



1172 Kansas Avenue, Suite A  
Modesto, CA 95351  
209.522.4119 – PH  
209.522.4227 - FAX  
groundzeroanalysis.com

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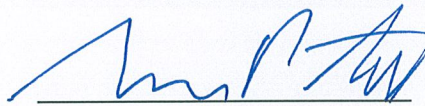
**ADDITIONAL SUBSURFACE INVESTIGATION REPORT  
(VOLUME I)**

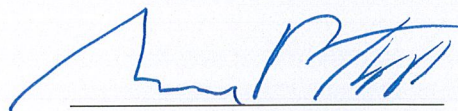
**The Green  
5411 Martinelli Way  
Dublin, CA**

August 18, 2014

*Prepared by*

Ground Zero Analysis, Inc.  
1172 Kansas Avenue  
Modesto, CA 95351

  
FOR Joseph L. Vasquez  
Staff Geologist

  
Gregory P. Stahl  
CA Professional Geologist No. 5023  
CA Certified Hydrogeologist No. 264



August 18, 2014

Mr. Jerry Wickham  
Alameda County Health Care Services Agency,  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Subject:       **Additional Subsurface Investigation Report**  
                  The Green, 5411 Martinelli Way, Dublin, CA  
                  SLIC Case No. RO0003131

Dear Mr. Wickham:

I declare, under penalty of perjury, that the information and/or recommendations contained in the referenced report dated August 18, 2014 and submitted to your agency by Ground Zero Analysis, Inc. is true and correct to the best of my knowledge.

Please contact me if you have any questions.

Best Regards,  
**Stockbridge/BHV Emerald Place Land Company, LLC**



Stephen Pilch

# TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
2.0 BACKGROUND.....	1
2.1 Property Information.....	1
2.2 Historic Site Investigations.....	2
2.3 Summary of Potential Concerns.....	4
3.0 SITE ACTIVITIES.....	5
3.1 Former Fuel Depot Investigation.....	6
3.2 Former Railroad Spur Investigation.....	7
3.3 Herbicides/Metals Investigation.....	7
3.4 Stockpiled Soil Investigation.....	8
4.0 RESULTS OF INVESTIGATION.....	8
4.1 Former Fuel Depot Investigation.....	8
4.2 Former Railroad Spur Investigation.....	10
4.3 Herbicides/Metals Investigation.....	11
4.4 Stockpiled Soil Investigation.....	11
5.0 EVALUATION OF RESULTS.....	12
5.1 Former Fuel Depot.....	12
5.2 Former Railroad Spur.....	12
5.3 Herbicides/Metals.....	13
5.4 Soil Stockpiles.....	13
6.0 SCREENING LEVEL HEALTH RISK EVALUATION.....	13
6.1 Potential Health Risks Due to Vapor Intrusion from VOCs in Soil Vapor.....	14
6.2 Potential Health Risk Due to Direct Contact with Contaminants in Soil.....	15
6.3 Potential Health Risk from Direct Exposure at Former Fuel Depot.....	16
6.4 Potential Health Risk from All Exposure Routes.....	17
7.0 SUMMARY AND CONCLUSIONS.....	17
8.0 REFERENCES.....	18

## TABLE OF CONTENTS

### LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	GZA 2013 Soil and Vapor Sampling Locations
Figure 4	Areas of Potential Concern
Figure 5	Previous Groundwater and Vapor Sampling Locations
Figure 6	Underground Utility Locations
Figure 7	Former Military Base Features
Figure 8	Former Military Base Features with Current Aerial Overlay
Figure 9	June 2014 Soil and Groundwater Sampling Locations

### LIST OF TABLES

Table 1	Soil Sample Analytical Data at Former Fuel Depot
Table 2	Groundwater Sample Analytical Data at Former Fuel Depot
Table 3	Soil Sample Analytical Data along Former Rail Spur
Table 4	Soil Sample PAH and PCB Detail, Former Rail Spur and Soil Piles
Table 5	Soil Sample Analytical Data from Random Locations (Herbicides and Metals)
Table 6	Soil Sample Analytical Data from Stockpiles
Table 7	Risk Calculations

### APPENDICES

#### APPENDIX A

Regulatory Correspondence

#### APPENDIX B

Drilling Permit

#### APPENDIX C

Field Notes

#### APPENDIX D

Boring Logs

#### APPENDIX E

Laboratory Reports (in Volume I and Volume II)

#### APPENDIX F

Statistics (in Volume II)

**ADDITIONAL SUBSURFACE INVESTIGATION REPORT**  
**The Green**  
**5411 Martinelli Way**  
**Dublin, California**

## **1.0 INTRODUCTION**

This *Additional Subsurface Investigation Report* is submitted by Ground Zero Analysis, Inc. (Ground Zero) on behalf of Quattro Realty Group and Stockbridge BHV Emerald Place Land Company, LLC (Stockbridge) in response to a directive from Alameda County Environmental Health (ACEH), dated January 30, 2014, requesting further site investigation in order to complete the assessment of the site. The location of the subject site is shown on Figure 1, and a site plan is shown on Figure 2.

## **2.0 BACKGROUND**

Stockbridge, the owner of the 27.45-acre property in Dublin known as “The Green,” is proposing mixed-use development of the property involving construction of commercial as well as medium density residential structures. The City of Dublin as the lead agency for CEQA has prepared a Draft Supplement Environmental Impact Report (“SEIR”) for an amendment to the City’s General Plan allowing for the proposed development. The SEIR contains certain mitigation measures that require the input of ACEH involving potential environmental contamination issues arising from the past use of the property. Stockbridge requested that ACEH provide such regulatory oversight as is necessary to satisfy the mitigation measures of the SEIR.

A meeting was held with ACEH on January 9, 2014, to discuss the background of the site and the measures that would be necessary for ACEH to provide the requested services. On January 9, 2014, ACEH opened Spills, Leaks, Investigations and Cleanup (SLIC) Case No. RO0003131 for the subject site.

After reviewing background information on previous site investigations, ACEH issued the directive letter dated January 30, 2014, requesting a Workplan to address specific technical questions related to the subject site. In response, Ground Zero submitted the *Workplan for Further Investigation*, dated April 23, 2014, which addressed the questions posed by ACEH. After review, ACEH requested a revised Workplan in correspondence dated May 7, 2014, to address additional areas of concern. Ground Zero submitted the *Addendum to April 23, 2014 Workplan for Further Investigation* on May 28, 2014. ACEH approved the Workplan and Workplan Addendum for implementation in correspondence dated June 11, 2014. Copies of the ACEH correspondence are included in Appendix A.

### **2.1 Property Information**

The subject site is located at 5411 Martinelli Way in Dublin, California. The subject site is bordered to the north by Martinelli Way, Hacienda Drive borders the site to the east, Interstate-580 borders the site to the south and Arnold Road borders the site to the west. The site has an area of approximately 27.45 acres and is identified as Assessor’s Parcel Numbers (APNs) 986-033-004,

986-033-005-2 and 986-033-006. The site is relatively flat and is at an elevation of approximately 340 feet above mean sea level.

The subject site was previously occupied by a portion of the U.S. Army's Camp Parks Reserve Forces Training Area. The subject portion of the base was closed and property ownership was transferred to Alameda County in the late 1960s. The structures on the property were demolished in the mid-1990s. The property is currently undeveloped open space, mainly covered by grasses and low weeds, with one small unoccupied structure in the north central portion of the site.

## **2.2 Historic Site Investigations**

Beginning as early as 1991, numerous Phase I and Phase II investigations have been conducted on behalf of various potential developers of the site and the surrounding properties. The subject property has been referred to in several previous reports as "Parcel 16". At some point prior to 2012 the portion of Parcel 16 north of Martinelli Way and south of Dublin Boulevard was severed and subsequently identified as "Parcel 16A". Property north of Dublin Boulevard, between Hacienda Drive and Arnold Road and south of Central Parkway has been referred to as "Parcel 15".

The property to the west of the site and south of Martinelli Way has been referred to as the "Option Parcel". These designations are shown on Figure 2. A detailed summary of all investigations conducted on properties surrounding the subject site is beyond the scope of this report. Investigations specific to the subject site are summarized below.

### Erler and Kalinowski (1998)

In 1998 Erler and Kalinowski (E&K) conducted a soil and groundwater investigation on Parcel 16 and the Option Parcel. A geophysical survey was conducted in two areas of Parcel 16 where underground fuel storage tanks were suspected based on historical military base records: the former guard house boiler room and the former underground fuel storage depot. The fuel storage depot was located on the subject site. No tanks were found during the geophysical survey. Trenching revealed buried debris, which was removed from the site. Grab groundwater samples from the former fuel storage depot area indicated the presence of total petroleum hydrocarbons as diesel (TPHd) at a maximum concentration of 120,000 parts per billion (ppb). Peripheral borings detected low levels of TPHd in groundwater no more than 55 feet downgradient of the fuel depot area. No benzene, toluene, ethylbenzene or xylenes (BTEX) compounds were detected.

E&K collected grab groundwater samples from several borings located throughout the investigation area. Samples were analyzed for TPHd, BTEX and volatile organic compounds (VOCs). Other than a trace of xylenes in one boring, no VOCs were detected in the samples collected from the current Parcel 16 and Parcel 16A. Some VOCs, including tetrachloroethene (PCE) and trichloroethene (TCE) were detected in certain borings on the Option Parcel and along the south boundary of Parcel 15.

E&K also collected soil samples along the former railroad spur that traversed Parcels 16 and 16A from the northwest to the southeast. Samples were collected from the native soil beneath the ballast at five locations, three of which were located on the subject site. The samples were analyzed for chlorinated herbicides, selected metals and total extractable petroleum hydrocarbons (TEPH). Trace levels of TEPH were found in two samples; a trace of the herbicide 2,4-DB was found in one

sample; metals concentrations were at naturally-occurring background levels.

#### Lowney and Associates (2001) and Treadwell & Rollo (2005)

In 2001 Lowney and Associates and Subsurface Consultants, Inc. (SCI) investigated a former incinerator and burn pit area located along the northeast corner of the current Parcel 16. Analytical results determined that lead was the only constituent of concern. Approximately 3,400 cubic yards of lead-contaminated soil was excavated in 2001 and transported to the Waste Management Kettleman Hills facility for disposal. The case was closed by ACEH in 2003 as “clean-closed with no restrictions on future development.” Additional sampling in the incinerator/burn pit area was conducted by Treadwell & Rollo (T&R) in 2005 which resulted in a second closure letter in December 2005 from the Department of Toxic Substances Control (DTSC) which concluded “... the incinerator/Burn Dump at Hacienda Drive and Martinelli Way does not appear to pose a threat to human health or the environment under a residential land use scenario.”

#### Levine-Fricke (2003)

In 2003 Levine-Fricke (L-F) conducted limited soil sampling along the railroad spur. Four soil borings were advanced and sampled at locations generally similar to those sampled by E&K. The samples were analyzed for organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), phenols and for creosote. Low levels of DDT in two of the soil samples were the only contaminants of concern detected during their investigation. Based on the results L-F concluded that no further investigation was warranted in the area of the former railroad spur on the property.

