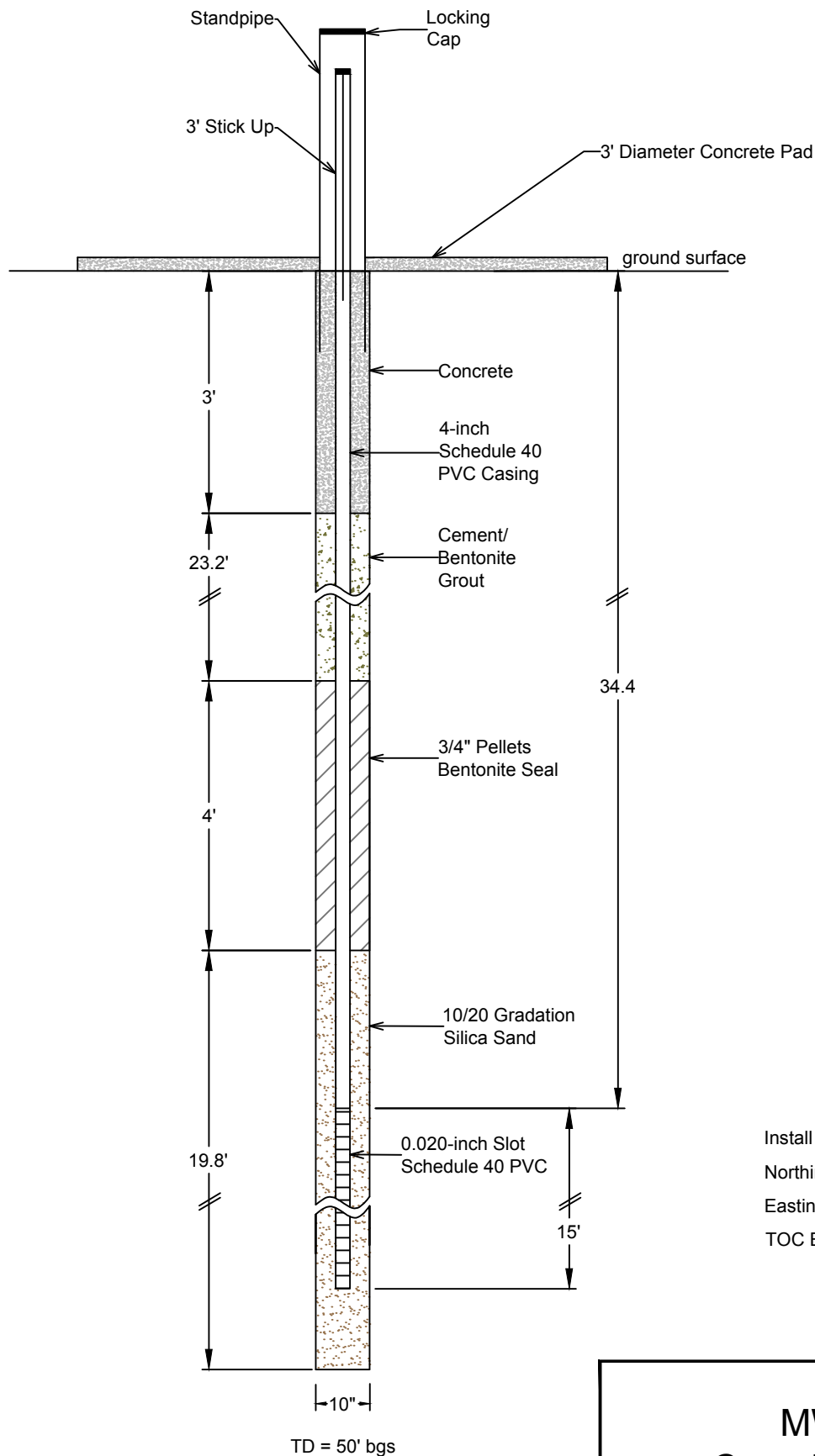


Install Date: 05/13/12  
 Northing: 586178.341  
 Easting: 855172.563  
 TOC Elevation: 3584.11

## MW-08 Well Completion Diagram

Enersource Site – Monument, NM



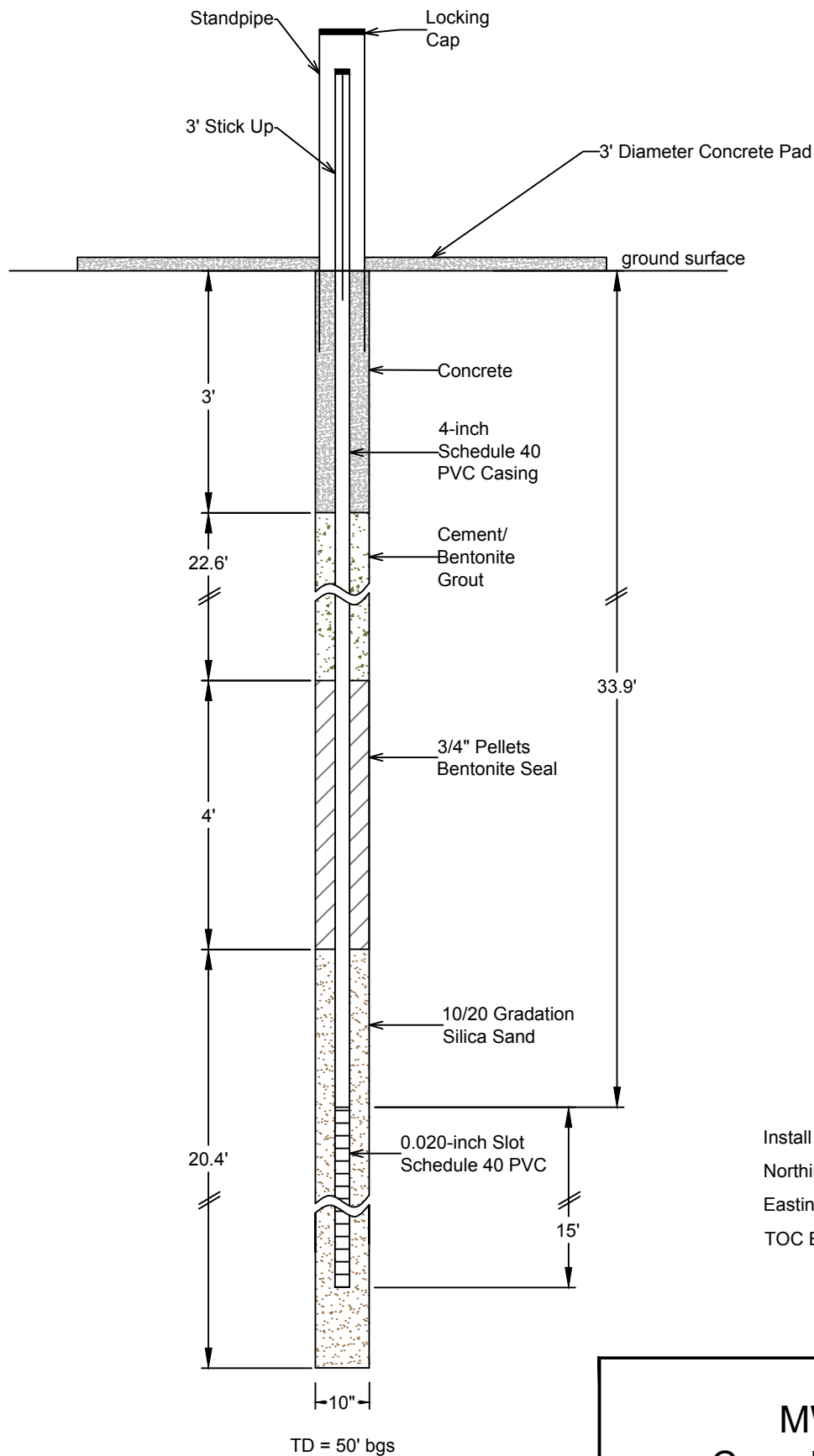


Install Date: 05/14/12  
 Northing: 585801.781  
 Easting: 855350.348  
 TOC Elevation: 3582.21

## MW-09 Well Completion Diagram

Enersource Site – Monument, NM





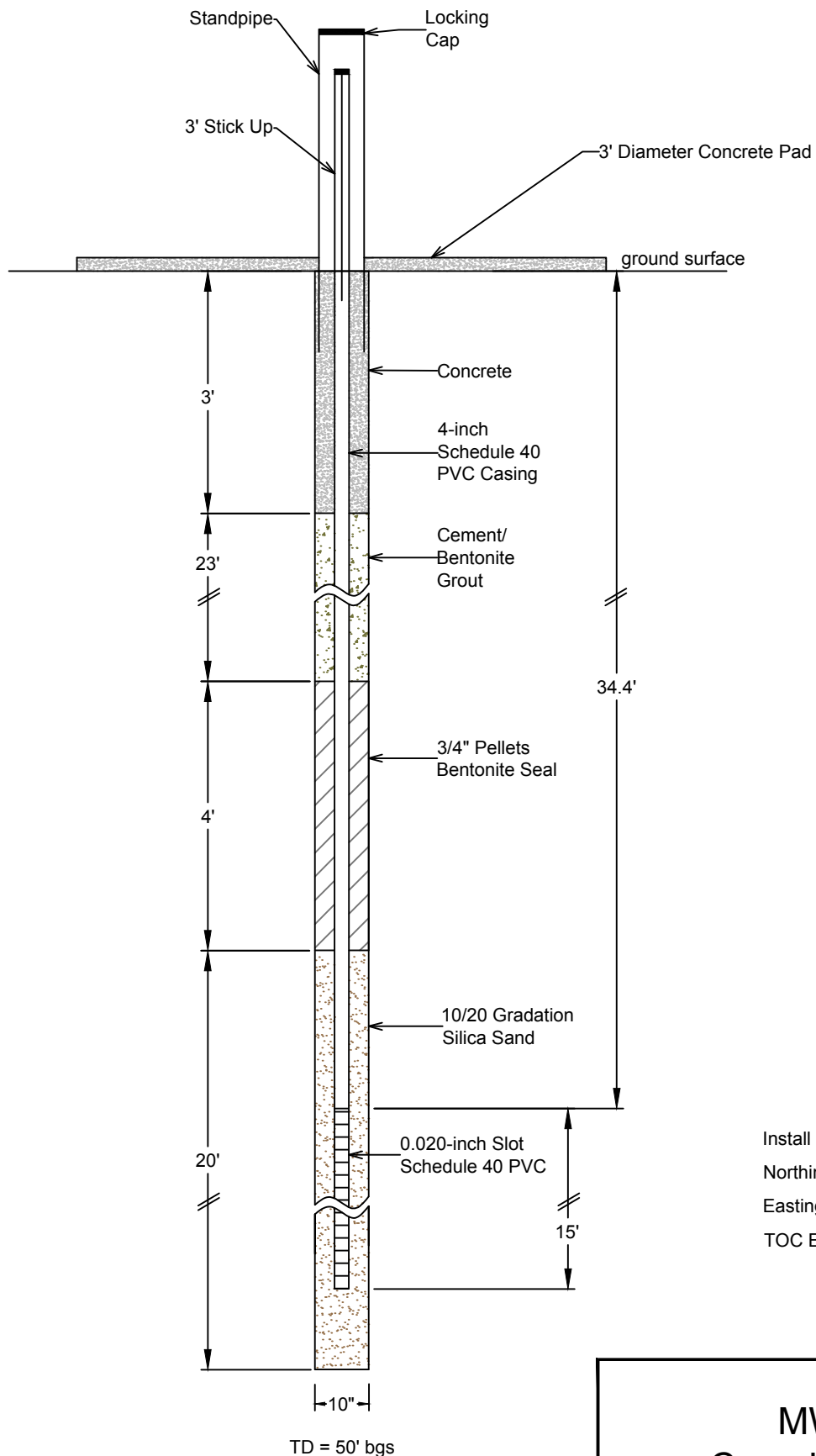
Install Date: 05/16/12  
 Northing: 585836.523  
 Easting: 855858.144  
 TOC Elevation: 3580.23

## MW-10 Well Completion Diagram

Enersource Site – Monument, NM





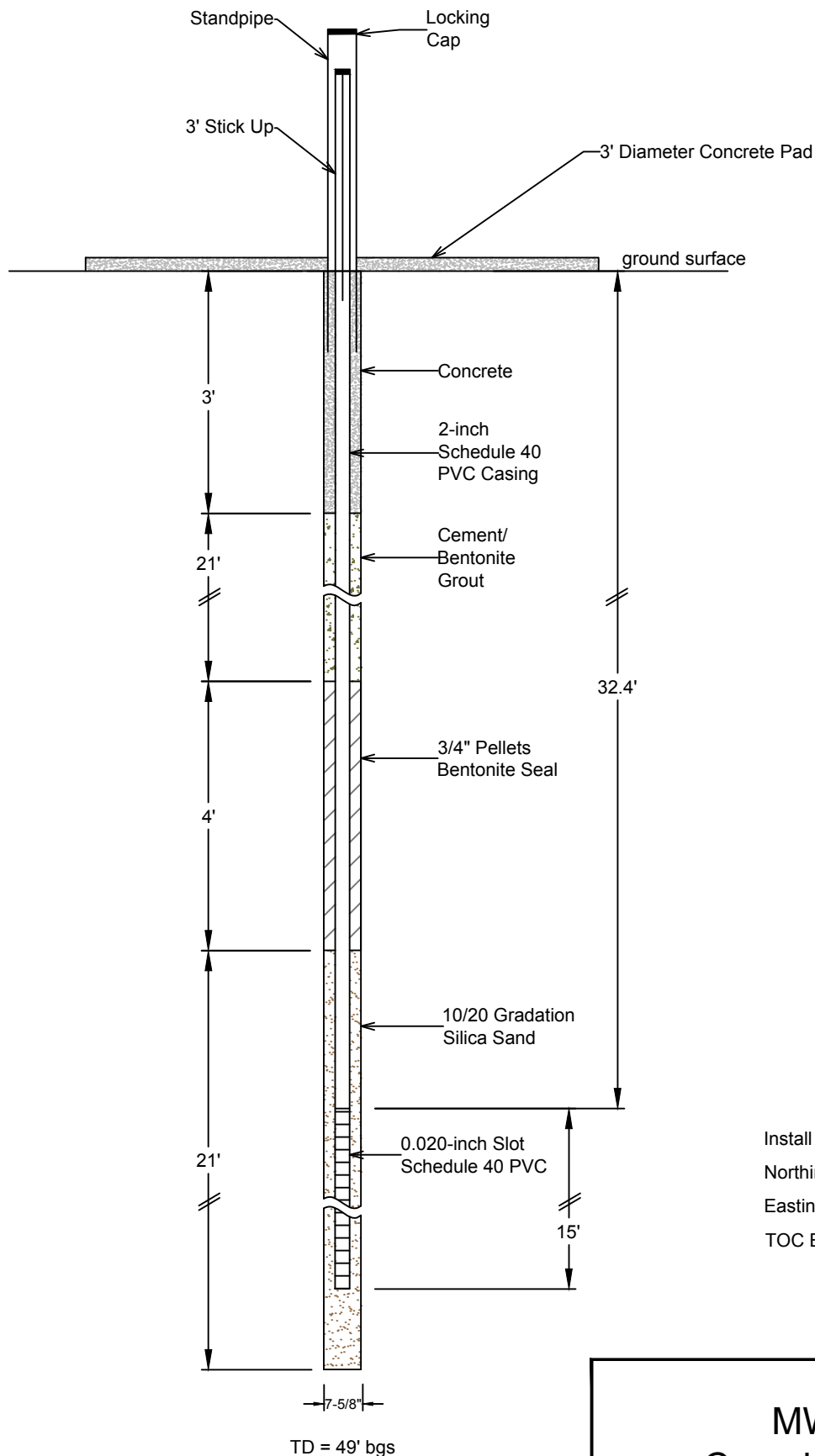


Install Date: 05/11/12  
 Northing: 585997.843  
 Easting: 856420.714  
 TOC Elevation: 3580.91

## MW-11 Well Completion Diagram

Enersource Site – Monument, NM



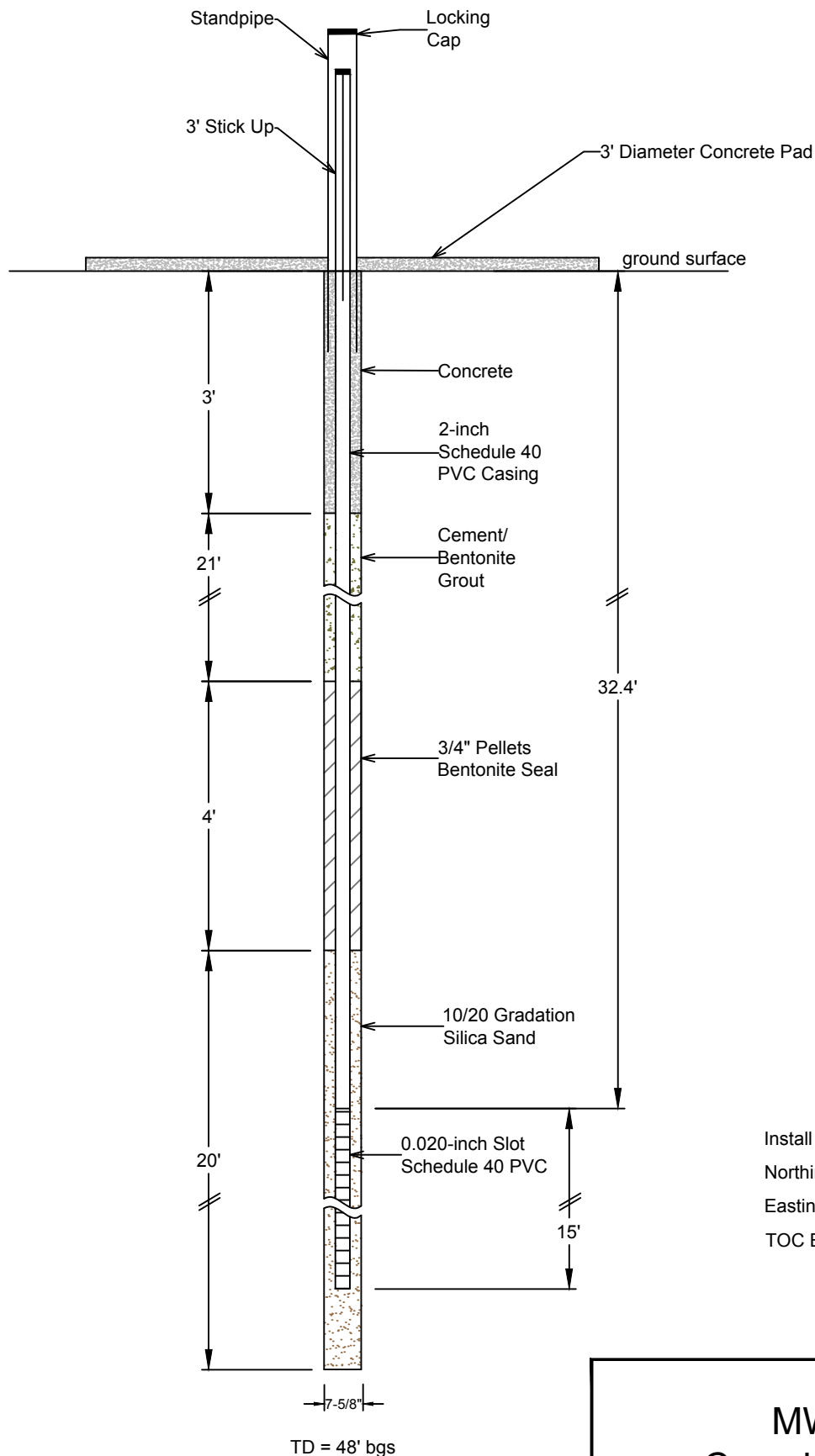


Install Date: 05/16/12  
 Northing: 585551.724  
 Easting: 856434.396  
 TOC Elevation: 3578.81

