SITE INVESTIGATION REPORT

Casa Grande/El Vado Motel, Lots 8A-1A, 8A-2A, 8A-3, Block 6 and Lots 24-39, Block 3, Albuquerque, New Mexico

Prepared for:

City of Albuquerque
Department of Family and Community Services
PO Box 1293, Room 504
Albuquerque, NM 87103

Prepared by:

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March 15, 2010

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethyl benzene, and total xylenes
COA	City of Albuquerque
DMD	Department of Municipal Development
DRO	diesel range organics
Earth Worx	Earth Worx Environmental Services, LLC
EDB	1,2-dibromoethene
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ft	feet
GRO	gasoline range organics
HASP	health and safety plan
HEAL	Hall Environmental Analysis Laboratory
INTERA	INTERA Incorporated
mg/kg	milligram per kilogram
mg/l	milligram per liter
MRO	motor oil range organics
MTBE	methyl tert-butyl ether
NMED	New Mexico Environmental Department
NM-GS	New Mexico Groundwater Standard
NMWQCC	New Mexico Water Quality Control Commission
NTP	notice to proceed
PAHs	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyls
PID	photoionization detector
PSTB	Petroleum Storage Tank Bureau
PNM	Public Service Company of New Mexico
REC	recognized environmental condition

ACRONYMS AND ABBREVIATIONS (concluded)

Site	Casa Grande property located at 2412A & B Central Avenue and El Vado Motel property located at 2500 Central Avenue, Albuquerque, Bernalillo County, New Mexico
SSL	Soil Screening Level
Sunbelt	Sunbelt Geophysics
TPH	total petroleum hydrocarbon
USCS	Unified Soil Classification System
UST	underground storage tank

1.0 INTRODUCTION

In accordance with the Work Plan submitted to the City of Albuquerque (COA) Department of Municipal Development (DMD) on December 28, 2009, INTERA Incorporated (INTERA) is submitting this Site Investigation Report (Report) documenting the completed field activities for the Casa Grande property located at 2412A & B and 2424 Central Avenue and the El Vado Motel property located at 2500 Central Avenue, Albuquerque, Bernalillo County, New Mexico (Site) (Figure 1). This report summarizes tasks associated with the completion of eight soil borings, the collection and submittal of four soil samples and four groundwater samples for laboratory analysis, the collection and submittal of two surficial soil samples of stained soil for laboratory analysis, and the completion of a geophysical survey at the Site. The Site is comprised of a North Area and South Area and is shown on Figure 2. The field work associated with this investigation was completed on February 9, 2010.

1.1 Background

INTERA completed a Phase I Environmental Site Assessment (ESA) at the Site in November 2009 and identified the following recognized environmental conditions (RECs) in connection with the Site:

- Staining at the concrete base and surrounding gravel/surficial soils of the pad-mounted transformer located immediately south of the southern North Area building;
- Historic gasoline station/gasoline pumps located at the El Vado Motel; and,
- Historic gasoline release at the Former Casa Grande Chevron located within an adjoining property beyond Central Avenue to the west of the Site (INTERA, 2009).

INTERA concluded that a gasoline release documented at the Former Casa Grande Chevron, located to the west across Central Avenue, may have impacted the Site and required additional Site investigation activities including soil and groundwater sampling. Furthermore, INTERA recommended that a geophysical investigation be conducted at the Site to determine if underground storage tanks (USTs) exist at the Site associated with the historic gasoline pumps formerly located at the El Vado Motel.

1.2 Work Plan

To address the concerns presented in the Phase I ESA, the COA requested INTERA to develop a Work Plan to investigate the identified RECs at the Site. INTERA developed a Work Plan for the Site Investigation and submitted it to the COA for approval on December 28, 2009. A copy of the Work Plan is provided as Appendix A. The Work Plan was approved by the COA in Notice to Proceed (NTP) Letter No. 5 (COA Contract No. 7772), dated January 21, 2010. A copy of the NTP Letter is provided as Appendix B.

A Site-specific health and safety plan (HASP) was written by INTERA prior to the initiation of the project and was used during field activities. The HASP was explained in detail to all field personnel and used as a guide for each daily health and safety meeting.

2.0 Field Activities

The field activities associated with the Site Investigation were completed at the Site on February 9, 2010. The field activity tasks completed at the Site are discussed in the following subsections.

2.1 Soil Borings and Soil Sampling

Earth Worx Environmental Services, LLC (Earth Worx) of Los Lunas, New Mexico utilized direct-push drilling methods to perform the soil boring activities under the direct supervision of INTERA. Using direct-push methods, soil samples can be collected continuously from the ground surface to the terminal depth of the soil boring. The locations of the soil borings are shown on Figure 2. Soil samples were collected continuously from the ground surface to terminal depth of each soil boring (approximately 12 feet below ground surface (ft bgs)). Subsurface soils were described in accordance with the Unified Soil Classification System (USCS). Descriptions of the subsurface soil include lithologic type, color, particle size range, particle angularity, particle sorting, moisture content, and structure. Completed copies of the soil borings logs are included in Appendix C. In general, sandy soils with little or no gravel were encountered from the ground surface to approximately 12 feet bgs, the approximate terminal depth of each soil boring. Photoionization detector (PID) measurements were collected from soil samples from each 4-foot interval (as measured from the ground surface to the total depth of each soil boring, 12 feet bgs). For each 4-foot interval, INTERA collected a soil sample for soil logging and to perform PID headspace analysis using the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) heated headspace method. The results of the PID readings for each 4-foot interval throughout the soil boring were recorded on the soil boring logs (see Appendix C). INTERA did not detect PID readings in any of the soil samples collected.

Soil samples collected at each 4-foot interval were placed in laboratory-provided containers and immediately placed on ice. Soil samples for laboratory analysis were collected from four soil borings: SB-03; SB-05; SB-06; and SB-07, each at the depth interval of 8 to 11 ft bgs. Field screening did not reveal contamination both through visual/olfactory observations and PID readings. Based on the lack of field screening results indicating impact, as described in INTERA's Work Plan, soil samples selected for laboratory analysis were collected immediately above the groundwater table. The reasoning for why soil samples were selected from specific soil borings for laboratory analysis is listed in the following table.

Soil Boring Identification	Reason for Selection of Soil Sample for Laboratory Analysis
SB-03/8'-11'	Soil boring located downgradient of former Casa Grande Chevron
SB-05/8'-11'	Soil boring located downgradient of former Casa Grande Chevron and adjacent to former fuel pumps at the El Vado Motel
SB-06/8'-11'	Soil boring located downgradient of former Casa Grande Chevron
SB-07/8'-11'	Soil boring located downgradient of former Casa Grande Chevron

Each soil sample was submitted for laboratory analysis at Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico. The soil samples were analyzed for total petroleum hydrocarbons (TPH) modified for diesel range organics (DRO), gasoline range organics (GRO), and motor oil range organics (MRO) by U.S. Environmental Protection Agency (EPA) Method 8015, benzene, toluene, ethyl benzene, total xylenes (BTEX), 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and methyl tert-butyl ether (MTBE) by EPA Method 8021B, 1,2-dibromoethene (EDB) by EPA Method 504.1, total lead by EPA Method 6010C/200.7/6020/200.8, and polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8310. A complete copy of the laboratory analytical report is included in Appendix D.

Soil cuttings were placed in a 5-gallon container and will be disposed of as non-hazardous waste by INTERA. Once the soil boring was completed the soil boring was abandoned by pouring bentonite pellets or chips into the soil boring and then hydrating the bentonite using potable water. At the surface, the asphalt was patched using cold patch asphalt at those soil boring completed in asphalt areas. The drill rods were decontaminated between soil borings to minimize the potential for cross-contamination. A photographic log of the drilling activities is included in Appendix E.

2.2 Groundwater Samples

Groundwater grab samples were collected from soil borings SB-01, SB-04, SB-05, and SB-07 for the reasons presented in the following table.

Soil Boring Identification	Reason for Collecting a Groundwater Sample from the Soil Boring
SB-01	Background
SB-04	Located downgradient of former Casa Grande Chevron and adjacent to former fuel pumps
SB-05	Located downgradient of former Casa Grande Chevron and adjacent to former fuel pumps
SB-07	Located downgradient of former Casa Grande Chevron

Groundwater samples were collected using dedicated polyethylene tubing and a peristaltic pump. Groundwater was purged from each soil boring until it was clear of sediment. Once the purged groundwater became clear, samples were collected, containerized, and immediately placed on ice for laboratory analysis at HEAL. Each groundwater sample submitted for laboratory analysis

was analyzed for TPH DRO, GRO, and MRO by EPA Method 8015, BTEX, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and by EPA Method 8021B, EDB by EPA Method 504.1, dissolved lead, iron, and manganese by EPA Method 6010C/200.7/6020/200.8, and PAHs by EPA Method 8310. The groundwater sample for dissolved lead, iron, and manganese was field filtered using a 0.45 micron filter. A copy of the laboratory analytical report is included in Appendix D.

2.3 Surface Soil Samples

Two surface soil samples were collected from stained surficial soils surrounding the pad-mounted transformer adjacent to the North Area building. A hand auger was used to obtain the surficial soil samples from two locations observed to be the most highly stained soil surrounding the concrete pad to depths of approximately 1 ft bgs (Figure 2). The surface soil samples were placed in laboratory-provided containers, placed on ice, and submitted for laboratory analysis of polychlorinated biphenyls (PCBs) by EPA Method 8082.

3.0 Results

The results of the field activities conducted at the Site are summarized in the following subsections. A copy of the HEAL Analytical Report is included in Appendix D.

3.1 Soil Boring Sample Analytical Results

Lead was detected in all the soil samples submitted for laboratory analysis at concentrations ranging from 1.5 to 2.1 milligrams per kilogram (mg/kg) (Table 1). These concentrations fall below the NMED residential Soil Screening Level (SSL) of 400 mg/kg. No other analytes were detected in the soil samples submitted for laboratory analysis.

3.2 Groundwater Sample Analytical Results

Dissolved lead was detected in groundwater samples collected from SB-01 and SB-07 at concentrations of 0.0076 and 0.0057 milligrams per liter (mg/l), respectively. These concentrations are below the New Mexico Groundwater Standard (NM-GS) defined by the New Mexico Water Quality Control Commission (NMWQCC) for lead of 0.05 mg/l. Dissolved iron was detected in groundwater samples collected from SB-01, SB-04, SB-05, and SB-07 at concentrations of 0.13, 1.5, 0.66, and 0.25 mg/l, respectively. The dissolved iron concentration detected in the groundwater sample collected from SB-04 exceeds the NM-GS for iron of 1.0 mg/l. Dissolved manganese was detected in groundwater samples collected from SB-01, SB-04, SB-05, and SB-07 at concentrations of 0.24, 0.64, 0.58, and 0.29 mg/l, respectively. The dissolved manganese concentrations detected in all groundwater samples exceed the NM-GS for manganese of 0.2 mg/l. Groundwater analytical results are provided in Table 2.

3.3 Surface Soil Sample Analytical Results

PCBs were not detected in the two surface soil samples submitted for laboratory analysis at concentrations exceeding the laboratory reporting limit of 0.10 mg/kg for PCBs.

4.0 Geophysical Survey

INTERA subcontracted Sunbelt Geophysics (Sunbelt) of Socorro, New Mexico to complete a geophysical survey at the Site. Sunbelt completed a geophysical survey to determine if USTs and associated ancillary piping associated with historic gasoline pumps are located at the western portion of the El Vado Motel property. In addition, a geophysical survey was completed in an area located in the southwestern portion of the Casa Grande property in the vicinity of the former gasoline pumps. The geophysical survey area locations are shown on Figure 2. Sunbelt concluded that no subsurface objects consistent with USTs were found at either the El Vado Motel or Casa Grande portions of the Site (Sunbelt, 2010). A copy of the Sunbelt geophysical survey report is included as Appendix F.

5.0 Summary and Conclusions

INTERA conducted a Site Investigation at the Site on February 9, 2010. The Site Investigation included the collection of soil and ground water samples and the completion of a geophysical survey. The findings of the Site Investigation are summarized below. A photographic log of field activities is included as Appendix E.

- Eight soil borings were completed at the Site on February 9, 2010. The soil boring locations are shown on Figure 2. Soils were characterized according to the USCS and consisted mainly of poorly graded sands with little or no gravel. Soil boring logs are included as Appendix C.

- Soil borings were sampled continuously from the ground surface to the terminal depths of each soil boring (approximately 12 ft bgs). Soil samples from each four foot interval of each soil boring were screened using PID heated headspace methods. No PID readings were observed from any of the soil samples collected during the advancement of the soil borings.

- Four soil samples collected from immediately above the water table were submitted for laboratory analysis (SB-03/8’-11’, SB-05/8’-11’, SB-06/8’-11’, and SB-07/8’-11’).

- Four groundwater grab samples were collected from soil borings SB-01, SB-04, SB-05, and SB-07 and submitted for laboratory analysis.

- Two surface soil samples were collected from the stained surficial soil surrounding the pad-mounted transformer located adjacent to the North Area building. The surface soil sampling locations are shown on Figure 2.

- Soil sample and groundwater analytical results are summarized in Tables 1 and 2 and a complete laboratory analytical report is included in Appendix D. Soil samples were analyzed for TPH DRO, GRO, and MRO, BTEX, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and MTBE, EDB, total lead, and PAHs. Groundwater samples were analyzed for TPH DRO, GRO, and MRO, BTEX, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, EDB, dissolved lead, iron, and manganese, and PAHs.

- Soil Sample analytical results were all below laboratory reporting limits with the exception of lead. Lead was indentified in soil samples SB-03, SB-05, SB-06, and SB-07 at concentrations well below the NMED residential SSL for lead.

- Iron and manganese were detected in groundwater samples collected at the Site at concentrations that exceeded their respective standards as defined by NMWQCC. The elevated values may be due to natural attenuation of petroleum hydrocarbons in groundwater (note the adjoining confirmed petroleum hydrocarbon release facility) and/or may be attributed to elevated background conditions. No other analytes were detected in groundwater at concentrations which exceed laboratory reporting limits.

- Surface soil samples were analyzed for PCBs. PCBs were not detected in surface soil samples at concentrations above the laboratory reporting limits.

- A geophysical survey was conducted at the Site in order to search for USTs that may have been left in place from historic operations at the Site. The geophysical survey did not find any subsurface objects consistent with USTs at the Site. A relic foundation and several buried lines were found at 2424 Central Avenue (Sunbelt, 2010). A complete copy of the geophysical survey report is included in Appendix F.

6.0 Recommendations

Based on current and historical information, further investigation work at the Site does not appear warranted.

The stained soils at the base of the pad-mounted transformer have been determined not to contain PCBs. The extent of stained soil has been determined to be limited in nature. Any cleanup associated with the stained soils is the responsibility of the transformer owner. The COA should contact the Public Service Company of New Mexico (PNM) to request removal of the stained soils.

Care should be taken if future Site activities involve excavation work, specifically in the area of the geophysical survey conducted at the 2424 Central Avenue. Geophysical results indicate that a relic foundation and several buried lines (former product, water, or electrical conduit) still exist within the subsurface. Buried pipes also exist within the geophysical survey area at the 2500 Central Avenue portion of the Site. The attached geophysical report should be reviewed prior to any excavation activities.

7.0 References

INTERA Incorporated (INTERA). 2009. “Phase I Environmental Site Assessment, Casa Grande/El Vado Motel Lots 8A-1A, 8A-2A, 8A-3, Block 6 and Lots 24-39, Block 3 Albuquerque, New Mexico”, November 6.

Sunbelt Geophysics (Sunbelt). 2010. “Geophysical Investigation for Abandoned USTs 2500 Central SW (El Vado Motel) and 2424 Central SW, Albuquerque, New Mexico.” Prepared for INTERA Incorporated. February.

