

**RECR – 15**

**State VC #1**

**Investigation Report  
June 2012**



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June 29, 2012

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

RE: Site Investigation Report, Former State VC # 1 Well; Lea County, New Mexico

Dear Mr. Griswold,

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

Sincerely,

**INTERA Incorporated**

A blue ink signature of Joe A. Galemore, consisting of a stylized 'J' followed by a series of loops and a long horizontal stroke.

Joe A. Galemore  
Senior Project Manager

A blue ink signature of Eileen Marcillo, featuring a series of loops and a long horizontal stroke.

Eileen Marcillo  
Staff Hydrologist

Enclosure

FILE: NMGSD.M002.VC1

# **SITE INVESTIGATION REPORT**

## **State VC # 1**

### **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  
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Suite 220  
Albuquerque, New Mexico 87110

**June 29, 2012**



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## TABLE OF CONTENTS

<b>FIGURES.....</b>	<b>ii</b>
<b>TABLES.....</b>	<b>ii</b>
<b>APPENDICES .....</b>	<b>ii</b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>iii</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Project History .....	1
1.2 Site Setting.....	1
1.3 Scope of Work and Work Plan Deviations .....	3
<b>2.0 FIELD ACTIVITIES.....</b>	<b>5</b>
2.1 Soil Boring Advancement, Soil Screening, and Soil Sampling.....	5
2.2 Monitoring Well Installation and Development .....	6
2.3 Monitoring Well Surveying and Sampling .....	7
<b>3.0 DISCUSSION OF FINDINGS .....</b>	<b>8</b>
3.1 Site Hydrogeology .....	8
3.1.1 Stratigraphy .....	8
3.1.2 Groundwater Conditions.....	8
3.2 Distribution of Contaminants in Soil .....	9
3.2.1 Soil Screening Results .....	9
3.2.2 Laboratory Results.....	9
3.3 Distribution of Contaminants in Groundwater.....	9
<b>4.0 CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>11</b>
<b>5.0 REFERENCES.....</b>	<b>12</b>



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## **FIGURES**

Figure 1	Site Location Map, State VC#1, Lea County, New Mexico
Figure 2	Site Map, State VC#1, Lea County, New Mexico
Figure 3	Groundwater Elevations, June 17, 2012
Figure 4	Distribution of Contaminants in Soil, State VC #1, Lea County, New Mexico
Figure 5	Distribution of Contaminants in Groundwater, State VC #1, Lea County, New Mexico

## **TABLES**

Table 1	Summary of Analytical Chemistry Results – Soil
Table 2	Fluid Level Gauging Results
Table 3	Summary of Analytical Chemistry Results – Groundwater

## **APPENDICES**

Appendix A	Land Access Agreements
Appendix B	Field Notes
Appendix C	Photographic Documentation
Appendix D	Log of Borings, Monitoring Well Construction Diagrams, and OSE Well Permits
Appendix E	Laboratory Reports
Appendix F	Survey of Monitoring Well Locations



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## ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
AST	aboveground storage tank
bgs	below ground surface
DRO	diesel range organics
EPA	U.S. Environmental Protection Agency
ft	feet <i>or</i> foot
GRO	gasoline range organics
HEAL	Hall Environmental Analysis Laboratory
HSA	hollow-stem auger
INTERA	INTERA Incorporated
LNAPL	light non-aqueous phase liquids
μS/cm	microsiemens per centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRO	motor oil range organics
NMWQCC	New Mexico Water Quality Control Commission
OCD	Oil Conservation Division (New Mexico Energy, Minerals and Natural Resources Department)
OSE	Office of the State Engineer
PA	price agreement
PAH	polynuclear aromatic hydrocarbon
PID	photoionization detector
ppm	parts per million
PVC	polyvinyl chloride
RL	reporting limit
SIM	selective ion monitoring
Site	State VC #1



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TDS	total dissolved solids
TOC	top of PVC casing
TPH	total petroleum hydrocarbons
USGS	U.S. Geological Survey
VOC	volatile organic compound



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## **1.0 INTRODUCTION**

INTERA Incorporated (INTERA) has completed a site investigation at the State VC #1 Site (Site) 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.

The Site, which is owned by the New Mexico State Land Office, is a rectangular-shaped parcel of land approximately 500 feet (ft) by 100 ft. It is located approximately 5 miles east of Buckeye, New Mexico, and 18 miles northwest of Hobbs, New Mexico, at latitude 32.789460 and longitude -103.417618 (Figure 1). The surface lease is currently held by Lee Cattle Co. LP under lease GT2754. Visits to the Site by OCD personnel revealed that releases of crude and/or produced water have occurred.

This report summarizes the field investigation activities and presents associated analytical results and recommendations for additional Site investigation. For reference, a brief summary of the operational history of the Site and a description of the Site's physical setting are provided in the following subsections.

### **1.1 Project History**

Historically, the former State VC # 1 well, which is located on the western portion of the Site, was an active oil production well. Its API number is 30-025-03035. Visits to the Site by OCD personnel revealed that releases of crude and/or produced water have occurred from former above-ground storage tanks (ASTs) located east of the former State VC #1 well. A pump jack was formerly located over the well. The eastern portion of the Site formerly contained a heater treater and a tank battery consisting of three ASTs. The State VC #1 well was plugged in September 2009, and the pump jack, ASTs, and heater treater have been removed (Figure 2). The Site also contains a plugging monument for State G-36. This well was located approximately 100 feet southeast of the State VC #1 well.

### **1.2 Site Setting**

The Site is located within the High Plains section of the Great Plains physiographic province. The High Plains is predominantly used for rangeland and agriculture. Land in the vicinity of the Site is used for oil and gas production and cattle ranching. The Site is located in or just southeast of the vacuum field.



Soils in the area 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).

Figure 1 illustrates the location of the Site on the Lovington SW 7.5 minute Quadrangle, U.S. Geological Survey (USGS) Topographic Maps (USGS, 1985). The Site covers approximately 500 square feet and is located in the southwest quarter of Section 36, Township 17 South, Range 35 East, Lea County, New Mexico. The elevation of the Site is approximately 3,890 ft above mean sea level (amsl). The ground surface slopes down to the southeast, and numerous playas are in the vicinity. An aqueduct appears to run into the eastern portion of the Site (Figure 1).

Surface geology of the Site 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 Site is located within the Lea County Underground Water Basin, which obtains water from the Ogallala Aquifer. Based on subsurface investigations performed under Abatement Plan-39 for the vacuum field located approximately 2 miles to the northwest, depth to the Ogallala Aquifer water table is approximately 60 ft below ground surface (bgs). Groundwater flow direction is to the southeast, and the slope of the water table is 0.004 ft/ft (Maxim Technologies, 2005).

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 15 permitted water wells within 1 mile of the Site and 3 within 1,000 ft (Figure 1). A discrepancy between the WATERS database and GIS shapefile were revealed pertaining to the location of

one well. The closest well included in the database is an oil/gas exploration/production water supply well located approximately 210 ft northwest of the Site; upon completion of the well in 1961, it was reported that depth to water was approximately 60 ft bgs. The next closest well listed in the database (not identified in the GIS shapefile) is an irrigation well located about 220 ft southwest of the Site. The WATERS database lists the depth to water at the time of the well completion in 1967 as 55 ft bgs. 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.

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

A scope of work for the following activities was submitted to OCD on April 16, 2012:

- Generate a Site-specific health and safety plan, stake boring locations for utility locate, contact New Mexico One Call, obtain all pertinent permits, and gain access to Site.
- Drill and sample soil from five borings to an approximate depth of 75 ft bgs using hollow-stem auger (HSA) and/or air rotary methods.
- Screen soil samples for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID).
- Analyze up to nine soil samples per boring for VOCs, total petroleum hydrocarbons (TPH), polynuclear aromatic hydrocarbons (PAHs), and chlorides.
- Convert three borings to groundwater monitoring wells and develop, survey, and sample the three wells.
- Analyze three groundwater samples for VOCs, dissolved chloride, and total dissolved solids (TDS).
- Manage all investigation-derived waste generated during field activities.

Deviations to the work plan included: (1) advancing two of the soil borings to depths less than 75 ft bgs; (2) reducing the number of soil samples submitted for analysis from each boring; (3) submitting all soil samples for the analysis of VOCs and PAHs; (4) not conducting continuous sampling due to auger and core-barrel refusal; (5) collecting groundwater samples prior to water quality stabilization; and (6) not installing bollards around the monitoring wells. Evidence of subsurface contamination was not encountered at the three soil boring/monitoring well locations, therefore SB-03 and SB-04 were advanced until refusal was encountered, which was less than the proposed 75 ft bgs. The number of soil samples submitted for analysis from each soil boring was reduced because field screening did not reveal the presence of contamination. Groundwater samples were collected prior to groundwater quality stabilization at MW-01 and MW-02. This may be a reflection of a malfunctioning of the pH meter. Core-barrel



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and auger refusal was encountered in four of the five soil borings; therefore, other drilling methods were necessary to complete these borings, which prohibited continuous samples being collected at these locations. Bollards were not installed surrounding the monitoring wells due to time constraints.

## **2.0 FIELD ACTIVITIES**

Site investigation field activities were performed from May 28 to June 1, from June 7 to June 8, and on June 17, 2012. Field notes and photographs are provided in Appendix B and Appendix C, respectively. Details of the field activities are provided in the following subsections. Information about decontamination and other quality assurance methods used is provided in the work plan (INTERA, 2012).

Prior to the initiation of any ground-breaking activities in the field, a series of planning and readiness activities had to be completed including: procurement of performance bond for the OCD, land access agreement, utility locates, Site health and safety and quality assurance plans, and well permits. Access agreements between the NM 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 Plains All American Pipeline 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 and copy of the performance bond is provided in Appendix A and the completed OSE well permit is provided in Appendix D

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

Soil borings were advanced using HSA drilling techniques at the locations illustrated on Figure 2. SB-01, SB-02, and SB-05 were advanced to a depth of 67 ft bgs (i.e., approximately 10 ft below the water table). SB-03 and SB-04 were advanced until refusal was encountered, which corresponded to total depths of 24 and 24.5 ft bgs, respectively. Air rotary drilling techniques were utilized at SB-05 from 25 to 31 ft bgs due to auger refusal. Core-barrel refusal was encountered at SB-01, SB-02, SB-03, and SB-05. The core-barrel sampler was removed from the augers, and the augers were able to advance through the material without collecting soil samples.

Soil samples were collected using a 5-ft-long core-barrel. Once collected, the soil cores were characterized by an INTERA scientist, screened for the presence of VOCs using the heated headspace method and a PID with a 10.6 electron volt lamp, and put in laboratory-provided containers for possible chemical analysis. Soil descriptions and soil screening data are provided on the boring logs, which are included in Appendix D.

Two to three soil samples were collected for laboratory analysis from each soil boring. For each soil boring, one soil sample was collected at the surface and one soil sample was collected above the zone where refusal was encountered. Additionally, for the soil borings that were converted to monitoring wells, one soil sample was taken from the area immediately above the water table. The soil samples collected were containerized, preserved, and submitted under chain of custody to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico. All soil samples were submitted for the analysis of the following:

- VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B (with methanol extraction)
- TPH gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO) by EPA Method 8015B (with methanol extraction for TPH-GRO)
- PAHs by EPA Method 8270 selective ion monitoring (SIM)
- Chloride by EPA method 300.0

A copy of the analytical chemistry laboratory reports is provided in Appendix E and a summary of the data is provided in Table 1.

Soil borings SB-03 and SB-04 were not converted to monitoring wells and were plugged with cement/bentonite grout. In accordance with the work plan, drilling and sampling equipment were decontaminated prior to commencement of drilling and the PID was calibrated daily to 100 parts per million (ppm) isobutylene (INTERA, 2012). All PID readings were less than 100 ppm; therefore, all soil cuttings were thin-spread on-site.

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

Three of the soil borings SB-01, SB-02, and SB-05, were converted to 2-inch polyvinyl chloride (PVC), flush-threaded, schedule 40, groundwater monitoring wells designated MW-01, MW-02, and MW-03, respectively (Figure 2).

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 back filled with 10/20 gradation silica sand (filter pack) to approximately 3 ft above the top of the well screen. A 3- to 4-ft bentonite seal was placed above the filter pack and consisted of either  $\frac{3}{4}$ -inch hydrated bentonite chips or a mixture of bentonite gel and sand. A cement/bentonite grout was placed above the seal to approximately 3 ft below grade. Surface completion for all wells consists of an above-ground, sloped, 3-ft diameter circular concrete pad and a protective metal standpipe with locking cover. Well construction diagrams and OSE permits are included in Appendix D.



Upon completion, each well was swabbed and pumped for up to one hour to remove fines and to clean the sand filter pack. Approximately 15 gallons of water were removed from MW-01 and MW-02, and 16 gallons from MW-03. The turbidity (visual), pH, specific conductance, and temperature of the groundwater were monitored and recorded during development. Monitoring well development field forms are included in the field notes provided in Appendix B. Water produced during development was discharged to a caliche road to evaporate.

### **2.3 Monitoring Well Surveying and Sampling**

The location and elevation of the north side of the top of the PVC casing (TOC) at each well location was surveyed by John West Surveying Company on June 12, 2012. This north side of the TOC was used as a measuring point for fluid levels and total depth of the monitoring well. A copy of the survey is included in Appendix F and a listing of well elevations is provided in Table 2.

Fluid levels were measured in each monitoring well and groundwater samples were collected on June 17, 2012, using an interface probe and dedicated disposable bailers in accordance with INTERA standard operating procedures. A minimum of three casing volumes of groundwater were purged from each well prior to sample collection. Groundwater quality stabilization was not reached at MW-02 and MW-03 due to anomalous pH readings. Temperature, specific conductance, and pH of the groundwater was measured and recorded in the log book during purging activities (see Appendix B). A summary of fluid levels is provided in Table 2.

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

- VOCs (and total naphthalenes) by EPA Method 8260B
- Dissolved chloride by EPA Method 300.0
- TDS by modified method SM 2540C

A copy of the analytical chemistry laboratory reports is provided in Appendix E and a summary of the data is provided in Table 3.

Purge water generated during groundwater sampling activities was poured on a caliche road to evaporate.

### **3.0 DISCUSSION OF FINDINGS**

This section presents the findings from the Site investigation. The section is divided into three subsections: site hydrogeology, distribution of contaminants in soil, and distribution of contaminants in groundwater.

#### **3.1 Site Hydrogeology**

The following two subsections discuss the Site hydrogeology. The discussion is based on regional geologic studies; information obtained during drilling and sampling of the soil borings; and the installation, gauging, and sampling of groundwater. Boring logs and monitoring well construction diagrams are provided in Appendix D.

##### **3.1.1 Stratigraphy**

Three stratigraphic units were encountered in the approximately 67 ft that were explored during the Site investigation. The upper most unit encountered at the Site consisted of clayey sand and silty sand. Caliche nodules were commonly contained in this unit. The thickness of this unit varied from 4 ft (SB-03) to 12 ft (SB-04).

Below this unit is a caliche with clayey sand. This unit was very hard and caused auger refusal at SB-05 and core-barrel refusal at SB-01, SB-02, and SB-03. The drilling method had to be changed from HSA to air rotary in order to continue drilling at SB-05 from a depth of 25 to 31 ft bgs. The core-barrel sampler was removed from within the augers at SB-01, SB-02, SB-03, and SB-05 when drilling through portions of this unit. The thickness of this unit varied from 12 ft in SB-04 (which terminated in this unit) to 25 ft in SB-02. Borings SB-01 and SB-02 had a 5-ft-thick sandy clay layer interbedded within this unit starting at 19.5 ft and 19 ft bgs, respectively.

The deepest unit encountered consisted of a poorly graded sand with varying degrees of cementation. This unit was observed in all of the borings except SB-03 and SB-04, which terminated in the overlying caliche unit.

##### **3.1.2 Groundwater Conditions**

The water table was encountered at approximately 60 ft bgs within the poorly graded sand unit. The elevation of the water table on June 17, 2012, varied from a high of 3839.48 ft amsl in MW-03 to a low of 3838.04 ft amsl in MW-02 (Table 2; Figure 3). The estimated groundwater flow direction on this date was to the east-southeast with a hydraulic gradient calculated as 0.004 ft/ft (approximately 21 ft per mile) (Figure 3).



Water quality parameters (temperature, specific conductance, and pH) were measured and recorded during groundwater sampling activities. At the time of sample collection, groundwater temperatures ranged from 22.5 (MW-03) to 24.4 degrees Celsius (MW-01) with an average groundwater temperature of 23.5 degrees Celsius (74 degrees Fahrenheit). Groundwater pH values ranged from 7.46 (MW-03) to 7.58 (MW-01) with an average pH of 7.52. Groundwater specific conductance ranged from 447 (MW-03) to 2,202 microsiemens/cm ( $\mu\text{S}/\text{cm}$ ) (MW-02) with an average specific conductance of 1,062  $\mu\text{S}/\text{cm}$ . Copies of the groundwater sampling field notes are provided in Appendix B.

## **3.2 Distribution of Contaminants in Soil**

### **3.2.1 Soil Screening Results**

Soil field screening results did not reveal the presence of VOCs above background levels with the exception of SB-03 from 24.5 to 25 ft bgs, which had a PID reading of 6.2 ppm. Field screening results are presented on the soil boring log provided in Appendix D.

### **3.2.2 Laboratory Results**

As indicated in Table 1 and Figure 4, TPH DRO and MRO were detected in the soil samples collected at SB-02 and SB-04 from a sample depth of 0.5 to 1 ft bgs. TPH GRO was not detected in any soil samples above the laboratory reporting limit (RL). Total TPH (sum of TPH GRO, DRO, and MRO) at SB-02 and SB-04 was detected at a concentration of 530 and 990 milligrams/kilograms (mg/kg), respectively. The VOC, 4-isopropyltoluene, was detected at SB-02 from the same depth at a concentration of 0.059 mg/kg. No other VOCs or PAHs were detected in soil samples above the RL.

Chloride was detected in soil samples at concentrations ranging from below the laboratory RL (SB-05) to 5,600 mg/kg (SB-02). Of the 13 soil samples analyzed for chloride, 2 samples had chloride concentrations less than 10 mg/kg, 6 samples had chloride concentrations between 10 and 1,000 mg/kg, and 5 samples had chloride concentrations greater than 1,000 mg/kg.

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

As indicated in Table 3 and illustrated in Figure 5, dissolved chloride was detected in MW-01 at a concentration of 21 milligrams/liter (mg/L) and in MW-03 at a concentration of 27 mg/L, both of which fall below the New Mexico Water Quality Control Commission (NMWQCC) standard of 250 mg/L. Chloride was detected in MW-02 at a concentration of 500 mg/L, which exceeds the NMWQCC standard.





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TDS was detected in MW-01 at a concentration of 347 mg/L and in MW-03 at a concentration of 317 mg/L, both of which fall below the NMWQCC standard of 1,000 mg/L. TDS was detected in MW-02 at a concentration of 1,220 mg/L, which exceeds the NMWQCC standard.

No other constituents were detected above the laboratory RLs.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

Results of the Site investigation indicate that a surface release, or releases, of hydrocarbons at the Site has impacted shallow soils. Results indicate that deeper soils and groundwater have not been impacted by a release of hydrocarbons. The detection of TPH DRO and MRO in surficial soils suggests that a surface release of crude oil may have occurred at the Site.

Shallow soils (i.e., surface to 1 ft bgs) at SB-02 and SB-04 contained elevated TPH. Although TPH was detected in these soil samples, no individual VOC or PAH constituents were detected. The vertical and horizontal extent of shallow TPH contamination has not been defined but appears to be less than 9.5 ft bgs based on a slight hydrocarbon odor and very low PID readings observed at these two borings. Once a regulatory standard is promulgated, actionable soil contamination may be evaluated.

Results of the Site investigation also indicate that soils and groundwater have been impacted by produced water. Elevated chloride concentrations ( $>1,000$  mg/kg) were detected in shallow soils at SB-04 and SB-05 and in deeper soil samples at SB-02, SB-04, and SB-05.

The estimated groundwater flow direction on June 17, 2012, was towards the east-southeast, and the hydraulic gradient is estimated to be 0.004 ft/ft (Figure 3). MW-02 had dissolved chloride and TDS concentrations which exceeded their respective NMWQCC standard.

It is noteworthy that background chloride conditions for this area are not known; therefore, high chloride in soil and groundwater could be representative of background conditions. However, consistent chloride concentrations were not found in soil and groundwater at all of the Site sampling locations.

