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PHASE II ENVIRONMENTAL SITE ASSESSMENT
85, 105, 125, 155, 185, 195 NORTH EDISON WAY
RENO, NEVADA

June 7, 2013

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June 7, 2013
File: 131379.01

Mr. David P. Friedman
Nevada Division of Environmental Protection
Bureau of Corrective Actions
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701-5249

SUBJECT: Results of Phase II Environmental Site Assessment
85, 105, 125, 155, 185, and 195 North Edison Way
Reno, Nevada

Dear Mr. Friedman:

Kleinfelder has completed a Phase II Environmental Site Assessment (ESA) for the properties located at 85, 105, 125, 155, 185, and 195 North Edison Way in Reno, Washoe County, Nevada (Site) as shown on Plate 1. The Site was previously developed with six buildings, which were demolished in 2010 as part of a Truckee River Flood Management Authority (TRFMA) flood control project. The scope of the Phase II ESA was developed based on the results of Phase I ESA reports dating from 2006 and 2007 (Robison Engineering Company, 2006a, 2006b, 2006c, 2007a, and 2007b) and was performed in accordance with the Field Sampling Plan dated January 21, 2013 and our revised proposal REN12P0409R, dated November 7, 2012.

Should you have any questions regarding this report or wish to discuss the conclusions and recommendations provided, please contact the undersigned at 775-689-7800.

Sincerely,

KLEINFELDER WEST, INC.

Phil Tousignant, CEM
Project Manager

for JF
Joshua Fortmann, CEM, PG
Senior Geologist

cc: Ms. Mimi Fujii-Strickler, Truckee River Flood Management Authority

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A Report Prepared for:

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Bureau of Corrective Actions
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PHASE II ENVIRONMENTAL
SITE ASSESSMENT
85, 105, 125, 155, 185, 195 NORTH EDISON WAY
RENO, NEVADA

Kleinfelder Job No. 131379.01

Prepared by:

Phil Tousignant, CEM #2001, Exp. 3/1/15
Project Manager

I, Phil Tousignant, hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable Federal, State and local statutes, regulations, and ordinances.

Joshua Fortmann, CEM, PG
Senior Geologist

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June 7, 2013

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1 PROJECT BACKGROUND

The subject site consists of six properties located at 85, 105, 125, 155, 185, and 195 North Edison Way (Site) in the city of Reno, Nevada (Plate 1). According to Phase I Environmental Site Assessments (ESAs) performed in 2006 and 2007, the Site was developed for mixed-commercial use in the early 1970s and was occupied by a variety of commercial tenants, including auto repair shops, a photo developer, construction companies, machine shops, a granite counter top manufacturer, a painter, and multiple restaurants for 30+ years (Robison Engineering Company, 2006a, 2006b, 2006c, 2007a, 2007b). The Truckee River Flood Management Authority (TRFMA) purchased the Site as part of a flood control project and demolished all structures at the Site in 2010; concrete building pads and asphalt paved parking areas remain in place pending future Site rehabilitation.

The Phase I ESAs documented a history of petroleum product and solvent usage at the Site. Based on these results, in addition to TFRMA's planned redevelopment activities at the Site, its location adjacent to the Truckee River (Plate 1), and known soil contamination at other nearby sites (Kleinfelder 2010), Kleinfelder recommended the completion of a Phase II ESA at the Site. This Phase II ESA was designed to provide analytical data to assess the potential for adverse environmental or human health impacts as a result of potential soil contamination at the Site.

2 SCOPE OF WORK

The scope of work for this Phase II ESA was completed in general accordance with the Field Sampling Plan (FSP) (Kleinfelder, 2013). Our scope of work identified in the FSP included a passive soil gas (PSG) survey and soil sample collection from 14 test pits; which were analyzed for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), Resource Conservation and Recovery Act (RCRA) metals, and ethylene glycol. This report documents the results of Phase II ESA sampling activities.

3 ASSESSMENT ACTIVITIES AND METHODOLOGY

Prior to performing field activities, Kleinfelder notified Underground Service Alert (USA), as required by Nevada regulations, marked the Site with white paint and reviewed the Health and Safety Plan (HASP) included in the FSP.

3.1 PASSIVE SOIL GAS SURVEY

PSG data are used as a cost-efficient, qualitative screening tool to assess TPH and VOC mass in soil vapor and aid in identifying locations to perform soil sample collection. Kleinfelder installed 34 Beacon Environmental Services, Inc. (Beacon) modules (modules) for PSG sample collection at the Site between February 11 and 13, 2013. Module locations were chosen using a judgmental sampling approach to capture the perimeter of the Site, the building footprints, and storm drain or other possible contaminant discharge locations. The PSG locations are shown on Figure 1 of Beacon's PSG Survey Analytical Report (Appendix A).

3.1.1 Installations

PSG module installation and retrieval activities were performed in accordance with the *Field Kit Guide for Passive Soil-Gas Investigations*, provided by Beacon (Appendix B). A 1.5-inch diameter drill bit was used to drill the first 12 inches of the sample hole. The sample holes were then deepened using a 0.75-inch diameter drill bit, to a depth of approximately 34 inches. A few of the sample holes were terminated shallower, at depths ranging between 28 and 34 inches, due to difficult drilling conditions. Soil cuttings accumulated in the upper portion of the sample hole were cleaned out using a wet-dry "shop-vac". A length of rebar was then temporarily inserted into the sample hole, and used to guide a 1-inch diameter, 12-inch long metal sleeve into the upper portion of the sample hole. The purpose of using the temporary rebar as a guide was to ensure that the metal sleeve was positioned directly atop the deeper portion of the sample hole. The metal sleeve was tapped into the sample hole using a hammer and wood dowel, so that the top of the metal sleeve was approximately 0.5-inch below ground surface. This also seated the bottom of the sleeve in the bottom of the 1.5-inch

diameter hole to reduce lateral vapor migration in the top 12 inches of the hole (as described in the Beacon *Field Kit Guide for Passive Soil-Gas Investigations).*

Upon installation of each metal sleeve, the solid plastic cap from the sample module vial was replaced with a screen-mesh sample cap. The sample module vial was then suspended using metal wire, open end down, approximately 6 to 8 inches below the top of the metal sleeve. The top of the sample hole was then plugged using a patch of aluminum foil and sealed with a 1-inch thick layer of grout.

3.1.2 Retrieval

The modules were retrieved between February 25 and 26, 2013, after a 13 to 14 days exposure period. To retrieve the modules, the grout seal was removed using a hammer and chisel to expose the aluminum foil patch. The module was then retrieved and the screen-mesh sample vial cap was immediately replaced by the solid plastic sample vial cap. The technician observed the sample hole for conditions including odors, water in the sample hole, and integrity of the grout seal, and recorded retrieval date and time on the *Field Deployment Report* data sheets (included in Appendix A). The sample hole was then backfilled and surface patched with non-shrink grout.

The modules were sent to Beacon in Forest Hill, MD, where they were analyzed for VOCs and TPH using EPA Method SW8260C. The TPH analyses are presented as C5-C9 (TPH in the range of gasoline [GRO]) and C10-C15 (TPH in the range of diesel [DRO]).

3.2 SOIL SAMPLE COLLECTION AND ANALYSIS

The FSP recommended excavation of a minimum of ten (10) test pits, with up to eight (8) additional test pits to be excavated in high TPH or VOC mass areas depending on the results of the PSG survey. The test pit locations were selected to assess 1) beneath building pads previously occupied by businesses that may have used petroleum products and/or solvents, 2) near stormwater drop-inlets, a grease interceptor, or other potential discharge locations and 3) areas exhibiting high TPH or VOC mass based on the PSG survey results. After review of the PSG data (see Section 4.1), discussion with NDEP, and field observations, a total of 13 test pits

locations were selected. However, an additional test pit (TP-14) was added when a small oil-water separator was observed in the building footprint at 185 North Edison Way. The locations of the test pits are shown on Plate 2.

The 14 test pits were excavated between March 26 and March 28, 2013 using a backhoe to dig to approximately 5 feet below ground surface (bgs). All test pits contained between approximately 1 and 5 feet of fill, with construction debris (concrete, metal, brick) noted in test pits TP-7 and TP-12. Native soil generally consisted of silts, sands and gravels (with varying amounts of cobbles and boulders). Photoionization (PID) readings were collected from each test pit at 2.5 and 5 feet bgs. No odors or visual evidence of contamination were reported in any of the test pits. Groundwater was not encountered in any of the test pits. The locations, total depths, fill and soil descriptions and PID readings from each test pit are presented in Table 1.

A soil sample was collected at the maximum depth of each test pit. Additionally, one extra soil sample was collected from TP-12 at 2.5 feet bgs on the basis of a PID reading of 3.8 parts per million by volume (ppmv), since all other PID readings were below background concentrations (<0.5 ppmv). Soil samples were collected directly from the test pit sidewalls or from the backhoe bucket into laboratory-supplied sample containers, sealed, labeled, and placed in an iced cooler for transport to the laboratory under chain-of-custody protocol.

Soil samples were transported to Alpha Analytical, Inc. (Alpha) in Sparks, Nevada under chain-of-custody protocol for analysis. Each of the 15 soil samples collected from the Site was analyzed for the following:

- TPH DRO, and TPH in the oil range (TPH-ORO) using EPA Method 8015;
- TPH GRO and VOCs using EPA Method 8260B;
- Resource Conservation and Recovery Act (RCRA) metals using EPA Method 6020; and
- Ethylene glycol using EPA Method 8015B.

In addition, two soil samples collected from test pit TP-12 (TP12-2.5 ft and TP12-5ft) were also analyzed for polyaromatic hydrocarbons (PAHs) by EPA Method SW8270C. These soil samples were analyzed for PAHs since the combined TPH concentrations for these samples were above the State of Nevada Reportable Concentration (RC) of 100 milligrams per kilogram (mg/Kg), as discussed in Section 4.2.

3.3 QUALITY CONTROL SAMPLES

3.3.1 PSG Survey

Two field blanks were collected during the PSG survey. The field blanks were collected by exposing a module to ambient air, once during the installation process and once during the removal process. The exposure time of the field blanks replicated the exposure time of modules installed for the PSG survey.

Two trip blanks were also provided by Beacon, consisting of sealed PSG sample modules. These trip blanks were kept with other PSG sample modules during all field activities, sample storage, and shipment.

Each PSG module contains two sorbent units. Two of the modules were selected randomly by Kleinfelder for duplicate analysis by Beacon.

All of the PSG survey quality control samples (field blanks, trip blanks, and duplicates) were analyzed for the same analyte list identified in Section 3.1.

3.3.2 Soil Sample Collection

The FSP required that equipment rinsate blanks be collected for reusable sampling equipment (stainless steel trowel) during soil sample collection activities. However, a stainless steel trowel was not used since the soil samples were collected directly into jars from the test pit sidewalls or from the backhoe bucket. Therefore, no rinsate blanks were collected.

Two trip blanks (one for each cooler delivered to Alpha), consisting of volatile organic analysis (VOA) vials containing clean, deionized water, were kept with the soil samples

during field activities and transport to the laboratory. The trip blanks were prepared and provided by Alpha. The trip blanks were analyzed for TPH GRO and VOCs by EPA Method 8260B.

4 FINDINGS

4.1 PSG SURVEY

Analytical results for the PSG survey are summarized in Table 2 and the complete Beacon PSG Survey Analytical Report is included as Appendix A. Figures provided by Beacon in their analytical report depict mass distribution of tetrachloroethene ([PCE], Figure 2), naphthalene (Figure 3), and TPH (combined for GRO and DRO, Figure 4).

Analytical results from the PSG survey detected the presence of TPH, naphthalene, and PCE in soil vapor at the Site. TPH was detected in PSG-4, PSG-15 through PSG-18, and PSG-20 at mass values ranging from 5,697 nanograms (ng) (PSG-16) to 9,346 ng (PSG-02). Napthalene was present above the detection limit (25 ng) in ten PSG samples at mass values ranging from 28 ng (PSG-17) to 120 ng (PSG-33). PCE was present above the detection limit (10 ng) in a number of samples across the site at mass values ranging from 5 ng (PSG-20) to 51 ng (PSG-23).

4.2 SOIL SAMPLE ANALYTICAL RESULTS

Soil sample analytical results are presented in Tables 3 and 4. Copies of the certified laboratory analytical report and chain-of-custody documents are included in Appendix C.

Of all test pit soil samples collected (15 total), only TPH DRO, TPH ORO, and arsenic were present above detection limits and/or the RC. Arsenic was detected in all soil samples, ranging in concentration from 3.6 mg/Kg (TP-12) to 17 mg/Kg (TP-13). Reportable concentrations of TPH were present only in the two soil samples collected from TP-12. TPH DRO ranged from 21 mg/Kg to 26 mg/Kg, while TPH ORO ranged from 85 mg/Kg to 99 mg/Kg.

Other analytes (VOCs, PAHs, RCRA metals, and ethylene glycol) were either below respective laboratory reporting limits and/or below their respective RCs.

4.3 QUALITY CONTROL SAMPLE RESULTS

4.3.1 PSG Survey

All PSG module sample results, including trip blanks, field blanks, and duplicates, are presented in Appendix A.

The trip blank PSG modules (Trip-1 and Trip-2) did not contain reportable concentrations of any of the analytes. This suggests that no cross-contamination occurred between PSG sample modules during sample storage and shipping.

The field blank PSG modules (FB-1 and FB-2) did not contain reportable concentrations of any of the analytes. This suggests that sample modules were not affected by potential contaminant concentrations in ambient air at the Site.

The first duplicate analysis was performed using module PSG-22. Using the PCE mass for modules PSG-22 (21 ng) and PSG-22-DUP (23 ng), a relative percent difference (RPD) of 9.1% is calculated. Using the naphthalene mass of 32 ng and 33 ng, respectively, a RPD of 3.1% is calculated. The second duplicate analysis was performed using module PSG-34. Using the naphthalene mass for modules PSG-34 (34 ng) and PSG-34-DUP (27 ng), a RPD of 23.0% is calculated. As indicated by Beacon in their PSG Survey Analytical Report (Appendix A), these RPD values are below the 100% RPD threshold used by Beacon to assess duplicate correspondence.

4.3.2 Soil Sample Collection

The analytical results for the trip blanks analyzed by Alpha are shown on Table 5. In summary, none of the analytes were detected above laboratory reporting limits for either of the trip blank samples. This suggests that no cross-contamination occurred during soil sample storage or transport.

4.4 LABORATORY QUALITY ASSURANCE/QUALITY CONTROL

4.4.1 PSG Survey

As indicated by Beacon in their PSG Survey Analytical Report (Appendix A), their quality assurance/quality control (QA/QC) procedures for the analytical method, equipment calibration curve verification, and method blank analysis showed no discrepancies.

4.4.2 Soil Sample Results by Alpha

A few QC discrepancies were noted for some of the analytical methods (Appendix C). These discrepancies consist of 1) matrix spike (MS) recovery being low, 2) matrix spike/matrix spike duplicate (MS/MSD) RPD being outside of laboratory control limits, and 3) surrogate recoveries being above or below laboratory acceptance limits.

These discrepancies were discussed with a laboratory manager at Alpha. He noted that the discrepancies regarding the MS and MS/MSD (items 1 and 2 listed above) are likely caused by matrix interference, due to the heterogeneity of the soil. He noted that the method control sample recovery was acceptable in all instances, which further suggests that the matrix interference was the cause of the discrepancies. Regarding the surrogate recoveries (item 3 listed above), he indicated that the high or low values could have been due to errors during surrogate spiking procedures, since the second surrogate values were within acceptable limits. The laboratory manager did not believe that the discrepancies affected the quality or validity of the data. The full QC summary reports from Alpha can be reviewed in Appendix C.

5 DISCUSSION

5.1 PSG DATA

As discussed in Section 4.1, the PSG survey identified detectable mass values of PCE, naphthalene, and TPH in soil vapor. As shown on Figures 2 through 4 of Appendix A, the detectable PCE, naphthalene, and TPH mass values do not appear to be spatially correlated (the three contaminants are generally not detected at the same PSG sample locations). The Figures also show only a few areas where contaminant mass is detected in two or more adjoining PSG sample locations (elevated mass areas). These elevated mass areas include modules 21/51 and 13/14 for PCE, modules 28/54, 38/39, and 61/65 for naphthalene, and modules 15/17/18 for TPH. These elevated mass areas were considered when scoping the final number and location of test pits, as discussed in Section 3.2.

5.2 SOIL SAMPLE DATA

The soil sample analytical results were generally below laboratory reporting limits and/or below the RCs. However, soil samples collected from TP-12 contained TPH concentrations above the laboratory reporting limits. A potential correlation may exist between TPH detected in the soil samples collected from TP-12 (the only soil samples with TPH above the laboratory reporting limits) and the highest detected TPH mass (PSG module 2 at 9,346 ng). The combined TPH concentrations for samples TP12-2.5ft (111 mg/Kg) and TP12-5ft (120 mg/Kg) are only slightly above the RC (100 mg/Kg). As noted in the laboratory analytical report, the reported TPH concentrations include heavier-end hydrocarbons that are consistent with asphaltic material. Asphalt was not observed during our field activities, but construction debris and fill material were noted in TP-12 to an approximate depth of 4.5 feet. It should also be noted that other contaminants that may indicate a potential release of petroleum product (VOCs or PAHs) were not detected above the laboratory reporting limits in either of the soil samples collected from TP-12. Therefore, based on the analytical signature and presence of fill material/construction debris, it appears likely that the TPH concentrations were caused by small asphalt fragments in the soil samples.

Arsenic was detected in all of the soil samples at concentrations ranging from 3.6 mg/Kg to 17 mg/Kg. Kleinfelder reviewed a map depicting arsenic concentrations in stream sediments and soil for northern Nevada (Yager and Folger, 2003). The evaluation shows a median arsenic concentration for their reviewed data of 5.74 mg/kg, and a mean of 11.16 mg/Kg. There are no site specific data for background arsenic at the site, but the detected concentrations are similar to established average background concentrations elsewhere in Nevada. Although the concentrations of arsenic exceed the RC (0.39 mg/Kg) in all samples, the detected concentrations appear to be representative of background conditions, as has been observed by Kleinfelder during other Phase II ESAs in the Reno/Sparks area.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

Based on the results of this Phase II ESA, Kleinfelder makes the following conclusions:

- The PSG survey data revealed few elevated mass areas for PCE, naphthalene, and TPH;
- Soil concentrations for target analytes are generally below laboratory reporting limits and/or RCs, with the exception of TPH in soil samples collected from TP-12, and arsenic in all soil samples;
- Other contaminants that may indicate a potential release of petroleum product (VOCs or PAHs) were not detected in the soil samples collected from TP-12;
- The TPH concentrations detected in soil samples collected from TP-12 are only slightly above the RC of 100 mg/Kg, and are likely caused by small asphalt fragments; and
- Arsenic concentrations detected in soil samples collected from the Site are above the RC, but are generally consistent with typical background concentrations for arsenic in Nevada.

6.2 RECOMMENDATIONS

Based on the conclusions presented above, it is Kleinfelder's opinion that additional assessment activities at the Site are not warranted at this time.

7 LIMITATIONS

It should be recognized that definition and evaluation of environmental conditions is a complex and inexact science. Judgments leading to findings and recommendations are generally made with an incomplete knowledge of the environmental and subsurface conditions present. Kleinfelder performed this assessment in accordance with generally accepted standards of care which existed in Nevada at the time the work was performed. No warranty, express or implied, is made.

8 REFERENCES

Kleinfelder, 2010. Results of Phase II Environmental Site Assessment, 35 and 65 North Edison Way, Reno, Nevada. Kleinfelder West, September 3, 2010.

Kleinfelder, 2013. Field Sampling Plan for: Phase II Environmental Site Assessment for 85, 105, 125, 155, 185, and 195 North Edison Way, Reno, Nevada. Kleinfelder West, January 31, 2013.

Robison Engineering Company, 2006a. Phase I Environmental Site Assessment, 85 North Edison Way, Reno, Nevada, Robison Engineering Company, January 18, 2006.

Robison Engineering Company, 2006b. Phase I Environmental Site Assessment, 105 North Edison Way, Reno, Nevada, Robison Engineering Company, March 16, 2006.

Robison Engineering Company, 2006c. Phase I Environmental Site Assessment, 195 North Edison Way, Reno, Nevada, Robison Engineering Company, March 16, 2006.

Robison Engineering Company, 2007a. Phase I Environmental Site Assessment, 155 and 185 North Edison Way, Reno, Nevada, Robison Engineering Company, February 22, 2007.

Robison Engineering Company, 2007b. Phase I Environmental Site Assessment, 125 North Edison Way, Reno, Nevada, Robison Engineering Company, June 7, 2007.

Yager, Douglas B. and Helen W. Folger, Map Showing Arsenic Concentrations from Stream Sediments and Soils Throughout the Humboldt River Basin and Surrounding Areas, Northern Nevada, 2003.