FIGURES

USGS 7.5 Minute Topographic Map:
Albuquerque West Quadrangle, 1996;
Contour Interval 10 Feet

Figure 1
Site Location Map
Casa Grande/El Vado Motel
Site Investigation
Albuquerque, NM

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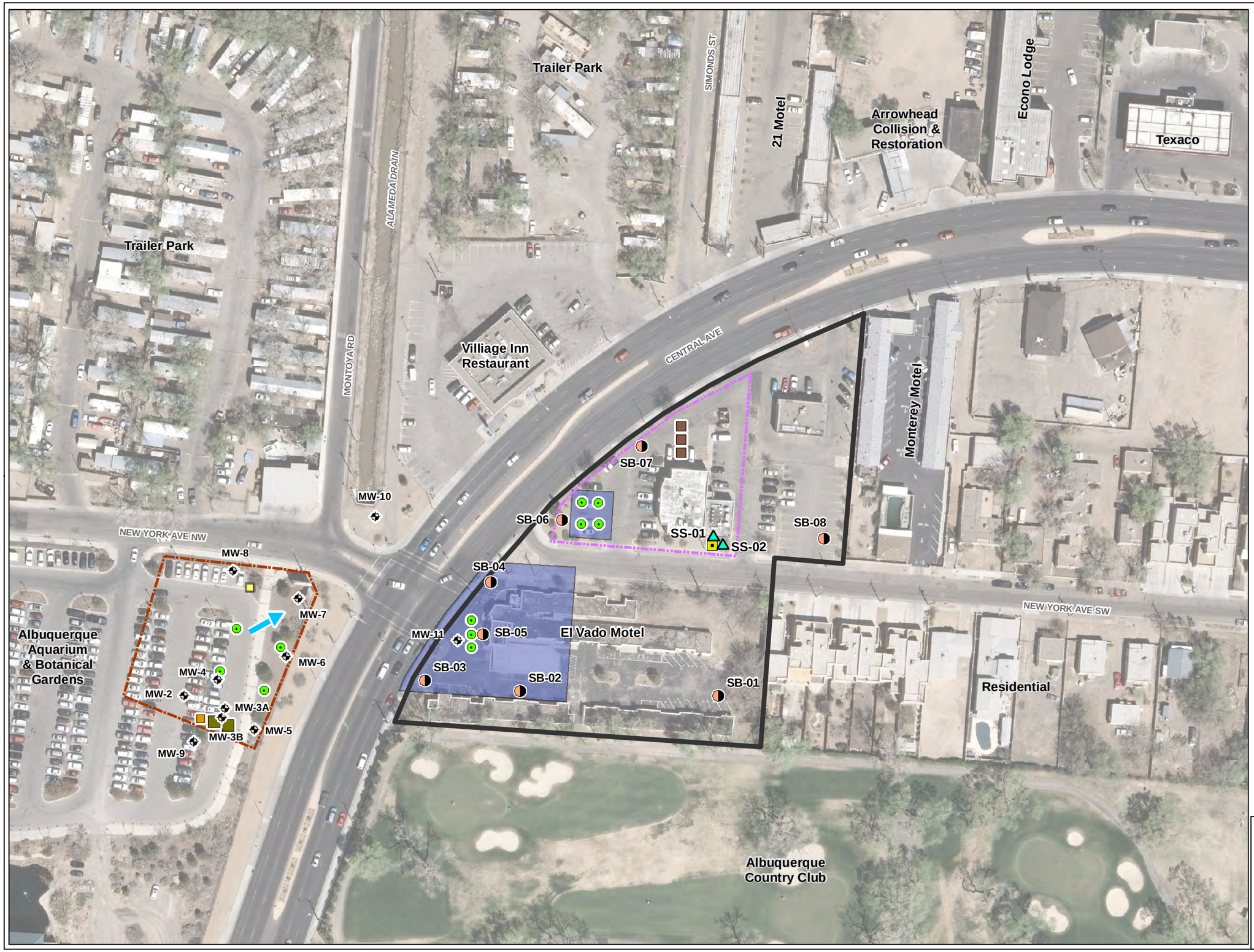

N

100 50 0 100 Feet

Source(s): Aerial photo – BERNCO, dated 2008; Point locations & boundaries based on Dames & Moore, 1995, New Mexico 1991, and NMED, 1993 & 1996; Groundwater flow – Dames & Moore, Sept. 1995.

Legend

- Direct-Push Soil Boring Location
- Surface Soil Sample Location
- Pad-Mounted Transformer
- Former Monitoring Well Location
- Former 4,000 gal. Used Oil UST
- Former 6,000 gal. Gasoline UST
- Former 8,000 gal. Gasoline UST
- Former 10,000 gal. Gasoline UST
- Former Gasoline Pump
- Site Boundary
- Former Casa Grande Chevron Boundary
- Former Circle K Boundary
- Geophysical Survey Area (estimated)
- Groundwater Flow Direction (Dames & Moore, 1995

Note(s):
All points and boundaries are approximately located

Figure 2
Site Detail and Proposed Investigation Locations Map
Casa Grande/El Vado Motel
Site Investigation
Albuquerque, NM

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TABLES

Table 1
Laboratory Analytical Results - Soil
Site Investigation Report Casa Grande/El Vado Motel
Albuquerque, Bernallio County, New Mexico

Boring ID	Sample Depth (bgs)	Date	Concentration (mg/kg)
			Lead[2]
NMED Soil Screening Levels[1]		Construction Worker	8.00E+02
		Residential	4.00E+02
SB-03	8' - 11'	02/09/10	1.7
SB-05	8' - 11'	02/09/10	2.1
SB-06	8' - 11'	02/09/10	1.5
SB-07	8' - 11'	02/09/10	1.6

Notes:

Bolding indicates values in excess of the applicable soil screening level.

1 = NMED soil screening levels (NMED, 2006)

2 = Analyzed by EPA Method 6010B

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

NMED = New Mexico Environment Department

Table 2
Laboratory Analytical Results - Groundwater
Site Investigation Report Casa Grande/El Vado Motel
Albuquerque, Bernallio County, New Mexico

Sample ID	Date	Concentration (mg/l)		
		Dissolved Lead[1]	Dissolved Iron[1]	Dissolved Manganese[1]
NM-GS		0.05	1.0	0.2
SB-01	2/9/2010	0.0076	0.13	**0.24**
SB-04	2/9/2010	<0.0050	**1.5**	**0.64**
SB-05	2/9/2010	<0.0050	0.66	**0.58**
SB-07	2/9/2010	0.0057	0.25	**0.29**

Notes:

Bolding indicates values in excess of the applicable groundwater standards.

1 = Analyzed by EPA Method 6010B, dissolved

EPA = U.S. Environmental Protection Agency

NM-GS = Groundwater Standards as defined by the State of New Mexico Water Quality Control Commission

mg/l = milligrams per liter

APPENDIX A
WORK PLAN

INTERA Incorporated
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(505) 246-1600
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December 28, 2009

Sent via e-mail to jhamel@cabq.gov

Mr. Jim Hamel
CIP Program Manager
City of Albuquerque
Department of Municipal Development
PO Box 1293
Albuquerque, NM 87103

RE: Work Plan and Cost Proposal to Complete a Site Investigation for the Casa Grande/El Vado Motel Property, Albuquerque, Bernalillo County, New Mexico

Dear Mr. Hamel,

Please find attached a work plan and cost proposal to complete a Site Investigation for the City of Albuquerque (COA) project – Casa Grande/El Vado Motel Property (Site). INTERA developed this scope of work and cost proposal after completing a Phase I Environmental Site Assessment (ESA) at the Site on November 10, 2009. The findings of this ESA indicated areas of potential environmental concern that warranted additional investigation activities at the Site. INTERA presented the ESA findings in a meeting with Mr. Doug Chaplin, Ms. Linda Rumpf and Mr. Rick Giron of the COA Department of Family and Community Services on November 23, 2009. INTERA recommended additional Site Investigation activities and the COA representatives asked for a written work plan and cost estimate for Site Investigation activities at the conclusion of this meeting.

If you have any questions about this work plan and/or cost estimate, please do not hesitate to contact me at (505) 246-1600. Sincerely,

INTERA Incorporated

Joseph Tracy, PG
Senior Geologist

cc.: Ms. Linda Rumpf, COA Department of Family and Community Services
Mr. Rick Giron, COA Department of Family and Community Services

Enclosures: Work Plan and Cost Proposal

WORK PLAN and COST ESTIMATE for SITE INVESTIGATION

Casa Grande/El Vado Motel, Lots 8A-1A, 8A-2A, 8A-3, Block 6 and Lots 24-39, Block 3, Albuquerque, New Mexico

Submitted to:

City of Albuquerque
Department of Family and Community Services
PO Box 1293
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Submitted by:

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December 23, 2009

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APPENDICES

1.0 INTRODUCTION

INTERA Incorporated (INTERA) was retained by the City of Albuquerque Department of Family and Community Services (COA) to perform a Phase I Environmental Site Assessment (ESA) for the Casa Grande property located at 2412A & B and 2424 Central Avenue and the El Vado Motel property located at 2500 Central Avenue, Albuquerque, Bernalillo County, New Mexico (Figure 1 and 2).

INTERA completed a Phase I ESA at the Site in November 2009 and identified the following recognized environmental conditions (RECs) in connection with the Site (INTERA, 2009):

- Staining at the concrete base and surrounding gravel/surficial soils of the pad-mounted transformer located immediately south of the southern North Area building;
- Historic gasoline station/gasoline pumps located at the El Vado Motel; and,
- Historic gasoline release at the Former Casa Grande Chevron located to the west of the Site.

INTERA believes the gasoline release documented at the Former Casa Grande Chevron requires additional Site investigation activities to include soil and groundwater sampling. Furthermore, a geophysical investigation should be conducted at the Site to determine if underground storage tanks (USTs) exist at the Site associated with the historic gasoline pumps at the El Vado Motel.

INTERA recommended and was asked by the COA to submit this Work Plan and cost estimate to complete a Phase II Site Investigation (SI) to further evaluate the RECs indentified in the ESA.

Based on the RECs identified in the Phase I ESA, the contaminants of potential concern (COPC) include:

- Petroleum hydrocarbons;
- Polynuclear aromatic hydrocarbons (PAHs);
- Polychlorinated biphenyls (PCBs); and,
- Lead.

Potential exposure pathways include dermal adsorption, ingestion, and inhalation of vapors. Potential receptors include construction workers and potential future building occupants.

2.0 SCOPE OF WORK

The purpose of the Phase II SI is to investigate RECs that have the potential to impact environmental conditions at the Site. The SI will be conducted using the ASTM Standard "*Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process ASTM Standard E 1903-97 (Reapproved 2002)"* (ASTM, 2002) as a guideline.

INTERA has divided the project scope of work into the following five tasks:

- Task 1 – Work Plan Development
- Task 2 – Project Planning and Scheduling
- Task 3 – Soil and Groundwater Investigation
- Task 4 – Surface Soil Sampling
- Task 5 – Geophysical Survey
- Task 6 – Reporting

2.1. Task 1 – Project Planning and Scheduling

Task 1 includes the following project planning and scheduling activities:

- Develop a Work Plan and a Site-specific health and safety plan (HASP);
- Subcontractor correspondence and scheduling; and
- Scheduling of field activities.

Soil and groundwater sampling is recommended for the Site. As part of Task 1, INTERA will create a HASP that will deal specifically with the planned tasks and the COPC. Earth Worx Environmental Services, LLC of Los Lunas, New Mexico is tentatively scheduled to perform the soil and groundwater drilling and sampling portion of the SI. Sunbelt Geophysics of Socorro, New Mexico, will be subcontracted to perform the geophysical survey portion of the SI. Scheduling of field activities will be based on the availability of the two subcontractors. Every attempt will be made to conduct the subcontractor activities simultaneously in order to minimize the amount of oversight required.

Once the SI schedule is developed, INTERA will coordinate with New Mexico One Call to identify the locations of underground utilities at the Site.

2.2. Task 2 – Soil and Groundwater Investigation

Task 2 includes sampling and analysis of subsurface soil and groundwater. Sample locations, sampling procedures, and analysis methods are provided below. Proposed soil boring locations and groundwater sampling locations are illustrated on Figure 2.

Eight soil borings (SB-01 through SB-08) will be advanced and soil samples will be collected using direct-push technology (DPT). DPT drilling uses a small rig and a one- or two-person crew to advance small diameter soil and groundwater sampling devices. The advantage of using DPT drilling is that discrete soil and groundwater samples can be collected quickly and inexpensively relative to other techniques.

Soil samples will be collected continuously from the ground surface to the terminal depth of each boring. The anticipated proposed terminal depth of each boring is provided in Table 1 and is based on the assumed depth to groundwater.

An INTERA field geologist will describe and identify soil types and produce a lithologic log of each soil boring. The soil samples and drill cuttings will be described in accordance with ASTM Standard "*Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) ASTM Standard D 2488-00"* (ASTM, 2000). Descriptions of the soil samples will include soil type, minerals present, color, particle size range, particle angularity, density, plasticity, particle grading, moisture content, and structure. Any odor emitted from the soil and/or the soil boring will be recorded on the soil boring log.

Each soil core will be screened in the field for total volatile organic compounds (VOCs) using a photoionization detector (PID). Field screening will be performed by making visual and olfactory observations related to the presence of contamination and by using a modified heated headspace technique using the New Mexico Environmental Department (NMED) Petroleum Storage Tank Bureau's (PSTB) Field Operating Procedures which is included as Appendix A of this Work Plan. The PID screens ionizable organic compound concentrations in air and gives direct measurement readouts in parts per million by volume (ppmv). Although the concentration of total ionizable VOCs is provided, the PID does not differentiate between specific compounds.

Soil samples will be collected and analyzed for:

- Benzene, toluene, ethylbenzene, total xylenes (BTEX), 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and methyl tert-butyl ether (MTBE) using U.S. Environmental Protection Agency (EPA) Method 8021B;
- 1,2-dibromoethene (EDB) by EPA Method 504.1;

- Total petroleum hydrocarbons (TPH) gasoline range organics (GRO), diesel range organics (DRO), motor oil range organics (MRO) by EPA Method 8015B;
- Total lead by EPA Method 6010C/200.7/6020/200.8; and,
- Polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8310.

A list of soil borings and the associated analysis plan for each is presented in Table 1. Sample holding times and container types are provided in Table 2 and regulatory agency soil screening levels are provided in Table 3.

Decisions on which samples will be analyzed by the contract laboratory will be based on field screening results. If field screening reveals no contamination, both through visual/olfactory inspection and through use of the PID, then the sample immediately above the groundwater table will be submitted for analysis. If field screening does reveal contamination, then the sample with the highest field PID screening result will be submitted for laboratory analysis. A total of four soil samples will be submitted for laboratory analysis.

All soil cuttings will be collected in 5-gallon containers and will be disposed of as non-hazardous waste by a local subcontractor pending soil sample analysis results. Each soil boring will be abandoned by pouring bentonite pellets or chips into the soil boring and then hydrating the bentonite using potable water. At the surface, the asphalt will be patched using cold patch asphalt. The work area surrounding each soil boring location will be swept clean before departure.

Four Geoprobe® groundwater grab samples will be collected at the Site. It is anticipated that groundwater grab samples will be collected from SB-01, SB-04, SB-05, and SB-07 although these sampling locations may change depending on soil field screening results. The Geoprobe® groundwater sample locations are shown on Figure 2. The groundwater sample will be collected from Geoprobe® subsurface soil borings using dedicated polyethylene tubing. Polyethylene tubing will be placed within the soil boring and groundwater will be removed from the Geoprobe® soil boring using a peristaltic pump. The polyethylene tubing will be discarded after the collection of each groundwater sample.

Groundwater samples will be analyzed for:

- BTEX, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and MTBE using EPA Method 8021B;
- EDB by EPA Method 504.1;

- TPH GRO, DRO, and MRO by EPA Method 8015B;
- Dissolved lead and total iron and manganese by EPA Method 6010C/200.7/6020/200.8; and,
- PAHs by EPA Method 8310.

Groundwater samples collected for dissolved lead will be field filtered using a 0.45 micron filter. Sample holding times and container types are provided in Table 2 and regulatory agency soil screening levels are provided in Table 3.

For all conducted field work, INTERA field personnel will use permanently-bound field logbooks to record and document field activities. The logbook will list the contract name and number, the project number, the Site name, and the names of subcontractors, the COA, and the project manager. At a minimum, the following will be recorded in the field logbook:

- Names and affiliations of all on-Site personnel or visitors;
- Weather conditions during the field activity;
- Summary of daily activities and significant events;
- Notes of conversations with coordinating officials;
- Discussions of problems encountered and their resolutions; and,
- Discussions of any deviations from the Work Plan.

INTERA estimates that the soil and groundwater sampling proposed as Task 2 will be completed in one day. An estimated total of eight soil borings will be advanced during DPT drilling and four groundwater samples will be collected. Additional soil borings may be added during field activities based on field screening results for VOCs and after receiving concurrence from the COA.

2.3. Task 3 – Surface Soil Sample

Task 3 includes the collection and analysis of two surface soil samples. The surface soil sample locations are illustrated on Figure 2. Surface soil samples will be obtained from the surficial soil surrounding the pad-mounted transformer located immediately south of the southern North Area building. A hand auger will be used to obtain soil samples from two locations surrounding the concrete pad at depths ranging from 0 to 1 foot below ground surface (bgs). The surface soil sample will be containerized and analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082.

2.4. Task 4 – Geophysical Survey

Historic gasoline pumps were located at the El Vado Motel. A geophysical survey will be conducted to determine if USTs and associated ancillary piping are located at the western portion of the El Vado Motel property (Figure 2). Additional areas may be investigated using geophysics as time permits.

An initial survey will be conducted using a Geonics Ltd. EM-61 high-resolution metal detector. This is a time domain electromagnetic instrument with a proven ability to map buried metallic objects, such as USTs, to a depth of approximately 10 feet. EM-61 data will be acquired approximately every 0.65 feet along the parallel traverses. If anomalous features are detected, additional EM-61 data will be acquired along perpendicular traverses.

A follow-on survey will be conducted using a Sensors & Software 250 megahertz ground penetrating radar (GPR) system. The GPR data will provide clarification of subsurface objects where re-enforcing metal, utilities, or other features may interfere with the EM-61, plus provide a second means of verification. Magnetic screening will also be performed using a Schonstedt magnetic locator.