Based on these results, INTERA recommends the following:

- Perform a more detailed search on background chloride conditions.
- Delineate the vertical and horizontal extent of shallow soil TPH contamination.
- Conduct another round of groundwater quality monitoring.



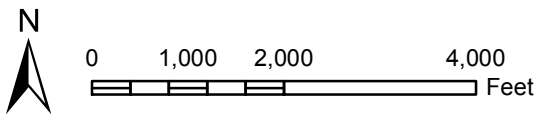
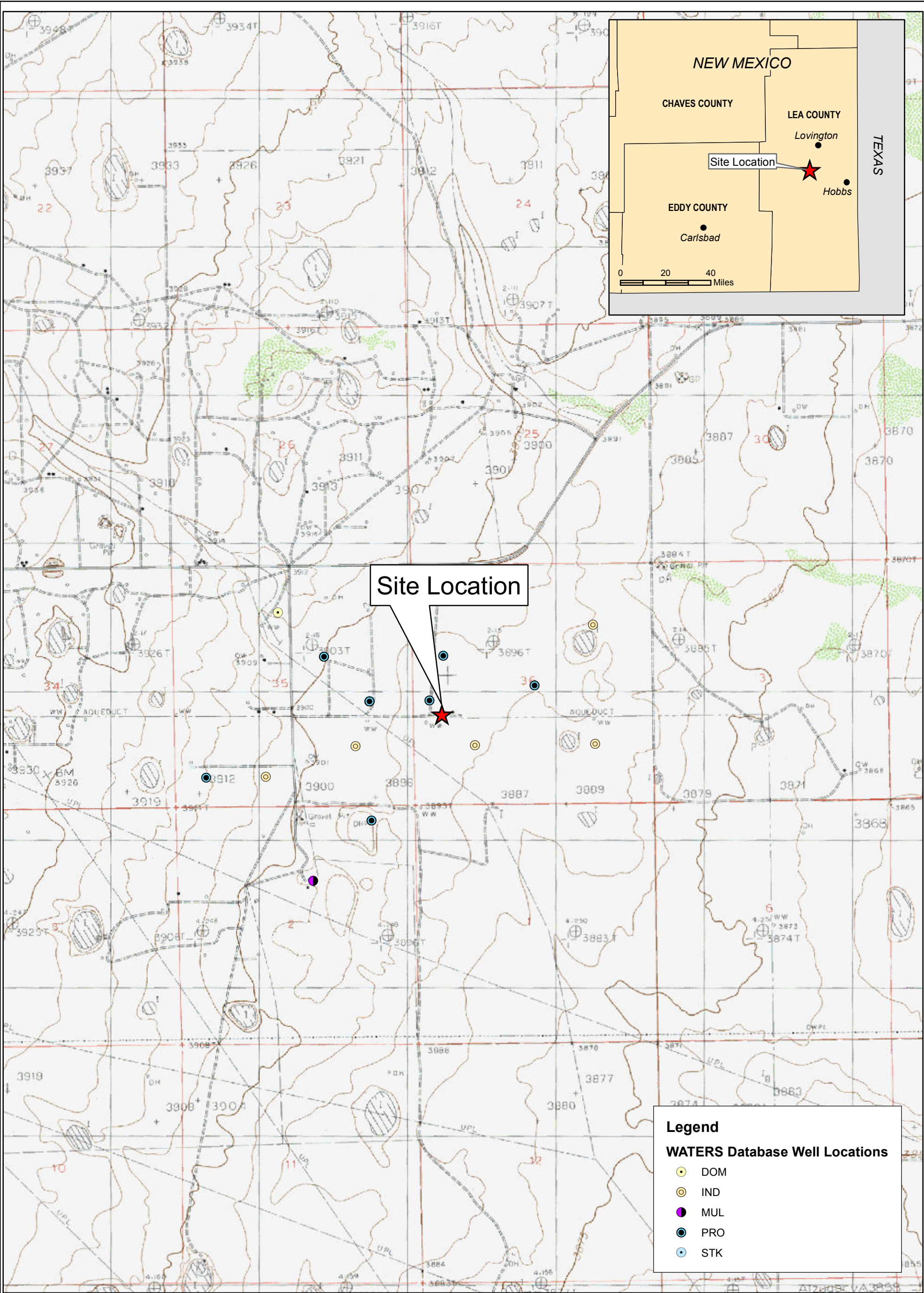
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## 5.0 REFERENCES

- INTERA. 2012. "Work Plan and Cost Estimate for Site Investigation, State VC #1, Lea County, New Mexico." Submitted to State of New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation Division. April 16, 2012.
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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).
- U.S. Geological Survey (USGS), 1985. Lovington SW Quadrangle, New Mexico – Lea Co. [Map]. 1:24,000. 7.5-Minute Series. Washington, D.C.: USGS, 1985.

## FIGURES





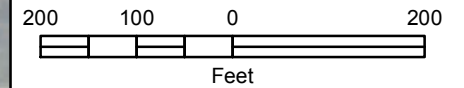
USGS 7.5 Minute Topographic Map:  
Lovington SW Quadrangle, 1985;  
Contour Interval 5 Feet







Sources:  
Topo – Navigator Pro/USGS;  
Wells – Waters database, 2011

Figure 1  
Project Location Map  
State VC #1  
Lea County, NM



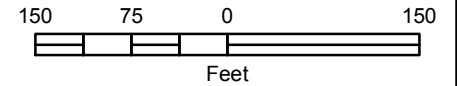


**Legend**

-  Monitoring Well
-  Soil Boring
-  O&G Production Well (P&A)
-  Former Tank Battery Location

Sources:  
2011 Aerial – USGS/EDAC

**Figure 2**  
**Site Investigation Map**  
State VC #1  
Lea County



Hydraulic Gradient = 0.004 ft/ft

MW-03  
3839.48

3839.40

MW-02  
3838.04



MW-01  
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3839.00

3838.60

3838.20

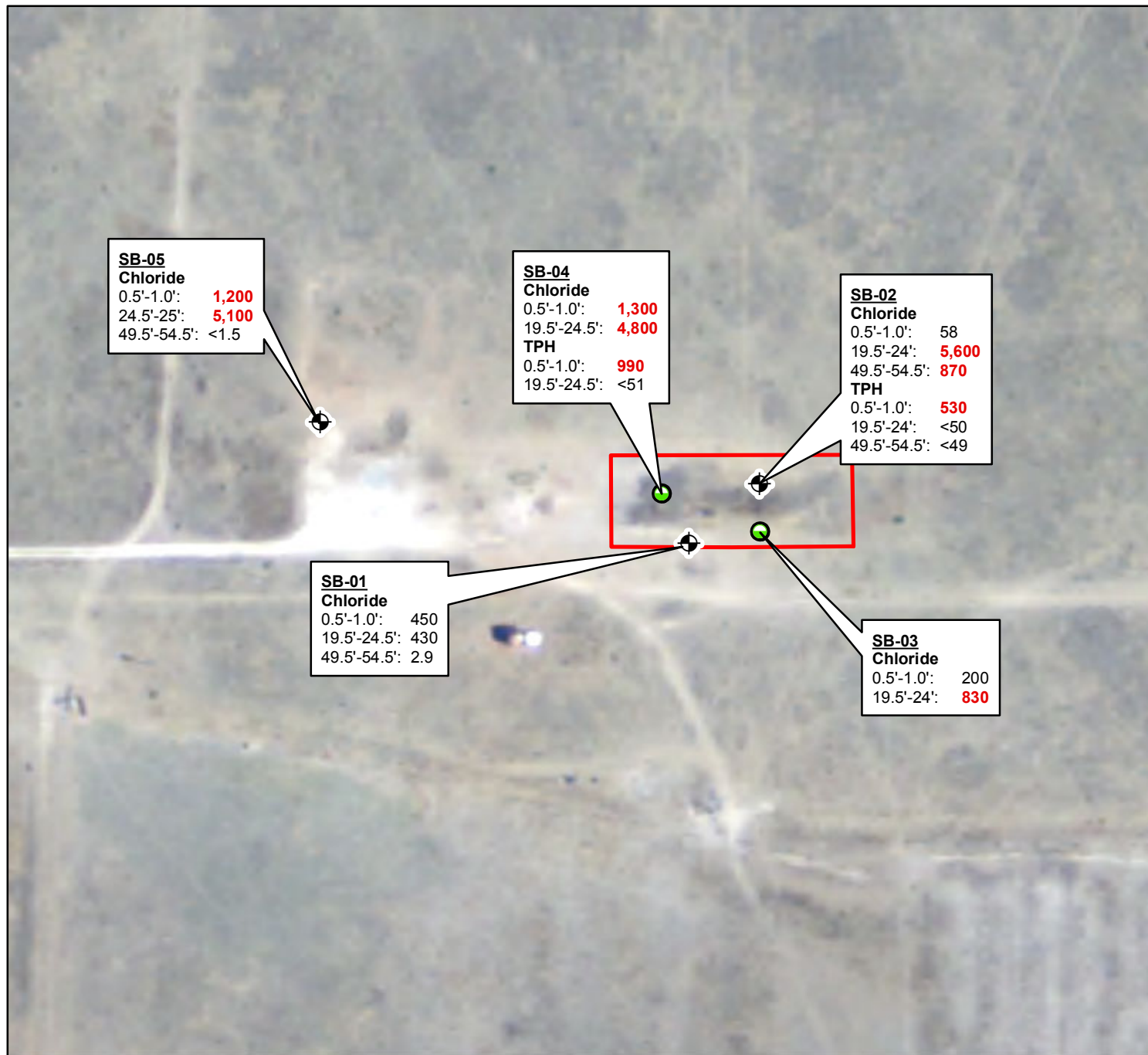
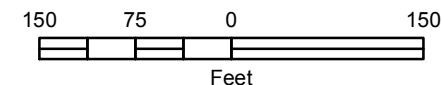
### Legend

-  Monitoring Well
-  Groundwater Elevation Contour

 Estimated Groundwater Flow Direction, 6/17/2012

Sources:  
2011 Aerial – USGS/EDAC

Figure 3  
Groundwater Elevations,  
June 17, 2012  
State VC #1  
Lea County, NM



## Legend

- Monitoring Well
- Soil Boring
- Former Tank Battery Location

## Sample Location

Analyte  
Depth (feet bgs): Result (mg/kg)

## Notes:

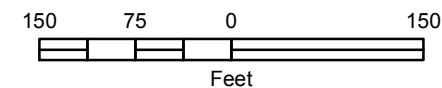
1. TPH = Sum of TPH GRO, DRO, and MRO
2. **Bold** indicates values in excess of reporting limits for organics and in excess of 500 mg/kg for chloride.
3. Samples collected during May and June 2012

## Sources:

2011 Aerial – USGS/EDAC

Figure 4  
Distribution of  
Contaminants in Soil  
State VC #1  
Lea County





### Legend



Monitoring Well



Former Tank Battery Location

**Sample Location**  
Sample Date  
Analyte: Result

#### Notes:

1. Results are in mg/L
2. **Bold** indicates concentration above NMWQCC Standard
3. Samples collected on June 17, 2012

#### Sources:

2011 Aerial – USGS/EDAC

Figure 5  
Distribution of Contaminants  
in Groundwater,  
State VC #1  
Lea County



## TABLES

**TABLE 1**  
**Summary of Analytical Chemistry Results - Soil**  
**Site Investigation Report**  
**State VC #1, Lea County, New Mexico**

Boring ID	Date	Sample Depth (bgs)	Concentration (mg/kg)					
			TPH GRO <sup>1</sup>	TPH DRO <sup>1</sup>	TPH MRO <sup>1</sup>	Total TPH <sup>2</sup>	4-Isopropyltoluene <sup>3</sup>	Chloride <sup>4</sup>
SB-01/MW-01	6/1/2012	6"-12"	<5.0	<9.6	<48	<48	<0.050	450
	6/1/2012	19.5'-24.5'	<5.0	<9.7	<49	<49	<0.050	430
	6/1/2012	49.5'-54.5'	<5.0	<9.7	<49	<49	<0.050	2.9
SB-02/MW-02	5/31/2012	6"-12"	<5.0	<b>110</b>	<b>420</b>	<b>530</b>	<b>0.059</b>	58
	5/31/2012	19.5'-24'	<5.0	<10	<50	<50	<0.050	<b>5,600</b>
	5/31/2012	49.5'-54.5'	<5.0	<9.9	<49	<49	<0.050	<b>870</b>
SB-03	6/8/2012	6"-12"	<5.0	<10	<50	<50	<0.050	200
	6/8/2012	19.5'-24'	<5.0	<9.8	<49	<49	<0.050	<b>830</b>
SB-04	6/7/2012	6"-12"	<5.0	<b>210</b>	<b>780</b>	<b>990</b>	<0.050	<b>1,300</b>
	6/7/2012	19.5'-24.5'	<5.0	<10	<51	<51	<0.050	<b>4,800</b>
SB-05/MW-03	5/28/2012	6"-12"	<5.0	<10	<51	<51	<0.050	<b>1,200</b>
	5/28/2012	24.5'-25'	<5.0	<9.8	<49	<49	<0.050	<b>5,100</b>
	5/30/2012	49.5'-54.5'	<5.0	<9.8	<49	<49	<0.050	<1.5

**Notes:**

**Bolding** indicates values in excess of reporting limits for organics and in excess of 500 mg/kg for chloride.

1 = Analyzed by EPA Method 8015B

2 = Total TPH includes sum GRO, DRO, and MRO. RL for Total TPH = highest RL for individual compounds; when summing detections, values listed as "<" RL are assumed to be 0.

3 = Analyzed by EPA Method 8260B

4 = Analyzed by EPA Method 300.0

bgs = below ground surface

DRO = diesel range organics

EPA = U.S. Environmental Protection Agency

GRO = gasoline range organics

MRO = motor oil range organics

RL = Reporting Detection Limit

TPH = total petroleum hydrocarbons

**TABLE 2**  
**Fluid Level Gauging Results**  
**Site Investigation Report**  
**State VC #1, 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-1	6/17/2012	3897.17	3894.03	51-66	-	59.01	-	3838.16
MW-2	6/17/2012	3896.67	3893.53	51-66	-	58.63	-	3838.04
MW-3	6/17/2012	3898.47	3895.48	51 - 66	-	58.99	-	3839.48

**Notes:**

- = Data not available or not present

1 = Value calculated from: Potentiometric Surface Elevation = Top of Casing Elevation - Depth to Water

amsl = above mean sea level

bgs = below ground surface

btoc = below top of casing

ft = feet

**TABLE 3**  
**Analytical Results - Groundwater**  
**Site Investigation Report**  
**State VC #1, Lea County, New Mexico**

Monitoring Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX <sup>a</sup>	Total Naphthalenes <sup>b</sup>	Dissolved Chloride	Total Dissolved Solids
		Concentration (µg/L)						Concentration (mg/L)	
NMWQCC Standards		10	750	750	620	NE	30	250 <sup>c</sup>	1000 <sup>c</sup>
MW-01	6/17/2012	<2.0	<2.0	<2.0	<3.0	<3.0	<8.0	21	347
MW-02	6/17/2012	<1.0	<1.0	<1.0	<1.5	<1.5	<4.0	500	1,220
MW-03	6/17/2012	<2.0	<2.0	<2.0	<3.0	<3.0	<8.0	27	317

**Notes:**

**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 = NMWQCC standard for domestic water supply

Chloride= by EPA Method 300.0

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)

Total Dissolved Solids = by SM2540C MOD



**APPENDIX A**  
**Land Access Agreements**

## **Monitoring Well Easement Procedures**

Submit application with \$100.00 application fee and \$75.00 appraisalment 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

May 09, 20 12

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** NE/4,SW/4,S 36,T17S, R35E **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 a maximum of three groundwater monitoring wells to characterize potential impacts to groundwater quality from nearby crude and/or produced water releases. A maximum of five soil borings will be drilled with intent to convert three to groundwater monitoring wells.



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:

Two borings will be plugged with a bentonite/cement-bentonite mixture and abandoned. Monitoring wells will be completed above-grade with a sloped 2'x2' concrete pad, a locking metal standpipe, and protective metal bollards.

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 \_\_\_\_\_



AIA Document A311

## Performance Bond

COPY

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 SOUTH ST, FRANCIS DR SANTA FE, NM 87505

as Obligee, hereinafter called Owner, in the amount of

NINETY TWO THOUSAND ONE HUNDRED AND SIX & 61/100 DOLLARS

(\$92,106.61)

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 APRIL 23, 2012, entered into a contract with Owner for

EVALUATE SAMPLES FOR CONTAMINATION

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 3 DAY OF MAY 2012

		INTERA INCORPORATED	
_____ (Witness)		_____ (Principal)	_____ (Seal)
		_____ (Title)	
		NORTH AMERICAN SPECIALTY INSURANCE COMPANY	
_____ (Witness)		_____ (Surety)	_____ (Seal)
		_____ (Title)	
		Dale E. Clark ATTORNEY IN FACT	



AIA Document A311

COPY

## 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 SOUTH 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

NINETY TWO THOUSAND ONE HUNDRED AND SIX & 61/100 DOLLARS

(\$92,106.61)

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 APRIL 23, 2012, entered into a contract with Owner for

EVALUATE SAMPLES FOR CONTAMINATION

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 3 DAY OF MAY 2012

		INTERA INCORPORATED	
		(Principal)	(Seal)
(Witness)			
		(Title)	
		NORTH AMERICAN SPECIALTY INSURANCE COMPANY	
		(Surety)	(Seal)
(Witness)			
		(Title)	
		Dale E. Clark ATTORNEY IN FACT	

NAS SURETY GROUP

NORTH AMERICAN SPECIALTY INSURANCE COMPANY  
WASHINGTON INTERNATIONAL INSURANCE COMPANY

COPY

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

*[Signature of Steven P. Anderson]*

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

By

*[Signature of David M. Layman]*

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 20<sup>th</sup> day of September, 2011.

North American Specialty Insurance Company  
Washington International Insurance Company

State of Illinois  
County of Cook

ss:

On this 20<sup>th</sup> day of September, 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.



*[Signature of D. Jill Nelson]*  
D. Jill Nelson, 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 3<sup>rd</sup> day of May, 2012.

*[Signature of James A. Carpenter]*

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

## **APPENDIX B**

### **Field Notes**

5/28/12 HSA  
Drilling LD

1000: Lu Dalton on-site  
↳ Precision (Juan + Alex) on-site

Objective: Drill c. 5/soil boring locations. Install 3/monitoring wells based on field screening results.

Equipment: CMF 85 rig

Conduct TGSM/review Hospital location. / Calibrate PID.

Locate soil boring locations.

1100: Call Joe Galemore to review SB locations, sampling, remediation, + IDW.

1115: Move rig to SB-05 (This location is the upgradient well location).

1145: Begin HSA (75/8" OD) drilling.

1230-1300: Lunch.

1500: refusal @ 25' bgs / Call Joe G. (Caliche) ←

①

5/28/12 HSA  
Drilling LD

~~cont~~: Precision will p/o an air compressor in the a.m. + we'll drill thru the caliche w/ a tri-core bit.

1515: To oversource to finish surface completion @ MW-14.

~~LD  
5/28/12~~



5/29/12

HSA  
Drilling

LD

1245: Lee on-site

1300: Precision on-site from  
Arturo to plug Air Compressor.

TGS/Calibrate PID

1315: Switch over to air-rotary  
(3 3/4" OD - Tri-core) will use  
cuttings for logging & PID.

1405: Begin air-rotary drilling.

1425: Have broken thru the  
caliche @ ~29' bgs - drilled  
to 31' bgs.

↳ Switch back to HSA drilling.

1450: Lynda on-site.

1540: Continue HSA (7 5/8" OD)  
drilling @ 25' bgs. - will  
over-ream the air-rotary  
boring.

1550: HSA refusal @ 25' bgs

↳ Juan calls John for suggestions.

1600: Will trip out the augers &  
drill thru the caliche w/  
a 6 1/2" - OD Tri-core bit.

5/29/12

HSA  
Drilling

LD

~~out~~ The OD of the tri-core is  
larger than the ID of the  
Auger.

1635: Begin Air-Rotary (6 1/2" OD)  
Tri-core.

1710: Drilled thru the caliche.  
↳ Trip out Air-rotary bit  
& switch back to HSA.

1750: Begin HSA (7 5/8" OD)  
drilling. - No Sampler.

1815: Have successfully drilled  
thru the caliche w/ the  
Augers.