## MW-12 Well Completion Diagram

Enersource Site – Monument, NM



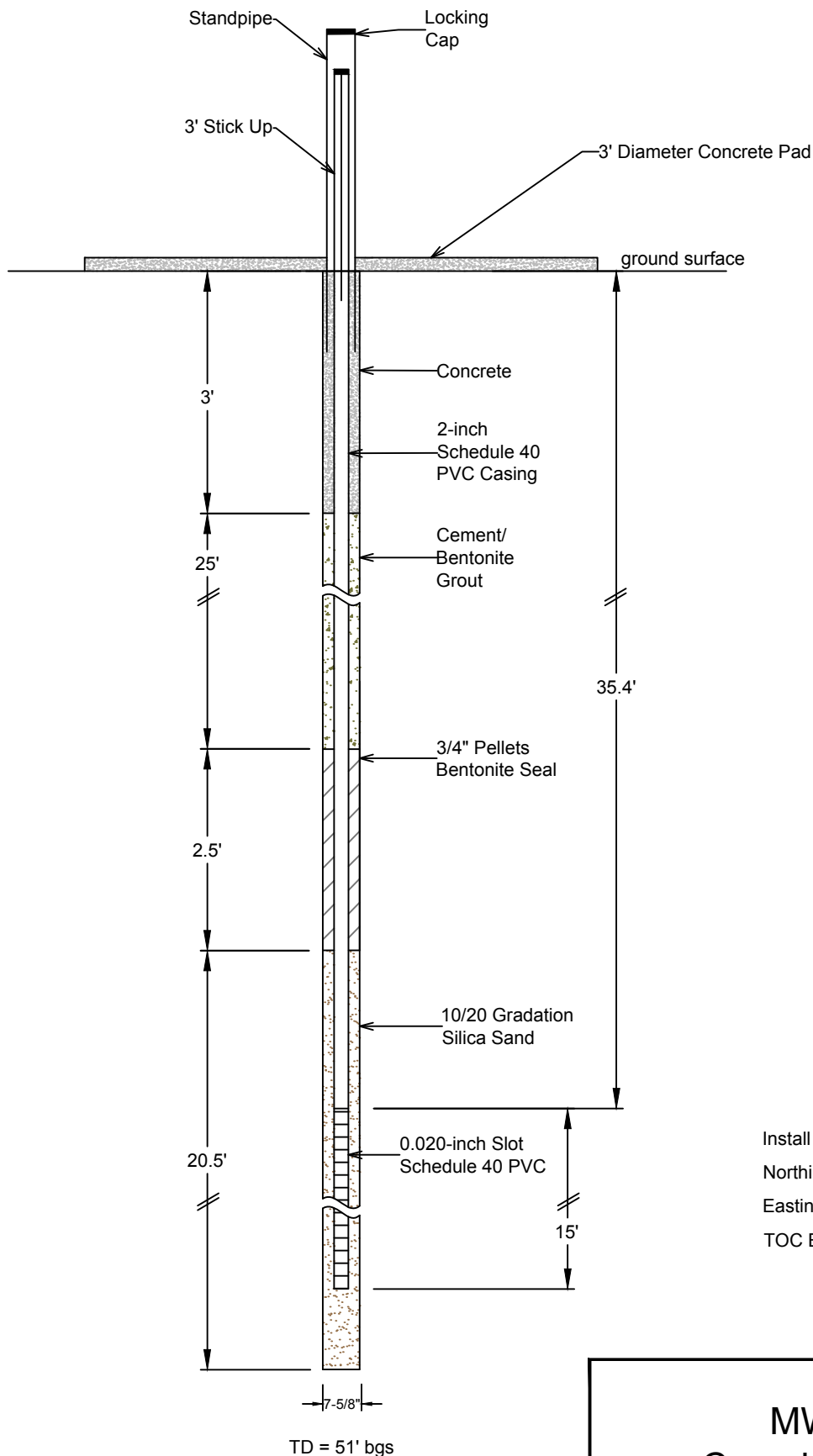


Install Date: 05/26/12  
 Northing: 585549.333  
 Easting: 855466.509  
 TOC Elevation: 3579.95

## MW-13 Well Completion Diagram

Enersource Site – Monument, NM





Install Date: 05/25/12  
 Northing: 585585.239  
 Easting: 856085.295  
 TOC Elevation: 3578.82

## MW-14 Well Completion Diagram

Enersource Site – Monument, NM





Scott A. Verhines, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 503093  
File Nbr: L 12993

May. 02, 2012

JOE A. GALEMORE  
INTERA INCORPORATED  
6000 UPTOWN BLVD, NE  
SUITE 220  
ALBUQUERQUE, NM 87110

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 05/31/2013.

Appropriate forms can be downloaded from the OSE website [www.ose.state.nm.us](http://www.ose.state.nm.us) or will be mailed upon request.

Sincerely,

A handwritten signature in cursive script, appearing to read "M. Wolf".

Margaret Wolf  
(575) 622-6521

Enclosure

explore

**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE/ MONITOR**

**SPECIFIC CONDITIONS OF APPROVAL**

- 1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- LOG The Point of Diversion L 12993 POD1 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 12993 POD2 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 12993 POD3 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 12993 POD4 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 12993 POD5 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 12993 POD6 must be completed and the Well Log filed on or before 05/31/2013.

Trn Desc: L 12993 (9 MONITOR WELLS)

File Number: L 12993  
Trn Number: 503093

**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE / MONITOR**

**SPECIFIC CONDITIONS OF APPROVAL (Continued)**

LOG The Point of Diversion L 12993 POD7 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD8 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD9 must be completed and the Well Log filed on or before 05/31/2013.

No water shall be diverted from these wells except for testing purposes which shall not exceed ten (10) cumulative days unless a permit to use water from these wells is acquired from the Office of the State Engineer.

Should the permittee change the purpose of use to other than monitoring purposes, an application shall be acquired from the Office of the State Engineer.

The wells shall be constructed, maintained and operated that each water shall be confined to the aquifer in which it is encountered.

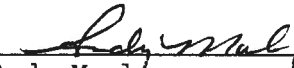
**ACTION OF STATE ENGINEER**

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 05/01/2012	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 02 day of May A.D., 2012

Scott A. Verhines, P.E., State Engineer

By:   
Andy Morley

## NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL  
WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

2-31370 #45

- Purpose:
- ☐ Pollution Control And / Or Recovery ☐ Geo-Thermal
- ☐ Exploratory ☐ Construction Site De-Watering ☐ Other (Describe):
- ☒ Monitoring ☐ Mineral De-Watering

A separate permit will be required to apply water to beneficial use.

☐ Temporary Request - Requested Start Date: Requested End Date:
Plugging Plan of Operations Submitted? ☐ Yes ☒ No

## 1. APPLICANT(S)

Name: New Mexico Energy, Minerals, and Natural Resources; Oil Conservation Division	Name: INTERA Incorporated
Contact or Agent: Jim Griswold check here if Agent <input type="checkbox"/>	Contact or Agent: Joe A. Galemore check here if Agent <input checked="" type="checkbox"/>
Mailing Address: 1220 South St. Francis Drive	Mailing Address: 6000 Uptown Blvd., NE; Suite 220
City: Santa Fe	City: Albuquerque
State: NM Zip Code: 87505	State: NM Zip Code: 87110
Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work): 505-476-3465	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work): 505-246-1600
E-mail (optional): jim.griswold@state.nm.us	E-mail (optional): jgalemore@intera.com

FOR OSE INTERNAL USE

Application for Permit, Form wr-07, Rev 8/25/11

File Number: L-12993	Trm Number: 503093
Trans Description (optional): 9 Monitor Wells	
Sub-Basin: L	
PCW/LOG Due Date: 05/31/2013	



2. WELL(S) Describe the well(s) applicable to this application.

<b>Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84)</b>			
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> NM State Plane (NAD83) (Feet)  <input type="checkbox"/> NM West Zone  <input type="checkbox"/> NM East Zone  <input type="checkbox"/> NM Central Zone         </div> <div> <input type="checkbox"/> UTM (NAD83) (Meters)  <input type="checkbox"/> Zone 12N  <input type="checkbox"/> Zone 13N         </div> <div> <input checked="" type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)         </div> </div>			
Well Number (if known):	X or Easting or Latitude:	Y or Northing or Longitude:	Optional: Complete boxes labeled "Other" below with PLSS (Public Land Survey System, i.e. Quarters, Section, Township, Range); Hydrographic Survey Map & Tract; Lot, Block & Subdivision; OR Land Grant Name if known.
MW-07	32° 36' 27.7"	-103° 18' 38.8"	SW 1/4 NE 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
MW-08	32° 36' 25.7"	-103° 18' 51.5"	SW 1/4 NW 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
MW-09	32° 36' 23.1"	-103° 18' 49.4"	SE 1/4 NW 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
MW-10	32° 36' 23.2"	-103° 18' 42.4"	SW 1/4 NE 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
MW-11	32° 36' 24.2"	-103° 18' 37.5"	SW 1/4 NE 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
<b>NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)</b> Additional well descriptions are attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many <u>4</u>			
Other description relating well to common landmarks, streets, or other: NA			
Well is on land owned by: Enersource And New Mexico State Land Office			
Well Information: <b>NOTE: If more than one (1) well needs to be described, provide attachment.</b> Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Approximate depth of well (feet): 50.00		Outside diameter of well casing (inches): 4.00	
Driller Name: New Mexico Licensed Driller		Driller License Number: TBD	

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

A maximum of nine monitoring wells are proposed to be installed for the purpose of monitoring groundwater quality at and near a former refinery. The locations stated are approximate and may change slightly depending on findings of the investigation. Fewer wells may be installed if contamination is found to be less than predicted. INTERA Incorporated is under contract with the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division, who is regulating the site and providing funding for the investigation.

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: L-12993

Trm Number: 503093



# NEW MEXICO OFFICE OF THE STATE ENGINEER



## ATTACHMENT 1 POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

<b>a. Is this a:</b> <input type="checkbox"/> Move-From Point of Diversion(s) <input type="checkbox"/> Move-To Point of Diversion(s)		<b>b. Information on Attachment(s):</b> Number of points of diversion involved in the application: _____ Total number of pages attached to the application: _____	
<input type="checkbox"/> <b>Surface Point of Diversion</b> OR <input checked="" type="checkbox"/> <b>Well</b>			
Name of ditch, acequia, or spring:			
Stream or water course:			
Tributary of:			
<b>c. Location (Required):</b> Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)			
NM State Plane (NAD83) (feet) NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/>	UTM (NAD83) (meters) Zone 13N <input type="checkbox"/> Zone 12N <input type="checkbox"/>	<input checked="" type="checkbox"/> Lat/Long-- (WGS84) 1/10 <sup>th</sup> of second	OTHER (allowable only for move-from descriptions - see application form for format) <input type="checkbox"/> PLSS (quarters, section, township, range) <input type="checkbox"/> Hydrographic Survey, Map & Tract <input type="checkbox"/> Lot, Block & Subdivision <input type="checkbox"/> Grant
POD Number: <b>MW-12</b>	X or Longitude <b>32° 36' 27.4"</b> -103° 18' 36.4"	Y or Latitude	Other Location Description: SW 1/4 NE 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
POD Number: <b>MW-13</b>	X or Longitude <b>32° 36' 20.2"</b> -103° 18' 47.7"	Y or Latitude	Other Location Description: NE 1/4 SW 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
POD Number: <b>MW-14</b>	X or Longitude <b>32° 36' 20.3"</b> -103° 18' 41.2"	Y or Latitude	Other Location Description: NW 1/4 SE 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
POD Number: <b>MW-15</b>	X or Longitude <b>32° 36' 20.4"</b> -103° 18' 36.7"	Y or Latitude	Other Location Description: NW 1/4 SE 1/4 NW 1/4 Sec 1, Twp 20S, Rge 36E
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:

FOR OSE INTERNAL USE

Form wr-08

POD DESCRIPTIONS - ATTACHMENT 1

File Number: **L-12993**

Trn Number: **503093**

Trans Description (optional): **9 Monitor Wells**

**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<b>Exploratory:</b> <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	<b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	<b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	<b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water.
<b>Monitoring:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input checked="" type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	<b>Geo-Thermal:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The amount of water to be diverted and re-injected for the project, <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

#### ACKNOWLEDGEMENT

I, We (name of applicant(s)),

JAMI BAILEY  
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

[Signature]  
Applicant Signature

Applicant Signature

#### ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 2nd day of May 20 12, for the State Engineer,

Scott A. Verhines, P.E., State Engineer

By: [Signature]  
Signature

Print

Title: Andy Morley, Acting District II Manager  
Print

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

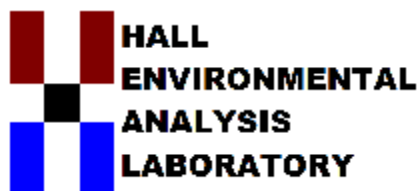
File Number: L-12993

Tm Number: 503093

## **APPENDIX F**

### **Laboratory Reports**





*Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)*

May 24, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX (505) 246-2600

RE: Enersource

OrderNo.: 1205815

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 7 sample(s) on 5/17/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-07 (14'-19')

**Project:** Enersource

**Collection Date:** 5/8/2012 10:10:00 AM

**Lab ID:** 1205815-001

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	2,900	97		mg/Kg	10	5/22/2012 3:33:42 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	5/22/2012 3:33:42 PM
Surr: DNOP	0	82.1-121	S	%REC	10	5/22/2012 3:33:42 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	250	H	mg/Kg	50	5/23/2012 11:19:54 AM
Surr: BFB	93.4	69.7-121	H	%REC	50	5/23/2012 11:19:54 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	31	7.5		mg/Kg	5	5/21/2012 7:09:13 PM
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: <b>JDC</b>
Acenaphthene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Acenaphthylene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Aniline	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Anthracene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Azobenzene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Benzoic acid	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Carbazole	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	5/23/2012 7:29:12 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Chrysene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	5/23/2012 7:29:12 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Dibenzofuran	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205815**

Date Reported: **5/24/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-07 (14'-19')

**Project:** Enersource

**Collection Date:** 5/8/2012 10:10:00 AM

**Lab ID:** 1205815-001

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	5/23/2012 7:29:12 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	5/23/2012 7:29:12 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	5/23/2012 7:29:12 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	5/23/2012 7:29:12 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
Fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Fluorene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Hexachloroethane	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Isophorone	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
1-Methylnaphthalene	8.0	1.0		mg/Kg	5	5/24/2012 12:19:48 PM
2-Methylnaphthalene	8.2	1.0		mg/Kg	5	5/24/2012 12:19:48 PM
2-Methylphenol	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Naphthalene	1.4	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	5/23/2012 7:29:12 PM
Nitrobenzene	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	5/23/2012 7:29:12 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	5/23/2012 7:29:12 PM
Phenanthrene	0.90	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Phenol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Pyrene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Pyridine	ND	0.50		mg/Kg	1	5/23/2012 7:29:12 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 7:29:12 PM
Surr: 2,4,6-Tribromophenol	11.9	20.1-121	S	%REC	1	5/23/2012 7:29:12 PM
Surr: 2-Fluorobiphenyl	50.5	19-133		%REC	1	5/23/2012 7:29:12 PM
Surr: 2-Fluorophenol	75.5	20.2-108		%REC	1	5/23/2012 7:29:12 PM

**Qualifiers:**

- \* /X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-07 (14'-19')

Project: Enersource

Collection Date: 5/8/2012 10:10:00 AM

Lab ID: 1205815-001

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Surr: 4-Terphenyl-d14	68.3	18.9-115		%REC	1	5/23/2012 7:29:12 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	5/23/2012 7:29:12 PM
Surr: Phenol-d5	78.8	19.8-115		%REC	1	5/23/2012 7:29:12 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Toluene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Ethylbenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2,4-Trimethylbenzene	9.1	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,3,5-Trimethylbenzene	3.0	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Naphthalene	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
1-Methylnaphthalene	ND	10		mg/Kg	50	5/18/2012 7:18:50 PM
2-Methylnaphthalene	ND	10		mg/Kg	50	5/18/2012 7:18:50 PM
Acetone	ND	38		mg/Kg	50	5/18/2012 7:18:50 PM
Bromobenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Bromodichloromethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Bromoform	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Bromomethane	ND	7.5		mg/Kg	50	5/18/2012 7:18:50 PM
2-Butanone	ND	25		mg/Kg	50	5/18/2012 7:18:50 PM
Carbon disulfide	ND	25		mg/Kg	50	5/18/2012 7:18:50 PM
Carbon tetrachloride	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
Chlorobenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Chloroethane	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
Chloroform	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Chloromethane	ND	7.5		mg/Kg	50	5/18/2012 7:18:50 PM
2-Chlorotoluene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
4-Chlorotoluene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
cis-1,2-DCE	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
Dibromochloromethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Dibromomethane	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-07 (14'-19')

Project: Enersource

Collection Date: 5/8/2012 10:10:00 AM

Lab ID: 1205815-001

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
2-Hexanone	ND	25		mg/Kg	50	5/18/2012 7:18:50 PM
Isopropylbenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	5/18/2012 7:18:50 PM
Methylene chloride	ND	7.5		mg/Kg	50	5/18/2012 7:18:50 PM
n-Butylbenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
n-Propylbenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
sec-Butylbenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Styrene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
tert-Butylbenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
trans-1,2-DCE	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
Vinyl chloride	ND	2.5		mg/Kg	50	5/18/2012 7:18:50 PM
Xylenes, Total	ND	5.0		mg/Kg	50	5/18/2012 7:18:50 PM
Surr: 1,2-Dichloroethane-d4	84.2	70-130		%REC	50	5/18/2012 7:18:50 PM
Surr: 4-Bromofluorobenzene	79.9	70-130		%REC	50	5/18/2012 7:18:50 PM
Surr: Dibromofluoromethane	82.3	71.7-132		%REC	50	5/18/2012 7:18:50 PM
Surr: Toluene-d8	93.0	70-130		%REC	50	5/18/2012 7:18:50 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-11 (29'-34')

Project: Enersource

Collection Date: 5/10/2012 9:00:00 AM

Lab ID: 1205815-002

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	910	99		mg/Kg	10	5/22/2012 3:55:42 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	5/22/2012 3:55:42 PM
Surr: DNOP	0	82.1-121	S	%REC	10	5/22/2012 3:55:42 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	56	50		mg/Kg	10	5/23/2012 11:48:45 AM
Surr: BFB	115	69.7-121		%REC	10	5/23/2012 11:48:45 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	120	7.5		mg/Kg	5	5/21/2012 7:34:03 PM
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Acenaphthylene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Aniline	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Anthracene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Azobenzene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Benzoic acid	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Carbazole	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	5/23/2012 8:58:15 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Chrysene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	5/23/2012 8:58:15 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Dibenzofuran	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205815**

Date Reported: **5/24/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-11 (29'-34')

**Project:** Enersource

**Collection Date:** 5/10/2012 9:00:00 AM

**Lab ID:** 1205815-002

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	5/23/2012 8:58:15 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	5/23/2012 8:58:15 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	5/23/2012 8:58:15 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	5/23/2012 8:58:15 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
Fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Fluorene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Hexachloroethane	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Isophorone	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
1-Methylnaphthalene	3.6	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
2-Methylnaphthalene	4.1	0.40		mg/Kg	2	5/24/2012 12:48:57 PM
2-Methylphenol	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Naphthalene	0.85	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	5/23/2012 8:58:15 PM
Nitrobenzene	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	5/23/2012 8:58:15 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	5/23/2012 8:58:15 PM
Phenanthrene	0.46	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Phenol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Pyrene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Pyridine	ND	0.50		mg/Kg	1	5/23/2012 8:58:15 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 8:58:15 PM
Surr: 2,4,6-Tribromophenol	41.2	20.1-121		%REC	1	5/23/2012 8:58:15 PM
Surr: 2-Fluorobiphenyl	58.6	19-133		%REC	1	5/23/2012 8:58:15 PM
Surr: 2-Fluorophenol	67.2	20.2-108		%REC	1	5/23/2012 8:58:15 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-11 (29'-34')