#### ADR (2008 – 2010)

In September 2008 during grading activities a steel underground storage tank (UST) was discovered in the southwest corner of the site. In October 2008 the UST was removed by ADR Environmental Group (ADR) and the soil in the vicinity of the former UST was excavated. Additional remedial over-excavation and groundwater pumping was conducted in 2009 and 2010. The results of the final confirmation soil samples were non-detect for all fuel analytes. Only a de-minimis concentration of diesel was detected in the final groundwater sample. Case closure was granted for the site in September 2010.

#### ENGEO (2013)

In their August 2013 *Phase I Environmental Site Assessment* report, ENGEO concluded that the presence of VOCs in soil vapor beneath the parcel located north of the subject property constitutes a Recognized Environmental Condition. ENGEO recommended, in pertinent part, the following actions:

- “A soil vapor monitoring study and a human health risk assessment should be considered at the Property to...evaluate impacts due to the upgradient VOC source...”
- “...it is our experience that historical use of herbicides was common on former military sites: as such, it may be prudent to consider the health risk of near-surface soil at contemplated residential development areas.”

## Ground Zero (2013)

A subsurface investigation conducted by Ground Zero in October 2013 was intended to address ENGE0's recommendations.

Ground Zero advanced five shallow hand augered soil borings (HAB1 through HAB5) in a rough grid pattern across the site on October 8, 2013. The locations of the borings are shown on Figure 3. Soil samples were collected at depths of approximately 1, 2 and 3 feet below grade. All soil samples collected from the depth of one foot were analyzed for chlorinated and nitrophenol herbicides by EPA Method 8151A. No herbicides were detected in any of the 1-foot soil samples collected.

In order to investigate the potential for detectable concentrations of VOCs in soil vapor, five temporary soil vapor wells (VW-1 through VW-5) were constructed in close proximity to the hand auger borings on October 15, 2013 (Figure 3). Soil vapor samples were collected and analyzed for VOCs by EPA Method TO-15. Various VOCs were detected in the vapor samples: several fuel-related VOCs were detected at similar concentrations across the site; several solvent-related VOCs were detected at similar concentrations across the site; and acetone was detected at similar concentrations across the site. The relative uniformity of the low levels of chemicals detected suggests that these are anthropogenic background levels. The concentrations of VOCs were all well below their respective residential vapor intrusion screening level values (ESLs and CHHSLs). The total lifetime excess risk for carcinogenic constituents was calculated at 4.0E-07, an order of magnitude below the threshold level of significance of 1E-06. Similarly, the total hazard index was calculated at 7.2E-03, several orders of magnitude below the threshold level of significance of 1E+00. Results of Ground Zero's investigation were reported in the *Subsurface Investigation Report* dated October 25, 2013.

### **2.3 Summary of Potential Concerns**

Based on investigations conducted by Ground Zero and others, we presented our summary and conclusions regarding potential environmental concerns to ACEH at the January 9, 2014, meeting:

- 1) 1,000-gallon LUST near southwest corner of property. This was remediated by excavation (545 yards of soil) and groundwater extraction (9,240 gallons) and the case was closed by Alameda County Health Care Services Agency in September 2010 under commercial property use standards. The only residual contamination was 114 ppb TPHd in groundwater. Volatilization to indoor air would be the only potential concern and diesel is not volatile. Ground Zero concluded that no further action should be necessary. Shown on Figure 4 as area "1".
- 2) Contamination associated with the former fuel depot on east side of property. E&K investigated potential USTs at the former fuel depot area in 1998. No USTs were found, debris was removed from the backfilled tankpit area. Groundwater samples were collected, one of which had 120,000 ppb TPHd with no associated BTEX. Stepout borings were advanced and the downgradient borings contained TPHd up to 180 ppb with no associated BTEX. No soil samples were analyzed. E&K performed a screening level risk assessment for vapor intrusion of VOCs for the site and Alameda County issued a closure letter July 10, 1998, stating that the "primary COCs in groundwater...do not pose a significant health risk...for current or proposed uses of the subject sites". Ground Zero concluded that some further investigation or evaluation may be necessary. Shown on Figure 4 as area "2".



- 3) Contamination associated with former burn pit on east side of property, intersection of Hacienda Drive and Martinelli Way. A former incinerator and burn debris was associated with the military base. 3,400 cubic yards of lead-contaminated soil was excavated in 2001. The case was closed by Alameda County Health Care Services Agency in 2003 as “clean-closed with no restrictions on future development.” The DTSC issued a second closure letter in December 2005 which concluded “... the incinerator/Burn Dump at Hacienda Drive and Martinelli Way does not appear to pose a threat to human health or the environment under a residential land use scenario.” Ground Zero concluded that no further action should be necessary. Shown on Figure 4 as area “3”.
- 4) Question of area-wide or limited contamination with VOC vapors. In 1998 E&K found no detectable HVOCs in groundwater. Ground Zero found low levels of VOCs in soil vapor in 2013, but levels were below residential screening levels. Ground Zero concluded that no further action should be necessary. Boring locations and results are shown on Figure 4.
- 5) Question of herbicides in shallow soil. GZA found none in 2013. Ground Zero concluded that this had been adequately addressed for residential development and that no further action should be necessary. Sampling locations are shown on Figure 4.
- 6) Question of herbicides, metals, OCPS, phenols, creosote and PCBs associated with former rail spur. E&K collected samples from 5 borings in 1998 which were analyzed for herbicides, metals and hydrocarbons. Trace levels of hydrocarbons were found in two samples and a single sample contained a detectable concentration of the herbicide 2,4-DB. LF sampled 4 borings in 2003 and analyzed for the above constituents. All were non-detect, except for DDT, which was detected at a maximum concentration of 60 ppb. This is below the residential screening levels of 1,600 – 1,700 ppb. Ground Zero concluded that this had been adequately addressed for residential development and that no further action should be necessary. Sampling locations are shown on Figure 4.

In their January 2014 letter, ACEH agreed with some of these conclusions but found that other issues required additional information/investigation. In particular, EHS agreed that no further investigation was necessary for the 1,000-gallon LUST or the incinerator/burn pit area.

The remaining areas of potential concern were:

- The former fuel depot
- The former railroad spur
- Random sampling for herbicides and metals
- Soil stockpile characterization

### **3.0 SITE ACTIVITIES**

After review of background information on previous site investigations, ACEH issued a directive letter, dated January 30, 2014, requesting a Workplan to address specific technical questions related to the subject site and in particular the remaining potential concerns. In response, Ground Zero submitted the *Workplan for Further Investigation*, dated April 23, 2014, which addressed the questions posed by ACEH. After review, ACEH requested a revised Workplan in correspondence dated May 7, 2014, to address additional potential concerns. Ground Zero submitted the *Addendum to April 23, 2014 Workplan for Further Investigation* on May 28, 2014. ACEH approved the Workplan and Addendum

for implementation in correspondence dated June 11, 2014. Copies of the ACEH correspondence are included in Appendix A. Ground Zero conducted the fieldwork proposed in the Workplan and Addendum during the week of June 16-20, 2014.

### **3.1 Former Fuel Depot Investigation**

The fuel depot investigation consisted of collecting soil and groundwater samples from six direct-push borings located in the area of the former fuel depot.

#### Permitting and Pre-Field Work Activities

Prior to site activities, a *Drilling Permit Application* was submitted to the Zone 7 Water Agency. A copy of the approved drilling permit is included in Appendix B. The proposed soil boring locations were marked with white-flagged stakes and white paint and Underground Service Alert (USA) was notified 48 hours prior to initiating drilling.

#### Drilling and Sampling

On June 19 and 20, 2014, V&W Drilling, Inc. ([V&W] C57-720904), under the supervision of a Ground Zero geologist, advanced six (6) soil borings, designated SB1 through SB6, using a Geoprobe™ direct-push drilling rig. The borings were advanced in a grid pattern in-and-around the former fuel depot area in order to investigate the nature and extent of soil and groundwater contamination

Soil borings SB1 and SB2 were both advanced to a depth of 24 feet below the ground surface (bgs), boring SB3 was advanced to a depth of 16 feet bgs, and borings SB4, SB5 and SB6 were advanced to a depth of 20 feet bgs. The locations of the soil borings are shown on Figure 9.

From each boring, soil was collected continuously from the ground surface to total depth of each borehole. The soil was collected into 2-inch diameter by 4-foot long acetate tubes for classification, subjective analysis of the presence of hydrocarbons (discoloration, odors, photoionization detector [PID] readings) and possible laboratory analysis. Samples at five-foot depth intervals were selected for laboratory analysis. The acetate tubes were cut to length, sealed with Teflon® tape, capped, uniquely labeled, and temporarily stored in an ice chest refrigerated to a temperature of approximately 4°C for delivery, under chain-of-custody protocol, to State-Certified Curtis & Tompkins, Ltd ([C&T] ELAP #2896) of Berkeley, California. Soil samples selected for analysis were analyzed by C&T for total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), and total petroleum hydrocarbons as motor oil (TPHmo) by EPA Method 8015B; for volatile organic compounds (VOCs) by EPA Method 8260B; for lead by EPA Method 6010B; and for organic lead by the DHS LUFT Method.

Groundwater samples were collected from borings SB1, SB2, SB4 and SB5 by drilling to the appropriate depth and inserting ¾-inch PVC casing and a dedicated 5-foot length of PVC screen into the borehole. The samples were collected through clean, dedicated, disposable tubing with a check valve attached to the end, which was inserted into the temporary PVC casing and screen. Groundwater samples were collected in a similar fashion from borings SB3 and SB6, however, instead of inserting temporary PVC casing into the borehole, hydropunch sampling tools were used by pushing to the desired sampling depth and pulling back on the rods to retract the sampling

screen. After collection, the samples were decanted into the appropriate containers, uniquely labeled and temporarily stored in an ice chest refrigerated to a temperature of approximately 4°C for delivery, under chain-of-custody protocol, to C&T for analysis. Groundwater samples were analyzed by C&T for TPHg, TPHd and TPHmo by EPA Method 8015B and for VOCs by EPA Method 8260B.

After soil and groundwater sample collection the borings were grouted to the surface with neat cement grout through tremie pipe. No drill cuttings were produced during the direct-push drilling activities. All non-disposable drilling and sampling equipment was washed thoroughly with laboratory-grade detergent and water between uses to minimize the potential for cross contamination.

### **3.2 Former Railroad Spur Investigation**

A site inspection was conducted by Ground Zero on April 19, 2014, and no evidence of the former railroad spur was found. The area has been smooth-graded with no sign of ballast, ties, etc. Previous soil sampling locations are shown on Figure 4. Previous analytical results for samples collected along the spur are summarized in Table 3.

On June 17, 2014, Ground Zero collected a series of shallow soil samples in order to investigate the former railroad spur. Prior to sampling, the position of the former railroad spur was located using historic aerial photographs. Once the approximate location of the spur and its bearing were determined the soil sample locations were measured out. Three (3) equally spaced transects along the spur were investigated, and at each of the three transects five (5) soil samples were collected: One sample was collected approximately 20 feet southwest of the railroad spur, one sample was collected approximately 10 feet southwest of the spur, one sample was directly below the spur, one sample was collected approximately 10 feet northeast of the spur and one sample was collected approximately 20 feet northeast of the railroad spur. The soil sample locations are shown on Figure 9.