LD  
5/29/12

5/30/12

HSA  
Drilling

LS

0715: All crew on-site

- ↳ TGSM / Calibrate PID
- ↳ Discuss methodology moving forward.

0740: Continue HSA w/ the Sample barrel @ 31' bgs.

0910: Rig stopped running (engine)

1030: Rig running (issue? - electrical)

- ↳ Continue drilling @ 54.5' bgs.

1105: correct ID @ 64.5' bgs.

- ↳ Precision to ensure source for backfilling materials. Will let boring net to see where static water level is.

1230: Precision on-site

1246: DTW = 56.1' bgs. SB-05

- ↳ will drill to 67' bgs & set a well.

1255: TD SB-05 @ 67' bgs.

1315: Installed SB-05 / mw-03 (AS-Built) →

1330: Begin backfilling w/ 10/20 Sand.

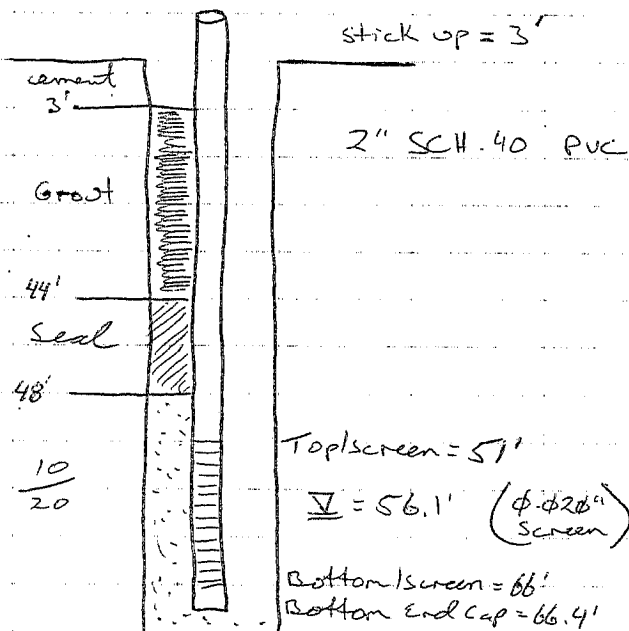
5

5/30/12

HSA  
Drilling

LS

SB-05 / mw-03 AS-Built

TD @ 67'  
bgsmaterials used

10/20 = 10 bags

Seal = 2 bags (3/4" bentonite chips)

- ↳ Hydrate w/ 10 gallons of clean water.

See p. 14 for sample details.

6

5/30/12

HSR  
Drilling

LD

1403: backfilling the bentonite seal ( $3/4"$  bentonite chips).

1450: Hydraulic filter is clogged & the rig's hydraulics are not working properly - Precision to town (@ 1505) to locate a new filter.

Note: Lynda on-site @ ~~1415~~ 1415 to pick up SB- $\phi$ 5 samples. She will deliver them to Hall tomorrow a.m.

1540: Lynda off-site to ABR.

1600: Lee off-site.

LD  
5/30/12

7

5/31/12

HSR  
Drilling

LD

1000: Lee on-site.

↳ Precision on-site installing hydraulic oil filter (pick this a.m. @ Napa).

1030: Filter installed.

↳ mix grout for SB- $\phi$ 5/mw- $\phi$ 3

1110: Make to SB- $\phi$ 2.

T65M / Calibrate PID

1125: Begin HSA (7  $5/8"$  OD) @ SB- $\phi$ 2.

1315: Fuel rig

1330 - 1400: Lunch.

1600: Correct TD @ 59.5' bgs.

& the SB is clean. Call Joe G. to see how he wants to proceed. Per Joe G. install a well @ SB- $\phi$ 2. Then drill @ SB- $\phi$ 1 - will also install a well in SB- $\phi$ 1 if clean. May not drill @ SB- $\phi$ 3 & SD- $\phi$ 4.

1648: DTW = 55.90' bgs SB- $\phi$ 2

↳ Will drill to 67' bgs & install a well (SB- $\phi$ 2/mw- $\phi$ 2)

8

5/31/12

HSA  
Drilling

LD

1650: TD SB- $\phi$ 2 @ 67' bgs.  
↳ prep to install well.

1750: Installed well @ SB- $\phi$ 2/  
MW- $\phi$ 2. Begin backfilling  
w/ 10/20 sand

1830: Backfilling w/ the seal -  
out of bentonite chips - will  
mix bentonite gel + 10/20  
sand for the seal.

1900: All crew off-site.

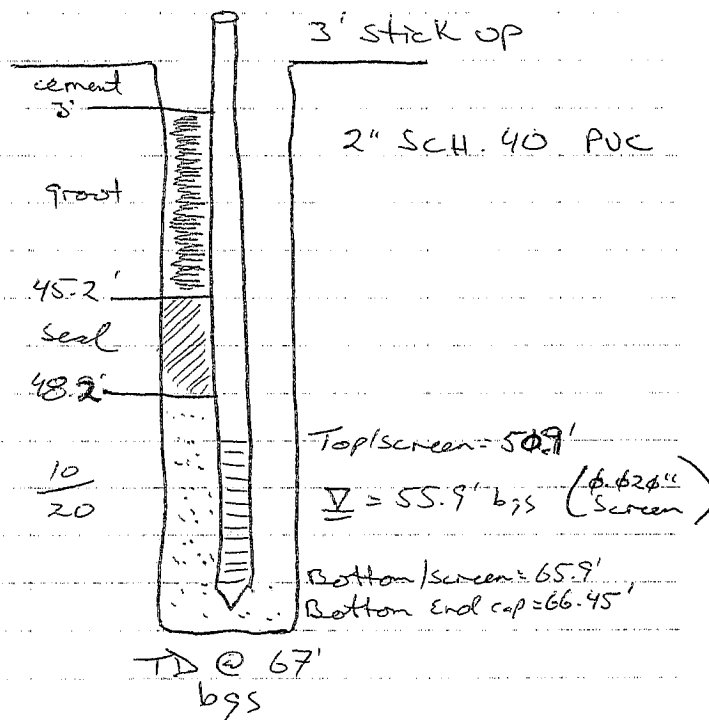
LD  
5/31/12

9.

5/31/12

HSA  
Drilling

SD

SB- $\phi$ 2 / MW- $\phi$ 2 As-Built

### materials used

10/20 - 8.5 bags

Seal - 1 bag gel / 2 bags sand

See page 14 for sample details.

10"

6/1/12

HSA  
Drilling

LD

0700: All crew on site

T6SM / Calibrate PID

0715: Trip out Augers @ SB- $\phi$ 2 /  
MW- $\phi$ 2.0810: Augers out - Need to replace  
3/4" on the lead auger.0840: Move to SB- $\phi$ 1 location.

↳ rig up.

0905: Begin HSA (7 5/8" OD) drilling.  
@ SB- $\phi$ 1.

1230-1300: Lunch

1315: TD @ 67' bgs } SB- $\phi$ 1  
DTW = 56' bgs1400: Install a well @ SB- $\phi$ 1 / MW- $\phi$ 1.

1420: Begin backfilling 10/20 sand.

1530: Backfill w/ 10/20 sand +  
bentonite gel = Seal1600: Grout MW- $\phi$ 2

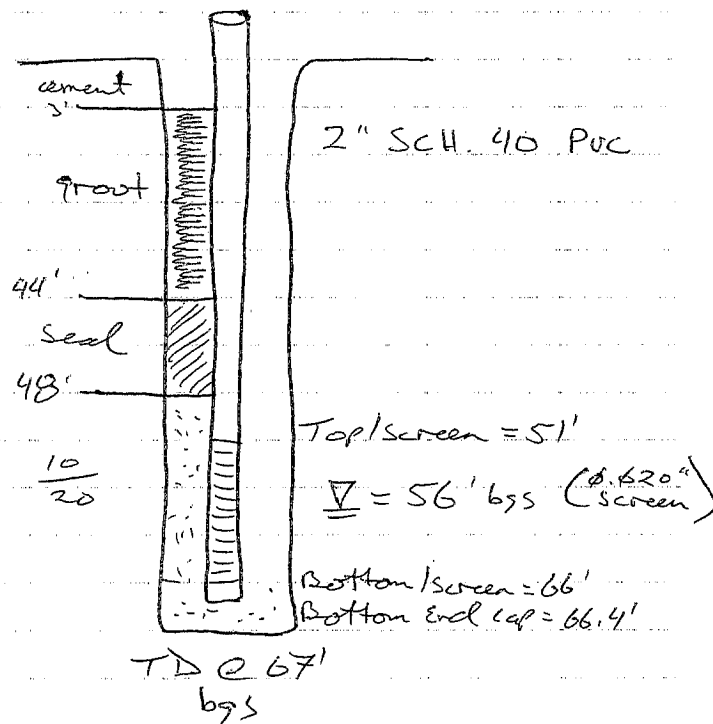
1620: out of water.

11

6/1/12

HSA  
Drilling

LD

SB- $\phi$ 1 / MW- $\phi$ 1 As-BuiltMaterials used

10/20 = 10 bags

Seal = 1 bag gel / 2 bags sand

See p. 14 for sample details.

12

6/1/12

HSA  
Drilling

LD

clean up site / secure site  
for days off.

1730! All crew off-site

LD  
6/1/12

13.

6/7/12

Notes

• All drill cuttings were thin  
spread on-site (all below  
100 ppm on PID).

• All samples were extracted  
into mesh kits in the  
field + kept on ice  
until delivered to Lab.

• Development water was  
poured onto the caliche  
rock + allowed to evaporate.

#### • Soil Samples for Analysis

SB-05 : surface, 24.5' - 25', + 49.5' - 54.5'

SB-04 : surface, 19.5' - 24.5'

SB-03 : surface, 19.5' - 24'

SB-02 : surface, 19.5' - 24', + 49.5' - 54.5'

SB-01 : surface, 19.5' - 24.5', + 49.5' - 54.5'

↳ All samples will be analyzed  
for TPH - GRO/DRO/MRO, VOC's, PAH's  
by SIMS + chlorides.

↳ 2/4oz jars + 1 mesh kit.

14.

6/7/12 HSA  
Drilling LD

1340: Lu on-site

↳ Precision (Juan + Tino)  
on-site. Mixing grout for  
SB- $\phi$ 1/mw- $\phi$ 1.

1400: Grout installed. (mw- $\phi$ 1)

TGSM/Calibrate PID

Move to SB- $\phi$ 4 location

Note! SB- $\phi$ 4 was moved ~45'

SE into a debris area

(large)

1450: Begin HSA (7 5/8" OD) drilling  
@ SB- $\phi$ 4.

1640: TD @ 24.5' bgs - core barrel refusal.

↳ trip out/clean site

Precision will pio water tonight  
for grouting in the a.m.

1710: off-site.

SB- $\phi$ 4 - GPS

N: 32° 47' 22.2"

W: 103° 25' 04.5"

Sample details for SB- $\phi$ 4 on  
page 14.

6/8/12 HSA  
Drilling LD

0800: Lu on-site

↳ Precision on-site preping forms  
for surface completions.

TGSM/Calibrate PID

0830: Begin HSA (7 5/8" OD) drilling  
@ SB- $\phi$ 3.

1040: TD @ 24' bgs - core barrel  
refusal. (Sample details p. 14)

↳ Trip out/rig down

1145-1215: Lunch

1215: Set up @ SB- $\phi$ 5/mw- $\phi$ 3  
to develop.

1315: Set up @ SB- $\phi$ 2/mw- $\phi$ 2  
to develop.

1530: Set up @ SB- $\phi$ 1/mw- $\phi$ 1  
to develop.

1610: Finished development/clean  
up site

1645: All crew off-site



Buckeye  
VC #1

Transcribed from  
Temporary Field  
Logbook

6/17/12

- Arrive on site at 0940  
INTERA Inc. - Tricia Johnson  
Jeff Palmer

- Safety meeting completed at  
0950 and documented

- On site to purge and sample  
MW-1  
MW-2  
MW-3

- Weather is sunny and warm

- Jeff collects LNAPL and water  
levels at 0952 at MW-3.  
(no depressurization when plug  
removed from well)

6/17/12

MW-3

time: 0955

Depth to LNAPL (ft): NA

Depth to water (ft): 58.99'

\* measurements ft BTOC (PVC) at  
mark on N side

TD not measured w/interface probe b/c  
it is not the right equipment and  
should not be used for TDs.

TD per Lee's development log = 69.4' BTOC  
 $69.4 - 58.99 = 10.41' / 2 = 5.205 \text{ gals}$   
for 3 purge vol  
(Approx.)

1005-

YSI - 63 pH, salinity, conductivity, temp

SN - 09E 100344 TRS# - 1097886

calibrate to 7.0 and 10.0 pH

6/17/12  
YST Cal-

7.0 buffer = 7.0 @ 26.0°C

7.0 @ 25.3°C

7.0 @ 25.4°C

10.0 buffer = 9.99 @ 25.7°C

1035- cond = 1409 ↑ 1413 @ 25°C

Calibration of YST complete

Fast-cal card not accurate as  
to procedure, had to use full  
book.

1045- Starting to purge MW-3

Jeff is bailing

1st bailer - clean

2nd - cloudy, brown

3rd 3/4 full - cloudy, took measurements

1055 pH - 7.41 @ 22.4°C

cond - 464.6 @ 22.7°C 45/

Spec Cond - 486.2 @ 25°C

4th 3/4 full - cloudy

5th 1/3 full - appear to be hitting bottom

6th 1/3 full - cloudy, silty

6/17/12

6<sup>th</sup> bailer sample

pH - 7.30 @ 22.7°C

Spec Cond - 485.045 @ 25°C

7<sup>th</sup> bailer - 1/2 full, cloudy

8<sup>th</sup> bailer - 1/2 full, cloudy

9<sup>th</sup> - full, cloudy/silty

10<sup>th</sup> full bailer - sample

pH - 7.43 @ 22.3°C

Spec Cond - 463.0 @ 25°C

Approx 2 gallons in bucket

11<sup>th</sup> bailer - full, cloudy/silty

12<sup>th</sup> bailer - full, cloudy/silty

13<sup>th</sup>

14<sup>th</sup> - full, cloudy/silty - sample

pH - 7.64 @ 22.7°C

Spec Cond - 464.145 @ 25°C

~ 3 gallons in bucket

15, 16, 17 - full, cloudy - sample

pH - 7.62 @ 22.1°C

Spec Cond - 459.245 @ 25°C

18, 19 - full, cloudy

6/17/12

19<sup>th</sup> bailer - ~ 4 gallons purged

Sample - pH - 7.61 @ 23°C

Spec Cond - 432.45 @ 25°C

Water - cloudy, silty

20, 21, 22, 23 - cloudy/silty - sample

pH - 7.16 @ 21.6°C (suspect reading)

Spec Cond - 441.045 @ 25°C (temp issue?)

~ 5 gallons purged

24 - full bucket, over 5 gallons

25 - cloudy/silty - sample

pH - 7.46 @ 22.5°C

Spec Cond - 446.7 @ 25°C

26<sup>th</sup> bailer - over 5.2 gallons, collect  
sample

1230 - MW-3 completed, go to MW-1

6/17/12

Lunch 1230-1245

1250- Arrive to MW-1

1255- open well, no depressurization

DTW (ft) = 59.01 BTOC no LNAPL <sup>present</sup>

T.D. on 6/8/12 = 69.4' BTOC

69.4 - 59.01 = 10.39' of water

$\div 2 = 5.195$  gallons for 3 purge  
volumes

1320- Starting to bail MW-1

Bailers- H H H H H H H H H H

1330- sample at 4th bailer

pH - 7.63 @ 30.0°C

Spec Cond - 536  $\mu$ S @ 25°C

1332- sample at 8th bailer

pH - 7.50 @ 24.6°C

Spec. Cond. - 534  $\mu$ S @ 25°C

temp - 24.3°C (initial)

6/17/12

★ - out of sequence  
OC initial temp

Bailing/purging MW-1

Time	Bailer	pH/temp	Conduct @ 25°C (µS)	OC initial temp
1340	12	7.43/26.3	528	24.1
★ 1330	4	7.63/30	536	
★ 1332	8	7.50/24.6	534	24.3
1345	16	7.40/25.1	528	22.8
1355	20	7.38/25.3	556	24.0
1400	23	7.54/24.3	527	23.7
1405	27	7.58/24.4	537	24.3

bailed more than 5.2 gallons  
going to MW-2 to purge, will come  
back to sample.

1415- Arrive to MW-2 to take a  
DTW and purge

open well - no depressurization

DT LVA PL (ft BTOC) =  $\emptyset$  NA

DTW (ft BTOC) = 58.63 time: 1420

TD = 69.45 ft BTOC on 6/8/12

58.63

$10.82/2 = 5.41$  gallons for  
3 purge volumes



6/17/12

1435 Bailing tally =  $\text{HHH HHH HHH HHH HHH HHH}$   
 (starting to bail) MW2 WQ parameters = 32

Time	Bailer	pH	Temp	Cond <sup>45</sup> (Spec 25°C)	initial temp <sup>°C</sup>
1445	5	8.26	27.2	2249	24.8
1451	9	7.74	24.0	2174	23.8
1454	12	7.38	25.0	2181	23.0
1459	16	7.46	24.3	2173	23.5
1502	20	7.66	23.7	1955	23.6
1506	24	7.53	24.6	2222	24.0
1513	28	8.31	24.3	1875	23.3

bailed over 5.5 gallons from well, ~~gelled~~ bailed  
 well appears to be recharging better than  
 others, water is still relatively clear at bailer 17.

No TPH odor in any wells detected.  
 Water cloudier at ~ 20 bailers, but  
 still cleaner than other wells.

1520	30	7.61	23.2	2074	22.8
1522	32	7.50	23.4	2202	22.2
		7.52	23.6		

6/17/12

MW-2 Bailing

Having a problem w/ good, consistent  
stabilization of YSI

Bailed over 7 gallons from well and  
had some anomalies in data (1513 time)

Not sure if probe is functioning at its  
best, but have collected more than  
3 well volumes in each well.

1532- Back to MW-1 to sample

1555- Sample collected

Well cap put back on and well closed.

1602- Back to MW-2 to collect  
sample.

1620- Sample collected

Well cap put back on and well closed.



## WELL DEVELOPMENT

PROJECT NAME: VC #1 WELL ID: SB-φ1/mw-φ1  
PROJECT NO.: \_\_\_\_\_ DATE: 6/8/12  
FORM COMPLETED BY: Lee Dalton

### WELL CONSTRUCTION

WELL TOTAL DEPTH - FEET BELOW TOP OF CASING (FT, BTOC): 69.4  
BOREHOLE DIAMETER (FT): 7 5/8"  
WELL INNER DIAMETER (FT): 2"  
SCREEN INTERVAL (FT, BTOC): 54-69

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 6/8/12 @  
WATER LEVEL INSTRUMENT USED: Huron Interface  
WATER LEVEL (FT, BTOC): 59.00 or 56' bgs  
LINEAR FEET OF WATER (FT): 10.4

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

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: submersible pump/swab  
WATER VOLUME TO BE REMOVED (GAL): 5.25 WATER VOLUME ACTUALLY REMOVED (GAL): 15.6  
TIME DEVELOPMENT STARTED: 1539 TIME DEVELOPMENT COMPLETED: 1610

### WATER QUALITY INSTRUMENTS

INSTRUMENT	CALIBRATION PERFORMED	TECH	COMMENTS
<u>Hydax</u>	<u>6/8/12</u>	<u>LD</u>	



COMMENTS: Will swab for 5 min. then pump & swab again every 5 gals.



## WELL DEVELOPMENT

PROJECT NAME: VC #1 WELL ID: S13-φ2/mw-φ2  
PROJECT NO.: \_\_\_\_\_ DATE: 6/8/12  
FORM COMPLETED BY: Lee Dalton

### WELL CONSTRUCTION

WELL TOTAL DEPTH – FEET BELOW TOP OF CASING (FT, BTOC): 69.45  
BOREHOLE DIAMETER (FT): 7 5/8"  
WELL INNER DIAMETER (FT): 2"  
SCREEN INTERVAL (FT, BTOC): ~~54.9-60~~ 53.9-68.9

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 6/8/12 @ 1320  
WATER LEVEL INSTRUMENT USED: Heron Interface  
WATER LEVEL (FT, BTOC): 58.60 or 55.60' bgs  
LINEAR FEET OF WATER (FT): 10.85'

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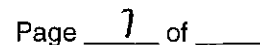
1 well casing volume = Volume/Linear Foot x Water Column Height

### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Submersible pump/swab  
WATER VOLUME TO BE REMOVED (GAL): 5-5 WATER VOLUME ACTUALLY REMOVED (GAL): 15-φ  
TIME DEVELOPMENT STARTED: 1325 TIME DEVELOPMENT COMPLETED: 1529

### WATER QUALITY INSTRUMENTS

INSTRUMENT	CALIBRATION PERFORMED	TECH	COMMENTS
<u>Hydloc</u>	<u>6/8/12</u>	<u>AD</u>	

[illegible]

COMMENTS: Swab for 5min prior to pumping, then pump 5 gals  
& swab for 5min & repeat.