2.5. Task 5 – Reporting

Upon the culmination of Task 1 through 4, INTERA will complete a report documenting results of the SI. The report will include at a minimum:

- A Site map;
- A Site map showing soil and groundwater sampling locations;
- Results of laboratory analytical data gathered (soil and groundwater);
- Boring logs and field screening results; and,
- Photographic documentation of field activities.

If appropriate, the SI will include recommendations for further investigation.

3.0 SCHEDULE

INTERA estimates that all field work can be accomplished in two days. The normal turn-around time for laboratory analysis and reporting is two weeks. A final report will be submitted to the COA by INTERA approximately two weeks after the receipt of the final laboratory report. Field work will commence upon receipt of a Notice to Proceed (NTP) from the COA Department of Municipal Development (DMD).

4.0 COST ESTIMATE

The cost estimate to complete the Work Plan as described herein is included in Appendix B. The cost estimate shall not be exceeded without the written authorization from the COA. All work will be conducted on a time and materials basis and the COA will be invoiced monthly. The COA will be notified of any condition requiring a change in the budget estimate as soon as such conditions become evident, should they arise. INTERA will conduct no further work until written approval is received by the COA.

5.0 REFERENCES

American Society for Testing and Materials (ASTM) 2000. *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. ASTM Standard D 2488-00.

———. 2002. *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. ASTM Standard E 1903-97 (Reapproved 2002).

INTERA Incorporated, 2009. Phase I Environmental Site Assessment, Casa Grande/El Vado Motel, Lots 8A-1A, 8A-2A, 8A-3, Block 6 and Lots 24-39, Block 3, Albuquerque, New Mexico. November 6.

New Mexico Environment Department (NMED), 2000. *New Mexico Underground Storage Tank Bureau Guidelines for Corrective Action*. March 13.

TABLES

Table 1
Summary of Soil and Groundwater Sample Locations
Work Plan and Cost Estimate for Site Investigation - Casa Grande/El Vado Motel

Soil Boring Identification	Sample Matrix		Sample Depth (ft bgs)	Purpose
	Soil	Aqueous		
SB-01	X	X	12	Background
SB-02	X		10	Located downgradient of former Casa Grande Chevron
SB-03	X		10	Located downgradient of former Casa Grande Chevron
SB-04	X	X	12	Located downgradient of former Casa Grande Chevron and adjacent to former fuel pumps
SB-05	X	X	12	Located downgradient of former Casa Grande Chevron and adjacent to former fuel pumps
SB-06	X		10	Located downgradient of former Casa Grande Chevron
SB-07	X	X	12	Located downgradient of former Casa Grande Chevron
SB-08	X		10	Background

Notes:

ft bgs - feet below ground surface

Table 2
Sample Holding Times and Sample Containers
Work Plan and Cost Estimate for Site Investigation - Casa Grande/El Vado Motel

Target Analytes	Matrix	Analytical Method	Sample Volume/Container	Preservative	Holding Time
BTEX, MTBE, 1,3,5-TMB, and 1,2,4-TMB	Water	EPA 8021	2-40 mL Glass VOAs	$HgCl_2$	14 days
				Cool to 4°C	
BTEX, MTBE, 1,3,5-TMB, and 1,2,4-TMB	Soil	EPA 8021	4-oz Glass Jar or Methanol Kit	Cool to 4°C	14 days
Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO)	Water	EPA 8015	2-40 mL Glass VOA	$HgCl_2$	14 days
				Cool to 4°C	
Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO)	Soil	EPA 8015	4-oz Glass Jar	Cool to 4°C	14 days
Total Petroleum Hydrocarbons (TPH) – Diesel Range Organics (DRO) and Motor Oil Range Organics (MRO)	Water	EPA 8015	2-40 mL Glass VOAs	$HgCl_2$	7 days
				Cool to 4°C	
Total Petroleum Hydrocarbons (TPH) – Diesel Range Organics (DRO) and Motor Oil Range Organics (MRO)	Soil	EPA 8015	4-oz Glass Jar	Cool to 4°C	14 days
Polynuclear Aromatic Hydrocarbons (PAHs)	Water	EPA 8310	1L Glass Amber	Cool to 4°C	7 days
Polynuclear Aromatic Hydrocarbons (PAHs)	Soil	EPA 8310	4-oz Glass Jar	Cool to 4°C	14 days
1,2-dibromoethane (EDB)	Water	EPA 504.1	2-40 mL Glass VOAs	$HgCl_2$	14 days
				Cool to 4°C	
1,2-dibromoethane (EDB)	Soil	EPA 504.1	4-oz Glass Jar	Cool to 4°C	14 days
Dissolved Lead	Water	EPA 6010/200.7/6020/200.8	125 mL HDP, field filtered	HNO_3	6 months (28 days for Hg)
				Cool to 4°C	
Lead	Soil	EPA 6010/200.7/6020/200.8	4-oz Glass Jar	Cool to 4°C	6 months (28 days for Hg)
Iron and Manganese	Water	EPA 6010/200.7/6020/200.8	125 mL HDP	Cool to 4°C	48 hours
Polychlorinated biphenyls	Soil	EPA 8082	4-oz Glass Jar	Cool to 4°C	14 days

Table 3
Regulatory Agency Soil and Groundwater Screening Levels
Work Plan and Cost Estimate for Site Investigation - Casa Grande/El Vado Motel

Chemical	Residential Soil	Industrial/ Occupational Soil	Construction Worker Soil	NMWQCC Standards (mg/l)
Volatile Organic Compounds				
Benzene	10.3	25.8	174	0.01
tert-Butyl methyl ether (MTBE)	388	984	19600	NA
1,2-Dibromoethane (EDB)	0.504	1.31	24.8	0.0001
Ethylbenzene	128	128	128	0.75
Toluene	252	252	252	0.75
1,2,4-Trimethylbenzene	58	213	190	NA
1,3,5-Trimethylbenzene	24.8	69.2	69.2	NA
Xylenes	82	82	82	0.62
Polynuclear Aromatic Hydrocarbons				
Acenaphthene	3730	33500	14100	NA
Acenaphthylene	NA	NA	NA	NA
Anthracene	22000	100000	86000	NA
Benzo(a)anthracene	6.21	23.4	212	NA
Benzo(a)pyrene	0.621	2.34	21.2	0.0007
Benzo(b)fluoranthene	6.21	23.4	212	NA
Benzo(g,h,l)fluoranthene	NA	NA	NA	NA
Benzo(k)fluoranthene	62.1	234	2120	NA
Chrysene	615	2310	21200	NA
Dibenzo(a,h)anthracene	0.621	2.34	21.2	NA
Fluoranthene	2290	24400	8730	NA
Fluorene	2660	26500	10200	NA
Indeno(1,2,3-cd)pyrene	6.21	23.4	212	NA
Naphthalene	79.5	300	262	0.03
1-Methylnaphthalene	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA
Phenanthrene	1830	20500	6990	NA
Pyrene	2290	30900	9010	NA
Metals				
Lead	400	800	800	0.05
Iron	23500	100000	92900	1.0
Manganese	3590	48400	150	0.2
SemiVolatile Organics				
Total Polychlorinated Biphenyls	NA	NA	NA	0.001
Aroclor 1016	3.93	41.3	15	NA
Aroclor 1221	1.12	8.26	4.28	NA
Aroclor 1232	1.12	8.26	4.28	NA
Aroclor 1242	1.12	8.26	4.28	NA
Aroclor 1248	1.12	8.26	4.28	NA
Aroclor 1254	1.12	8.26	4.28	NA
Aroclor 1260	1.12	8.26	4.28	NA

Notes:

Soil Screening Levels from NMED 2006: Technical Background Document for Development of Soil Screening Levels; NMWQCC Standards from 20.6.2.3103 NMAC

mg/kg = milligram per kilogram

mg/L = milligram per liter

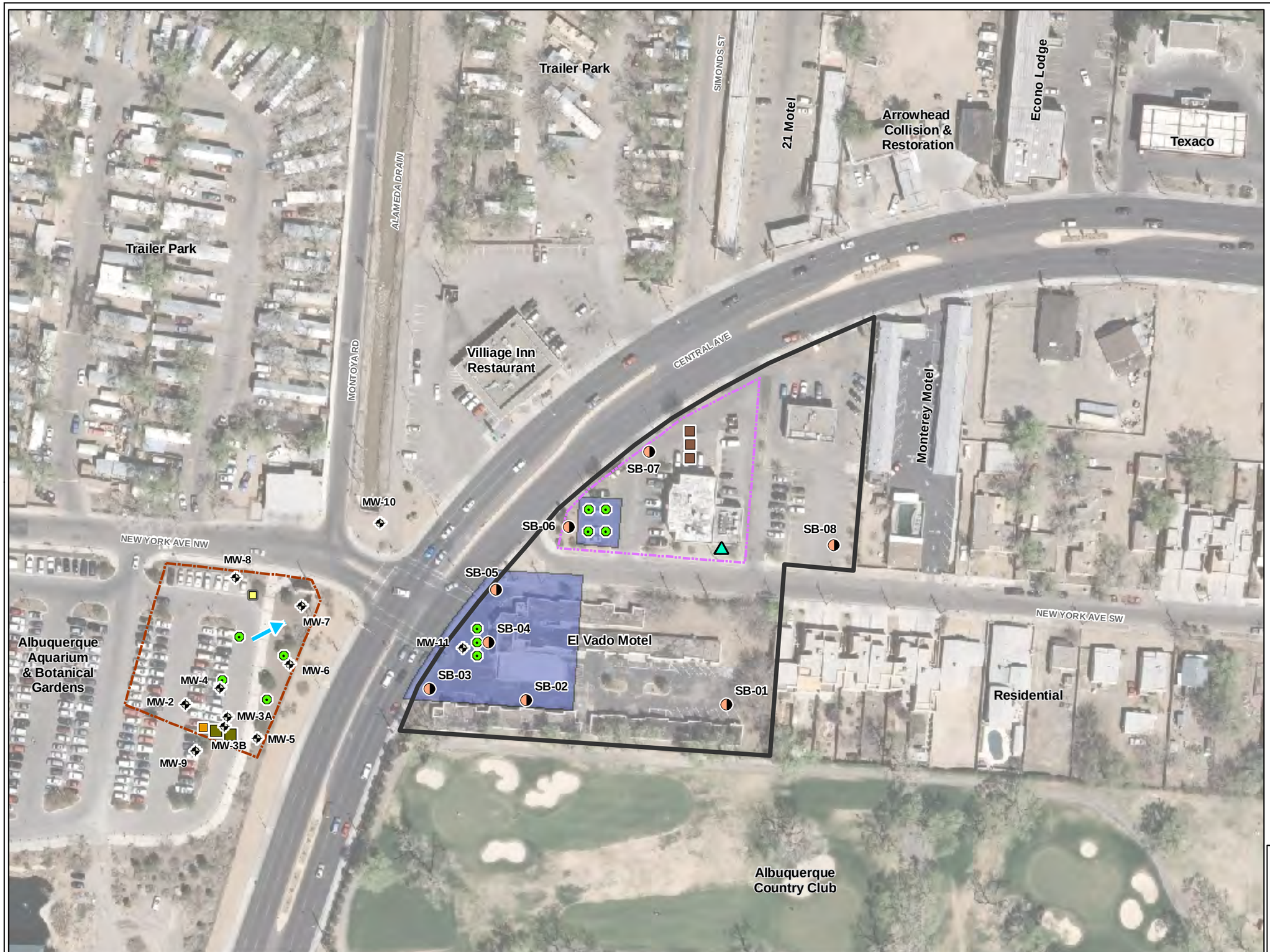
NA = No NMWQCC or NMED Standard Available

NMED = New Mexico Environment

NMWQCC = New Mexico Water Quality Control Commission

FIGURES


Site Boundary
Site
NEW MEXICO
Old Town
ALBUQUERQUE
TOWN OF ALBUQUERQUE
Atrisco
Arenal
Armijo
Five Points
Los Duranes
West Bluff Park
Golf Course
Albuquerque Country Club
Rio Grande Zoological Park
Tingley Field
RIO GRANDE VALLEY STATE PARK
ROAD ON LEVEE
GRAND
Old Town Bridge
Barelas Bridge
I-40 18
I-40 17
I-40 16
NM 448 3
NM 45 3
NM 45 6
BM 4950
BM 4975
BM 4941
BM 4958
BM 4951
Athletic Fields
Footbridge
Drive-in Theater
Rio Grande High Sch
Atrisco Sch
Armijo Sch
Carson Sch
Pyle Middle Sch
Valle Vista Sch
Chaves Sch
Tiguex Park
Old Town Plaza
Atrisco Park
Arenal Park
Los Duranes Park
Mobile Home Park
Krogh Park
Forest Park
Rt. Carson Park
Pete Rodilla Park
Tingley Beach
Courthouse
Library
Five Points
Old Armijo Sch
Rio Grande
Atrisco
Arenal
Armijo
Old Town
Albuquerque
Los Duranes
Five Points
Site Boundary
Sources:
Topo – Terrain Navigator Pro/USGS;
N
0 1,000 2,000 4,000 Feet
USGS 7.5 Minute Topographic Map:
Albuquerque West Quadrangle, 1996;
Contour Interval 10 Feet
Figure 1
Site Location Map
Casa Grande/El Vado Motel Phase II
Albuquerque, NM
S:\Projects\COA On-Call 2008\Task_3_CasaGrande_ESA_EA\Graphics\GIS\mapdocs\PhaseII\figure1.mxd



N

100 50 0 100 Feet

Source(s): Aerial photo – BERNCO, dated 2008; Point locations & boundaries based on Dames & Moore, 1995, New Mexico 1991, and NMED, 1993 & 1996; Groundwater flow – Dames & Moore, Sept. 1995.

Legend

- Proposed Soil Boring Location
- Proposed Surface Soil Sample Location
- Proposed Geophysical Survey Area (estimated)
- Former Monitoring Well Location
- Former 4,000 gal. Used Oil UST
- Former 6,000 gal. Gasoline UST
- Former 8,000 gal. Gasoline UST
- Former 10,000 gal. Gasoline UST
- Former Gasoline Pump
- Site Boundary
- Former Casa Grande Chevron Boundary
- Former Circle K Boundary
- Groundwater Flow Direction (Dames & Moore, 1995

Note(s):
All points and boundaries are a pproximately located

Figure 2
Site Detail and Proposed Investigation Locations Map
Casa Grande/El Vado Motel Phase II
Albuquerque, NM

S:\Projects\COA On-Call 2008\Task_3_CasaGrande_ESA_EA\Graphics\GIS\mapdocs\PhaseI-ESA\figure2.mxd

APPENDIX A

PSTB HEATED HEADSPACE PROCEDURE

Standard Operating Procedure

Headspace Analysis

The NMED UST Bureau has issued the following guidance on Headspace analysis.

Equipment needed for soil screening includes clean 0.5 to 1 liter or 16-ounce jars, aluminum foil, and a FID, PID, detector tubes, or other acceptable field instrument. If the temperature is below 60° Fahrenheit or 15° Celsius, a thermometer and water bath will also be needed. The container for the water bath must be large enough to hold the sample jar, heat source, and deionized water. It is also acceptable to warm up the sample using heated air from the interior of a vehicle. The use of a portable gas chromatograph is optional. Use best judgement in choosing a field instrument. Factors to consider include, but are not limited to, age of the UST system, soil characteristics, and extent of contaminant degradation. Instruments for field screening should be calibrated in the field and in good working order. Follow the manufacturer's instructions for calibrating the filed instrument.

The steps for the heated headspace method are:

(1) Fill a 0.5 liter/16 ounce or larger clean glass jar half full of soil sample. Plastic bags or other non-glass containers are not acceptable.

(2) Seal top of jar with clean aluminum foil and lid ring or equivalent.

(3) Ensure sample is at 15°C to 25°C or approximately 60°F to 80°F. A warm water bath or heated air from the interior of a vehicle should be used if necessary to raise sample temperature to the acceptable range. Samples are to be protected from direct sunlight in order to prevent photo-destruction of the volatiles.

(4) Aromatic hydrocarbon vapor concentrations should be allowed to develop in the headspace of the sample jar for 5 to 10 minutes. During the initial stages of headspace development, the sample is to be shaken vigorously for one minute.

(5) Immediately pierce the foil seal with the probe of either a Flame Ionization Detector (FID), a Photoionization Detector (PID) or colorimetric tubes, and record the highest (peak) measurement. The instrument should be able to accurately detect total aromatic hydrocarbons (TAH) between 0 and 1000 parts per million (ppm).

APPENDIX B
NOTICE TO PROCEED LETTER

CITY OF ALBUQUERQUE

January 21, 2010

Joseph Tracy, P.G.
Intera Inc.
6000 Uptown Boulevard, N.E. Suite 100
Albuquerque, NM 87110

Re: On-Call Engineering Services Agreement - No. 7772.01

Dear Mr. Tracy:

In accordance with the referenced A/E Services Agreement, Job No. 7772.01, your firm is hereby authorized to perform the following Basic Services as established in Exhibit I.

Site Investigation Casa Grande/El Vado Motel

This work shall be coordinated with Linda Rumpf, Planner, Family and Community Services Department.