All of the soil samples were collected from approximately 6-inches below grade into clean stainless steel tubes. The soil tubes were sealed with Teflon<sup>®</sup> tape, capped, uniquely labeled and temporarily stored in an ice chest cooled to approximately 4°C for delivery, under chain-of-custody protocol, to C&T for analysis. All samples were analyzed for CAM-17 Metals by EPA Method 6010B; for Hexane Extractable Materials (HEM, “Oil & Grease”) by EPA Method 1664A; for Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270C and for polychlorinated biphenyls (PCBs) by EPA Method 8082.

### **3.3 Herbicides/Metals Investigation**

ACEH requested in their January 2014 correspondence that the 2013 Ground Zero random herbicide sampling locations also be analyzed for metals. On June 17, 2014, Ground Zero collected shallow soil samples duplicating the locations of previous hand auger borings HAB1 through HAB5. Soil samples HAB1, HAB2, HAB3, HAB4 and HAB5 were collected at 6-inches below grade into clean, stainless steel tubes, at the locations shown on Figure 9. After collection, the samples were sealed with Teflon<sup>®</sup> tape, capped, uniquely labeled and temporarily stored in an ice chest, cooled to approximately 4°C for delivery to the laboratory. The soil samples were analyzed by C&T for CAM-17 Metals by EPA Method 6010B.

### **3.4 Stockpiled Soil Investigation**

Currently, one large soil stockpile and one smaller gravel stockpile are located on the site as shown on Figure 9. The large gravelly soil stockpile (Stockpile 1) is approximately 5,000 cubic yards in volume, while the smaller gravel stockpile (Stockpile 2) contains approximately 500 cubic yards of material.

On June 18, 2014, Ground Zero collected soil samples at random locations and depths from both stockpiles in order to characterize the material. The locations of the soil samples are shown on Figure 9. In accordance with the DTSC document *Information Advisory, Clean Imported Fill Material*, twelve (12) discrete soil samples (SP1A through SP1L) were collected from various locations and depths in the large soil stockpile and two (2) discrete soil samples (SP2A & SP2B) were collected from the small gravel stockpile. The samples were collected using a hand auger and shovel to get to the appropriate depth and drive sampler to collect the samples. The soil samples were collected into clean stainless steel tubes, sealed with Teflon<sup>®</sup> tape, capped, uniquely labeled and temporarily stored in an ice chest, cooled to approximately 4°C, for delivery, under chain-of-custody protocol, to C&T for analysis. The samples were analyzed for TPHg, TPHd, and TPHmo by EPA Method 8015B; for full scan VOCs by EPA Method 8260B; for Organochlorine Pesticides (OCPs) by EPA Method 8081A; for CAM-17 metals by EPA Method 6010B; for PAHs by EPA Method 8270C; for PCBs by EPA Method 8082 and for asbestos by CARB Method 435.

## **4.0 RESULTS OF INVESTIGATION**

### **4.1 Former Fuel Depot Investigation**

#### Subsurface Conditions

Soils encountered in the fuel depot investigation borings were quite uniform overall and consisted for the most part of fat clays with varying percentages of gravel and sand. A two-foot thick gravel bed was present in boring SB3 between the depths of 12 and 14 feet. The uppermost 6 feet in boring SB5 consisted of silt with sand, which is inconsistent with the lithology in the other borings. This may indicate backfill material in the former tankpit.

Slight to moderate hydrocarbon odors were noted in borings SB1, SB2, SB4 and SB6. Odors and discoloration were noted between the depths of 12 and 16 feet, and as shallow as 9.5 feet in SB4. The PID was malfunctioning on June 19 so no readings exist from SB1 through SB3. On June 20, slightly elevated PID readings were recorded in SB4 at the depths of 10 and 15 feet.

Groundwater was initially encountered in borings SB1, SB2, SB4 and SB5 between the depths of 20 and 23 feet. Water levels subsequently stabilized at 12 to 15 feet. In SB3, a gravel bed at 12 feet bgs was saturated. In SB6 saturated soil and caving conditions were found at a depth of 16 feet.

Soil boring logs depicting lithologic details and field observations are included in Appendix D.

## Soil Analytical Results

Soil samples collected from the soil borings SB1 through SB6 on June 19 and 20, 2014, were analyzed by C&T for TPHg, TPHd, TPHmo, VOCs, lead and organic lead by the appropriate EPA Methods. Soil analytical results are presented on Table 1. Laboratory reports are included in Appendix E.

The fuel depot soil analytical results are summarized as follows:

- *SB1*: Soil samples were collected from boring SB1 at 5, 10, 15 and 20 feet below grade. TPHg was detected in the 15-foot sample at a concentration of 19 parts per million (ppm), although the laboratory noted that the “sample exhibits chromatographic pattern which does not resemble standard.” TPHd was detected in all samples collected from SB1: 98 ppm at 5 feet, 2.6 ppm at 10 feet, 2,200 ppm at 15 feet and 4.4 ppm at 20 feet. For the TPHd results from the 5, 10 and 20 foot samples the laboratory again noted that the chromatographic pattern does not resemble the standard. TPHmo was detected in the 5-foot sample at 120 ppm, in the 15-foot sample at 150 ppm (although chromatographic pattern does not resemble standard) and in the 20-foot sample at 10 ppm. Of the VOCs, only sec-butylbenzene was detected (26 ppb at 15 feet below grade). Lead was detected in all of the soil samples at background levels. No other analyzed constituents were reported above laboratory detection limits in the soil samples collected from SB1.
- *SB2*: Soil samples were collected from boring SB2 at 5, 10, 15 and 20 feet below grade. TPHg was detected in the 15-foot sample at a concentration of 10 ppm, although the laboratory noted that the “sample exhibits chromatographic pattern which does not resemble standard.” TPHd was detected 3 of the 4 samples collected from SB2: 3.1 ppm at 5 feet, 330 ppm at 15 feet and 8.8 ppm at 20 feet. For the TPHd results from the 5 and 20 foot samples the laboratory again noted that the chromatographic pattern does not resemble the standard. TPHmo was detected in the 15-foot sample at 24 ppm, although chromatographic pattern does not resemble the standard. Of the VOCs, only acetone was detected (20 ppb at 20 feet below grade). Lead was detected in all of the soil samples at background levels. No other analyzed constituents were reported above laboratory detection limits in the soil samples collected from SB2.
- *SB3*: Soil samples were collected from boring SB3 at 5, 10, 15 and 16 feet below grade. TPHd was detected in the 5-foot sample at a concentration of 6.3 ppm and in the 10-foot sample at a concentration of 9.0 ppm, although the laboratory noted that in both samples the “sample exhibits chromatographic pattern which does not resemble standard.” TPHmo was detected in the 5-foot sample at 47 ppm, in the 10-foot sample at 69 ppm and in the 15-foot sample at 5.3 ppm. Of the VOCs, only acetone was detected (34 ppb at 10 feet). Lead was detected in all of the soil samples at background levels. No other analyzed constituents were reported above laboratory detection limits in the soil samples collected from SB3.
- *SB4*: Soil samples were collected from borings SB4 at 5, 10, 15 and 20 feet below grade. TPHg was detected in the 10-foot sample at a concentration of 26 ppm and in the 15-foot sample at a concentration of 5.2 ppm, although the laboratory noted that in both samples the “sample exhibits chromatographic pattern which does not resemble standard.” TPHd was detected in 3 of the 4 samples collected from SB4: 18 ppm at 5 feet, 3,900 ppm at 10 feet and 970 ppm at 15

feet. For the TPHd results from the 5 foot sample the laboratory again noted that the chromatographic pattern does not resemble the standard. TPHmo was detected in the 5-foot sample at 32 ppm, in the 10-foot sample at 290 ppm and in the 15-foot sample at 100 ppm. Of the VOCs, only sec-butylbenzene was detected (31 ppb at 10 feet). Lead was detected in all of the soil samples at background levels. No other analyzed constituents were reported above laboratory detection limits in the soil samples collected from boring SB4.

- *SB5*: Soil samples were collected from boring SB5 at 5, 10, 15 and 20 feet below grade. Lead was detected in all of the soil samples at background levels. No other analyzed constituents were reported above laboratory detection limits in the soil samples collected from SB5.
- *SB6*: Soil samples were collected from boring SB6 at 5, 10 and 15 feet below grade. TPHd was detected in the 15-foot sample at a concentration of 64 ppm. Lead was detected in all of the soil samples at background levels. No other analyzed constituents were reported above laboratory detection limits in the soil samples collected from SB6.

### Groundwater Analytical Results

Discrete groundwater samples were collected from soil borings SB1, SB2, SB3, SB4, SB5 and SB6 on June 19 and 20, 2014, and were analyzed by C&T for TPHg, TPHd, TPHmo and VOCs by the appropriate EPA methods. Groundwater analytical results are summarized in Table 2. Copies of the laboratory reports, including chain-of-custody documentation, are included in Appendix E.

A summary of the results follows:

- TPHd was detected in each groundwater sample at concentrations ranging from 100 parts per billion (ppb) in SB-5 to 2,100 ppb in SB-4.
- TPHmo was detected in the groundwater samples from borings SB-1, SB-2 and SB-4 at levels ranging from 640 ppb (SB-2) to 1,000 ppb in SB-4
- “TPHg” was detected in the groundwater sample from SB-4 at 170 ppb; however, the laboratory reported that the chromatogram did not match a gasoline standard.
- No benzene, toluene, ethylbenzene or xylenes (BTEX compounds) were detected in any groundwater sample.
- MTBE was detected in each groundwater sample. Concentrations ranged from 0.7 ppb in SB-3 to 6.4 ppb in SB-5.
- Other than MTBE, no VOCs were detected in the groundwater samples.

### **4.2 Former Railroad Spur Investigation**

Three equally spaced transects (T1, T2 and T3) along the railroad spur were investigated and at each of the three transects five shallow soil samples were collected on June 17, 2014. Soil samples collected during the railroad spur investigation were analyzed by C&T for HEM, CAM-17 Metals, PCBs and PAHs by the appropriate EPA Methods. Soil analytical results are summarized in Table 3. Table 4 summarizes results for PAHs and PCBs. A copy of the laboratory report, including chain-of-custody documentation, has been included in Appendix E. The railroad spur soil analytical results are summarized as follows:

- *Transect 1 (T1)*: No PCBs or PAHs were detected in any sample. Metals were detected in all 5 soil samples at concentrations that are within expected naturally-occurring background ranges. HEM (or oil and grease [O&G]) was detected in all of the soil samples collected from T1. O&G concentrations ranged from 76 ppm to 180 ppm.
- *Transect 2 (T2)*: No PCBs were detected in any sample. Metals were detected in all 5 soil samples at concentrations that are within background ranges. O&G was detected in all of the soil samples collected from T2. O&G concentrations ranged from 53 ppm to 150 ppm. Several PAHs were detected at sub-ppm concentrations. Of the detected PAHs, low levels of fluoranthene, pyrene, chrysene, benzo(b)fluoranthene and benzo(a)pyrene were detected in sample RS-T2-20SW; low levels of fluoranthene and pyrene were detected in RS-T2-10SW and low levels of pyrene and chrysene were detected in sample RS-T2-10NE.
- *Transect 3 (T3)*: No PCBs were detected in any sample. Metals were detected in all 5 soil samples at concentrations within background ranges. O&G was detected in all of the soil samples collected from T3. O&G concentrations ranged from 30 ppm to 160 ppm. Several PAHs were detected at sub-ppm concentrations. Of the detected PAHs, low levels of fluoranthene and chrysene were detected in sample RS-T3-20SW and low levels of fluoranthene, pyrene, chrysene, and benzo(a)pyrene were detected in sample RS-T3-20NE.