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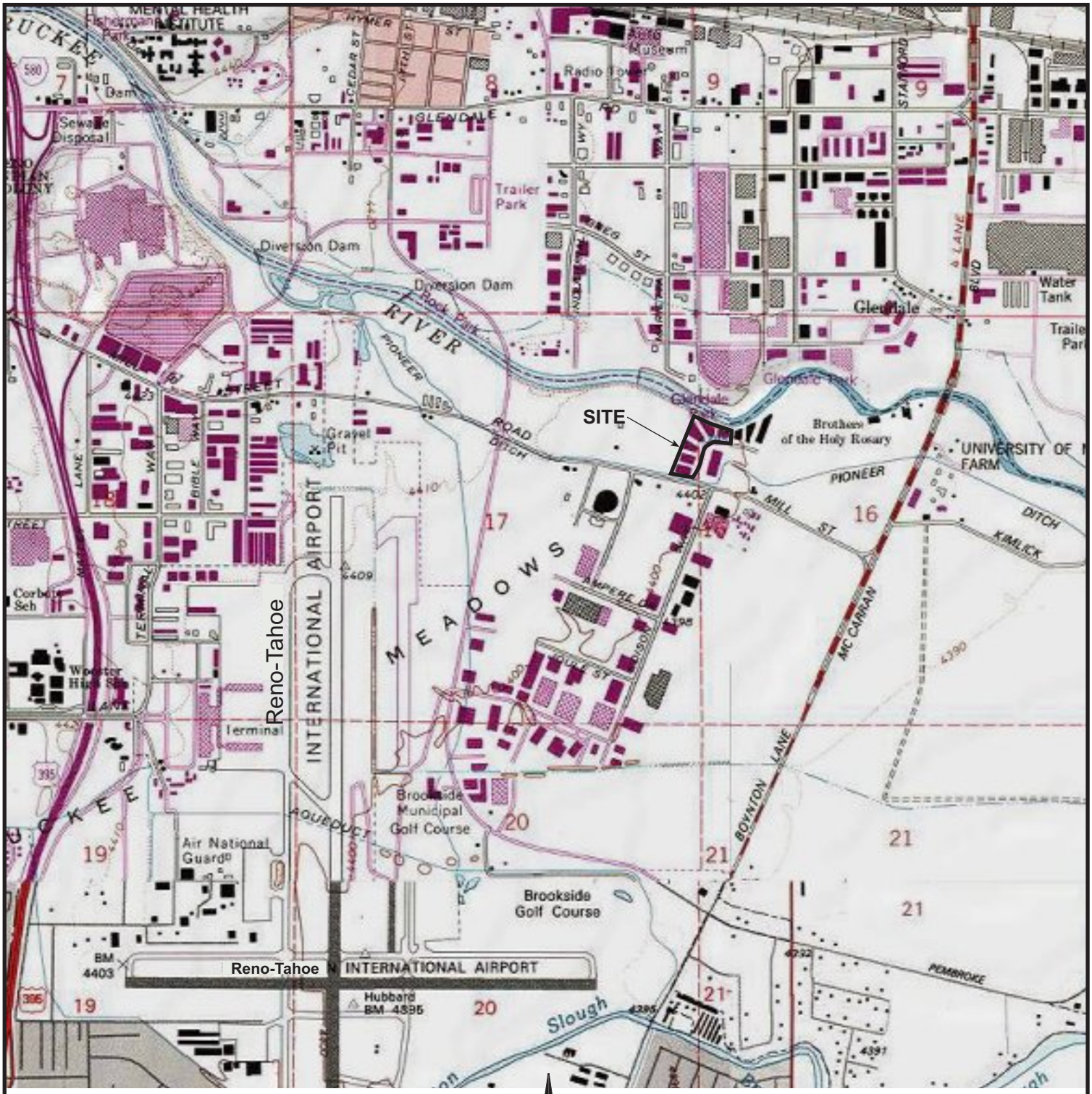
PLATES



APPROXIMATE SCALE IN FEET:
1" = 2000'

0 2000

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Project Number: 131379	**Site Vicinity Map**	Plate
Graphic Date: 5/7/13		
Graphic By: G. GOMEZ	**Phase II ESA** **85, 105, 125, 155, 185, and 195** **North Edison Way** **Reno, Nevada**	1
Checked By: P.T.		
File Name: PLATE 1.fh11		

LEGEND:

TP-1 Approximate Test Pit Location

N

200 100 0 200

APPROXIMATE SCALE (feet)

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PROJECT NO.	131379
DRAWN:	12/31/2012
DRAWN BY:	G.G.
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Site Plan and Test Pit Locations

PHASE II ESA
85, 105, 125, 155, 185, and 195
North Edison Way
Reno, Nevada

FIGURE
2

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TABLES

Table 1
Test Pit Summary
85, 95, 125, 155, 185, and 195 North Edison Way
Reno, Nevada

Test Pit	Total Depth (feet)	Surface Type, Test Pit Location	Fill Material Approximate Depth (feet)	Fill Description	Native Soil Description	PID Readings- at 2.5' / 5' *ppmv*
TP-1	5	Concrete, 185 North Edison building pad.	1	Base material.	Brown silt (ML), moist, soft.	0.0 / 0.0
TP-2	5	Concrete, 155 North Edison building pad.	1	Base material.	Dark brown silt with sand (ML), moist, soft.	0.4 / 0.0
TP-3	5	Concrete, 85 North Edison building pad (adjacent to former hydraulic lift).	1	Decomposed granite.	Dark brown clayey gravel with sand (GC), gravel, cobbles, and boulders,moist, loose	0.1 / 0.2
TP-4	5	Asphalt, adjacent to grease interceptor between 95 and 125 North Edison building pads.	2	Base material and light brown sandy silt with gravel (ML).	Brown silty gravel (GM), moist, loose and gray brown sandy silt (ML) with gravel, moist, soft.	0.0 / 0.2
TP-5	5	Asphalt, adjacent to drop inlet between 155 and 185 North Edison building pads.	1	Base material.	Brown silt (ML) with sand, moist, soft.	0.3 / 0.2
TP-6	5	Asphalt, adjacent to drop inlet between 125 and 155 North Edison building pads.	1	Base material.	Brown silt with sand (ML), and dark brown silty sand (SM) with gravel and cobbles. Roots observed to approximately 4.5 feet.	0.4 / 0.3
TP-7	5	Asphalt, north of 95 North Edison building pad.	5+	Base material and brown well graded gravel with sand (GW), cobbles and boulders. Roots and construction debris observed (plastic, metal, brick, concrete).	NA	0.0 / 0.0
TP-8	5	Concrete, 195 North Edison building pad.	2.5	Brown silty sand (SM) with gravel, moist, loose.	Brown silt (ML), firm.	0.0 / 0.0
TP-9	5	Asphalt, west of 185 North Edison building pad.	1	Base material.	Brown sandy silt (ML), moist, soft and brown poorly graded sand (SP) with gravel, moist, loose.	0.0 / 0.0
TP-10	5	Concrete, 155 North Edison building pad.	1	Base material.	Brown sandy silt (ML), moist, soft.	0.1 / 0.3
TP-11	5	Concrete, 125 North Edison building pad near floor drains.	2.5	Base material and light brown poorly graded sand with silt and gravel (SP-SM), moist, loose.	Brown sandy silt (ML), moist, soft and brown poorly graded sand with silt and gravel (SP-SM), moist, loose.	0.4 / 0.2
TP-12	5	Asphalt, west of 125 North Edison, adjacent to drop inlet.	4	Base material and multi-colored clayey gravel with sand (GC), cobbles and boulders, moist, loose. Construction debris observed (concrete).	Gray silty sand (SM) with gravel, moist, loose.	3.8 / 0.4
TP-13	5.5	Concrete, 95 North Edison building pad.	1.5	Decomposed granite.	Brown sandy silt with gravel (ML), moist, soft. Brown silty gravel (GM) with sand, moist, loose. Brown silty sand with gravel (SM), moist, loose. Reddish brown poorly graded sand (SP), moist loose.	0.0 / 0.0
TP-14	5	Concrete, 185 North Edison building pad, adjacent to oil-water separator.	1.5	Base material.	Dark brown silt (ML), moist, soft.	0.2 / 0.1

ppmv = Parts per million by volume

ML = silt
GC = clayey gravel
SM = silty sand
SP-SM = poorly graded sand with silt
GM = silty gravel
SP = poorly graded sand

Table 2
PSG Survey Analytical Results Summary
85, 95, 125, 155, 185, and 195 North Edison Way
Reno, Nevada

Client Sample ID	Lab File ID	Received Date	Analysis Date	Analysis Time	Matrix	Vinyl chloride	Trichlorofluoromethane (Freon 11)	1,1-Dichloroethene	1,1,2-Trichlorotrifluoroethane (Fr.113)	trans-1,2-Dichloroethene	Methyl-t-butyl ether	1,1-Dichloroethane	cis-1,2-Dichloroethene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	Carbon Tetrachloride	Benzene	Trichloroethene	1,4-Dioxane	1,1,2-Trichloroethane	Toluene	1,2-Dibromoethane (EDB)	Tetrachloroethene	1,1,1,2-Tetrachloroethane	Chlorobenzene	Ethylbenzene	p & m-Xylene	1,1,2,2-Tetrachloroethane	o-Xylene	1,2,3-Trichloropropane	Isopropylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,2-Dichlorobenzene	1,2,4-Trichlorobenzene	Naphthalene	1,2,3-Trichlorobenzene	2-Methylnaphthalene	TPH C_5-C_9	TPH C_{10}-C_{15}
mb130307c	C13030703		3/7/2013	10:48		<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
Trip-1	C13030705	3/5/2013	3/7/2013	12:05		<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
Trip-2	C13030706	3/5/2013	3/7/2013	12:27		<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-FB1	C13030707	3/5/2013	3/7/2013	12:47	Air	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-FB2	C13030708	3/5/2013	3/7/2013	13:08	Air	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-01	C13030709	3/5/2013	3/7/2013	13:30	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-02	C13030710	3/5/2013	3/7/2013	13:51	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**9,346**	<5,000
PSG-03	C13030711	3/5/2013	3/7/2013	14:12	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-04	C13030712	3/5/2013	3/7/2013	14:33	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	**66**	**299**	<25	<25	<25	<25	**74**	<25	**30**	<5,000	**7,897**
PSG-05	C13030713	3/5/2013	3/7/2013	14:54	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-06	C13030714	3/5/2013	3/7/2013	15:16	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-07	C13030715	3/5/2013	3/7/2013	15:37	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-08	C13030716	3/5/2013	3/7/2013	15:59	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**14**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-09	C13030717	3/5/2013	3/7/2013	16:20	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	**12**	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-10	C13030718	3/5/2013	3/7/2013	16:41	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-11	C13030719	3/5/2013	3/7/2013	17:02	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-12	C13030720	3/5/2013	3/7/2013	17:24	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-13	C13030721	3/5/2013	3/7/2013	17:45	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-14	C13030722	3/5/2013	3/7/2013	18:06	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	**5J**	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-15	C13030723	3/5/2013	3/7/2013	18:27	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	**6,128**
PSG-16	C13030724	3/5/2013	3/7/2013	18:48	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	**7J**	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**43**	<25	<25	<5,000	**5,697**
PSG-17	C13030725	3/5/2013	3/7/2013	19:10	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**28**	<25	<25	<5,000	**7,698**
PSG-18	C13030726	3/5/2013	3/7/2013	19:31	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**54**	<25	<25	<5,000	**8,027**
PSG-19	C13030727	3/5/2013	3/7/2013	19:52	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**12**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**39**	<25	<25	<5,000	<5,000
PSG-20	C13030728	3/5/2013	3/7/2013	20:14	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**5J**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**38**	<25	<25	<5,000	**8,346**
PSG-21	C13030729	3/5/2013	3/7/2013	20:35	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-22	C13030730	3/5/2013	3/7/2013	20:56	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**21**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**32**	<25	<25	<5,000	<5,000
PSG-22 DUP	C13030731	3/5/2013	3/7/2013	21:17	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**23**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**33**	<25	<25	<5,000	<5,000
PSG-23	C13030732	3/5/2013	3/7/2013	21:38	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	**7J**	<25	<25	<25	<25	**51**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-24	C13030733	3/5/2013	3/7/2013	22:00	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-25	C13030734	3/5/2013	3/7/2013	22:21	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**61**	<25	**27**	<5,000	<5,000
PSG-26	C13030735	3/5/2013	3/7/2013	22:43	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**7J**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**65**	<25	**35**	<5,000	<5,000
PSG-27	C13030736	3/5/2013	3/7/2013	23:04	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-28	C13030737	3/5/2013	3/7/2013	23:25	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-29	C13030738	3/5/2013	3/7/2013	23:47	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**14**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-30	C13030739	3/5/2013	3/8/2013	0:08	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	**11**	<25	<25	<10	<25	<25	<25	<25	**13**	<25	<25	<25	<25	<25	<25	<25	<25	<25	**26**	<25	<25	<25	<25	<25	**66**	<25	**34**	<5,000	<5,000
PSG-31	C13030740	3/5/2013	3/8/2013	0:29	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-32	C13030741	3/5/2013	3/8/2013	0:50	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000
PSG-33	C13030742	3/5/2013	3/8/2013	1:11	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	**28**	<25	<25	<25	<25	<25	<25	<25	<25	<25	**32**	<25	<25	<25	<25	**12**	<25	**60**	<5,000	<5,000
PSG-34	C13030743	3/5/2013	3/8/2013	1:32	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**34**	<25	<25	<5,000	<5,000
PSG-34 DUP	C13030744	3/5/2013	3/8/2013	1:53	Soil Gas	<10	<25	<10	<25	<10	<25	<25	<10	<10	<25	<10	<25	<25	<10	<25	<25	<25	<25	<10	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**27**	<25	<25	<5,000	<5,000

Results in nanograms (ng).
J = Vaues below limit of quantitation (LOQ) but above limit of detection (LOD).
B = Detected in method blank.

Table 3
Soil Sample Analytical Results Summary
85, 95, 125, 155, 185, and 195 North Edison Way
Reno, Nevada

Sample Number	Test Pit Number	Sample Depth (feet)	TPH-DRO (mg/Kg)	TPH-ORO (mg/Kg)	TPH-GRO (mg/Kg)	E-Glycol (µg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethylbenzene (µg/Kg)	Total Xylenes (µg/Kg)	Other VOCs (µg/Kg)	Chromium (mg/Kg)	Arsenic (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Cadmium (mg/Kg)	Barium (mg/Kg)	Mercury (mg/Kg)	Lead (mg/Kg)
TP-1-5ft	TP-1	5	<10	<10	<10	<6,100	<20	<20	<20	<20	ND	21	**9.7**	<1.0	<1.0	<1.0	170	<0.20	6.3
TP-2-5ft	TP-2	5	<10	<10	<10	<6,200	<20	<20	<20	<20	ND	14	**6.7**	<0.1	<0.1	<0.1	90	<0.20	4.6
TP-3-5ft	TP-3	5	<10	<10	<10	<6,300	<20	<20	<20	<20	ND	21	**4.8**	<1.0	<1.0	<1.0	160	<0.20	8.6
TP-4-5ft	TP-4	5	<10	<10	<10	<6,300	<20	<20	<20	<20	ND	24	**6.9**	<1.0	<1.0	<1.0	170	<0.20	10
TP-5-5ft	TP-5	5	<10	<10	<10	<5,600	<20	<20	<20	<20	ND	25	**8.9**	<1.0	<1.0	<1.0	50	<0.20	3.9
TP-6-5ft	TP-6	5	<10	<10	<10	<6,100	<20	<20	<20	<20	ND	14	**4.9**	<1.0	<1.0	<1.0	77	<0.20	3.9
TP-7-5ft	TP-7	5	<10	<10	<10	<5,400	<20	<20	<20	<20	ND	13	**4.7**	<1.0	<1.0	<1.0	78	<0.20	18
TP-8-5ft	TP-8	5	<10	<10	<10	<6,200	<20	<20	<20	<20	ND	24	**5.9**	<1.0	<1.0	<1.0	160	<0.20	6.2
TP-9-5ft	TP-9	5	<10	<10	<10	<5,500	<20	<20	<20	<20	ND	14	**6.3**	<1.0	<1.0	<1.0	170	<0.20	6.3
TP-10-5ft	TP-10	5	<10	<10	<10	<5,700	<20	<20	<20	<20	ND	14	**5.0**	<0.1	<0.1	<0.1	90	<0.20	4.6
TP-11-5ft	TP-11	5	<10	<10	<10	<5,600	<20	<20	<20	<20	ND	19	**3.6**	<0.1	<0.1	<0.1	130	<0.20	14
TP-12-2.5ft	TP-12	2.5	**26**[2,3]	**85**[3]	<10	<6,000	<20	<20	<20	<20	ND	21	**4.8**	<1.0	<1.0	<1.0	160	0.25	13
TP-12-5ft	TP-12	5	**21**[2,3]	**99**[3]	<10	<6,600	<20	<20	<20	<20	ND	17	**3.7**	<1.0	<1.0	<1.0	77	<0.20	14
TP-13-5ft	TP-13	5	<10	<10	<10	<5,500	<20	<20	<20	<20	ND	10	**17**	<1.0	<1.0	<1.0	140	<0.20	15
TP-14-5ft	TP-14	5	<10	<10	<10	<6,200	<20	<20	<20	<20	ND	13	**7.0**	<1.0	<1.0	<1.0	130	<0.20	5.0
Reportable Concentration[1]			**100**			**120,000**	**30**	**12,000**	**5,700**	**210,000**	**Various**	**38**	**0.39**	**5.0**	**34**	**8.0**	**1,600**	**6.7**	**400**

Notes:
< = Less than laboratory reporting limit (RL)
ND = Not detected above respective RLs
TPH-DRO = Total petroleum hydrocarbons- diesel range organics (with silica gel wash)
TPH-ORO = Total petroleum hydrocarbons- oil range organics (with silica gel wash)
TPH-GRO = Total petroleum hydrocarbons- gasoline range organics
E-Glycol = Ethylene glycol
mg/Kg = Milligrams per kilogram
µg/Kg = Micrograms per kilogram
[1] Based on NDEP Draft Guidelines for Discovery Events, Appendix A2, 1-28-09
[2] Concentrations may include contributions from heavier-end hydrocarbons that elute in the DRO range
[3] Reported DRO/ORO concentrations include heavier-end hydrocarbons that are consistent with asphaltic material
Bold = Exceeds reportable concentration

Table 4
Soil Sample Analytical Results- Polyaromatic Hydrocarbons
85, 95, 125, 155, 185, and 195 North Edison Way
Reno, Nevada

Sample Number	Test Pit Number	Sample Depth *(feet)*	Acenaphthene (µg/Kg)	Acenaphthylene (µg/Kg)	Anthracene (µg/Kg)	Benz(a) anthracene (µg/Kg)	Benzo (a) pyrene (µg/Kg)	Benzo(b&k) fluoranthene (µg/Kg)	Benzo(g,h,i) perylene (µg/Kg)	Chrysene (µg/Kg)	Dibenz(a,h) anthracene (µg/Kg)	Fluoranthene (µg/Kg)	Fluorene (µg/Kg)	Indeno (1,2,3-cd) pyrene (µg/Kg)	1-Methylnaphthalene (µg/Kg)	2-Methylnaphthalene (µg/Kg)	Naphthalene (µg/Kg)	Phenanthrene (µg/Kg)	Pyrene (µg/Kg)
TP12-2.5ft	TP-12	2.5	<25	<25	<25	<25	<25	65	50	<25	<25	43	<25	37	<25	<25	<25	<25	64
TP-12-5ft	TP-12	5	<25	<25	<25	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	26
Reportable Concentration(1)			**570,000**	**-**	**12,000,000**	**150**	**15**	**150**	**-**	**15,000**	**150**	**2,300,000**	**560,000**	**150**	**22,000**	**310,000**	**3,900**	**-**	**1,700,000**

Notes:
< = Less than laboratory reporting limit (RL)
ND = Not detected above respective RLs
µg/Kg = Micrograms per kilogram
(1) = Presented in NDEP Draft Guidelines for Discovery Events, Appendix A2, 1-28-09

Table 5

Quality Control Sample Analytical Results Summary
85, 95, 125, 155, 185, and 195 North Edison Way
Reno, Nevada

Sample Number	Sample Date	TPH-GRO *(mg/L)*	Benzene *(µg/L)*	Toluene *(µg/L)*	Ethylbenzene *(µg/L)*	Total Xylenes *(µg/L)*	Other VOCs *(µg/L)*
TB	3/27/2013	<0.50	<20	<20	<20	<20	ND
TB	3/28/2013	<0.50	<20	<20	<20	<20	ND

Notes:
< = Less than laboratory reporting limit (RL, shown in parentheses)
ND = Not detected above respective RLs
TPH-GRO = Total petroleum hydrocarbons- gasoline range organics
mg/L = Milligrams per liter
µg/L = Micrograms per liter

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APPENDIX A

BEACON PSG SURVEY ANALYTICAL REPORT

Kleinfelder, Inc.
4835 Longley Lane
Reno, NV 89502
Attn: Mr. Phil Tousignant

Passive Soil Gas Survey – Analytical Report

Date: March 20, 2013
Beacon Project No. 2592

Project Reference:	Edison Site, Reno, NV
Samplers Installed:	February 11 through 13, 2013
Samplers Retrieved:	February 25 and 27, 2013
Samples Received:	March 5, 2013
Analyses Completed:	March 8, 2013
Laboratory Data Issued:	March 12, 2013

EPA Method 8260C
All samples were successfully analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation to target a custom compound list following EPA Method 8260C. Laboratory results are reported in nanograms (ng) of specific compound per sample.

Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were in accordance with BEACON's Quality Assurance Project Plan.

Reporting limits
The reporting limit (RL) is 10 nanograms (ng) for vinyl chloride, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, chloroform, 1,1,1-trichloroethane, trichloroethene, and tetrachloroethene; 25 ng for the remaining individual compounds; and 5,000 ng for Total Petroleum Hydrocarbons (TPH). **Table 1** provides survey results in nanograms per sampler by sample-point number and compound name. For the eight (8) compounds listed above, measurements below the limit of quantitation (10 ng) but above the limit of detection (5 ng) are flagged with a "J." The RLs represent a baseline above which results exceed laboratory-determined limits of precision and accuracy. Any field sample measurements above the upper calibration standard are estimated; however, these values are reported without qualifiers because all reported measurements are relative to each other and are appropriate to meet the survey objectives of locating source areas and vapor intrusion pathways and defining the lateral extent of contamination.

Calibration Verification
The continuing calibration verification (CCV) values for the calibration check compounds were all within ±20% of the true values as defined by the initial five-point calibration and met the requirements specified in Beacon Environmental's Quality Assurance Project Plan.

Method Blanks/Trip Blanks
Laboratory method blanks are run with each sample batch to identify contamination present in the laboratory. If contamination is detected on a method blank, measurements of identical compounds in that sample batch are flagged in the laboratory report. The laboratory method blank analyzed in connection with the present samples revealed no contamination.

The trip blank is a sampler prepared, transported, and analyzed with other samples but intentionally not exposed. Any target compounds identified on the trip blanks are reported in the laboratory data. The analyses of the trip blanks (labeled Trip-1 and Trip-2 in **Table 1**) reported none of the targeted compounds.

Passive Soil-Gas Survey Notes

When sample locations are covered with or near the edge of an artificial surface (*e.g.*, asphalt or concrete), the concentrations of compounds in soil gas are often significantly higher than the concentrations would be if the surfacing were not present. Thus, a reading taken below or near an impermeable surface is much higher than it would be in the absence of such a cap. Therefore, the sample location conditions should be evaluated when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate survey and site information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times). BEACON recommends the guidelines stated in **Attachment 1** to establish a relationship between reported soil-gas measurements and actual subsurface contaminant concentrations, which will indicate those measurements representing significant subsurface contamination.

BEACON's passive soil-gas samplers are prepared with two sets of adsorbent cartridges for subsequent duplicate or confirmatory sample analysis. At Kleinfelder's request, duplicate analysis was performed for two (2) field samples. The field sample duplicates were designated with a "DUP" following the sample number. When comparing quantitative results, a duplicate correspondence should be considered when the relative percent difference (RPD) between the two samples is less than or equal to 100%. For the purpose of calculating correspondences, all non-detections should be assigned, as a baseline value, the CRQL for the specific contaminant. Based on these assumptions, a 100% correlation was found between the field sample duplicates and their base samples.

Kleinfelder collected two (2) ambient air control samples to determine if there were any compounds present in the ambient air that may bias field samples. An ambient air sample is exposed to air for a period of 10-30 seconds at a pre-selected location during both installation and retrieval of PSG samplers (the approximate amount of time the field samples are exposed to ambient air). The ambient air samples collected in this investigation (labeled PSG-FB1 and PSG-FB2, collected at locations PSG-10 and PSG-30, respectively) reported none of the targeted compounds.

Project Details

Samplers were deployed February 11 through 13, 2013, and were retrieved on February 25 and 27, 2013. **Attachment 2** describes standard field procedures. Individual deployment and retrieval times will be found in the Field Deployment Report (**Attachment 3**).

Thirty-four (34) field samples, two (2) field sample duplicates, two (2) ambient air samples, and two (2) trip blanks were received by BEACON on March 5, 2013. Adsorbent cartridges from the passive samplers were thermally desorbed, then analyzed using gas chromatography/mass spectrometry (GC/MS) equipment, in accordance with EPA Method 8260C, as described in **Attachment 4**. BEACON's laboratory analyzed each sample for the targeted compounds; analyses were completed on March 8, 2013. Following a laboratory review, results were provided to Kleinfelder on March 12, 2013. The Chain-of-Custody, which was shipped with the samples for this survey, is supplied as **Attachment 5**.

Sample locations are shown on **Figure 1**. The following table lists frequency of detections based on the number of field samples analyzed, the reporting limit, and the maximum value for each mapped compound. The table also includes the transformation and interpolation method for the compound distribution maps provided.