The cost for this work shall not exceed **SIXTEEN THOUSAND THREE HUNDRED SEVENTY FOUR AND .10/100 DOLLARS ($16,374.10)** exclusive of gross receipt's tax. Payment shall be in accordance with Article XVIII, Paragraph 4.2.

This is **Notice to Proceed # 5**. Please make this reference upon submittal of invoices for these specific services.

Sincerely,

Jim Hamel
CIP Program Manager
DMD

cc: Linda Rumpf, Planner, FCS
Betty Greenbaum, CIP
Fiscal/DMD

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

APPENDIX C
SOIL BORING LOGS

LOG OF SB-01

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512867.98128
Drilling Company	: Earth Worx	Coordinate-Y	: 1489802.49055

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Asphalt 0-0.3' bgs	NA	
		0	48/24	Well graded SAND: fine- to medium-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
5		0	48/34	Well graded SAND: fine- to coarse-grained sand, trace fine gravel, sub-rounded, sub-angular, light brown, weakly cemented, very loose, dry	SW	
10		0	48/30	Well graded SAND: medium- to coarse-grained sand, trace fine-grained sand, some fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
				Well graded SAND: fine- to medium-grained sand, brown, weakly cemented, very loose, sub-angular, sub-rounded, wet		
15				Bottom of Boring at 12' bgs		

Notes
1. Collected groundwater grab sample.
2. NA = Not Applicable.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-01.bor

LOG OF SB-02

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512654.93298
Drilling Company	: Earth Worx	Coordinate-Y	: 1489807.30131

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Asphalt 0-0.3' bgs	NA	
				Silty SAND: fine-grained sand, brown, firm, wet	SM	
		0	48/20	Well graded SAND: fine- to medium-grained sand, trace fine gravel, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
				Well graded SAND: fine- to medium-grained sand, trace fine gravel, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
5				Well graded SAND: fine- to coarse-grained sand, trace fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
		0	48/36			
				Well graded SAND: fine- to coarse-grained sand, trace fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
10		0	48/24			
				Bottom of Boring at 12' bgs		
15						

Notes:
1. NA = Not Applicable.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-02.bor

LOG OF SB-03

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512552.53234
Drilling Company	: Earth Worx	Coordinate-Y	: 1489818.98461

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Poorly graded SAND: fine-grained sand, trace Silt, dark brown, dry	SP	
		0	48/18	Well graded SAND: fine- to medium-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
5		0	48/36			
	X			Well graded SAND: fine- to coarse-grained sand, trace fine gravel, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
		0	48/24			
10	X			Well graded SAND: medium- to coarse-grained sand, some fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, wet		
				Bottom of Boring at 12' bgs		
15						

Notes:
1. X = Sample interval sent for laboratory analysis.

LOG OF SB-04

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512623.31936
Drilling Company	: Earth Worx	Coordinate-Y	: 1489924.82151

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Top Soil 0-0.8' bgs	PT	
		0	48/24	Poorly graded SAND: fine-grained sand, trace silt, light brown, weakly cemented, very loose, sub-angular, dry	SP	
5		0	48/34	Well graded SAND: fine- to coarse-grained sand, trace fine gravel, light brown, weakly cemented, very loose, sub-rounded, moist		
				Well graded SAND: fine- to medium-grained sand, trace coarse-grained sand, brown, weakly cemented, very loose, sub-angular, moist	SW	
10		0	48/24	Well graded SAND: fine- to medium-grained sand, some fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, wet		
				Bottom of Boring at 12' bgs		
15						

Notes:
1. Collected groundwater grab sample.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-04.bor

LOG OF SB-05

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512615.07233
Drilling Company	: Earth Worx	Coordinate-Y	: 1489868.46679

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Asphalt 0-0.6' bgs	NA	
		0	48/24	Well graded SAND: fine- to coarse-grained sand, dark brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
				Poorly graded SAND: fine-grained sand, light brown, weakly cemented, very loose, sub-angular, dry	SP	
5		0	48/32	Well graded SAND: fine- to coarse-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
	X	0	48/18			
10	X			Well graded SAND: medium- to coarse-grained sand, trace fine gravel, weakly cemented, very loose, sub-angular, sub-rounded, wet		
				Bottom of Boring at 12' bgs		
15						

Notes:
1. X = Sample interval sent for laboratory analysis.
2. Collected groundwater grab sample.
3. NA = Not Applicable.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-05.bor

LOG OF SB-06

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512700.29165
Drilling Company	: Earth Worx	Coordinate-Y	: 1489991.48501

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Well graded SAND: fine- to medium-grained sand, trace fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, moist	SW	
		0	48/31	Poorly graded SAND: fine-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, laminated, dry	SP	
5		0	48/32	Well graded SAND: fine- to coarse-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
	X	0	48/18	Well graded SAND: medium- to coarse-grained sand, some fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, moist	SW	
10				Well graded SAND: medium- to coarse-grained sand, some fine gravel, brown, weakly cemented, very loose, sub-angular, sub-rounded, wet		
				Bottom of Boring at 12' bgs		
15						

Notes:
1. X = Sample interval sent for laboratory analysis.
2. NA = Not Applicable.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-06.bor

LOG OF SB-07

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512785.51097
Drilling Company	: Earth Worx	Coordinate-Y	: 1490071.20630

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Asphalt 0-0.5' bgs	NA	
				Poorly graded SAND w/ silt: fine-grained sand, dark brown, moderately cemented, dense, moist	SW/SM	
		0	48/27	Poorly graded SAND: fine-grained sand, light brown, trace silt, weakly cemented, very loose, sub-angular, sub-rounded, dry	SP	
5		0	48/36	Well graded SAND: fine- to medium-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
	X	0	48/24	Well graded SAND: medium- to coarse-grained sand, trace fine-grained sand, brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
10						
				Bottom of Boring at 12' bgs		
15						

Notes:
1. X = Sample sent for laboratory analysis.
2. Collected groundwater grab sample.
3. NA = Not Applicable.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-07.bor

LOG OF SB-08

Project Name:
COA – Casa Grande
Albuquerque, New Mexico

Project #: COA-OCS-02-05

Date Started	: 2/9/2010	Driller	: L. Trujillo
Date Completed	: 2/9/2010	Depth to Water	: 11' bgs
Drilling Method	: DPT	Logged By	: E. Romesser
Sampling Method	: Continuous	Coordinate-X	: 1512982.06520
Drilling Company	: Earth Worx	Coordinate-Y	: 1489971.55468

Depth in Feet	Sample Interval	PID (ppm)	Pen./Rec. (%)	DESCRIPTION	USCS	GRAPHIC
0				Asphalt 0-0.5' bgs	NA	
				Well graded SAND: fine-grained sand, trace silt, trace fine gravel, dark brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
		0	48/24	Poorly graded SAND: fine-grained sand, light brown, weakly cemented, loose, sub-angular, sub-rounded, dry	SP	
				Poorly graded SAND: fine-grained sand, light brown, moderately cemented, loose, sub-angular, sub-rounded, dry		
5				Well graded SAND: fine- to coarse-grained sand, trace fine gravel, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry		
		0	48/36			
				Well graded SAND: medium- to coarse-grained sand, some fine gravel, light brown, weakly cemented, very loose, sub-angular, sub-rounded, dry	SW	
10		0	48/30			
				Well graded SAND: medium- to coarse-grained sand, light brown, weakly cemented, very loose, sub-angular, sub-rounded, wet		
				Bottom of Boring at 12' bgs		
15						

Notes:
1. NA = Not Applicable.

03-15-2010 S:\Projects\BoreLogs\Casa_Grande\SB-08.bor

APPENDIX D
LABORATORY ANALYTICAL REPORT

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 15, 2010

Joseph Tracy
Intera, Inc.
6000 Uptown Boulevard, NE Suite 100
Albuquerque, NM 87110

TEL: (505) 246-1600
FAX (505) 246-2600

RE: Casa Grande/ El Vado

Order No.: 1002193

Dear Joseph Tracy:

Hall Environmental Analysis Laboratory, Inc. received 12 sample(s) on 2/10/2010 for the analyses presented in the following report.

This report is an addendum to the report dated February 22, 2010. This is an updated report.

No determination of compounds below these (denoted by the ND or < sign) has been made.