### 4.3 Herbicides/Metals Investigation

Soil samples from random locations HAB1 through HAB5 were analyzed for CAM-17 metals. The results, along with previous results for herbicides are summarized in Table 5. The laboratory report is included in Appendix e. All metal concentrations were within the expected naturally-occurring background ranges for California soils (Dragun and Chiasson, 1991). No detectable concentrations of herbicides were reported.

### 4.4 Stockpiled Soil Investigation

Twelve discrete soil samples (SP1A through SP1L) were collected from the large soil stockpile (Soil Pile No. 1) and two discrete soil samples (SP2A & SP2B) were collected from the small gravel stockpile (Soil Pile No. 2) on June 18, 2014. The samples were analyzed by C&T for TPHg, TPHd, TPHmo, VOCs, OCPs, CAM-17 metals, PCBs, PAHs, and asbestos by the appropriate EPA Methods. Stockpiled soil analytical results are presented on Table 6. Table 4 summarizes results for PAHs and PCBs. A copy of the laboratory report, including chain-of-custody documentation, has been included in Appendix E.

- *Soil Pile 1*: No OCPs, TPHg, VOCs or asbestos were detected in any sample. Metals were detected in all 12 soil samples at concentrations within background ranges. Low levels of TPHd and TPHmo were detected in each sample. TPHd concentrations ranged from 5.3 ppm to 18 ppm. TPHmo concentrations ranged from 43 to 110 ppm. Sub-ppm concentrations of the PCBs Arochlor -1254 and Arochlor-1260 were detected in sample SP1-B6'' and a sub-ppm concentration of Arochlor-1254 was detected in sample SP1-C6'. One or more PAHs were detected at sub-ppm levels in 9 of the 12 samples. These included Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b) fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene and Benzo(g,h,i)perylene.

- *Soil Pile 2:* No OCPs, TPHg, VOCs or asbestos were detected in any sample. Metals were detected in both soil samples at concentrations within background ranges. Low levels of TPHd (23 ppm) and TPHmo (160-200 ppm) were detected. Sub-ppm levels of the PCBs Arochlor-1254 and Arochlor-1260 were detected in each sample. Sub-ppm concentrations of several PAHs were detected in each sample. These included Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene and Benzo(g,h,i)perylene.

## 5.0 EVALUATION OF RESULTS

### 5.1 Former Fuel Depot

The current investigation has determined that soil and groundwater in the former fuel depot area are impacted with relatively low levels of diesel/oil range hydrocarbons. The highest levels are concentrated in the capillary fringe. However, toxic volatile fuel components such as BTEX compounds are absent. Total lead is present at background levels and organic lead is absent. The lack of VOCs and lead indicates that gasoline was not released at the former fuel depot.

The lack of BTEX in groundwater and the trace concentrations of MTBE in groundwater (MTBE is presumably from an offsite source, ACEH, 2013) are below the groundwater threshold level criteria for closure under the State Water Resources Control Board's *Low Threat Underground Storage Tank Case Closure Policy (LTCP)*.

The lack of BTEX and naphthalene in shallow soil comply with the LTCP closure criterion for direct exposure. The lack of benzene in groundwater combined with TPHg + TPHd concentrations of less than 100 ppm in the upper five feet of the soil column also complies with the LTCP closure criterion for vapor intrusion.

The potential health threat to a residential occupant is evaluated in Section 6.

### 5.2 Former Railroad Spur

Shallow soil along the former rail spur contains detectable concentrations of oil and grease and sporadically detectable concentrations of certain PAHs. This is presumably associated with disseminated residues of creosote and/or small fragments of asphalt. All concentrations of oil and grease and PAHs are below their respective Environmental Screening Levels (ESLs) for direct exposure under a residential property use scenario (RWQCB, 2013).

All metal concentrations were within the expected naturally-occurring background ranges for California soils (Dragun and Chiasson, 1991). PCBs were not detected.

An evaluation of the cumulative health risk due to the PAHs and oil and grease is presented in Section 6.



### **5.3 Herbicides/Metals**

All metal concentrations were within the expected naturally-occurring background ranges for California soils (Dragun and Chiasson, 1991). No detectable concentrations of herbicides were reported during the October 2013 investigation.

No further evaluation is necessary.

### **5.4 Soil Stockpiles**

#### Soil Pile No. 1

Soil Pile No. 1 is impacted with low levels of various PAHs and diesel and oil-range petroleum hydrocarbons. None of the PAHs or TPH concentrations exceeds residential ESLs for direct exposure under residential property use (RWQCB, 2013). Sub-ppm levels of PCBs were detected in two of the twelve samples. Concentrations do not exceed ESLs.

Soil Pile No. 1 is not impacted by TPHg, VOCs, OCPs, asbestos or metals.

The relative similarity of the group of contaminants to those found along the former rail spur suggests that the material stockpiled in Soil Pile No. 1 may have originated onsite, perhaps along the rail spur. Assuming that it would be preferable to utilize this soil during site development, the potential health risk associated with the contaminants is evaluated in Section 6.

#### Soil Pile No. 2

The contaminants present in Soil Pile No. 2 are similar to those in Soil Pile No. 1, however at higher concentrations. Low levels of diesel and oil-range hydrocarbons, PAHs and PCBs were detected. The concentrations of benzo(a)pyrene in samples SP2 A-1' and SP2 B-6'' exceeds the residential direct exposure ESL and CHHSL. The total PCB concentration in sample SP2 B-6'' is at the CHHSL level of 0.089 ppm. Moreover, the sum of the risks due to the multiple PAH and PCB congeners would be expected to exceed acceptable levels.

Although Soil Pile No. 2 is not impacted with TPHg, OCPs, VOCs, asbestos or metals, the levels of PAHs and PCBs indicate that this material is not suitable for re-use. Soil Pile No. 2 will be transported offsite for property disposal.

## **6.0 SCREENING LEVEL HEALTH RISK EVALUATION**

Both the CA Regional Water Quality Control Board (RWQCB) and the CA Office of Environmental Health Hazard Assessment (OEHHA) have calculated and published screening levels for concentrations of chemicals in various media and via various exposure routes that are considered protective of human health under most conditions. The screening levels are concentrations that correspond to a lifetime excess cancer risk of one-in-one-million (1E-06) or a hazard quotient (non-cancer toxicity threshold) of one. Risks below these levels are considered to be insignificant.

This screening level risk evaluation compares the concentrations of the chemicals of concern in soil and soil vapor to the published screening levels. Risk is quantified for each chemical of concern for the indoor air inhalation (“vapor intrusion”) exposure route and for the direct soil contact exposure route (incidental ingestion, dermal contact and dust inhalation). The individual risks are then summed to derive cumulative risk via all potential routes of exposure. Such a screening level risk evaluation is by its nature very conservative since the published screening levels utilize intentionally conservative exposure parameters. Consequently, cumulative risk beneath the thresholds of significance implies that in most situations further evaluation is unnecessary.

For this evaluation, residential occupancy is assumed (assuming commercial occupancy would result in significantly lower exposure and risk). The maximum detected soil vapor concentrations were used in the evaluation and the 95<sup>th</sup> percentile upper confidence level concentrations of organic compounds in rail spur and Soil Pile No. 1 soil were used (USEPA, 1989). It is assumed that the Soil Pile No. 1 material will be utilized onsite. The maximum concentration of TPHd in the upper five feet of soil at the former fuel depot was used in the evaluation.

With this approach, the residential receptor is assumed to simultaneously occupy property overlying and exposed to the highest onsite vapor concentrations, to occupy land situated above the former fuel depot, and to occupy land underlain by fill derived from the rail spur and Soil Pile No. 1. Such a hypothetical situation overstates risk and provides another layer of confidence in the risk evaluation.

### 6.1 Potential Health Risks Due to Vapor Intrusion from VOCs in Soil Vapor

Based on the results of Ground Zero’s October 2013 soil vapor investigation, the potential health threat to residential occupants of the property due to vapor intrusion to indoor air and inhalation of VOCs was evaluated (Ground Zero Analysis, 2013).

Although none of the detected soil vapor VOCs exceeded (or even approached) Residential Shallow Soil Gas Screening Levels for Indoor Air Vapor Intrusion (RWQCB Environmental Screening Levels [ESLs] or the OEHHA California Human Health Risk Screening Levels [CHHSLs]), the cancer risk and hazard quotients were calculated for the individual detected compounds and for the sum total. The cumulative totals were then compared to the accepted thresholds of “significant” lifetime excess cancer risk of 1E-06 and the non-cancer hazard index of 1. Since the risk formula for both cancer and non-cancer effects are linear, simple ratios can be used to calculated risk.

Calculations for cancer risk were made for each carcinogenic constituent (benzene, ethylbenzene and PCE) by dividing the maximum concentration detected by the CHHSL value (which is lower than the ESL value) and multiplying by 1E-06. The results were summarized as follows:

#### Potential Lifetime Excess Cancer Risk Due to Vapor Intrusion

Compound	Maximum Detected Soil Vapor Concentration (ug/m <sup>3</sup> )	Cancer Risk
Benzene	12	3.3E-07
Ethylbenzene	17	4.0E-08
PCE	4.5	2.5E-08
<b>TOTAL CANCER RISK</b>		<b>4.0E-07</b>

		<b>INSIGNIFICANT</b>
--	--	----------------------

Similarly, calculations for the hazard quotients were made for each detected VOC that has a corresponding published non-cancer ESL or CHHSL value. The calculations were made by dividing the maximum concentration by the non-cancer screening level. These are summarized as follows:

### Potential Non-Cancer Toxicity Due to Vapor Intrusion

Compound	Maximum Detected Soil Vapor Concentration (ug/m <sup>3</sup> )	Hazard Quotient
Acetone	270	1.7E-05
Benzene	12	7.5E-04
Bromomethane	11	4.2E-03
MEK	76	2.9E-05
Ethylbenzene	17	3.3E-05
MIBK	26	1.6E-05
PCE	4.5	3.2E-05
Toluene	75	5.4E-04
Xylenes	79	1.5E-03
<b>TOTAL HAZARD INDEX</b>		<b>7.2E-03</b> <b>INSIGNIFICANT</b>

## 6.2 Potential Health Risk Due to Direct Contact with Contaminants in Soil

The results of the current investigation have identified certain contaminants in shallow soil (and in Soil Pile No. 1) that have the potential to cause a risk of cancer or non-cancer toxicity at particular doses. These contaminants (PAHs, PCBs and TPH) are considered to be non-volatile and vapor intrusion is not a concern. However, “*direct exposure*” with the soil can expose an individual to the chemical through the routes of incidental ingestion, dermal contact and dust inhalation.