Project: Enersource

Collection Date: 5/10/2012 9:00:00 AM

Lab ID: 1205815-002

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Surr: 4-Terphenyl-d14	73.1	18.9-115		%REC	1	5/23/2012 8:58:15 PM
Surr: Nitrobenzene-d5	55.5	20.8-123		%REC	1	5/23/2012 8:58:15 PM
Surr: Phenol-d5	75.2	19.8-115		%REC	1	5/23/2012 8:58:15 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Toluene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Ethylbenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2,4-Trimethylbenzene	2.1	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,3,5-Trimethylbenzene	0.58	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2-Dichloroethane (EDC)	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2-Dibromoethane (EDB)	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Naphthalene	0.90	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
1-Methylnaphthalene	2.5	1.0		mg/Kg	5	5/18/2012 9:11:13 PM
2-Methylnaphthalene	3.1	1.0		mg/Kg	5	5/18/2012 9:11:13 PM
Acetone	ND	3.8		mg/Kg	5	5/18/2012 9:11:13 PM
Bromobenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Bromodichloromethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Bromoform	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Bromomethane	ND	0.75		mg/Kg	5	5/18/2012 9:11:13 PM
2-Butanone	ND	2.5		mg/Kg	5	5/18/2012 9:11:13 PM
Carbon disulfide	ND	2.5		mg/Kg	5	5/18/2012 9:11:13 PM
Carbon tetrachloride	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
Chlorobenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Chloroethane	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
Chloroform	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Chloromethane	ND	0.75		mg/Kg	5	5/18/2012 9:11:13 PM
2-Chlorotoluene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
4-Chlorotoluene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
cis-1,2-DCE	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
cis-1,3-Dichloropropene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2-Dibromo-3-chloropropane	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
Dibromochloromethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Dibromomethane	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
1,2-Dichlorobenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,3-Dichlorobenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,4-Dichlorobenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Dichlorodifluoromethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,1-Dichloroethane	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
1,1-Dichloroethene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2-Dichloropropane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-11 (29'-34')

**Project:** Enersource

**Collection Date:** 5/10/2012 9:00:00 AM

**Lab ID:** 1205815-002

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
2,2-Dichloropropane	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
1,1-Dichloropropene	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
Hexachlorobutadiene	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
2-Hexanone	ND	2.5		mg/Kg	5	5/18/2012 9:11:13 PM
Isopropylbenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
4-Isopropyltoluene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
4-Methyl-2-pentanone	ND	2.5		mg/Kg	5	5/18/2012 9:11:13 PM
Methylene chloride	ND	0.75		mg/Kg	5	5/18/2012 9:11:13 PM
n-Butylbenzene	0.50	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
n-Propylbenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
sec-Butylbenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Styrene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
tert-Butylbenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,1,1,2-Tetrachloroethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,1,2,2-Tetrachloroethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Tetrachloroethene (PCE)	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
trans-1,2-DCE	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
trans-1,3-Dichloropropene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2,3-Trichlorobenzene	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
1,2,4-Trichlorobenzene	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,1,1-Trichloroethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,1,2-Trichloroethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Trichloroethene (TCE)	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Trichlorofluoromethane	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
1,2,3-Trichloropropane	ND	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
Vinyl chloride	ND	0.25		mg/Kg	5	5/18/2012 9:11:13 PM
Xylenes, Total	0.56	0.50		mg/Kg	5	5/18/2012 9:11:13 PM
Surr: 1,2-Dichloroethane-d4	79.9	70-130		%REC	5	5/18/2012 9:11:13 PM
Surr: 4-Bromofluorobenzene	56.4	70-130	S	%REC	5	5/18/2012 9:11:13 PM
Surr: Dibromofluoromethane	76.5	71.7-132		%REC	5	5/18/2012 9:11:13 PM
Surr: Toluene-d8	88.6	70-130		%REC	5	5/18/2012 9:11:13 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-08 (14'-19')

**Project:** Enersource

**Collection Date:** 5/12/2012 1:45:00 PM

**Lab ID:** 1205815-003

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	43	10		mg/Kg	1	5/22/2012 1:41:02 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	5/22/2012 1:41:02 PM
Surr: DNOP	82.3	82.1-121		%REC	1	5/22/2012 1:41:02 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	100	10		mg/Kg	2	5/23/2012 12:17:33 PM
Surr: BFB	691	69.7-121	S	%REC	2	5/23/2012 12:17:33 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	570	30		mg/Kg	20	5/21/2012 8:11:17 PM
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: <b>JDC</b>
Acenaphthene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Acenaphthylene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Aniline	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Anthracene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Azobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Benzoic acid	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Carbazole	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	5/23/2012 9:27:47 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Chrysene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	5/23/2012 9:27:47 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Dibenzofuran	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-08 (14'-19')

Project: Enersource

Collection Date: 5/12/2012 1:45:00 PM

Lab ID: 1205815-003

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	5/23/2012 9:27:47 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	5/23/2012 9:27:47 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	5/23/2012 9:27:47 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	5/23/2012 9:27:47 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
Fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Fluorene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Hexachloroethane	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Isophorone	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
2-Methylphenol	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Naphthalene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	5/23/2012 9:27:47 PM
Nitrobenzene	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	5/23/2012 9:27:47 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	5/23/2012 9:27:47 PM
Phenanthrene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Phenol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Pyrene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Pyridine	ND	0.50		mg/Kg	1	5/23/2012 9:27:47 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 9:27:47 PM
Surr: 2,4,6-Tribromophenol	72.5	20.1-121		%REC	1	5/23/2012 9:27:47 PM
Surr: 2-Fluorobiphenyl	74.9	19-133		%REC	1	5/23/2012 9:27:47 PM
Surr: 2-Fluorophenol	73.2	20.2-108		%REC	1	5/23/2012 9:27:47 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-08 (14'-19')

Project: Enersource

Collection Date: 5/12/2012 1:45:00 PM

Lab ID: 1205815-003

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Surr: 4-Terphenyl-d14	73.6	18.9-115		%REC	1	5/23/2012 9:27:47 PM
Surr: Nitrobenzene-d5	66.5	20.8-123		%REC	1	5/23/2012 9:27:47 PM
Surr: Phenol-d5	76.9	19.8-115		%REC	1	5/23/2012 9:27:47 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Toluene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Ethylbenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2,4-Trimethylbenzene	3.0	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,3,5-Trimethylbenzene	1.2	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Naphthalene	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	5/18/2012 11:59:15 PM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	5/18/2012 11:59:15 PM
Acetone	ND	15		mg/Kg	20	5/18/2012 11:59:15 PM
Bromobenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Bromoform	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Bromomethane	ND	3.0		mg/Kg	20	5/18/2012 11:59:15 PM
2-Butanone	ND	10		mg/Kg	20	5/18/2012 11:59:15 PM
Carbon disulfide	ND	10		mg/Kg	20	5/18/2012 11:59:15 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
Chlorobenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Chloroethane	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
Chloroform	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Chloromethane	ND	3.0		mg/Kg	20	5/18/2012 11:59:15 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Dibromomethane	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-08 (14'-19')

Project: Enersource

Collection Date: 5/12/2012 1:45:00 PM

Lab ID: 1205815-003

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
2-Hexanone	ND	10		mg/Kg	20	5/18/2012 11:59:15 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	5/18/2012 11:59:15 PM
Methylene chloride	ND	3.0		mg/Kg	20	5/18/2012 11:59:15 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Styrene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
Vinyl chloride	ND	1.0		mg/Kg	20	5/18/2012 11:59:15 PM
Xylenes, Total	ND	2.0		mg/Kg	20	5/18/2012 11:59:15 PM
Surr: 1,2-Dichloroethane-d4	82.8	70-130		%REC	20	5/18/2012 11:59:15 PM
Surr: 4-Bromofluorobenzene	79.6	70-130		%REC	20	5/18/2012 11:59:15 PM
Surr: Dibromofluoromethane	77.9	71.7-132		%REC	20	5/18/2012 11:59:15 PM
Surr: Toluene-d8	87.7	70-130		%REC	20	5/18/2012 11:59:15 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-09 (19'-23')

**Project:** Enersource

**Collection Date:** 5/13/2012 5:50:00 PM

**Lab ID:** 1205815-004

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	630	10		mg/Kg	1	5/22/2012 2:02:54 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/22/2012 2:02:54 PM
Surr: DNOP	86.8	82.1-121		%REC	1	5/22/2012 2:02:54 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	490	100		mg/Kg	20	5/23/2012 12:46:17 PM
Surr: BFB	251	69.7-121	S	%REC	20	5/23/2012 12:46:17 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	260	30		mg/Kg	20	5/21/2012 5:42:21 PM
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: <b>JDC</b>
Acenaphthene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Acenaphthylene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Aniline	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Anthracene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Azobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Benzoic acid	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Carbazole	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	5/23/2012 9:57:25 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Chrysene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	5/23/2012 9:57:25 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Dibenzofuran	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-09 (19'-23')

Project: Enersource

Collection Date: 5/13/2012 5:50:00 PM

Lab ID: 1205815-004

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	5/23/2012 9:57:25 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	5/23/2012 9:57:25 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	5/23/2012 9:57:25 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	5/23/2012 9:57:25 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
Fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Fluorene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Hexachloroethane	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Isophorone	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
1-Methylnaphthalene	2.4	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
2-Methylnaphthalene	3.1	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
2-Methylphenol	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Naphthalene	0.98	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	5/23/2012 9:57:25 PM
Nitrobenzene	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	5/23/2012 9:57:25 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	5/23/2012 9:57:25 PM
Phenanthrene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Phenol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Pyrene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Pyridine	ND	0.50		mg/Kg	1	5/23/2012 9:57:25 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 9:57:25 PM
Surr: 2,4,6-Tribromophenol	77.9	20.1-121		%REC	1	5/23/2012 9:57:25 PM
Surr: 2-Fluorobiphenyl	73.7	19-133		%REC	1	5/23/2012 9:57:25 PM
Surr: 2-Fluorophenol	80.9	20.2-108		%REC	1	5/23/2012 9:57:25 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-09 (19'-23')

Project: Enersource

Collection Date: 5/13/2012 5:50:00 PM

Lab ID: 1205815-004

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Surr: 4-Terphenyl-d14	79.5	18.9-115		%REC	1	5/23/2012 9:57:25 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	5/23/2012 9:57:25 PM
Surr: Phenol-d5	86.1	19.8-115		%REC	1	5/23/2012 9:57:25 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Toluene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Ethylbenzene	4.8	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2,4-Trimethylbenzene	13	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,3,5-Trimethylbenzene	4.5	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Naphthalene	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
1-Methylnaphthalene	ND	10		mg/Kg	50	5/19/2012 12:55:28 AM
2-Methylnaphthalene	ND	10		mg/Kg	50	5/19/2012 12:55:28 AM
Acetone	ND	38		mg/Kg	50	5/19/2012 12:55:28 AM
Bromobenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Bromoform	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Bromomethane	ND	7.5		mg/Kg	50	5/19/2012 12:55:28 AM
2-Butanone	ND	25		mg/Kg	50	5/19/2012 12:55:28 AM
Carbon disulfide	ND	25		mg/Kg	50	5/19/2012 12:55:28 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
Chlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Chloroethane	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
Chloroform	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Chloromethane	ND	7.5		mg/Kg	50	5/19/2012 12:55:28 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Dibromomethane	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-09 (19'-23')

Project: Enersource

Collection Date: 5/13/2012 5:50:00 PM

Lab ID: 1205815-004

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
2-Hexanone	ND	25		mg/Kg	50	5/19/2012 12:55:28 AM
Isopropylbenzene	2.5	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	5/19/2012 12:55:28 AM
Methylene chloride	ND	7.5		mg/Kg	50	5/19/2012 12:55:28 AM
n-Butylbenzene	4.2	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
n-Propylbenzene	4.3	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
sec-Butylbenzene	2.7	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Styrene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
Vinyl chloride	ND	2.5		mg/Kg	50	5/19/2012 12:55:28 AM
Xylenes, Total	12	5.0		mg/Kg	50	5/19/2012 12:55:28 AM
Surr: 1,2-Dichloroethane-d4	80.7	70-130		%REC	50	5/19/2012 12:55:28 AM
Surr: 4-Bromofluorobenzene	79.0	70-130		%REC	50	5/19/2012 12:55:28 AM
Surr: Dibromofluoromethane	78.3	71.7-132		%REC	50	5/19/2012 12:55:28 AM
Surr: Toluene-d8	87.3	70-130		%REC	50	5/19/2012 12:55:28 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-10 (24'-29')

Project: Enersource

Collection Date: 5/15/2012 3:40:00 PM

Lab ID: 1205815-005

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	780	99		mg/Kg	10	5/22/2012 4:17:42 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	5/22/2012 4:17:42 PM
Surr: DNOP	0	82.1-121	S	%REC	10	5/22/2012 4:17:42 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	520	100		mg/Kg	20	5/23/2012 1:15:00 PM
Surr: BFB	342	69.7-121	S	%REC	20	5/23/2012 1:15:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	ND	7.5		mg/Kg	5	5/21/2012 5:54:46 PM
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Acenaphthylene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Aniline	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Anthracene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Azobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Benzoic acid	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Carbazole	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	5/23/2012 10:27:05 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Chrysene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	5/23/2012 10:27:05 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Dibenzofuran	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205815**

Date Reported: **5/24/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-10 (24'-29')

**Project:** Enersource

**Collection Date:** 5/15/2012 3:40:00 PM

**Lab ID:** 1205815-005

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: <b>JDC</b>
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	5/23/2012 10:27:05 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	5/23/2012 10:27:05 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	5/23/2012 10:27:05 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	5/23/2012 10:27:05 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
Fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Fluorene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Hexachloroethane	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Isophorone	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
1-Methylnaphthalene	3.5	0.40		mg/Kg	2	5/24/2012 1:18:09 PM
2-Methylnaphthalene	4.3	0.40		mg/Kg	2	5/24/2012 1:18:09 PM
2-Methylphenol	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Naphthalene	1.1	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	5/23/2012 10:27:05 PM
Nitrobenzene	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	5/23/2012 10:27:05 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	5/23/2012 10:27:05 PM
Phenanthrene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Phenol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Pyrene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Pyridine	ND	0.50		mg/Kg	1	5/23/2012 10:27:05 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 10:27:05 PM
Surr: 2,4,6-Tribromophenol	68.1	20.1-121		%REC	1	5/23/2012 10:27:05 PM
Surr: 2-Fluorobiphenyl	63.3	19-133		%REC	1	5/23/2012 10:27:05 PM
Surr: 2-Fluorophenol	63.1	20.2-108		%REC	1	5/23/2012 10:27:05 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-10 (24'-29')

**Project:** Enersource

**Collection Date:** 5/15/2012 3:40:00 PM

**Lab ID:** 1205815-005

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Surr: 4-Terphenyl-d14	70.9	18.9-115		%REC	1	5/23/2012 10:27:05 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	5/23/2012 10:27:05 PM
Surr: Phenol-d5	70.3	19.8-115		%REC	1	5/23/2012 10:27:05 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Toluene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Ethylbenzene	10	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2,4-Trimethylbenzene	15	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,3,5-Trimethylbenzene	5.6	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Naphthalene	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
1-Methylnaphthalene	ND	10		mg/Kg	50	5/19/2012 1:51:59 AM
2-Methylnaphthalene	ND	10		mg/Kg	50	5/19/2012 1:51:59 AM
Acetone	ND	38		mg/Kg	50	5/19/2012 1:51:59 AM
Bromobenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Bromoform	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Bromomethane	ND	7.5		mg/Kg	50	5/19/2012 1:51:59 AM
2-Butanone	ND	25		mg/Kg	50	5/19/2012 1:51:59 AM
Carbon disulfide	ND	25		mg/Kg	50	5/19/2012 1:51:59 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
Chlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Chloroethane	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
Chloroform	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Chloromethane	ND	7.5		mg/Kg	50	5/19/2012 1:51:59 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Dibromomethane	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-10 (24'-29')

Project: Enersource

Collection Date: 5/15/2012 3:40:00 PM

Lab ID: 1205815-005

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
2-Hexanone	ND	25		mg/Kg	50	5/19/2012 1:51:59 AM
Isopropylbenzene	4.6	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	5/19/2012 1:51:59 AM
Methylene chloride	ND	7.5		mg/Kg	50	5/19/2012 1:51:59 AM
n-Butylbenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
n-Propylbenzene	6.0	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
sec-Butylbenzene	2.9	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Styrene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
Vinyl chloride	ND	2.5		mg/Kg	50	5/19/2012 1:51:59 AM
Xylenes, Total	25	5.0		mg/Kg	50	5/19/2012 1:51:59 AM
Surr: 1,2-Dichloroethane-d4	77.7	70-130		%REC	50	5/19/2012 1:51:59 AM
Surr: 4-Bromofluorobenzene	81.1	70-130		%REC	50	5/19/2012 1:51:59 AM
Surr: Dibromofluoromethane	78.3	71.7-132		%REC	50	5/19/2012 1:51:59 AM
Surr: Toluene-d8	88.9	70-130		%REC	50	5/19/2012 1:51:59 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-12 (29'-33')

Project: Enersource

Collection Date: 5/16/2012 4:00:00 PM

Lab ID: 1205815-006

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	1,500	99		mg/Kg	10	5/22/2012 4:39:35 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	5/22/2012 4:39:35 PM
Surr: DNOP	0	82.1-121	S	%REC	10	5/22/2012 4:39:35 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	310	100		mg/Kg	20	5/23/2012 1:43:51 PM
Surr: BFB	165	69.7-121	S	%REC	20	5/23/2012 1:43:51 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	230	7.5		mg/Kg	5	5/21/2012 6:44:24 PM
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Acenaphthylene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Aniline	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Anthracene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Azobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Benzoic acid	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Carbazole	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	5/23/2012 10:56:39 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Chrysene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	5/23/2012 10:56:39 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Dibenzofuran	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-12 (29'-33')

Project: Enersource

Collection Date: 5/16/2012 4:00:00 PM

Lab ID: 1205815-006

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	5/23/2012 10:56:39 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	5/23/2012 10:56:39 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	5/23/2012 10:56:39 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	5/23/2012 10:56:39 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
Fluoranthene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Fluorene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Hexachloroethane	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Isophorone	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
1-Methylnaphthalene	7.2	1.0		mg/Kg	5	5/24/2012 1:47:21 PM
2-Methylnaphthalene	9.1	1.0		mg/Kg	5	5/24/2012 1:47:21 PM
2-Methylphenol	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Naphthalene	2.0	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	5/23/2012 10:56:39 PM
Nitrobenzene	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	5/23/2012 10:56:39 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	5/23/2012 10:56:39 PM
Phenanthrene	0.30	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Phenol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Pyrene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Pyridine	ND	0.50		mg/Kg	1	5/23/2012 10:56:39 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	5/23/2012 10:56:39 PM
Surr: 2,4,6-Tribromophenol	57.0	20.1-121		%REC	1	5/23/2012 10:56:39 PM
Surr: 2-Fluorobiphenyl	63.0	19-133		%REC	1	5/23/2012 10:56:39 PM
Surr: 2-Fluorophenol	58.4	20.2-108		%REC	1	5/23/2012 10:56:39 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-12 (29'-33')

Project: Enersource

Collection Date: 5/16/2012 4:00:00 PM

Lab ID: 1205815-006

Matrix: MEOH (SOIL)

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8270C: SEMIVOLATILES</b>						Analyst: JDC
Surr: 4-Terphenyl-d14	87.0	18.9-115		%REC	1	5/23/2012 10:56:39 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	5/23/2012 10:56:39 PM
Surr: Phenol-d5	79.7	19.8-115		%REC	1	5/23/2012 10:56:39 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Toluene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Ethylbenzene	5.8	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2,4-Trimethylbenzene	12	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,3,5-Trimethylbenzene	4.0	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Naphthalene	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
1-Methylnaphthalene	ND	10		mg/Kg	50	5/19/2012 2:48:04 AM
2-Methylnaphthalene	ND	10		mg/Kg	50	5/19/2012 2:48:04 AM
Acetone	ND	38		mg/Kg	50	5/19/2012 2:48:04 AM
Bromobenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Bromoform	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Bromomethane	ND	7.5		mg/Kg	50	5/19/2012 2:48:04 AM
2-Butanone	ND	25		mg/Kg	50	5/19/2012 2:48:04 AM
Carbon disulfide	ND	25		mg/Kg	50	5/19/2012 2:48:04 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
Chlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Chloroethane	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
Chloroform	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Chloromethane	ND	7.5		mg/Kg	50	5/19/2012 2:48:04 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Dibromomethane	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-12 (29'-33')

**Project:** Enersource

**Collection Date:** 5/16/2012 4:00:00 PM

**Lab ID:** 1205815-006

**Matrix:** MEOH (SOIL)

**Received Date:** 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
2-Hexanone	ND	25		mg/Kg	50	5/19/2012 2:48:04 AM
Isopropylbenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	5/19/2012 2:48:04 AM
Methylene chloride	ND	7.5		mg/Kg	50	5/19/2012 2:48:04 AM
n-Butylbenzene	2.5	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
n-Propylbenzene	3.6	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Styrene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
Vinyl chloride	ND	2.5		mg/Kg	50	5/19/2012 2:48:04 AM
Xylenes, Total	20	5.0		mg/Kg	50	5/19/2012 2:48:04 AM
Surr: 1,2-Dichloroethane-d4	83.7	70-130		%REC	50	5/19/2012 2:48:04 AM
Surr: 4-Bromofluorobenzene	77.7	70-130		%REC	50	5/19/2012 2:48:04 AM
Surr: Dibromofluoromethane	81.9	71.7-132		%REC	50	5/19/2012 2:48:04 AM
Surr: Toluene-d8	86.1	70-130		%REC	50	5/19/2012 2:48:04 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MEOH BLANK

Project: Enersource

Collection Date:

Lab ID: 1205815-007

Matrix: MEOH BLAN

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/23/2012 2:41:30 PM
Surr: BFB	92.1	69.7-121		%REC	1	5/23/2012 2:41:30 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Toluene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Ethylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Naphthalene	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	5/19/2012 3:44:06 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	5/19/2012 3:44:06 AM
Acetone	ND	0.75		mg/Kg	1	5/19/2012 3:44:06 AM
Bromobenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Bromoform	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Bromomethane	ND	0.15		mg/Kg	1	5/19/2012 3:44:06 AM
2-Butanone	ND	0.50		mg/Kg	1	5/19/2012 3:44:06 AM
Carbon disulfide	ND	0.50		mg/Kg	1	5/19/2012 3:44:06 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
Chlorobenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Chloroethane	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
Chloroform	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Chloromethane	ND	0.15		mg/Kg	1	5/19/2012 3:44:06 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Dibromomethane	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205815

Date Reported: 5/24/2012

CLIENT: Intera, Inc.