Reporting limits are determined by EPA methodology.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SS-01-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 2:30:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Aroclor 1221	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Aroclor 1232	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Aroclor 1242	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Aroclor 1248	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Aroclor 1254	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Aroclor 1260	ND	0.10		mg/Kg	1	2/16/2010 2:21:52 PM
Surr: Decachlorobiphenyl	60.0	16.9-111		%REC	1	2/16/2010 2:21:52 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SS-02-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 2:35:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Aroclor 1221	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Aroclor 1232	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Aroclor 1242	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Aroclor 1248	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Aroclor 1254	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Aroclor 1260	ND	0.10		mg/Kg	1	2/16/2010 3:09:36 PM
Surr: Decachlorobiphenyl	40.0	16.9-111		%REC	1	2/16/2010 3:09:36 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-04-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 9:00:00 AM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.010		µg/L	1	2/17/2010 10:41:26 AM
Surr: 1,2,3-Trichloropropane	103	60-131		%REC	1	2/17/2010 10:41:26 AM
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/11/2010 2:57:36 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/11/2010 2:57:36 PM
Surr: DNOP	122	58-140		%REC	1	2/11/2010 2:57:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/11/2010 3:34:39 PM
Surr: BFB	93.8	55.2-107		%REC	1	2/11/2010 3:34:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	2/15/2010 8:45:03 PM
Benzene	ND	1.0		µg/L	1	2/15/2010 8:45:03 PM
Toluene	ND	1.0		µg/L	1	2/15/2010 8:45:03 PM
Ethylbenzene	ND	1.0		µg/L	1	2/15/2010 8:45:03 PM
Xylenes, Total	ND	2.0		µg/L	1	2/15/2010 8:45:03 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/15/2010 8:45:03 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/15/2010 8:45:03 PM
Surr: 4-Bromofluorobenzene	94.6	65.9-130		%REC	1	2/15/2010 8:45:03 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	2.0		µg/L	1	2/18/2010 10:15:50 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 10:15:50 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 10:15:50 PM
Acenaphthylene	ND	2.5		µg/L	1	2/18/2010 10:15:50 PM
Acenaphthene	ND	5.0		µg/L	1	2/18/2010 10:15:50 PM
Fluorene	ND	0.80		µg/L	1	2/18/2010 10:15:50 PM
Phenanthrene	ND	0.60		µg/L	1	2/18/2010 10:15:50 PM
Anthracene	ND	0.60		µg/L	1	2/18/2010 10:15:50 PM
Fluoranthene	ND	0.30		µg/L	1	2/18/2010 10:15:50 PM
Pyrene	ND	0.60		µg/L	1	2/18/2010 10:15:50 PM
Benz(a)anthracene	ND	0.070		µg/L	1	2/18/2010 10:15:50 PM
Chrysene	ND	0.20		µg/L	1	2/18/2010 10:15:50 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	2/18/2010 10:15:50 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	2/18/2010 10:15:50 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	2/18/2010 10:15:50 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	2/18/2010 10:15:50 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	2/18/2010 10:15:50 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/18/2010 10:15:50 PM
Surr: Benzo(e)pyrene	70.8	28.3-111		%REC	1	2/18/2010 10:15:50 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-04-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 9:00:00 AM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **SNV**
Iron	1.5	0.10		mg/L	5	2/14/2010 3:33:06 PM
Lead	ND	0.0050		mg/L	1	2/11/2010 11:33:21 AM
Manganese	0.64	0.010		mg/L	5	2/14/2010 3:33:06 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-05-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 10:20:00 AM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.010		µg/L	1	2/17/2010 10:54:10 AM
Surr: 1,2,3-Trichloropropane	106	60-131		%REC	1	2/17/2010 10:54:10 AM
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/11/2010 3:34:06 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/11/2010 3:34:06 PM
Surr: DNOP	121	58-140		%REC	1	2/11/2010 3:34:06 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/11/2010 4:05:00 PM
Surr: BFB	90.5	55.2-107		%REC	1	2/11/2010 4:05:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	2/11/2010 4:05:00 PM
Benzene	ND	1.0		µg/L	1	2/11/2010 4:05:00 PM
Toluene	ND	1.0		µg/L	1	2/11/2010 4:05:00 PM
Ethylbenzene	ND	1.0		µg/L	1	2/11/2010 4:05:00 PM
Xylenes, Total	ND	2.0		µg/L	1	2/11/2010 4:05:00 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 4:05:00 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 4:05:00 PM
Surr: 4-Bromofluorobenzene	98.6	65.9-130		%REC	1	2/11/2010 4:05:00 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	2.0		µg/L	1	2/18/2010 10:37:12 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 10:37:12 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 10:37:12 PM
Acenaphthylene	ND	2.5		µg/L	1	2/18/2010 10:37:12 PM
Acenaphthene	ND	5.0		µg/L	1	2/18/2010 10:37:12 PM
Fluorene	ND	0.80		µg/L	1	2/18/2010 10:37:12 PM
Phenanthrene	ND	0.60		µg/L	1	2/18/2010 10:37:12 PM
Anthracene	ND	0.60		µg/L	1	2/18/2010 10:37:12 PM
Fluoranthene	ND	0.30		µg/L	1	2/18/2010 10:37:12 PM
Pyrene	ND	0.60		µg/L	1	2/18/2010 10:37:12 PM
Benz(a)anthracene	ND	0.070		µg/L	1	2/18/2010 10:37:12 PM
Chrysene	ND	0.20		µg/L	1	2/18/2010 10:37:12 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	2/18/2010 10:37:12 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	2/18/2010 10:37:12 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	2/18/2010 10:37:12 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	2/18/2010 10:37:12 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	2/18/2010 10:37:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/18/2010 10:37:12 PM
Surr: Benzo(e)pyrene	59.6	28.3-111		%REC	1	2/18/2010 10:37:12 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
E	Estimated value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
MCL	Maximum Contaminant Level
NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit
S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-05-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 10:20:00 AM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **SNV**
Iron	0.66	0.020		mg/L	1	2/11/2010 11:45:32 AM
Lead	ND	0.0050		mg/L	1	2/11/2010 11:45:32 AM
Manganese	0.58	0.0020		mg/L	1	2/11/2010 11:45:32 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-07-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:00:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.010		µg/L	1	2/17/2010 11:06:47 AM
Surr: 1,2,3-Trichloropropane	102	60-131		%REC	1	2/17/2010 11:06:47 AM
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/11/2010 4:10:20 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/11/2010 4:10:20 PM
Surr: DNOP	115	58-140		%REC	1	2/11/2010 4:10:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/11/2010 4:35:13 PM
Surr: BFB	83.6	55.2-107		%REC	1	2/11/2010 4:35:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	2/11/2010 4:35:13 PM
Benzene	ND	1.0		µg/L	1	2/11/2010 4:35:13 PM
Toluene	ND	1.0		µg/L	1	2/11/2010 4:35:13 PM
Ethylbenzene	ND	1.0		µg/L	1	2/11/2010 4:35:13 PM
Xylenes, Total	ND	2.0		µg/L	1	2/11/2010 4:35:13 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 4:35:13 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 4:35:13 PM
Surr: 4-Bromofluorobenzene	89.6	65.9-130		%REC	1	2/11/2010 4:35:13 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	2.0		µg/L	1	2/18/2010 10:58:41 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 10:58:41 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 10:58:41 PM
Acenaphthylene	ND	2.5		µg/L	1	2/18/2010 10:58:41 PM
Acenaphthene	ND	5.0		µg/L	1	2/18/2010 10:58:41 PM
Fluorene	ND	0.80		µg/L	1	2/18/2010 10:58:41 PM
Phenanthrene	ND	0.60		µg/L	1	2/18/2010 10:58:41 PM
Anthracene	ND	0.60		µg/L	1	2/18/2010 10:58:41 PM
Fluoranthene	ND	0.30		µg/L	1	2/18/2010 10:58:41 PM
Pyrene	ND	0.60		µg/L	1	2/18/2010 10:58:41 PM
Benz(a)anthracene	ND	0.070		µg/L	1	2/18/2010 10:58:41 PM
Chrysene	ND	0.20		µg/L	1	2/18/2010 10:58:41 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	2/18/2010 10:58:41 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	2/18/2010 10:58:41 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	2/18/2010 10:58:41 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	2/18/2010 10:58:41 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	2/18/2010 10:58:41 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/18/2010 10:58:41 PM
Surr: Benzo(e)pyrene	79.9	28.3-111		%REC	1	2/18/2010 10:58:41 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-07-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:00:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **SNV**
Iron	0.25	0.020		mg/L	1	2/11/2010 11:47:22 AM
Lead	0.0057	0.0050		mg/L	1	2/11/2010 11:47:22 AM
Manganese	0.29	0.0020		mg/L	1	2/11/2010 11:47:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-01-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 1:30:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.010		µg/L	1	2/17/2010 11:21:49 AM
Surr: 1,2,3-Trichloropropane	106	60-131		%REC	1	2/17/2010 11:21:49 AM
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/11/2010 4:46:48 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/11/2010 4:46:48 PM
Surr: DNOP	113	58-140		%REC	1	2/11/2010 4:46:48 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/11/2010 5:05:30 PM
Surr: BFB	87.6	55.2-107		%REC	1	2/11/2010 5:05:30 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	2/11/2010 5:05:30 PM
Benzene	ND	1.0		µg/L	1	2/11/2010 5:05:30 PM
Toluene	ND	1.0		µg/L	1	2/11/2010 5:05:30 PM
Ethylbenzene	ND	1.0		µg/L	1	2/11/2010 5:05:30 PM
Xylenes, Total	ND	2.0		µg/L	1	2/11/2010 5:05:30 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 5:05:30 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 5:05:30 PM
Surr: 4-Bromofluorobenzene	94.5	65.9-130		%REC	1	2/11/2010 5:05:30 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	2.0		µg/L	1	2/18/2010 11:20:06 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 11:20:06 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	2/18/2010 11:20:06 PM
Acenaphthylene	ND	2.5		µg/L	1	2/18/2010 11:20:06 PM
Acenaphthene	ND	5.0		µg/L	1	2/18/2010 11:20:06 PM
Fluorene	ND	0.80		µg/L	1	2/18/2010 11:20:06 PM
Phenanthrene	ND	0.60		µg/L	1	2/18/2010 11:20:06 PM
Anthracene	ND	0.60		µg/L	1	2/18/2010 11:20:06 PM
Fluoranthene	ND	0.30		µg/L	1	2/18/2010 11:20:06 PM
Pyrene	ND	0.60		µg/L	1	2/18/2010 11:20:06 PM
Benz(a)anthracene	ND	0.070		µg/L	1	2/18/2010 11:20:06 PM
Chrysene	ND	0.20		µg/L	1	2/18/2010 11:20:06 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	2/18/2010 11:20:06 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	2/18/2010 11:20:06 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	2/18/2010 11:20:06 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	2/18/2010 11:20:06 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	2/18/2010 11:20:06 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/18/2010 11:20:06 PM
Surr: Benzo(e)pyrene	76.0	28.3-111		%REC	1	2/18/2010 11:20:06 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-01-020910
Lab Order:	1002193	**Collection Date:**	2/9/2010 1:30:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **SNV**
Iron	0.13	0.020		mg/L	1	2/11/2010 11:49:13 AM
Lead	0.0076	0.0050		mg/L	1	2/11/2010 11:49:13 AM
Manganese	0.24	0.0020		mg/L	1	2/11/2010 11:49:13 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-05-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 10:20:00 AM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-07	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1 MODIFIED: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	2/11/2010 11:32:58 AM
Surr: 1,2,3-Trichloropropane	102	56.9-128		%REC	1	2/11/2010 11:32:58 AM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2010 5:49:56 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2010 5:49:56 PM
Surr: DNOP	71.0	61.7-135		%REC	1	2/15/2010 5:49:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/11/2010 11:09:16 PM
Surr: BFB	82.9	65.9-118		%REC	1	2/11/2010 11:09:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	2/11/2010 11:09:16 PM
Benzene	ND	0.050		mg/Kg	1	2/11/2010 11:09:16 PM
Toluene	ND	0.050		mg/Kg	1	2/11/2010 11:09:16 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/11/2010 11:09:16 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/11/2010 11:09:16 PM
Surr: 4-Bromofluorobenzene	88.2	64.7-120		%REC	1	2/11/2010 11:09:16 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HL**
Percent Moisture	2.7	0.10		wt%	1	2/11/2010
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	0.25		mg/Kg	1	2/19/2010 12:24:19 AM
1-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 12:24:19 AM
2-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 12:24:19 AM
Acenaphthylene	ND	0.25		mg/Kg	1	2/19/2010 12:24:19 AM
Acenaphthene	ND	0.25		mg/Kg	1	2/19/2010 12:24:19 AM
Fluorene	ND	0.030		mg/Kg	1	2/19/2010 12:24:19 AM
Phenanthrene	ND	0.015		mg/Kg	1	2/19/2010 12:24:19 AM
Anthracene	ND	0.015		mg/Kg	1	2/19/2010 12:24:19 AM
Fluoranthene	ND	0.020		mg/Kg	1	2/19/2010 12:24:19 AM
Pyrene	ND	0.025		mg/Kg	1	2/19/2010 12:24:19 AM
Benz(a)anthracene	ND	0.010		mg/Kg	1	2/19/2010 12:24:19 AM
Chrysene	ND	0.011		mg/Kg	1	2/19/2010 12:24:19 AM
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 12:24:19 AM
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 12:24:19 AM
Benzo(a)pyrene	ND	0.010		mg/Kg	1	2/19/2010 12:24:19 AM
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	2/19/2010 12:24:19 AM
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	2/19/2010 12:24:19 AM
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	2/19/2010 12:24:19 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-05-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 10:20:00 AM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-07	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
Surr: Benzo(e)pyrene	71.2	25.6-129		%REC	1	2/19/2010 12:24:19 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **SNV**
Lead	2.1	0.25		mg/Kg	1	2/17/2010 9:34:50 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
NC	Non-Chlorinated
PQL	Practical Quantitation Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-06-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:30:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-08	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1 MODIFIED: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	2/11/2010 11:45:27 AM
Surr: 1,2,3-Trichloropropane	98.0	56.9-128		%REC	1	2/11/2010 11:45:27 AM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2010 6:26:08 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2010 6:26:08 PM
Surr: DNOP	80.9	61.7-135		%REC	1	2/15/2010 6:26:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/11/2010 11:39:35 PM
Surr: BFB	85.9	65.9-118		%REC	1	2/11/2010 11:39:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	2/11/2010 11:39:35 PM
Benzene	ND	0.050		mg/Kg	1	2/11/2010 11:39:35 PM
Toluene	ND	0.050		mg/Kg	1	2/11/2010 11:39:35 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/11/2010 11:39:35 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/11/2010 11:39:35 PM
Surr: 4-Bromofluorobenzene	92.5	64.7-120		%REC	1	2/11/2010 11:39:35 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HL**
Percent Moisture	5.5	0.10		wt%	1	2/11/2010
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	0.25		mg/Kg	1	2/19/2010 1:49:50 AM
1-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 1:49:50 AM
2-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 1:49:50 AM
Acenaphthylene	ND	0.25		mg/Kg	1	2/19/2010 1:49:50 AM
Acenaphthene	ND	0.25		mg/Kg	1	2/19/2010 1:49:50 AM
Fluorene	ND	0.030		mg/Kg	1	2/19/2010 1:49:50 AM
Phenanthrene	ND	0.015		mg/Kg	1	2/19/2010 1:49:50 AM
Anthracene	ND	0.015		mg/Kg	1	2/19/2010 1:49:50 AM
Fluoranthene	ND	0.020		mg/Kg	1	2/19/2010 1:49:50 AM
Pyrene	ND	0.025		mg/Kg	1	2/19/2010 1:49:50 AM
Benz(a)anthracene	ND	0.010		mg/Kg	1	2/19/2010 1:49:50 AM
Chrysene	ND	0.011		mg/Kg	1	2/19/2010 1:49:50 AM
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 1:49:50 AM
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 1:49:50 AM
Benzo(a)pyrene	ND	0.010		mg/Kg	1	2/19/2010 1:49:50 AM
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	2/19/2010 1:49:50 AM
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	2/19/2010 1:49:50 AM
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	2/19/2010 1:49:50 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-06-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:30:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-08	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
Surr: Benzo(e)pyrene	75.7	25.6-129		%REC	1	2/19/2010 1:49:50 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **SNV**
Lead	1.5	0.25		mg/Kg	1	2/17/2010 9:36:51 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-07-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:00:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-09	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1 MODIFIED: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	2/11/2010 11:58:02 AM
Surr: 1,2,3-Trichloropropane	97.3	56.9-128		%REC	1	2/11/2010 11:58:02 AM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2010 7:02:21 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2010 7:02:21 PM
Surr: DNOP	78.6	61.7-135		%REC	1	2/15/2010 7:02:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/12/2010 12:09:50 AM
Surr: BFB	90.6	65.9-118		%REC	1	2/12/2010 12:09:50 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	2/12/2010 12:09:50 AM
Benzene	ND	0.050		mg/Kg	1	2/12/2010 12:09:50 AM
Toluene	ND	0.050		mg/Kg	1	2/12/2010 12:09:50 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/12/2010 12:09:50 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/12/2010 12:09:50 AM
Surr: 4-Bromofluorobenzene	98.1	64.7-120		%REC	1	2/12/2010 12:09:50 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HL**
Percent Moisture	5.7	0.10		wt%	1	2/11/2010
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	0.25		mg/Kg	1	2/19/2010 2:11:12 AM
1-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 2:11:12 AM
2-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 2:11:12 AM
Acenaphthylene	ND	0.25		mg/Kg	1	2/19/2010 2:11:12 AM
Acenaphthene	ND	0.25		mg/Kg	1	2/19/2010 2:11:12 AM
Fluorene	ND	0.030		mg/Kg	1	2/19/2010 2:11:12 AM
Phenanthrene	ND	0.015		mg/Kg	1	2/19/2010 2:11:12 AM
Anthracene	ND	0.015		mg/Kg	1	2/19/2010 2:11:12 AM
Fluoranthene	ND	0.020		mg/Kg	1	2/19/2010 2:11:12 AM
Pyrene	ND	0.025		mg/Kg	1	2/19/2010 2:11:12 AM
Benz(a)anthracene	ND	0.010		mg/Kg	1	2/19/2010 2:11:12 AM
Chrysene	ND	0.011		mg/Kg	1	2/19/2010 2:11:12 AM
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 2:11:12 AM
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 2:11:12 AM
Benzo(a)pyrene	ND	0.010		mg/Kg	1	2/19/2010 2:11:12 AM
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	2/19/2010 2:11:12 AM
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	2/19/2010 2:11:12 AM
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	2/19/2010 2:11:12 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-07-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:00:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-09	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
Surr: Benzo(e)pyrene	77.8	25.6-129		%REC	1	2/19/2010 2:11:12 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **SNV**
Lead	1.6	0.25		mg/Kg	1	2/17/2010 9:38:51 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
NC	Non-Chlorinated
PQL	Practical Quantitation Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-03-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:45:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-10	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1 MODIFIED: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	2/11/2010 12:10:34 PM
Surr: 1,2,3-Trichloropropane	97.5	56.9-128		%REC	1	2/11/2010 12:10:34 PM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2010 7:38:02 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2010 7:38:02 PM
Surr: DNOP	80.6	61.7-135		%REC	1	2/15/2010 7:38:02 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/12/2010 12:40:03 AM
Surr: BFB	89.8	65.9-118		%REC	1	2/12/2010 12:40:03 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	2/12/2010 12:40:03 AM
Benzene	ND	0.050		mg/Kg	1	2/12/2010 12:40:03 AM
Toluene	ND	0.050		mg/Kg	1	2/12/2010 12:40:03 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/12/2010 12:40:03 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/12/2010 12:40:03 AM
Surr: 4-Bromofluorobenzene	96.7	64.7-120		%REC	1	2/12/2010 12:40:03 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HL**
Percent Moisture	5.7	0.10		wt%	1	2/11/2010
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	0.25		mg/Kg	1	2/19/2010 2:32:35 AM
1-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 2:32:35 AM
2-Methylnaphthalene	ND	0.25		mg/Kg	1	2/19/2010 2:32:35 AM
Acenaphthylene	ND	0.25		mg/Kg	1	2/19/2010 2:32:35 AM
Acenaphthene	ND	0.25		mg/Kg	1	2/19/2010 2:32:35 AM
Fluorene	ND	0.030		mg/Kg	1	2/19/2010 2:32:35 AM
Phenanthrene	ND	0.015		mg/Kg	1	2/19/2010 2:32:35 AM
Anthracene	ND	0.015		mg/Kg	1	2/19/2010 2:32:35 AM
Fluoranthene	ND	0.020		mg/Kg	1	2/19/2010 2:32:35 AM
Pyrene	ND	0.025		mg/Kg	1	2/19/2010 2:32:35 AM
Benz(a)anthracene	ND	0.010		mg/Kg	1	2/19/2010 2:32:35 AM
Chrysene	ND	0.011		mg/Kg	1	2/19/2010 2:32:35 AM
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 2:32:35 AM
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	2/19/2010 2:32:35 AM
Benzo(a)pyrene	ND	0.010		mg/Kg	1	2/19/2010 2:32:35 AM
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	2/19/2010 2:32:35 AM
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	2/19/2010 2:32:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	2/19/2010 2:32:35 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	SB-03-8-11
Lab Order:	1002193	**Collection Date:**	2/9/2010 12:45:00 PM
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-10	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **SCC**
Surr: Benzo(e)pyrene	81.6	25.6-129		%REC	1	2/19/2010 2:32:35 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **SNV**
Lead	1.7	0.25		mg/Kg	1	2/17/2010 9:40:55 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
NC	Non-Chlorinated
PQL	Practical Quantitation Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	1002193	**Collection Date:**	
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-11	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/11/2010 5:35:47 PM
Surr: BFB	88.6	55.2-107		%REC	1	2/11/2010 5:35:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	2/11/2010 5:35:47 PM
Benzene	ND	1.0		µg/L	1	2/11/2010 5:35:47 PM
Toluene	ND	1.0		µg/L	1	2/11/2010 5:35:47 PM
Ethylbenzene	ND	1.0		µg/L	1	2/11/2010 5:35:47 PM
Xylenes, Total	ND	2.0		µg/L	1	2/11/2010 5:35:47 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 5:35:47 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2010 5:35:47 PM
Surr: 4-Bromofluorobenzene	96.6	65.9-130		%REC	1	2/11/2010 5:35:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Mar-10*

CLIENT:	Intera, Inc.	**Client Sample ID:**	Meoh Blank
Lab Order:	1002193	**Collection Date:**	
Project:	Casa Grande/ El Vado	**Date Received:**	2/10/2010
Lab ID:	1002193-12	**Matrix:**	MEOH BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/12/2010 1:10:14 AM
Surr: BFB	87.8	65.9-118		%REC	1	2/12/2010 1:10:14 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	2/12/2010 1:10:14 AM
Benzene	ND	0.050		mg/Kg	1	2/12/2010 1:10:14 AM
Toluene	ND	0.050		mg/Kg	1	2/12/2010 1:10:14 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/12/2010 1:10:14 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/12/2010 1:10:14 AM
Surr: 4-Bromofluorobenzene	93.8	64.7-120		%REC	1	2/12/2010 1:10:14 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 504.1 Modified: EDB											
Sample ID: 1002193-10AMSD		*MSD*				Batch ID:	**21370**	Analysis Date:		2/11/2010 3:48:57 PM	
1,2-Dibromoethane	0.9140	µg/Kg	0.10	1	0	91.4	65.8	127	9.39	20	
Sample ID: MB-21370		*MBLK*				Batch ID:	**21370**	Analysis Date:		2/11/2010 10:55:31 AM	
1,2-Dibromoethane	ND	µg/Kg	0.10								
Sample ID: LCS-21370		*LCS*				Batch ID:	**21370**	Analysis Date:		2/11/2010 11:08:02 AM	
1,2-Dibromoethane	0.9650	µg/Kg	0.10	1	0	96.5	70	130			
Sample ID: LCSD-21370		*LCSD*				Batch ID:	**21370**	Analysis Date:		2/11/2010 11:20:31 AM	
1,2-Dibromoethane	0.9890	µg/Kg	0.10	1	0	98.9	70	130	2.46	20	
Sample ID: 1002193-10AMS		*MS*				Batch ID:	**21370**	Analysis Date:		2/11/2010 3:36:16 PM	
1,2-Dibromoethane	0.8320	µg/Kg	0.10	1	0	83.2	65.8	127			
Method: EPA Method 504.1: EDB											
Sample ID: MB-21414		*MBLK*				Batch ID:	**21414**	Analysis Date:		2/17/2010 10:03:32 AM	
1,2-Dibromoethane	ND	µg/L	0.010								
Sample ID: LCS-21414		*LCS*				Batch ID:	**21414**	Analysis Date:		2/17/2010 10:16:12 AM	
1,2-Dibromoethane	0.09700	µg/L	0.010	0.1	0	97.0	70	130			
Sample ID: LCSD-21414		*LCSD*				Batch ID:	**21414**	Analysis Date:		2/17/2010 10:28:50 AM	
1,2-Dibromoethane	0.09900	µg/L	0.010	0.1	0	99.0	70	130	2.04	20	
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: 1002193-07AMSD		*MSD*				Batch ID:	**21374**	Analysis Date:		2/15/2010 5:13:26 PM	
Diesel Range Organics (DRO)	46.33	mg/Kg	10	50	0	92.7	67.4	117	2.06	17.4	
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						0	0	
Sample ID: MB-21374		*MBLK*				Batch ID:	**21374**	Analysis Date:		2/15/2010 2:46:58 PM	
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Motor Oil Range Organics (MRO)	ND	mg/Kg	50								
Sample ID: LCS-21374		*LCS*				Batch ID:	**21374**	Analysis Date:		2/15/2010 3:23:43 PM	
Diesel Range Organics (DRO)	43.52	mg/Kg	10	50	0	87.0	64.6	116			
Sample ID: LCSD-21374		*LCSD*				Batch ID:	**21374**	Analysis Date:		2/15/2010 4:00:28 PM	
Diesel Range Organics (DRO)	46.09	mg/Kg	10	50	0	92.2	64.6	116	5.74	17.4	
Sample ID: 1002193-07AMS		*MS*				Batch ID:	**21374**	Analysis Date:		2/15/2010 4:36:57 PM	
Diesel Range Organics (DRO)	45.38	mg/Kg	10	50	0	90.8	67.4	117			
Motor Oil Range Organics (MRO)	ND	mg/Kg	50								
Method: EPA Method 8015B: Diesel Range											
Sample ID: MB-21368		*MBLK*				Batch ID:	**21368**	Analysis Date:		2/11/2010 1:09:00 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Motor Oil Range Organics (MRO)	ND	mg/L	5.0								
Sample ID: LCS-21368		*LCS*				Batch ID:	**21368**	Analysis Date:		2/11/2010 1:45:14 PM	
Diesel Range Organics (DRO)	5.975	mg/L	1.0	5	0	120	74	157			
Sample ID: LCSD-21368		*LCSD*				Batch ID:	**21368**	Analysis Date:		2/11/2010 2:21:25 PM	
Diesel Range Organics (DRO)	5.813	mg/L	1.0	5	0	116	74	157	2.75	23	