As they did for the vapor intrusion exposure route, RWQCB and OEHHA have calculated and published screening levels for concentrations of chemicals in shallow soil that are considered to be protective of human health due to direct exposure. The screening levels are concentrations that correspond to a lifetime excess cancer risk of one-in-one-million (1E-06) or a hazard quotient (non-cancer toxicity threshold) of one. Risks below these levels are considered to be insignificant.

For this evaluation it is assumed that the Soil Pile No. 1 material will be utilized onsite. It is assumed that Soil Pile No. 2 will be transported offsite for disposal. Although none of the individual detected soil contaminants exceeded Residential Shallow Soil Screening Levels for Direct Contact (RWQCB ESLs or OEHHA CHHSLs), the cancer risk and hazard quotients were calculated for the individual detected compounds and for the sum total. The cumulative totals were then compared to the accepted thresholds of “significant” lifetime excess cancer risk of 1E-06 and the non-cancer hazard index of 1. Since the risk formula for both cancer and non-cancer effects are linear, simple ratios can be used to calculate risk.

Calculations for cancer risk were made for each carcinogenic constituent by dividing the 95<sup>th</sup> percentile upper confidence level (UCL<sub>95</sub>) concentration detected by the ESL or CHHSL value (whichever was

lower) and multiplying by 1E-06. Statistical computations are included in Appendix F (normality assumed, non-detects honored at one half the detection limit). Table 7 provides more detail on the risk computations but the results are summarized as follows:

### Potential Lifetime Excess Cancer Risk Due to Direct Soil Exposure

Compound	UCL <sub>95</sub> Soil Concentration (mg/kg)	Cancer Risk
Benzo(a)anthracene	0.0053	1.4E-08
Chrysene	0.0066	1.7E-09
Benzo(b)fluoranthene	0.0056	1.5E-08
Benzo(k)fluoranthene	0.0049	1.3E-08
Benzo(a)pyrent	0.0063	1.7E-07
Total PCBs	0.0332	3.7E-07
<b>TOTAL CANCER RISK</b>		<b>5.8E-07</b> <b>INSIGNIFICANT</b>

Similarly, calculations for the hazard quotients were made for each detected constituent that has a corresponding published non-cancer ESL or CHHSL value. The calculations were made by dividing the UCL<sub>95</sub> concentration by the non-cancer screening level. Statistical computations are included in Appendix F (normality assumed, non-detects honored at one half the detection limit). Table 7 provides more detail on the risk computations but the results are summarized as follows:

### Potential Non-Cancer Toxicity Due to Direct Soil Exposure

Compound	UCL <sub>95</sub> Soil Concentration (mg/kg)	Hazard Quotient
Fluoranthene	0.0075	3.3E-06
Pyrene	0.0067	2.0E-06
Total PCBs	0.0332	3.0E-02
TPHmo and HEM	96.5	9.7E-03
<b>TOTAL HAZARD INDEX</b>		<b>4.0E-02</b> <b>INSIGNIFICANT</b>

### 6.3 Potential Health Risk from Direct Exposure at Former Fuel Depot

Calculations for potential health risk due to direct exposure to the upper five feet of soil at the former fuel depot are summarized below. No cancer risk is associated with the TPHd and TPHmo detected in fuel depot soil.

### Potential Non-Cancer Toxicity Due to Direct Soil Exposure – Fuel Depot

Compound	Maximum Soil Concentration (mg/kg)	Hazard Quotient
TPHd	98	4.1E-01
TPHmo	120	1.2E-02
<b>TOTAL HAZARD INDEX</b>		<b>4.2E-01</b> <b>INSIGNIFICANT</b>

## 6.4 Potential Health Risk from All Exposure Routes

The potential health risks due to the combination of vapor intrusion and direct contact were summed to arrive at a conservative estimate of risk via all potential exposures routes:

### Potential Lifetime Excess Cancer Risk and Toxicity – All Sources and Exposure Routes

Source	Cancer Risk	Hazard Quotient
Vapor Intrusion	4.0E-07	7.2E-03
PAHs in Soil	2.1E-07	5.2E-06
PCBs in Soil	3.7E-07	3.0E-02
TPH in Soil		9.7E-03
TPH in Soil at Fuel Depot		4.2E-01
<b>TOTAL CANCER RISK HAZARD INDEX</b>	<b>9.8E-07 INSIGNIFICANT</b>	<b>4.7E-01 INSIGNIFICANT</b>

## 7.0 SUMMARY AND CONCLUSIONS

The current investigation focused on characterizing the remaining areas of potential concern including the former fuel depot, the former rail spur, random sampling for metals, and soil stockpiles. The investigation determined that:

- Soil and groundwater in the area of the former fuel depot are impacted with relatively low levels of diesel-oil range petroleum hydrocarbons. Insignificant concentrations of MTBE are present in groundwater and trace levels of acetone and sec-butylbenzene were detected in certain soil samples. Other than those, no VOCs including BTEX compounds are present. The characteristics of the former fuel depot area meet the criteria for closure under the SWRCB *Low Threat Underground Storage Tank Closure Policy*.
- Shallow soil adjacent to the former rail spur contains low levels of oil and grease and certain PAHs. This soil does not contain detectable concentrations of PCBs. Metals concentrations are at naturally-occurring background levels. Previous investigations by others detected only trace levels of OCPs.
- Random sampling of shallow soil at five locations throughout the site did not detect herbicides and metal concentrations were at naturally-occurring background levels.
- Soil Piles No. 1 and No. 2 contain detectable concentrations of diesel-oil range petroleum hydrocarbons, certain PAHs and certain PCBs. The soil piles do not contain detectable levels of VOCs, OCPs or asbestos. Metals are present at naturally-occurring background concentrations. The levels of PAHs and PCBs in Soil Pile No. 2 suggest that it is not suitable for re-use on the property.
- A screening level human health risk evaluation concluded that the potential health risk to

residential occupants due to the contaminants is insignificant.

## 8.0 REFERENCES

- ACEH, 1998, *Letter to Rod Frietag, Alameda County GSA, re no further action required, Parcel 16 and Option Parcel*, July 10, 1998
- ACEH, 2003, *Letter to Jeri Ram, City of Dublin re closure of burn pit*, January 31, 2003
- ACEH, 2010, *Letter to Brad Blake, Stockbridge, re closure of underground storage tank case*, September 3, 2010
- ACEH, 2013, *Case Closure for Fuel Leak Case No. RO0002985, Shell #16-5112*, November 26, 2013
- ACEH, 2014a, *Letter to Mike Parker, Quattro Realty Group, Case File Review for SLIC Case No. RO0003131, The Green, 5411 Martinelli Way, Dublin, CA*, January 30, 2014
- ACEH, 2014b, *Letter to Mike Parker, Quattro Realty Group, Work Plan Review for SLIC Case No. RO0003131, The Green, 5411 Martinelli Way, Dublin, CA*, May 7, 2014
- ACEH, 2014c, *Letter to Mike Parker, Quattro Realty Group, Work Plan Review for SLIC Case No. RO0003131, The Green, 5411 Martinelli Way, Dublin, CA*, June 11, 2014
- ADR Environmental Group, Inc., 2008, *Tank Closure Report for The Green on Park Place*, October 29, 2008
- ADR Environmental Group, Inc., 2009, *Remedial Soil Excavation and Sampling Data Report for The Green on Park Place*, July 31, 2009.
- California DTSC, 2005, *Letter to Karen Moroz, ACEH regarding burn pit closure*, December 5, 2005
- California SWRCB, 2012, *Resolution No. 2012-0016 Adopting the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure*, May 1, 2012
- California RWQCB, 2013, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater , Interim Final, November 2007 (Revised December 2013)*, Cal RWQCB, San Francisco Bay Region, 2013
- City of Dublin, 2014, *The Green Mixed-Use Project, Draft Supplemental Environmental Impact Report, SCH #2013072032*, prepared by Jerry Haag, May, 2014
- Dragun, James, Ph.D. and Andrew Chaisson, 1991, *Elements in North American Soils*, Hazardous Materials Control Resources Institute, 1991
- ENGEO, Inc., 2013, *Phase I Environmental Site Assessment, The Green – General Plan Amendment Study, APNs 986-033-004, 986-033-005-2 and 986-033-006*, August 2, 2013.
- Erler & Kalinowski, Inc., 1998, *Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment for Properties Located at Hacienda Drive and Dublin Boulevard*, June 19, 1998
- Ground Zero Analysis, Inc. 2013, *Subsurface Investigation Report, The Green, 5411 Martinelli Way, Dublin, CA*, October 25, 2013

Ground Zero Analysis, Inc. 2014a, *Workplan for Further Investigation, The Green, 5411 Martinelli Way, Dublin, CA*, April 23, 2014

Ground Zero Analysis, Inc. 2014b, *Addendum to Workplan for Further Investigation, The Green, 5411 Martinelli Way, Dublin, CA*, May 28, 2014

Levine-Fricke, 2003, *Limited Soil Sampling and Analysis Program*, October 9, 2003

Strata Environmental, 2007, *Phase I Environmental Site Assessment, Emerald Place, Hacienda Drive and Martinelli Way*, February 2007

Subsurface Consultants, Inc., 2002, *Investigation and Remediation Former Incinerator/Burn Dump Parcel 16A and Digital Drive, Santa Rita Property, Dublin, CA*, March 25, 2002

Terraphase Engineering, Inc., 2012(a), *Phase I Environmental Site Assessment Parcel 16A, Southwest Corner of Dublin Blvd. and Hacienda Drive*, September 12, 2012