Client Sample ID: MEOH BLANK

Project: Enersource

Collection Date:

Lab ID: 1205815-007

Matrix: MEOH BLAN

Received Date: 5/17/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
2-Hexanone	ND	0.50		mg/Kg	1	5/19/2012 3:44:06 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/19/2012 3:44:06 AM
Methylene chloride	ND	0.15		mg/Kg	1	5/19/2012 3:44:06 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Styrene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
Vinyl chloride	ND	0.050		mg/Kg	1	5/19/2012 3:44:06 AM
Xylenes, Total	ND	0.10		mg/Kg	1	5/19/2012 3:44:06 AM
Surr: 1,2-Dichloroethane-d4	80.2	70-130		%REC	1	5/19/2012 3:44:06 AM
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	1	5/19/2012 3:44:06 AM
Surr: Dibromofluoromethane	76.2	71.7-132		%REC	1	5/19/2012 3:44:06 AM
Surr: Toluene-d8	87.2	70-130		%REC	1	5/19/2012 3:44:06 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2028		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 2028		RunNo: 2936					
Prep Date:	5/21/2012		Analysis Date: 5/21/2012		SeqNo: 81491		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-2028		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 2028		RunNo: 2936					
Prep Date:	5/21/2012		Analysis Date: 5/21/2012		SeqNo: 81492		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

Sample ID	1205804-001AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 2028		RunNo: 2936					
Prep Date:	5/21/2012		Analysis Date: 5/21/2012		SeqNo: 81494		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	7.5	15.00	1.995	84.6	74.6	118			

Sample ID	1205804-001AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 2028		RunNo: 2936					
Prep Date:	5/21/2012		Analysis Date: 5/21/2012		SeqNo: 81495		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	7.5	15.00	1.995	85.3	74.6	118	0.672	20	

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2024	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2024			RunNo: 2934					
Prep Date:	5/21/2012	Analysis Date: 5/22/2012			SeqNo: 81538		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.6	82.1	121			

Sample ID	LCS-2024		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2024		RunNo: 2934					
Prep Date:	5/21/2012		Analysis Date: 5/22/2012		SeqNo: 81539		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.3	52.6	130			
Surr: DNOP	4.9		5.000		97.3	82.1	121			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2045		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 2045		RunNo: 3004					
Prep Date:	5/21/2012		Analysis Date: 5/24/2012		SeqNo: 83270		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1,000		91.7	69.7	121			

Sample ID	LCS-2045		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 2045		RunNo: 3004					
Prep Date:	5/21/2012		Analysis Date: 5/24/2012		SeqNo: 83271		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	98.5	133			
Surr: BFB	970		1,000		97.0	69.7	121			

Sample ID	1205837-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 2045		RunNo: 3004					
Prep Date:	5/21/2012		Analysis Date: 5/23/2012		SeqNo: 83287		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	4.7	23.41	1.982	125	85.4	147			
Surr: BFB	930		936.3		99.3	69.7	121			

Sample ID	1205837-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015B: Gasoline Range				
Client ID:	BatchQC		Batch ID:	2045		RunNo:	3004				
Prep Date:	5/21/2012		Analysis Date:	5/23/2012		SeqNo:	83288		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	30	4.9	24.32	1.982	117	85.4	147	2.26	19.2		
Surr: BFB	960		972.8		98.5	69.7	121	0	0		

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R2899	RunNo:	2899					
Prep Date:		Analysis Date:	5/18/2012	SeqNo:	80419	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R2899	RunNo:	2899					
Prep Date:		Analysis Date:	5/18/2012	SeqNo:	80419	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.41		0.5000		82.3	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.38		0.5000		76.1	71.7	132			
Surr: Toluene-d8	0.46		0.5000		91.8	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R2899	RunNo:	2899					
Prep Date:		Analysis Date:	5/18/2012	SeqNo:	80420	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	70.7	123			
Toluene	0.95	0.050	1.000	0	95.1	80	120			
Chlorobenzene	0.98	0.050	1.000	0	98.1	70	130			
1,1-Dichloroethene	0.86	0.050	1.000	0	86.4	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.0	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.41		0.5000		81.2	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.2	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R2899	RunNo:	2899					
Prep Date:		Analysis Date:	5/18/2012	SeqNo:	80420	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.38		0.5000		75.1	71.7	132			
Surr: Toluene-d8	0.44		0.5000		88.5	70	130			

Sample ID	1205815-001a ms	SampType:	MS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	MW-07 (14'-19')	Batch ID:	R2899	RunNo:	2899					
Prep Date:		Analysis Date:	5/18/2012	SeqNo:	80421	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	48	2.5	50.00	0	95.8	81.3	119			
Toluene	48	2.5	50.00	0	96.2	75	121			
Chlorobenzene	50	2.5	50.00	0.2369	99.8	78.5	120			
1,1-Dichloroethene	45	2.5	50.00	0	90.4	75.3	115			
Trichloroethene (TCE)	44	2.5	50.00	0	88.3	67.8	119			
Surr: 1,2-Dichloroethane-d4	21		25.00		84.5	70	130			
Surr: 4-Bromofluorobenzene	20		25.00		81.3	70	130			
Surr: Dibromofluoromethane	21		25.00		83.1	71.7	132			
Surr: Toluene-d8	22		25.00		87.2	70	130			

Sample ID	1205815-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	MW-07 (14'-19')	Batch ID:	R2899	RunNo:	2899					
Prep Date:		Analysis Date:	5/18/2012	SeqNo:	80422	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	45	2.5	50.00	0	90.1	81.3	119	6.16	15.7	
Toluene	47	2.5	50.00	0	93.5	75	121	2.82	16.2	
Chlorobenzene	48	2.5	50.00	0.2369	96.1	78.5	120	3.74	14.9	
1,1-Dichloroethene	43	2.5	50.00	0	86.7	75.3	115	4.19	31.8	
Trichloroethene (TCE)	42	2.5	50.00	0	83.0	67.8	119	6.11	16.5	
Surr: 1,2-Dichloroethane-d4	21		25.00		82.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	21		25.00		83.4	70	130	0	0	
Surr: Dibromofluoromethane	21		25.00		82.2	71.7	132	0	0	
Surr: Toluene-d8	22		25.00		88.5	70	130	0	0	

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	mb-2036		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 2036		RunNo: 2994					
Prep Date:	5/21/2012		Analysis Date: 5/23/2012		SeqNo: 83109		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	<b>mb-2036</b>		SampType:	<b>MBLK</b>		TestCode:	<b>EPA Method 8270C: Semivolatiles</b>			
Client ID:	<b>PBS</b>		Batch ID:	<b>2036</b>		RunNo:	<b>2994</b>			
Prep Date:	<b>5/21/2012</b>		Analysis Date:	<b>5/23/2012</b>		SeqNo:	<b>83109</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	1.7		3.330		52.1	20.1	121			
Surr: 2-Fluorobiphenyl	0.78		1.670		46.5	19	133			
Surr: 2-Fluorophenol	1.5		3.330		45.2	20.2	108			
Surr: 4-Terphenyl-d14	0.89		1.670		53.1	18.9	115			
Surr: Nitrobenzene-d5	0.75		1.670		44.9	20.8	123			
Surr: Phenol-d5	1.7		3.330		50.4	19.8	115			

Sample ID	<b>lcs-2036</b>		SampType:	<b>LCS</b>		TestCode:	<b>EPA Method 8270C: Semivolatiles</b>			
Client ID:	<b>LCSS</b>		Batch ID:	<b>2036</b>		RunNo:	<b>2994</b>			
Prep Date:	<b>5/21/2012</b>		Analysis Date:	<b>5/23/2012</b>		SeqNo:	<b>83110</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

**Client:** Intera, Inc.

**Project:** Enersource

Sample ID	Ics-2036		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 2036		RunNo: 2994					
Prep Date:	5/21/2012		Analysis Date: 5/23/2012		SeqNo: 83110		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	70.6	38.6	100			
4-Chloro-3-methylphenol	2.9	0.50	3.330	0	85.7	35.8	108			
2-Chlorophenol	2.4	0.20	3.330	0	71.4	48.2	96.1			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	60.2	42.5	97.6			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.4	51.2	108			
N-Nitrosodi-n-propylamine	0.86	0.20	1.670	0	51.2	31.6	114			
4-Nitrophenol	2.5	0.25	3.330	0	73.8	22.7	144			
Pentachlorophenol	2.2	0.40	3.330	0	67.2	24	109			
Phenol	2.6	0.20	3.330	0	78.8	33.1	108			
Pyrene	1.3	0.20	1.670	0	76.3	42.7	98.9			
1,2,4-Trichlorobenzene	1.0	0.20	1.670	0	60.4	27.1	118			
Surr: 2,4,6-Tribromophenol	2.9		3.330		86.9	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		70.3	19	133			
Surr: 2-Fluorophenol	2.2		3.330		66.1	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		88.4	18.9	115			
Surr: Nitrobenzene-d5	1.1		1.670		66.9	20.8	123			
Surr: Phenol-d5	2.7		3.330		81.2	19.8	115			

Sample ID	1205815-001Ams	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	MW-07 (14'-19')	Batch ID: 2036			RunNo: 2994					
Prep Date:	5/21/2012	Analysis Date: 5/23/2012			SeqNo: 83117		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.667	0	69.4	38.6	100			
4-Chloro-3-methylphenol	2.7	0.50	3.324	0	80.2	35.8	108			
2-Chlorophenol	2.9	0.20	3.324	0	86.1	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.20	1.667	0	72.9	42.5	97.6			
2,4-Dinitrotoluene	ND	0.50	1.667	0	27.5	51.2	108			S
N-Nitrosodi-n-propylamine	ND	0.20	1.667	0	0	31.6	114			S
4-Nitrophenol	ND	0.25	3.324	0	0	22.7	144			S
Pentachlorophenol	0.81	0.40	3.324	0	24.2	24	109			
Phenol	2.9	0.20	3.324	0	86.9	33.1	108			
Pyrene	1.6	0.20	1.667	0	97.9	42.7	98.9			
1,2,4-Trichlorobenzene	0.96	0.20	1.667	0	57.6	27.1	118			
Surr: 2,4,6-Tribromophenol	0.32		3.324		9.75	20.1	121			S
Surr: 2-Fluorobiphenyl	0.71		1.667		42.8	19	133			
Surr: 2-Fluorophenol	2.2		3.324		65.8	20.2	108			
Surr: 4-Terphenyl-d14	1.2		1.667		73.3	18.9	115			
Surr: Nitrobenzene-d5	0		1.667		0	20.8	123			S
Surr: Phenol-d5	2.5		3.324		75.0	19.8	115			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205815

24-May-12

Client: Intera, Inc.

Project: Enersource

Sample ID	1205815-001Amsd	SampType: MSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	MW-07 (14'-19')	Batch ID: 2036			RunNo: 2994					
Prep Date:	5/21/2012	Analysis Date: 5/23/2012			SeqNo: 83118		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.1	0.20	1.659	0	67.4	38.6	100	3.32	20	
4-Chloro-3-methylphenol	2.6	0.50	3.309	0	78.7	35.8	108	2.33	20	
2-Chlorophenol	2.8	0.20	3.309	0	85.3	48.2	96.1	1.50	20	
1,4-Dichlorobenzene	1.2	0.20	1.659	0	72.4	42.5	97.6	1.18	20	
2,4-Dinitrotoluene	ND	0.50	1.659	0	28.4	51.2	108	0	20	S
N-Nitrosodi-n-propylamine	ND	0.20	1.659	0	0	31.6	114	0	20	S
4-Nitrophenol	ND	0.25	3.309	0	0	22.7	144	0	20	S
Pentachlorophenol	0.75	0.40	3.309	0	22.7	24	109	6.99	20	S
Phenol	3.0	0.20	3.309	0	89.2	33.1	108	2.09	20	
Pyrene	1.6	0.20	1.659	0	96.8	42.7	98.9	1.57	20	
1,2,4-Trichlorobenzene	0.88	0.20	1.659	0	53.2	27.1	118	8.47	20	
Surr: 2,4,6-Tribromophenol	0.23		3.309		7.09	20.1	121	0	0	S
Surr: 2-Fluorobiphenyl	0.64		1.659		38.6	19	133	0	0	
Surr: 2-Fluorophenol	2.2		3.309		66.5	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.2		1.659		72.0	18.9	115	0	0	
Surr: Nitrobenzene-d5	0		1.659		0	20.8	123	0	0	S
Surr: Phenol-d5	2.5		3.309		76.0	19.8	115	0	0	

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

## Sample Log-In Check List

Client Name: INT

Work Order Number: 1205815

Received by/date:

*mg* 05/17/12

Logged By: Ashley Gallegos 5/17/2012 4:20:00 PM

Completed By: Ashley Gallegos 5/18/2012 2:11:10 PM

Reviewed By:

### Chain of Custody

- |                                  |        |    |               |
|----------------------------------|--------|----|---------------|
| 1. Were seals intact?            | Yes    | No | Not Present ✓ |
| 2. Is Chain of Custody complete? | Yes ✓  | No | Not Present   |
| 3. How was the sample delivered? | Client |    |               |

### Log In

- |   |       |      |  |
|---|-------|------|--|
| 4. Coolers are present? (see 19. for cooler specific information)                         | Yes ✓ | No   | NA                                     |
| 5. Was an attempt made to cool the samples?   | Yes ✓ | No   | NA                                     |
| 6. Were all samples received at a temperature of >0° C to 6.0°C                           | Yes   | No ✓ | NA                                     |
| <u>Not required</u>   |       |      |  |
| 7. Sample(s) in proper container(s)?  | Yes ✓ | No   |  |
| 8. Sufficient sample volume for indicated test(s)?  | Yes ✓ | No   |  |
| 9. Are samples (except VOA and ONG) properly preserved?                                   | Yes ✓ | No   |  |
| 10. Was preservative added to bottles?  | Yes   | No ✓ | NA                                     |
| 11. VOA vials have zero headspace?  | Yes   | No   | No VOA Vials ✓                         |
| 12. Were any sample containers received broken?   | Yes   | No ✓ |  |
| 13. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)       | Yes ✓ | No   | # of preserved bottles checked for pH: |
| 14. Are matrices correctly identified on Chain of Custody?                                | Yes ✓ | No   | (<2 or >12 unless noted)               |
| 15. Is it clear what analyses were requested?   | Yes ✓ | No   | Adjusted?                              |
| 16. Were all holding times able to be met?<br>(If no, notify customer for authorization.) | Yes ✓ | No   | Checked by:                            |

### Special Handling (if applicable)

- |   |     |    |      |
|---|-----|----|------|
| 17. Was client notified of all discrepancies with this order? | Yes | No | NA ✓ |
|---|-----|----|------|

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

18. Additional remarks:

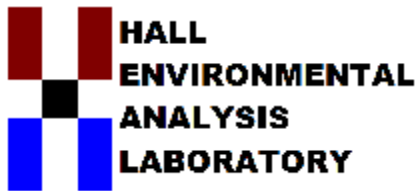
*per LD use Sample ID's on LOC*  
*A 05/21/12*

### 19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.6	Good	Not Present			







*Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)*

June 08, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX (505) 246-2600

RE: Enersource

OrderNo.: 1205B43

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/30/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-12

Project: Enersource

Collection Date: 5/27/2012 12:30:00 PM

Lab ID: 1205B43-001

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 4:49:10 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	6200	250		mg/L	500	6/1/2012 11:44:22 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	1900	50		µg/L	50	6/4/2012 4:19:19 PM
Toluene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Ethylbenzene	33	5.0		µg/L	5	6/2/2012 6:59:48 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2,4-Trimethylbenzene	20	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,3,5-Trimethylbenzene	5.5	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2-Dichloroethane (EDC)	55	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Naphthalene	ND	10		µg/L	5	6/2/2012 6:59:48 AM
1-Methylnaphthalene	ND	20		µg/L	5	6/2/2012 6:59:48 AM
2-Methylnaphthalene	ND	20		µg/L	5	6/2/2012 6:59:48 AM
Acetone	ND	50		µg/L	5	6/2/2012 6:59:48 AM
Bromobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Bromodichloromethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Bromoform	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Bromomethane	ND	15		µg/L	5	6/2/2012 6:59:48 AM
2-Butanone	ND	50		µg/L	5	6/2/2012 6:59:48 AM
Carbon disulfide	ND	50		µg/L	5	6/2/2012 6:59:48 AM
Carbon Tetrachloride	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Chlorobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Chloroethane	ND	10		µg/L	5	6/2/2012 6:59:48 AM
Chloroform	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Chloromethane	ND	15		µg/L	5	6/2/2012 6:59:48 AM
2-Chlorotoluene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
4-Chlorotoluene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
cis-1,2-DCE	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/2/2012 6:59:48 AM
Dibromochloromethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Dibromomethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,1-Dichloroethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,1-Dichloroethene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2-Dichloropropane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-12

Project: Enersource

Collection Date: 5/27/2012 12:30:00 PM

Lab ID: 1205B43-001

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
2,2-Dichloropropane	ND	10		µg/L	5	6/2/2012 6:59:48 AM
1,1-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Hexachlorobutadiene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
2-Hexanone	ND	50		µg/L	5	6/2/2012 6:59:48 AM
Isopropylbenzene	5.7	5.0		µg/L	5	6/2/2012 6:59:48 AM
4-Isopropyltoluene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
4-Methyl-2-pentanone	ND	50		µg/L	5	6/2/2012 6:59:48 AM
Methylene Chloride	ND	15		µg/L	5	6/2/2012 6:59:48 AM
n-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
n-Propylbenzene	6.8	5.0		µg/L	5	6/2/2012 6:59:48 AM
sec-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Styrene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
tert-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/2/2012 6:59:48 AM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
trans-1,2-DCE	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Trichlorofluoromethane	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
1,2,3-Trichloropropane	ND	10		µg/L	5	6/2/2012 6:59:48 AM
Vinyl chloride	ND	5.0		µg/L	5	6/2/2012 6:59:48 AM
Xylenes, Total	60	7.5		µg/L	5	6/2/2012 6:59:48 AM
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%REC	5	6/2/2012 6:59:48 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	5	6/2/2012 6:59:48 AM
Surr: Dibromofluoromethane	100	69.8-130		%REC	5	6/2/2012 6:59:48 AM
Surr: Toluene-d8	94.3	70-130		%REC	5	6/2/2012 6:59:48 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	13800	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-07