Qualifiers:

- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- NC Non-Chlorinated
- R RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 1002193-10A MSD		*MSD*				Batch ID: **R37359**		Analysis Date:		2/12/2010 4:12:14 AM	
Gasoline Range Organics (GRO)	24.12	mg/Kg	5.0	25	0	96.5	69.5	120	2.66	11.6	
Sample ID: 5ML RB		*MBLK*				Batch ID: **R37359**		Analysis Date:		2/11/2010 9:24:30 AM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID: **R37359**		Analysis Date:		2/11/2010 7:06:44 PM	
Gasoline Range Organics (GRO)	25.82	mg/Kg	5.0	25	0	103	77.7	135			
Sample ID: 1002193-10A MS		*MS*				Batch ID: **R37359**		Analysis Date:		2/12/2010 3:41:55 AM	
Gasoline Range Organics (GRO)	24.77	mg/Kg	5.0	25	0	99.1	69.5	120			
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 1002193-04A MSD		*MSD*				Batch ID: **R37359**		Analysis Date:		2/11/2010 6:36:22 PM	
Gasoline Range Organics (GRO)	0.5102	mg/L	0.050	0.5	0	102	80	115	1.22	8.39	
Sample ID: 5ML RB		*MBLK*				Batch ID: **R37359**		Analysis Date:		2/11/2010 9:24:30 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 5ML RB		*MBLK*				Batch ID: **R37375**		Analysis Date:		2/15/2010 9:13:40 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID: **R37359**		Analysis Date:		2/11/2010 7:06:44 PM	
Gasoline Range Organics (GRO)	0.5164	mg/L	0.050	0.5	0	103	80	115			
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID: **R37375**		Analysis Date:		2/15/2010 4:42:51 PM	
Gasoline Range Organics (GRO)	0.4630	mg/L	0.050	0.5	0	92.6	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*				Batch ID: **R37375**		Analysis Date:		2/15/2010 5:13:16 PM	
Gasoline Range Organics (GRO)	0.4912	mg/L	0.050	0.5	0	98.2	80	115	5.91	8.39	
Sample ID: 1002193-04A MS		*MS*				Batch ID: **R37359**		Analysis Date:		2/11/2010 6:06:05 PM	
Gasoline Range Organics (GRO)	0.5040	mg/L	0.050	0.5	0	101	80	115			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 1002193-09A MSD		*MSD*				Batch ID:	**R37359**	Analysis Date:		2/12/2010 5:12:41 AM	
Methyl tert-butyl ether (MTBE)	1.119	mg/Kg	0.10	1	0	112	67.9	135	1.53	28	
Benzene	0.9344	mg/Kg	0.050	1	0	93.4	78.8	132	7.76	27	
Toluene	0.8933	mg/Kg	0.050	1	0	89.3	78.9	112	8.83	19	
Ethylbenzene	0.9425	mg/Kg	0.050	1	0	94.3	69.3	125	7.41	10	
Xylenes, Total	2.881	mg/Kg	0.10	3	0	96.0	73	128	6.06	13	
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R37359**	Analysis Date:		2/11/2010 9:24:30 AM	
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.10								
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R37359**	Analysis Date:		2/11/2010 8:37:29 PM	
Methyl tert-butyl ether (MTBE)	1.014	mg/Kg	0.10	1	0	101	67.9	135			
Benzene	1.044	mg/Kg	0.050	1	0	104	78.8	132			
Toluene	1.022	mg/Kg	0.050	1	0	102	78.9	112			
Ethylbenzene	1.010	mg/Kg	0.050	1	0	101	69.3	125			
Xylenes, Total	3.073	mg/Kg	0.10	3	0	102	73	128			
Sample ID: 1002193-09A MS		*MS*				Batch ID:	**R37359**	Analysis Date:		2/12/2010 4:42:27 AM	
Methyl tert-butyl ether (MTBE)	1.102	mg/Kg	0.10	1	0	110	67.9	135			
Benzene	1.010	mg/Kg	0.050	1	0	101	78.8	132			
Toluene	0.9758	mg/Kg	0.050	1	0	97.6	78.9	112			
Ethylbenzene	1.015	mg/Kg	0.050	1	0	102	69.3	125			
Xylenes, Total	3.061	mg/Kg	0.10	3	0	102	73	128			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 1002193-03A MSD		*MSD*				Batch ID:	**R37359**	Analysis Date:		2/11/2010 8:07:22 PM	
Methyl tert-butyl ether (MTBE)	19.49	µg/L	2.5	20	0	97.5	51.2	138	5.72	28	
Benzene	20.94	µg/L	1.0	20	0.672	101	85.9	113	5.79	27	
Toluene	21.31	µg/L	1.0	20	1.892	97.1	86.4	113	6.96	19	
Ethylbenzene	20.57	µg/L	1.0	20	0.408	101	83.5	118	4.65	10	
Xylenes, Total	62.14	µg/L	2.0	60	0	104	83.4	122	4.16	13	
1,2,4-Trimethylbenzene	20.27	µg/L	1.0	20	0.414	99.3	83.5	115	3.13	21	
1,3,5-Trimethylbenzene	19.38	µg/L	1.0	20	0	96.9	85.2	113	2.95	10	
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R37359**	Analysis Date:		2/11/2010 9:24:30 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R37375**	Analysis Date:		2/15/2010 9:13:40 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R37359**	Analysis Date:		2/11/2010 8:37:29 PM	
Methyl tert-butyl ether (MTBE)	20.28	µg/L	2.5	20	0	101	51.2	138			
Benzene	20.88	µg/L	1.0	20	0	104	85.9	113			
Toluene	20.44	µg/L	1.0	20	0	102	86.4	113			
Ethylbenzene	20.19	µg/L	1.0	20	0	101	83.5	118			
Xylenes, Total	61.47	µg/L	2.0	60	0	102	83.4	122			
1,2,4-Trimethylbenzene	20.58	µg/L	1.0	20	0	103	83.5	115			
1,3,5-Trimethylbenzene	19.65	µg/L	1.0	20	0	98.3	85.2	113			
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R37375**	Analysis Date:		2/15/2010 5:43:35 PM	
Methyl tert-butyl ether (MTBE)	18.08	µg/L	2.5	20	0	90.4	51.2	138			
Benzene	18.82	µg/L	1.0	20	0	94.1	85.9	113			
Toluene	18.26	µg/L	1.0	20	0	91.3	86.4	113			
Ethylbenzene	17.98	µg/L	1.0	20	0	89.9	83.5	118			
Xylenes, Total	54.44	µg/L	2.0	60	0	90.7	83.4	122			
1,2,4-Trimethylbenzene	18.56	µg/L	1.0	20	0	92.8	83.5	115			
1,3,5-Trimethylbenzene	17.58	µg/L	1.0	20	0	87.9	85.2	113			
Sample ID: 100NG BTEX LCSD		*LCSD*				Batch ID:	**R37375**	Analysis Date:		2/15/2010 6:13:58 PM	
Methyl tert-butyl ether (MTBE)	19.13	µg/L	2.5	20	0	95.7	51.2	138	5.63	28	
Benzene	19.44	µg/L	1.0	20	0	97.2	85.9	113	3.23	27	
Toluene	18.91	µg/L	1.0	20	0	94.5	86.4	113	3.49	19	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 100NG BTEX LCSD		*LCSD*				Batch ID:	**R37375**	Analysis Date:		2/15/2010 6:13:58 PM	
Ethylbenzene	18.47	µg/L	1.0	20	0	92.3	83.5	118	2.68	10	
Xylenes, Total	56.28	µg/L	2.0	60	0	93.8	83.4	122	3.32	13	
1,2,4-Trimethylbenzene	18.27	µg/L	1.0	20	0	91.4	83.5	115	1.55	21	
1,3,5-Trimethylbenzene	17.75	µg/L	1.0	20	0	88.8	85.2	113	0.996	10	
Sample ID: 1002193-03A MS		*MS*				Batch ID:	**R37359**	Analysis Date:		2/11/2010 7:37:01 PM	
Methyl tert-butyl ether (MTBE)	20.64	µg/L	2.5	20	0	103	51.2	138			
Benzene	22.19	µg/L	1.0	20	0.672	108	85.9	113			
Toluene	22.85	µg/L	1.0	20	1.892	105	86.4	113			
Ethylbenzene	21.55	µg/L	1.0	20	0.408	106	83.5	118			
Xylenes, Total	64.77	µg/L	2.0	60	0	108	83.4	122			
1,2,4-Trimethylbenzene	20.91	µg/L	1.0	20	0.414	103	83.5	115			
1,3,5-Trimethylbenzene	19.96	µg/L	1.0	20	0	99.8	85.2	113			
Method: EPA Method 8082: PCB's											
Sample ID: MB-21369		*MBLK*				Batch ID:	**21369**	Analysis Date:		2/16/2010 10:25:43 AM	
Aroclor 1016	ND	mg/Kg	0.020								
Aroclor 1221	ND	mg/Kg	0.020								
Aroclor 1232	ND	mg/Kg	0.020								
Aroclor 1242	ND	mg/Kg	0.020								
Aroclor 1248	ND	mg/Kg	0.020								
Aroclor 1254	ND	mg/Kg	0.020								
Aroclor 1260	ND	mg/Kg	0.020								
Sample ID: LCS-21369		*LCS*				Batch ID:	**21369**	Analysis Date:		2/16/2010 11:12:56 AM	
Aroclor 1260	0.09635	mg/Kg	0.020	0.125	0	77.1	38.2	140			
Sample ID: LCSD-21369		*LCSD*				Batch ID:	**21369**	Analysis Date:		2/16/2010 12:00:05 PM	
Aroclor 1260	0.07835	mg/Kg	0.020	0.125	0	62.7	38.2	140	20.6	34.2	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: 1002193-07AMSD		*MSD*				Batch ID:	**21395**	Analysis Date:		2/19/2010 1:28:26 AM	
Naphthalene	1.543	mg/Kg	0.25	2	0	77.2	18.1	105	4.00	20	
1-Methylnaphthalene	1.607	mg/Kg	0.25	2	0	80.3	22.4	120	4.31	20	
2-Methylnaphthalene	1.537	mg/Kg	0.25	2	0	76.8	22.6	108	2.94	20	
Acenaphthylene	1.538	mg/Kg	0.25	2	0	76.9	15.3	104	3.81	20	
Acenaphthene	1.586	mg/Kg	0.25	2	0	79.3	26.8	115	3.24	20	
Fluorene	0.1235	mg/Kg	0.030	0.2	0	61.8	28.1	81.5	11.6	20	
Phenanthrene	0.07850	mg/Kg	0.015	0.101	0	78.0	21.7	102	5.23	20	
Anthracene	0.07650	mg/Kg	0.015	0.101	0	76.0	30.3	107	3.32	20	
Fluoranthene	0.1533	mg/Kg	0.020	0.201	0	76.4	29.6	118	5.86	20	
Pyrene	0.1493	mg/Kg	0.025	0.2	0	74.6	32	105	6.40	20	
Benz(a)anthracene	0.01400	mg/Kg	0.010	0.02	0	70.0	19.6	108	5.50	20	
Chrysene	0.07150	mg/Kg	0.011	0.101	0	71.1	23.1	106	5.39	20	
Benzo(b)fluoranthene	0.01750	mg/Kg	0.010	0.025	0	70.0	32.2	94.8	4.38	20	
Benzo(k)fluoranthene	ND	mg/Kg	0.010	0.013	0	72.0	25.6	123	0	20	
Benzo(a)pyrene	ND	mg/Kg	0.010	0.013	0	78.0	26.1	117	0	20	
Dibenz(a,h)anthracene	0.01975	mg/Kg	0.010	0.025	0	79.0	29.3	119	2.56	20	
Benzo(g,h,i)perylene	0.02075	mg/Kg	0.010	0.025	0.0018	76.0	23.8	93.7	2.44	20	
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10	0.050	0	81.0	27.7	119	0	20	
Sample ID: MB-21395		*MBLK*				Batch ID:	**21395**	Analysis Date:		2/18/2010 11:41:34 PM	
Naphthalene	ND	mg/Kg	0.25								
1-Methylnaphthalene	ND	mg/Kg	0.25								
2-Methylnaphthalene	ND	mg/Kg	0.25								
Acenaphthylene	ND	mg/Kg	0.25								
Acenaphthene	ND	mg/Kg	0.25								
Fluorene	ND	mg/Kg	0.030								
Phenanthrene	ND	mg/Kg	0.015								
Anthracene	ND	mg/Kg	0.015								
Fluoranthene	ND	mg/Kg	0.020								
Pyrene	ND	mg/Kg	0.025								
Benz(a)anthracene	ND	mg/Kg	0.010								
Chrysene	ND	mg/Kg	0.011								
Benzo(b)fluoranthene	ND	mg/Kg	0.010								
Benzo(k)fluoranthene	ND	mg/Kg	0.010								
Benzo(a)pyrene	ND	mg/Kg	0.010								
Dibenz(a,h)anthracene	ND	mg/Kg	0.010								
Benzo(g,h,i)perylene	ND	mg/Kg	0.010								
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10								
Sample ID: LCS-21395		*LCS*				Batch ID:	**21395**	Analysis Date:		2/19/2010 12:02:57 AM	
Naphthalene	1.675	mg/Kg	0.25	2	0	83.7	24.9	105			
1-Methylnaphthalene	1.760	mg/Kg	0.25	2	0	88.0	31.9	106			
2-Methylnaphthalene	1.683	mg/Kg	0.25	2	0	84.1	30	103			
Acenaphthylene	1.686	mg/Kg	0.25	2	0	84.3	36.2	107			
Acenaphthene	1.705	mg/Kg	0.25	2	0	85.2	37.2	107			
Fluorene	0.1360	mg/Kg	0.030	0.2	0	68.0	22.4	87.7			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: LCS-21395		*LCS*				Batch ID:	**21395**	Analysis Date:	2/19/2010 12:02:57 AM		
Phenanthrene	0.08725	mg/Kg	0.015	0.101	0	86.7	32.6	91.9			
Anthracene	0.08325	mg/Kg	0.015	0.101	0	82.8	34.4	101			
Fluoranthene	0.1710	mg/Kg	0.020	0.201	0	85.2	35.9	106			
Pyrene	0.1623	mg/Kg	0.025	0.2	0	81.1	24.1	96.4			
Benz(a)anthracene	0.01500	mg/Kg	0.010	0.02	0.001	70.0	21.6	111			
Chrysene	0.07800	mg/Kg	0.011	0.101	0	77.5	28.6	104			
Benzo(b)fluoranthene	0.02000	mg/Kg	0.010	0.025	0	80.0	28.8	123			
Benzo(k)fluoranthene	0.01025	mg/Kg	0.010	0.013	0.001	74.0	30.3	114			
Benzo(a)pyrene	0.01000	mg/Kg	0.010	0.013	0.0008	74.0	24.4	105			
Dibenz(a,h)anthracene	0.02175	mg/Kg	0.010	0.025	0	87.0	23.6	110			
Benzo(g,h,i)perylene	0.02275	mg/Kg	0.010	0.025	0.003	79.0	31.7	99.9			
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10	0.050	0.002	84.0	25.1	114			
Sample ID: 1002193-07AMS		*MS*				Batch ID:	**21395**	Analysis Date:	2/19/2010 1:07:04 AM		
Naphthalene	1.483	mg/Kg	0.25	2	0	74.1	18.1	105			
1-Methylnaphthalene	1.539	mg/Kg	0.25	2	0	76.9	22.4	120			
2-Methylnaphthalene	1.492	mg/Kg	0.25	2	0	74.6	22.6	108			
Acenaphthylene	1.481	mg/Kg	0.25	2	0	74.0	15.3	104			
Acenaphthene	1.536	mg/Kg	0.25	2	0	76.8	26.8	115			
Fluorene	0.1100	mg/Kg	0.030	0.2	0	55.0	28.1	81.5			
Phenanthrene	0.07450	mg/Kg	0.015	0.101	0	74.1	21.7	102			
Anthracene	0.07400	mg/Kg	0.015	0.101	0	73.6	30.3	107			
Fluoranthene	0.1625	mg/Kg	0.020	0.201	0	81.0	29.6	118			
Pyrene	0.1400	mg/Kg	0.025	0.2	0	70.0	32	105			
Benz(a)anthracene	0.01325	mg/Kg	0.010	0.02	0	66.3	19.6	108			
Chrysene	0.06775	mg/Kg	0.011	0.101	0	67.3	23.1	106			
Benzo(b)fluoranthene	0.01675	mg/Kg	0.010	0.025	0	67.0	32.2	94.8			
Benzo(k)fluoranthene	ND	mg/Kg	0.010	0.013	0	72.0	25.6	123			
Benzo(a)pyrene	ND	mg/Kg	0.010	0.013	0	78.0	26.1	117			
Dibenz(a,h)anthracene	0.01925	mg/Kg	0.010	0.025	0	77.0	29.3	119			
Benzo(g,h,i)perylene	0.02025	mg/Kg	0.010	0.025	0.0018	74.0	23.8	93.7			
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10	0.050	0	78.5	27.7	119			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: MB-21393		*MBLK*				Batch ID:	**21393**	Analysis Date:	2/18/2010 8:50:19 PM		
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	2.0								
2-Methylnaphthalene	ND	µg/L	2.0								
Acenaphthylene	ND	µg/L	2.5								
Acenaphthene	ND	µg/L	5.0								
Fluorene	ND	µg/L	0.80								
Phenanthrene	ND	µg/L	0.60								
Anthracene	ND	µg/L	0.60								
Fluoranthene	ND	µg/L	0.30								
Pyrene	ND	µg/L	0.60								
Benz(a)anthracene	ND	µg/L	0.070								
Chrysene	ND	µg/L	0.20								
Benzo(b)fluoranthene	ND	µg/L	0.10								
Benzo(k)fluoranthene	ND	µg/L	0.070								
Benzo(a)pyrene	ND	µg/L	0.070								
Dibenz(a,h)anthracene	ND	µg/L	0.070								
Benzo(g,h,i)perylene	ND	µg/L	0.080								
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080								
Sample ID: LCS-21393		*LCS*				Batch ID:	**21393**	Analysis Date:	2/18/2010 9:33:07 PM		
Naphthalene	45.26	µg/L	2.0	80	0	56.6	20.5	109			
1-Methylnaphthalene	47.62	µg/L	2.0	80.2	0	59.4	23.1	116			
2-Methylnaphthalene	45.47	µg/L	2.0	80	0	56.8	19.5	112			
Acenaphthylene	49.23	µg/L	2.5	80.2	0	61.4	27.5	119			
Acenaphthene	45.61	µg/L	5.0	80	0	57.0	31	117			
Fluorene	3.540	µg/L	0.80	8.02	0	44.1	17.1	109			
Phenanthrene	2.210	µg/L	0.60	4.02	0	55.0	25.5	112			
Anthracene	2.230	µg/L	0.60	4.02	0	55.5	25.8	119			
Fluoranthene	4.710	µg/L	0.30	8.02	0	58.7	27.2	122			
Pyrene	4.260	µg/L	0.60	8.02	0	53.1	24.1	118			
Benz(a)anthracene	0.4000	µg/L	0.070	0.802	0	49.9	31.1	125			
Chrysene	2.090	µg/L	0.20	4.02	0	52.0	32.8	119			
Benzo(b)fluoranthene	0.5500	µg/L	0.10	1.002	0	54.9	24.4	117			
Benzo(k)fluoranthene	0.2900	µg/L	0.070	0.5	0	58.0	28.4	132			
Benzo(a)pyrene	0.2900	µg/L	0.070	0.502	0	57.8	32.4	119			
Dibenz(a,h)anthracene	0.5900	µg/L	0.070	1.002	0	58.9	33.9	120			
Benzo(g,h,i)perylene	0.6000	µg/L	0.080	1	0.04	56.0	35.2	113			
Indeno(1,2,3-cd)pyrene	1.200	µg/L	0.080	2.004	0	59.9	33.6	115			
Sample ID: LCSD-21393		*LCSD*				Batch ID:	**21393**	Analysis Date:	2/18/2010 9:54:27 PM		
Naphthalene	56.74	µg/L	2.0	80	0	70.9	20.5	109	22.5	32.1	
1-Methylnaphthalene	59.09	µg/L	2.0	80.2	0	73.7	23.1	116	21.5	32.7	
2-Methylnaphthalene	57.56	µg/L	2.0	80	0	72.0	19.5	112	23.5	34	
Acenaphthylene	57.42	µg/L	2.5	80.2	0	71.6	27.5	119	15.4	38.8	
Acenaphthene	60.09	µg/L	5.0	80	0	75.1	31	117	27.4	38.6	
Fluorene	4.530	µg/L	0.80	8.02	0	56.5	17.1	109	24.5	29.3	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Casa Grande/ El Vado **Work Order:** 1002193