Figure No.	**2**	**3**	**4**
Compound	Tetrachloroethene	Naphthalene	Total Petroleum Hydrocarbons
Frequency	9	12	7
Reporting Limit (nanograms)	10	25	5,000
Max Value (nanograms)	51	120	9,346
Transformation Method	Log	Log	Log
Interpolation Method	Kriging	Kriging	Kriging

Attachments:

- **-1-** Applying Results From Passive Soil-Gas Surveys
- **-2-** Field Procedures
- **-3-** Field Deployment Report
- **-4-** Laboratory Procedures
- **-5-** Chain-of-Custody Form

ALL DATA MEET REQUIREMENTS AS SPECIFIED IN THE BEACON ENVIRONMENTAL SERVICES, INC. QUALITY ASSURANCE PROJECT PLAN AND THE RESULTS RELATE ONLY TO THE SAMPLES REPORTED. BEACON ENVIRONMENTAL SERVICES IS ACCREDITED TO ISO 17025:2005, AND THE WORK PERFORMED WAS IN ACCORDANCE WITH ISO 17025 REQUIREMENTS, WITH THE EXCEPTION THAT SAMPLES WERE ANALYZED WITHIN A 24-HOUR TUNE WINDOW AND FREON 113, 1,4-DIOXANE, 2-METHYLNAPHTHALENE, TPH C_5-C_9 AND TPH C_{10}-C_{15} ARE NOT INCLUDED IN BEACON'S SCOPE OF ACCREDITATION. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY DIRECTOR OR HIS SIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURES:

Steven C. Thornley
Laboratory Director

Patti J. Riggs
Quality Manager

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	mb130307c	Trip-1	Trip-2	PSG-FB1	PSG-FB2	PSG-01
Project Number:		2592	2592	2592	2592	2592
Lab File ID:	C13030703	C13030705	C13030706	C13030707	C13030708	C13030709
Received Date:		3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013
Analysis Time:	10:48	12:05	12:27	12:47	13:08	13:30
Matrix:				Air	Air	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	<10	<10	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	PSG-02	PSG-03	PSG-04	PSG-05	PSG-06	PSG-07
Project Number:	2592	2592	2592	2592	2592	2592
Lab File ID:	C13030710	C13030711	C13030712	C13030713	C13030714	C13030715
Received Date:	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013
Analysis Time:	13:51	14:12	14:33	14:54	15:16	15:37
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	<10	<10	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	**66**	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	**299**	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	**74**	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	**30**	<25	<25	<25
TPH C_5-C_9	**9,346**	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	**7,897**	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	PSG-08	PSG-09	PSG-10	PSG-11	PSG-12	PSG-13
Project Number:	2592	2592	2592	2592	2592	2592
Lab File ID:	C13030716	C13030717	C13030718	C13030719	C13030720	C13030721
Received Date:	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013
Analysis Time:	15:59	16:20	16:41	17:02	17:24	17:45
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<10	**12**	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**14**	<10	<10	<10	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	**27**	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	PSG-14	PSG-15	PSG-16	PSG-17	PSG-18	PSG-19
Project Number:	2592	2592	2592	2592	2592	2592
Lab File ID:	C13030722	C13030723	C13030724	C13030725	C13030726	C13030727
Received Date:	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013
Analysis Time:	18:06	18:27	18:48	19:10	19:31	19:52
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	**5 J**	<10	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	**7 J**	<10	<10	<10
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	<10	<10	<10	**12**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	**43**	**28**	**54**	**39**
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	**6,128**	**5,697**	**7,698**	**8,027**	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	PSG-20	PSG-21	PSG-22	PSG-22 DUP	PSG-23	PSG-24
Project Number:	2592	2592	2592	2592	2592	2592
Lab File ID:	C13030728	C13030729	C13030730	C13030731	C13030732	C13030733
Received Date:	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013
Analysis Time:	20:14	20:35	20:56	21:17	21:38	22:00
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	**7 J**	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**5 J**	<10	**21**	**23**	**51**	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	**38**	<25	**32**	**33**	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	**8,346**	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	PSG-25	PSG-26	PSG-27	PSG-28	PSG-29	PSG-30
Project Number:	2592	2592	2592	2592	2592	2592
Lab File ID:	C13030734	C13030735	C13030736	C13030737	C13030738	C13030739
Received Date:	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/7/2013	3/8/2013
Analysis Time:	22:21	22:43	23:04	23:25	23:47	0:08
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	**11**
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	**7 J**	<10	<10	**14**	**13**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	**26**
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	**61**	**65**	<25	<25	<25	**66**
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	**27**	**35**	<25	<25	<25	**34**
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	PSG-31	PSG-32	PSG-33	PSG-34	PSG-34 DUP
Project Number:	2592	2592	2592	2592	2592
Lab File ID:	C13030740	C13030741	C13030742	C13030743	C13030744
Received Date:	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
Analysis Date:	3/8/2013	3/8/2013	3/8/2013	3/8/2013	3/8/2013
Analysis Time:	0:29	0:50	1:11	1:32	1:53
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng
COMPOUNDS					
Vinyl Chloride	<10	<10	<10	<10	<10
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25
1,1-Dichloroethene	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	<10	<10
1,2-Dichloroethane	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<10	<10	<10	<10	<10
Carbon Tetrachloride	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	**28**	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	**32**	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25
Naphthalene	<25	<25	**120**	**34**	**27**
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	**60**	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

BEACON ENVIRONMENTAL SERVICES, INC.
2203A Commerce Road, Suite 1, Forest Hill, MD 21050 USA
www.Beacon-USA.com 1-410-838-8780
Beacon Project No. 2592, March 2013

LEGEND

▲ 28 PASSIVE SOIL-GAS SAMPLE LOCATION

Scale in Feet

0 150 300

Figure 1
Passive Soil-Gas Survey
Sample Locations

Edison Site
Reno, NV

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Beacon Project No. 2592, March 2013

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5 J — NANOGRAMS/SAMPLER (J = Estimated Value)

28 — PASSIVE SOIL-GAS SAMPLE LOCATION

Scale in Feet

0 150 300

Figure 2
Passive Soil-Gas Survey
Tetrachloroethene

Edison Site
Reno, NV

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www.Beacon-USA.com 1-410-838-8780
Beacon Project No. 2592, March 2013

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1,000 NANOGRAMS/SAMPLER

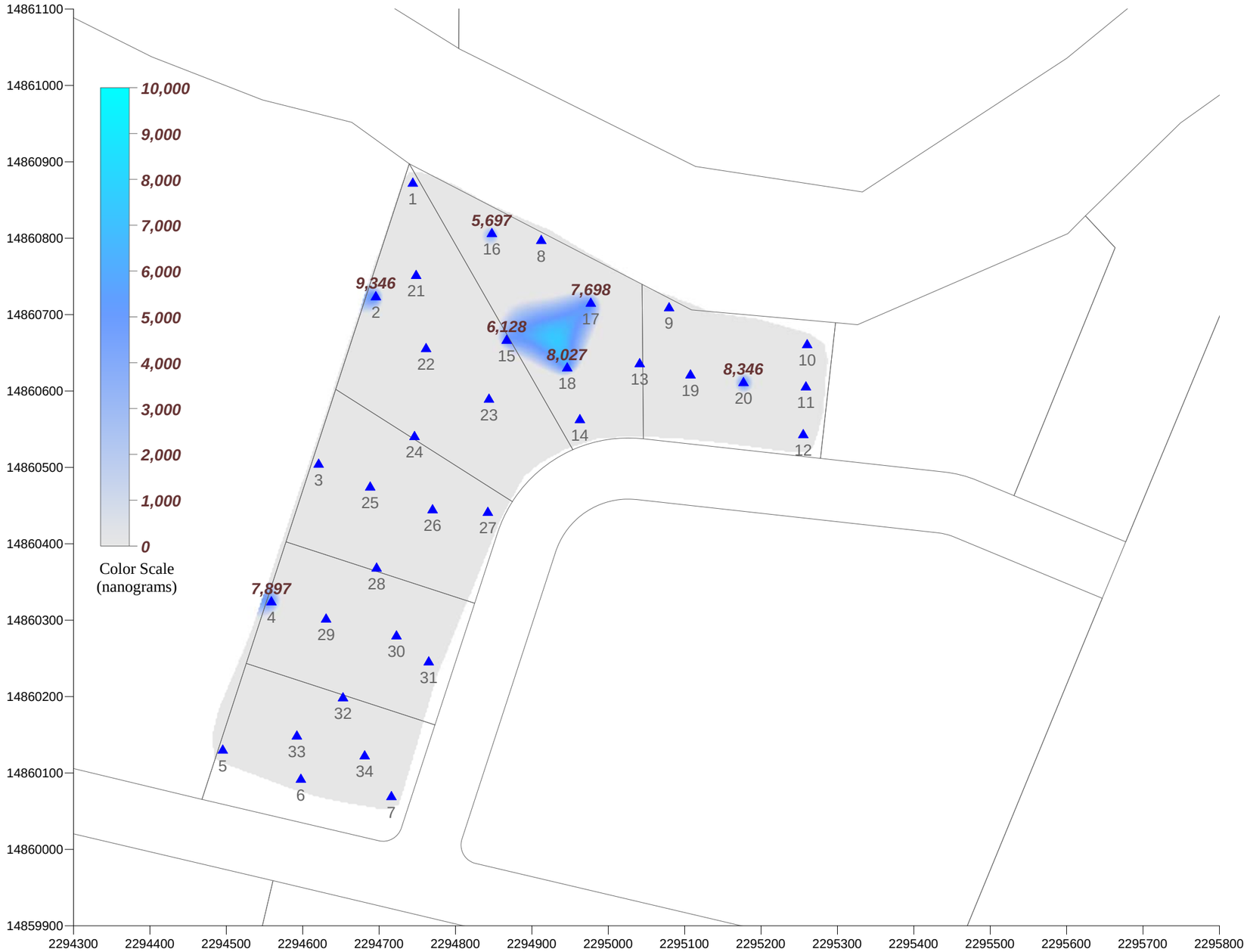
▲ **28** PASSIVE SOIL-GAS SAMPLE LOCATION

Scale in Feet

0 150 300

Figure 3
Passive Soil-Gas Survey
Naphthalene

Edison Site
Reno, NV



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2203A Commerce Road, Suite 1, Forest Hill, MD 21050 USA
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Beacon Project No. 2592, March 2013

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1,000 NANOGRAMS/SAMPLER

▲ **28** PASSIVE SOIL-GAS SAMPLE LOCATION

Scale in Feet

0 150 300

Figure 4
Passive Soil-Gas Survey
Total Petroleum Hydrocarbons

Edison Site
Reno, NV

Attachments

Attachment 1

APPLYING RESULTS FROM PASSIVE SOIL-GAS SURVEYS

The utility of soil-gas surveys is directly proportional to their accuracy in reflecting and representing changes in the subsurface concentrations of source compounds. Passive soil-gas survey results are the mass collected from the vapor-phase emanating from the source(s). The vapor-phase is merely a fractional trace of the source(s) and, as a matter of convenience, the units used in reporting detection values from passive soil-gas surveys are smaller than those employed for source-compound concentrations.

Passive soil gas data are reported in mass of compounds identified per sample location (e.g., nanograms (ng) or micrograms (µg) per sampler). Results from a passive soil gas survey typically are then used to guide where follow-on intrusive samples should be collected to obtain corresponding concentrations of the contaminants in soil, soil gas, and/or groundwater, as well as eliminate those areas where intrusive samples are not required. It is not practical to report passive soil gas data as concentration because the sampler's uptake rates of the compounds are often greater than the replenishment rates of the compounds around the sampler, which results in low bias measurements, and the replenishment rates will be dependent on several factors that include, at a minimum, soil gas concentrations, soil porosity and permeability, and soil moisture level.

Whatever the relative concentrations of source and associated soil gas, best results are realized when the ratio of soil-gas measurements to actual subsurface concentrations remains as close to constant as the real world permits. It is the reliability and consistency of this ratio, not the particular units of mass (*e.g.*, nanograms) that determine usefulness. Thus, BEACON emphasizes the necessity of conducting — at minimum — follow-on intrusive sampling in areas that show relatively high soil-gas measurements to obtain corresponding concentrations of soil and groundwater contaminants. These correspondent values furnish the basis for approximating a relationship. For extrapolating passive soil gas results to vapor intrusion evaluations, we recommend a minimum of three passive soil gas locations be converted to a shallow vapor well then sampled using an active soil gas method. Once a relationship is established, it can be used in conjunction with the remaining soil-gas measurements to estimate subsurface contaminant concentrations across the survey field. (See www.beacon-usa.com/passivesoilgas.html, Publication 1: *Mass to Concentration Tie-In for PSG Surveys* and Publication 4: *Groundwater and PSG Correlation*.) It is important to keep in mind, however, that specific conditions at individual sample points, including soil porosity and permeability, depth to contamination, and perched ground water, can have an impact on soil-gas measurements at those locations.

When passive soil-gas surveys are utilized as described above, the data provide information that can yield substantial savings in drilling costs and in time. They furnish, among other things, a checklist of compounds expected at each survey location and help to determine how and where drilling budgets can most effectively be spent. Passive soil-gas surveys can also be used as a remediation or general site monitoring tool that can be implemented on a quarterly, semi-annual or annual basis.

Attachment 2

FIELD PROCEDURES FOR PASSIVE SOIL-GAS SURVEYS

The following field procedures are routinely used during a BEACON Passive Soil-Gas Survey. Modifications can be and are incorporated from time to time in response to individual project requirements. In all instances, BEACON adheres to EPA-approved Quality Assurance and Quality Control practices.

A. Field personnel carry a BESURE Sample Collection Kit™ and support equipment to the site and deploy the passive samplers in a prearranged survey pattern. A passive sampler consists of a borosilicate glass vial containing hydrophobic adsorbent cartridges with a length of wire attached to the vial for retrieval. Although samplers require only one person for emplacement and retrieval, the specific number of field personnel required depends upon the scope and schedule of the project. Each Sampler emplacement generally takes less than two minutes.

B. At each survey point a field technician clears vegetation as needed and, using a hammer drill with a 1″- to 1½″-diameter bit, creates a hole 12 to 14 inches deep. [Note: For locations covered with asphalt, concrete, or gravel surfacing, the field technician drills a 1″- to 1½″-diameter hole through the surfacing to the soils beneath]. The technician then, using a hammer drill with a ½″ diameter bit, creates a hole three-feet deep. The hole is then sleeved with a 1″-diameter metal sleeve.

C. The technician then removes the solid plastic cap from a sampler and replaces it with a Sampling Cap (a plastic cap with a hole covered by screen meshing). The technician inserts the sampler, with the Sampling Cap end facing down, into the hole (**see attached figure**). The sampler is then covered with an aluminum foil plug and soils for uncapped locations or, for capped locations, an aluminum foil plug and a concrete patch. The sampler's location, time and date of emplacement, and other relevant information are recorded on the Field Deployment Form.

D. One or more trip blanks are included as part of the quality-control procedures.

E. Once all the samplers have been deployed, field personnel schedule sampler recovery and depart, taking all other equipment and materials with them.

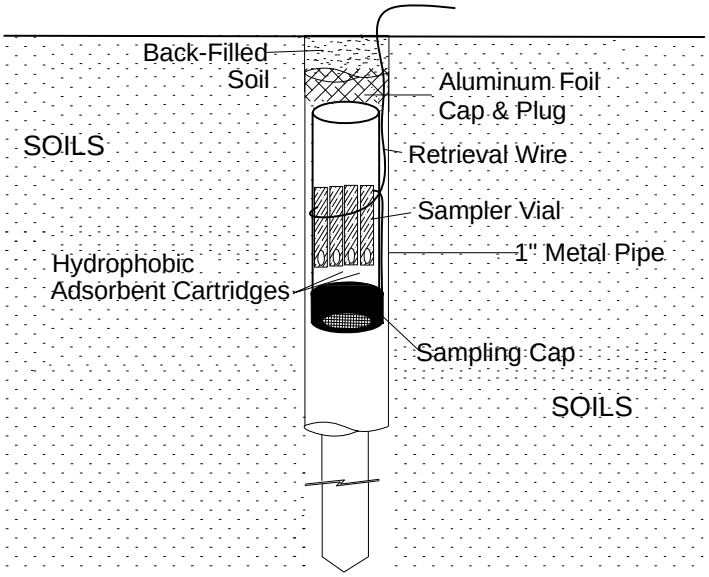
F. Field personnel retrieve the samplers at the end of the exposure period. At each location, a field technician withdraws the sampler from its hole, removes the retrieval wire, and wipes the outside of the vial clean using gauze cloth; following removal of the Sampling Cap, the threads of the vial are also cleaned. A solid plastic cap is screwed onto the vial and the sample location number is written on the label. The technician then records sample-point location, date, time, etc. on the Field Deployment Form.

G. Sampling holes are refilled with soil, sand, or other suitable material. If samplers have been installed through asphalt or concrete, the hole is filled to grade with a plug of cold patch or cement.

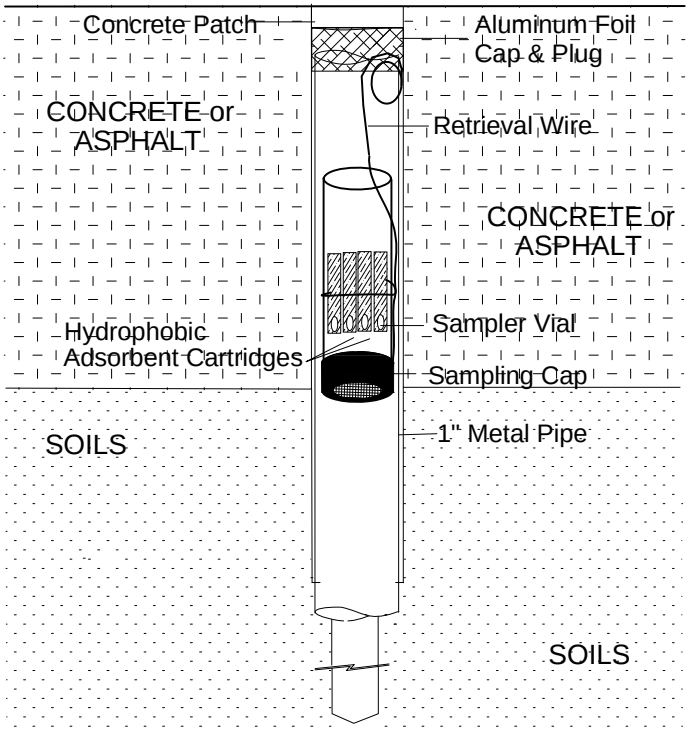
H. Following retrieval, field personnel ship or transport the passive samplers to BEACON's laboratory.

BEACON'S PASSIVE SOIL-GAS SAMPLER

DEPLOYMENT THROUGH SOILS



DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



Attachment 3

Field Deployment Report

PASSIVE SOIL-GAS SURVEY
FIELD DEPLOYMENT REPORT

Project Information	
Beacon Project No.:	2592
Site Name:	Edison Site
Site Location:	Reno, NV

BEACON ENVIRONMENTAL SERVICES, INC.
2203A Commerce Road | Suite 1
Forest Hill, MD 21050 USA
800-878-5510 | 1-410-838-8780

Client Information	
Company Name:	Kleinfelder, Inc.
Office Location:	Reno, NV
Samples Collected By:	RICK ERDMAN

FIELD SAMPLE ID	Date Emplaced / Time Emplaced	Date Retrieved / Time Retrieved	Sampling Hole Depth (inches)	FIELD NOTES (e.g., asphalt/concrete/gravel, description of sample location, PID/FID readings)
	2-11-13 /	2-25-13 /		SURFACE — THICKNESS
PSG-01	0855	1105	36"	asphalt 3"
02	0930	1120	"	" 2 3/4"
03	1005	1135	"	" 2 1/2"
04	1035	1150	"	" 3"
05	1055	1220	"	" 3 1/2"
06	1120	1235	"	" 3 1/2
07	1150	1310	"	" 3"
08	1215	1335	"	" 4"
09	1240	1350	"	" 4"
10	1305	1405	"	" FB-1 @ 10
11	1330	1415	"	" 2 1/2"
12	1400	1430	"	" 3"
13	1425	1445	"	" 3"
14	1450	1500	"	" 2 1/2"

PASSIVE SOIL-GAS SURVEY
FIELD DEPLOYMENT REPORT

Project Information	
Beacon Project No.:	2592
Site Name:	Edison Site
Site Location:	Reno, NV

BEACON ENVIRONMENTAL SERVICES, INC.
2203A Commerce Road | Suite 1
Forest Hill, MD 21050 USA
800-878-5510 | 1-410-838-8780

Client Information	
Company Name:	Kleinfelder, Inc.
Office Location:	Reno, NV
Samples Collected By:	RICK ERDMAN

FIELD SAMPLE ID	Date Emplaced 2-12-13 Time Emplaced	Date Retrieved 2-27-13 Time Retrieved	Sampling Hole Depth (inches)	FIELD NOTES (*e.g.*, asphalt/concrete/gravel, description of sample location, PID/FID readings) SURFACE – DEPTH (THICK)
PSG - 15	0815	0805	36	asphalt 2.5"
16	0920	0830	"	concrete 4"
17	0945	0845	"	" 4"
18	1015	0900	"	" 3¾"
19	1100	0915	"	" 3"
20	1215	0930	"	" 5"
21	1305	0945	"	" 3½"
22	1345	1000	"	" 3¾"
23	1420	1015	"	" 3¾"
24	1515	1030	"	asphalt 2½"

PASSIVE SOIL-GAS SURVEY
FIELD DEPLOYMENT REPORT

Project Information	
Beacon Project No.:	2592
Site Name:	Edison Site
Site Location:	Reno, NV

BEACON ENVIRONMENTAL SERVICES, INC.
2203A Commerce Road | Suite 1
Forest Hill, MD 21050 USA
800-878-5510 | 1-410-838-8780

Client Information	
Company Name:	Kleinfelder, Inc.
Office Location:	Reno, NV
Samples Collected By:	RICK ERDMAN

FIELD SAMPLE ID	Date Emplaced / Time Emplaced	Date Retrieved / Time Retrieved	Sampling Hole Depth (inches)	FIELD NOTES (e.g., asphalt/concrete/gravel, description of sample location, PID/FID readings)
	2-13-13	2-27-13		SURFACE / THICKNESS
PSG-25	0745	1045	36	Concrete 4"
26	0835	1100	"	" 4 1/4"
27	0950	1150	"	Asphalt 2 1/2"
28	1040	1255	"	" 2 1/2"
29	1115	1310	"	Concrete 4 1/2"
30	1155	1330	"	" FB-2 4 1/4"
31	1235	1345	"	Gravel / Soil —
32	1310	1400	"	Asphalt 2 1/2"
33	1350	1430	"	Concrete 4 1/2"
34	1430	1445	"	" 4 1/2"

Attachment 4

LABORATORY PROCEDURES FOR PASSIVE SOIL-GAS SAMPLES

Following are laboratory procedures used with BEACON Passive Soil-Gas Surveys, a screening technology for expedited site investigation. After exposure, adsorbent cartridges from the passive samplers are analyzed using U.S. EPA Method 8260C as a guidance document, a capillary gas chromatographic/mass spectrometric method, modified to accommodate high temperature thermal desorption of the adsorbent cartridges and to meet the objecitves of reporting semi-quantitative data. This procedure is summarized as follows:

A. The adsorbent cartridges are loaded with internal standards and surrogates prior to loading the autosampler with the cartridges. The loaded cartridges are purged in a helium flow. Then the cartridges are thermally desorbed in a helium flow onto a focusing trap. Any analytes in the helium stream are adsorbed onto a focusing trap.

B. Following trap focusing, the trap is thermally desorbed onto a Rxi-624Sil MS 20m, 0.18 mm ID, 1.00 micron filament thickness capillary column.