1354: Well kept pumping dry - will bail develop the well.  
1407: Hydac stopped working continue to bail  
1445: Hydac is working again.



## WELL DEVELOPMENT

PROJECT NAME: VC #1 WELL ID: SB-45/MW-43  
PROJECT NO.: \_\_\_\_\_ DATE: 6/8/12  
FORM COMPLETED BY: Lee Dalton

### WELL CONSTRUCTION

WELL TOTAL DEPTH - FEET BELOW TOP OF CASING (FT, BTOC): 69.4'  
BOREHOLE DIAMETER (FT): 7 5/8"  
WELL INNER DIAMETER (FT): 2"  
SCREEN INTERVAL (FT, BTOC): 54-69

### WATER VOLUME CALCULATION

DATE/TIME OF MEASUREMENT: 6/8/12 @ 1215  
WATER LEVEL INSTRUMENT USED: Heron Interface  
WATER LEVEL (FT, BTOC): ~~58.97~~ 58.97 or 55.97' logs  
LINEAR FEET OF WATER (FT): ~10.4'

### 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

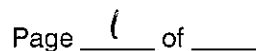
### DEVELOPMENT CRITERIA

METHOD OF DEVELOPMENT: Submersible Pump w/ Swabbing  
WATER VOLUME TO BE REMOVED (GAL): 5.25 WATER VOLUME ACTUALLY REMOVED (GAL): 16.0  
TIME DEVELOPMENT STARTED: 1225 TIME DEVELOPMENT COMPLETED: 1315

### WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
<u>6/8/12/1220</u>	<u>Hydloc</u>		<u>6/8/12</u>	<u>LD</u>	



[illegible]

COMMENTS: swabbed w/ pump for 5 min. prior to pumping  
then pumped 5 gals. & swabbed for 5 min. & repeat.

pumping @ ~ 0.7/gpm

## **APPENDIX C**

### **Photographic Documentation**



*No. 1 – Setting up over soil boring to begin drilling using HSA drilling methods.*



*No. 2 – View of the tricone bit used during air rotary drilling.*



No. 3 – View of air rotary drilling at SB-05.



No. 4 – View of caliche samples obtained at SB-01.



*No. 5 – View of well installation.*



*No. 6 – View of filter pack installation at a monitoring location.*



*No. 7 – View of cement/bentonite grout being installed at a monitoring well location.*

## **APPENDIX D**

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



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: 504360  
File Nbr: L 13014

May. 29, 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, and the well is to be plugged on or before 05/31/2013, 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

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 13014 POD1 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 13014 POD2 must be completed and the Well Log filed on or before 05/31/2013.
- LOG The Point of Diversion L 13014 POD3 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.

NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:                      Date Rcvd. Corrected:  
Formal Application Rcvd: 05/18/2012      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 29 day of May A.D., 2012

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

By: *Andy Morley*  
Andy Morley

Trn Desc: L 13014 (3 MONITOR WELLS)

File Number: L 13014  
Trn Number: 504360



# 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/>

2-31475 #15

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

STATE ENGINEER OFFICE  
ROS WELL  
MAY 18 10:37

FOR OSE INTERNAL USE

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

File Number: <b>L-13014</b>	Trn Number: <b>504360</b>
Trans Description (optional): <b>3 MONITOR WELLS</b>	
Sub-Basin: <b>L</b>	
PCW/LOG Due Date: <b>05/31/2013</b>	

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.
SB-02/MW-01 <i>POD 1</i>	32°47'22.17"	-103°24'59.38"	NEW MEXICO, NM MERIDIAN T17S,R35E,SEC 36 <i>NE 1/4 NW 1/4 SW 1/4</i>
SB-03/MW-02 <i>POD 2</i>	32°47'21.74"	-103°24'59.36"	NEW MEXICO, NM MERIDIAN T17S,R35E,SEC 36 <i>NE 1/4 NW 1/4 SW 1/4</i>
SB-05/MW-03 <i>POD 3</i>	32°47'22.87"	-103°25'4.44"	NEW MEXICO, NM MERIDIAN T17S,R35E,SEC 36 <i>NW 1/4 NW 1/4 SW 1/4</i>
<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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No      If yes, how many _____			
Other description relating well to common landmarks, streets, or other: <b>NA</b>			
Well is on land owned by: <b>New Mexico State Land Office</b>			
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): <b>80.00</b>		Outside diameter of well casing (inches): <b>2.00</b>	
Driller Name: <b>New Mexico Licensed Driller</b>		Driller License Number: <b>TBD</b>	

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Installation of a maximum of three monitoring wells is proposed to ascertain potential impacts to groundwater quality from documented surface releases of crude and/or produced water from former above-ground storage tanks in Lea County, New Mexico. The locations stated herein are approximate; final locations will be determined upon receipt of investigation results. Monitoring duration will also be determined upon receipt of investigation results. This work is being performed by INTERA Incorporated under contract to the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division, who is regulating the site and providing funding for the investigation.

STATE ENGINEER OFFICE  
 ROSWELL, NEW MEXICO  
 2012 MAY 18 10:37

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number:

*L-13014*

Trn Number:

*504360*



**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)), NM EMNRA OCS  
 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 29<sup>th</sup> 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

STATE ENGINEER OFFICE  
 ROSWELL, NEW MEXICO  
 2012 MAY 18 10:37

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number:

L-13014

Trn Number:

504360

OFFICIAL RECEIPT NUMBER: 2-31475 DATE: May 18, 2012 FILE NO.: L-Monitor

TOTAL: 15.00 RECEIVED: Fifteen and 00/100 DOLLARS CHECK NO.: — CASH: 15.00

PAYOR: Almos/Intera Inc ADDRESS: 6030 Uptown Blvd. N.E. CITY: Albuquerque STATE: NM

ZIP: 87110 RECEIVED BY: M. J. J. J. Suite 220

**INSTRUCTIONS:** Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; **yellow** copy remains in district office, and **goldenrod** copy to accompany application being filed. If you make an error, void original and all copies and submit to Program Support/ASD along with other valid receipts.

### C. Miscellaneous Fees

[illegible]





# LOG OF BORING SB-01/MW-01

(Page 1 of 2)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 6/1/2012  
Date Completed : 6/1/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 54.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	
0		33	0/0	[0'-1' PID = 0] CLAYEY SAND, brown, very fine- to fine-grained sand, poorly graded, 99% quartz, 1% feldspar /ithics, low plasticity, caliche nodules at surface-white roots, loose, strong HCL, dry, no odor [1'-4.5' PID = 0] Same as previous, with Caliche, brown and white, no roots [4.5'-5.2' PID = 0]	SC		Concrete
5		62	0/0	[5.2'-9.5' PID = 0] SANDY CLAY with Caliche, reddish-brown and white (caliche), very fine- to fine-grained sand, medium plasticity, soft to firm, strong HCL, no odor	CL		
10		70	0.4	CALICHE with Clayey Sand, little carbonate nodules (gravel size), angular, laminar, very fine to fine-grained sand, poorly graded, 99% quartz/1% feldspar/lithics, no plasticity, loose to dense, strong HCL, dry, no odor, reddish-brown pockets of trace CL from above, carbonate cemented SC @14.4-14.5' bgs			
15		56	0.2	Same as previous, ~75% carbonate cemented SC and caliche, very dense (hard drilling from 14-16.5' bgs)			
20		Not Reported	0	SANDY CLAY with Caliche, reddish-brown, white, very fine to fine-grained sand, low to medium plasticity, firm, strong HCL, dry to moist, no odor, trace carbonate cement fine-grained gravel, angular	CL		2" SCH 40 PVC Casing
25				Not sampled; hard drilling			Grout
30		60	0	Poorly graded SAND, pinkish-brown, very fine- to medium-grained sand (predominantly very fine- to fine-grained sand), trace coarse-grained sand, angular to subrounded, 99%quartz/1%feldspar/lithics, loose, none to strong HCL (lighter white pockets effervesce), dry, no odor, trace carbonate cemented SP, strongly cemented			
35		92	0	Same as previous, ~20% carbonate cemented SP	SP		
40				Same as previous			

## Notes:

1. X = Sample interval sent for laboratory analysis



# LOG OF BORING SB-01/MW-01

(Page 2 of 2)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 6/1/2012  
Date Completed : 6/1/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 54.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-01 3897.17
40		96	0				Grout
45		84	0	Same as previous, ~15% carbonate cemented SP			2" SCH 40 PVC Casing
50		94	0	Same as previous, ~10% carbonate cemented SP, weakly cemented, weak to strong HCL, dry to moist from 51.3'-53' bgs, moist from 53'-54.5' bgs			Bentonite Gel/ Sand Seal
55		62	0	Same as previous, wet, pockets of carbonate, trace carbonate cemented SP, none to weak HCL	SP		0.020' Screen
60		64	0	Same as previous			10/20 Silica Sand
65		Not Reported	Not Reported	Same as previous			Endcap
				Bottom of boring at 67' bgs			
70							
75							
80							

Notes:

1. X = Sample interval sent for laboratory analysis





# LOG OF BORING SB-02/MW-02

(Page 1 of 2)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 5/31/2012  
Date Completed : 5/31/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 54.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	
							Well: MW-02 3896.67
0				[0'-1' PID = 1.8] CLAYEY SAND, light brown, gray-brown, whitish-brown (caliche), very fine- to fine-grained sand, poorly graded, 99% quartz/1% feldspar/lithics, low plasticity, few caliche, loose, medium to strong HCL, dry, no odor, roots, caliche in end of shoe [1'-4.5' PID = 0]	SC		Concrete
5		76	1.8/0	CALICHE with Sandy Clay, white, reddish-brown, very fine- to fine-grained sand, medium plasticity, soft to firm, strong HCL, no odor, laminar bands of white/reddish-brown from 8.5' to 9' bgs)			
10		36	0.1	CALICHE with Clayey Sand, white, very fine- to fine-grained sand, poorly graded, 99% quartz/1% feldspar/lithics, no to low plasticity, loose to medium dense, strong HCL, dry, no odor, carbonate cemented SC in shoe			
15		30	0.1	[14.5'-18.9' PID = 0] Same as previous, few carbonate cemented SC gravel, angular			2" SCH 40 PVC Casing
20		84	0/0	[18.9'-19.5' PID = 0] SANDY CLAY with Caliche, reddish-brown and white, very fine- to fine-grained sand, trace carbonate (low density) gravel, angular, medium plasticity, firm, strong HCL, no odor [19.5'-23.4' PID = 0] Same as previous, with fine-grained gravel, decreasing density, silica gravel (chert like) has a carbonate rind	CL		Grout
25		73	0/0	[23.4'-24' PID = 0] Poorly graded SAND, pinkish-brown to white, very fine- to fine-grained sand, 99% quartz/1% feldspar/lithics, few silica cement fine-grained gravel, angular, loose to medium dense, no HCL, no odor, silica cement (mushy and slick when wet), silica cement cobble in shoe Not sampled; drilled through hard material	SP		
30		Not Sampled		Poorly graded SAND, pinkish-brown, very fine- to medium-grained sand (predominantly very fine- to fine-grained sand), trace coarse-grained sand, 99% quartz/1% feldspar/lithics, angular to subrounded, loose, no HCL, dry, no odor trace caliche 30.1-30.3' bgs (strong HCL)			
35		70	0	Same as previous, ~80% stratified carbonate cemented SP, weak to strong HCL	SP		

## Notes:

1. X = Sample interval sent for laboratory analysis



# LOG OF BORING SB-02/MW-02

(Page 2 of 2)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 5/31/2012  
Date Completed : 5/31/2012  
Drilling Method : HSA 7 5/8" OD  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 54.5' bgs  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-02 3896.67
35		82	0	Same as previous, loose, no HCL at 39'-39.5'			Grout
40		92	0	Same as previous, ~30% carbonate cemented, stratified and/or blocky, weak to strong HCL			2" SCH 40 PVC Casing
45		72	0	Same as previous			Bentonite Gel/Sand Seal
50		82	0	Same as previous, dry to moist (52'-52.6' bgs), moist to wet (52.6' 54.5' bgs), weak HCL	SP		10/20 Silica Sand
55		Not Reported	0	Same as previous, wet, none to weak HCL			0.020" Screen
60		Not Reported	0	Same as previous			Endcap
65		Not Reported	0	Same as previous			
70				Bottom of boring at 67' bgs			

## Notes:

1. X = Sample interval sent for laboratory analysis



## LOG OF BORING SB-03

(Page 1 of 1)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 6/8/2012  
Date Completed : 6/8/2012  
Drilling Method : HSA 7 5/8 " OD  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : NA  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC
0		100	0/ 0.3	[0'-2.8' PID = 0] CLAYEY SAND, light brown to reddish-brown, very fine- to fine-grained sand, trace medium-grained sand, subangular to subrounded, poorly graded, 99% quartz/1% feldspar/lithics, low plasticity, very loose, strong HCL, dry, roots	SC	
				[2.8'-4.5' PID = 0.3] SANDY CLAY, brown, reddish-brown, white, very fine- to fine-grained sand, few caliche (lensed and modules), low plasticity, firm, strong HCL, dry, blocky	CL	
5		80	0.2	CALICHE with Sandy Clay, brown, reddish-brown, white, very fine- to fine-grained sand, trace carbonate cemented CL gravel, few caliche (lensed and modules), low plasticity, firm, strong HCL, dry, blocky		
10		Not Sampled		Not sampled; hard caliche core barrel refusal		
		88	0.1	Same as previous		
15		Not Sampled		Not sampled; hard caliche, core barrel refusal		
		68	0.1	Same as previous, with carbonate cement fine-grained gravel, angular, low to strong HCL		
20		76	0.1	Same as previous, trace silica cement fine-grained gravel, angular to subangular		
25	Bottom of Boring at 24' bgs					
30						

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Borehole plugged with cement (95%)/bentonite (5%) mixture



## LOG OF BORING SB-04

(Page 1 of 1)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 6/7/2012  
Date Completed : 6/7/2012  
Drilling Method : HSA 7 5/8 " OD  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : NA  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC
0		78	0.3/ Not Reported	[0'-1' PID = 0.3] CLAYEY SAND, brown to reddish-brown, very fine- to fine-grained sand, poorly graded, 99% quartz/1% feldspar/lithics, low plasticity, loose, strong HCL, dry to moist, roots [1'-4.5' PID = Not Reported] Same as previous, brown, weak hydrocarbon odor from 1'-9.5' [4.5'-9' PID = 0]	SC	
5		70	0/ 0	[9'-9.5' PID = 0]		
10		96	0/ 0.1	[9.5'-12.5' PID = 0] CALICHE with Clayey Sand, white-light brown, very fine- to fine-grained sand, trace medium-grained sand, poorly graded, subangular to subrounded, no to low plasticity, medium dense, strong HCL, dry, weak hydrocarbon odor, thin layer of clayey sand in show	SC	
15		74	0	CLAYEY SAND, reddish-brown, very fine- to fine-grained sand, poorly graded, 99% quartz/1% feldspar/lithics, low plasticity, dense, no to weak HCL, dry, no odor [12.5'-14.5' PID = 0.1] CALICHE with Sandy Clay, white to light brown, very fine- to fine-grained sand, trace medium-grained sand, subangular to subrounded, few fine - coarse carbonate cemented CL, no plasticity, firm, strong HCL		
20		82	0	Same as previous, white, reddish brown, trace carbonate cemented CL, few carbonated cemented fine-grained gravel, angular		
25	Bottom of Boring at 24.5' bgs					
30						

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Borehole plugged with cement (95%)/bentonite (5%) mixture



# LOG OF BORING SB-05/MW-03

(Page 1 of 2)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 5/28/2012  
Date Completed : 5/30/2012  
Drilling Method : HSA 7 5/8 " OD/Air Rotary  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

Driller : J. Barraza  
Depth to Water : 56.1  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-03 3898.47
0				Poorly graded SAND with Silt, light brown, very fine- to fine-grained sand, trace medium-grained sand, subangular to subrounded, trace clay, very loose, no plasticity, strong HCL, dry, no odor, roots			
10		10	0	[4.5'-6.2' PID = 0] Same as previous, with Caliche	SP/SM		Concrete
5		100	0/0/0	[6.2'-8.7' PID = 0] CLAYEY SAND, reddish-brown, poorly graded, very-fine to fine-grained sand, few caliche, medium plasticity, loose, moderate HCL, dry, no odor	SC		
10		80	0.5	[8.7'-9.5' PID = 0] CALICHE with Sandy Clay, white, very fine- to fine-grained sand, medium plasticity, firm, very strong HCL, dry, no odor Same as previous, SC lens at 11.5'-11.7' bgs, trace carbonate cemented SC cobble at 13.5' bgs			
15		66	0.2	Same as previous, beginning at 16.5' bgs, with carbonate cemented fine- to coarse-grained gravel size caliche nodules and fine- to coarse-grained cobble size caliche nodules, subrounded			2" SCH 40 PVC Casing
20	Not Sampled	17	0.1	19.2'-19.5' Not sampled; core barrel refusal Same as previous, carbonate cemented cobble size caliche nodule in shoe			Grout
25	Not Sampled 0 Not Reported	6.2	6.2	22.5'-23' Not sampled; core barrel refusal No recovery, cobble in show Same as previous, moist Same as previous, (switched to air rotary from 25' -31' bgs), very hard			
30		69	0.7/0.4	SILTY SAND, light brown-pinkish brown, very fine- to medium-grained sand, trace coarse-grained sand, poorly graded, 99% quartz/1% feldspar/lithics, angular to subrounded, very loose, strong HCL, dry, no odor [31'-34' PID = 0.7]	SM		
35		60	0.3	[34'-34.5' PID = 0.4] Poorly graded SAND, pinkish brown, very fine- to medium grained sand, trace coarse-grained sand, 99% quartz/1% feldspar/lithics, angular to subrounded, very loose, weak HCL, dry, no odor Same as previous, no HCL, thin layers (1/4" to 1/2") of weakly cemented, white band with strong HCL from 38.7'-39' bgs Same as previous	SP		
40							

## Notes:

1. X = Sample interval sent for laboratory analysis
2. Air rotary from 25-31' bgs with 6 1/2" tricone bit



# LOG OF BORING SB-05/MW-03

(Page 2 of 2)

Project Name:  
OCD – State VC #1  
Lea County, NM

Date Started : 5/28/2012  
Date Completed : 5/30/2012  
Drilling Method : HSA 7 5/8 " OD/Air Rotary  
Sampling Method : Continuous 5' Core Barrel  
Drilling Company : Precision Sampling