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: LCSD-21393		*LCSD*				Batch ID:	**21393**	Analysis Date:		2/18/2010 9:54:27 PM	
Phenanthrene	3.070	µg/L	0.60	4.02	0	76.4	25.5	112	32.6	25	R
Anthracene	2.960	µg/L	0.60	4.02	0	73.6	25.8	119	28.1	23.9	R
Fluoranthene	6.020	µg/L	0.30	8.02	0	75.1	27.2	122	24.4	15.7	R
Pyrene	5.740	µg/L	0.60	8.02	0	71.6	24.1	118	29.6	15.3	R
Benz(a)anthracene	0.5500	µg/L	0.070	0.802	0	68.6	31.1	125	31.6	19	R
Chrysene	2.820	µg/L	0.20	4.02	0	70.1	32.8	119	29.7	16.6	R
Benzo(b)fluoranthene	0.7100	µg/L	0.10	1.002	0	70.9	24.4	117	25.4	21.7	R
Benzo(k)fluoranthene	0.3600	µg/L	0.070	0.5	0	72.0	28.4	132	21.5	19.4	R
Benzo(a)pyrene	0.3800	µg/L	0.070	0.502	0	75.7	32.4	119	26.9	16.7	R
Dibenz(a,h)anthracene	0.7700	µg/L	0.070	1.002	0	76.8	33.9	120	26.5	17.3	R
Benzo(g,h,i)perylene	0.7600	µg/L	0.080	1	0.04	72.0	35.2	113	23.5	18	R
Indeno(1,2,3-cd)pyrene	1.550	µg/L	0.080	2.004	0	77.3	33.6	115	25.5	17.7	R
Method: EPA Method 6010B: Dissolved Metals											
Sample ID: 1002193-03DMSD		*MSD*				Batch ID:	**R37339**	Analysis Date:		2/11/2010 11:43:29 AM	
Lead	0.4841	mg/L	0.0050	0.5	0.0043	96.0	75	125	0.795	20	
Sample ID: 1002193-03DMSD		*MSD*				Batch ID:	**R37357**	Analysis Date:		2/14/2010 3:37:30 PM	
Iron	3.935	mg/L	0.10	2.5	1.469	98.6	75	125	0.757	20	
Manganese	3.083	mg/L	0.010	2.5	0.6444	97.5	75	125	0.247	20	
Sample ID: MB		*MBLK*				Batch ID:	**R37339**	Analysis Date:		2/11/2010 10:47:28 AM	
Iron	ND	mg/L	0.020								
Lead	ND	mg/L	0.0050								
Manganese	ND	mg/L	0.0020								
Sample ID: LCS		*LCS*				Batch ID:	**R37339**	Analysis Date:		2/11/2010 10:49:23 AM	
Iron	0.5060	mg/L	0.020	0.5	0	101	80	120			
Lead	0.4945	mg/L	0.0050	0.5	0	98.9	80	120			
Manganese	0.5088	mg/L	0.0020	0.5	0	102	80	120			
Sample ID: 1002193-03DMS		*MS*				Batch ID:	**R37339**	Analysis Date:		2/11/2010 11:35:17 AM	
Lead	0.4803	mg/L	0.0050	0.5	0.0043	95.2	75	125			
Sample ID: 1002193-03DMS		*MS*				Batch ID:	**R37357**	Analysis Date:		2/14/2010 3:35:15 PM	
Iron	3.905	mg/L	0.10	2.5	1.469	97.4	75	125			
Manganese	3.091	mg/L	0.010	2.5	0.6444	97.9	75	125			
Method: EPA Method 6010B: Soil Metals											
Sample ID: MB-21400		*MBLK*				Batch ID:	**21400**	Analysis Date:		2/17/2010 9:17:48 AM	
Lead	ND	mg/Kg	0.25								
Sample ID: LCS-21400		*LCS*				Batch ID:	**21400**	Analysis Date:		2/17/2010 9:19:57 AM	
Lead	24.85	mg/Kg	0.25	25	0	99.4	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Chain-of-Custody Record

Client: INTERA Inc.

Mailing Address: 6000 Uptown Blvd. Suite 100, ABQ, NM

Phone #: 505-246-1600

email or Fax#: jtracy@intera.com

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Casa Grande/El Vado

Project #: COA-OCS-02-05

Project Manager: Joe Tracy

Sampler: Eileen Romesser

On Ice: ☒ Yes ☐ No

Sample Temperature: 3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1003193	BTEX + MTBE + TMB's (8021)	BTEX + 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,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	PCBs - 8082	Dissolved Lead	Iron & Manganese	Total Lead	Air Bubbles (Y or N)	Soil Moisture
2/9/10	14:30	S	SS-01-020910	4oz glass	NA	1												X					
2/9/10	14:35	S	SS-02-020910	4oz glass Jar	NA	2												X					
2/9/10	9:00	AQ	SB-04-020910	1L Amber, 250 40mL VOA 125mL plastic	HNO_3, $HgCl_2$	3	X		X		X	X							X	X			
2/9/10	10:20	AQ	SB-05-020910	1L Amber 250 40mL VOA 125 plastic	HNO_3, $HgCl_2$	4	X		X		X	X							X	X			
2/9/10	12:00	AQ	SB-07-020910	1L Amber 250 40mL VOA 125 plastic	HNO_3, $HgCl_2$	5	X		X		X	X							X	X			
2/9/10	13:30	AQ	SB-01-020910	1L Amber 250 40mL VOA 125 plastic	HNO_3, $HgCl_2$	6	X		X		X	X							X	X			
2/9/10	10:20	S	SB-05-8-11	4oz glass MeOH vial glass	MeOH	7	X		X		X	X									X		X
2/9/10	12:30	S	SB-06-8-11	4oz glass vial glass	MeOH	8	X		X		X	X									X		X
2/9/10	12:00	S	SB-07-8-11	4oz glass vial glass	MeOH	9	X		X		X	X									X		X
2/9/10	12:45	S	SB-03-8-11	4oz glass vial glass	MeOH	10	X		X		X	X									X		X
			trip blank TB 10/10			11																	
			Meoh Blanks			12																	

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/10/10	13:55		Ignacio Mayes		
Date:	Time:	Relinquished by:	Received by:	Date	Time
				2/10/10	14:40

Remarks:

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 E
PHOTOGRAPHIC LOG

No. 1 – View of the advancing a soil boring in the front of the El Vado Motel, looking north.

No. 2 – View of collecting a groundwater grab sample at soil boring SB-01.

No. 3 – View of abandoning a soil boring with bentonite pellets.

No. 4 – View of a typical asphalt patch using cold patch asphalt.

No. 5 – View of Sunbelt Geophysics personnel conducting the geophysical survey at the El Vado Motel, looking west.

No. 6 – View of Sunbelt Geophysics personnel conducting the geophysical survey at the El Vado Motel, looking north.

APPENDIX F
GEOPHYSICAL SURVEY REPORT

SUNBELT GEOPHYSICS P.O. Box 208 Socorro, New Mexico 87801 (575) 838-2941

Geophysical Investigations for Abandoned USTs 2500 Central SW (El Vado Motel) and 2424 Central SW Albuquerque, New Mexico

Prepared for:
INTERA Incorporated
6000 Uptown Boulevard, NE
Albuquerque, New Mexico 87110

David A. Hyndman

February 2010

Summary

Geophysical investigations have been conducted at 2500 Central Ave. SW (El Vado Motel) and the adjacent 2424 Central Ave. SW in Albuquerque, New Mexico. The objective of these investigations was to determine if abandoned underground storage tanks (USTs) remained from past land use.

Electromagnetic and ground penetrating radar surveys found no evidence of USTs at either property. A relic foundation and several buried lines were found at 2424 Central Ave.

Introduction

Geophysical investigations have been conducted at the El Vado Motel located at 2500 Central SW and the adjacent property at 2424 Central SW in Albuquerque, New Mexico. The objective of these investigations was to determine if abandoned underground storage tanks (USTs) remained from past land use. The investigations consisted of high-resolution metal detection surveys and ground penetrating radar surveys supported by magnetic screening.

The field work for the geophysical investigations was conducted on 9 February, 2010. Labor, instrumentation, and technical expertise for the surveys were provided by Sunbelt Geophysics of Socorro, New Mexico. Guidance, coordination and oversight were provided by INTERA Incorporated of Albuquerque, New Mexico.

Methods

Geophysical surveying was conducted over spatial control and data acquisition grids which were established utilizing a transit and tape. The grids were positioned to cover the areas of interest designated by INTERA. The grids established parallel data acquisition traverses separated by 4 feet which were marked with small dots of spray paint.

Initial surveys were conducted using a Geonics EM-61 metal detector with the 1-meter antenna set. The EM-61 is a time domain electromagnetic instrument capable of detecting concentrations of buried metal, such as USTs, to a depth of approximately 10 ft. The EM-61 data were acquired every 0.65 feet along the parallel traverses.

A second survey was conducted using a Sensors & Software Noggin 250 MHz ground penetrating radar (GPR) system. GPR data were acquired every 0.16 feet along traverses separated by 2 feet.

Data from these instruments were transferred to a computer for analysis and mapping. The DAT61 (Geonics Ltd.), Ekko_View (Sensors & Software Ltd.) and the Oasis montaj (Geosoft Ltd.) programs were used for processing and image preparation.

The EM-61, GPR and a Schonstedt magnetic locator were deployed for qualitative screening over areas where landscaping and other features limited placing a grid for formal surveying.

Results

2500 Central SW (El Vado Motel)

An image of the EM-61 data acquired to the west of the face of the El Vado Motel is shown in Figure 1. Even a small, deep UST can be expected to generate a strong (red to pink) response. Strong response is only observed where generated by the perimeter fence, a re-enforced concrete sidewalk, and a low wall. No features consistent with a UST are observed.

Two subsurface features with modest response (orange) are observed in the northern portion of the survey. These are interpreted to be buried pipes. An additional linear feature with mild

response (blue to green) is found in the center of the survey. This is may a relic underground line.

The GPR detected an area of disturbed soil, suggestive of backfill, where marked on Figure 1. Examples of north – south and east – west profiles over this area are given in Figure 2. The disturbed soil may indicate the location of former USTs that have been removed.

2424 Central SW

An image of the EM-61 data acquired over the western side of 2424 Central SW is given in Figure 3. This image is dominated by several very strong (>2000 mV) anomalies forming a square with dimensions of approximately 50 feet by 50 feet. A 1982 historical aerial image provided by INTERA shows a structure, reported to be a fuel dispensing facility, with these dimensions at this location. It is assumed that most of this EM-61 response is due to re-enforcing steel in the relic concrete foundation of this facility. Several buried lines are seen running west, north and east from the relic foundation.

The GPR proved able to at least partially penetrate the re-enforced concrete and no features consistent with a UST were detected below the relic foundation. Breaks in the concrete foundation and buried lines adjacent to the foundation were found. Example GPR profiles are given in Figure 4.

Combined interpretations of both geophysical data sets are provided in Figure 5. There are four areas in the relic foundation where the concrete has been removed. These areas have approximate dimensions of 8 ft by 10 ft, and two are connected by a narrow channel. Numerous buried lines run from the relic foundation. Those running to the east are relatively small cables or pipes, possibly relic power, control, and/or water supply. The lines running to the north and west are larger, possibly relic product supply pipes. No breaks in the perimeter of the concrete foundation were found; breaks would be expected for complete product line removal.

The areas blocked by landscaping were screened with a Schonstedt magnetic locator and the EM-61 and GPR where possible. No features suggestive of a UST were found.

Conclusions

The results of the geophysical investigations at the two properties along Central Avenue support the following conclusions:

- No subsurface objects consistent with a UST were detected at the El Vado Motel. An area of disturbed soil was found; possibly the former location of USTs.

- No subsurface objects consistent with a UST were detected at 2424 Central Ave. A relic concrete foundation and several buried lines were found. There are indications that the former fueling facilities were not completely removed.