C. The GC/MS is scanned between 35 and 270 Atomic Mass Units (AMU) at 3.12 scans per second.

D. BFB tuning criteria and the initial five-point calibration procedures are those stated in method SW846-8260C. System performance and calibration check criteria are met prior to analysis of samples. A laboratory method blank is analyzed after the daily standard to determine that the system is contaminant-free.

E. The instrumentation used for these analyses includes:

- Agilent 7890-5975c Gas Chromatograph/Mass Spectrometer;
- Markes Unity2 thermal desorber;
- Markes UltrA2 autosampler; and
- Markes Mass Flow Controller Modules.

Attachment 5

Chain-of-Custody Form

CHAIN-OF-CUSTODY
PASSIVE SOIL-GAS SAMPLES

Project Information	
Beacon Project No.:	2592
Site Name:	Edison Site
Site Location:	Reno, NV
Analytical Method:	EPA Method 8260C
Target Compounds:	Beacon Project Number 2592 Target Compound List

BEACON ENVIRONMENTAL SERVICES, INC.
2203A Commerce Road | Suite 1
Forest Hill, MD 21050 USA
800-878-5510 | 1-410-838-8780

Client Information	
Company Name:	Kleinfelder, Inc.
Office Location:	Reno, NV
Samples Submitted By:	RICK ERDMAN
Contact Phone No.:	775-689-7800

Field Sample ID	Comments (only necessary if problem or discrepancy) Notes	Date	Time	Initial
Trip-1				RE
Trip-2				RE
PSG-01		2-25-13	1105	RE
PSG-02			1120	RE
PSG-03			1135	RE
PSG-04			1150	RE
PSG-05			1220	RE
PSG-06			1235	RE
FSG-07			1310	RE
PSG-08			1335	RE
FSG-09			1350	RE
PSG-10			1405	RE
PSG-FB1			1400	RE
PSG-11			1415	RE
PSG-12			1430	RE
PSG-13			1445	RE
PSG-14		↓	1500	RE
PSG-15		2-27-13	0805	RE
PSG-16		2-27-13	0830	RE
PSG-17		2-27-13	0845	RE

Shipment of Field Kit to Site — Custody Seal # 17350287 **Intact?** (Y) N

Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Kenny Ifeacho	01-23-2013 / 1700 Hours	FedEx	Rick Erdman	1-31-13 / 1130

Shipment of Field Kit to Laboratory — Custody Seal # 17350288 **Intact?** (Y) N

Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Rick Erdman	3-4-13 / 0800	FED EX	Steve Thornley	3.5.13 / 1200

CHAIN-OF-CUSTODY
PASSIVE SOIL-GAS SAMPLES

Project Information	
Beacon Project No.:	2592
Site Name:	Edison Site
Site Location:	Reno, NV
Analytical Method:	EPA Method 8260C
Target Compounds:	Beacon Project Number 2592 Target Compound List

BEACON ENVIRONMENTAL SERVICES, INC.
2203A Commerce Road | Suite 1
Forest Hill, MD 21050 USA
800-878-5510 | 1-410-838-8780

Client Information	
Company Name:	Kleinfelder, Inc.
Office Location:	Reno, NV
Samples Submitted By:	RICK ERDMAN
Contact Phone No.:	775-689-7800

Field Sample ID	Comments (only necessary if problem or discrepancy)			
	Notes	Date	Time	Initial
PSG-18		2-27-13	0900	RE
PSG-19			0915	RE
PSG-20			0930	RE
PSG-21			0945	RE
PSG-22 D			1000	RE
PSG-23			1015	RE
PSG-24			1030	RE
PSG-25			1045	RE
PSG-26			1100	RE
PSG-27			1150	RE
PSG-28			1255	RE
PSG-29			1310	RE
PSG-30			1330	RE
PSG-FB2			1320	RE
PSG-31			1345	RE
PSG-32			1400	RE
PSG-33			1430	RE
PSG-34 D			1445	RE

Shipment of Field Kit to Site — Custody Seal # 17350287 **Intact?** (Y) N

Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Kenny Ipsacho	01-23-2013 / 1700 Hours	FedEx	Rick Erdman	1-31-13 / 1130

Shipment of Field Kit to Laboratory — Custody Seal # 17350288 **Intact?** (Y) N

Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Rick Erdman	3-4-13 / 0800	FED-EX	Steven Thornley	3,5,13 / 1200

KLEINFELDER
Bright People. Right Solutions.

APPENDIX B

FIELD KIT GUIDE FOR PASSIVE SOIL GAS INVESTIGATIONS

FIELD KIT GUIDE
FOR
PASSIVE SOIL-GAS INVESTIGATIONS
[PLEASE READ ENTIRE GUIDE BEFORE STARTING SURVEY]

I. General Information

A. BEACON is furnishing this kit to **RMT, Inc.** (RMT) specifically for use on the **Tecumseh Products site in Tecumseh, MI.** To meet the project objectives the Samplers will be retrieved **seven (7) days after installation**. Please contact BEACON following installation of the samplers at (800) 878-5510 with anticipated date when samples will arrive at BEACON's laboratory.

B. Prior to returning the Kit to BEACON, RMT should verify that the caps are tight on the Passive Soil-Gas (PSG) Samplers and that the Samplers are sealed individually in the small Sampler Bags and also in the larger Return Shipment Bag, with an adsorbent pak.

C. ***Before going to the field*** please inventory the contents of the Kit, checking them against the enclosed list to verify item counts and to become familiar with all components. (Because the components are thoroughly cleaned prior to shipment, the inventory should be conducted without opening the plastic bags.) Note that Trip Blanks are to remain sealed throughout the Survey.

D. Upon receipt of the Field Kit, BEACON requests that RMT sign and date the enclosed Chain-of-Custody Form to document receipt of the Kit. The Field Deployment Report is to be completed during the course of the survey.

E. Following completion of the survey, fill out the Chain-of-Custody Form with the following information: (i) Field Sample IDs, (ii) the name and contact phone number of the person submitting the samples, (iii) the unique number of the custody seal that will be used, and (iv) signature and date of person relinquishing samples. The Chain-of-Custody Form and Field Deployment Report are to be returned with the Field Kit to BEACON. If possible, retain photocopies for your record. Next, pack the Samplers, tools, containers, sampling caps, and requisite documentation in the Field Kit.

Note: Place the Return Shipment Bag, which contains the individually bagged PSG Samplers, in the upper tray and place the tools in the lower compartment of the Kit so they do not damage the Samplers. One trip blank should be included with each Return Shipment Bag.

Affix the tug-tight custody seal to the latch on the Field Kit, pack it in its original cardboard shipping container, and send the shipment via overnight courier (FedEx, UPS, DHL) to:

Beacon Environmental Services, Inc.
Attn: Sample Receiving
323 Williams Street, Suite D
Bel Air, MD 21014
410-838-8780

NOTE: DO NOT PACK IN THE KIT OR SHIPPING BOX STYRENE PEANUTS, NEWSPAPER, OR OTHER MATERIALS THAT COULD CONTAMINATE THE SAMPLES. PLEASE AVOID SMOKING WHILE HANDLING SAMPLERS.

II. Contents

A. This Field Kit contains the components needed for a **148**-point soil-gas survey, plus sufficient additional cartridges for **5** trip blanks (vial labeled **Trip-1 through Trip-5**, not to be opened), and **4** extra Samplers for use in the event of breakage or accidental contamination. In addition, **3** extra transport vials are provided in case a Sampler Vial breaks during retrieval. **Do not open bags until deployment.**

Code/Item		Quantity
(1)	PASSIVE SOIL-GAS SAMPLERS	**157**
(2)	EXTRA TRANSPORT VIALS	**3**
(3)	SAMPLING CAPS (in container)	**160**
(4)	CAP STORAGE CONTAINERS	**2**
(5)	TAPPING DOWELS	**1**
(6)	12″ LENGTHS OF METAL PIPE	**152**
(7)	WIRE CUTTERS	**1**
(8)	GAUZE CLOTHS	**160**
(9)	PIPE CUTTER	**1**
(10)	SCRATCH AWL	**1**
(11)	VISE GRIPS	**1**
(12)	3” x 4” PLASTIC SAMPLER BAGS (for return shipment of samples)	**160**
(13)	12” x 12” PLASTIC RETURN SHIPMENT BAG	**1**

B. In addition to the materials found in the kit, field teams will need:

- NITRILE GLOVES
- CLEAN TOWEL
- HAMMER
- ELECTRIC ROTARY HAMMER DRILL WITH:
  ½”-DIAMETER BIT WITH AT LEAST 36 INCHES OF CUTTING LENGTH and
  1¼” to 1½” DIAMETER BIT WITH AT LEAST 12 INCHES OF CUTTING LENGTH
- PIPE WRENCH (to dislodge drill bits should they become stuck)
- BALL-POINT PEN and CLIPBOARD
- PIN FLAGS, WOODEN STAKES, or OTHER LOCATION MARKERS
- FLAGGING TAPE
- BOX OF ALUMINUM FOIL

C. Additional materials necessary only for deployment through asphalt or concrete:

- DRY CONCRETE MORTAR MIX and ASSOCIATED EQUIPMENT (for temporary patching of the sample holes) including:
  SMALL PAIL, WATER, SMALL PLASTIC PUTTY KNIFE
- CHISEL or SCREWDRIVER (to remove the temporary patch)
- ASPHALT COLD PATCH or CEMENT (for final repair of the sample holes)

III. Instructions

A. GENERAL:

Deployment and retrieval of Samplers requires only one person. Separate step-by-step procedures are detailed below for sampling through vegetation or bare soils and for sampling in areas covered by asphalt, concrete, or gravel. **Keep exposure of sample cartridges to ambient air to a minimum.**

Note: Do not deploy Samplers within 10 feet of a monitoring well, penetrometer, hydropunch shaft, or other intrusive sampling apparatus that potentially creates a preferential pathway for gases.

REMEMBER: TRIP BLANKS ARE NOT TO BE OPENED.

B. SAMPLER DEPLOYMENT:

Note: Each Sampler contains two sets of adsorbent cartridges. BEACON will analyze one set per Sampler; however, the second set in each Sampler can be analyzed as a field sample duplicate. RMT will note at which locations, if any, duplicates are to be analyzed by writing separate entries corresponding to the sample location followed by the letter "D" (*i.e*, 3, 3-D, 4, 4-D) on the Chain-of-Custody Form. It is not necessary to alter the deployment pattern to have the duplicate samples analyzed. There is an additional per sample charge for analysis of any duplicates.

Vegetation or Bare Soils:

1. At each survey point, clear vegetation as necessary and, using a hammer drill and drill bit, create a 1¼"- to 1½"-diameter hole approximately 12 inches deep. Then, using the ½" drill bit, extend the hole to a three foot depth. **Note**: In areas of very organic topsoil or landscaped areas (ie, mulched areas, gardens, etc.) it is important to get beneath the organic soil layer to the underlying soil below.

2. When the holes have been drilled, take a 12-inch length of 1"-diameter metal pipe and lower it into the sample hole, being careful not to touch the inside of the pipe. Any portion of pipe above grade is cut flush with the ground surface, using the pipe cutter. With the tapping dowel and a hammer, push or tap the pipe one inch into the base of the drilled hole (see **attached figure**).

3. Remove one of the Samplers (a glass vial containing four ***hydrophobic*** adsorbent cartridges) and unwind the retrieval wire wrapped around it. Holding the capped end of the vial in one hand, pull the wire tight (to straighten it) with the other hand. Remove the solid cap on the Sampler Vial and replace it with a Sampling Cap (a one-hole cap with a screen meshing insert). Place the solid cap in the Field Kit.

Note: At each sampling location, verify that the (black) sampling cap is on the vial before installing the Sampler.

4. Lower the Sampler, open-end down, into the metal pipe approximately four inches so that the retrieval wire sticks out of the hole. Cover the open end of the pipe with a balled up **wad** of aluminum foil, pressing it tightly on top of the pipe with the tapping dowel. Next, cover the hole to grade with local soils or sand, leaving the end of the wire exposed above the surface of the ground. Using the hammer, collapse the soils above the Sampler. **Coil the wire and lay it flat on the ground surface**. Place the solid cap in the Cap Storage Container. Clearly mark the sample location with a pin flag or wooden stake.

5. Close the Field Kit, and on the Field Deployment Report record: (a) sample-point number; (b) date/time of emplacement (to nearest minute); and (c) other relevant information (*e.g.*, soil type, vegetation, proximity to potential source areas). Mark the sample location and take detailed notes (*i.e.*, compass bearings and distances from fixed reference points).

6. Move to next location.

Concrete, Asphalt, or Gravel Covered Areas:

1. At each survey point, drill a 1¼"- to 1½"-diameter hole through the asphalt/concrete/gravel to bare soil using a rotary hammer drill or comparable equipment. This hole should be approximately 12 inches deep. **Note**: When one person is performing fieldwork, it is often more efficient to drill all sample-point holes before beginning Sampler deployment.

2. When the hole through concrete/asphalt/gravel has been completed, using the ½" drill bit, extend the hole to a three foot depth. Next, take a 12-inch length of 1"-diameter metal pipe and lower it into the sample hole, being careful not to touch the inside of the pipe. Any portion of pipe above grade is cut flush with the ground surface, using the pipe cutter. With the tapping dowel and a hammer, push or tap the pipe one inch into the base of the drilled hole (see **attached figure**).

3. Remove one of the Samplers (a glass vial containing four ***hydrophobic*** adsorbent cartridges) and unwind the retrieval wire approximately six inches from the sampler, so that a coil of wire remains at the end. Remove the solid cap on the Sampler Vial and replace it with a Sampling Cap (a one-hole cap with a screen meshing insert). Place the solid cap in the Field Kit.

Note: At each sampling location, verify that the (black) sampling cap is on the vial before installing the Sampler.

4. Lower the Sampler, open-end down, into the metal pipe approximately four inches.

   If sampling through asphalt or concrete, bend the end of the wire over the top of the pipe so that the coil of wire hangs over the top and outside of the pipe. Next, plug the top of the hole with a wad of aluminum foil. Using the tapping dowel, push down the aluminum foil so it forms a seal on the metal pipe and rests ¼" below the surfacing. Cover the hole to grade with a **¼" thick** concrete patch. [**Note**: A ¼" thick patch is all that is required. If it is thicker it will be difficult to remove during retrieval.] Next, place the solid cap in the Cap Storage Container.

   If sampling through gravel, extend the retrieval wire out of the pipe and plug the pipe with a wad of aluminum foil. Using the tapping dowel, push down the aluminum foil so it forms a seal on the metal pipe. Bend the wire over the aluminum foil plug and while the wire is extended out of the hole, cover the aluminum foil with local soil or sand. **Coil the wire and lay it flat on the ground surface.** Next, place the solid cap in the Cap Storage Container.

   If a hole deeper than 12 inches is created, it will be necessary to use more than one wad of aluminum foil. In these situations, extend the wire out of the pipe. While holding onto the wire, plug the top of the pipe and hole loosely with as many wads as needed. Before inserting the last wad of foil, bend the wire so it rests below the uppermost wad of foil. This will make it easy to retrieve the Sampler during retrieval.

5. Close the Field Kit, and on the Field Deployment Report record: (a) sample-point number; (b) date and time of emplacement (to nearest minute); (c) type of surfacing and approximate thickness; and (d) other relevant information (*e.g.*, surfacing material, proximity to potential source areas). Be sure to mark the sample location and take detailed notes (*i.e.*, compass bearings and distances from fixed reference points).

6. Move to next location.

C. SAMPLER RETRIEVAL:

Prior to retrieving samples, seal each Trip Blank in a 3"x4" Sampler Bag, and place the bagged Trip Blank in a separate larger bag marked "Return Shipment Bag." One trip blank should be included with each Return Shipment Bag. Stow the sampler blocks, with the Transport vials and extra samplers, in the lower compartment of the kit. The sampler blocks are to be returned to BEACON's lab along with the samples.

Note: Each Sampler contains two sets of adsorbent cartridges. BEACON will analyze one set per Sampler; however, the second set in each Sampler can be analyzed as a field sample duplicate. RMT will note at which locations, if any, duplicates are to be analyzed by writing separate entries corresponding to the sample location followed by the letter "D" (*i.e*, 3, 3-D, 4, 4-D) on the Chain-of-Custody Form. It is not necessary to alter the deployment pattern to have the duplicate samples analyzed. There is an additional per sample charge for analysis of any duplicates.

Vegetation or Bare Soils:

1. At each sample location open the Field Kit and place it and the wire cutters within easy reach. Remove a square of gauze cloth and place it and a clean towel on the open Kit. Remove a solid cap from the Cap Storage Container and place it on the Kit, also.

2. Remove the aluminum foil plug, using vise grips and the scratch awl, if necessary, and retrieve the Sampler from the hole.

3. Holding the Sampler upright, clean the sides of the vial with the clean towel (especially close to the Sampling Cap). Remove the Sampling Cap, cut the wire from the vial with the wire cutters, and clean the vial threads completely with the gauze cloth.
   [**Note**: **Completely remove the wire to ensure the cap fits tight on the vial and no soil is returned in the field kit**.]

4. Firmly screw the solid cap on the Sampler Vial and clean the vial completely with the gauze cloth. With a **ballpoint pen** record the sample number, corresponding to the sample location, on the cap's label. [**Note**: Do not use a Sharpie marker.]

5. Return the sampling cap to the Sampling Cap container. Place the sealed and labeled Sampler Vial in the smaller 3" x 4" plastic Sampler Bag. Then place the individually bagged and labeled sampler into the larger bag labeled "Return Shipment Bag."

   Note: Each sampler must be individually bagged and placed in a Return Shipment Bag, with approximately 40 samplers and one trip blank per Return Shipment Bag.

6. On the Field Deployment Report, record: (a) date and time of retrieval (to nearest minute); and (b) any other relevant information.

7. After all samples have been retrieved, verify that the caps on each Sampler are sealed tightly and that the seals on the Sampler Bags are closed. Verify that all Samplers are stored in the Return Shipment Bag, which contains an adsorbent pak. Seal the Return Shipment Bag and place it in the upper tray of the Field Kit, and place the provided tools and materials in the lower compartment of the Field Kit.

<u>Note</u>: Please do not return the sampling caps, used pipe, or the wire with the Field Kit as they could bias the samplers. Return *all* the other materials and equipment (blocks, extra samplers, tools, containers, *etc.*).

<u>Asphalt, Concrete, or Gravel:</u>

1. At each sample point covered by gravel, clear away the soil or sand to expose the aluminum-foil plug. For those locations covered by asphalt or concrete, use a small chisel and hammer to remove the concrete patch to expose the aluminum foil.

2. Next, open the Field Kit and place it and the wire cutters within easy reach. Remove a square of gauze cloth and place it and a clean towel on the open Kit. Remove a solid cap from the Cap Storage Container and place it on the Kit, also.

3. While securely holding onto the retrieval wire, remove the aluminum-foil plug, using the scratch awl, as necessary. Holding the Sampler upright, clean the sides of the vial with the clean towel (especially close to the Sampling Cap). Remove the Sampling Cap, cut all the wire from the vial with the wire cutters, and clean the vial threads completely with gauze cloth.
   [**Note**: **Completely remove the wire to ensure the cap fits tight on the vial and no soil is returned in the field kit**.]

4. Firmly screw the solid cap on the Sampler Vial and clean the vial completely with the gauze cloth. With a **ballpoint pen** record the sample number, corresponding to the sample location, on the cap's label. [**Note**: Do not use a Sharpie marker.]

5. Return the sampling cap to the Sampling Cap container. Place the sealed and labeled Sampler Vial in the smaller 3" x 4" plastic Sampler Bag. Then place the individually bagged and labeled sampler into the larger bag labeled "Return Shipment Bag."

   Note: Each sampler must be individually bagged and placed in a Return Shipment Bag, with approximately 40 samplers and one trip blank per Return Shipment Bag.

6. On the Field Deployment Report, record: (a) date and time of retrieval (to nearest minute); and (b) any other relevant information. Return the sampling cap to the Sampling Cap container.

7. After all samples have been retrieved, verify that the caps on each Sampler are sealed tightly and that the seals on the Sampler Bags are closed. Verify that all Samplers are stored in the Return Shipment Bag, which contains an adsorbent pak. Seal the Return Shipment Bag and place it in the upper tray of the Field Kit, and place the provided tools and materials in the lower compartment of the Field Kit.

<u>Note</u>: Please do not return the sampling caps, used pipe, or the wire with the Field Kit as they could bias the samplers. Return *all* the other materials and equipment (blocks, extra samplers, tools, containers, *etc.*).

8. Fill sampling holes to grade with an asphalt cold patch or cement.

IV. Forms

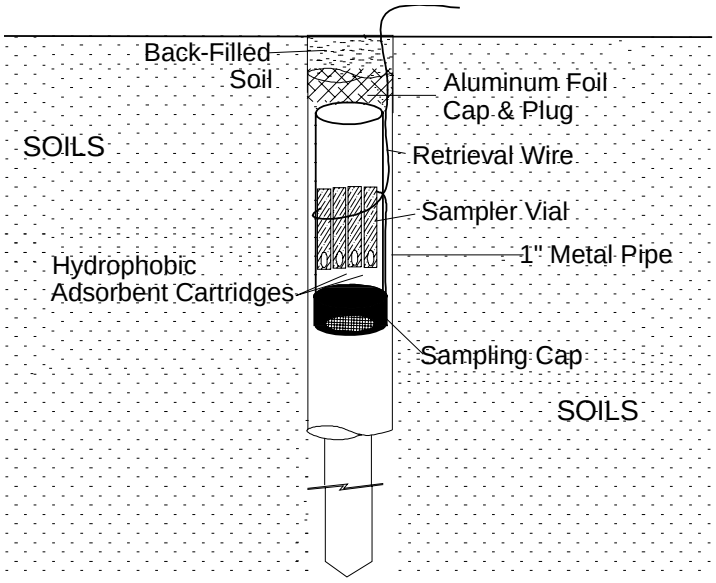
The Field Kit also contains a **Chain-of-Custody Form** and a **Field Deployment Report**.

A. The Chain-of-Custody Form is to be completed in accordance with **Section I**.

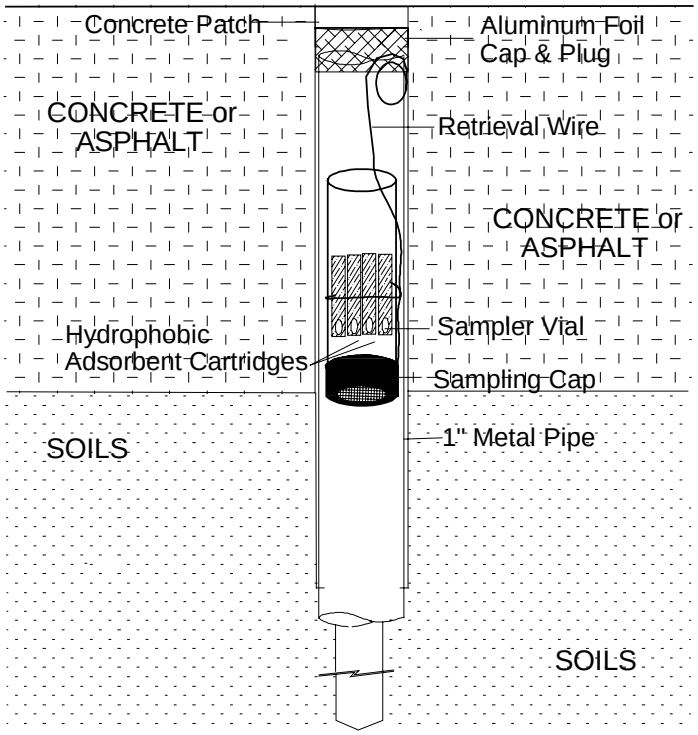
B. The Field Deployment Report is to be filled out during the Survey as indicated in **Section III**.