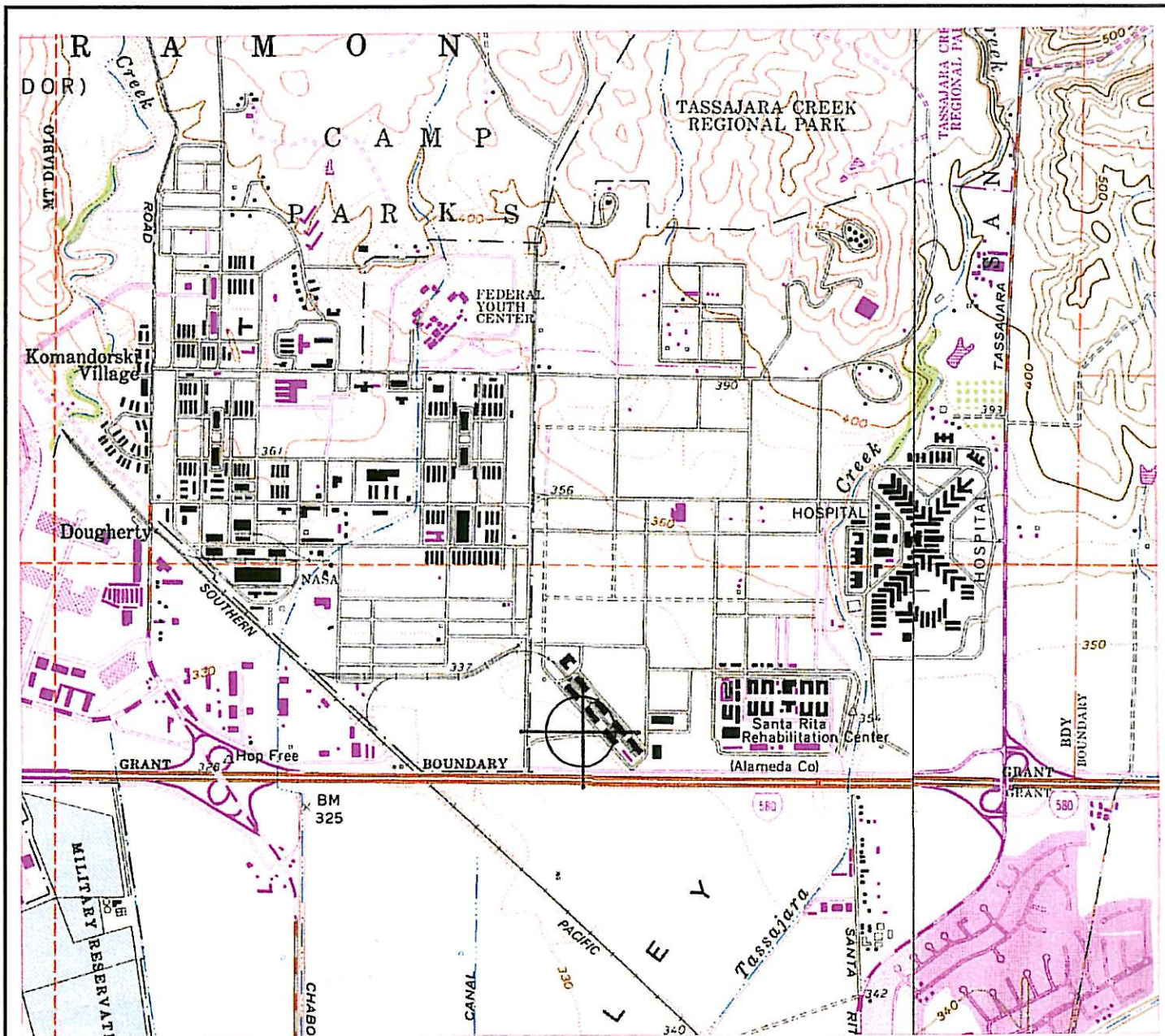
Terraphase Engineering, Inc., 2012(b), *Phase II Site Investigation Report Parcel 16A, Southwest Corner of Dublin Blvd. and Hacienda Drive*, September 12, 2012

Treadwell & Rollo, 2005, *Soil Sampling and Chemical Analysis, Martinelli Way at Hacienda Drive IKEA – Dublin Off-Site Development*, October 31, 2005

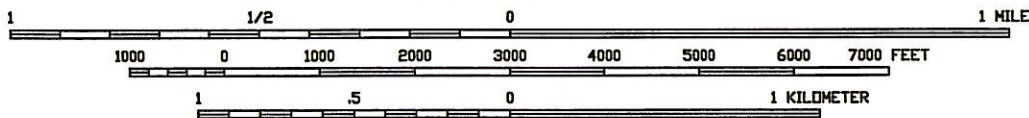
USEPA, 1989, *Risk Assessment Guidance for Superfund*, December 1989 (updated April 2010)

## **FIGURES**





SCALE 1:24000



LEGEND:



SITE LOCATION

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE: DUBLIN, CA.



GROUND ZERO  
 ANALYSIS, INC.

SITE LOCATION MAP  
 THE GREEN  
 5411 MARTINELLI WAY  
 DUBLIN, CA

FIGURE

1

FN 1013/SITELOC

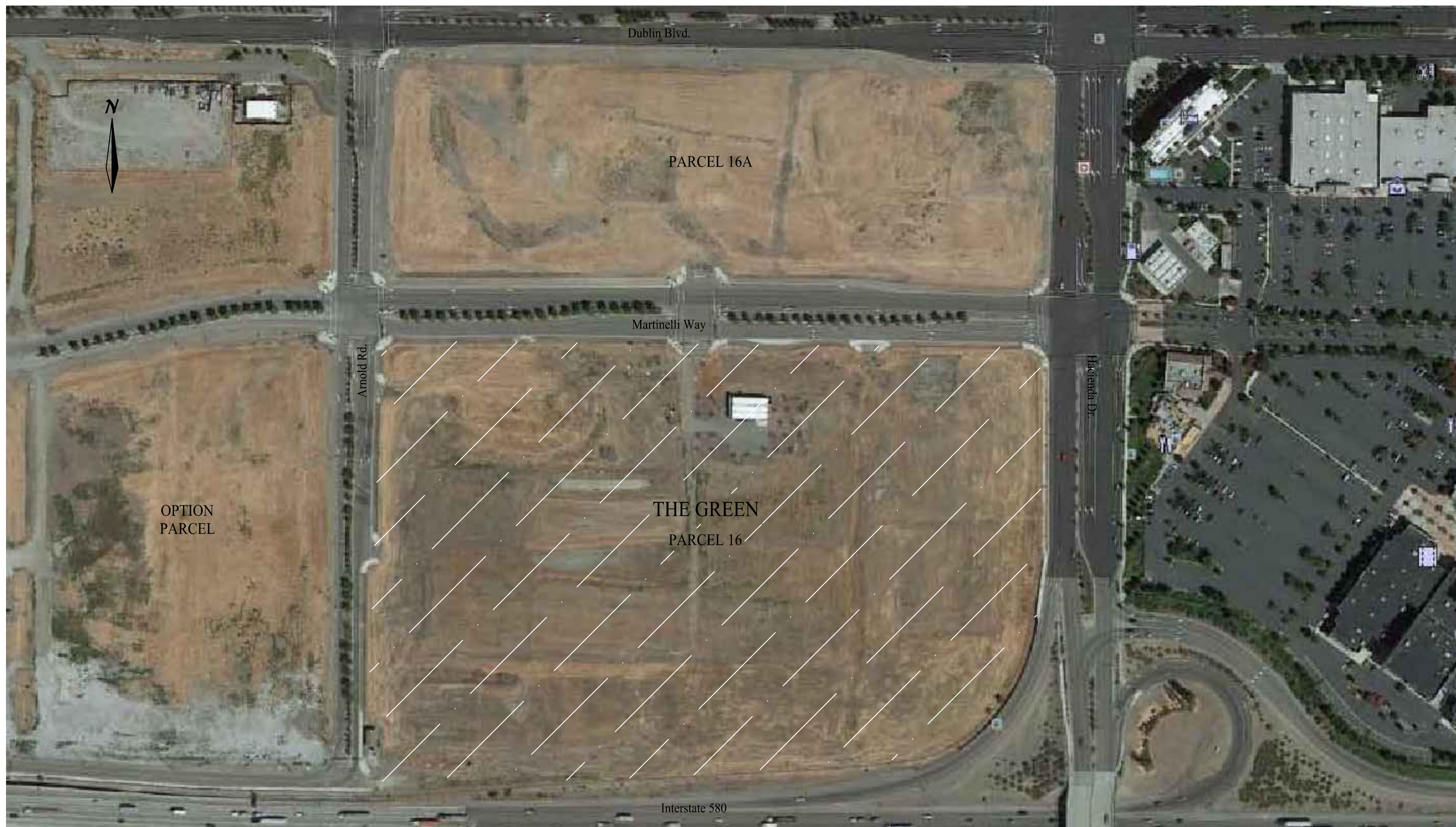


FIGURE 2

**SITE PLAN**  
Stockbridge - The Green  
Dublin, California

0 100 200  
SCALE 1"=200'



FIGURE 3

OCTOBER 2013 SOIL & VAPOR SAMPLE LOCATIONS  
 Stockbridge - The Green  
 Dublin, California

LEGEND

- Soil Boring/Temporary Vapor Probe Location (GZA 2013)
- Approximate Property Line

0 100 200  
 SCALE 1"=200'



FIGURE 4

**AREAS OF POTENTIAL CONCERN**

Stockbridge - The Green  
Dublin, California



<p>— Approximate Property Line</p> <table border="1" style="font-size: small;"> <tr><td>VOCs</td></tr> <tr><td>TPH-D</td></tr> <tr><td>BTEX</td></tr> </table> <p>1,2,3 Areas of Remediation</p>	VOCs	TPH-D	BTEX	<p>■ Soil Boring/Temporary Vapor Probe Location (GZA 2013)</p> <p>△ Groundwater Sample Location (E&amp;K 1998)</p> <p>RR5 ● Soil Sample Location (E&amp;K 1998)</p> <p>IKHA004 ⊕ Soil Sample Location (LFR 2003)</p>
VOCs				
TPH-D				
BTEX				

**LEGEND**



FIGURE 5

Historic Groundwater & Soil Vapor Sample Locations

Stockbridge - The Green  
Dublin, California



LEGEND

- ✕ Soil & Groundwater Grab Sample Location (TerraPhase 2012)
- ✕ Soil & Groundwater Grab Sample Location (EKI 1998)
- ✕ Soil & Groundwater Grab Sample Location (Klienfelder 2011)
- ✕ Soil & Groundwater Grab Sample Location (Lowney Associates 2000)
- Groundwater Monitoring Well (CRA)
- Groundwater Grab Sample - CPT Boring (CRA)
- Soil Gas Sample Location (TerraPhase 2012)
- ▲ Groundwater Grab Sample Location (TerraPhase 2012)
- Soil Boring/Temporary Vapor Probe Location (GZA 2013)



Martinelli Way

Arnold Rd.

Hacienda Dr.