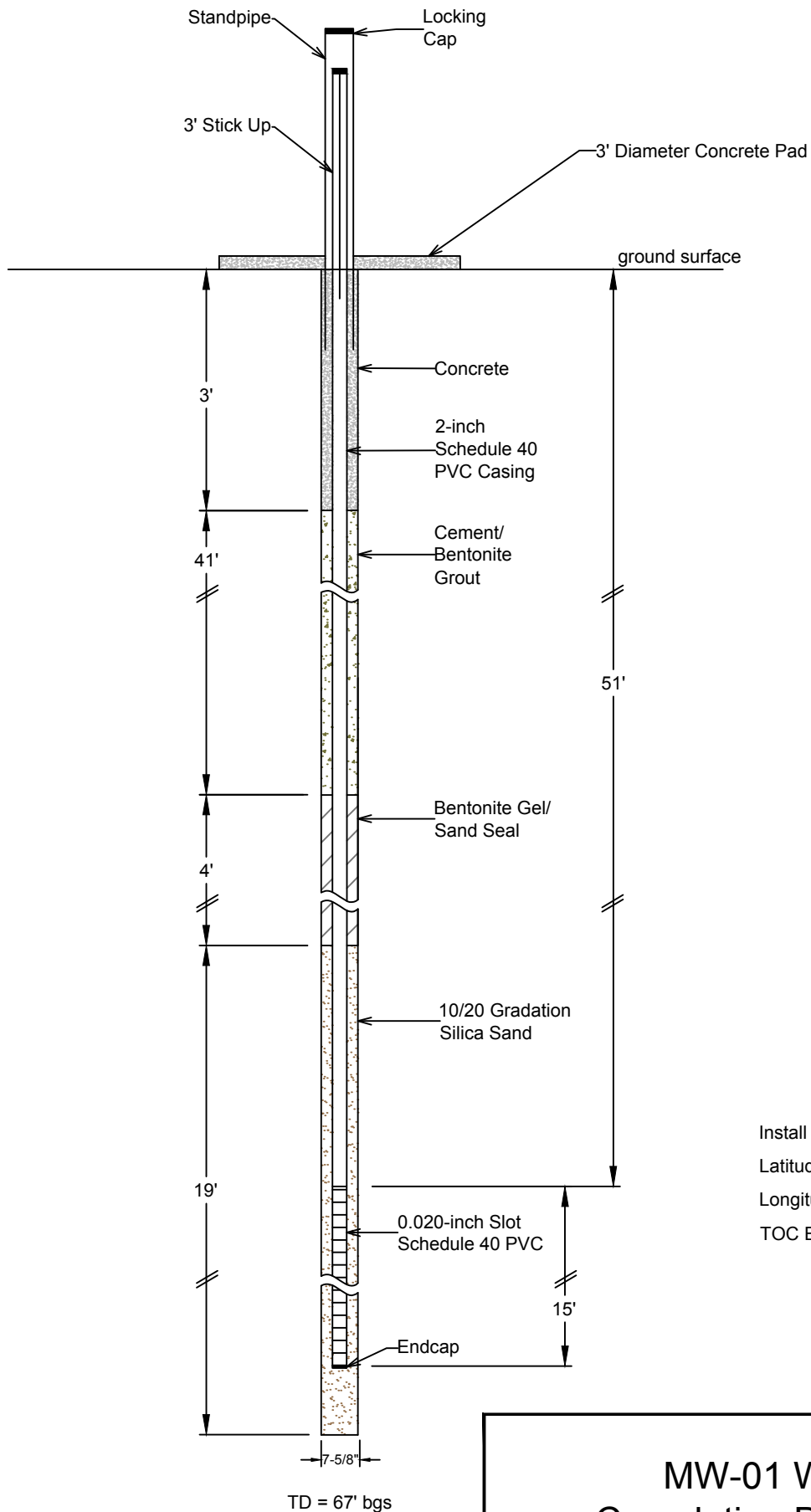
Driller : J. Barraza  
Depth to Water : 56.1  
Logged By : L. Dalton

Project #: NMGSD.M002.VC1

Depth in Feet	Sample Interval	Recovery (%)	PID Reading (ppm)	DESCRIPTION	USCS	GRAPHIC	Well: MW-03 3898.47
40		72	0.3	Same as previous, weak to medium HCL from 47.5'-49.5' bgs, trace carbonate cemented SP at 49' bgs, strong HCL	SP		
45		82	0.2				
50		74	0	Same as previous, dry to moist from 49.5' to 53' bgs, moist to wet from 53' to 54.5' bgs, 99% quartz/1% feldspar/lithics			
55		62	0	Same as previous, wet, moderate HCL in white pockets throughout, no HCL when pinkish brown			
60		Not Reported	0	Same as previous, from 62'-64.5' bgs mostly silica cemented, weak to no HCL			
65		Not Reported	Not Reported	Not Sampled			
70				Bottom of Boring at 67' bgs			
75							
80							

## Notes:

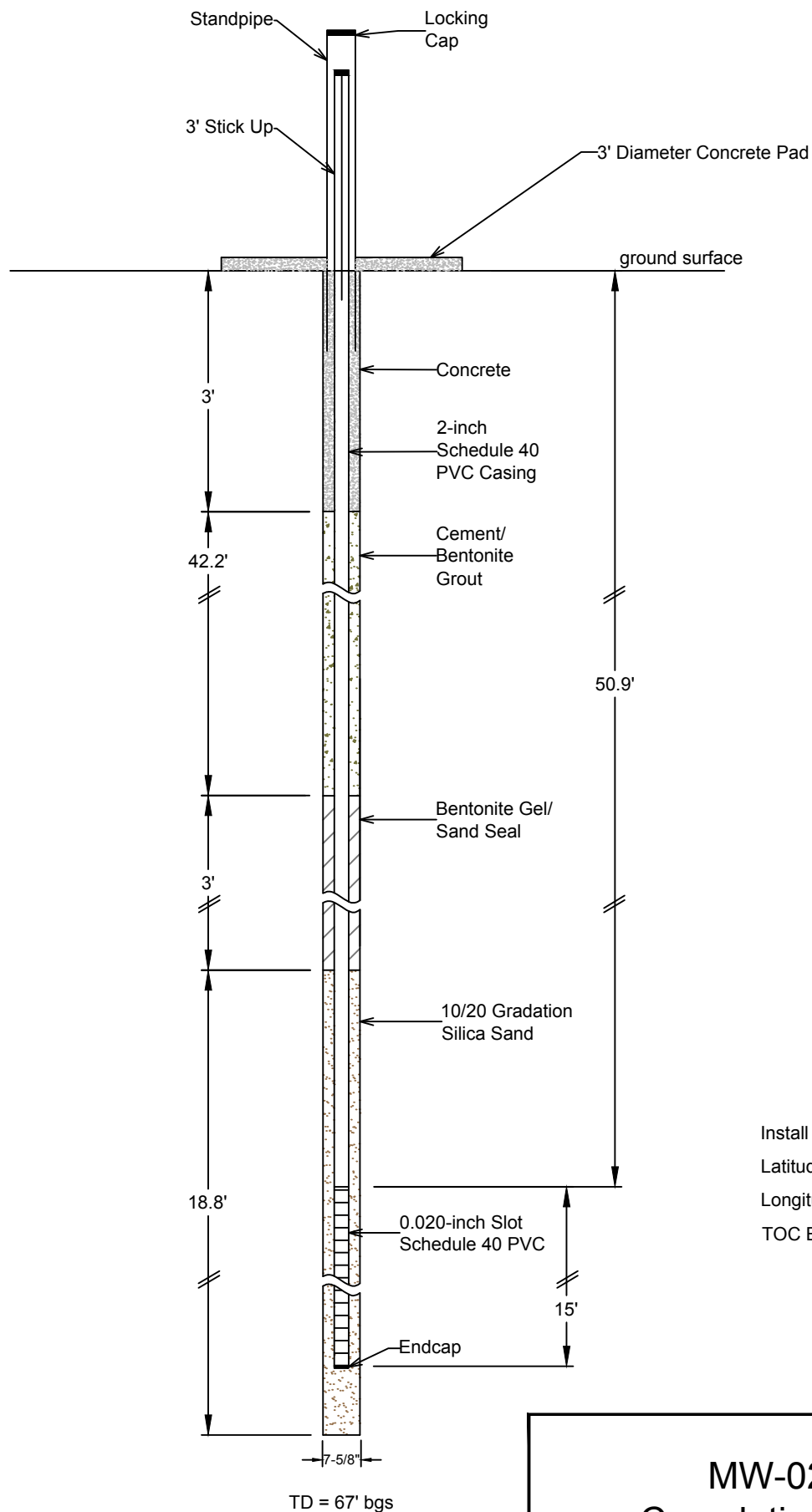
1. X = Sample interval sent for laboratory analysis
2. Air rotary from 25-31' bgs with 6 1/2" tricone bit



Install Date: 06/01/12  
Latitude: 32.7893  
Longitude: -103.4167  
TOC Elevation: 3897.17

## MW-01 Well Completion Diagram State VC #1



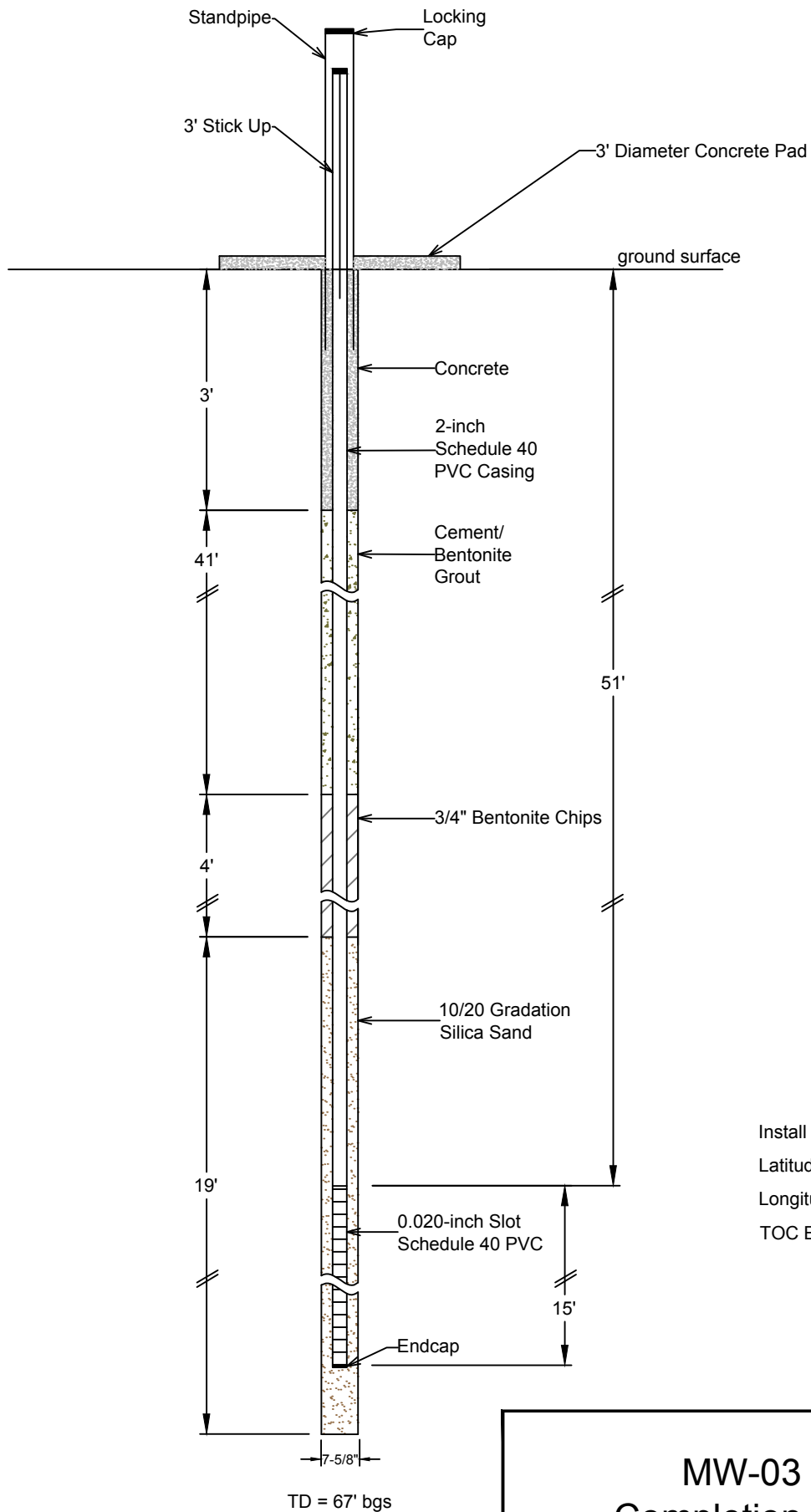


Install Date: 05/31/12  
Latitude: 32.7895  
Longitude: -103.4165  
TOC Elevation: 3896.67

## MW-02 Well Completion Diagram State VC #1







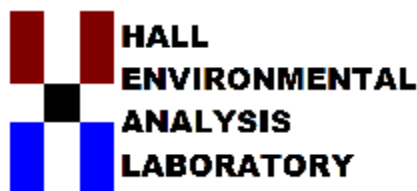
Install Date: 05/30/12  
Latitude: 32.7897  
Longitude: -103.4179  
TOC Elevation: 3898.47

## MW-03 Well Completion Diagram State VC #1



## **APPENDIX E**

### **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)

June 21, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX (505) 246-2600

RE: VC #1

OrderNo.: 1206093

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/4/2012 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. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-05 Surface (6"-12")

Project: VC #1

Collection Date: 5/28/2012 11:45:00 AM

Lab ID: 1206093-001

Matrix: SOIL

Received Date: 6/4/2012 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)	ND	10		mg/Kg	1	6/7/2012 11:39:45 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/7/2012 11:39:45 AM
Surr: DNOP	125	82.1-121	S	%REC	1	6/7/2012 11:39:45 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 1:59:30 AM
Surr: BFB	91.0	69.7-121		%REC	1	6/7/2012 1:59:30 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	1200	75		mg/Kg	50	6/11/2012 2:32:20 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 2:53:18 PM
Surr: Benzo(e)pyrene	80.9	40.5-114		%REC	1	6/6/2012 2:53:18 PM
Surr: N-hexadecane	73.9	42.8-117		%REC	1	6/6/2012 2:53:18 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 3:54:08 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-05 Surface (6"-12")

Project: VC #1

Collection Date: 5/28/2012 11:45:00 AM

Lab ID: 1206093-001

Matrix: SOIL

Received Date: 6/4/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 3:54:08 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 3:54:08 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 3:54:08 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 3:54:08 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 3:54:08 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 3:54:08 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 3:54:08 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 3:54:08 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 3:54:08 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-05 Surface (6"-12")

Project: VC #1

Collection Date: 5/28/2012 11:45:00 AM

Lab ID: 1206093-001

Matrix: SOIL

Received Date: 6/4/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 3:54:08 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 3:54:08 PM
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	1	6/5/2012 3:54:08 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/5/2012 3:54:08 PM
Surr: Dibromofluoromethane	102	71.7-132		%REC	1	6/5/2012 3:54:08 PM
Surr: Toluene-d8	91.0	70-130		%REC	1	6/5/2012 3:54:08 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-5 (24.5'-25')

Project: VC #1

Collection Date: 5/28/2012 3:00:00 PM

Lab ID: 1206093-002

Matrix: SOIL

Received Date: 6/4/2012 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)	ND	9.8		mg/Kg	1	6/7/2012 12:01:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2012 12:01:28 PM
Surr: DNOP	113	82.1-121		%REC	1	6/7/2012 12:01:28 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 2:28:06 AM
Surr: BFB	90.6	69.7-121		%REC	1	6/7/2012 2:28:06 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	5100	300		mg/Kg	200	6/11/2012 3:46:47 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 4:00:07 PM
Surr: Benzo(e)pyrene	81.6	40.5-114		%REC	1	6/6/2012 4:00:07 PM
Surr: N-hexadecane	78.5	42.8-117		%REC	1	6/6/2012 4:00:07 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 4:22:22 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-5 (24.5'-25')

Project: VC #1

Collection Date: 5/28/2012 3:00:00 PM

Lab ID: 1206093-002

Matrix: SOIL

Received Date: 6/4/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 4:22:22 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 4:22:22 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 4:22:22 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 4:22:22 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 4:22:22 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 4:22:22 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 4:22:22 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 4:22:22 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 4:22:22 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 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  
U   Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206093**Date Reported: **6/21/2012****CLIENT:** Intera, Inc.**Client Sample ID:** SB-5 (24.5'-25')**Project:** VC #1**Collection Date:** 5/28/2012 3:00:00 PM**Lab ID:** 1206093-002**Matrix:** SOIL**Received Date:** 6/4/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 4:22:22 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 4:22:22 PM
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%REC	1	6/5/2012 4:22:22 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/5/2012 4:22:22 PM
Surr: Dibromofluoromethane	99.7	71.7-132		%REC	1	6/5/2012 4:22:22 PM
Surr: Toluene-d8	90.9	70-130		%REC	1	6/5/2012 4:22:22 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-5 (49.5'-54.5')

Project: VC #1

Collection Date: 5/30/2012 9:00:00 AM

Lab ID: 1206093-003

Matrix: SOIL

Received Date: 6/4/2012 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)	ND	9.8		mg/Kg	1	6/7/2012 1:07:11 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2012 1:07:11 PM
Surr: DNOP	113	82.1-121		%REC	1	6/7/2012 1:07:11 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 2:56:53 AM
Surr: BFB	91.9	69.7-121		%REC	1	6/7/2012 2:56:53 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	ND	1.5		mg/Kg	1	6/8/2012 2:28:25 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 4:22:23 PM
Surr: Benzo(e)pyrene	84.6	40.5-114		%REC	1	6/6/2012 4:22:23 PM
Surr: N-hexadecane	82.9	42.8-117		%REC	1	6/6/2012 4:22:23 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 4:50:33 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-5 (49.5'-54.5')

Project: VC #1

Collection Date: 5/30/2012 9:00:00 AM

Lab ID: 1206093-003

Matrix: SOIL

Received Date: 6/4/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 4:50:33 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 4:50:33 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 4:50:33 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 4:50:33 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 4:50:33 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 4:50:33 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 4:50:33 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 4:50:33 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 4:50:33 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206093

Date Reported: 6/21/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-5 (49.5'-54.5')

Project: VC #1

Collection Date: 5/30/2012 9:00:00 AM

Lab ID: 1206093-003

Matrix: SOIL

Received Date: 6/4/2012 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 4:50:33 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 4:50:33 PM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	1	6/5/2012 4:50:33 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	6/5/2012 4:50:33 PM
Surr: Dibromofluoromethane	98.0	71.7-132		%REC	1	6/5/2012 4:50:33 PM
Surr: Toluene-d8	90.7	70-130		%REC	1	6/5/2012 4:50:33 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

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H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit  
U Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2288		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 2288		RunNo: 3288					
Prep Date:	6/7/2012		Analysis Date: 6/7/2012		SeqNo: 91410		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-2288		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 2288		RunNo: 3288					
Prep Date:	6/7/2012		Analysis Date: 6/7/2012		SeqNo: 91411		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

### Qualifiers:

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R RPD outside accepted recovery limits

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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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2266	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2266			RunNo: 3254					
Prep Date:	6/6/2012	Analysis Date: 6/7/2012			SeqNo: 90233		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	12		10.00		116	82.1	121			

Sample ID	LCS-2266		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2266		RunNo: 3254					
Prep Date:	6/6/2012		Analysis Date: 6/7/2012		SeqNo: 90234		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.5	52.6	130			
Surr: DNOP	4.7		5.000		94.5	82.1	121			

Sample ID	1206093-002AMS		SampType: MS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SB-5 (24.5'-25')		Batch ID: 2266		RunNo: 3254					
Prep Date:	6/6/2012		Analysis Date: 6/7/2012		SeqNo: 90888		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.15	0	76.5	57.2	146			
Surr: DNOP	4.6		5.015		92.4	82.1	121			

Sample ID	1206093-002AMSD		SampType:	MSD		TestCode:	EPA Method 8015B: Diesel Range Organics				
Client ID:	SB-5 (24.5'-25')		Batch ID:	2266		RunNo:	3254				
Prep Date:	6/6/2012		Analysis Date:	6/7/2012		SeqNo:	90891		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	39	10	50.61	0	77.5	57.2	146	2.15	24.5		
Surr: DNOP	4.5		5.061		89.3	82.1	121	0	0		

### Qualifiers:

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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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R3267		RunNo: 3267					
Prep Date:			Analysis Date: 6/6/2012		SeqNo: 90693		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		91.7	69.7	121			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R3267		RunNo: 3267					
Prep Date:			Analysis Date: 6/6/2012		SeqNo: 90694		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	98.5	133			
Surr: BFB	990		1000		98.7	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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89458	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	0.20								
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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89458	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	0.46		0.5000		91.5	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.1	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:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.5	70.7	123			
Toluene	0.88	0.050	1.000	0	87.9	80	120			
Chlorobenzene	0.90	0.050	1.000	0	89.5	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	98.9	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	87.7	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.50		0.5000		100	71.7	132			
Surr: Toluene-d8	0.46		0.5000		92.3	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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	<b>Ics-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
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			