Project: Enersource

Collection Date: 5/27/2012 9:45:00 AM

Lab ID: 1205B43-002

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 5:01:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	1700	50		mg/L	100	5/31/2012 1:36:33 AM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	28	1.0		µg/L	1	6/2/2012 7:27:50 AM
Toluene	3.6	1.0		µg/L	1	6/2/2012 7:27:50 AM
Ethylbenzene	6.9	1.0		µg/L	1	6/2/2012 7:27:50 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2,4-Trimethylbenzene	16	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,3,5-Trimethylbenzene	4.7	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Naphthalene	4.1	2.0		µg/L	1	6/2/2012 7:27:50 AM
1-Methylnaphthalene	7.1	4.0		µg/L	1	6/2/2012 7:27:50 AM
2-Methylnaphthalene	5.7	4.0		µg/L	1	6/2/2012 7:27:50 AM
Acetone	ND	10		µg/L	1	6/2/2012 7:27:50 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 7:27:50 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 7:27:50 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 7:27:50 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 7:27:50 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 7:27:50 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 7:27:50 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-07

Project: Enersource

Collection Date: 5/27/2012 9:45:00 AM

Lab ID: 1205B43-002

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 7:27:50 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 7:27:50 AM
Isopropylbenzene	1.5	1.0		µg/L	1	6/2/2012 7:27:50 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 7:27:50 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 7:27:50 AM
n-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
n-Propylbenzene	2.4	1.0		µg/L	1	6/2/2012 7:27:50 AM
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 7:27:50 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 7:27:50 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 7:27:50 AM
Xylenes, Total	13	1.5		µg/L	1	6/2/2012 7:27:50 AM
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	6/2/2012 7:27:50 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	6/2/2012 7:27:50 AM
Surr: Dibromofluoromethane	103	69.8-130		%REC	1	6/2/2012 7:27:50 AM
Surr: Toluene-d8	92.6	70-130		%REC	1	6/2/2012 7:27:50 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	4630	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-10

**Project:** Enersource

**Collection Date:** 5/27/2012 3:50:00 PM

**Lab ID:** 1205B43-003

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 5:14:19 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	5100	250		mg/L	500	6/1/2012 11:56:47 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	65	1.0		µg/L	1	6/4/2012 4:47:29 PM
Toluene	1.1	1.0		µg/L	1	6/4/2012 4:47:29 PM
Ethylbenzene	26	1.0		µg/L	1	6/4/2012 4:47:29 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2,4-Trimethylbenzene	21	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,3,5-Trimethylbenzene	5.5	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Naphthalene	3.6	2.0		µg/L	1	6/4/2012 4:47:29 PM
1-Methylnaphthalene	4.8	4.0		µg/L	1	6/4/2012 4:47:29 PM
2-Methylnaphthalene	4.6	4.0		µg/L	1	6/4/2012 4:47:29 PM
Acetone	ND	10		µg/L	1	6/4/2012 4:47:29 PM
Bromobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Bromoform	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Bromomethane	ND	3.0		µg/L	1	6/4/2012 4:47:29 PM
2-Butanone	ND	10		µg/L	1	6/4/2012 4:47:29 PM
Carbon disulfide	ND	10		µg/L	1	6/4/2012 4:47:29 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Chlorobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Chloroethane	ND	2.0		µg/L	1	6/4/2012 4:47:29 PM
Chloroform	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Chloromethane	ND	3.0		µg/L	1	6/4/2012 4:47:29 PM
2-Chlorotoluene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
4-Chlorotoluene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/4/2012 4:47:29 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Dibromomethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-10

Project: Enersource

Collection Date: 5/27/2012 3:50:00 PM

Lab ID: 1205B43-003

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/4/2012 4:47:29 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
2-Hexanone	ND	10		µg/L	1	6/4/2012 4:47:29 PM
Isopropylbenzene	5.7	1.0		µg/L	1	6/4/2012 4:47:29 PM
4-Isopropyltoluene	1.2	1.0		µg/L	1	6/4/2012 4:47:29 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/4/2012 4:47:29 PM
Methylene Chloride	ND	3.0		µg/L	1	6/4/2012 4:47:29 PM
n-Butylbenzene	1.3	1.0		µg/L	1	6/4/2012 4:47:29 PM
n-Propylbenzene	6.8	1.0		µg/L	1	6/4/2012 4:47:29 PM
sec-Butylbenzene	3.3	1.0		µg/L	1	6/4/2012 4:47:29 PM
Styrene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
tert-Butylbenzene	1.2	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/4/2012 4:47:29 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/4/2012 4:47:29 PM
Vinyl chloride	ND	1.0		µg/L	1	6/4/2012 4:47:29 PM
Xylenes, Total	42	1.5		µg/L	1	6/4/2012 4:47:29 PM
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	6/4/2012 4:47:29 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	6/4/2012 4:47:29 PM
Surr: Dibromofluoromethane	102	69.8-130		%REC	1	6/4/2012 4:47:29 PM
Surr: Toluene-d8	93.0	70-130		%REC	1	6/4/2012 4:47:29 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	12500	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** Equipment Rinsate

**Project:** Enersource

**Collection Date:** 5/27/2012 5:30:00 PM

**Lab ID:** 1205B43-004

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 5:26:49 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	ND	0.50		mg/L	1	5/30/2012 3:11:53 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Toluene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Ethylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Naphthalene	ND	2.0		µg/L	1	6/2/2012 8:24:08 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 8:24:08 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 8:24:08 AM
Acetone	ND	10		µg/L	1	6/2/2012 8:24:08 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Bromodichloromethane	1.0	1.0		µg/L	1	6/2/2012 8:24:08 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 8:24:08 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 8:24:08 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 8:24:08 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 8:24:08 AM
Chloroform	1.1	1.0		µg/L	1	6/2/2012 8:24:08 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 8:24:08 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 8:24:08 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B43**

Date Reported: **6/8/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** Equipment Rinsate

**Project:** Enersource

**Collection Date:** 5/27/2012 5:30:00 PM

**Lab ID:** 1205B43-004

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 8:24:08 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 8:24:08 AM
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 8:24:08 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 8:24:08 AM
n-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 8:24:08 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 8:24:08 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 8:24:08 AM
Xylenes, Total	ND	1.5		µg/L	1	6/2/2012 8:24:08 AM
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	1	6/2/2012 8:24:08 AM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	1	6/2/2012 8:24:08 AM
Surr: Dibromofluoromethane	91.7	69.8-130		%REC	1	6/2/2012 8:24:08 AM
Surr: Toluene-d8	94.6	70-130		%REC	1	6/2/2012 8:24:08 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>SNV</b>
Total Dissolved Solids	ND	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: Trip Blank

Project: Enersource

Collection Date:

Lab ID: 1205B43-005

Matrix: TRIP BLANK

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Toluene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Ethylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Naphthalene	ND	2.0		µg/L	1	6/2/2012 8:52:25 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 8:52:25 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 8:52:25 AM
Acetone	ND	10		µg/L	1	6/2/2012 8:52:25 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 8:52:25 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 8:52:25 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 8:52:25 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 8:52:25 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 8:52:25 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 8:52:25 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 8:52:25 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 8:52:25 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** Trip Blank

**Project:** Enersource

**Collection Date:**

**Lab ID:** 1205B43-005

**Matrix:** TRIP BLANK

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 8:52:25 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 8:52:25 AM
n-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 8:52:25 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 8:52:25 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 8:52:25 AM
Xylenes, Total	ND	1.5		µg/L	1	6/2/2012 8:52:25 AM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	6/2/2012 8:52:25 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/2/2012 8:52:25 AM
Surr: Dibromofluoromethane	99.3	69.8-130		%REC	1	6/2/2012 8:52:25 AM
Surr: Toluene-d8	94.5	70-130		%REC	1	6/2/2012 8:52:25 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-14

Project: Enersource

Collection Date: 5/28/2012 3:40:00 PM

Lab ID: 1205B43-006

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 5:39:20 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	6200	250		mg/L	500	6/2/2012 12:09:12 AM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	2900	100		µg/L	100	6/4/2012 5:43:51 PM
Toluene	2.7	1.0		µg/L	1	6/2/2012 11:13:01 AM
Ethylbenzene	72	1.0		µg/L	1	6/2/2012 11:13:01 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2,4-Trimethylbenzene	33	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,3,5-Trimethylbenzene	8.6	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Naphthalene	4.9	2.0		µg/L	1	6/2/2012 11:13:01 AM
1-Methylnaphthalene	8.5	4.0		µg/L	1	6/2/2012 11:13:01 AM
2-Methylnaphthalene	6.8	4.0		µg/L	1	6/2/2012 11:13:01 AM
Acetone	ND	10		µg/L	1	6/2/2012 11:13:01 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 11:13:01 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 11:13:01 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 11:13:01 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 11:13:01 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 11:13:01 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 11:13:01 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B43**

Date Reported: **6/8/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-14

**Project:** Enersource

**Collection Date:** 5/28/2012 3:40:00 PM

**Lab ID:** 1205B43-006

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 11:13:01 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 11:13:01 AM
Isopropylbenzene	14	1.0		µg/L	1	6/2/2012 11:13:01 AM
4-Isopropyltoluene	2.1	1.0		µg/L	1	6/2/2012 11:13:01 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 11:13:01 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 11:13:01 AM
n-Butylbenzene	2.8	1.0		µg/L	1	6/2/2012 11:13:01 AM
n-Propylbenzene	14	1.0		µg/L	1	6/2/2012 11:13:01 AM
sec-Butylbenzene	6.4	1.0		µg/L	1	6/2/2012 11:13:01 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
tert-Butylbenzene	1.7	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 11:13:01 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 11:13:01 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 11:13:01 AM
Xylenes, Total	69	1.5		µg/L	1	6/2/2012 11:13:01 AM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	1	6/2/2012 11:13:01 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	6/2/2012 11:13:01 AM
Surr: Dibromofluoromethane	98.8	69.8-130		%REC	1	6/2/2012 11:13:01 AM
Surr: Toluene-d8	93.1	70-130		%REC	1	6/2/2012 11:13:01 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>SNV</b>
Total Dissolved Solids	13400	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-13

Project: Enersource

Collection Date: 5/28/2012 12:10:00 PM

Lab ID: 1205B43-007

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 5:51:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	8600	250		mg/L	500	6/2/2012 12:21:37 AM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	6.5	1.0		µg/L	1	6/4/2012 6:40:00 PM
Toluene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2-Dichloroethane (EDC)	2.3	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Naphthalene	ND	2.0		µg/L	1	6/4/2012 6:40:00 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/4/2012 6:40:00 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/4/2012 6:40:00 PM
Acetone	ND	10		µg/L	1	6/4/2012 6:40:00 PM
Bromobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Bromoform	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Bromomethane	ND	3.0		µg/L	1	6/4/2012 6:40:00 PM
2-Butanone	ND	10		µg/L	1	6/4/2012 6:40:00 PM
Carbon disulfide	ND	10		µg/L	1	6/4/2012 6:40:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Chloroethane	ND	2.0		µg/L	1	6/4/2012 6:40:00 PM
Chloroform	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Chloromethane	ND	3.0		µg/L	1	6/4/2012 6:40:00 PM
2-Chlorotoluene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
4-Chlorotoluene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/4/2012 6:40:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-13

Project: Enersource

Collection Date: 5/28/2012 12:10:00 PM

Lab ID: 1205B43-007

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/4/2012 6:40:00 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
2-Hexanone	ND	10		µg/L	1	6/4/2012 6:40:00 PM
Isopropylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/4/2012 6:40:00 PM
Methylene Chloride	ND	3.0		µg/L	1	6/4/2012 6:40:00 PM
n-Butylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
n-Propylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
sec-Butylbenzene	1.3	1.0		µg/L	1	6/4/2012 6:40:00 PM
Styrene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
tert-Butylbenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/4/2012 6:40:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/4/2012 6:40:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/4/2012 6:40:00 PM
Xylenes, Total	ND	1.5		µg/L	1	6/4/2012 6:40:00 PM
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%REC	1	6/4/2012 6:40:00 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	6/4/2012 6:40:00 PM
Surr: Dibromofluoromethane	98.1	69.8-130		%REC	1	6/4/2012 6:40:00 PM
Surr: Toluene-d8	93.1	70-130		%REC	1	6/4/2012 6:40:00 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	18800	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-13 (24'-29')

Project: Enersource

Collection Date: 5/26/2012 1:00:00 PM

Lab ID: 1205B43-008

Matrix: MEOH (SOIL)

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	450	9.6		mg/Kg	1	6/6/2012 8:51:58 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/6/2012 8:51:58 AM
Surr: DNOP	109	82.1-121		%REC	1	6/6/2012 8:51:58 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	240	5.0		mg/Kg	1	6/2/2012 12:35:32 AM
Surr: BFB	1360	69.7-121	S	%REC	1	6/2/2012 12:35:32 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	420	30		mg/Kg	20	6/1/2012 10:17:24 AM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	0.39	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
1-Methylnaphthalene	0.93	0.10		mg/Kg	5	6/6/2012 9:59:05 PM
2-Methylnaphthalene	0.96	0.10		mg/Kg	5	6/6/2012 9:59:05 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Fluorene	0.046	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Phenanthrene	0.063	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:58:01 PM
Surr: Benzo(e)pyrene	69.1	40.5-114		%REC	1	6/6/2012 6:58:01 PM
Surr: N-hexadecane	139	42.8-117	S	%REC	1	6/6/2012 6:58:01 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Toluene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Ethylbenzene	2.0	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Methyl tert-butyl ether (MTBE)	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2,4-Trimethylbenzene	4.6	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,3,5-Trimethylbenzene	1.4	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2-Dichloroethane (EDC)	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2-Dibromoethane (EDB)	0.27	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Naphthalene	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
1-Methylnaphthalene	ND	1.0		mg/Kg	5	6/1/2012 5:08:03 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B43**

Date Reported: **6/8/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-13 (24'-29')

**Project:** Enersource

**Collection Date:** 5/26/2012 1:00:00 PM

**Lab ID:** 1205B43-008

**Matrix:** MEOH (SOIL)

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	1.0		mg/Kg	5	6/1/2012 5:08:03 AM
Acetone	ND	3.8		mg/Kg	5	6/1/2012 5:08:03 AM
Bromobenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Bromodichloromethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Bromoform	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Bromomethane	ND	0.75		mg/Kg	5	6/1/2012 5:08:03 AM
2-Butanone	ND	2.5		mg/Kg	5	6/1/2012 5:08:03 AM
Carbon disulfide	ND	2.5		mg/Kg	5	6/1/2012 5:08:03 AM
Carbon tetrachloride	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
Chlorobenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Chloroethane	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
Chloroform	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Chloromethane	ND	0.75		mg/Kg	5	6/1/2012 5:08:03 AM
2-Chlorotoluene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
4-Chlorotoluene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
cis-1,2-DCE	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
cis-1,3-Dichloropropene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2-Dibromo-3-chloropropane	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
Dibromochloromethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Dibromomethane	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
1,2-Dichlorobenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,3-Dichlorobenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,4-Dichlorobenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Dichlorodifluoromethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,1-Dichloroethane	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
1,1-Dichloroethene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2-Dichloropropane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,3-Dichloropropane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
2,2-Dichloropropane	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
1,1-Dichloropropene	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
Hexachlorobutadiene	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
2-Hexanone	ND	2.5		mg/Kg	5	6/1/2012 5:08:03 AM
Isopropylbenzene	1.3	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
4-Isopropyltoluene	0.56	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
4-Methyl-2-pentanone	ND	2.5		mg/Kg	5	6/1/2012 5:08:03 AM
Methylene chloride	ND	0.75		mg/Kg	5	6/1/2012 5:08:03 AM
n-Butylbenzene	1.4	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
n-Propylbenzene	1.7	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
sec-Butylbenzene	0.90	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Styrene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
tert-Butylbenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,1,1,2-Tetrachloroethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-13 (24'-29')

Project: Enersource

Collection Date: 5/26/2012 1:00:00 PM

Lab ID: 1205B43-008

Matrix: MEOH (SOIL)

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Tetrachloroethene (PCE)	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
trans-1,2-DCE	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
trans-1,3-Dichloropropene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2,3-Trichlorobenzene	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
1,2,4-Trichlorobenzene	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,1,1-Trichloroethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,1,2-Trichloroethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Trichloroethene (TCE)	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Trichlorofluoromethane	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
1,2,3-Trichloropropane	ND	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
Vinyl chloride	ND	0.25		mg/Kg	5	6/1/2012 5:08:03 AM
Xylenes, Total	2.0	0.50		mg/Kg	5	6/1/2012 5:08:03 AM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	5	6/1/2012 5:08:03 AM
Surr: 4-Bromofluorobenzene	65.2	70-130	S	%REC	5	6/1/2012 5:08:03 AM
Surr: Dibromofluoromethane	103	71.7-132		%REC	5	6/1/2012 5:08:03 AM
Surr: Toluene-d8	91.8	70-130		%REC	5	6/1/2012 5:08:03 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-14 (19'-23')

Project: Enersource

Collection Date: 5/25/2012 11:45:00 AM

Lab ID: 1205B43-009

Matrix: MEOH (SOIL)

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	1000	97		mg/Kg	10	5/31/2012 12:16:05 PM
Motor Oil Range Organics (MRO)	ND	480		mg/Kg	10	5/31/2012 12:16:05 PM
Surr: DNOP	0	82.1-121	S	%REC	10	5/31/2012 12:16:05 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	370	100		mg/Kg	20	6/2/2012 1:32:51 AM
Surr: BFB	226	69.7-121	S	%REC	20	6/2/2012 1:32:51 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	ND	7.5		mg/Kg	5	6/1/2012 10:29:49 AM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	1.3	0.20		mg/Kg	10	6/6/2012 7:20:15 PM
1-Methylnaphthalene	3.0	0.20		mg/Kg	10	6/6/2012 7:20:15 PM
2-Methylnaphthalene	3.2	0.20		mg/Kg	10	6/6/2012 7:20:15 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Fluorene	0.063	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Phenanthrene	0.050	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 7:42:31 PM
Surr: Benzo(e)pyrene	53.7	40.5-114		%REC	1	6/6/2012 7:42:31 PM
Surr: N-hexadecane	121	42.8-117	S	%REC	1	6/6/2012 7:42:31 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Toluene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Ethylbenzene	5.4	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2,4-Trimethylbenzene	8.3	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,3,5-Trimethylbenzene	3.0	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Naphthalene	2.1	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
1-Methylnaphthalene	4.2	4.0		mg/Kg	20	6/1/2012 5:36:12 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B43**

Date Reported: **6/8/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-14 (19'-23')

**Project:** Enersource

**Collection Date:** 5/25/2012 11:45:00 AM

**Lab ID:** 1205B43-009

**Matrix:** MEOH (SOIL)

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	5.2	4.0		mg/Kg	20	6/1/2012 5:36:12 AM
Acetone	ND	15		mg/Kg	20	6/1/2012 5:36:12 AM
Bromobenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Bromodichloromethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Bromoform	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Bromomethane	ND	3.0		mg/Kg	20	6/1/2012 5:36:12 AM
2-Butanone	ND	10		mg/Kg	20	6/1/2012 5:36:12 AM
Carbon disulfide	ND	10		mg/Kg	20	6/1/2012 5:36:12 AM
Carbon tetrachloride	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
Chlorobenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Chloroethane	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
Chloroform	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Chloromethane	ND	3.0		mg/Kg	20	6/1/2012 5:36:12 AM
2-Chlorotoluene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
4-Chlorotoluene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
cis-1,2-DCE	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
Dibromochloromethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Dibromomethane	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
2-Hexanone	ND	10		mg/Kg	20	6/1/2012 5:36:12 AM
Isopropylbenzene	2.0	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	6/1/2012 5:36:12 AM
Methylene chloride	ND	3.0		mg/Kg	20	6/1/2012 5:36:12 AM
n-Butylbenzene	2.0	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
n-Propylbenzene	2.7	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
sec-Butylbenzene	1.4	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Styrene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
tert-Butylbenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B43**Date Reported: **6/8/2012****CLIENT:** Intera, Inc.**Client Sample ID:** MW-14 (19'-23')**Project:** Enersource**Collection Date:** 5/25/2012 11:45:00 AM**Lab ID:** 1205B43-009**Matrix:** MEOH (SOIL)**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
trans-1,2-DCE	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
Vinyl chloride	ND	1.0		mg/Kg	20	6/1/2012 5:36:12 AM
Xylenes, Total	11	2.0		mg/Kg	20	6/1/2012 5:36:12 AM
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	20	6/1/2012 5:36:12 AM
Surr: 4-Bromofluorobenzene	72.7	70-130		%REC	20	6/1/2012 5:36:12 AM
Surr: Dibromofluoromethane	106	71.7-132		%REC	20	6/1/2012 5:36:12 AM
Surr: Toluene-d8	92.1	70-130		%REC	20	6/1/2012 5:36:12 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: Methanol Blank

Project: Enersource

Collection Date:

Lab ID: 1205B43-010

Matrix: MEOH (SOIL)

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/2/2012 2:30:23 AM
Surr: BFB	96.2	69.7-121		%REC	1	6/2/2012 2:30:23 AM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Toluene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Ethylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Naphthalene	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/1/2012 6:32:18 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/1/2012 6:32:18 AM
Acetone	ND	0.75		mg/Kg	1	6/1/2012 6:32:18 AM
Bromobenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Bromoform	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Bromomethane	ND	0.15		mg/Kg	1	6/1/2012 6:32:18 AM
2-Butanone	ND	0.50		mg/Kg	1	6/1/2012 6:32:18 AM
Carbon disulfide	ND	0.50		mg/Kg	1	6/1/2012 6:32:18 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
Chlorobenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Chloroethane	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
Chloroform	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Chloromethane	ND	0.15		mg/Kg	1	6/1/2012 6:32:18 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Dibromomethane	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B43

Date Reported: 6/8/2012

CLIENT: Intera, Inc.