BEACON'S PASSIVE SOIL-GAS SAMPLER

DEPLOYMENT THROUGH SOILS



DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



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APPENDIX C

ALPHA ANALYTICAL LABORATORY REPORTS

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810
Date Received : 03/27/13

Job: 131379.01/NDEP-No. Edison

Metals by ICPMS
EPA Method SW6020 / SW6020A

Parameter		Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **TP8-5ft.**					
Lab ID : KLF13032820-01A	Chromium (Cr)	24	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 07:15	Arsenic (As)	5.9	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	160	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	6.2	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP7-5ft.**					
Lab ID : KLF13032820-02A	Chromium (Cr)	13	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 07:55	Arsenic (As)	4.7	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	78	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	18	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP1-5ft.**					
Lab ID : KLF13032820-03A	Chromium (Cr)	21	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 08:50	Arsenic (As)	9.7	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	170	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	6.3	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP9-5ft.**					
Lab ID : KLF13032820-04A	Chromium (Cr)	14	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 09:45	Arsenic (As)	6.3	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	55	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	3.7	1.0 mg/Kg	03/28/13	03/28/13

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID: **TP5-5ft.**					
Lab ID : KLF13032820-05A	Chromium (Cr)	25	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 10:30	Arsenic (As)	8.9	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	50	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	3.9	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP14-5ft.**					
Lab ID : KLF13032820-06A	Chromium (Cr)	13	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 11:00	Arsenic (As)	7.0	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	130	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	5.0	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP2-5ft.**					
Lab ID : KLF13032820-07A	Chromium (Cr)	14	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 12:00	Arsenic (As)	6.7	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	130	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	5.4	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP10-5ft.**					
Lab ID : KLF13032820-08A	Chromium (Cr)	14	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 12:30	Arsenic (As)	5.0	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	90	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	4.6	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP6-5ft.**					
Lab ID : KLF13032820-09A	Chromium (Cr)	14	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 13:15	Arsenic (As)	4.9	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	77	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	3.9	1.0 mg/Kg	03/28/13	03/28/13
Client ID: **TP12-5ft.**					
Lab ID : KLF13032820-10A	Chromium (Cr)	17	1.0 mg/Kg	03/28/13	03/28/13
Date Sampled 03/27/13 14:10	Arsenic (As)	3.7	1.0 mg/Kg	03/28/13	03/28/13
	Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
	Barium (Ba)	77	1.0 mg/Kg	03/28/13	03/28/13
	Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
	Lead (Pb)	14	1.0 mg/Kg	03/28/13	03/28/13

Alpha Analytical, Inc.

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Client ID: **TP11-5ft.**

Lab ID : KLF13032820-11A

Date Sampled 03/27/13 15:00

Chromium (Cr)	19	1.0 mg/Kg	03/28/13	03/28/13
Arsenic (As)	3.6	1.0 mg/Kg	03/28/13	03/28/13
Selenium (Se)	ND	1.0 mg/Kg	03/28/13	03/28/13
Silver (Ag)	ND	1.0 mg/Kg	03/28/13	03/28/13
Cadmium (Cd)	ND	1.0 mg/Kg	03/28/13	03/28/13
Barium (Ba)	130	1.0 mg/Kg	03/28/13	03/28/13
Mercury (Hg)	ND	0.20 mg/Kg	03/28/13	03/28/13
Lead (Pb)	14	1.0 mg/Kg	03/28/13	03/28/13

Sample results were calculated on a wet weight basis.

ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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4/4/13

Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-10A
Client I.D. Number: TP12-5ft.

Sampled: 03/27/13 14:10
Received: 03/27/13
Extracted: 04/08/13 12:56
Analyzed: 04/10/13

Semivolatile Organics by GC/MS - SIM
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	25 µg/Kg
2	2-Methylnaphthalene	ND	25 µg/Kg
3	1-Methylnaphthalene	ND	25 µg/Kg
4	Acenaphthylene	ND	25 µg/Kg
5	Acenaphthene	ND	25 µg/Kg
6	Fluorene	ND	25 µg/Kg
7	Phenanthrene	ND	25 µg/Kg
8	Anthracene	ND	25 µg/Kg
9	Fluoranthene	ND	25 µg/Kg
10	Pyrene	26	25 µg/Kg
11	Benzo(a)anthracene	ND	25 µg/Kg
12	Chrysene	ND	25 µg/Kg
13	Benzo(b&k)fluoranthene, isomeric pair	ND	50 µg/Kg
14	Benzo(a)pyrene	ND	25 µg/Kg
15	Indeno(1,2,3-cd)pyrene	ND	25 µg/Kg
16	Dibenz(a,h)anthracene	ND	25 µg/Kg
17	Benzo(g,h,i)perylene	ND	25 µg/Kg

Note: EPA Method 8270C CC compounds Acenaphthene, Fluoranthene and Benzo(a)pyrene were evaluated in the CV at the method criteria of 80-120% recovery.

Sample results were calculated on a wet weight basis.
ND = Not Detected

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Report Date

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810
Date Received : 03/27/13

Job: 131379.01/NDEP-No. Edison

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B / SW8260B

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**TP8-5ft.**						
Lab ID :	KLF13032820-01A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 07:15	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP7-5ft.**						
Lab ID :	KLF13032820-02A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 07:55	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP1-5ft.**						
Lab ID :	KLF13032820-03A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 08:50	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP9-5ft.**						
Lab ID :	KLF13032820-04A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 09:45	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP5-5ft.**						
Lab ID :	KLF13032820-05A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 10:30	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP14-5ft.**						
Lab ID :	KLF13032820-06A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 11:00	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP2-5ft.**						
Lab ID :	KLF13032820-07A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 12:00	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP10-5ft.**						
Lab ID :	KLF13032820-08A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 12:30	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP6-5ft.**						
Lab ID :	KLF13032820-09A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 13:15	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP12-5ft.**						
Lab ID :	KLF13032820-10A	TPH-E (DRO), Silica Gel	21	L*	10 mg/Kg	03/28/13	03/29/13
Date Sampled	03/27/13 14:10	TPH-E (ORO), Silica Gel	99	*	10 mg/Kg	03/28/13	03/29/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP11-5ft.**						
Lab ID :	KLF13032820-11A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	03/28/13	03/30/13
Date Sampled	03/27/13 15:00	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	03/28/13	03/30/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13

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Client ID :	**TB**					
Lab ID :	KLF13032820-12A	TPH-P (GRO)	ND	0.50 mg/L	03/28/13	03/28/13
Date Sampled	03/27/13 00:00					

* Reported DRO/ORO concentrations include heavier-end hydrocarbons that are consistent with asphaltic material.

Diesel Range Organics (DRO) C13-C22

EnCore samples were received and extracted within holding time.

Gasoline Range Organics (GRO) C4-C13

L = DRO concentration may include contributions from heavier-end hydrocarbons that elute in the DRO range.

Oil Range Organics (ORO) C22-C40+

Sample results were calculated on a wet weight basis.

ND = Not Detected

ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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NELAP ACCREDITED LABORATORY TNI

4/4/13

Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-01A
Client I.D. Number: TP8-5ft.

Sampled: 03/27/13 07:15
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACLASS ACCREDITED DoD ELAP

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-02A
Client I.D. Number: TP7-5ft.

Sampled: 03/27/13 07:55
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACCREDITED DoD ELAP

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Report Date

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-03A
Client I.D. Number: TP1-5ft.

Sampled: 03/27/13 08:50
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-04A
Client I.D. Number: TP9-5ft.

Sampled: 03/27/13 09:45
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

NELAP ACCREDITED TNI LABORATORY

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-05A
Client I.D. Number: TP5-5ft.

Sampled: 03/27/13 10:30
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-06A
Client I.D. Number: TP14-5ft.

Sampled: 03/27/13 11:00
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	90 µg/Kg
2	Vinyl chloride	ND	23 µg/Kg
3	Chloroethane	ND	23 µg/Kg
4	Bromomethane	ND	90 µg/Kg
5	Trichlorofluoromethane	ND	23 µg/Kg
6	1,1-Dichloroethene	ND	23 µg/Kg
7	Dichloromethane	ND	90 µg/Kg
8	trans-1,2-Dichloroethene	ND	23 µg/Kg
9	1,1-Dichloroethane	ND	23 µg/Kg
10	cis-1,2-Dichloroethene	ND	23 µg/Kg
11	Chloroform	ND	23 µg/Kg
12	1,2-Dichloroethane	ND	23 µg/Kg
13	1,1,1-Trichloroethane	ND	23 µg/Kg
14	Carbon tetrachloride	ND	23 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	23 µg/Kg
17	Trichloroethene	ND	23 µg/Kg
18	Bromodichloromethane	ND	23 µg/Kg
19	cis-1,3-Dichloropropene	ND	23 µg/Kg
20	trans-1,3-Dichloropropene	ND	23 µg/Kg
21	1,1,2-Trichloroethane	ND	23 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	23 µg/Kg
24	Tetrachloroethene	ND	23 µg/Kg
25	Chlorobenzene	ND	23 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	23 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	23 µg/Kg
31	1,3-Dichlorobenzene	ND	23 µg/Kg
32	1,4-Dichlorobenzene	ND	23 µg/Kg
33	1,2-Dichlorobenzene	ND	23 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-07A
Client I.D. Number: TP2-5ft.

Sampled: 03/27/13 12:00
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-08A
Client I.D. Number: TP10-5ft.

Sampled: 03/27/13 12:30
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

4/4/13
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-09A
Client I.D. Number: TP6-5ft.

Sampled: 03/27/13 13:15
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-10A
Client I.D. Number: TP12-5ft.

Sampled: 03/27/13 14:10
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-11A
Client I.D. Number: TP11-5ft.

Sampled: 03/27/13 15:00
Received: 03/27/13
Extracted: 03/28/13 11:57
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032820-12A
Client I.D. Number: TB

Sampled: 03/27/13 00:00
Received: 03/27/13
Extracted: 03/28/13
Analyzed: 03/28/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	Benzene	ND	1.0 µg/L
16	1,2-Dichloropropane	ND	1.0 µg/L
17	Trichloroethene	ND	1.0 µg/L
18	Bromodichloromethane	ND	1.0 µg/L
19	cis-1,3-Dichloropropene	ND	1.0 µg/L
20	trans-1,3-Dichloropropene	ND	1.0 µg/L
21	1,1,2-Trichloroethane	ND	1.0 µg/L
22	Toluene	ND	1.0 µg/L
23	Dibromochloromethane	ND	1.0 µg/L
24	Tetrachloroethene	ND	1.0 µg/L
25	Chlorobenzene	ND	1.0 µg/L
26	Ethylbenzene	ND	1.0 µg/L
27	m,p-Xylene	ND	1.0 µg/L
28	Bromoform	ND	1.0 µg/L
29	o-Xylene	ND	1.0 µg/L
30	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
31	1,3-Dichlorobenzene	ND	1.0 µg/L
32	1,4-Dichlorobenzene	ND	1.0 µg/L
33	1,2-Dichlorobenzene	ND	1.0 µg/L

ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

NELAP ACCREDITED TNI LABORATORY

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: KLF13032820 **Job:** 131379.01/NDEP-No. Edison

Alpha's Sample ID	Client's Sample ID	Matrix	pH
13032820-12A	TB	Aqueous	2

4/4/13

Report Date

Alpha Analytical, Inc.

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Date: 04-Apr-13

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **032713.B\052_M.D** Batch ID: **30660** Analysis Date: **03/28/2013 13:24**

Sample ID: **MB-30660** Units : **mg/Kg** Run ID: **ICP/MS_130328A** Prep Date: **03/28/2013 09:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	1								
Arsenic (As)	ND	1								
Selenium (Se)	ND	1								
Silver (Ag)	ND	1								
Cadmium (Cd)	ND	1								
Barium (Ba)	ND	1								
Mercury (Hg)	ND	0.2								
Lead (Pb)	ND	1								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **032713.B\054_M.D** Batch ID: **30660** Analysis Date: **03/28/2013 13:36**

Sample ID: **LCS-30660** Units : **mg/Kg** Run ID: **ICP/MS_130328A** Prep Date: **03/28/2013 09:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	24.2	1	25		97	80	120			
Arsenic (As)	25.4	1	25		101	80	120			
Selenium (Se)	25.1	1	25		101	80	120			
Silver (Ag)	25.5	1	25		102	80	120			
Cadmium (Cd)	24.5	1	25		98	80	120			
Barium (Ba)	244	1	250		97	80	120			
Mercury (Hg)	0.419	0.2	0.5		84	80	120			
Lead (Pb)	25.3	1	25		101	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **032713.B\056_M.D** Batch ID: **30660** Analysis Date: **03/28/2013 13:47**

Sample ID: **13032641-01AMS** Units : **mg/Kg** Run ID: **ICP/MS_130328A** Prep Date: **03/28/2013 09:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	48.3	1	25	27.76	82	75	125			
Arsenic (As)	22.4	1	25	2.186	81	75	125			
Selenium (Se)	21.9	1	25	0	88	75	125			
Silver (Ag)	25.5	1	25	0	102	75	125			
Cadmium (Cd)	25.1	1	25	0	100	75	125			
Barium (Ba)	281	1	250	49.64	93	75	125			
Mercury (Hg)	0.728	0.2	0.5	0.589	28	75	125			M2
Lead (Pb)	33.3	1	25	10.55	91	75	125			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **032713.B\057_M.D** Batch ID: **30660** Analysis Date: **03/28/2013 13:53**

Sample ID: **13032641-01AMSD** Units : **mg/Kg** Run ID: **ICP/MS_130328A** Prep Date: **03/28/2013 09:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	51.6	1	25	27.76	95	75	125	48.27	6.6(20)	
Arsenic (As)	20.2	1	25	2.186	72	75	125	22.41	10.6(20)	M2
Selenium (Se)	20.1	1	25	0	80	75	125	21.88	8.4(20)	
Silver (Ag)	25.6	1	25	0	102	75	125	25.48	0.4(20)	
Cadmium (Cd)	24.5	1	25	0	98	75	125	25.06	2.2(20)	
Barium (Ba)	272	1	250	49.64	89	75	125	280.9	3.3(20)	
Mercury (Hg)	0.964	0.2	0.5	0.589	75	75	125	0.7284	27.9(20)	R58
Lead (Pb)	38.1	1	25	10.55	110	75	125	33.29	13.5(20)	

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Date: *04-Apr-13*

QC Summary Report

Work Order: 13032820

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

R58 = MS/MSD RPD exceeded the laboratory control limit.

Alpha Analytical, Inc.

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Date: *15-Apr-13*

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW8270C**

File ID: **13041003.D** Batch ID: **30705** Analysis Date: **04/10/2013 12:20**

Sample ID: **MBLK-30705** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Naphthalene	ND	25								
2-Methylnaphthalene	ND	25								
1-Methylnaphthalene	ND	25								
Acenaphthylene	ND	25								
Acenaphthene	ND	25								
Fluorene	ND	25								
Phenanthrene	ND	25								
Anthracene	ND	25								
Fluoranthene	ND	25								
Pyrene	ND	25								
Benzo(a)anthracene	ND	25								
Chrysene	ND	25								
Benzo(b&k)fluoranthene, isomeric pair	ND	50								
Benzo(a)pyrene	ND	25								
Indeno(1,2,3-cd)pyrene	ND	25								
Dibenz(a,h)anthracene	ND	25								
Benzo(g,h,i)perylene	ND	25								
Surr: 2-Fluorobiphenyl	390		312.5		125	47	137			
Surr: 4-Terphenyl-d14	354		312.5		113	27	141			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8270C**

File ID: **13041012.D** Batch ID: **30705** Analysis Date: **04/10/2013 16:07**

Sample ID: **LCS-30705** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Acenaphthene	340	25	312.5		109	42	138			
Pyrene	327	25	312.5		105	29	143			
Surr: 2-Fluorobiphenyl	466		312.5		149	47	137			S55
Surr: 4-Terphenyl-d14	343		312.5		110	27	141			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8270C**

File ID: **13041010.D** Batch ID: **30705** Analysis Date: **04/10/2013 15:17**

Sample ID: **13032827-04AMS** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Acenaphthene	278	25	312.5	0	89	20	162			
Pyrene	361	25	312.5	64.08	95	10	159			
Surr: 2-Fluorobiphenyl	393		312.5		126	47	137			
Surr: 4-Terphenyl-d14	309		312.5		99	27	141			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8270C**

File ID: **13041014.D** Batch ID: **30705** Analysis Date: **04/10/2013 16:58**

Sample ID: **13032827-04AMSD** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Acenaphthene	279	25	312.5	0	89	20	162	278.4	0.3(32)	
Pyrene	366	25	312.5	64.08	97	10	159	361.3	1.4(49)	
Surr: 2-Fluorobiphenyl	392		312.5		125	47	137			
Surr: 4-Terphenyl-d14	297		312.5		95	27	141			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

S55 = Surrogate recovery was above laboratory acceptance limits.

Alpha Analytical, Inc.

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Date: *01-Apr-13*

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **7A03281338.D** Batch ID: **30667SG** Analysis Date: **03/29/2013 15:59**

Sample ID: **MBLK-30667** Units : **mg/Kg** Run ID: **FID_7_130328C** Prep Date: **03/28/2013 12:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	ND	10								
TPH-E (ORO), Silica Gel	ND	10								
Surr: Nonane, Silica Gel	5.11		6		85	65	160			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **7A03281339.D** Batch ID: **30667SG** Analysis Date: **03/29/2013 16:25**

Sample ID: **LCS-30667** Units : **mg/Kg** Run ID: **FID_7_130328C** Prep Date: **03/28/2013 12:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	104	5	100		104	70	130			
Surr: Nonane, Silica Gel	6.27		6		104	65	160			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **7A03281341.D** Batch ID: **30667SG** Analysis Date: **03/29/2013 17:19**

Sample ID: **13032820-01AMS** Units : **mg/Kg** Run ID: **FID_7_130328C** Prep Date: **03/28/2013 12:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	101	5	100	0	101	46	150			
Surr: Nonane, Silica Gel	5.62		6		94	65	160			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **7A03281342.D** Batch ID: **30667SG** Analysis Date: **03/29/2013 17:46**

Sample ID: **13032820-01AMSD** Units : **mg/Kg** Run ID: **FID_7_130328C** Prep Date: **03/28/2013 12:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	108	5	100	0	108	46	150	100.6	7.1(42)	
Surr: Nonane, Silica Gel	6.16		6		103	65	160			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: 01-Apr-13

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032909.D** Batch ID: **MS10S0664B** Analysis Date: **03/29/2013 14:48**

Sample ID: **MBLK MS10S0664B** Units : **mg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 14:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	0.244		0.2		122	70	130			
Surr: Toluene-d8	0.202		0.2		101	70	130			
Surr: 4-Bromofluorobenzene	0.177		0.2		89	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032913.D** Batch ID: **MS10S0664B** Analysis Date: **03/29/2013 16:14**

Sample ID: **GLCS MS10S0664B** Units : **mg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 16:14**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	34.2	2	32		107	63	149			
Surr: 1,2-Dichloroethane-d4	0.466		0.4		117	70	130			
Surr: Toluene-d8	0.433		0.4		108	70	130			
Surr: 4-Bromofluorobenzene	0.385		0.4		96	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032914.D** Batch ID: **MS10S0664B** Analysis Date: **03/29/2013 16:36**

Sample ID: **13031963-04AGS** Units : **mg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	16	2	16	0	99.8	36	164			
Surr: 1,2-Dichloroethane-d4	0.454		0.4		113	70	130			
Surr: Toluene-d8	0.413		0.4		103	70	130			
Surr: 4-Bromofluorobenzene	0.362		0.4		90	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032915.D** Batch ID: **MS10S0664B** Analysis Date: **03/29/2013 16:57**

Sample ID: **13031963-04AGSD** Units : **mg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 16:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	18.5	2	16	0	116	36	164	15.98	14.8(40)	
Surr: 1,2-Dichloroethane-d4	0.445		0.4		111	70	130			
Surr: Toluene-d8	0.42		0.4		105	70	130			
Surr: 4-Bromofluorobenzene	0.37		0.4		92	70	130			

Comments:

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Date: *01-Apr-13*

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032615.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 13:19**

Sample ID: **MBLK MS06W0328B** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 13:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.5								
Surr: 1,2-Dichloroethane-d4	0.0115		0.01		115	70	130			
Surr: Toluene-d8	0.00976		0.01		98	70	130			
Surr: 4-Bromofluorobenzene	0.00936		0.01		94	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032614.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 12:55**

Sample ID: **GLCS MS06W0328B** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 12:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.401	0.05	0.4		100	70	130			
Surr: 1,2-Dichloroethane-d4	0.0116		0.01		116	70	130			
Surr: Toluene-d8	0.0095		0.01		95	70	130			
Surr: 4-Bromofluorobenzene	0.00934		0.01		93	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032828.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 19:16**

Sample ID: **13032860-06AGS** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 19:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.95	0.25	2	0	98	54	143			
Surr: 1,2-Dichloroethane-d4	0.0608		0.05		122	70	130			
Surr: Toluene-d8	0.0476		0.05		95	70	130			
Surr: 4-Bromofluorobenzene	0.0461		0.05		92	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032829.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 19:40**

Sample ID: **13032860-06AGSD** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 19:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.01	0.25	2	0	101	54	143	1.952	3.1(23)	
Surr: 1,2-Dichloroethane-d4	0.0584		0.05		117	70	130			
Surr: Toluene-d8	0.0477		0.05		95	70	130			
Surr: 4-Bromofluorobenzene	0.046		0.05		92	70	130			

Comments:

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Date: *01-Apr-13*

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032909.D** Batch ID: **MS10S0664A** Analysis Date: **03/29/2013 14:48**

Sample ID: **MBLK MS10S0664A** Units : **µg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 14:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	80								
Vinyl chloride	ND	20								
Chloroethane	ND	20								
Bromomethane	ND	80								
Trichlorofluoromethane	ND	20								
1,1-Dichloroethene	ND	20								
Dichloromethane	ND	80								
trans-1,2-Dichloroethene	ND	20								
1,1-Dichloroethane	ND	20								
cis-1,2-Dichloroethene	ND	20								
Chloroform	ND	20								
1,2-Dichloroethane	ND	20								
1,1,1-Trichloroethane	ND	20								
Carbon tetrachloride	ND	20								
Benzene	ND	20								
1,2-Dichloropropane	ND	20								
Trichloroethene	ND	20								
Bromodichloromethane	ND	20								
cis-1,3-Dichloropropene	ND	20								
trans-1,3-Dichloropropene	ND	20								
1,1,2-Trichloroethane	ND	20								
Toluene	ND	20								
Dibromochloromethane	ND	20								
Tetrachloroethene	ND	20								
Chlorobenzene	ND	20								
Ethylbenzene	ND	20								
m,p-Xylene	ND	20								
Bromoform	ND	20								
o-Xylene	ND	20								
1,1,2,2-Tetrachloroethane	ND	20								
1,3-Dichlorobenzene	ND	20								
1,4-Dichlorobenzene	ND	20								
1,2-Dichlorobenzene	ND	20								
Surr: 1,2-Dichloroethane-d4	244		200		122	70	130			
Surr: Toluene-d8	202		200		101	70	130			
Surr: 4-Bromofluorobenzene	177		200		89	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032910.D** Batch ID: **MS10S0664A** Analysis Date: **03/29/2013 15:10**

Sample ID: **LCS MS10S0664A** Units : **µg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 15:10**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	441	20	400		110	10	131			
Benzene	483	10	400		121	70	137			
Trichloroethene	489	20	400		122	70	149			
Toluene	523	10	400		131	70	139			
Chlorobenzene	451	20	400		113	70	137			
Ethylbenzene	468	10	400		117	70	137			
m,p-Xylene	398	10	400		99	70	145			
o-Xylene	451	10	400		113	70	145			
Surr: 1,2-Dichloroethane-d4	517		400		129	70	130			
Surr: Toluene-d8	445		400		111	70	130			
Surr: 4-Bromofluorobenzene	393		400		98	70	130			

Alpha Analytical, Inc.