Sample ID	<b>1206093-001Ams</b>		SampType:	<b>MS</b>		TestCode:	<b>EPA Method 8270C: PAHs</b>			
Client ID:	<b>SB-05 Surface (6"-1</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>90385</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.24	0.020	0.3281	0	71.9	56.8	103			
1-Methylnaphthalene	0.24	0.020	0.3281	0	72.9	45	114			
2-Methylnaphthalene	0.23	0.020	0.3281	0	70.9	54.9	107			
Acenaphthylene	0.26	0.020	0.3281	0	77.8	58	108			
Acenaphthene	0.26	0.020	0.3281	0	80.6	57.2	105			
Fluorene	0.26	0.020	0.3281	0	80.4	55.2	118			
Phenanthrene	0.29	0.020	0.3281	0	89.3	31.4	152			
Anthracene	0.28	0.020	0.3281	0	86.3	49.9	134			
Fluoranthene	0.26	0.020	0.3281	0	78.6	46.3	133			
Pyrene	0.25	0.020	0.3281	0	76.8	44	127			
Benz(a)anthracene	0.26	0.020	0.3281	0	80.3	5.46	204			
Chrysene	0.28	0.020	0.3281	0	85.7	47.3	127			
Benzo(b)fluoranthene	0.27	0.020	0.3281	0	83.4	58.6	138			
Benzo(k)fluoranthene	0.26	0.020	0.3281	0	78.0	64.9	122			
Benzo(a)pyrene	0.27	0.020	0.3281	0	82.8	45.4	134			
Dibenz(a,h)anthracene	0.27	0.020	0.3281	0	83.7	56.1	118			
Benzo(g,h,i)perylene	0.28	0.020	0.3281	0	86.6	58.1	115			
Indeno(1,2,3-cd)pyrene	0.27	0.020	0.3281	0	82.5	58.1	133			
Surr: Benzo(e)pyrene	0.26		0.3281		80.5	33.9	171			
Surr: N-hexadecane	1.1		1.452		76.9	51.1	118			

Sample ID	<b>1206093-001Amsd</b>		SampType:	<b>MSD</b>		TestCode:	<b>EPA Method 8270C: PAHs</b>			
Client ID:	<b>SB-05 Surface (6"-1</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>90386</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.24	0.020	0.3317	0	71.7	56.8	103	0.785	20	
1-Methylnaphthalene	0.26	0.020	0.3317	0	79.0	45	114	9.04	20	
2-Methylnaphthalene	0.26	0.020	0.3317	0	77.0	54.9	107	9.26	20	
Acenaphthylene	0.27	0.020	0.3317	0	81.9	58	108	6.25	20	
Acenaphthene	0.28	0.020	0.3317	0	84.9	57.2	105	6.31	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#: 1206093

21-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	1206093-001Amsd	SampType: MSD		TestCode: EPA Method 8270C: PAHs						
Client ID:	SB-05 Surface (6"-1	Batch ID: 2242		RunNo: 3256						
Prep Date:	6/5/2012	Analysis Date: 6/6/2012		SeqNo: 90386		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluorene	0.28	0.020	0.3317	0	83.8	55.2	118	5.25	20	
Phenanthrene	0.36	0.020	0.3317	0	107	31.4	152	19.5	20	
Anthracene	0.35	0.020	0.3317	0	106	49.9	134	22.0	20	R
Fluoranthene	0.32	0.020	0.3317	0	96.4	46.3	133	21.4	20	R
Pyrene	0.30	0.020	0.3317	0	89.8	44	127	16.7	20	
Benz(a)anthracene	0.28	0.020	0.3317	0	85.8	5.46	204	7.63	20	
Chrysene	0.30	0.020	0.3317	0	91.1	47.3	127	7.24	20	
Benzo(b)fluoranthene	0.31	0.020	0.3317	0	93.4	58.6	138	12.4	20	
Benzo(k)fluoranthene	0.32	0.020	0.3317	0	95.2	64.9	122	20.9	20	R
Benzo(a)pyrene	0.31	0.020	0.3317	0	92.6	45.4	134	12.2	20	
Dibenz(a,h)anthracene	0.32	0.020	0.3317	0	95.7	56.1	118	14.3	20	
Benzo(g,h,i)perylene	0.34	0.020	0.3317	0	101	58.1	115	16.5	20	
Indeno(1,2,3-cd)pyrene	0.32	0.020	0.3317	0	97.2	58.1	133	17.4	20	
Surr: Benzo(e)pyrene	0.31		0.3317		92.8	33.9	171	0	0	
Surr: N-hexadecane	1.2		1.467		79.9	51.1	118	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:	1206093
Received by/date:	AG 05/31/12 Samples on hold until 06/04/12 /AT		
Logged By:	Anne Thorne	6/4/2012 4:20:00 PM	Anne Thorne
Completed By:	Anne Thorne	6/5/2012	Anne Thorne
Reviewed By:	06/05/12		

## Chain of Custody

- Were seals intact? Yes ☒ No ☐ Not Present ☐
- Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
- How was the sample delivered? Client

## Log In

- Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
- Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
- Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
- Sample(s) in proper container(s)? Yes ☒ No ☐
- Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
- Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
- Was preservative added to bottles? Yes ☐ No ☒ NA ☐
- VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
- Were any sample containers received broken? Yes ☐ No ☒
- Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
- Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
- Is it clear what analyses were requested? Yes ☒ No ☐
- 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)

- Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

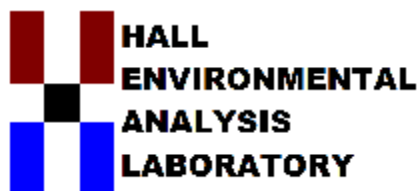
Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

- Additional remarks:

## 19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	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 22, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX

RE: VC #1

OrderNo.: 1206097

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/4/2012 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. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 Surface (6"-12")

Project: VC #1

Collection Date: 5/31/2012 11:20:00 AM

Lab ID: 1206097-001

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	110	10		mg/Kg	1	6/8/2012 10:09:48 AM
Motor Oil Range Organics (MRO)	420	51		mg/Kg	1	6/8/2012 10:09:48 AM
Surr: DNOP	115	77.6-140		%REC	1	6/8/2012 10:09:48 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 3:25:41 AM
Surr: BFB	92.7	69.7-121		%REC	1	6/7/2012 3:25:41 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	58	15		mg/Kg	10	6/8/2012 2:53:15 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
1-Methylnaphthalene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
2-Methylnaphthalene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Acenaphthylene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Acenaphthene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Fluorene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Phenanthrene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Anthracene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Fluoranthene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Pyrene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Benz(a)anthracene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Chrysene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Benzo(b)fluoranthene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Benzo(k)fluoranthene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Benzo(a)pyrene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Dibenz(a,h)anthracene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Benzo(g,h,i)perylene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Indeno(1,2,3-cd)pyrene	ND	0.099		mg/Kg	1	6/6/2012 4:44:39 PM
Surr: Benzo(e)pyrene	94.4	40.5-114		%REC	1	6/6/2012 4:44:39 PM
Surr: N-hexadecane	111	42.8-117		%REC	1	6/6/2012 4:44:39 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 5:18:52 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 Surface (6"-12")

Project: VC #1

Collection Date: 5/31/2012 11:20:00 AM

Lab ID: 1206097-001

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 5:18:52 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 5:18:52 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 5:18:52 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 5:18:52 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 5:18:52 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 5:18:52 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 5:18:52 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
4-Isopropyltoluene	0.059	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 5:18:52 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 5:18:52 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206097**

Date Reported: **6/22/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** SB-02 Surface (6"-12")

**Project:** VC #1

**Collection Date:** 5/31/2012 11:20:00 AM

**Lab ID:** 1206097-001

**Matrix:** SOIL

**Received Date:** 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 5:18:52 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 5:18:52 PM
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%REC	1	6/5/2012 5:18:52 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	1	6/5/2012 5:18:52 PM
Surr: Dibromofluoromethane	94.3	71.7-132		%REC	1	6/5/2012 5:18:52 PM
Surr: Toluene-d8	93.8	70-130		%REC	1	6/5/2012 5:18:52 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 (19.5'-24')

Project: VC #1

Collection Date: 5/31/2012 1:30:00 PM

Lab ID: 1206097-002

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2012 1:29:01 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2012 1:29:01 PM
Surr: DNOP	117	82.1-121		%REC	1	6/7/2012 1:29:01 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 3:54:24 AM
Surr: BFB	90.3	69.7-121		%REC	1	6/7/2012 3:54:24 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	5600	300		mg/Kg	200	6/11/2012 5:38:32 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:06:55 PM
Surr: Benzo(e)pyrene	83.7	40.5-114		%REC	1	6/6/2012 5:06:55 PM
Surr: N-hexadecane	77.8	42.8-117		%REC	1	6/6/2012 5:06:55 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 5:47:06 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 (19.5'-24')

Project: VC #1

Collection Date: 5/31/2012 1:30:00 PM

Lab ID: 1206097-002

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 5:47:06 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 5:47:06 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 5:47:06 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 5:47:06 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 5:47:06 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 5:47:06 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 5:47:06 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 5:47:06 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 5:47:06 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 (19.5'-24')

Project: VC #1

Collection Date: 5/31/2012 1:30:00 PM

Lab ID: 1206097-002

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 5:47:06 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 5:47:06 PM
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	1	6/5/2012 5:47:06 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	6/5/2012 5:47:06 PM
Surr: Dibromofluoromethane	95.2	71.7-132		%REC	1	6/5/2012 5:47:06 PM
Surr: Toluene-d8	92.0	70-130		%REC	1	6/5/2012 5:47:06 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 (49.5'-54.5')

Project: VC #1

Collection Date: 5/31/2012 2:45:00 PM

Lab ID: 1206097-003

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2012 1:51:06 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2012 1:51:06 PM
Surr: DNOP	116	82.1-121		%REC	1	6/7/2012 1:51:06 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 4:23:05 AM
Surr: BFB	90.8	69.7-121		%REC	1	6/7/2012 4:23:05 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	870	30		mg/Kg	20	6/8/2012 3:18:04 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:29:11 PM
Surr: Benzo(e)pyrene	78.8	40.5-114		%REC	1	6/6/2012 5:29:11 PM
Surr: N-hexadecane	86.9	42.8-117		%REC	1	6/6/2012 5:29:11 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 6:15:13 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-02 (49.5'-54.5')

Project: VC #1

Collection Date: 5/31/2012 2:45:00 PM

Lab ID: 1206097-003

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 6:15:13 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 6:15:13 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 6:15:13 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 6:15:13 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 6:15:13 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 6:15:13 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 6:15:13 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 6:15:13 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 6:15:13 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 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  
 U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206097**

Date Reported: **6/22/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** SB-02 (49.5'-54.5')

**Project:** VC #1

**Collection Date:** 5/31/2012 2:45:00 PM

**Lab ID:** 1206097-003

**Matrix:** SOIL

**Received Date:** 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 6:15:13 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 6:15:13 PM
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	1	6/5/2012 6:15:13 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	6/5/2012 6:15:13 PM
Surr: Dibromofluoromethane	97.2	71.7-132		%REC	1	6/5/2012 6:15:13 PM
Surr: Toluene-d8	93.0	70-130		%REC	1	6/5/2012 6:15:13 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-01 Surface (6"-12")

Project: VC #1

Collection Date: 6/1/2012 9:00:00 AM

Lab ID: 1206097-004

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/7/2012 2:37:20 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2012 2:37:20 PM
Surr: DNOP	126	82.1-121	S	%REC	1	6/7/2012 2:37:20 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 4:51:50 AM
Surr: BFB	91.7	69.7-121		%REC	1	6/7/2012 4:51:50 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	450	30		mg/Kg	20	6/8/2012 3:30:29 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 5:51:26 PM
Surr: Benzo(e)pyrene	63.2	40.5-114		%REC	1	6/6/2012 5:51:26 PM
Surr: N-hexadecane	64.2	42.8-117		%REC	1	6/6/2012 5:51:26 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 6:43:23 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-01 Surface (6"-12")

Project: VC #1

Collection Date: 6/1/2012 9:00:00 AM

Lab ID: 1206097-004

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 6:43:23 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 6:43:23 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 6:43:23 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 6:43:23 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 6:43:23 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 6:43:23 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 6:43:23 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 6:43:23 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 6:43:23 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206097**

Date Reported: **6/22/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** SB-01 Surface (6"-12")

**Project:** VC #1

**Collection Date:** 6/1/2012 9:00:00 AM

**Lab ID:** 1206097-004

**Matrix:** SOIL

**Received Date:** 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 6:43:23 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 6:43:23 PM
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	1	6/5/2012 6:43:23 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	6/5/2012 6:43:23 PM
Surr: Dibromofluoromethane	97.5	71.7-132		%REC	1	6/5/2012 6:43:23 PM
Surr: Toluene-d8	93.9	70-130		%REC	1	6/5/2012 6:43:23 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-1 (19.5'-24.5')

Project: VC #1

Collection Date: 6/1/2012 11:45:00 AM

Lab ID: 1206097-005

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2012 2:59:18 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2012 2:59:18 PM
Surr: DNOP	118	82.1-121		%REC	1	6/7/2012 2:59:18 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2012 7:55:11 PM
Surr: BFB	91.2	69.7-121		%REC	1	6/7/2012 7:55:11 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	430	30		mg/Kg	20	6/8/2012 4:32:34 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:13:40 PM
Surr: Benzo(e)pyrene	80.1	40.5-114		%REC	1	6/6/2012 6:13:40 PM
Surr: N-hexadecane	84.3	42.8-117		%REC	1	6/6/2012 6:13:40 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 7:11:27 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-1 (19.5'-24.5')

Project: VC #1

Collection Date: 6/1/2012 11:45:00 AM

Lab ID: 1206097-005

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 7:11:27 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 7:11:27 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 7:11:27 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 7:11:27 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 7:11:27 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 7:11:27 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 7:11:27 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 7:11:27 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 7:11:27 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-1 (19.5'-24.5')

Project: VC #1

Collection Date: 6/1/2012 11:45:00 AM

Lab ID: 1206097-005

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 7:11:27 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 7:11:27 PM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	1	6/5/2012 7:11:27 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	6/5/2012 7:11:27 PM
Surr: Dibromofluoromethane	101	71.7-132		%REC	1	6/5/2012 7:11:27 PM
Surr: Toluene-d8	94.5	70-130		%REC	1	6/5/2012 7:11:27 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-01 (49.5'-54.5')

Project: VC #1

Collection Date: 6/1/2012 12:30:00 PM

Lab ID: 1206097-006

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2012 3:21:30 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2012 3:21:30 PM
Surr: DNOP	119	82.1-121		%REC	1	6/7/2012 3:21:30 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/8/2012 5:01:26 AM
Surr: BFB	91.7	69.7-121		%REC	1	6/8/2012 5:01:26 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: SRM
Chloride	2.9	1.5		mg/Kg	1	6/8/2012 4:44:59 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Fluorene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Chrysene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/6/2012 6:35:47 PM
Surr: Benzo(e)pyrene	69.1	40.5-114		%REC	1	6/6/2012 6:35:47 PM
Surr: N-hexadecane	62.2	42.8-117		%REC	1	6/6/2012 6:35:47 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Toluene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Naphthalene	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 7:39:33 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  
 U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-01 (49.5'-54.5')

Project: VC #1

Collection Date: 6/1/2012 12:30:00 PM

Lab ID: 1206097-006

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/5/2012 7:39:33 PM
Acetone	ND	0.75		mg/Kg	1	6/5/2012 7:39:33 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Bromoform	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Bromomethane	ND	0.20		mg/Kg	1	6/5/2012 7:39:33 PM
2-Butanone	ND	0.50		mg/Kg	1	6/5/2012 7:39:33 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/5/2012 7:39:33 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Chloroethane	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
Chloroform	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Chloromethane	ND	0.15		mg/Kg	1	6/5/2012 7:39:33 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/5/2012 7:39:33 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/5/2012 7:39:33 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/5/2012 7:39:33 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Styrene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206097

Date Reported: 6/22/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-01 (49.5'-54.5')

Project: VC #1

Collection Date: 6/1/2012 12:30:00 PM

Lab ID: 1206097-006

Matrix: SOIL

Received Date: 6/4/2012 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/5/2012 7:39:33 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/5/2012 7:39:33 PM
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	6/5/2012 7:39:33 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	6/5/2012 7:39:33 PM
Surr: Dibromofluoromethane	97.8	71.7-132		%REC	1	6/5/2012 7:39:33 PM
Surr: Toluene-d8	91.5	70-130		%REC	1	6/5/2012 7:39:33 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  
U Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2288		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 2288		RunNo: 3288					
Prep Date:	6/7/2012		Analysis Date: 6/7/2012		SeqNo: 91410		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-2288		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 2288		RunNo: 3288					
Prep Date:	6/7/2012		Analysis Date: 6/7/2012		SeqNo: 91411		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID	MB-2302		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	2302		RunNo:	3315				
Prep Date:	6/8/2012		Analysis Date:	6/8/2012		SeqNo:	92200		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-2302		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 2302		RunNo: 3315					
Prep Date:	6/8/2012		Analysis Date: 6/8/2012		SeqNo: 92201		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

Sample ID	1206097-006BMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	SB-01 (49.5'-54.5')		Batch ID: 2288		RunNo: 3315					
Prep Date:	6/7/2012		Analysis Date: 6/8/2012		SeqNo: 92232		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	2.877	89.4	74.6	118			

Sample ID	1206097-006BMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	SB-01 (49.5'-54.5')		Batch ID: 2288		RunNo: 3315					
Prep Date:	6/7/2012		Analysis Date: 6/8/2012		SeqNo: 92233		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	2.877	84.8	74.6	118	4.33	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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2266	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2266			RunNo: 3254					
Prep Date:	6/6/2012	Analysis Date: 6/7/2012			SeqNo: 90233		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	12		10.00		116	82.1	121			

Sample ID	LCS-2266		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2266		RunNo: 3254					
Prep Date:	6/6/2012		Analysis Date: 6/7/2012		SeqNo: 90234		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.5	52.6	130			
Surr: DNOP	4.7		5.000		94.5	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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R3267		RunNo: 3267					
Prep Date:			Analysis Date: 6/6/2012		SeqNo: 90693		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		91.7	69.7	121			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R3267		RunNo: 3267					
Prep Date:			Analysis Date: 6/6/2012		SeqNo: 90694		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	98.5	133			
Surr: BFB	990		1000		98.7	69.7	121			

Sample ID	LCS-2252		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 2252		RunNo: 3296					
Prep Date:	6/5/2012		Analysis Date: 6/7/2012		SeqNo: 91760		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	98.5	133			
Surr: BFB	980		1000		97.5	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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89458	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	0.20								
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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89458	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	0.46		0.5000		91.5	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.1	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:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.5	70.7	123			
Toluene	0.88	0.050	1.000	0	87.9	80	120			
Chlorobenzene	0.90	0.050	1.000	0	89.5	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	98.9	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	87.7	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R3209	RunNo:	3209					
Prep Date:		Analysis Date:	6/5/2012	SeqNo:	89745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.50		0.5000		100	71.7	132			
Surr: Toluene-d8	0.46		0.5000		92.3	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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

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#: 1206097

22-Jun-12

Client: Intera, Inc.