Client Sample ID: Methanol Blank

Project: Enersource

Collection Date:

Lab ID: 1205B43-010

Matrix: MEOH (SOIL)

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
2-Hexanone	ND	0.50		mg/Kg	1	6/1/2012 6:32:18 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/1/2012 6:32:18 AM
Methylene chloride	ND	0.15		mg/Kg	1	6/1/2012 6:32:18 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Styrene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
Vinyl chloride	ND	0.050		mg/Kg	1	6/1/2012 6:32:18 AM
Xylenes, Total	ND	0.10		mg/Kg	1	6/1/2012 6:32:18 AM
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	6/1/2012 6:32:18 AM
Surr: 4-Bromofluorobenzene	91.3	70-130		%REC	1	6/1/2012 6:32:18 AM
Surr: Dibromofluoromethane	103	71.7-132		%REC	1	6/1/2012 6:32:18 AM
Surr: Toluene-d8	96.3	70-130		%REC	1	6/1/2012 6:32:18 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2183		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	2183		RunNo:	3153				
Prep Date:	5/31/2012		Analysis Date:	6/1/2012		SeqNo:	87137		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-2183		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 2183		RunNo: 3153					
Prep Date:	5/31/2012		Analysis Date: 6/1/2012		SeqNo: 87138		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R3108			RunNo: 3108					
Prep Date:		Analysis Date: 5/30/2012			SeqNo: 85926		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R3108		RunNo: 3108					
Prep Date:			Analysis Date: 5/30/2012		SeqNo: 85927		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.9	90	110			

Sample ID	MB	SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBW	Batch ID:	R3112		RunNo:	3112				
Prep Date:		Analysis Date:	5/30/2012		SeqNo:	86071		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R3112		RunNo: 3112					
Prep Date:			Analysis Date: 5/30/2012		SeqNo: 86072		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.5	90	110			

Sample ID	1205B43-004CMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	Equipment Rinsate		Batch ID: R3112		RunNo: 3112					
Prep Date:			Analysis Date: 5/30/2012		SeqNo: 86087		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0.2114	93.1	78	107			

Sample ID	1205B43-004CMSD			SampType:	MSD		TestCode:	EPA Method 300.0: Anions			
Client ID:	Equipment Rinsate			Batch ID:	R3112		RunNo:	3112			
Prep Date:				Analysis Date:	5/30/2012		SeqNo:	86088		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	4.9	0.50	5.000	0.2114	93.4	78	107	0.358	20		

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R3112			RunNo: 3112					
Prep Date:		Analysis Date: 5/30/2012			SeqNo: 86123		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R3112		RunNo: 3112					
Prep Date:			Analysis Date: 5/30/2012		SeqNo: 86124		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.8	90	110			

Sample ID	MB		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBW		Batch ID: R3173		RunNo: 3173					
Prep Date:			Analysis Date: 6/1/2012		SeqNo: 87634		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R3173		RunNo: 3173					
Prep Date:			Analysis Date: 6/1/2012		SeqNo: 87636		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.1	90	110			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2220		SampType:	MBLK		TestCode:	EPA Method 8011/504.1: EDB				
Client ID:	PBW		Batch ID:	2220		RunNo:	3181				
Prep Date:	6/4/2012		Analysis Date:	6/4/2012		SeqNo:	88089		Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,2-Dibromoethane	ND	0.010									

Sample ID	LCS-2220		SampType: LCS		TestCode: EPA Method 8011/504.1: EDB					
Client ID:	LCSW		Batch ID: 2220		RunNo: 3181					
Prep Date:	6/4/2012		Analysis Date: 6/4/2012		SeqNo: 88093		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.089	0.010	0.1000	0	89.0	70	130			

Sample ID	LCSD-2220		SampType: LCSD		TestCode: EPA Method 8011/504.1: EDB					
Client ID:	LCSS02		Batch ID: 2220		RunNo: 3181					
Prep Date:	6/4/2012		Analysis Date: 6/4/2012		SeqNo: 88094		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.075	0.010	0.1000	0	75.0	70	130	17.1	20	

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2164		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 2164		RunNo: 3105					
Prep Date:	5/30/2012		Analysis Date: 5/31/2012		SeqNo: 85860		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	82.1	121			

Sample ID	LCS-2164		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2164		RunNo: 3105					
Prep Date:	5/30/2012		Analysis Date: 5/31/2012		SeqNo: 85861		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	52.6	130			
Surr: DNOP	4.7		5.000		94.4	82.1	121			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R3156		RunNo: 3156					
Prep Date:			Analysis Date: 6/1/2012		SeqNo: 87730		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.0	69.7	121			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R3156		RunNo: 3156					
Prep Date:			Analysis Date: 6/1/2012		SeqNo: 87731		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	98.5	133			
Surr: BFB	990		1000		99.1	69.7	121			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3132	RunNo:	3132					
Prep Date:		Analysis Date:	5/31/2012	SeqNo:	86497	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3132	RunNo:	3132					
Prep Date:		Analysis Date:	5/31/2012	SeqNo:	86497	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	71.7	132			
Surr: Toluene-d8	0.48		0.5000		95.6	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R3132	RunNo:	3132					
Prep Date:		Analysis Date:	5/31/2012	SeqNo:	86500	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	94.9	70.7	123			
Toluene	0.94	0.050	1.000	0	93.6	80	120			
Chlorobenzene	0.94	0.050	1.000	0	94.2	70	130			
1,1-Dichloroethene	1.0	0.050	1.000	0	104	63.1	148			
Trichloroethene (TCE)	0.91	0.050	1.000	0	91.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.1	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R3132	RunNo:	3132					
Prep Date:		Analysis Date:	5/31/2012	SeqNo:	86500	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.51		0.5000		102	71.7	132			
Surr: Toluene-d8	0.48		0.5000		96.8	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87441	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87441	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.8	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87445	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.9	84.1	126			
Toluene	19	1.0	20.00	0	92.6	80	120			
Chlorobenzene	19	1.0	20.00	0	95.3	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	99.7	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	91.2	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R3155			RunNo: 3155					
Prep Date:		Analysis Date: 6/1/2012			SeqNo: 87445		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		99.6	69.8	130			
Surr: Toluene-d8	9.7		10.00		97.1	70	130			

Sample ID	b8	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3155			RunNo: 3155					
Prep Date:		Analysis Date: 6/1/2012			SeqNo: 87481		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID <b>b8</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/1/2012</b>			SeqNo: <b>87481</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	69.8	130			
Surr: Toluene-d8	9.4		10.00		94.2	70	130			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs2		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R3155		RunNo: 3155					
Prep Date:			Analysis Date: 6/1/2012		SeqNo: 87483		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.7	84.1	126			
Toluene	18	1.0	20.00	0	88.4	80	120			
Chlorobenzene	18	1.0	20.00	0	89.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.2	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.2	76.2	119			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.2	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	10		10.00		103	69.8	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Sample ID	b13		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW		Batch ID: R3155		RunNo: 3155					
Prep Date:			Analysis Date: 6/2/2012		SeqNo: 87507		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID <b>b13</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87507</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.4	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.5	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID <b>b13</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87507</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		100	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID <b>100ng lcs3</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87508</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.1	84.1	126			
Toluene	17	1.0	20.00	0	84.7	80	120			
Chlorobenzene	18	1.0	20.00	0	88.9	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.7	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID <b>1205b43-006a ms</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>MW-14</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87509</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	20	1.0	20.00	2.659	86.9	74	121			
Chlorobenzene	18	1.0	20.00	0	88.8	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.5	76.3	127			
Trichloroethene (TCE)	18	1.0	20.00	0	91.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.6	70	130			

Sample ID <b>1205b43-006a msd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>MW-14</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87510</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	20	1.0	20.00	2.659	88.3	74	121	1.40	18.5	
Chlorobenzene	18	1.0	20.00	0	90.4	70	130	1.73	17.7	
1,1-Dichloroethene	20	1.0	20.00	0	97.6	76.3	127	1.00	16.5	
Trichloroethene (TCE)	18	1.0	20.00	0	88.3	70	130	3.01	18.9	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.3	70	130	0	0	

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	1205b43-006a msd	SampType:	MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	MW-14	Batch ID:	R3155		RunNo: 3155					
Prep Date:		Analysis Date:	6/2/2012		SeqNo: 87510		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	69.8	130	0	0	
Surr: Toluene-d8	9.8		10.00		97.8	70	130	0	0	

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3190			RunNo: 3190					
Prep Date:		Analysis Date: 6/4/2012			SeqNo: 88240		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								

### Qualifiers:

\* /X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3190			RunNo: 3190					
Prep Date:		Analysis Date: 6/4/2012			SeqNo: 88240	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	10		10.00		102	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R3190			RunNo: 3190					
Prep Date:		Analysis Date: 6/4/2012			SeqNo: 88242		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.0	84.1	126			
Toluene	18	1.0	20.00	0	90.0	80	120			
Chlorobenzene	19	1.0	20.00	0	92.5	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	<b>mb-2242</b>		SampType:	<b>MBLK</b>		TestCode:	<b>EPA Method 8270C: PAHs</b>			
Client ID:	<b>PBS</b>		Batch ID:	<b>2242</b>		RunNo:	<b>3256</b>			
Prep Date:	<b>6/5/2012</b>		Analysis Date:	<b>6/6/2012</b>		SeqNo:	<b>90370</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.020								
1-Methylnaphthalene	ND	0.020								
2-Methylnaphthalene	ND	0.020								
Acenaphthylene	ND	0.020								
Acenaphthene	ND	0.020								
Fluorene	ND	0.020								
Phenanthrene	ND	0.020								
Anthracene	ND	0.020								
Fluoranthene	ND	0.020								
Pyrene	ND	0.020								
Benz(a)anthracene	ND	0.020								
Chrysene	ND	0.020								
Benzo(b)fluoranthene	ND	0.020								
Benzo(k)fluoranthene	ND	0.020								
Benzo(a)pyrene	ND	0.020								
Dibenz(a,h)anthracene	ND	0.020								
Benzo(g,h,i)perylene	ND	0.020								
Indeno(1,2,3-cd)pyrene	ND	0.020								
Surr: Benzo(e)pyrene	0.29		0.3300		87.8	40.5	114			
Surr: N-hexadecane	1.3		1.460		90.9	42.8	117			

Sample ID	<b>lcs-2242</b>		SampType:	<b>LCS</b>		TestCode:	<b>EPA Method 8270C: PAHs</b>			
Client ID:	<b>LCSS</b>		Batch ID:	<b>2242</b>		RunNo:	<b>3256</b>			
Prep Date:	<b>6/5/2012</b>		Analysis Date:	<b>6/6/2012</b>		SeqNo:	<b>90371</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.27	0.020	0.3300	0	80.7	50.15	108.9			
1-Methylnaphthalene	0.28	0.020	0.3300	0	86.1	49.96	108.45			
2-Methylnaphthalene	0.28	0.020	0.3300	0	85.7	53.36	116.25			
Acenaphthylene	0.26	0.020	0.3300	0	78.8	48.44	106.25			
Acenaphthene	0.26	0.020	0.3300	0	77.5	51.23	105.53			
Fluorene	0.27	0.020	0.3300	0	80.6	48.42	104.49			
Phenanthrene	0.27	0.020	0.3300	0	81.0	51.76	107.81			
Anthracene	0.26	0.020	0.3300	0	80.2	51.74	104.29			
Fluoranthene	0.23	0.020	0.3300	0	71.0	54.67	103.26			
Pyrene	0.25	0.020	0.3300	0	76.6	57.16	111.06			
Benz(a)anthracene	0.25	0.020	0.3300	0	77.2	59.07	102.66			
Chrysene	0.27	0.020	0.3300	0	82.3	58.19	107.82			
Benzo(b)fluoranthene	0.28	0.020	0.3300	0	84.6	54.1	110.08			
Benzo(k)fluoranthene	0.27	0.020	0.3300	0	80.5	52.04	108.39			
Benzo(a)pyrene	0.27	0.020	0.3300	0	83.0	53.67	103.1			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	lcs-2242		SampType: LCS			TestCode: EPA Method 8270C: PAHs				
Client ID:	LCSS		Batch ID: 2242			RunNo: 3256				
Prep Date:	6/5/2012		Analysis Date: 6/6/2012			SeqNo: 90371		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	0.28	0.020	0.3300	0	83.7	54.55	106.56			
Benzo(g,h,i)perylene	0.29	0.020	0.3300	0	87.4	51.48	105.08			
Indeno(1,2,3-cd)pyrene	0.27	0.020	0.3300	0	83.0	55.5	104.02			
Surr: Benzo(e)pyrene	0.29		0.3300		86.4	35.28	118.46			
Surr: N-hexadecane	1.2		1.460		81.3	36.19	122.5			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B43

08-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2165		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 2165		RunNo: 3158					
Prep Date:	5/30/2012		Analysis Date: 6/1/2012		SeqNo: 87223		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-2165		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 2165		RunNo: 3158					
Prep Date:	5/30/2012		Analysis Date: 6/1/2012		SeqNo: 87224		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	8.000	101	80	120			

Sample ID	1205B43-003CMS	SampType:	MS	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	MW-10	Batch ID:	2165	RunNo:	3158					
Prep Date:	5/30/2012	Analysis Date:	6/1/2012	SeqNo:	87235	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	13500	20.0	1000	12480	102	80	120			

Sample ID	1205B43-003CMSD		SampType:	MSD		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	MW-10		Batch ID:	2165		RunNo:	3158				
Prep Date:	5/30/2012		Analysis Date:	6/1/2012		SeqNo:	87236		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	13500	20.0	1000	12480	97.7	80	120	0.349	20		

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

## Sample Log-In Check List

Client Name: INT

Work Order Number: 1205B43

Received by/date:

Logged By: Lindsay Mangin

05/30/12  
5/30/2012 9:00:00 AM

Completed By: Lindsay Mangin

5/30/2012 10:28:04 AM

Reviewed By:

05/30/12

### Chain of Custody

- |                                  |       |    |               |
|----------------------------------|-------|----|---------------|
| 1. Were seals intact?            | Yes   | No | Not Present ✓ |
| 2. Is Chain of Custody complete? | Yes ✓ | No | Not Present   |
| 3. How was the sample delivered? | FedEx |    |               |

### Log In

- |   |       |      |  |
|---|-------|------|--|
| 4. Coolers are present? (see 19. for cooler specific information)                         | Yes ✓ | No   | NA                                     |
| 5. Was an attempt made to cool the samples?   | Yes ✓ | No   | NA                                     |
| 6. Were all samples received at a temperature of >0° C to 6.0°C                           | Yes ✓ | No   | NA                                     |
| 7. Sample(s) in proper container(s)?  | Yes ✓ | No   |  |
| 8. Sufficient sample volume for indicated test(s)?  | Yes ✓ | No   |  |
| 9. Are samples (except VOA and ONG) properly preserved?                                   | Yes ✓ | No   |  |
| 10. Was preservative added to bottles?  | Yes   | No ✓ | NA                                     |
| 11. VOA vials have zero headspace?  | Yes ✓ | No   | No VOA Vials                           |
| 12. Were any sample containers received broken?   | Yes   | No ✓ |  |
| 13. Does paperwork match bottle labels?<br>(Note discrepancies on chain-of-custody)       | Yes ✓ | No   | # of preserved bottles checked for pH: |
| 14. Are matrices correctly identified on Chain of Custody?                                | Yes ✓ | No   | (<2 or >12 unless noted)               |
| 15. Is it clear what analyses were requested?   | Yes ✓ | No   | Adjusted?                              |
| 16. Were all holding times able to be met?<br>(If no, notify customer for authorization.) | Yes ✓ | No   | Checked by:                            |

### Special Handling (if applicable)

- |   |     |    |      |
|---|-----|----|------|
| 17. Was client notified of all discrepancies with this order? | Yes | No | NA ✓ |
|---|-----|----|------|

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

18. Additional remarks:

### 19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			







*Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)*

June 11, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX (505) 246-2600

RE: Enersource

OrderNo.: 1205B40

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/30/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



*Hall Environmental Analysis Laboratory*  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

## Case Narrative

WO#: 1205B40  
Date: 6/11/2012

---

**CLIENT:** Intera, Inc.  
**Project:** Enersource

---

### Analytical Notes for TDS:

The following samples were received past the 7 day holding time: MW-01, MW-06, MW-04, MW-05

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-01

Project: Enersource

Collection Date: 5/22/2012 3:45:00 PM

Lab ID: 1205B40-001

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 2:56:04 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	3800	250		mg/L	500	6/4/2012 6:12:24 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	1.7	1.0		µg/L	1	6/2/2012 1:50:09 AM
Toluene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Ethylbenzene	2.1	1.0		µg/L	1	6/2/2012 1:50:09 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Naphthalene	ND	2.0		µg/L	1	6/2/2012 1:50:09 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 1:50:09 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 1:50:09 AM
Acetone	ND	10		µg/L	1	6/2/2012 1:50:09 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 1:50:09 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 1:50:09 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 1:50:09 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 1:50:09 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 1:50:09 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 1:50:09 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B40**

Date Reported: **6/11/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-01

**Project:** Enersource

**Collection Date:** 5/22/2012 3:45:00 PM

**Lab ID:** 1205B40-001

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 1:50:09 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 1:50:09 AM
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 1:50:09 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 1:50:09 AM
n-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 1:50:09 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 1:50:09 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 1:50:09 AM
Xylenes, Total	ND	1.5		µg/L	1	6/2/2012 1:50:09 AM
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	6/2/2012 1:50:09 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	6/2/2012 1:50:09 AM
Surr: Dibromofluoromethane	95.6	69.8-130		%REC	1	6/2/2012 1:50:09 AM
Surr: Toluene-d8	96.9	70-130		%REC	1	6/2/2012 1:50:09 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>SNV</b>
Total Dissolved Solids	11800	20.0	H	mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-06