Interstate 580

**LEGEND**

- Sanitary Sewer/Storm Drain Line
- Water Line
- Gas Line
- Telephone/Communications Line
- Recycled Water Line

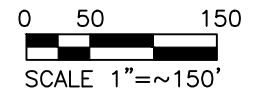
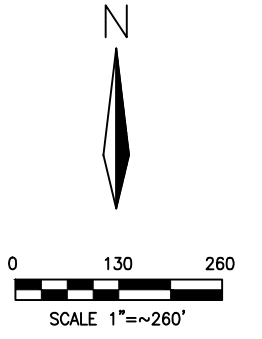
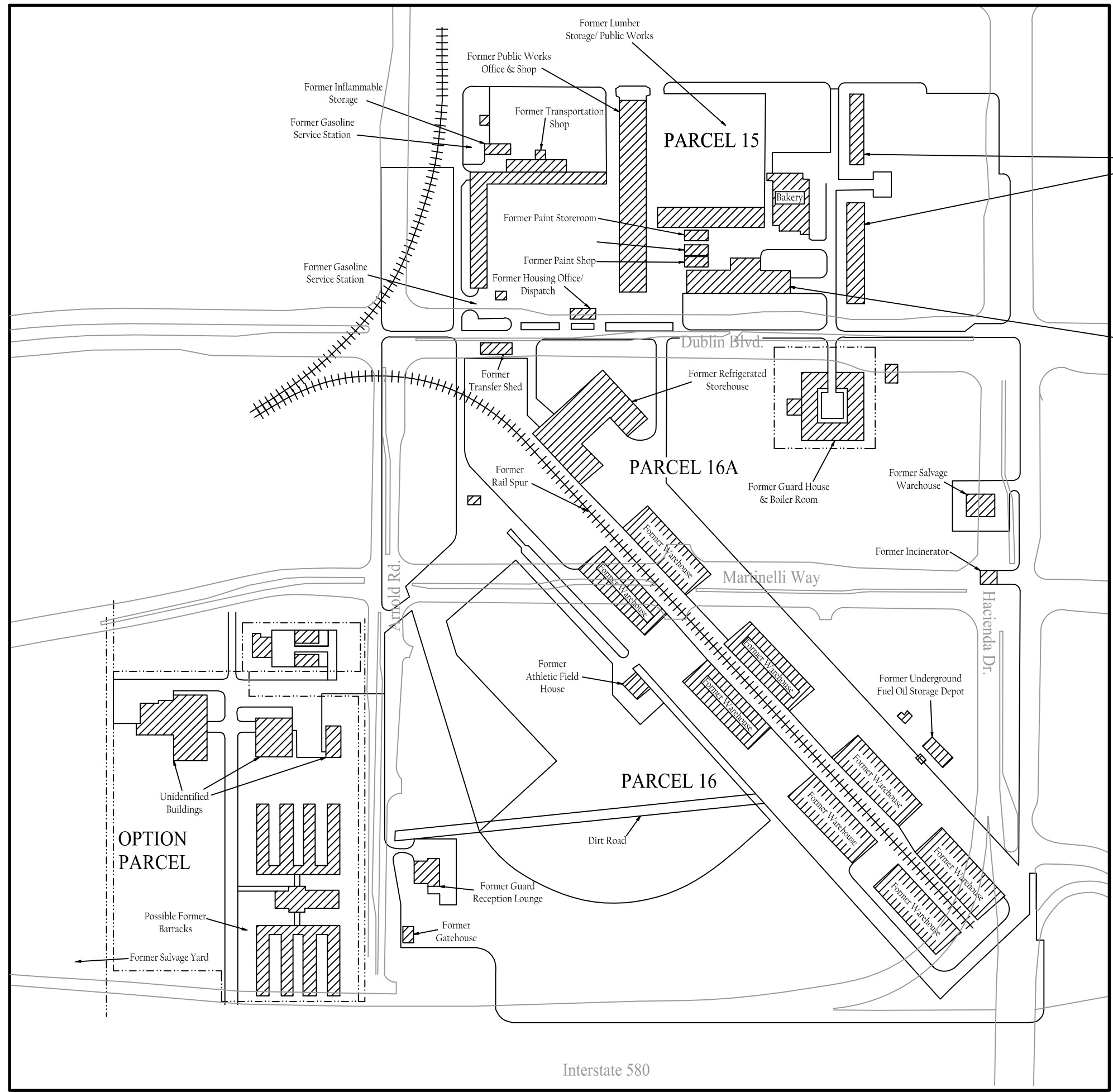


FIGURE 6

**Utility Locations**

Stockbridge - The Green  
Dublin, California



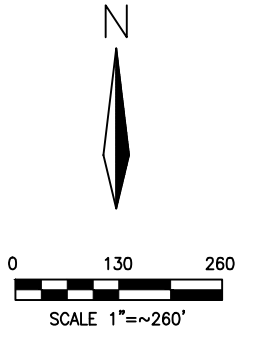
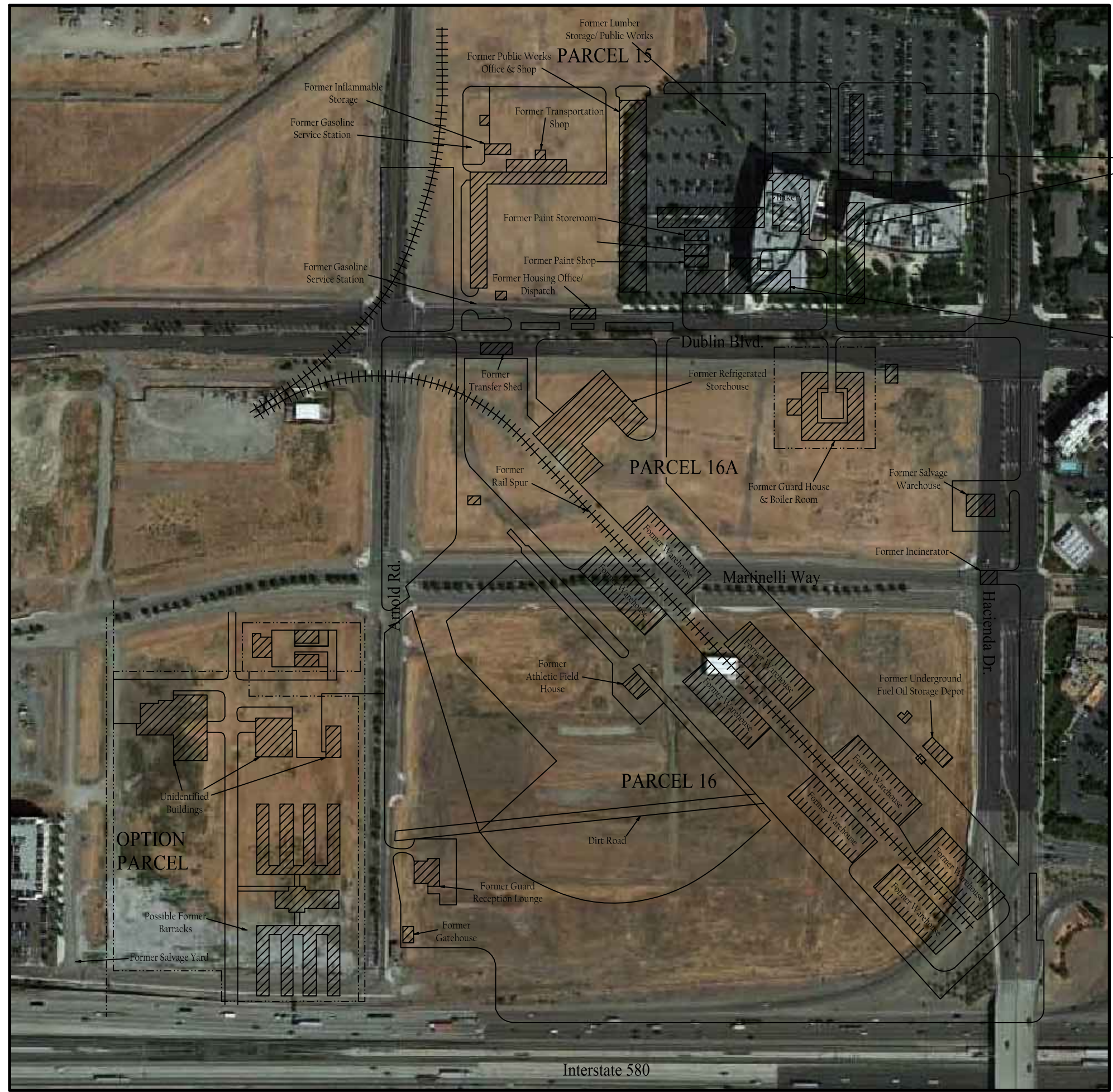


**FORMER MILITARY BASE STRUCTURE LOCATIONS**  
 Stockbridge - The Green  
 Dublin, California

FIGURE 7



Interstate 580



FORMER MILITARY BASE STRUCTURE LOCATIONS  
 Stockbridge - The Green  
 Dublin, California

FIGURE 8







FIGURE 9

JUNE 2014 SOIL & GROUNDWATER SAMPLING LOCATIONS  
 Stockbridge - The Green  
 Dublin, California

LEGEND:

- Approximate Property Line
- 1,2,3 Areas of Remediation
- Stockpile Sample Locations

- Random Soil Sample Locations
- ⊕ Direct Push Soil & GW Sample Locations
- ▲ Rail Spur Soil Sample Locations



## **TABLES**

**TABLE 1**  
**Fuel Depot Soil Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
*(in ppm)*

Date	Sample ID	TPHg	TPHd	TPHmo	B	T	E	X	VOCs	Pb	Organic Pb
<b>Ground Zero Analysis June 2014</b>											
06/19/14	SB1-5	<1.1	<b>98*</b>	<b>120</b>	<0.0049	<0.0049	<0.0049	<0.0098	ND	6.6	<1.0
	SB1-10	<0.92	<b>2.6*</b>	<5.0	<0.0046	<0.0046	<0.0046	<0.0092	ND	8.3	<1.0
	SB1-15	<b>19*</b>	<b>2,200</b>	<b>150*</b>	<0.025	<0.025	<0.025	<0.05	<b>0.026<sup>1</sup></b>	7.3	<1.0
	SB1-20	<1.1	<b>4.4*</b>	<b>10</b>	<0.0049	<0.0049	<0.0049	<0.0098	ND	7.6	<1.0
	SB2-5	<1.1	<b>3.1*</b>	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	ND	6.3	<1.0
	SB2-10	<1.1	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	ND	6.6	<1.0
	SB2-15	<b>10*</b>	<b>330</b>	<b>24*</b>	<0.0048	<0.0048	<0.0048	<0.0096	ND	5.1	<1.0
	SB2-20	<1.0	<b>8.8*</b>	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	<b>0.020<sup>2</sup></b>	4.9	<1.0
	SB3-5	<0.96	<b>6.3*</b>	<b>47</b>	<0.0046	<0.0046	<0.0046	<0.0092	ND	7.7	<1.0
	SB3-10	<1.0	<b>9.0*</b>	<b>69</b>	<0.0047	<0.0047	<0.0047	<0.0094	<b>0.034<sup>2</sup></b>	6.4	<1.0
SB3-15	<1.0	<0.99	<b>5.3</b>	<0.0047	<0.0047	<0.0047	<0.0094	ND	4.6	<1.0	
SB3-16	<0.92	<1.0	<5.0	<0.005	<0.005	<0.005	<0.01	ND	5.3	<1.0	
06/20/14	SB4-5	<1.0	<b>18*</b>	<b>32</b>	<0.0049	<0.0049	<0.0049	<0.0098	ND	5.7	<1.0
	SB4-10	<b>26*</b>	<b>3,900</b>	<b>290</b>	<0.025	<0.025	<0.025	<0.05	<b>0.031<sup>1</sup></b>	5.0	<1.0
	SB4-15	<b>5.2*</b>	<b>970</b>	<b>100</b>	<0.012	<0.012	<0.012	<0.024	ND	5.2	<1.0
	SB4-20	<0.95	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	ND	4.9	<1.0
	SB5-5	<1.1	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	ND	4.7	<1.0
	SB5-10	<0.93	<1.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	ND	3.8	<1.0
	SB5-15	<0.91	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	ND	5.6	<1.0
	SB5-20	<0.91	<0.99	<5.0	<0.005	<0.005	<0.005	<0.01	ND	4.2	<1.0
	SB6-5	<0.98	<1.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	ND	4.4	<1.0
	SB6-10	<1.0	<0.99	<5.0	<0.0044	<0.0044	<0.0044	<0.0088	ND	4.6	<1.0
SB6-15	<1.0	<b>64</b>	<5.0	<0.005	<0.005	<0.005	<0.01	ND	6.1	<1.0	
ESL		770	240	10,000	0.74	1,000	4.8	600	--	80	--