Project: VC #1

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

## Sample Log-In Check List

Client Name: INT Work Order Number: 1206097

Received by/date: LM 06/04/12

Logged By: Anne Thorne 6/4/2012 4:45:00 PM

Completed By: Anne Thorne 6/5/2012

Reviewed By: [Signature] 06/05/12

[Signature]

[Signature]

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: ☐ 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	2.6	Good	Not Present			



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

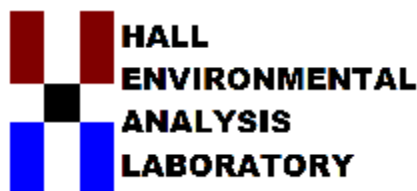
Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Air Bubbles (Y or N)

Chain-of-Custody Record				
Client: <u>Intere</u>				
Mailing Address: <u>on file</u>				
Phone #: <u>246-1600</u>				
email or Fax#: <u>jgalemore@inter.com</u>				
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				
Accreditation: <input checked="" type="checkbox"/> NELAP <input type="checkbox"/> Other _____				
AEDD (Type) _____				
Date	Time	Matrix	Sample Request ID	
11/12	0700	Soil	SD-01 Surface (6"-12")	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Sample Temperature: <u>21.6</u>
	0700		SD-01 (1-4.5")	Container Type and # <u>1 mech kit 2/402</u> Preservative Type <u>mech</u> HEAL No. <u>12 Nov 97</u>
	0700		(8.2-9.5")	
	0700		(9.5-14.5")	
	0845		(14.5-19.5")	
	1145		(19.5-24.5")	
	1200		(24.5-34.5")	
	1220		(34.5-44.5")	
	1230		(44.5-54.5")	
Turn-Around Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush				
Project Name: <u>VC #1</u>				
Project #: <u>12M6SD.VC-1.02</u>				
Project Manager: <u>Joe Galemore</u>				
Sampler: <u>Leif DeHou</u> <u>CRD</u>				
Received by: <u>[Signature]</u> Date: <u>11/12</u> Time: <u>1645</u>				
Relinquished by: <u>[Signature]</u> Date: <u>11/12</u> Time: <u>1645</u>				

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



*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 25, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX

RE: VC #1 (Buckeye)

OrderNo.: 1206759

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/19/2012 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. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-1

Project: VC #1 (Buckeye)

Collection Date: 6/17/2012 3:55:00 PM

Lab ID: 1206759-001

Matrix: AQUEOUS

Received Date: 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Benzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Toluene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Ethylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Naphthalene	ND	4.0		µg/L	2	6/20/2012 7:23:40 AM
1-Methylnaphthalene	ND	8.0		µg/L	2	6/20/2012 7:23:40 AM
2-Methylnaphthalene	ND	8.0		µg/L	2	6/20/2012 7:23:40 AM
Acetone	ND	20		µg/L	2	6/20/2012 7:23:40 AM
Bromobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Bromodichloromethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Bromoform	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Bromomethane	ND	6.0		µg/L	2	6/20/2012 7:23:40 AM
2-Butanone	ND	20		µg/L	2	6/20/2012 7:23:40 AM
Carbon disulfide	ND	20		µg/L	2	6/20/2012 7:23:40 AM
Carbon Tetrachloride	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Chlorobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Chloroethane	ND	4.0		µg/L	2	6/20/2012 7:23:40 AM
Chloroform	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Chloromethane	ND	6.0		µg/L	2	6/20/2012 7:23:40 AM
2-Chlorotoluene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
4-Chlorotoluene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
cis-1,2-DCE	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	6/20/2012 7:23:40 AM
Dibromochloromethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Dibromomethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Dichlorodifluoromethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,1-Dichloroethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,1-Dichloroethene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2-Dichloropropane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,3-Dichloropropane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
2,2-Dichloropropane	ND	4.0		µg/L	2	6/20/2012 7:23:40 AM
1,1-Dichloropropene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Hexachlorobutadiene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
2-Hexanone	ND	20		µg/L	2	6/20/2012 7:23:40 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-1

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 3:55:00 PM

**Lab ID:** 1206759-001

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Isopropylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
4-Isopropyltoluene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
4-Methyl-2-pentanone	ND	20		µg/L	2	6/20/2012 7:23:40 AM
Methylene Chloride	ND	6.0		µg/L	2	6/20/2012 7:23:40 AM
n-Butylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
n-Propylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
sec-Butylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Styrene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
tert-Butylbenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	6/20/2012 7:23:40 AM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
trans-1,2-DCE	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Trichloroethene (TCE)	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Trichlorofluoromethane	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	6/20/2012 7:23:40 AM
Vinyl chloride	ND	2.0		µg/L	2	6/20/2012 7:23:40 AM
Xylenes, Total	ND	3.0		µg/L	2	6/20/2012 7:23:40 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	2	6/20/2012 7:23:40 AM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	2	6/20/2012 7:23:40 AM
Surr: Dibromofluoromethane	107	69.8-130		%REC	2	6/20/2012 7:23:40 AM
Surr: Toluene-d8	101	70-130		%REC	2	6/20/2012 7:23:40 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	347	20.0		mg/L	1	6/22/2012 9:02:00 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
- U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206759**

Date Reported: **6/25/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-1 Dissolved

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 3:55:00 PM

**Lab ID:** 1206759-002

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	21	10		mg/L	20	6/20/2012 3:43:42 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

CLIENT: Intera, Inc.

Client Sample ID: MW-2

Project: VC #1 (Buckeye)

Collection Date: 6/17/2012 4:20:00 PM

Lab ID: 1206759-003

Matrix: AQUEOUS

Received Date: 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Benzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Toluene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Naphthalene	ND	2.0		µg/L	1	6/20/2012 3:11:16 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/20/2012 3:11:16 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/20/2012 3:11:16 PM
Acetone	ND	10		µg/L	1	6/20/2012 3:11:16 PM
Bromobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Bromoform	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Bromomethane	ND	3.0		µg/L	1	6/20/2012 3:11:16 PM
2-Butanone	ND	10		µg/L	1	6/20/2012 3:11:16 PM
Carbon disulfide	ND	10		µg/L	1	6/20/2012 3:11:16 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Chlorobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Chloroethane	ND	2.0		µg/L	1	6/20/2012 3:11:16 PM
Chloroform	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Chloromethane	ND	3.0		µg/L	1	6/20/2012 3:11:16 PM
2-Chlorotoluene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
4-Chlorotoluene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/20/2012 3:11:16 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Dibromomethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/20/2012 3:11:16 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
2-Hexanone	ND	10		µg/L	1	6/20/2012 3:11:16 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-2

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 4:20:00 PM

**Lab ID:** 1206759-003

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Isopropylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/20/2012 3:11:16 PM
Methylene Chloride	ND	3.0		µg/L	1	6/20/2012 3:11:16 PM
n-Butylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
n-Propylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
sec-Butylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Styrene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
tert-Butylbenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/20/2012 3:11:16 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/20/2012 3:11:16 PM
Vinyl chloride	ND	1.0		µg/L	1	6/20/2012 3:11:16 PM
Xylenes, Total	ND	1.5		µg/L	1	6/20/2012 3:11:16 PM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	1	6/20/2012 3:11:16 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	1	6/20/2012 3:11:16 PM
Surr: Dibromofluoromethane	101	69.8-130		%REC	1	6/20/2012 3:11:16 PM
Surr: Toluene-d8	106	70-130		%REC	1	6/20/2012 3:11:16 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	1220	20.0		mg/L	1	6/22/2012 9:02:00 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206759**

Date Reported: **6/25/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-2 Dissolved

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 4:20:00 PM

**Lab ID:** 1206759-004

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	500	25		mg/L	50	6/22/2012 2:44:49 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206759**

Date Reported: **6/25/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-3

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 12:20:00 PM

**Lab ID:** 1206759-005

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>JDJ</b>
Benzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Toluene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Ethylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Naphthalene	ND	4.0		µg/L	2	6/20/2012 3:41:41 PM
1-Methylnaphthalene	ND	8.0		µg/L	2	6/20/2012 3:41:41 PM
2-Methylnaphthalene	ND	8.0		µg/L	2	6/20/2012 3:41:41 PM
Acetone	ND	20		µg/L	2	6/20/2012 3:41:41 PM
Bromobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Bromodichloromethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Bromoform	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Bromomethane	ND	6.0		µg/L	2	6/20/2012 3:41:41 PM
2-Butanone	ND	20		µg/L	2	6/20/2012 3:41:41 PM
Carbon disulfide	ND	20		µg/L	2	6/20/2012 3:41:41 PM
Carbon Tetrachloride	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Chlorobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Chloroethane	ND	4.0		µg/L	2	6/20/2012 3:41:41 PM
Chloroform	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Chloromethane	ND	6.0		µg/L	2	6/20/2012 3:41:41 PM
2-Chlorotoluene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
4-Chlorotoluene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
cis-1,2-DCE	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	6/20/2012 3:41:41 PM
Dibromochloromethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Dibromomethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Dichlorodifluoromethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,1-Dichloroethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,1-Dichloroethene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2-Dichloropropane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,3-Dichloropropane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
2,2-Dichloropropane	ND	4.0		µg/L	2	6/20/2012 3:41:41 PM
1,1-Dichloropropene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
2-Hexanone	ND	20		µg/L	2	6/20/2012 3:41:41 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-3

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 12:20:00 PM

**Lab ID:** 1206759-005

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Isopropylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	6/20/2012 3:41:41 PM
Methylene Chloride	ND	6.0		µg/L	2	6/20/2012 3:41:41 PM
n-Butylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
n-Propylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
sec-Butylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Styrene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
tert-Butylbenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	6/20/2012 3:41:41 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
trans-1,2-DCE	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	6/20/2012 3:41:41 PM
Vinyl chloride	ND	2.0		µg/L	2	6/20/2012 3:41:41 PM
Xylenes, Total	ND	3.0		µg/L	2	6/20/2012 3:41:41 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%REC	2	6/20/2012 3:41:41 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	2	6/20/2012 3:41:41 PM
Surr: Dibromofluoromethane	99.6	69.8-130		%REC	2	6/20/2012 3:41:41 PM
Surr: Toluene-d8	104	70-130		%REC	2	6/20/2012 3:41:41 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: SNV
Total Dissolved Solids	317	20.0		mg/L	1	6/22/2012 9:02:00 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206759**

Date Reported: **6/25/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** MW-3 Dissolved

**Project:** VC #1 (Buckeye)

**Collection Date:** 6/17/2012 12:20:00 PM

**Lab ID:** 1206759-006

**Matrix:** AQUEOUS

**Received Date:** 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	27	10		mg/L	20	6/20/2012 4:28:37 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

CLIENT: Intera, Inc.

Client Sample ID: Trip Blank

Project: VC #1 (Buckeye)

Collection Date:

Lab ID: 1206759-007

Matrix: TRIP BLANK

Received Date: 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Benzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Toluene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Naphthalene	ND	2.0		µg/L	1	6/20/2012 4:12:05 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	6/20/2012 4:12:05 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	6/20/2012 4:12:05 PM
Acetone	ND	10		µg/L	1	6/20/2012 4:12:05 PM
Bromobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Bromoform	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Bromomethane	ND	3.0		µg/L	1	6/20/2012 4:12:05 PM
2-Butanone	ND	10		µg/L	1	6/20/2012 4:12:05 PM
Carbon disulfide	ND	10		µg/L	1	6/20/2012 4:12:05 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Chlorobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Chloroethane	ND	2.0		µg/L	1	6/20/2012 4:12:05 PM
Chloroform	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Chloromethane	ND	3.0		µg/L	1	6/20/2012 4:12:05 PM
2-Chlorotoluene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
4-Chlorotoluene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/20/2012 4:12:05 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Dibromomethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	6/20/2012 4:12:05 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
2-Hexanone	ND	10		µg/L	1	6/20/2012 4:12:05 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
- U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206759

Date Reported: 6/25/2012

CLIENT: Intera, Inc.

Client Sample ID: Trip Blank

Project: VC #1 (Buckeye)

Collection Date:

Lab ID: 1206759-007

Matrix: TRIP BLANK

Received Date: 6/19/2012 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: JDJ
Isopropylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/20/2012 4:12:05 PM
Methylene Chloride	ND	3.0		µg/L	1	6/20/2012 4:12:05 PM
n-Butylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
n-Propylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
sec-Butylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Styrene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
tert-Butylbenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/20/2012 4:12:05 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/20/2012 4:12:05 PM
Vinyl chloride	ND	1.0		µg/L	1	6/20/2012 4:12:05 PM
Xylenes, Total	ND	1.5		µg/L	1	6/20/2012 4:12:05 PM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	1	6/20/2012 4:12:05 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	6/20/2012 4:12:05 PM
Surr: Dibromofluoromethane	103	69.8-130		%REC	1	6/20/2012 4:12:05 PM
Surr: Toluene-d8	107	70-130		%REC	1	6/20/2012 4:12:05 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  
U Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206759

25-Jun-12

**Client:** Intera, Inc.  
**Project:** VC #1 (Buckeye)

Sample ID <b>MB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R3587</b>		RunNo: <b>3587</b>							
Prep Date:	Analysis Date: <b>6/20/2012</b>		SeqNo: <b>101235</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R3587</b>		RunNo: <b>3587</b>							
Prep Date:	Analysis Date: <b>6/20/2012</b>		SeqNo: <b>101236</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.1	0.50	5.000	0	101	90	110			

Sample ID <b>MB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R3587</b>		RunNo: <b>3587</b>							
Prep Date:	Analysis Date: <b>6/21/2012</b>		SeqNo: <b>101297</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R3587</b>		RunNo: <b>3587</b>							
Prep Date:	Analysis Date: <b>6/21/2012</b>		SeqNo: <b>101298</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.6	90	110			

Sample ID <b>MB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R3643</b>		RunNo: <b>3643</b>							
Prep Date:	Analysis Date: <b>6/22/2012</b>		SeqNo: <b>102533</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID <b>LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R3643</b>		RunNo: <b>3643</b>							
Prep Date:	Analysis Date: <b>6/22/2012</b>		SeqNo: <b>102534</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.0	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#: 1206759

25-Jun-12

Client: Intera, Inc.

Project: VC #1 (Buckeye)

Sample ID <b>b3</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3546</b>			RunNo: <b>3546</b>						
Prep Date:	Analysis Date: <b>6/19/2012</b>			SeqNo: <b>99835</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								
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#: 1206759

25-Jun-12

Client: Intera, Inc.

Project: VC #1 (Buckeye)

Sample ID <b>b3</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R3546</b>			RunNo: <b>3546</b>						
Prep Date:	Analysis Date: <b>6/19/2012</b>			SeqNo: <b>99835</b>		Units: <b>µg/L</b>				
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	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.4	70	130			
Surr: Dibromofluoromethane	11		10.00		107	69.8	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID <b>100ng icvb</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8260B: VOLATILES</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>R3546</b>			RunNo: <b>3546</b>						
Prep Date:	Analysis Date: <b>6/19/2012</b>			SeqNo: <b>99837</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	93.4	84.1	126			
Toluene	17	1.0	20.00	0	87.3	80	120			
Chlorobenzene	17	1.0	20.00	0	82.9	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	99.8	83	130			
Trichloroethene (TCE)	19	1.0	20.00	0	94.2	76.2	119			
Surr: 1,2-Dichloroethane-d4	30		30.00		100	70	130			
Surr: 4-Bromofluorobenzene	27		30.00		91.6	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#: 1206759

25-Jun-12

Client: Intera, Inc.

Project: VC #1 (Buckeye)

Sample ID	100ng icvb	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R3546			RunNo: 3546					
Prep Date:		Analysis Date: 6/19/2012			SeqNo: 99837		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	31		30.00		104	69.8	130			
Surr: Toluene-d8	28		30.00		92.0	70	130			

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3588			RunNo: 3588					
Prep Date:		Analysis Date: 6/20/2012			SeqNo: 101363		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#: 1206759

25-Jun-12

Client: Intera, Inc.

Project: VC #1 (Buckeye)

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R3588			RunNo: 3588					
Prep Date:		Analysis Date: 6/20/2012			SeqNo: 101363	Units: µg/L				
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	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130			
Surr: Dibromofluoromethane	11		10.00		106	69.8	130			
Surr: Toluene-d8	10		10.00		104	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#: 1206759

25-Jun-12

Client: Intera, Inc.

Project: VC #1 (Buckeye)

Sample ID	100 lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R3588			RunNo: 3588					
Prep Date:	Analysis Date: 6/20/2012			SeqNo: 101365		Units: µg/L				
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	18	1.0	20.00	0	89.6	80	120			
Chlorobenzene	18	1.0	20.00	0	88.1	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	93.8	83	130			
Trichloroethene (TCE)	19	1.0	20.00	0	92.8	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.7	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.2	70	130			
Surr: Dibromofluoromethane	10		10.00		103	69.8	130			
Surr: Toluene-d8	11		10.00		106	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#: 1206759

25-Jun-12

**Client:** Intera, Inc.  
**Project:** VC #1 (Buckeye)

Sample ID	MB-2484		SampType:	MBLK		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW		Batch ID:	2484		RunNo:	3612				
Prep Date:	6/20/2012		Analysis Date:	6/22/2012		SeqNo:	101986		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-2484		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 2484		RunNo: 3612					
Prep Date:	6/20/2012		Analysis Date: 6/22/2012		SeqNo: 101987		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1030	20.0	1000	0	103	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: 1206759

Received by/date: mg 06/19/12

Logged By: Michelle Garcia 6/19/2012 8:40:00 AM

*Michelle Garcia*

Completed By: Michelle Garcia 6/19/2012 9:11:14 AM

*Michelle Garcia*

Reviewed By: [Signature] 06/19/12

### 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: ☐ 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	3.8	Good	Yes			

# Chain-of-Custody Record

Client: Intera Inc.

Mailing Address: 6000 Uptown Blvd. Ste 220  
Albuquerque, NM 88220  
 Phone #: 505-246-1600  
 email or Fax#: 505-246-2600

QA/QC Package:  
☒ Standard ☐ Level 4 (Full Validation)

Accreditation  
☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

VC #1 (Buckeye)

Project #:

NMGSD.M002.VC1

Project Manager:

Joe Galemore

Sampler: T. Johnson / J. Palmer

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.8

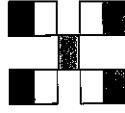
Container Type and #  
 Preservative Type  
 HEAL No.  
1206759

6/17/12	1555	Water	MW-1	VOA	HCl	-001
6/17/12	1555		MW-1	125ml plastic	None	-002
6/17/12	1555		MW-1	500ml plastic	None	-001
6/17/12	1555	620	MW-2	VOA	HCl	-003
6/17/12	1555	620	MW-2	125ml plastic	None	-004
6/17/12	1555	620	MW-2	500ml plastic	None	-003
6/17/12	1220		MW-3	VOA	HCl	-005
6/17/12	1220		MW-3	125ml plastic	None	-006
6/17/12	1220	↓	MW-3	500ml plastic	None	-005
6/17/12	1220		TRIP BLANK	VOA XZ	HCl	-008

Date: 6/14/12

Relinquished by: T. Johnson  
 Date: 6/14/12  
 Relinquished by: Michelle Garcia  
 Date: 6/14/12

Remarks:



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

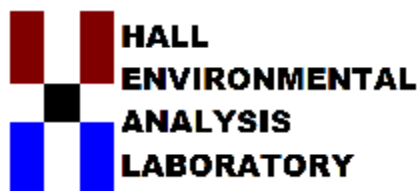
www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

BTX + MTBE + TMB's (8021)	BTX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA) + total naph	8270 (Semi-VOA)	Dissolved Chloride (3000)	TDS (Mod Method SM 2540C)	Air Bubbles (Y or N)
									✓		✓	✓	
									✓			✓	
											✓		
									✓				
											✓		
									✓				
											✓		



*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 26, 2012

Joe Galemore

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 239-6414

FAX (505) 246-2600

RE: VC #1

OrderNo.: 1206426

Dear Joe Galemore:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/11/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued June 19, 2012.