Project: Enersource

Collection Date: 5/22/2012 5:15:00 PM

Lab ID: 1205B40-002

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 3:08:40 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	5500	250		mg/L	500	6/4/2012 6:24:48 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	1900	20		µg/L	20	6/2/2012 2:46:37 AM
Toluene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Ethylbenzene	20	5.0		µg/L	5	6/4/2012 2:26:46 PM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Naphthalene	ND	10		µg/L	5	6/4/2012 2:26:46 PM
1-Methylnaphthalene	ND	20		µg/L	5	6/4/2012 2:26:46 PM
2-Methylnaphthalene	ND	20		µg/L	5	6/4/2012 2:26:46 PM
Acetone	ND	50		µg/L	5	6/4/2012 2:26:46 PM
Bromobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Bromodichloromethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Bromoform	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Bromomethane	ND	15		µg/L	5	6/4/2012 2:26:46 PM
2-Butanone	ND	50		µg/L	5	6/4/2012 2:26:46 PM
Carbon disulfide	ND	50		µg/L	5	6/4/2012 2:26:46 PM
Carbon Tetrachloride	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Chlorobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Chloroethane	ND	10		µg/L	5	6/4/2012 2:26:46 PM
Chloroform	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Chloromethane	ND	15		µg/L	5	6/4/2012 2:26:46 PM
2-Chlorotoluene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
4-Chlorotoluene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
cis-1,2-DCE	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/4/2012 2:26:46 PM
Dibromochloromethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Dibromomethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM

**Qualifiers:** \*X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-06

Project: Enersource

Collection Date: 5/22/2012 5:15:00 PM

Lab ID: 1205B40-002

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
2,2-Dichloropropane	ND	10		µg/L	5	6/4/2012 2:26:46 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
2-Hexanone	ND	50		µg/L	5	6/4/2012 2:26:46 PM
Isopropylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	6/4/2012 2:26:46 PM
Methylene Chloride	ND	15		µg/L	5	6/4/2012 2:26:46 PM
n-Butylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
n-Propylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
sec-Butylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Styrene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
tert-Butylbenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/4/2012 2:26:46 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
trans-1,2-DCE	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	6/4/2012 2:26:46 PM
Vinyl chloride	ND	5.0		µg/L	5	6/4/2012 2:26:46 PM
Xylenes, Total	18	7.5		µg/L	5	6/4/2012 2:26:46 PM
Surr: 1,2-Dichloroethane-d4	89.2	70-130		%REC	5	6/4/2012 2:26:46 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	5	6/4/2012 2:26:46 PM
Surr: Dibromofluoromethane	95.1	69.8-130		%REC	5	6/4/2012 2:26:46 PM
Surr: Toluene-d8	92.0	70-130		%REC	5	6/4/2012 2:26:46 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	14200	20.0	H	mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-04

**Project:** Enersource

**Collection Date:** 5/23/2012 10:40:00 AM

**Lab ID:** 1205B40-003

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 3:21:14 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	6300	250		mg/L	500	6/4/2012 6:37:13 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	1.4	1.0		µg/L	1	6/2/2012 3:42:48 AM
Toluene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Ethylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Naphthalene	ND	2.0		µg/L	1	6/2/2012 3:42:48 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 3:42:48 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 3:42:48 AM
Acetone	ND	10		µg/L	1	6/2/2012 3:42:48 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 3:42:48 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 3:42:48 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 3:42:48 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 3:42:48 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 3:42:48 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 3:42:48 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-04

Project: Enersource

Collection Date: 5/23/2012 10:40:00 AM

Lab ID: 1205B40-003

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 3:42:48 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 3:42:48 AM
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 3:42:48 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 3:42:48 AM
n-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 3:42:48 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 3:42:48 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 3:42:48 AM
Xylenes, Total	ND	1.5		µg/L	1	6/2/2012 3:42:48 AM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	6/2/2012 3:42:48 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	6/2/2012 3:42:48 AM
Surr: Dibromofluoromethane	99.5	69.8-130		%REC	1	6/2/2012 3:42:48 AM
Surr: Toluene-d8	97.8	70-130		%REC	1	6/2/2012 3:42:48 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	13300	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B40**

Date Reported: **6/11/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-05

**Project:** Enersource

**Collection Date:** 5/23/2012 2:45:00 PM

**Lab ID:** 1205B40-004

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 3:33:50 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	3100	250		mg/L	500	6/4/2012 6:49:38 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	290	5.0		µg/L	5	6/2/2012 4:10:53 AM
Toluene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Ethylbenzene	7.2	5.0		µg/L	5	6/2/2012 4:10:53 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2-Dichloroethane (EDC)	7.8	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Naphthalene	ND	10		µg/L	5	6/2/2012 4:10:53 AM
1-Methylnaphthalene	ND	20		µg/L	5	6/2/2012 4:10:53 AM
2-Methylnaphthalene	ND	20		µg/L	5	6/2/2012 4:10:53 AM
Acetone	ND	50		µg/L	5	6/2/2012 4:10:53 AM
Bromobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Bromodichloromethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Bromoform	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Bromomethane	ND	15		µg/L	5	6/2/2012 4:10:53 AM
2-Butanone	ND	50		µg/L	5	6/2/2012 4:10:53 AM
Carbon disulfide	ND	50		µg/L	5	6/2/2012 4:10:53 AM
Carbon Tetrachloride	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Chlorobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Chloroethane	ND	10		µg/L	5	6/2/2012 4:10:53 AM
Chloroform	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Chloromethane	ND	15		µg/L	5	6/2/2012 4:10:53 AM
2-Chlorotoluene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
4-Chlorotoluene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
cis-1,2-DCE	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/2/2012 4:10:53 AM
Dibromochloromethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Dibromomethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,1-Dichloroethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,1-Dichloroethene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2-Dichloropropane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-05

Project: Enersource

Collection Date: 5/23/2012 2:45:00 PM

Lab ID: 1205B40-004

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
2,2-Dichloropropane	ND	10		µg/L	5	6/2/2012 4:10:53 AM
1,1-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Hexachlorobutadiene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
2-Hexanone	ND	50		µg/L	5	6/2/2012 4:10:53 AM
Isopropylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
4-Isopropyltoluene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
4-Methyl-2-pentanone	ND	50		µg/L	5	6/2/2012 4:10:53 AM
Methylene Chloride	ND	15		µg/L	5	6/2/2012 4:10:53 AM
n-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
n-Propylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
sec-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Styrene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
tert-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/2/2012 4:10:53 AM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
trans-1,2-DCE	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Trichlorofluoromethane	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
1,2,3-Trichloropropane	ND	10		µg/L	5	6/2/2012 4:10:53 AM
Vinyl chloride	ND	5.0		µg/L	5	6/2/2012 4:10:53 AM
Xylenes, Total	ND	7.5		µg/L	5	6/2/2012 4:10:53 AM
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	5	6/2/2012 4:10:53 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	5	6/2/2012 4:10:53 AM
Surr: Dibromofluoromethane	99.6	69.8-130		%REC	5	6/2/2012 4:10:53 AM
Surr: Toluene-d8	94.3	70-130		%REC	5	6/2/2012 4:10:53 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	8230	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-08

**Project:** Enersource

**Collection Date:** 5/25/2012 5:18:00 PM

**Lab ID:** 1205B40-005

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 3:46:27 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	4100	250		mg/L	500	6/4/2012 7:02:02 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	75	1.0		µg/L	1	6/2/2012 4:39:09 AM
Toluene	14	1.0		µg/L	1	6/2/2012 4:39:09 AM
Ethylbenzene	1.8	1.0		µg/L	1	6/2/2012 4:39:09 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2,4-Trimethylbenzene	53	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,3,5-Trimethylbenzene	21	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Naphthalene	6.3	2.0		µg/L	1	6/2/2012 4:39:09 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 4:39:09 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 4:39:09 AM
Acetone	ND	10		µg/L	1	6/2/2012 4:39:09 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 4:39:09 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 4:39:09 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 4:39:09 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 4:39:09 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 4:39:09 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 4:39:09 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-08

Project: Enersource

Collection Date: 5/25/2012 5:18:00 PM

Lab ID: 1205B40-005

Matrix: AQUEOUS

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 4:39:09 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 4:39:09 AM
Isopropylbenzene	22	1.0		µg/L	1	6/2/2012 4:39:09 AM
4-Isopropyltoluene	3.6	1.0		µg/L	1	6/2/2012 4:39:09 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 4:39:09 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 4:39:09 AM
n-Butylbenzene	3.8	1.0		µg/L	1	6/2/2012 4:39:09 AM
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
sec-Butylbenzene	6.9	1.0		µg/L	1	6/2/2012 4:39:09 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 4:39:09 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 4:39:09 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 4:39:09 AM
Xylenes, Total	200	1.5		µg/L	1	6/2/2012 4:39:09 AM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	6/2/2012 4:39:09 AM
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	1	6/2/2012 4:39:09 AM
Surr: Dibromofluoromethane	100	69.8-130		%REC	1	6/2/2012 4:39:09 AM
Surr: Toluene-d8	96.7	70-130		%REC	1	6/2/2012 4:39:09 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	12100	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-09

**Project:** Enersource

**Collection Date:** 5/25/2012 1:31:00 PM

**Lab ID:** 1205B40-006

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 3:58:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	7100	500		mg/L	1000	6/5/2012 1:11:00 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	3200	100		µg/L	100	6/4/2012 3:51:14 PM
Toluene	33	5.0		µg/L	5	6/2/2012 5:07:22 AM
Ethylbenzene	71	5.0		µg/L	5	6/2/2012 5:07:22 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2,4-Trimethylbenzene	32	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,3,5-Trimethylbenzene	9.3	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Naphthalene	ND	10		µg/L	5	6/2/2012 5:07:22 AM
1-Methylnaphthalene	ND	20		µg/L	5	6/2/2012 5:07:22 AM
2-Methylnaphthalene	ND	20		µg/L	5	6/2/2012 5:07:22 AM
Acetone	ND	50		µg/L	5	6/2/2012 5:07:22 AM
Bromobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Bromodichloromethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Bromoform	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Bromomethane	ND	15		µg/L	5	6/2/2012 5:07:22 AM
2-Butanone	ND	50		µg/L	5	6/2/2012 5:07:22 AM
Carbon disulfide	ND	50		µg/L	5	6/2/2012 5:07:22 AM
Carbon Tetrachloride	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Chlorobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Chloroethane	ND	10		µg/L	5	6/2/2012 5:07:22 AM
Chloroform	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Chloromethane	ND	15		µg/L	5	6/2/2012 5:07:22 AM
2-Chlorotoluene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
4-Chlorotoluene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
cis-1,2-DCE	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/2/2012 5:07:22 AM
Dibromochloromethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Dibromomethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,1-Dichloroethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,1-Dichloroethene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2-Dichloropropane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B40**

Date Reported: **6/11/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-09

**Project:** Enersource

**Collection Date:** 5/25/2012 1:31:00 PM

**Lab ID:** 1205B40-006

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
1,3-Dichloropropane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
2,2-Dichloropropane	ND	10		µg/L	5	6/2/2012 5:07:22 AM
1,1-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Hexachlorobutadiene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
2-Hexanone	ND	50		µg/L	5	6/2/2012 5:07:22 AM
Isopropylbenzene	18	5.0		µg/L	5	6/2/2012 5:07:22 AM
4-Isopropyltoluene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
4-Methyl-2-pentanone	ND	50		µg/L	5	6/2/2012 5:07:22 AM
Methylene Chloride	ND	15		µg/L	5	6/2/2012 5:07:22 AM
n-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
n-Propylbenzene	15	5.0		µg/L	5	6/2/2012 5:07:22 AM
sec-Butylbenzene	5.8	5.0		µg/L	5	6/2/2012 5:07:22 AM
Styrene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
tert-Butylbenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/2/2012 5:07:22 AM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
trans-1,2-DCE	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Trichlorofluoromethane	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
1,2,3-Trichloropropane	ND	10		µg/L	5	6/2/2012 5:07:22 AM
Vinyl chloride	ND	5.0		µg/L	5	6/2/2012 5:07:22 AM
Xylenes, Total	100	7.5		µg/L	5	6/2/2012 5:07:22 AM
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%REC	5	6/2/2012 5:07:22 AM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	5	6/2/2012 5:07:22 AM
Surr: Dibromofluoromethane	98.8	69.8-130		%REC	5	6/2/2012 5:07:22 AM
Surr: Toluene-d8	96.8	70-130		%REC	5	6/2/2012 5:07:22 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>SNV</b>
Total Dissolved Solids	15900	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B40**

Date Reported: **6/11/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-11

**Project:** Enersource

**Collection Date:** 5/25/2012 9:43:00 AM

**Lab ID:** 1205B40-007

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: <b>LRW</b>
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 4:11:31 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	3500	250		mg/L	500	6/4/2012 7:26:51 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	40	1.0		µg/L	1	6/2/2012 6:03:27 AM
Toluene	14	1.0		µg/L	1	6/2/2012 6:03:27 AM
Ethylbenzene	27	1.0		µg/L	1	6/2/2012 6:03:27 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2,4-Trimethylbenzene	41	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,3,5-Trimethylbenzene	11	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2-Dichloroethane (EDC)	34	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Naphthalene	8.5	2.0		µg/L	1	6/2/2012 6:03:27 AM
1-Methylnaphthalene	15	4.0		µg/L	1	6/2/2012 6:03:27 AM
2-Methylnaphthalene	11	4.0		µg/L	1	6/2/2012 6:03:27 AM
Acetone	ND	10		µg/L	1	6/2/2012 6:03:27 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 6:03:27 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 6:03:27 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 6:03:27 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 6:03:27 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 6:03:27 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 6:03:27 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1205B40**

Date Reported: **6/11/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-11

**Project:** Enersource

**Collection Date:** 5/25/2012 9:43:00 AM

**Lab ID:** 1205B40-007

**Matrix:** AQUEOUS

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 6:03:27 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 6:03:27 AM
Isopropylbenzene	3.3	1.0		µg/L	1	6/2/2012 6:03:27 AM
4-Isopropyltoluene	1.1	1.0		µg/L	1	6/2/2012 6:03:27 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 6:03:27 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 6:03:27 AM
n-Butylbenzene	1.6	1.0		µg/L	1	6/2/2012 6:03:27 AM
n-Propylbenzene	5.1	1.0		µg/L	1	6/2/2012 6:03:27 AM
sec-Butylbenzene	1.9	1.0		µg/L	1	6/2/2012 6:03:27 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 6:03:27 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 6:03:27 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 6:03:27 AM
Xylenes, Total	98	1.5		µg/L	1	6/2/2012 6:03:27 AM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	6/2/2012 6:03:27 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	6/2/2012 6:03:27 AM
Surr: Dibromofluoromethane	105	69.8-130		%REC	1	6/2/2012 6:03:27 AM
Surr: Toluene-d8	94.0	70-130		%REC	1	6/2/2012 6:03:27 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>SNV</b>
Total Dissolved Solids	7970	20.0		mg/L	1	6/1/2012 2:36:00 PM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** Trip Blank

**Project:** Enersource

**Collection Date:**

**Lab ID:** 1205B40-008

**Matrix:** TRIP BLANK

**Received Date:** 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8011/504.1: EDB</b>						Analyst: LRW
1,2-Dibromoethane	ND	0.010		µg/L	1	6/4/2012 4:36:40 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Toluene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Ethylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Naphthalene	ND	2.0		µg/L	1	6/2/2012 6:31:44 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 6:31:44 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2012 6:31:44 AM
Acetone	ND	10		µg/L	1	6/2/2012 6:31:44 AM
Bromobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Bromoform	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Bromomethane	ND	3.0		µg/L	1	6/2/2012 6:31:44 AM
2-Butanone	ND	10		µg/L	1	6/2/2012 6:31:44 AM
Carbon disulfide	ND	10		µg/L	1	6/2/2012 6:31:44 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Chlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Chloroethane	ND	2.0		µg/L	1	6/2/2012 6:31:44 AM
Chloroform	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Chloromethane	ND	3.0		µg/L	1	6/2/2012 6:31:44 AM
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2012 6:31:44 AM
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Dibromomethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2012 6:31:44 AM

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205B40

Date Reported: 6/11/2012

CLIENT: Intera, Inc.

Client Sample ID: Trip Blank

Project: Enersource

Collection Date:

Lab ID: 1205B40-008

Matrix: TRIP BLANK

Received Date: 5/30/2012 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
2-Hexanone	ND	10		µg/L	1	6/2/2012 6:31:44 AM
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2012 6:31:44 AM
Methylene Chloride	ND	3.0		µg/L	1	6/2/2012 6:31:44 AM
n-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Styrene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2012 6:31:44 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2012 6:31:44 AM
Vinyl chloride	ND	1.0		µg/L	1	6/2/2012 6:31:44 AM
Xylenes, Total	ND	1.5		µg/L	1	6/2/2012 6:31:44 AM
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	1	6/2/2012 6:31:44 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	1	6/2/2012 6:31:44 AM
Surr: Dibromofluoromethane	101	69.8-130		%REC	1	6/2/2012 6:31:44 AM
Surr: Toluene-d8	92.8	70-130		%REC	1	6/2/2012 6:31:44 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R3204			RunNo: 3204						
Prep Date:		Analysis Date: 6/4/2012			SeqNo: 88861		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions						
Client ID:	LCSW	Batch ID:	R3204	RunNo:	3204						
Prep Date:		Analysis Date:	6/4/2012	SeqNo:	88862	Units:	mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.7	0.50	5.000	0	93.1	90	110			

Sample ID	MB	SampType:	MBLK		TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R3223		RunNo:	3223					
Prep Date:		Analysis Date:	6/5/2012		SeqNo:	89301		Units:	mg/L		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions						
Client ID:	LCSW	Batch ID:	R3223	RunNo:	3223						
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89302	Units:	mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.8	0.50	5.000	0	95.0	90	110			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2220		SampType:	MBLK		TestCode:	EPA Method 8011/504.1: EDB				
Client ID:	PBW		Batch ID:	2220		RunNo:	3181				
Prep Date:	6/4/2012		Analysis Date:	6/4/2012		SeqNo:	88089		Units:		µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,2-Dibromoethane	ND	0.010									

Sample ID	LCS-2220		SampType: LCS		TestCode: EPA Method 8011/504.1: EDB					
Client ID:	LCSW		Batch ID: 2220		RunNo: 3181					
Prep Date:	6/4/2012		Analysis Date: 6/4/2012		SeqNo: 88093		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.089	0.010	0.1000	0	89.0	70	130			

Sample ID	LCSD-2220		SampType: LCSD		TestCode: EPA Method 8011/504.1: EDB					
Client ID:	LCSS02		Batch ID: 2220		RunNo: 3181					
Prep Date:	6/4/2012		Analysis Date: 6/4/2012		SeqNo: 88094		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.075	0.010	0.1000	0	75.0	70	130	17.1	20	

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87441	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87441	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.8	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87445	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.9	84.1	126			
Toluene	19	1.0	20.00	0	92.6	80	120			
Chlorobenzene	19	1.0	20.00	0	95.3	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	99.7	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	91.2	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R3155			RunNo: 3155					
Prep Date:		Analysis Date: 6/1/2012			SeqNo: 87445		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		99.6	69.8	130			
Surr: Toluene-d8	9.7		10.00		97.1	70	130			

Sample ID	b8	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3155			RunNo: 3155					
Prep Date:		Analysis Date: 6/1/2012			SeqNo: 87481		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID <b>b8</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/1/2012</b>			SeqNo: <b>87481</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	69.8	130			
Surr: Toluene-d8	9.4		10.00		94.2	70	130			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	100ng lcs2		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R3155		RunNo: 3155					
Prep Date:			Analysis Date: 6/1/2012		SeqNo: 87483		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.7	84.1	126			
Toluene	18	1.0	20.00	0	88.4	80	120			
Chlorobenzene	18	1.0	20.00	0	89.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.2	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.2	76.2	119			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.2	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	10		10.00		103	69.8	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Sample ID	b13	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3155			RunNo: 3155					
Prep Date:		Analysis Date: 6/2/2012			SeqNo: 87507		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								

### Qualifiers:

\* /X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID <b>b13</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87507</b>	Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.4	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.5	70	130			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID <b>b13</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87507</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		100	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID <b>100ng lcs3</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>R3155</b>			RunNo: <b>3155</b>						
Prep Date:	Analysis Date: <b>6/2/2012</b>			SeqNo: <b>87508</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.1	84.1	126			
Toluene	17	1.0	20.00	0	84.7	80	120			
Chlorobenzene	18	1.0	20.00	0	88.9	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.7	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID <b>5ml-rb</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3190</b>			RunNo: <b>3190</b>						
Prep Date:	Analysis Date: <b>6/4/2012</b>			SeqNo: <b>88240</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R3190	RunNo:	3190					
Prep Date:		Analysis Date:	6/4/2012	SeqNo:	88240	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R3190	RunNo:	3190					
Prep Date:		Analysis Date:	6/4/2012	SeqNo:	88240	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	10		10.00		102	69.8	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R3190	RunNo:	3190					
Prep Date:		Analysis Date:	6/4/2012	SeqNo:	88242	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.0	84.1	126			
Toluene	18	1.0	20.00	0	90.0	80	120			
Chlorobenzene	19	1.0	20.00	0	92.5	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		101	69.8	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205B40

11-Jun-12

Client: Intera, Inc.