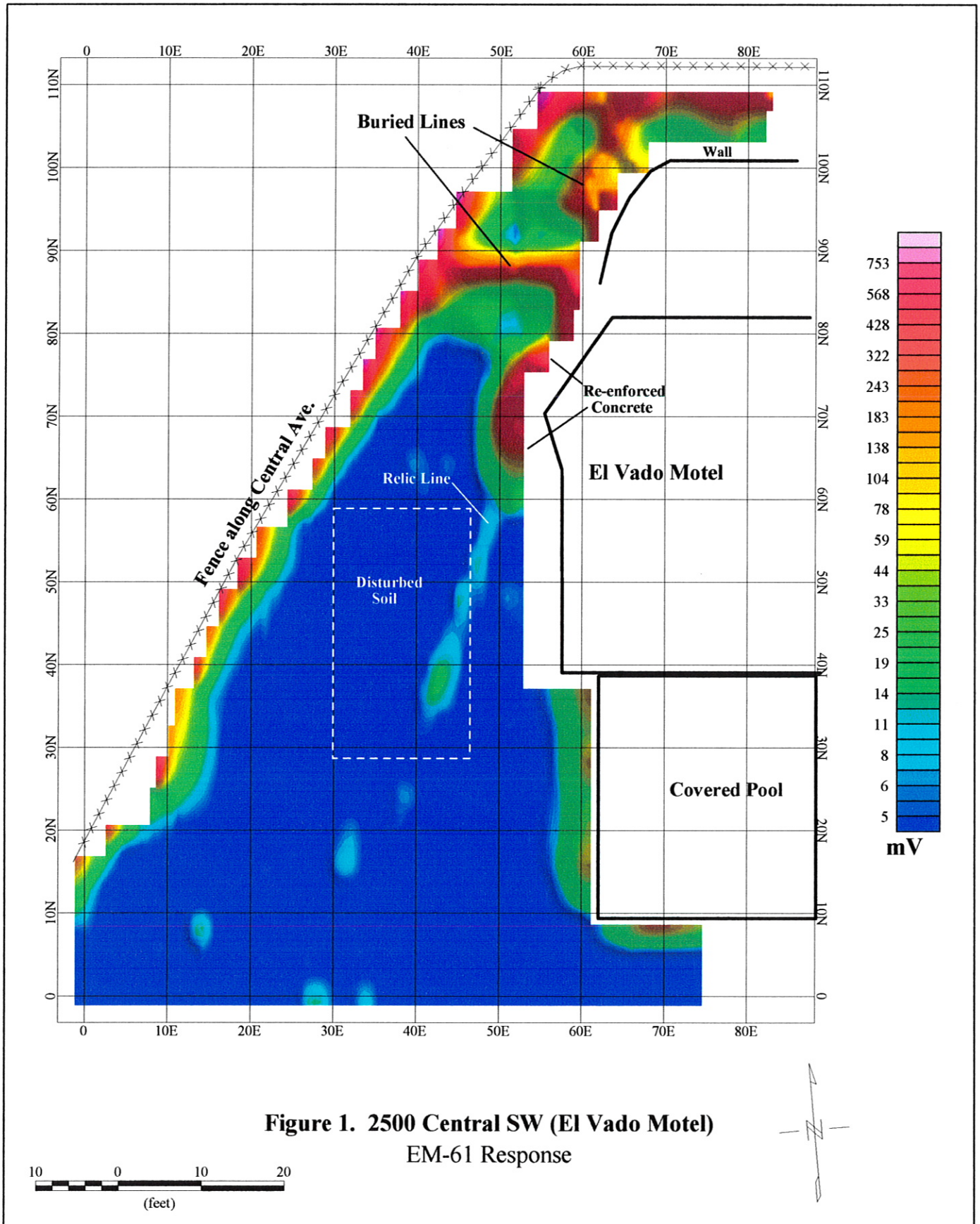


Figure 1. 2500 Central SW (El Vado Motel)
EM-61 Response

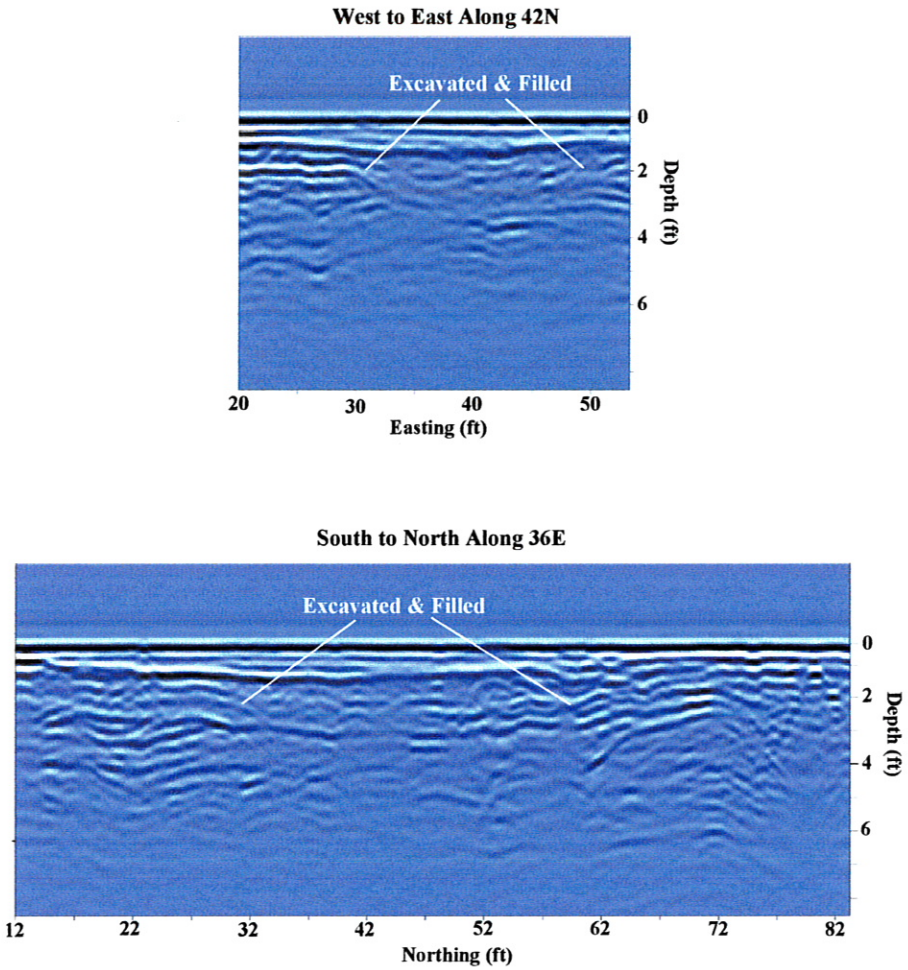


Figure 2. 2500 Central SW (El Vado Motel)
Example GPR Profiles

10 0 10 20
(feet)

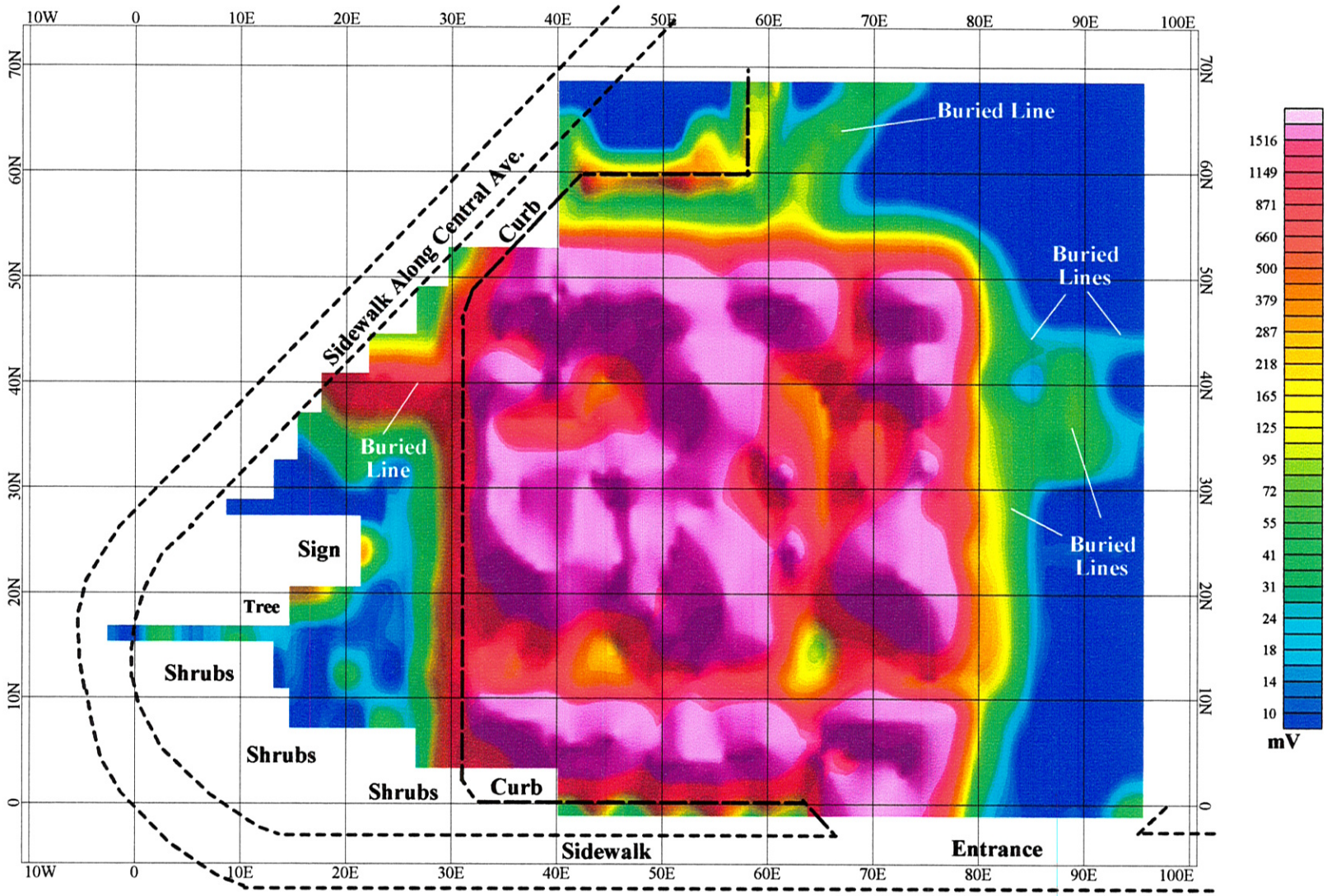


Figure 3. 2424 Central SW
EM-61 Response

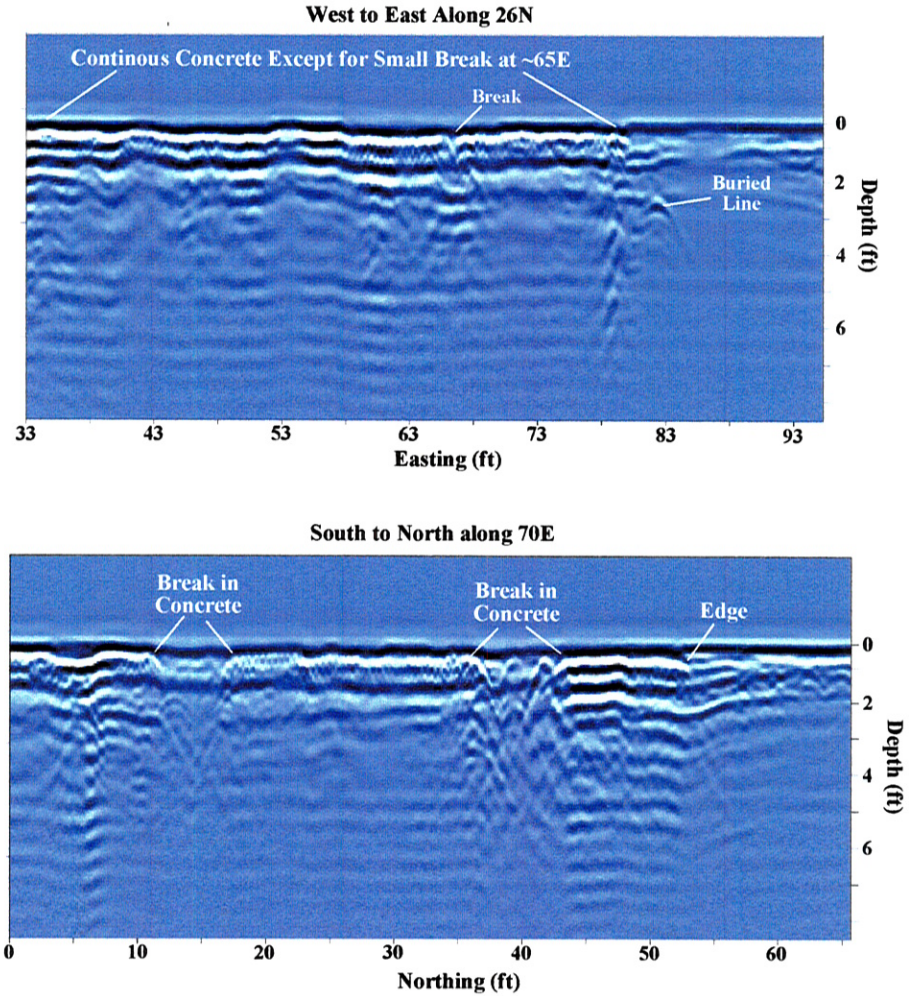
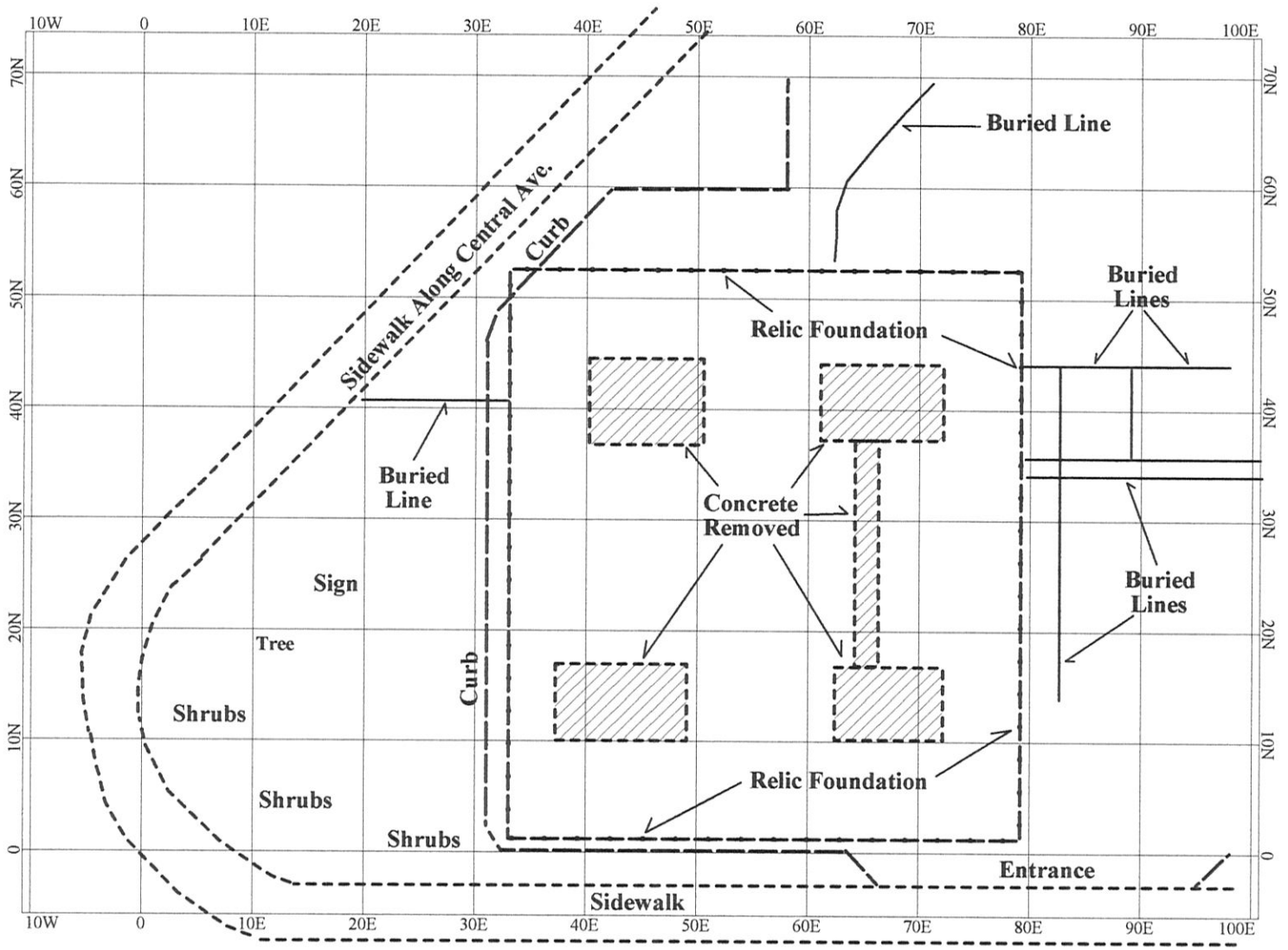


Figure 4. 2424 Central SW

Example GPR Profiles

10 0 10

(feet)



10 0 10
(feet)

Figure 5. 2424 Central SW
Interpretations