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", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-04 Surface (6"-12")

Project: VC #1

Collection Date: 6/7/2012 2:50:00 PM

Lab ID: 1206426-001

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	210	51		mg/Kg	5	6/15/2012 8:29:41 AM
Motor Oil Range Organics (MRO)	780	260		mg/Kg	5	6/15/2012 8:29:41 AM
Surr: DNOP	0	77.6-140	S	%REC	5	6/15/2012 8:29:41 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/15/2012 2:56:31 PM
Surr: BFB	106	69.7-121		%REC	1	6/15/2012 2:56:31 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	1300	75		mg/Kg	50	6/15/2012 6:41:33 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Acenaphthylene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Acenaphthene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Fluorene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Phenanthrene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Anthracene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Fluoranthene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Pyrene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Chrysene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	6/15/2012 12:28:28 AM
Surr: Benzo(e)pyrene	97.0	40.5-114		%REC	1	6/15/2012 12:28:28 AM
Surr: N-hexadecane	97.5	42.8-117		%REC	1	6/15/2012 12:28:28 AM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Toluene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Naphthalene	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 6:46:17 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206426**

Date Reported: **6/26/2012**

**CLIENT:** Intera, Inc.

**Client Sample ID:** SB-04 Surface (6"-12")

**Project:** VC #1

**Collection Date:** 6/7/2012 2:50:00 PM

**Lab ID:** 1206426-001

**Matrix:** MEOH (SOIL)

**Received Date:** 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 6:46:17 PM
Acetone	ND	0.75		mg/Kg	1	6/13/2012 6:46:17 PM
Bromobenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Bromoform	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Bromomethane	ND	0.15		mg/Kg	1	6/13/2012 6:46:17 PM
2-Butanone	ND	0.50		mg/Kg	1	6/13/2012 6:46:17 PM
Carbon disulfide	ND	0.50		mg/Kg	1	6/13/2012 6:46:17 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
Chlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Chloroethane	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
Chloroform	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Chloromethane	ND	0.15		mg/Kg	1	6/13/2012 6:46:17 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Dibromomethane	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
2-Hexanone	ND	0.50		mg/Kg	1	6/13/2012 6:46:17 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/13/2012 6:46:17 PM
Methylene chloride	ND	0.15		mg/Kg	1	6/13/2012 6:46:17 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Styrene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-04 Surface (6"-12")

Project: VC #1

Collection Date: 6/7/2012 2:50:00 PM

Lab ID: 1206426-001

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
Vinyl chloride	ND	0.050		mg/Kg	1	6/13/2012 6:46:17 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/13/2012 6:46:17 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	6/13/2012 6:46:17 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	1	6/13/2012 6:46:17 PM
Surr: Dibromofluoromethane	116	71.7-132		%REC	1	6/13/2012 6:46:17 PM
Surr: Toluene-d8	96.0	70-130		%REC	1	6/13/2012 6:46:17 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-04 (19.5'-24.5')

Project: VC #1

Collection Date: 6/7/2012 4:40:00 PM

Lab ID: 1206426-002

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/14/2012 10:11:53 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/14/2012 10:11:53 AM
Surr: DNOP	113	77.6-140		%REC	1	6/14/2012 10:11:53 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/15/2012 3:27:15 PM
Surr: BFB	94.5	69.7-121		%REC	1	6/15/2012 3:27:15 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	4800	150		mg/Kg	100	6/15/2012 5:51:53 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Fluorene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Anthracene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Pyrene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Chrysene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/14/2012 7:57:21 PM
Surr: Benzo(e)pyrene	101	40.5-114		%REC	1	6/14/2012 7:57:21 PM
Surr: N-hexadecane	102	42.8-117		%REC	1	6/14/2012 7:57:21 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Toluene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Ethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Naphthalene	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 1:53:10 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-04 (19.5'-24.5')

Project: VC #1

Collection Date: 6/7/2012 4:40:00 PM

Lab ID: 1206426-002

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 1:53:10 AM
Acetone	ND	0.75		mg/Kg	1	6/13/2012 1:53:10 AM
Bromobenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Bromoform	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Bromomethane	ND	0.15		mg/Kg	1	6/13/2012 1:53:10 AM
2-Butanone	ND	0.50		mg/Kg	1	6/13/2012 1:53:10 AM
Carbon disulfide	ND	0.50		mg/Kg	1	6/13/2012 1:53:10 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
Chlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Chloroethane	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
Chloroform	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Chloromethane	ND	0.15		mg/Kg	1	6/13/2012 1:53:10 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Dibromomethane	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
2-Hexanone	ND	0.50		mg/Kg	1	6/13/2012 1:53:10 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/13/2012 1:53:10 AM
Methylene chloride	ND	0.15		mg/Kg	1	6/13/2012 1:53:10 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Styrene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 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
- U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206426**Date Reported: **6/26/2012****CLIENT:** Intera, Inc.**Client Sample ID:** SB-04 (19.5'-24.5')**Project:** VC #1**Collection Date:** 6/7/2012 4:40:00 PM**Lab ID:** 1206426-002**Matrix:** MEOH (SOIL)**Received Date:** 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
Vinyl chloride	ND	0.050		mg/Kg	1	6/13/2012 1:53:10 AM
Xylenes, Total	ND	0.10		mg/Kg	1	6/13/2012 1:53:10 AM
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	6/13/2012 1:53:10 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	6/13/2012 1:53:10 AM
Surr: Dibromofluoromethane	119	71.7-132		%REC	1	6/13/2012 1:53:10 AM
Surr: Toluene-d8	91.8	70-130		%REC	1	6/13/2012 1:53:10 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-03 Surface (6"-12")

Project: VC #1

Collection Date: 6/8/2012 8:30:00 AM

Lab ID: 1206426-003

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/14/2012 10:33:39 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/14/2012 10:33:39 AM
Surr: DNOP	106	77.6-140		%REC	1	6/14/2012 10:33:39 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/15/2012 3:57:58 PM
Surr: BFB	109	69.7-121		%REC	1	6/15/2012 3:57:58 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	200	30		mg/Kg	20	6/12/2012 8:59:28 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Acenaphthylene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Acenaphthene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Fluorene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Phenanthrene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Anthracene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Pyrene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Chrysene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/14/2012 11:22:44 AM
Surr: Benzo(e)pyrene	67.4	40.5-114		%REC	1	6/14/2012 11:22:44 AM
Surr: N-hexadecane	62.5	42.8-117		%REC	1	6/14/2012 11:22:44 AM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Toluene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Ethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Naphthalene	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 2:21:29 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-03 Surface (6"-12")

Project: VC #1

Collection Date: 6/8/2012 8:30:00 AM

Lab ID: 1206426-003

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 2:21:29 AM
Acetone	ND	0.75		mg/Kg	1	6/13/2012 2:21:29 AM
Bromobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Bromoform	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Bromomethane	ND	0.15		mg/Kg	1	6/13/2012 2:21:29 AM
2-Butanone	ND	0.50		mg/Kg	1	6/13/2012 2:21:29 AM
Carbon disulfide	ND	0.50		mg/Kg	1	6/13/2012 2:21:29 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
Chlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Chloroethane	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
Chloroform	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Chloromethane	ND	0.15		mg/Kg	1	6/13/2012 2:21:29 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Dibromomethane	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
2-Hexanone	ND	0.50		mg/Kg	1	6/13/2012 2:21:29 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/13/2012 2:21:29 AM
Methylene chloride	ND	0.15		mg/Kg	1	6/13/2012 2:21:29 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Styrene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206426**Date Reported: **6/26/2012****CLIENT:** Intera, Inc.**Client Sample ID:** SB-03 Surface (6"-12")**Project:** VC #1**Collection Date:** 6/8/2012 8:30:00 AM**Lab ID:** 1206426-003**Matrix:** MEOH (SOIL)**Received Date:** 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: <b>RAA</b>
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
Vinyl chloride	ND	0.050		mg/Kg	1	6/13/2012 2:21:29 AM
Xylenes, Total	ND	0.10		mg/Kg	1	6/13/2012 2:21:29 AM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	6/13/2012 2:21:29 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	6/13/2012 2:21:29 AM
Surr: Dibromofluoromethane	119	71.7-132		%REC	1	6/13/2012 2:21:29 AM
Surr: Toluene-d8	91.7	70-130		%REC	1	6/13/2012 2:21:29 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-03 (19.5'-24')

Project: VC #1

Collection Date: 6/8/2012 10:40:00 AM

Lab ID: 1206426-004

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/14/2012 10:55:36 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/14/2012 10:55:36 AM
Surr: DNOP	108	77.6-140		%REC	1	6/14/2012 10:55:36 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/15/2012 4:28:25 PM
Surr: BFB	125	69.7-121	S	%REC	1	6/15/2012 4:28:25 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Chloride	830	30		mg/Kg	20	6/12/2012 9:24:18 PM
<b>EPA METHOD 8270C: PAHS</b>						Analyst: JDC
Naphthalene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
1-Methylnaphthalene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
2-Methylnaphthalene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Acenaphthylene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Acenaphthene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Fluorene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Phenanthrene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Anthracene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Pyrene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Benz(a)anthracene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Chrysene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Benzo(b)fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Benzo(k)fluoranthene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Benzo(a)pyrene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Dibenz(a,h)anthracene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Benzo(g,h,i)perylene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Indeno(1,2,3-cd)pyrene	ND	0.020		mg/Kg	1	6/14/2012 6:28:07 PM
Surr: Benzo(e)pyrene	69.9	40.5-114		%REC	1	6/14/2012 6:28:07 PM
Surr: N-hexadecane	60.6	42.8-117		%REC	1	6/14/2012 6:28:07 PM
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Toluene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Ethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Naphthalene	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 2:49:46 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: SB-03 (19.5'-24')

Project: VC #1

Collection Date: 6/8/2012 10:40:00 AM

Lab ID: 1206426-004

Matrix: MEOH (SOIL)

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 2:49:46 AM
Acetone	ND	0.75		mg/Kg	1	6/13/2012 2:49:46 AM
Bromobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Bromoform	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Bromomethane	ND	0.15		mg/Kg	1	6/13/2012 2:49:46 AM
2-Butanone	ND	0.50		mg/Kg	1	6/13/2012 2:49:46 AM
Carbon disulfide	ND	0.50		mg/Kg	1	6/13/2012 2:49:46 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
Chlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Chloroethane	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
Chloroform	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Chloromethane	ND	0.15		mg/Kg	1	6/13/2012 2:49:46 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Dibromomethane	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
2-Hexanone	ND	0.50		mg/Kg	1	6/13/2012 2:49:46 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/13/2012 2:49:46 AM
Methylene chloride	ND	0.15		mg/Kg	1	6/13/2012 2:49:46 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Styrene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 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  
 U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206426**Date Reported: **6/26/2012****CLIENT:** Intera, Inc.**Client Sample ID:** SB-03 (19.5'-24')**Project:** VC #1**Collection Date:** 6/8/2012 10:40:00 AM**Lab ID:** 1206426-004**Matrix:** MEOH (SOIL)**Received Date:** 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
Vinyl chloride	ND	0.050		mg/Kg	1	6/13/2012 2:49:46 AM
Xylenes, Total	ND	0.10		mg/Kg	1	6/13/2012 2:49:46 AM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	1	6/13/2012 2:49:46 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/13/2012 2:49:46 AM
Surr: Dibromofluoromethane	118	71.7-132		%REC	1	6/13/2012 2:49:46 AM
Surr: Toluene-d8	94.2	70-130		%REC	1	6/13/2012 2:49:46 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206426

Date Reported: 6/26/2012

CLIENT: Intera, Inc.

Client Sample ID: MeOH Blank

Project: VC #1

Collection Date:

Lab ID: 1206426-005

Matrix: MEOH BLAN

Received Date: 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Toluene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Ethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Naphthalene	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 3:17:59 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	6/13/2012 3:17:59 AM
Acetone	ND	0.75		mg/Kg	1	6/13/2012 3:17:59 AM
Bromobenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Bromoform	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Bromomethane	ND	0.15		mg/Kg	1	6/13/2012 3:17:59 AM
2-Butanone	ND	0.50		mg/Kg	1	6/13/2012 3:17:59 AM
Carbon disulfide	ND	0.50		mg/Kg	1	6/13/2012 3:17:59 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
Chlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Chloroethane	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
Chloroform	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Chloromethane	ND	0.15		mg/Kg	1	6/13/2012 3:17:59 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Dibromomethane	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
2-Hexanone	ND	0.50		mg/Kg	1	6/13/2012 3:17:59 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
- U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206426**Date Reported: **6/26/2012****CLIENT:** Intera, Inc.**Client Sample ID:** MeOH Blank**Project:** VC #1**Collection Date:****Lab ID:** 1206426-005**Matrix:** MEOH BLAN**Received Date:** 6/11/2012 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: RAA
Isopropylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	6/13/2012 3:17:59 AM
Methylene chloride	ND	0.15		mg/Kg	1	6/13/2012 3:17:59 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Styrene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
Vinyl chloride	ND	0.050		mg/Kg	1	6/13/2012 3:17:59 AM
Xylenes, Total	ND	0.10		mg/Kg	1	6/13/2012 3:17:59 AM
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	6/13/2012 3:17:59 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	1	6/13/2012 3:17:59 AM
Surr: Dibromofluoromethane	118	71.7-132		%REC	1	6/13/2012 3:17:59 AM
Surr: Toluene-d8	92.7	70-130		%REC	1	6/13/2012 3:17:59 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  
U   Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2347		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 2347		RunNo: 3387					
Prep Date:	6/12/2012		Analysis Date: 6/12/2012		SeqNo: 94687		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

### 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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2373		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 2373		RunNo: 3419					
Prep Date:	6/13/2012		Analysis Date: 6/14/2012		SeqNo: 95468		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	77.6	140			

Sample ID	LCS-2373		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2373		RunNo: 3419					
Prep Date:	6/13/2012		Analysis Date: 6/14/2012		SeqNo: 95469		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.2	52.6	130			
Surr: DNOP	4.6		5.000		92.3	77.6	140			

### 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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	MB-2392		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 2392		RunNo: 3464					
Prep Date:	6/14/2012		Analysis Date: 6/15/2012		SeqNo: 97874		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	950		1000		94.8	69.7	121			

Sample ID	LCS-2392		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 2392		RunNo: 3464					
Prep Date:	6/14/2012		Analysis Date: 6/15/2012		SeqNo: 97903		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.0	25.00	0	123	98.5	133			
Surr: BFB	960		1000		96.3	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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3366	RunNo:	3366					
Prep Date:		Analysis Date:	6/12/2012	SeqNo:	94236	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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R3366	RunNo:	3366					
Prep Date:		Analysis Date:	6/12/2012	SeqNo:	94236	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	0.46		0.5000		91.3	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.58		0.5000		115	71.7	132			
Surr: Toluene-d8	0.48		0.5000		96.0	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R3366	RunNo:	3366					
Prep Date:		Analysis Date:	6/12/2012	SeqNo:	94237	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	92.4	70.7	123			
Toluene	0.92	0.050	1.000	0	91.7	80	120			
Chlorobenzene	0.93	0.050	1.000	0	93.2	70	130			
1,1-Dichloroethene	1.0	0.050	1.000	0	101	63.1	148			
Trichloroethene (TCE)	0.90	0.050	1.000	0	89.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.8	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.3	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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: R3366		RunNo: 3366					
Prep Date:			Analysis Date: 6/12/2012		SeqNo: 94237		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.58		0.5000		117	71.7	132			
Surr: Toluene-d8	0.48		0.5000		95.3	70	130			

Sample ID	1206426-001a ms		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	SB-04 Surface (6"-1		Batch ID: R3396		RunNo: 3396					
Prep Date:			Analysis Date: 6/13/2012		SeqNo: 95230		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.0	81.3	119			
Toluene	0.89	0.050	1.000	0.009380	88.3	75	121			
Chlorobenzene	0.92	0.050	1.000	0	91.5	78.5	120			
1,1-Dichloroethene	1.1	0.050	1.000	0	110	75.3	115			
Trichloroethene (TCE)	0.96	0.050	1.000	0	95.6	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.6	70	130			
Surr: Dibromofluoromethane	0.63		0.5000		127	71.7	132			
Surr: Toluene-d8	0.47		0.5000		93.3	70	130			

Sample ID	1206426-001a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	SB-04 Surface (6"-1		Batch ID: R3396		RunNo: 3396					
Prep Date:	Analysis Date: 6/13/2012		SeqNo: 95232		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	90.5	81.3	119	7.96	15.7	
Toluene	0.85	0.050	1.000	0.009380	84.0	75	121	4.95	16.2	
Chlorobenzene	0.88	0.050	1.000	0	88.2	78.5	120	3.70	14.9	
1,1-Dichloroethene	0.98	0.050	1.000	0	97.5	75.3	115	11.8	31.8	
Trichloroethene (TCE)	0.87	0.050	1.000	0	87.5	67.8	119	8.84	16.5	
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.3	70	130	0	0	
Surr: Dibromofluoromethane	0.61		0.5000		121	71.7	132	0	0	
Surr: Toluene-d8	0.46		0.5000		92.8	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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	<b>mb-2364</b>		SampType:	<b>MBLK</b>		TestCode:	<b>EPA Method 8270C: PAHs</b>			
Client ID:	<b>PBS</b>		Batch ID:	<b>2364</b>		RunNo:	<b>3439</b>			
Prep Date:	<b>6/13/2012</b>		Analysis Date:	<b>6/14/2012</b>		SeqNo:	<b>96241</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	0.32		0.3300		95.8	40.5	114			
Surr: N-hexadecane	1.2		1.460		85.1	42.8	117			

Sample ID	<b>lcs-2364</b>		SampType:	<b>LCS</b>		TestCode:	<b>EPA Method 8270C: PAHs</b>			
Client ID:	<b>LCSS</b>		Batch ID:	<b>2364</b>		RunNo:	<b>3439</b>			
Prep Date:	<b>6/13/2012</b>		Analysis Date:	<b>6/14/2012</b>		SeqNo:	<b>96242</b>		Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.28	0.020	0.3300	0	84.2	50.15	108.9			
1-Methylnaphthalene	0.28	0.020	0.3300	0	85.7	49.96	108.45			
2-Methylnaphthalene	0.28	0.020	0.3300	0	84.9	53.36	116.25			
Acenaphthylene	0.29	0.020	0.3300	0	86.9	48.44	106.25			
Acenaphthene	0.31	0.020	0.3300	0	94.1	51.23	105.53			
Fluorene	0.29	0.020	0.3300	0	86.4	48.42	104.49			
Phenanthrene	0.32	0.020	0.3300	0	96.5	51.76	107.81			
Anthracene	0.31	0.020	0.3300	0	93.2	51.74	104.29			
Fluoranthene	0.27	0.020	0.3300	0	81.8	54.67	103.26			
Pyrene	0.26	0.020	0.3300	0	80.2	57.16	111.06			
Benz(a)anthracene	0.27	0.020	0.3300	0	81.6	59.07	102.66			
Chrysene	0.29	0.020	0.3300	0	87.2	58.19	107.82			
Benzo(b)fluoranthene	0.30	0.020	0.3300	0	89.4	54.1	110.08			
Benzo(k)fluoranthene	0.29	0.020	0.3300	0	88.0	52.04	108.39			
Benzo(a)pyrene	0.30	0.020	0.3300	0	90.1	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#: 1206426

26-Jun-12

Client: Intera, Inc.

Project: VC #1

Sample ID	lcs-2364		SampType: LCS			TestCode: EPA Method 8270C: PAHs				
Client ID:	LCSS		Batch ID: 2364			RunNo: 3439				
Prep Date:	6/13/2012		Analysis Date: 6/14/2012			SeqNo: 96242		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	85.9	54.55	106.56			
Benzo(g,h,i)perylene	0.30	0.020	0.3300	0	90.4	51.48	105.08			
Indeno(1,2,3-cd)pyrene	0.29	0.020	0.3300	0	86.6	55.5	104.02			
Surr: Benzo(e)pyrene	0.28		0.3300		84.0	35.28	118.46			
Surr: N-hexadecane	1.2		1.460		83.2	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

## Sample Log-In Check List

Client Name: INT Work Order Number: 1206426  
Received by/date: AG 06/11/12  
Logged By: Lindsay Mangin 6/11/2012 12:45:00 PM  
Completed By: Lindsay Mangin 6/11/2012 4:22:08 PM  
Reviewed By: IO 06/12/12

### 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? 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: ☐ 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	3.4	Good	Not Present			

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

**APPENDIX F**  
**Survey of Monitoring Well Locations**

1/2" STL. ROD  
W/SIMS.

25  
26

35  
36



3225.9'

N00°39'55"W

79.2'

1987.9'

2-1/2" STL.  
ROD W/SIMS.

35 36 T-17-S  
2 1 T-18-S

N89°20'05"E 592.1'

N89°20'05"E 659.7'

TRANSFORMER POLE

3-W ELECTRIC LINE

RICE BURIED WATER PIPELINE

MW #3

STATE OF NEW MEXICO  
SOUTHWESTERN VC #1

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

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TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

4-W ELECTRIC LINE  
TRAIL ROAD

4-W ELECTRIC LINE

SPS BURIED WATER PIPELINE

PENROC OIL  
STATE G-36 #1 P&A

MW #1

B.M. 3893.95  
2" ALUM. CAP

TANKS

SOIL BORE HOLE

SOIL BORE HOLE

PLAINS BURIED PIPELINE

SOIL BORE HOLE

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

TRAIL ROAD

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TRAIL ROAD

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# COORDINATE TABLE

COORDINATES VALUES SHOWN ARE RELATIVE TO THE  
NORTH AMERICAN DATUM 1927, "NEW MEXICO EAST ZONE".  
ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN  
VERTICAL DATUM 1988

WELL	COORDINATES	ELEVATIONS
MW #1	652113.2 N 823022.5 E	NATURAL GROUND - 3894.03' TOP OF PVC - 3897.17'
MW #2	652172.5 N 823094.8 E	NATURAL GROUND - 3893.53' TOP OF PVC - 3896.67'
MW #3	652238.1 N 822650.6 E	NATURAL GROUND - 3895.48' TOP OF PVC - 3898.47'

## LEGEND:

- - DENOTES FOUND CORNER AS NOTED
- ⬢ - DENOTES EXISTING MONITOR WELL
- ∅ - DENOTES EXISTING PRODUCTION WELL (P&A)



Scale: 1" = 100'

## INTERA INCORPORATED

### MONITOR WELL LOCATIONS

IN SECTION 36,  
TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M.  
LEA COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES  
SINCE 1946  
JOHN WEST SURVEYING COMPANY  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

Survey Date: 6/12/12	CAD Date: 6/22/12	Drawn By: DSS
W.O. No.: 12110963	Rev.:	Sheet 1 of 1

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 *Ronald J. Eidson* DATE: *6/22/2012*