Project: Enersource

Sample ID	MB-2165		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 2165		RunNo: 3158					
Prep Date:	5/30/2012		Analysis Date: 6/1/2012		SeqNo: 87223		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-2165		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 2165		RunNo: 3158					
Prep Date:	5/30/2012		Analysis Date: 6/1/2012		SeqNo: 87224		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	8.000	101	80	120			

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# Sample Log-In Check List

Client Name: INT Work Order Number: 1205B40

Received by/date: LM 05/30/12

Logged By: Michelle Garcia 5/30/2012 9:00:00 AM *Michelle Garcia*

Completed By: Michelle Garcia 5/30/2012 10:08:58 AM *Michelle Garcia*

Reviewed By: *mg* 05/30/12

## Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

## Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
(<2 or >12 unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

## Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

18. Additional remarks:

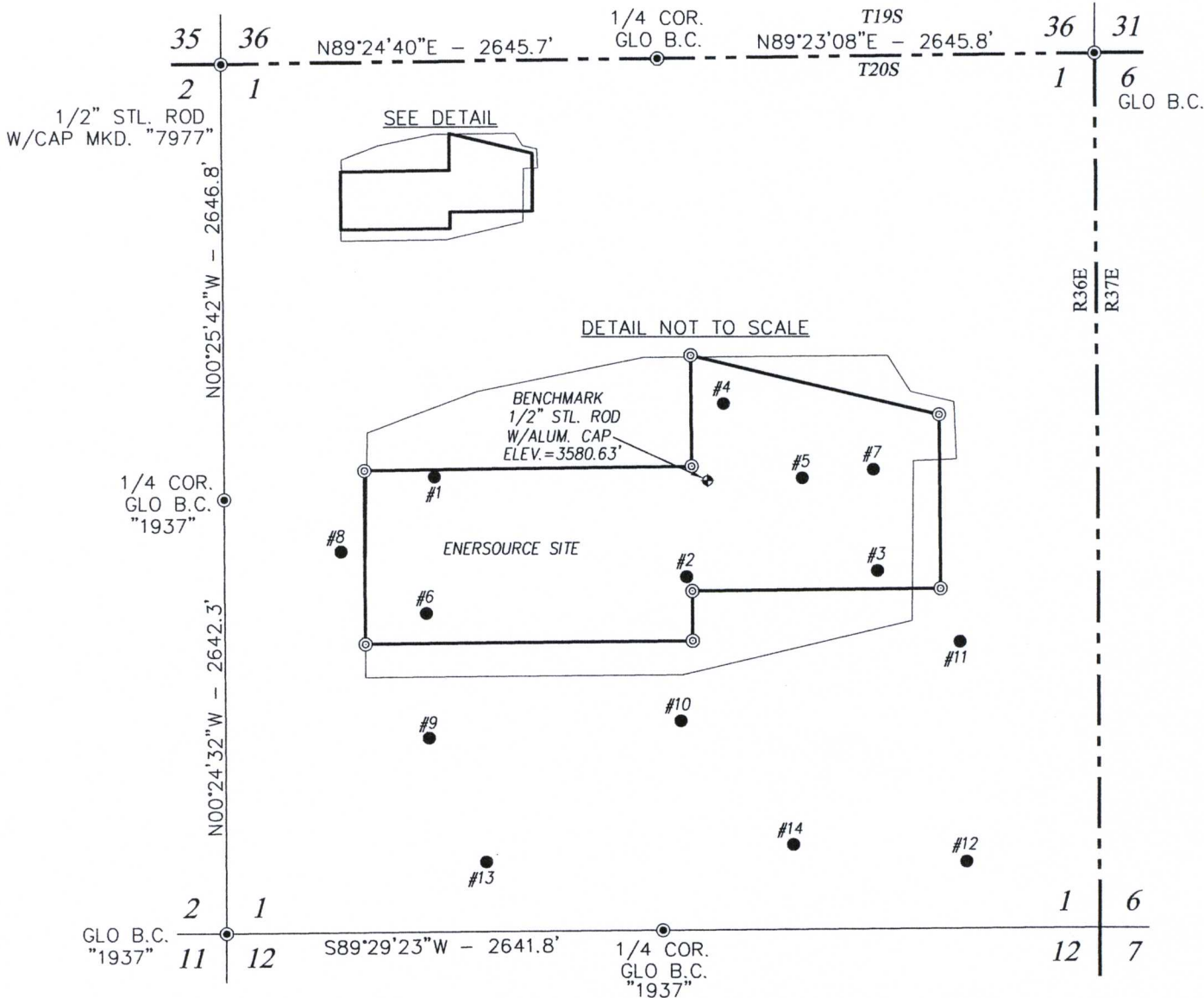
## 19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



**APPENDIX G**  
**2012 Geodetic Survey Report**

SECTION 3, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY  
NEW MEXICO



WELL	COORDINATES	ELEVATIONS			
MW #1	586267.1 N 814178.7 E	NATURAL GROUND - 3580.40' TOP OF PVC - 3582.43' TOP OF CONCRETE - 3580.69'	MW #8	586116.1 N 813990.6 E	NATURAL GROUND - 3580.90' TOP OF PVC - 3584.11' TOP OF CONCRETE - 3581.23'
MW #2	586065.4 N 814687.7 E	NATURAL GROUND - 3580.00' TOP OF PVC - 3582.94' TOP OF CONCRETE - 3580.36'	MW #9	585739.6 N 814168.4 E	NATURAL GROUND - 3579.22' TOP OF PVC - 3582.21' TOP OF CONCRETE - 3579.53'
MW #3	586077.6 N 815072.1 E	NATURAL GROUND - 3578.84' TOP OF PVC - 3581.84' TOP OF CONCRETE - 3579.18'	MW #10	585774.3 N 814676.1 E	NATURAL GROUND - 3577.01' TOP OF PVC - 3580.23' TOP OF CONCRETE - 3577.31'
MW #4	586414.9 N 814761.8 E	NATURAL GROUND - 3581.10' TOP OF PVC - 3583.33' TOP OF CONCRETE - 3581.43'	MW #11	585935.7 N 815238.7 E	NATURAL GROUND - 3577.75' TOP OF PVC - 3580.91' TOP OF CONCRETE - 3577.96'
MW #5	586264.3 N 814920.2 E	NATURAL GROUND - 3580.18' TOP OF PVC - 3582.10' TOP OF CONCRETE - 3580.54'	MW #12	585489.6 N 815252.4 E	NATURAL GROUND - 3575.73' TOP OF PVC - 3578.81' TOP OF CONCRETE - 3576.17'
MW #6	585992.1 N 814162.5 E	NATURAL GROUND - 3579.35' TOP OF PVC - 3582.48' TOP OF CONCRETE - 3579.63'	MW #13	585487.1 N 814284.5 E	NATURAL GROUND - 3577.04' TOP OF PVC - 3579.95' TOP OF CONCRETE - 3577.35'
MW #7	586281.5 N 815063.6 E	NATURAL GROUND - 3579.02' TOP OF PVC - 3582.14' TOP OF CONCRETE - 3579.28'	MW #14	585523.1 N 814903.3 E	NATURAL GROUND - 3575.99' TOP OF PVC - 3578.82' TOP OF CONCRETE - 3576.32'

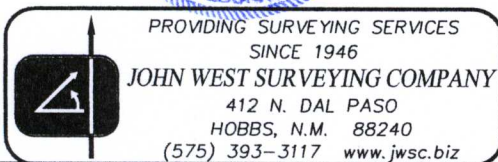
NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

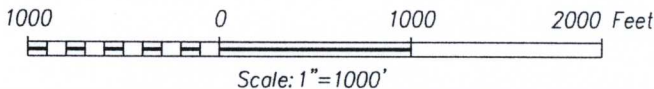
RONALD J. EIDSON

DATE: 06/26/2012



LEGEND:

- ◆ - DENOTES SET BENCHMARK, 1/2" REBAR
- ⊙ - DENOTES FOUND 1/2" STL ROD W/CAP MKD. "JWSC P.S. 12641" UNLESS NOTED OTHERWISE
- ⊙ - DENOTES SET 1/2" REBAR W/YELLOW CAP MKD. #12641
- - DENOTES MONITOR WELLS



INTERA INCORPORATED

SURVEY TO LOCATE MONITOR WELLS IN  
SECTION 1, TOWNSHIP 20 SOUTH, RANGE 36 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 5/30/12	CAD Date: 6/22/12	Drawn By: ACR
W.O. No.: 12110964	Rev:	Rel. W.O.: 09.11.0563

Sheet 1 of 1

## **Appendix H**

### **LNAPL Bail Down/Recovery Test**



# EPA, 1996: How to effectively Recover Free Product at Leaking UST Sites

MW-03: Diameter : 4.0 inches  
 radius : 2.0 inches  
 : 0.166 feet

1. Maximum LNAPL thickness = 1.82 feet

2. 80% of maximum =  $0.8 \times 1.82 = 1.46$  feet ✓

3. Time corresponding to 80% recovery. Interpolated from Site data = 22 hrs and 15 min = 1335 mins.

4. Compute gallons per foot of LNAPL thickness in well

$$(\pi r^2) \left( 7.48 \frac{\text{gal}}{\text{ft}^3} \right)$$

$$(3.14) (0.166 \text{ ft})^2 \left( 7.48 \frac{\text{gal}}{\text{ft}^3} \right) = 0.65 \text{ gal/ft} \checkmark$$

5. Compute average recovery rate to 80% recovery

$$\left( 0.65 \frac{\text{gal}}{\text{ft}} \right) \left( \frac{1.46 \text{ feet}}{1335 \text{ min}} \right) \left( \frac{1440 \text{ min}}{1 \text{ day}} \right) = \boxed{1.02 \text{ gal/day}}$$

Rev.	Orig.	Date	Chkd.	Date	Client/Project:
			JAG	6-27	OCD: Enersource
					Subject: LNAPL Baildown Test - MW-03
					Calc. No.: _____ Sht. 1 of 2

Huntley, 2000. Analytic Determination of Hydrocarbon Transmissivity from Baildown Tests

Charbeneau, 1999. Free-Product Recovery of Petroleum Hydrocarbon Liquids.

\* K value from Bouwer and Rice Analysis using AQTESOLV \*  
↳ see attached report

$$K = 2.929 \times 10^{-5} \text{ cm/sec}$$

Apply LNAPL "correction" per Huntley, 2000.  $\left(\frac{1}{1-\rho}\right)$   
↳ correction accounts for LNAPL density ( $\rho$ )

Using a  $\rho = 0.78$  from Charbeneau, 1999, this is an average  $\rho$  value of Gasoline and Diesel @ 15°C.

$$\text{LNAPL correction factor} = \frac{1}{1-0.78} = 4.55$$

$$K_{\text{LNAPL}} = (2.929 \times 10^{-5} \text{ cm/sec}) (4.55) = 1.33 \times 10^{-4} \text{ cm/sec} = 0.38 \text{ ft/day}$$

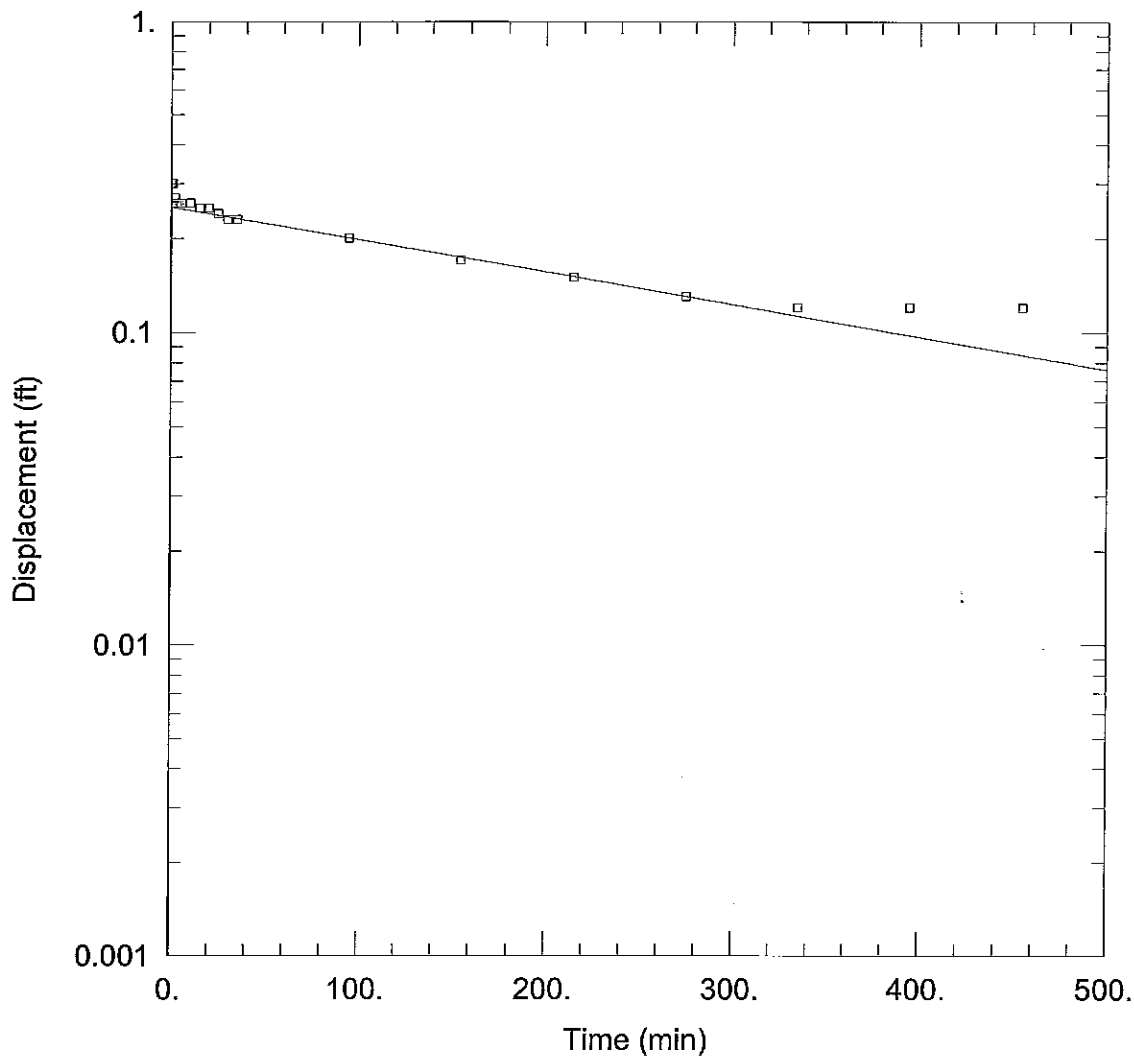
$$T_{\text{LNAPL}} = K_{\text{LNAPL}} * b_{\text{LNAPL}}$$

$$\therefore T_{\text{LNAPL}} = (1.33 \times 10^{-4} \text{ cm/sec}) * (1.82 \text{ ft}) \left(\frac{12 \text{ in}}{1 \text{ ft}}\right) \left(\frac{2.54 \text{ cm}}{1 \text{ in}}\right) = 7.4 \times 10^{-3} \frac{\text{cm}^2}{\text{sec}}$$

$$= 0.70 \text{ ft}^2/\text{day}$$

ITRC, December 2009: LNAPL Transmissivity can be used as a performance metric and can aid in determining appropriate remediation technology.

Rev.	Orig.	Date	Chkd.	Date	Client/Project:
			JB	6-27	OCDEnerSource
					Subject: LNAPL Baildown Test - Mw-03
					Calc. No.: Sht. 2 of 2



### WELL TEST ANALYSIS

Data Set: S:\...\BowerRice.aqt

Date: 06/22/12

Time: 14:49:42

### PROJECT INFORMATION

Company: INTERA

Client: Enersource

Test Well: MW-03

Test Date: 5/24/2012

### AQUIFER DATA

Saturated Thickness: 1.82 ft

Anisotropy Ratio ( $K_z/K_r$ ): 0.1

### WELL DATA (MW-03)

Initial Displacement: 0.3 ft

Total Well Penetration Depth: 45. ft

Casing Radius: 0.167 ft

Static Water Column Height: 1.82 ft

Screen Length: 15. ft

Well Radius: 0.167 ft

### SOLUTION

Aquifer Model: Unconfined

$K = 2.929E-5$  cm/sec

Solution Method: Bouwer-Rice

$y_0 = 0.2518$  ft

**Appendix Table H-1**  
**LNAPL Bail Down/Recovery Test**  
**2012 Site Investigation Report**  
**Former Enersource Facility - Monument, Lea County, New Mexico**

Date and Time (HH:MM:SS)	Top of Casing Elevation (ft amsl)	Depth to LNAPL (ft btoc)	LNAPL Elevation (ft amsl)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	LNAPL Thickness (ft)	Elapsed Time (minutes)	Recovery Rate (mL/min)	LNAPL Drawdown (ft)
5/24/2012 8:23:00	3581.84	39.02	3542.82	40.84	3541.00	1.82	-	-	-
5/24/2012 9:15:00	3581.84	39.33	3542.51	39.49	3542.35	0.16	0	0.00	0.31
5/24/2012 9:16:00	3581.84	39.32	3542.52	39.49	3542.35	0.17	1	24.70	0.30
5/24/2012 9:17:00	3581.84	39.29	3542.55	39.49	3542.35	0.20	2	49.40	0.27
5/24/2012 9:18:00	3581.84	39.28	3542.56	39.49	3542.35	0.21	3	41.16	0.26
5/24/2012 9:19:00	3581.84	39.28	3542.56	39.49	3542.35	0.21	4	30.87	0.26
5/24/2012 9:20:00	3581.84	39.28	3542.56	39.49	3542.35	0.21	5	24.70	0.26
5/24/2012 9:25:00	3581.84	39.28	3542.56	39.50	3542.34	0.22	10	14.82	0.26
5/24/2012 9:30:00	3581.84	39.27	3542.57	39.52	3542.32	0.25	15	14.82	0.25
5/24/2012 9:35:00	3581.84	39.27	3542.57	39.55	3542.29	0.28	20	14.82	0.25
5/24/2012 9:40:00	3581.84	39.26	3542.58	39.54	3542.30	0.28	25	11.86	0.24
5/24/2012 9:45:00	3581.84	39.25	3542.59	39.56	3542.28	0.31	30	12.35	0.23
5/24/2012 9:50:00	3581.84	39.25	3542.59	39.58	3542.26	0.33	35	12.00	0.23
5/24/2012 10:50:00	3581.84	39.22	3542.62	39.76	3542.08	0.54	95	9.88	0.20
5/24/2012 11:50:00	3581.84	39.19	3542.65	39.86	3541.98	0.67	155	8.13	0.17
5/24/2012 12:50:00	3581.84	39.17	3542.67	39.94	3541.90	0.77	215	7.01	0.15
5/24/2012 13:50:00	3581.84	39.15	3542.69	40.01	3541.83	0.86	275	6.29	0.13
5/24/2012 14:50:00	3581.84	39.14	3542.70	40.08	3541.76	0.94	335	5.75	0.12
5/24/2012 15:50:00	3581.84	39.14	3542.70	40.13	3541.71	0.99	395	5.19	0.12
5/24/2012 16:50:00	3581.84	39.14	3542.70	40.19	3541.65	1.05	455	4.83	0.12
5/24/2012 17:50:00	3581.84	39.14	3542.70	40.23	3541.61	1.09	515	4.46	0.12
5/25/2012 7:30:00	3581.84	39.10	3542.74	40.55	3541.29	1.45	575	5.54	0.08
5/27/2012 8:00:00	3581.84	39.03	3542.81	40.76	3541.08	1.73	4245	0.91	0.01
5/28/2012 17:35:00	3581.84	39.03	3542.81	40.85	3540.99	1.82	6335	0.65	0.01

**Notes:**

amsl = above mean sea level

btoc = below top of casing

ft = feet