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Date: *01-Apr-13*

QC Summary Report

Work Order: 13032820

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032911.D** Batch ID: **MS10S0664A** Analysis Date: **03/29/2013 15:31**

Sample ID: **13031963-04AMS** Units : **µg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 15:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	427	20	400	0	107	10	131			
Benzene	451	10	400	0	113	52	151			
Trichloroethene	468	20	400	0	117	48	165			
Toluene	498	10	400	0	124	47	154			
Chlorobenzene	421	20	400	0	105	50	151			
Ethylbenzene	443	10	400	0	111	52	154			
m,p-Xylene	378	10	400	0	95	51	162			
o-Xylene	431	10	400	0	108	52	162			
Surr: 1,2-Dichloroethane-d4	512		400		128	70	130			
Surr: Toluene-d8	442		400		111	70	130			
Surr: 4-Bromofluorobenzene	391		400		98	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\130329\13032912.D** Batch ID: **MS10S0664A** Analysis Date: **03/29/2013 15:53**

Sample ID: **13031963-04AMSD** Units : **µg/Kg** Run ID: **MSD_10_130329B** Prep Date: **03/29/2013 15:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	539	20	400	0	135	10	131	427.1	23.2(40)	M1
Benzene	553	10	400	0	138	52	151	450.8	20.4(30)	
Trichloroethene	581	20	400	0	145	48	165	468.2	21.5(29)	
Toluene	604	10	400	0	151	47	154	497.7	19.2(28)	
Chlorobenzene	531	20	400	0	133	50	151	420.7	23.3(40)	
Ethylbenzene	559	10	400	0	140	52	154	443.5	23.0(37)	
m,p-Xylene	472	10	400	0	118	51	162	378.2	22.1(34)	
o-Xylene	535	10	400	0	134	52	162	430.5	21.6(40)	
Surr: 1,2-Dichloroethane-d4	504		400		126	70	130			
Surr: Toluene-d8	433		400		108	70	130			
Surr: 4-Bromofluorobenzene	395		400		99	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

Alpha Analytical, Inc.

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Date: *01-Apr-13*

QC Summary Report

Work Order: 13032820

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032615.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 13:19**

Sample ID: **MBLK MS06W0328A** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 13:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	2								
Vinyl chloride	ND	1								
Chloroethane	ND	1								
Bromomethane	ND	2								
Trichlorofluoromethane	ND	1								
1,1-Dichloroethene	ND	1								
Dichloromethane	ND	2								
trans-1,2-Dichloroethene	ND	1								
1,1-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Chloroform	ND	1								
1,2-Dichloroethane	ND	1								
1,1,1-Trichloroethane	ND	1								
Carbon tetrachloride	ND	1								
Benzene	ND	1								
1,2-Dichloropropane	ND	1								
Trichloroethene	ND	1								
Bromodichloromethane	ND	1								
cis-1,3-Dichloropropene	ND	1								
trans-1,3-Dichloropropene	ND	1								
1,1,2-Trichloroethane	ND	1								
Toluene	ND	1								
Dibromochloromethane	ND	1								
Tetrachloroethene	ND	1								
Chlorobenzene	ND	1								
Ethylbenzene	ND	1								
m,p-Xylene	ND	1								
Bromoform	ND	1								
o-Xylene	ND	1								
1,1,2,2-Tetrachloroethane	ND	1								
1,3-Dichlorobenzene	ND	1								
1,4-Dichlorobenzene	ND	1								
1,2-Dichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	11.5		10		115	70	130			
Surr: Toluene-d8	9.76		10		98	70	130			
Surr: 4-Bromofluorobenzene	9.36		10		94	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032613.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 12:32**

Sample ID: **LCS MS06W0328A** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 12:32**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	11.7	1	10		117	80	120			
Benzene	12.2	0.5	10		122	70	130			
Trichloroethene	10.9	1	10		109	68	138			
Toluene	11.3	0.5	10		113	80	120			
Chlorobenzene	10.8	1	10		108	70	130			
Ethylbenzene	10.8	0.5	10		108	80	120			
m,p-Xylene	10.8	0.5	10		108	65	139			
o-Xylene	10.8	0.5	10		108	70	130			
Surr: 1,2-Dichloroethane-d4	11.4		10		114	70	130			
Surr: Toluene-d8	9.94		10		99	70	130			
Surr: 4-Bromofluorobenzene	8.98		10		90	70	130			

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Date: *01-Apr-13*

QC Summary Report

Work Order: 13032820

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032826.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 18:30**

Sample ID: **13032860-06AMS** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 18:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	47.2	2.5	50	0	94	62	133			
Benzene	52.8	1.3	50	0	106	67	134			
Trichloroethene	46	2.5	50	0	92	68	138			
Toluene	48.8	1.3	50	0	98	38	130			
Chlorobenzene	48.4	2.5	50	0	97	70	130			
Ethylbenzene	49.4	1.3	50	0	99	70	130			
m,p-Xylene	48.6	1.3	50	0	97	65	139			
o-Xylene	48.7	1.3	50	0	97	69	130			
Surr: 1,2-Dichloroethane-d4	58.4		50		117	70	130			
Surr: Toluene-d8	49.8		50		99.7	70	130			
Surr: 4-Bromofluorobenzene	48.4		50		97	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032827.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 18:53**

Sample ID: **13032860-06AMSD** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 18:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	50.3	2.5	50	0	101	62	133	47.21	6.3(35)	
Benzene	57.8	1.3	50	0	116	67	134	52.78	9.2(21)	
Trichloroethene	50	2.5	50	0	100	68	138	45.95	8.4(20)	
Toluene	53.3	1.3	50	0	107	38	130	48.75	9.0(20)	
Chlorobenzene	53.2	2.5	50	0	106	70	130	48.37	9.5(20)	
Ethylbenzene	53.8	1.3	50	0	108	70	130	49.35	8.6(20)	
m,p-Xylene	53.4	1.3	50	0	107	65	139	48.55	9.5(20)	
o-Xylene	54.1	1.3	50	0	108	69	130	48.72	10.5(20)	
Surr: 1,2-Dichloroethane-d4	59.4		50		119	70	130			
Surr: Toluene-d8	49.6		50		99	70	130			
Surr: 4-Bromofluorobenzene	48.3		50		97	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

April 04, 2013 Service Request No: R1302102

Ms. Reyna Vallejo
Alpha Analytical Laboratories, Inc (Sparks NV)
255 Glendale Ave
Suite 21
Sparks, NV 89431

Laboratory Results for: KLF13032820

Dear Ms. Vallejo:

Enclosed are the results of the sample(s) submitted to our laboratory on March 29, 2013. For your reference, these analyses have been assigned our service request number **R1302102.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Deb.Patton@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Deb Patton
Project Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1302102

Lab ID	Client ID
R1302102-001	KLF13032820-01A
R1302102-002	KLF13032820-02A
R1302102-003	KLF13032820-03A
R1302102-004	KLF13032820-04A
R1302102-005	KLF13032820-05A
R1302102-006	KLF13032820-06A
R1302102-007	KLF13032820-07A
R1302102-008	KLF13032820-08A
R1302102-009	KLF13032820-09A
R1302102-010	KLF13032820-10A
R1302102-011	KLF13032820-11A

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.

ALS Environmental

REPORT QUALIFIERS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://alsglobal.com/environmental/laboratories/rochester-environmental-lab.aspx

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0715
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-01A		
Lab Code:	R1302102-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**81.2**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0715
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 18:21
Sample Name:	KLF13032820-01A	**Units:**	µg/Kg
Lab Code:	R1302102-001	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK356.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6200	U	6200	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	75	60-146	4/2/13 18:21	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0755
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-02A		
Lab Code:	R1302102-002	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**91.8**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0755
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 18:43
Sample Name:	KLF13032820-02A	**Units:**	µg/Kg
Lab Code:	R1302102-002	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK357.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5400	U	5400	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	88	60-146	4/2/13 18:43	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0850
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-03A		
Lab Code:	R1302102-003	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**81.8**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0850
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 19:05
Sample Name:	KLF13032820-03A	**Units:**	µg/Kg
Lab Code:	R1302102-003	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK358.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6100	U	6100	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	79	60-146	4/2/13 19:05	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0945
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-04A		
Lab Code:	R1302102-004	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	91.7		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 0945
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 19:27
Sample Name:	KLF13032820-04A	**Units:**	µg/Kg
Lab Code:	R1302102-004	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK359.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5500	U	5500	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	74	60-146	4/2/13 19:27	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1030
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-05A		
Lab Code:	R1302102-005	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**89.0**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1030
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 19:49
Sample Name:	KLF13032820-05A	**Units:**	µg/Kg
Lab Code:	R1302102-005	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK360.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5600	U	5600	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	75	60-146	4/2/13 19:49	

ALS ENVIRONMENTAL

Analytical Report

Client: Alpha Analytical Laboratories, Inc (Sparks NV)
Project: KLF13032820
Sample Matrix: Soil

Service Request: R1302102
Date Collected: 3/27/13 1100
Date Received: 3/29/13

Sample Name: KLF13032820-06A
Lab Code: R1302102-006

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**80.6**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1100
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 20:11
Sample Name:	KLF13032820-06A	**Units:**	µg/Kg
Lab Code:	R1302102-006	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK361.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6200	U	6200	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	67	60-146	4/2/13 20:11	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1200
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-07A		
Lab Code:	R1302102-007	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**81.2**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1200
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 20:33
Sample Name:	KLF13032820-07A	**Units:**	µg/Kg
Lab Code:	R1302102-007	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK362.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6200	U	6200	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	69	60-146	4/2/13 20:33	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1230
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-08A		
Lab Code:	R1302102-008	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**88.2**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1230
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 20:55
Sample Name:	KLF13032820-08A	**Units:**	µg/Kg
Lab Code:	R1302102-008	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK363.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5700	U	5700	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	72	60-146	4/2/13 20:55	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1315
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-09A		
Lab Code:	R1302102-009	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**81.7**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1315
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 21:17
Sample Name:	KLF13032820-09A	**Units:**	µg/Kg
Lab Code:	R1302102-009	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK364.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6100	U	6100	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	70	60-146	4/2/13 21:17	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1410
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032820-10A		
Lab Code:	R1302102-010	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**75.2**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1410
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 22:01
Sample Name:	KLF13032820-10A	**Units:**	µg/Kg
Lab Code:	R1302102-010	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK366.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6600	U	6600	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	67	60-146	4/2/13 22:01	

Client: Alpha Analytical Laboratories, Inc (Sparks NV)
Project: KLF13032820
Sample Matrix: Soil

Service Request: R1302102
Date Collected: 3/27/13 1500
Date Received: 3/29/13

Sample Name: KLF13032820-11A
Lab Code: R1302102-011

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**88.5**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	3/27/13 1500
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 22:23
Sample Name:	KLF13032820-11A	**Units:**	µg/Kg
Lab Code:	R1302102-011	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK367.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5600	U	5600	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	73	60-146	4/2/13 22:23	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1302102-MB1	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	1.0	U	Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1302102-MB2	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	1.0	U	Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302102
Project:	KLF13032820	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 13:58
Sample Name:	Method Blank	**Units:**	µg/Kg
Lab Code:	RQ1303011-01	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK344.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5000	U	5000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	90	60-146	4/2/13 13:58	

ALS ENVIRONMENTAL

QA/QC Report

Client: Alpha Analytical Laboratories, Inc (Sparks NV) **Service Request:** R1302102
Project: KLF13032820 **Date Analyzed:** 4/ 2/13
Sample Matrix: Soil

Lab Control Sample Summary
Glycols by GC/FID

Analytical Method: 8015C **Units:** µg/Kg
Prep Method: Method **Basis:** Dry

Extraction Lot: 179838

	Lab Control Sample RQ1303011-02			Duplicate Lab Control Sample RQ1303011-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ethylene Glycol	18900	19900	95	19900	19900	100	56 - 117	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Alpha Analytical, Inc.
255 Glendale Avenue
Suite 21
Sparks, Nevada 89431-5778
Phone: (775) 355-1044
Fax: (775) 355-0406

SUB CHAIN-OF-CUSTODY RECORD

Work Order : KLF13032820
*Please reference the Work Order number on all reports and invoices.
*Also please include the dates of analysis and detection limits.
Please send the report to Alpha Analytical (Sparks).
Attention To Reyna Vallejo (reyna@alpha-analytical.com).

Report Due By : 5:00 PM
On : 12-Apr-13

Required QC:
Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Subcontractor:
ALS Environmental
1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623

TEL: (585) 288-5380
FAX:
Acct #:

Sampled by : Rick Erdman

28-Mar-13

Alpha's Sample ID	Client's Sample ID	Matrix	Collection Date	Type (#) of Bottles Preserved	Type (#) of Bottles Other	Requested Tests: EPA Method SW8015	Requested Tests	Requested Tests	Sample Comments
KLF13032820-01A	TP8-5ft.	Soil	03/27/13 07:15		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-02A	TP7-5ft.	Soil	03/27/13 07:55		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-03A	TP1-5ft.	Soil	03/27/13 08:50		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-04A	TP9-5ft.	Soil	03/27/13 09:45		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-05A	TP5-5ft.	Soil	03/27/13 10:30		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-06A	TP14-5ft.	Soil	03/27/13 11:00		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-07A	TP2-5ft.	Soil	03/27/13 12:00		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-08A	TP10-5ft.	Soil	03/27/13 12:30		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-09A	TP6-5ft.	Soil	03/27/13 13:15		8OZ-CG-U (1)	Ethylene Glycol			

Comments:

R1302102 5
Alpha Analytical Laboratories, Inc (Sparks NV)
KLF13032820

Relinquished by: Kellumay	**Date/Time** 3/28/13 1600	**Received by:** [signature] ALS	**Date/Time** 3/29/13/1000
Relinquished by:		**Received by:**	

00030

Alpha Analytical, Inc.
255 Glendale Avenue
Suite 21
Sparks, Nevada 89431-5778
Phone: (775) 355-1044
Fax: (775) 355-0406

SUB CHAIN-OF-CUSTODY RECORD

Work Order : KLF13032820

***Please reference the Work Order number on all reports and invoices.**
***Also please include the dates of analysis and detection limits.**
Please send the report to Alpha Analytical (Sparks).
Attention To Reyna Vallejo (reyna@alpha-analytical.com).

Report Due By : 5:00 PM
On : 12-Apr-13

Subcontractor:
ALS Environmental
1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623

TEL: (585) 288-5380
FAX:
Acct #:

Required QC:
Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Sampled by : Rick Erdman
28-Mar-13

Alpha's Sample ID	Client's Sample ID	Matrix	Collection Date	Type (#) of Bottles Preserved	Other	Requested Tests: EPA Method SW8015			Sample Comments
KLF13032820-10A	TP12-5ft.	Soil	03/27/13 14:10		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032820-11A	TP11-5ft.	Soil	03/27/13 15:00		8OZ-CG-U (1)	Ethylene Glycol			

Comments:

		Date/Time			Date/Time
Relinquished by:	Kellmay	3/28/13 1600	**Received by:**	ALS	3/29/13/1000
Relinquished by:			**Received by:**		

T6000

Cooler Receipt and Preservation Check Form

Project/Client Alpha Analytical Folder Number R2102

Cooler received on 3/29/13 by: SM COURIER: ALS UPS FEDEX VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	YES	NO	
2.	Were custody papers properly filled out (ink, signed, etc.)?	YES	NO	
3.	Did all bottles arrive in good condition (unbroken)?	YES	NO	
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO	N/A
5.	Were Ice or Ice packs present?	YES	NO	
6.	Where did the bottles originate?	ALS/ROC, CLIENT		
7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore Lab5035set N/A
8.	Temperature of cooler(s) upon receipt:	2.4°		

Is the temperature within 0° - 6° C?: Y N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 3/29/13 1010

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by SM on 3/29/13 at 1010

5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: KB 4/4/13

Cooler Breakdown: Date: 3/29/13 Time: 1421 by: KV

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	NO
2.	Did all bottle labels and tags agree with custody papers?	YES	NO
3.	Were correct containers used for the tests indicated?	YES	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		N/A

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN, Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: Client

Other Comments:

PC Secondary Review: KB 4/4/13

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

AMENDED

Billing Information :
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Client:
Kleinfelder
4835 Longley Lane

Reno, NV 89502

PO :

Client's COC # : 11271 Job : 131379.01/NDEP-No. Edison

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention	Phone Number	EMail Address
Phil Tousignant	(775) 689-7800 x 133	ptousignant@kleinfelder.com

NV

WorkOrder : KLF13032820

Report Due By : 5:00 PM On : 05-Apr-13

Amendment Due: 4/16/13

EDD Required : **No**

Sampled by : Rick Erdman

Cooler Temp	Samples Received	Date Printed
4 °C	27-Mar-13	08-Apr-13

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests GLYCOLS_S	METALS_SO	PNA_SIM_S	TPH/E_SG_S	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
KLF13032820-01A	TP8-5ft.	SO	03/27/13 07:15	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-02A	TP7-5ft.	SO	03/27/13 07:55	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-03A	TP1-5ft.	SO	03/27/13 08:50	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-04A	TP9-5ft.	SO	03/27/13 09:45	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-05A	TP5-5ft.	SO	03/27/13 10:30	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-06A	TP14-5ft.	SO	03/27/13 11:00	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-07A	TP2-5ft.	SO	03/27/13 12:00	3	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		Two 25 gram Encores, two 8 oz. jars
KLF13032820-08A	TP10-5ft.	SO	03/27/13 12:30	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars

Comments: Samples brought in by client on 3/27/13, kept cold and secure until login on 3/28/13. Frozen ice. Samples received after 16:00 cut off time, therefore one day added to TAT. Ethylene Glycol subbed to ALS-Columbia Rochester on a 10 day TAT, per Phil. Metals : logged in as RCRA 8, VOCs as std list & TPH/E_SG, per email/phone call from Phil on 3/28/13. Client provided temp blank received at 4°C. Amended 4/8/13: Per phone conversation w/ Phil 4/8/13 @ 11:02 added PNA SIM to sample -10A on std TAT, Due 4/16/13. EA

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	4.8.13 11:12

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

Billing Information :
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Client:
Kleinfelder
4835 Longley Lane

Reno, NV 89502

PO :

Client's COC # : 11271 Job : 131379.01/NDEP-No. Edison

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention	Phone Number	EMail Address
Phil Tousignant	(775) 689-7800 x 133	ptousignant@kleinfelder.com

NV

WorkOrder : KLF13032820

Report Due By : 5:00 PM On : 05-Apr-13

EDD Required : **No**

Sampled by : Rick Erdman

Cooler Temp	Samples Received	Date Printed
4 °C	27-Mar-13	08-Apr-13

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests GLYCOLS_S	METALS_SO	PNA_SIM_S	TPH/E_SG_S	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
KLF13032820-09A	TP6-5ft.	SO	03/27/13 13:15	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-10A	TP12-5ft.	SO	03/27/13 14:10	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	SIM	Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-11A	TP11-5ft.	SO	03/27/13 15:00	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore, two 8 oz. jars
KLF13032820-12A	TB	AQ	03/27/13 00:00	1	0	6						GAS-N		8260_Ns	Reno Trip Blank 3/22/13

Comments: Samples brought in by client on 3/27/13, kept cold and secure until login on 3/28/13. Frozen ice. Samples received after 16:00 cut off time, therefore one day added to TAT. Ethylene Glycol subbed to ALS-Columbia Rochester on a 10 day TAT, per Phil. Metals : logged in as RCRA 8, VOCs as std list & TPH/E_SG, per email/phone call from Phil on 3/28/13. Client provided temp blank received at 4°C. Amended 4/8/13: Per phone conversation w/ Phil 4/8/13 @ 11:02 added PNA SIM to sample -10A on std TAT, Due 4/16/13. EA

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	4.8.13 11:12

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Client:
Kleinfelder
4835 Longley Lane

Reno, NV 89502

PO :

Client's COC # : 11271 Job : 131379.01/NDEP-No. Edison

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention	Phone Number	EMail Address
Phil Tousignant	(775) 689-7800 x 133	ptousignant@kleinfelder.com

NV

WorkOrder : KLF13032820

Report Due By : 5:00 PM On : 05-Apr-13

EDD Required : **No**

Sampled by : Rick Erdman

Cooler Temp	Samples Received	Date Printed
4 °C	27-Mar-13	**28-Mar-13**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests GLYCOLS_S	METALS_SO	TPH/E_SG_S	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
KLF13032820-01A	TP8-5ft.	SO	03/27/13 07:15	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-02A	TP7-5ft.	SO	03/27/13 07:55	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-03A	TP1-5ft.	SO	03/27/13 08:50	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-04A	TP9-5ft.	SO	03/27/13 09:45	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-05A	TP5-5ft.	SO	03/27/13 10:30	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-06A	TP14-5ft.	SO	03/27/13 11:00	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-07A	TP2-5ft.	SO	03/27/13 12:00	3	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			Two 25 gram Encores, two 8 oz. jars
KLF13032820-08A	TP10-5ft.	SO	03/27/13 12:30	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars

Comments: Samples brought in by client on 3/27/13, kept cold and secure until login on 3/28/13. Frozen ice. Samples received after 16:00 cut off time, therefore one day added to TAT. Ethylene Glycol subbed to ALS-Columbia Rochester on a 10 day TAT, per Phil. : Metals logged in as RCRA 8, VOCs as standard list and silica gel for TPH/E, per email/phone call from Phil on 3/28/13. Client provided temp blank received at 4°C.

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	3/28/13 0935

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Client:
Kleinfelder
4835 Longley Lane

Reno, NV 89502

PO :

Client's COC # : 11271 Job : 131379.01/NDEP-No. Edison

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention	Phone Number	EMail Address
Phil Tousignant	(775) 689-7800 x 133	ptousignant@kleinfelder.com

NV

WorkOrder : KLF13032820

Report Due By : 5:00 PM On : 05-Apr-13

EDD Required : **No**

Sampled by : Rick Erdman

Cooler Temp	Samples Received	Date Printed
4 °C	27-Mar-13	**28-Mar-13**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests GLYCOLS_S	METALS_SO	TPH/E_SG_S	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
KLF13032820-09A	TP6-5ft.	SO	03/27/13 13:15	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-10A	TP12-5ft.	SO	03/27/13 14:10	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-11A	TP11-5ft.	SO	03/27/13 15:00	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore, two 8 oz. jars
KLF13032820-12A	TB	AQ	03/27/13 00:00	1	0	6					GAS-N		8260_Ns		Reno Trip Blank 3/22/13

Comments: Samples brought in by client on 3/27/13, kept cold and secure until login on 3/28/13. Frozen ice. Samples received after 16:00 cut off time, therefore one day added to TAT. Ethylene Glycol subbed to ALS-Columbia Rochester on a 10 day TAT, per Phil. : Metals logged in as RCRA 8, VOCs as standard list and silica gel for TPH/E, per email/phone call from Phil on 3/28/13. Client provided temp blank received at 4°C.

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	3/28/13 0935

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
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Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Company:
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431
Phone: 775-355-1044
Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

11271

Page # 1 of 1

Consultant/ Client Info:
Company: KLEINFELDER
Address: 4835 LONGLEY LN
City, State, Zip: RENO, NV 89502

Job and Purchase Order Info:
Job #: 131379.01
Job Name: NDEP - ND, EDISON
P.O. #:

Report Attention/Project Manager:
Name: PHIL TOUSIGNANT
Email Address: ptousignant@kleinfelder.com
Phone #: 775-689-7800
Cell #:

QC Deliverable Info:
EDD Required? Yes / No
EDF Required? Yes / No
Global ID:
Data Validation Level: III or IV

Samples Collected from which State? (circle one) AZ CA (NV) WA ID OR DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered?	# Containers** (See Key Below)	Analysis Requested: VOC, GRO by SW8260B	TPH - 8015 DRO, ORO	RCRA metals 8 by method 200.8/6020	ethylene glycol by mod 8015	Remarks
0715	03/27	OT	KLF13032820-01	TP8-5'	STAND	N	2-3 1-Encore	✓	✓	✓	✓	
0755			02	TP7-5'				✓	✓	✓	✓	
0850			03	~~TP6~~ TP1-5'				✓	✓	✓	✓	
0945			04	TP9-5'				✓	✓	✓	✓	
1030			05	TP5-5'				✓	✓	✓	✓	
1100			06	TP14-5'				✓	✓	✓	✓	
1200			07	TP2-5'				✓	✓	✓	✓	~~* 1 EXTRA SHORT FOR MS/MSD~~ KM
1230			08	TP10-5'				✓	✓	✓	✓	
1315			09	TP6-5'				✓	✓	✓	✓	
1410			10	TP12-5'				✓	✓	✓	✓	
1500			11	TP11-5'				✓	✓	✓	✓	
		AQ	12	TB			1-V	✓				VOC ONLY

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: RICK ERDMAN

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
Rick Erdman / KLF	3-27-13	1610	K Murray / AAL	3/27/13	1610
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

* Key: AQ - Aqueous WA - Waste OT - Other **: L - Liter V - VOA S-Soil Jar O - Orbo T - Tedlar B - Brass P - Plastic OT - Other

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810
Date Received : 03/28/13

Job: 131379.01/NDEP-No. Edison

Metals by ICPMS
EPA Method SW6020 / SW6020A

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **TP4-5ft.**				
Lab ID : KLF13032827-01A Chromium (Cr)	24	1.0 mg/Kg	04/01/13	04/02/13
Date Sampled 03/28/13 07:30 Arsenic (As)	6.9	1.0 mg/Kg	04/01/13	04/02/13
Selenium (Se)	ND	1.0 mg/Kg	04/01/13	04/02/13
Silver (Ag)	ND	1.0 mg/Kg	04/01/13	04/02/13
Cadmium (Cd)	ND	1.0 mg/Kg	04/01/13	04/02/13
Barium (Ba)	170	1.0 mg/Kg	04/01/13	04/02/13
Mercury (Hg)	ND	0.20 mg/Kg	04/01/13	04/02/13
Lead (Pb)	10	1.0 mg/Kg	04/01/13	04/02/13
Client ID: **TP13-5ft.**				
Lab ID : KLF13032827-02A Chromium (Cr)	10	1.0 mg/Kg	04/01/13	04/02/13
Date Sampled 03/28/13 08:30 Arsenic (As)	17	1.0 mg/Kg	04/01/13	04/02/13
Selenium (Se)	ND	1.0 mg/Kg	04/01/13	04/02/13
Silver (Ag)	ND	1.0 mg/Kg	04/01/13	04/02/13
Cadmium (Cd)	ND	1.0 mg/Kg	04/01/13	04/02/13
Barium (Ba)	140	1.0 mg/Kg	04/01/13	04/02/13
Mercury (Hg)	ND	0.20 mg/Kg	04/01/13	04/02/13
Lead (Pb)	15	1.0 mg/Kg	04/01/13	04/02/13
Client ID: **TP3-5ft.**				
Lab ID : KLF13032827-03A Chromium (Cr)	17	1.0 mg/Kg	04/01/13	04/02/13
Date Sampled 03/28/13 09:15 Arsenic (As)	7.3	1.0 mg/Kg	04/01/13	04/02/13
Selenium (Se)	ND	1.0 mg/Kg	04/01/13	04/02/13
Silver (Ag)	ND	1.0 mg/Kg	04/01/13	04/02/13
Cadmium (Cd)	ND	1.0 mg/Kg	04/01/13	04/02/13
Barium (Ba)	160	1.0 mg/Kg	04/01/13	04/02/13
Mercury (Hg)	ND	0.20 mg/Kg	04/01/13	04/17/13
Lead (Pb)	8.6	1.0 mg/Kg	04/01/13	04/02/13
Client ID: **TP12-2.5ft.**				
Lab ID : KLF13032827-04A Chromium (Cr)	21	1.0 mg/Kg	04/01/13	04/02/13
Date Sampled 03/28/13 12:00 Arsenic (As)	4.8	1.0 mg/Kg	04/01/13	04/02/13
Selenium (Se)	ND	1.0 mg/Kg	04/01/13	04/02/13
Silver (Ag)	ND	1.0 mg/Kg	04/01/13	04/02/13
Cadmium (Cd)	ND	1.0 mg/Kg	04/01/13	04/02/13
Barium (Ba)	160	1.0 mg/Kg	04/01/13	04/02/13
Mercury (Hg)	0.25	0.20 mg/Kg	04/01/13	04/03/13
Lead (Pb)	13	1.0 mg/Kg	04/01/13	04/02/13

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

This replaces the report signed 4/4/13 due to a change in the concentration for -03A, due to lab error.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACCREDITED DoD ELAP

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

4/17/13

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032827-04A
Client I.D. Number: TP12-2.5ft.

Sampled: 03/28/13 12:00
Received: 03/28/13
Extracted: 04/08/13 12:56
Analyzed: 04/10/13

Semivolatile Organics by GC/MS - SIM
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	25 µg/Kg
2	2-Methylnaphthalene	ND	25 µg/Kg
3	1-Methylnaphthalene	ND	25 µg/Kg
4	Acenaphthylene	ND	25 µg/Kg
5	Acenaphthene	ND	25 µg/Kg
6	Fluorene	ND	25 µg/Kg
7	Phenanthrene	ND	25 µg/Kg
8	Anthracene	ND	25 µg/Kg
9	Fluoranthene	43	25 µg/Kg
10	Pyrene	64	25 µg/Kg
11	Benzo(a)anthracene	ND	25 µg/Kg
12	Chrysene	ND	25 µg/Kg
13	Benzo(b&k)fluoranthene, isomeric pair	65	50 µg/Kg
14	Benzo(a)pyrene	ND	25 µg/Kg
15	Indeno(1,2,3-cd)pyrene	37	25 µg/Kg
16	Dibenz(a,h)anthracene	ND	25 µg/Kg
17	Benzo(g,h,i)perylene	50	25 µg/Kg

Note: EPA Method 8270C CC compounds Acenaphthene, Fluoranthene and Benzo(a)pyrene were evaluated in the CV at the method criteria of 80-120% recovery.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
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NELAP ACCREDITED TNI LABORATORY

4/15/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810
Date Received : 03/28/13

Job: 131379.01/NDEP-No. Edison

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B / SW8260B

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**TP4-5ft.**						
Lab ID :	KLF13032827-01A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	04/01/13	04/02/13
Date Sampled	03/28/13 07:30	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	04/01/13	04/02/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP13-5ft.**						
Lab ID :	KLF13032827-02A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	04/01/13	04/02/13
Date Sampled	03/28/13 08:30	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	04/01/13	04/02/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP3-5ft.**						
Lab ID :	KLF13032827-03A	TPH-E (DRO), Silica Gel	ND		10 mg/Kg	04/01/13	04/02/13
Date Sampled	03/28/13 09:15	TPH-E (ORO), Silica Gel	ND		10 mg/Kg	04/01/13	04/02/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TP12-2.5ft.**						
Lab ID :	KLF13032827-04A	TPH-E (DRO), Silica Gel	26	L*	10 mg/Kg	04/01/13	04/02/13
Date Sampled	03/28/13 12:00	TPH-E (ORO), Silica Gel	85	*	10 mg/Kg	04/01/13	04/02/13
		TPH-P (GRO)	ND		10 mg/Kg	03/28/13	03/29/13
Client ID :	**TB**						
Lab ID :	KLF13032827-05A	TPH-P (GRO)	ND		0.50 mg/L	03/28/13	03/28/13
Date Sampled	03/28/13 00:00						

* Reported DRO/ORO concentrations include heavier-end hydrocarbons that are consistent with asphaltic material.
Diesel Range Organics (DRO) C13-C22
Gasoline Range Organics (GRO) C4-C13
L = DRO concentration may include contributions from heavier-end hydrocarbons that elute in the DRO range.
Oil Range Organics (ORO) C22-C40+
Sample results were calculated on a wet weight basis.
ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032827-01A
Client I.D. Number: TP4-5ft.

Sampled: 03/28/13 07:30
Received: 03/28/13
Extracted: 03/28/13 14:19
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032827-02A
Client I.D. Number: TP13-5ft.

Sampled: 03/28/13 08:30
Received: 03/28/13
Extracted: 03/28/13 14:19
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

NELAP ACCREDITED TNI LABORATORY

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032827-03A
Client I.D. Number: TP3-5ft.

Sampled: 03/28/13 09:15
Received: 03/28/13
Extracted: 03/28/13 14:19
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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4/4/13
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032827-04A
Client I.D. Number: TP12-2.5ft.

Sampled: 03/28/13 12:00
Received: 03/28/13
Extracted: 03/28/13 14:19
Analyzed: 03/29/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg
10	cis-1,2-Dichloroethene	ND	20 µg/Kg
11	Chloroform	ND	20 µg/Kg
12	1,2-Dichloroethane	ND	20 µg/Kg
13	1,1,1-Trichloroethane	ND	20 µg/Kg
14	Carbon tetrachloride	ND	20 µg/Kg
15	Benzene	ND	20 µg/Kg
16	1,2-Dichloropropane	ND	20 µg/Kg
17	Trichloroethene	ND	20 µg/Kg
18	Bromodichloromethane	ND	20 µg/Kg
19	cis-1,3-Dichloropropene	ND	20 µg/Kg
20	trans-1,3-Dichloropropene	ND	20 µg/Kg
21	1,1,2-Trichloroethane	ND	20 µg/Kg
22	Toluene	ND	20 µg/Kg
23	Dibromochloromethane	ND	20 µg/Kg
24	Tetrachloroethene	ND	20 µg/Kg
25	Chlorobenzene	ND	20 µg/Kg
26	Ethylbenzene	ND	20 µg/Kg
27	m,p-Xylene	ND	20 µg/Kg
28	Bromoform	ND	20 µg/Kg
29	o-Xylene	ND	20 µg/Kg
30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
31	1,3-Dichlorobenzene	ND	20 µg/Kg
32	1,4-Dichlorobenzene	ND	20 µg/Kg
33	1,2-Dichlorobenzene	ND	20 µg/Kg

EnCore sample was received and extracted within holding time.

Sample results were calculated on a wet weight basis.
ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

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4/4/13
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Kleinfelder
4835 Longley Lane
Reno, NV 89502
Job: 131379.01/NDEP-No. Edison

Attn: Phil Tousignant
Phone: (775) 689-7800
Fax: (775) 689-7810

Alpha Analytical Number: KLF13032827-05A
Client I.D. Number: TB

Sampled: 03/28/13 00:00
Received: 03/28/13
Extracted: 03/28/13
Analyzed: 03/28/13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	Benzene	ND	1.0 µg/L
16	1,2-Dichloropropane	ND	1.0 µg/L
17	Trichloroethene	ND	1.0 µg/L
18	Bromodichloromethane	ND	1.0 µg/L
19	cis-1,3-Dichloropropene	ND	1.0 µg/L
20	trans-1,3-Dichloropropene	ND	1.0 µg/L
21	1,1,2-Trichloroethane	ND	1.0 µg/L
22	Toluene	ND	1.0 µg/L
23	Dibromochloromethane	ND	1.0 µg/L
24	Tetrachloroethene	ND	1.0 µg/L
25	Chlorobenzene	ND	1.0 µg/L
26	Ethylbenzene	ND	1.0 µg/L
27	m,p-Xylene	ND	1.0 µg/L
28	Bromoform	ND	1.0 µg/L
29	o-Xylene	ND	1.0 µg/L
30	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
31	1,3-Dichlorobenzene	ND	1.0 µg/L
32	1,4-Dichlorobenzene	ND	1.0 µg/L
33	1,2-Dichlorobenzene	ND	1.0 µg/L

ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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NELAP ACCREDITED TNI LABORATORY

4/4/13
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: KLF13032827 **Job:** 131379.01/NDEP-No. Edison

Alpha's Sample ID	Client's Sample ID	Matrix	pH
13032827-05A	TB	Aqueous	2

4/4/13

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 05-Apr-13

QC Summary Report

Work Order: 13032827

Method Blank

Type **MBLK** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **040213.B\056_M.D** Batch ID: **30681** Analysis Date: **04/02/2013 22:56**

Sample ID: **MB-30681** Units : **mg/Kg** Run ID: **ICP/MS_130402C** Prep Date: **04/01/2013 14:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	1								
Arsenic (As)	ND	1								
Selenium (Se)	ND	1								
Silver (Ag)	ND	1								
Cadmium (Cd)	ND	1								
Barium (Ba)	ND	1								
Mercury (Hg)	ND	0.2								
Lead (Pb)	ND	1								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **040213.B\058_M.D** Batch ID: **30681** Analysis Date: **04/02/2013 23:08**

Sample ID: **LCS-30681** Units : **mg/Kg** Run ID: **ICP/MS_130402C** Prep Date: **04/01/2013 14:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	26.5	1	25		106	80	120			
Arsenic (As)	26.4	1	25		105	80	120			
Selenium (Se)	26.6	1	25		106	80	120			
Silver (Ag)	26.1	1	25		104	80	120			
Cadmium (Cd)	25.6	1	25		102	80	120			
Barium (Ba)	251	1	250		101	80	120			
Mercury (Hg)	0.472	0.2	0.5		94	80	120			
Lead (Pb)	26.2	1	25		105	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **040213.B\060_M.D** Batch ID: **30681** Analysis Date: **04/02/2013 23:19**

Sample ID: **13032827-01AMS** Units : **mg/Kg** Run ID: **ICP/MS_130402C** Prep Date: **04/01/2013 14:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	54.7	1	25	23.91	123	75	125			
Arsenic (As)	33.7	1	25	6.891	107	75	125			
Selenium (Se)	26.6	1	25	0	106	75	125			
Silver (Ag)	27.1	1	25	0	108	75	125			
Cadmium (Cd)	26.8	1	25	0	107	75	125			
Barium (Ba)	470	1	250	169.8	120	75	125			
Mercury (Hg)	0.539	0.2	0.5	0	108	75	125			
Lead (Pb)	36.4	1	25	10.28	105	75	125			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **040213.B\061_M.D** Batch ID: **30681** Analysis Date: **04/02/2013 23:25**

Sample ID: **13032827-01AMSD** Units : **mg/Kg** Run ID: **ICP/MS_130402C** Prep Date: **04/01/2013 14:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	53.9	1	25	23.91	120	75	125	54.7	1.5(20)	
Arsenic (As)	32.9	1	25	6.891	104	75	125	33.68	2.3(20)	
Selenium (Se)	25.7	1	25	0	103	75	125	26.6	3.5(20)	
Silver (Ag)	26.7	1	25	0	107	75	125	27.07	1.4(20)	
Cadmium (Cd)	26.8	1	25	0	107	75	125	26.79	0.1(20)	
Barium (Ba)	456	1	250	169.8	114	75	125	469.5	3.0(20)	
Mercury (Hg)	0.585	0.2	0.5	0	117	75	125	0.5387	8.3(20)	
Lead (Pb)	37.1	1	25	10.28	107	75	125	36.44	1.9(20)	

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *05-Apr-13*

QC Summary Report

Work Order: 13032827

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 15-Apr-13

QC Summary Report

Work Order: 13032827

Method Blank

Type **MBLK** Test Code: **EPA Method SW8270C**

File ID: **13041003.D** Batch ID: **30705** Analysis Date: **04/10/2013 12:20**

Sample ID: **MBLK-30705** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Naphthalene	ND	25								
2-Methylnaphthalene	ND	25								
1-Methylnaphthalene	ND	25								
Acenaphthylene	ND	25								
Acenaphthene	ND	25								
Fluorene	ND	25								
Phenanthrene	ND	25								
Anthracene	ND	25								
Fluoranthene	ND	25								
Pyrene	ND	25								
Benzo(a)anthracene	ND	25								
Chrysene	ND	25								
Benzo(b&k)fluoranthene, isomeric pair	ND	50								
Benzo(a)pyrene	ND	25								
Indeno(1,2,3-cd)pyrene	ND	25								
Dibenz(a,h)anthracene	ND	25								
Benzo(g,h,i)perylene	ND	25								
Surr: 2-Fluorobiphenyl	390		312.5		125	47	137			
Surr: 4-Terphenyl-d14	354		312.5		113	27	141			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8270C**

File ID: **13041012.D** Batch ID: **30705** Analysis Date: **04/10/2013 16:07**

Sample ID: **LCS-30705** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Acenaphthene	340	25	312.5		109	42	138			
Pyrene	327	25	312.5		105	29	143			
Surr: 2-Fluorobiphenyl	466		312.5		149	47	137			S55
Surr: 4-Terphenyl-d14	343		312.5		110	27	141			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8270C**

File ID: **13041010.D** Batch ID: **30705** Analysis Date: **04/10/2013 15:17**

Sample ID: **13032827-04AMS** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Acenaphthene	278	25	312.5	0	89	20	162			
Pyrene	361	25	312.5	64.08	95	10	159			
Surr: 2-Fluorobiphenyl	393		312.5		126	47	137			
Surr: 4-Terphenyl-d14	309		312.5		99	27	141			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8270C**

File ID: **13041014.D** Batch ID: **30705** Analysis Date: **04/10/2013 16:58**

Sample ID: **13032827-04AMSD** Units : **µg/Kg** Run ID: **MSD_16_130410A** Prep Date: **04/08/2013 12:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Acenaphthene	279	25	312.5	0	89	20	162	278.4	0.3(32)	
Pyrene	366	25	312.5	64.08	97	10	159	361.3	1.4(49)	
Surr: 2-Fluorobiphenyl	392		312.5		125	47	137			
Surr: 4-Terphenyl-d14	297		312.5		95	27	141			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

S55 = Surrogate recovery was above laboratory acceptance limits.

Alpha Analytical, Inc.

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Date: *05-Apr-13*

QC Summary Report

Work Order: 13032827

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **1A04011343.D** Batch ID: **30678SG** Analysis Date: **04/02/2013 12:20**

Sample ID: **MBLK-30678** Units : **mg/Kg** Run ID: **FID_1_130401B** Prep Date: **04/01/2013 12:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	ND	10								
TPH-E (ORO), Silica Gel	ND	10								
Surr: Nonane, Silica Gel	6		6		99.9	65	160			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **1A04011344.D** Batch ID: **30678SG** Analysis Date: **04/02/2013 12:46**

Sample ID: **LCS-30678** Units : **mg/Kg** Run ID: **FID_1_130401B** Prep Date: **04/01/2013 12:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	92.9	5	100		93	70	130			
Surr: Nonane, Silica Gel	6.01		6		100	65	160			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **1A04011351.D** Batch ID: **30678SG** Analysis Date: **04/02/2013 15:43**

Sample ID: **13032827-03AMS** Units : **mg/Kg** Run ID: **FID_1_130401B** Prep Date: **04/01/2013 12:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	110	5	100	0	110	46	150			
Surr: Nonane, Silica Gel	6.71		6		112	65	160			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext / SG**

File ID: **1A04011352.D** Batch ID: **30678SG** Analysis Date: **04/02/2013 16:08**

Sample ID: **13032827-03AMSD** Units : **mg/Kg** Run ID: **FID_1_130401B** Prep Date: **04/01/2013 12:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO), Silica Gel	109	5	100	0	109	46	150	109.6	0.1(42)	
Surr: Nonane, Silica Gel	7.13		6		119	65	160			

Comments:

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Date: *03-Apr-13*

QC Summary Report

Work Order: 13032827

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **13032906.D** Batch ID: **MS08S0670B** Analysis Date: **03/29/2013 13:06**

Sample ID: **MBLK MS08S0670B** Units : **mg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 13:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	0.189		0.2		94	70	130			
Surr: Toluene-d8	0.211		0.2		105	70	130			
Surr: 4-Bromofluorobenzene	0.169		0.2		84	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **13032919.D** Batch ID: **MS08S0670B** Analysis Date: **03/29/2013 18:13**

Sample ID: **GLCS MS08S0670B** Units : **mg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 18:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	14.6	2	16		91	63	149			
Surr: 1,2-Dichloroethane-d4	0.363		0.4		91	70	130			
Surr: Toluene-d8	0.425		0.4		106	70	130			
Surr: 4-Bromofluorobenzene	0.349		0.4		87	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **13032920.D** Batch ID: **MS08S0670B** Analysis Date: **03/29/2013 18:36**

Sample ID: **13032827-01AGS** Units : **mg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 18:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	12.9	2	16	0	80	36	164			
Surr: 1,2-Dichloroethane-d4	0.364		0.4		91	70	130			
Surr: Toluene-d8	0.425		0.4		106	70	130			
Surr: 4-Bromofluorobenzene	0.344		0.4		86	70	130			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **13032921.D** Batch ID: **MS08S0670B** Analysis Date: **03/29/2013 18:59**

Sample ID: **13032827-01AGSD** Units : **mg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 18:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	12.9	2	16	0	81	36	164	12.88	0.4(40)	
Surr: 1,2-Dichloroethane-d4	0.376		0.4		94	70	130			
Surr: Toluene-d8	0.425		0.4		106	70	130			
Surr: 4-Bromofluorobenzene	0.343		0.4		86	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *03-Apr-13*

QC Summary Report

Work Order: 13032827

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032615.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 13:19**

Sample ID: **MBLK MS06W0328B** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 13:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.5								
Surr: 1,2-Dichloroethane-d4	0.0115		0.01		115	70	130			
Surr: Toluene-d8	0.00976		0.01		98	70	130			
Surr: 4-Bromofluorobenzene	0.00936		0.01		94	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032614.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 12:55**

Sample ID: **GLCS MS06W0328B** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 12:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.401	0.05	0.4		100	70	130			
Surr: 1,2-Dichloroethane-d4	0.0116		0.01		116	70	130			
Surr: Toluene-d8	0.0095		0.01		95	70	130			
Surr: 4-Bromofluorobenzene	0.00934		0.01		93	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032828.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 19:16**

Sample ID: **13032860-06AGS** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 19:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.95	0.25	2	0	98	54	143			
Surr: 1,2-Dichloroethane-d4	0.0608		0.05		122	70	130			
Surr: Toluene-d8	0.0476		0.05		95	70	130			
Surr: 4-Bromofluorobenzene	0.0461		0.05		92	70	130			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032829.D** Batch ID: **MS06W0328B** Analysis Date: **03/28/2013 19:40**

Sample ID: **13032860-06AGSD** Units : **mg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 19:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.01	0.25	2	0	101	54	143	1.952	3.1(23)	
Surr: 1,2-Dichloroethane-d4	0.0584		0.05		117	70	130			
Surr: Toluene-d8	0.0477		0.05		95	70	130			
Surr: 4-Bromofluorobenzene	0.046		0.05		92	70	130			

Comments:

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Date: *03-Apr-13*

QC Summary Report

Work Order: 13032827

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **13032906.D** Batch ID: **MS08S0670A** Analysis Date: **03/29/2013 13:06**

Sample ID: **MBLK MS08S0670A** Units : **µg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 13:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	80								
Vinyl chloride	ND	20								
Chloroethane	ND	20								
Bromomethane	ND	80								
Trichlorofluoromethane	ND	20								
1,1-Dichloroethene	ND	20								
Dichloromethane	ND	80								
trans-1,2-Dichloroethene	ND	20								
1,1-Dichloroethane	ND	20								
cis-1,2-Dichloroethene	ND	20								
Chloroform	ND	20								
1,2-Dichloroethane	ND	20								
1,1,1-Trichloroethane	ND	20								
Carbon tetrachloride	ND	20								
Benzene	ND	20								
1,2-Dichloropropane	ND	20								
Trichloroethene	ND	20								
Bromodichloromethane	ND	20								
cis-1,3-Dichloropropene	ND	20								
trans-1,3-Dichloropropene	ND	20								
1,1,2-Trichloroethane	ND	20								
Toluene	ND	20								
Dibromochloromethane	ND	20								
Tetrachloroethene	ND	20								
Chlorobenzene	ND	20								
Ethylbenzene	ND	20								
m,p-Xylene	ND	20								
Bromoform	ND	20								
o-Xylene	ND	20								
1,1,2,2-Tetrachloroethane	ND	20								
1,3-Dichlorobenzene	ND	20								
1,4-Dichlorobenzene	ND	20								
1,2-Dichlorobenzene	ND	20								
Surr: 1,2-Dichloroethane-d4	189		200		94	70	130			
Surr: Toluene-d8	211		200		105	70	130			
Surr: 4-Bromofluorobenzene	169		200		84	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **13032916.D** Batch ID: **MS08S0670A** Analysis Date: **03/29/2013 17:03**

Sample ID: **LCS MS08S0670A** Units : **µg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 17:03**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	403	20	400		101	10	131			
Benzene	381	10	400		95	70	137			
Trichloroethene	504	20	400		126	70	149			
Toluene	457	10	400		114	70	139			
Chlorobenzene	453	20	400		113	70	137			
Ethylbenzene	441	10	400		110	70	137			
m,p-Xylene	476	10	400		119	70	145			
o-Xylene	440	10	400		110	70	145			
Surr: 1,2-Dichloroethane-d4	372		400		93	70	130			
Surr: Toluene-d8	424		400		106	70	130			
Surr: 4-Bromofluorobenzene	349		400		87	70	130			

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Date: *03-Apr-13*

QC Summary Report

Work Order: 13032827

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **13032917.D** Batch ID: **MS08S0670A** Analysis Date: **03/29/2013 17:26**

Sample ID: **13032827-01AMS** Units : **µg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 17:26**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	307	20	400	0	77	10	131			
Benzene	349	10	400	0	87	52	151			
Trichloroethene	450	20	400	0	113	48	165			
Toluene	418	10	400	0	104	47	154			
Chlorobenzene	413	20	400	0	103	50	151			
Ethylbenzene	409	10	400	0	102	52	154			
m,p-Xylene	449	10	400	0	112	51	162			
o-Xylene	410	10	400	0	103	52	162			
Surr: 1,2-Dichloroethane-d4	371		400		93	70	130			
Surr: Toluene-d8	426		400		107	70	130			
Surr: 4-Bromofluorobenzene	338		400		85	70	130			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **13032918.D** Batch ID: **MS08S0670A** Analysis Date: **03/29/2013 17:49**

Sample ID: **13032827-01AMSD** Units : **µg/Kg** Run ID: **MSD_08_130329A** Prep Date: **03/29/2013 17:49**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	301	20	400	0	75	10	131	307.1	2.1(40)	
Benzene	332	10	400	0	83	52	151	348.5	4.7(30)	
Trichloroethene	423	20	400	0	106	48	165	450.3	6.2(29)	
Toluene	382	10	400	0	96	47	154	417.9	9.0(28)	
Chlorobenzene	393	20	400	0	98	50	151	413.1	4.9(40)	
Ethylbenzene	385	10	400	0	96	52	154	408.8	6.0(37)	
m,p-Xylene	404	10	400	0	101	51	162	448.7	10.5(34)	
o-Xylene	383	10	400	0	96	52	162	410.2	6.9(40)	
Surr: 1,2-Dichloroethane-d4	384		400		96	70	130			
Surr: Toluene-d8	422		400		106	70	130			
Surr: 4-Bromofluorobenzene	344		400		86	70	130			

Comments:

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Date: *03-Apr-13*

QC Summary Report

Work Order: 13032827

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032615.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 13:19**

Sample ID: **MBLK MS06W0328A** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 13:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	2								
Vinyl chloride	ND	1								
Chloroethane	ND	1								
Bromomethane	ND	2								
Trichlorofluoromethane	ND	1								
1,1-Dichloroethene	ND	1								
Dichloromethane	ND	2								
trans-1,2-Dichloroethene	ND	1								
1,1-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Chloroform	ND	1								
1,2-Dichloroethane	ND	1								
1,1,1-Trichloroethane	ND	1								
Carbon tetrachloride	ND	1								
Benzene	ND	1								
1,2-Dichloropropane	ND	1								
Trichloroethene	ND	1								
Bromodichloromethane	ND	1								
cis-1,3-Dichloropropene	ND	1								
trans-1,3-Dichloropropene	ND	1								
1,1,2-Trichloroethane	ND	1								
Toluene	ND	1								
Dibromochloromethane	ND	1								
Tetrachloroethene	ND	1								
Chlorobenzene	ND	1								
Ethylbenzene	ND	1								
m,p-Xylene	ND	1								
Bromoform	ND	1								
o-Xylene	ND	1								
1,1,2,2-Tetrachloroethane	ND	1								
1,3-Dichlorobenzene	ND	1								
1,4-Dichlorobenzene	ND	1								
1,2-Dichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	11.5		10		115	70	130			
Surr: Toluene-d8	9.76		10		98	70	130			
Surr: 4-Bromofluorobenzene	9.36		10		94	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032613.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 12:32**

Sample ID: **LCS MS06W0328A** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 12:32**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	11.7	1	10		117	80	120			
Benzene	12.2	0.5	10		122	70	130			
Trichloroethene	10.9	1	10		109	68	138			
Toluene	11.3	0.5	10		113	80	120			
Chlorobenzene	10.8	1	10		108	70	130			
Ethylbenzene	10.8	0.5	10		108	80	120			
m,p-Xylene	10.8	0.5	10		108	65	139			
o-Xylene	10.8	0.5	10		108	70	130			
Surr: 1,2-Dichloroethane-d4	11.4		10		114	70	130			
Surr: Toluene-d8	9.94		10		99	70	130			
Surr: 4-Bromofluorobenzene	8.98		10		90	70	130			

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QC Summary Report

Work Order: 13032827

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032826.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 18:30**

Sample ID: **13032860-06AMS** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 18:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	47.2	2.5	50	0	94	62	133			
Benzene	52.8	1.3	50	0	106	67	134			
Trichloroethene	46	2.5	50	0	92	68	138			
Toluene	48.8	1.3	50	0	98	38	130			
Chlorobenzene	48.4	2.5	50	0	97	70	130			
Ethylbenzene	49.4	1.3	50	0	99	70	130			
m,p-Xylene	48.6	1.3	50	0	97	65	139			
o-Xylene	48.7	1.3	50	0	97	69	130			
Surr: 1,2-Dichloroethane-d4	58.4		50		117	70	130			
Surr: Toluene-d8	49.8		50		99.7	70	130			
Surr: 4-Bromofluorobenzene	48.4		50		97	70	130			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS06\DATA\130326\13032827.D** Batch ID: **MS06W0328A** Analysis Date: **03/28/2013 18:53**

Sample ID: **13032860-06AMSD** Units : **µg/L** Run ID: **MSD_06_130328A** Prep Date: **03/28/2013 18:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	50.3	2.5	50	0	101	62	133	47.21	6.3(35)	
Benzene	57.8	1.3	50	0	116	67	134	52.78	9.2(21)	
Trichloroethene	50	2.5	50	0	100	68	138	45.95	8.4(20)	
Toluene	53.3	1.3	50	0	107	38	130	48.75	9.0(20)	
Chlorobenzene	53.2	2.5	50	0	106	70	130	48.37	9.5(20)	
Ethylbenzene	53.8	1.3	50	0	108	70	130	49.35	8.6(20)	
m,p-Xylene	53.4	1.3	50	0	107	65	139	48.55	9.5(20)	
o-Xylene	54.1	1.3	50	0	108	69	130	48.72	10.5(20)	
Surr: 1,2-Dichloroethane-d4	59.4		50		119	70	130			
Surr: Toluene-d8	49.6		50		99	70	130			
Surr: 4-Bromofluorobenzene	48.3		50		97	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

April 04, 2013 Service Request No: R1302101

Ms. Reyna Vallejo
Alpha Analytical Laboratories, Inc (Sparks NV)
255 Glendale Ave
Suite 21
Sparks, NV 89431

Laboratory Results for: KLF13032827

Dear Ms. Vallejo:

Enclosed are the results of the sample(s) submitted to our laboratory on March 29, 2013. For your reference, these analyses have been assigned our service request number **R1302101.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Deb.Patton@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Deb Patton
Project Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1302101

Lab ID	Client ID
R1302101-001	KLF13032827-01A
R1302101-002	KLF13032827-02A
R1302101-003	KLF13032827-03A
R1302101-004	KLF13032827-04A

l samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at e end of this report.

l samples were preserved in accordance with approved analytical methods.

l samples have been analyzed by the approved methods cited on the analytical results pages.

l holding times and associated QC were within limits.

› analytical or QC problems were encountered.

l sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements anual" or by client specifications.

ALS Environmental

REPORT QUALIFIERS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.

ACCREDITED IN ACCORDANCE WITH nelap

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://alsglobal.com/environmental/laboratories/rochester-environmental-lab.aspx

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	3/28/13 0730
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032827-01A		
Lab Code:	R1302101-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	79.9		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	Service Request:	R1302101
Project:	KLF13032827	Date Collected:	3/28/13 0730
Sample Matrix:	Soil	Date Received:	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 15:48
Sample Name:	KLF13032827-01A	Units:	µg/Kg
Lab Code:	R1302101-001	Basis:	Dry

Glycols by GC/FID

Analytical Method:	8015C	Analysis Lot:	334853
Prep Method:	Method	Extraction Lot:	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK349.D\	Instrument Name:	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6300	U	6300	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	84	60-146	4/2/13 15:48	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	Service Request:	R1302101
Project:	KLF13032827	Date Collected:	3/28/13 0830
Sample Matrix:	Soil	Date Received:	3/29/13
Sample Name:	KLF13032827-02A		
Lab Code:	R1302101-002	Basis:	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	**91.6**		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	Service Request:	R1302101
Project:	KLF13032827	Date Collected:	3/28/13 0830
Sample Matrix:	Soil	Date Received:	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 16:54
Sample Name:	KLF13032827-02A	Units:	µg/Kg
Lab Code:	R1302101-002	Basis:	Dry

Glycols by GC/FID

Analytical Method:	8015C	Analysis Lot:	334853
Prep Method:	Method	Extraction Lot:	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK352.D\	Instrument Name:	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5500	U	5500	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	83	60-146	4/2/13 16:54	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	3/28/13 0915
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032827-03A		
Lab Code:	R1302101-003	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	79.7		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	3/28/13 0915
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 17:16
Sample Name:	KLF13032827-03A	**Units:**	µg/Kg
Lab Code:	R1302101-003	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK353.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	6300	U	6300	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	70	60-146	4/2/13 17:16	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	3/28/13 1200
Sample Matrix:	Soil	**Date Received:**	3/29/13
Sample Name:	KLF13032827-04A		
Lab Code:	R1302101-004	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	82.9		Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	3/28/13 1200
Sample Matrix:	Soil	**Date Received:**	3/29/13
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 17:59
Sample Name:	KLF13032827-04A	**Units:**	µg/Kg
Lab Code:	R1302101-004	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK355.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
07-21-1	Ethylene Glycol	6000	U	6000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	85	60-146	4/2/13 17:59	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1302101-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	1.0	U	Percent	1.0	1	NA	3/29/13 14:52	

ALS ENVIRONMENTAL

Analytical Report

Client:	Alpha Analytical Laboratories, Inc (Sparks NV)	**Service Request:**	R1302101
Project:	KLF13032827	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	4/1/13
		Date Analyzed:	4/2/13 13:58
Sample Name:	Method Blank	**Units:**	µg/Kg
Lab Code:	RQ1303011-01	**Basis:**	Dry

Glycols by GC/FID

Analytical Method:	8015C	**Analysis Lot:**	334853
Prep Method:	Method	**Extraction Lot:**	179838
Data File Name:	I:\ACQUDATA\5890B\DATA\040213\CK344.D\	**Instrument Name:**	R-GC-52
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
107-21-1	Ethylene Glycol	5000	U	5000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Cyclohexanol	90	60-146	4/2/13 13:58	

ALS ENVIROMNENTAL

QA/QC Report

Client: Alpha Analytical Laboratories, Inc (Sparks NV)
Project: KLF13032827
Sample Matrix: Soil

Service Request: R1302101
Date Collected: 3/28/13
Date Received: 3/29/13
Date Analyzed: 3/29/13

Replicate Sample Summary
General Chemistry Parameters

Sample Name: KLF13032827-01A
Lab Code: R1302101-001

Units: Percent
Basis: NA

Analyte Name	Method	MRL	Sample Result	KLF13032827-01AD UP Duplicate Sample R1302101-001DUP Result	Average	RPD	RPD Limit
Solids, Total	160.3 Modified	1.0	79.9	80.2	80.0	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS ENVIRONMENTAL

QA/QC Report

Client: Alpha Analytical Laboratories, Inc (Sparks NV)
Project: KLF13032827
Sample Matrix: Soil

Service Request: R1302101
Date Collected: 3/28/13
Date Received: 3/29/13
Date Analyzed: 4/ 2/13

Matrix Spike Summary
Glycols by GC/FID

Sample Name: KLF13032827-01A
Lab Code: R1302101-001

Units: µg/Kg
Basis: Dry

Analytical Method: 8015C
Prep Method: Method

		KLF13032827-01AMS Matrix Spike RQ1303011-04			KLF13032827-01ADMS Duplicate Matrix Spike RQ1303011-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ethylene Glycol	ND	17700	24900	71	21800	24900	88	56 - 117	21	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS ENVIRONMENTAL

QA/QC Report

Client: Alpha Analytical Laboratories, Inc (Sparks NV)
Project: KLF13032827
Sample Matrix: Soil

Service Request: R1302101
Date Analyzed: 4/ 2/13

Lab Control Sample Summary
Glycols by GC/FID

Analytical Method: 8015C
Prep Method: Method

Units: µg/Kg
Basis: Dry

Extraction Lot: 179838

Analyte Name	Lab Control Sample RQ1303011-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1303011-03 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ethylene Glycol	18900	19900	95	19900	19900	100	56 - 117	6	30

esults flagged with an asterisk (*) indicate values outside control criteria.
ercent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Alpha Analytical, Inc.
255 Glendale Avenue
Suite 21
Sparks, Nevada 89431-5778
Phone: (775) 355-1044
Fax: (775) 355-0406

SUB CHAIN-OF-CUSTODY RECORD

Work Order : KLF13032827

***Please reference the Work Order number on all reports and invoices.**
***Also please include the dates of analysis and detection limits.**
Please send the report to Alpha Analytical (Sparks).
Attention To Reyna Vallejo (reyna@alpha-analytical.com).

Report Due By : 5:00 PM
On : 12-Apr-13

Required QC:
Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Subcontractor:
ALS Environmental
1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623

TEL: (585) 288-5380
FAX:
Acct #:

Sampled by : Rick Erdman
28-Mar-13

Alpha's Sample ID	Client's Sample ID	Matrix	Collection Date	Type (#) of Bottles Preserved	Other	Requested Tests: EPA Method SW8015			Sample Comments
KLF13032827-01A	TP4-5ft.	Soil	03/28/13 07:30		8OZ-CG-U (1)	Ethylene Glycol			MS/MSD
KLF13032827-02A	TP13-5ft.	Soil	03/28/13 08:30		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032827-03A	TP3-5ft.	Soil	03/28/13 09:15		8OZ-CG-U (1)	Ethylene Glycol			
KLF13032827-04A	TP12-2.5ft.	Soil	03/28/13 12:00		8OZ-CG-U (1)	Ethylene Glycol			

Comments:

R1302101 5
Alpha Analytical Laboratories, Inc (Sparks NV)
KLF13032827

		Date/Time			Date/Time
Relinquished by:	K. Mulvaney	3/28/13 1600	**Received by:**	[illegible] ALS	3/29/13/1000
Relinquished by:			**Received by:**		

0001.7

Cooler Receipt and Preservation Check Form

Project/Client Alpha Analytical Folder Number R2101

Cooler received on 3/29/13 by: DH COURIER: ALS UPS FEDEX VELOCITY CLIENT

.	Were custody seals on outside of cooler?	YES	NO	
.	Were custody papers properly filled out (ink, signed, etc.)?	YES	NO	
.	Did all bottles arrive in good condition (unbroken)?	YES	NO	
.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO	N/A
.	Were Ice or Ice packs present?	YES	NO	
.	Where did the bottles originate?	ALS/ROC, CLIENT		
.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore Lab5035set N/A
.	Temperature of cooler(s) upon receipt:	2.4°		
	Is the temperature within 0° - 6° C?:	Y N	Y N	Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 3/29/13 1010

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample Bottle

f out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by DH on 3/29/13 at 1010

5035 samples placed in storage location / by on at

C Secondary Review: KB 4/4/13

Cooler Breakdown: Date: 3/29/13 Time: 1421 by:

.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	NO
.	Did all bottle labels and tags agree with custody papers?	YES	NO
.	Were correct containers used for the tests indicated?	YES	NO
.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated N/A

Explain any discrepancies:

H	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
12	NaOH								
2	HNO_3								
2	H_2SO_4								
4	$NaHSO_4$								
esidual hlorine)	For TCN Phenol and 522	-	-	If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust:

ottle lot numbers: Client

ther Comments:

C Secondary Review: KB 4/4/13

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Client:
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : KLF13032827

Report Due By : 5:00 PM On : 05-Apr-13

Amendment Due: 4/16/13

Report Attention	Phone Number	EMail Address
Phil Tousignant	(775) 689-7800 x 133	ptousignant@kleinfelder.com

EDD Required : **No**

Sampled by : Rick Erdman

PO :

Client's COC # : 11272 Job : 131379.01/NDEP-No. Edison

Cooler Temp	Samples Received	Date Printed
4 °C	28-Mar-13	**08-Apr-13**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests GLYCOLS_S	METALS_SO	PNA_SIM_S	TPH/E_SG_S	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
KLF13032827-01A	TP4-5ft.	SO	03/28/13 07:30	4	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		Three 25 gram Encores and two 8 oz jars. MS/MSD
KLF13032827-02A	TP13-5ft.	SO	03/28/13 08:30	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore and two 8 oz jars.
KLF13032827-03A	TP3-5ft.	SO	03/28/13 09:15	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se		Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore and two 8 oz jars.
KLF13032827-04A	TP12-2.5ft.	SO	03/28/13 12:00	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	SIM	Silica Gel (N)	GAS-N		8260_Ns		One 25 gram Encore and two 8 oz jars.
KLF13032827-05A	TB	AQ	03/28/13 00:00	1	0	6						GAS-N		8260_Ns	Reno Trip Blank 3/7/13

Comments: Samples brought in by client. Frozen ice. Ethylene Glycol subbed to ALS-Columbia Rochester on a 10 day TAT, per Phil. Client provided temp blank received at 4°C. Amended 4/8/13: Per phone conversation 4/8/13 @ 11:02 added PNA SIM to sample -04A : on standard TAT, Due 4/16/13. EA

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	4.8.13 11:20

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :
Kleinfelder
4835 Longley Lane

Reno, NV 89502

Client:
Kleinfelder
4835 Longley Lane

Reno, NV 89502

PO :

Client's COC # : 11272 Job : 131379.01/NDEP-No. Edison

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention	Phone Number	EMail Address
Phil Tousignant	(775) 689-7800 x 133	ptousignant@kleinfelder.com

NV

WorkOrder : KLF13032827

Report Due By : 5:00 PM On : 05-Apr-13

EDD Required : **No**

Sampled by : Rick Erdman

Cooler Temp	Samples Received	Date Printed
4 °C	28-Mar-13	**28-Mar-13**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests GLYCOLS_S	METALS_SO	TPH/E_SG_S	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
KLF13032827-01A	TP4-5ft.	SO	03/28/13 07:30	4	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			Three 25 gram Encores and two 8 oz jars. MS/MSD
KLF13032827-02A	TP13-5ft.	SO	03/28/13 08:30	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore and two 8 oz jars.
KLF13032827-03A	TP3-5ft.	SO	03/28/13 09:15	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore and two 8 oz jars.
KLF13032827-04A	TP12-2.5ft.	SO	03/28/13 12:00	2	1	6	Ethylene Glycol	As, Ba, Cd, Cr, Pb, Hg, Ag, Se	Silica Gel (N)	GAS-N		8260_Ns			One 25 gram Encore and two 8 oz jars.
KLF13032827-05A	TB	AQ	03/28/13 00:00	1	0	6					GAS-N		8260_Ns		Reno Trip Blank 3/7/13

Comments: Samples brought in by client. Frozen ice. Ethylene Glycol subbed to ALS-Columbia Rochester on a 10 day TAT, per Phil. Client provided temp blank received at 4°C. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	3/28/13 1330

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Company: _____
Attn: _____
Address: _____
City, State, Zip: _____
Phone Number: _____ Fax: _____

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

11272

Page # 1 of 1

Consultant/ Client Info:
Company: KLEINFELDER
Address: 4835 LONGLEY LN
City, State, Zip: RENO, NV 89502

Job and Purchase Order Info:
Job #: 13|379.01
Job Name: NDEP - NO. EDISON
P.O. #:

Report Attention/Project Manager:
Name: PHIL TOUSIGNANT
Email Address: ptousignant@kleinfelder.com
Phone #: 775-689-7800
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID:
Data Validation Level: III or IV

Samples Collected from which State? (circle one) AZ CA (NV) WA ID OR DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered?	# Containers** (See Key Below)	VOC, GRO by SW8260B	TPH - DRO, ORO By 8015	RCRA metals 8 by 300 6020	Ethylene Glycol By mod 8015	Remarks
0730	03/28	OT	KLF13032827-01	TP4-5'	STAND	N	3-ENCORE 2-jars	✓	✓	✓	✓	* 2-EXTRA ENCORE FOR MS/MSD
0830	↓	↓	02	TP13-5'	↓	↓	1-ENCORE 2-jars	✓	✓	✓	✓	
0915			03	TP3-5'			↓	✓	✓	✓	✓	
1200		↓	04	TP12-2.5'				✓	✓	✓	✓	
-	↓	AQ	05	TB	↓	↓	1-V	✓				VOC only

ADDITIONAL INSTRUCTIONS: TPH: SILICA GEL WASH

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: RICK ERDMAN

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Rick Erdman / KLF	3-28-13	1230	[illegible]/ASL	3/28/13	1230

* Key: AQ - Aqueous WA - Waste OT - Other **: L - Liter V - VOA S-Soil Jar O - Orbo T - Tedlar B - Brass P - Plastic OT - Other

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.