**Notes:**

- |            |   |    |  |
|------------|---|----|--|
| ppm        | = Parts per million (mg/kg)   | -- | = Not analyzed   |
| TPHg       | = Total petroleum hydrocarbons as gasoline by EPA 8015                          | <  | = Less than indicated detection limit (not detected)                       |
| TPHd       | = Total petroleum hydrocarbons as diesel by EPA 8015                            | ND | = Not detected (multiple analytes)   |
| TPHmo      | = Total petroleum hydrocarbons as motor oil by EPA 8015                         | *  | = Sample exhibits chromatographic pattern which does not resemble standard |
| B          | = Benzene by EPA 8260   | 1  | = sec-butylbenzene   |
| T          | = Toluene by EPA 8260   | 2  | = Acetone  |
| E          | = Ethylbenzene by EPA 8260  |    |  |
| X          | = Xylenes by EPA 8260   |    |  |
| VOCs       | = Volatile organic compounds by EPA 8260  |    |  |
| Pb         | = Total lead by EPA 6010  |    |  |
| Organic Pb | = Organic lead by DHS LUFT  |    |  |
| ESL        | = Residential Direct Exposure Screening Level (RWQCB, December 2013, Table K-1) |    |  |

**TABLE 2**  
**Groundwater Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppb)  
Page 1 of 3

Date	Sample ID	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	PCE	TCE	Carbon Tetrachloride	Chloroform
<b>Erler &amp; Kalinowski 1998</b>													
Feb. 1998	P-1	--	<b>120</b>	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	P-2	--	<b>69</b>	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	P-3	--	<50	--	<2	<2	<2	<2	--	<b>83</b>	<2	<2	<2
	P-4	--	<50	--	<2	<2	<2	<2	--	<b>100</b>	<b>4.2</b>	<2	<2
	P-5	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	P-6	--	<50	--	<2	<2	<2	<b>6.6</b>	--	<2	<2	<2	<2
Apr. 1998	P-7	--	<b>120,000</b>	--	<40	<40	<40	<2	--	<40	<40	<40	<40
	P-8	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	P-9	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	P-10	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	OA-1	--	<b>92</b>	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	OA-2	--	<b>96</b>	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	OA-3	--	<b>57</b>	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	OA-4	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	OA-5	--	<50	--	<2	<2	<2	<2	--	<b>29</b>	<b>5</b>	<2	<2
	OA-6	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	OA-7	--	<50	--	<2	<2	<2	<2	--	<2	<2	<2	<2
	FD-1		<50	--	<2	<2	<2	<2	--	--	--	--	--
FD-2		<200	--	<2	<2	<2	<2	--	--	--	--	--	
FD-3		<50	--	<2	<2	<2	<2	--	--	--	--	--	
FD-4		<50	--	<2	<2	<2	<2	--	--	--	--	--	
FD-5		<50	--	<2	<2	<2	<2	--	--	--	--	--	
FD-6		<50	--	<2	<2	<2	<2	--	--	--	--	--	
FD-7			<b>110</b>	--	<2	<2	<2	<2	--	--	--	--	
FD-8			<b>180</b>	--	<2	<2	<2	<2	--	--	--	--	
<b>Lowney Associates 2000</b>													
Oct. 2000	EB-8	<50	<b>500</b>	<1,300	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	EB-9	<50	<b>720</b>	<1,200	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	EB-20	<50	<b>63</b>	<500	<0.5	<0.5	<0.5	<0.5	--	<b>120</b>	<0.5	<0.5	<0.5
	EB-21	<50	<b>51</b>	<500	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5
	EB-22	<50	<b>83</b>	<500	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5
	EB-23	<50	<b>53</b>	<500	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5
	EB-24	<50	<b>88</b>	<500	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5



**TABLE 2**  
**Groundwater Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppb)  
Page 3 of 3

Date	Sample ID	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	PCE	TCE	Carbon Tetrachloride	Chloroform
<b>Conestoga Rovers Shell Station Investigation 2012</b>													
Mar. 2012	CPT-1	<50	<b>110</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	CPT-2	<50	<b>86</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	CPT-3	<50	<b>53</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	CPT-4	<b>310</b>	<b>88</b>	--	<2.5	<2.5	<2.5	<5.0	<b>410</b>	--	--	--	--
Nov. 2012	CPT-5	<50	<b>59</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	CPT-6	<50	<b>54</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	CPT-7	<50	<54	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	CPT-8	<50	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	MW-1	<50	<b>97</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	MW-2	<50	<48	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	MW-3	<50	<b>58</b>	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
	MW-4	<50	<48	--	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	--	--
MW-5	<b>100</b>	<48	--	<0.5	<0.5	<0.5	<1.0	<b>96</b>	--	--	--	--	
MW-6	<50	<50	--	<0.5	<0.5	<0.5	<1.0	<b>1.7</b>	--	--	--	--	
<b>Ground Zero Analysis Former Fuel Depot Investigation 2014</b>													
06/19/14	SB-1	<50	<b>610</b>	<b>790</b>	<0.5	<0.5	<0.5	<1.0	<b>0.6</b>	<0.5	<0.5	<0.5	<0.5
	SB-2	<50	<b>590</b>	<b>640</b>	<0.5	<0.5	<0.5	<1.0	<b>3.8</b>	<0.5	<0.5	<0.5	<0.5
06/20/14	SB-3	<50	<b>120</b>	<300	<0.5	<0.5	<0.5	<1.0	<b>0.7</b>	<0.5	<0.5	<0.5	<0.5
	SB-4	<b>170*</b>	<b>2,100</b>	<b>1,000</b>	<0.5	<0.5	<0.5	<1.0	<b>1.0</b>	<0.5	<0.5	<0.5	<0.5
	SB-5	<50	<b>100</b>	<300	<0.5	<0.5	<0.5	<1.0	<b>6.4</b>	<0.5	<0.5	<0.5	<0.5
	SB-6	<50	<b>340</b>	<300	<0.5	<0.5	<0.5	<1.0	<b>1.8</b>	<0.5	<0.5	<0.5	<0.5

**Notes:**

- ppb = Parts per billion (micrograms per liter)
- TPHg = Total petroleum hydrocarbons as gasoline
- TPHd = Total petroleum hydrocarbons as diesel
- TPHmo = Total petroleum hydrocarbons as motor oil
- MTBE = Methyl tert butyl ether
- PCE = Tetrachloroethene
- TCE = Trichloroethene
- \* = Sample exhibits chromatographic pattern which does not resemble standard
- < = Less than indicated detection limit (not-detected)
- = Not analyzed
- ND = Not detected

**TABLE 3**  
**Rail Spur Soil Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
*(in ppm)*  
Page 1 of 2

Date	Sample ID	Creosote	PAHs	PCBs	DDT	Other OCPs	2,4-DB	Other Herbicides	TEPH	HEM	As	Cd	Cr	Cu	Pb	Ni	Zn
<b>Erler &amp; Kalinowski February 1998</b>																	
2/26/1998	RR-1	--	--	--	--	--	0.051	ND	<1.0	--	4.0	0.17	32	28	6.3	34	52
	RR-2	--	--	--	--	--	<0.040	ND	<1.0	--	4.2	0.087	31	26	7.2	33	47
	RR-3	--	--	--	--	--	<0.040	ND	<1.0	--	3.4	0.09	25	20	6.0	30	39
	RR-4	--	--	--	--	--	<0.040	ND	2.9	--	15	0.083	27	37	7.2	33	54
	RR-5	--	--	--	--	--	<0.040	ND	6.6	--	3.4	0.091	27	22	7.0	34	44
<b>Levine-Fricke September 2003</b>																	
09/16/03	IKHA001	ND	--	ND	<0.017	ND	--	--	--	--	--	--	--	--	--	--	--
	IKHA002	ND	--	ND	0.060	ND	--	--	--	--	--	--	--	--	--	--	--
	IKHA003	ND	--	ND	0.0037	ND	--	--	--	--	--	--	--	--	--	--	--
	IKHA004	ND	--	ND	<0.033	ND	--	--	--	--	--	--	--	--	--	--	--
<b>Ground Zero Analysis June 2014</b>																	
06/17/14	RS-T1-20SW	--	ND	ND	--	--	--	--	--	180	4.1	0.44	47	28	13	58	58
	RS-T1-10SW	--	ND	ND	--	--	--	--	--	120	4.9	0.46	47	28	14	55	59
	RS-T1-C	--	ND	ND	--	--	--	--	--	76	4.4	0.46	46	27	15	50	59
	RS-T1-10NE	--	ND	ND	--	--	--	--	--	110	4.4	0.43	49	29	13	60	56
	RS-T1-20NE	--	ND	ND	--	--	--	--	--	150	3.8	0.46	51	31	12	65	53
	RS-T2-20SW	--	0.0058 <sup>1</sup> , 0.0057 <sup>2</sup> , 0.0050 <sup>3</sup> , 0.0068 <sup>4</sup> , 0.0086 <sup>5</sup>	ND	--	--	--	--	--	53	5.1	0.45	38	24	11	42	53
	RS-T2-10SW	--	0.0050 <sup>1</sup> , 0.0051 <sup>3</sup>	ND	--	--	--	--	100	5.5	0.45	36	25	11	47	53	
	RS-T2-C	--	ND	ND	--	--	--	--	63	5.0	0.49	43	24	10	42	52	
	RS-T2-10NE	--	0.0052 <sup>2</sup> , 0.0051 <sup>3</sup>	ND	--	--	--	--	150	3.9	0.43	37	23	9.0	46	50	
	RS-T2-20NE	--	ND	ND	--	--	--	--	100	4.4	0.46	45	25	11	52	52	
	RS-T3-20SW	--	0.0058 <sup>1</sup> , 0.0055 <sup>2</sup>	ND	--	--	--	--	160	4.5	0.39	38	26	11	40	56	
	RS-T3-10SW	--	ND	ND	--	--	--	--	50	4.4	0.40	33	23	11	37	52	
	RS-T3-C	--	ND	ND	--	--	--	--	30	4.4	0.40	35	24	9.1	38	53	
	RS-T3-10NE	--	ND	ND	--	--	--	--	40	4.2	0.45	35	25	9.2	43	54	
RS-T3-20NE	--	0.0069 <sup>1</sup> , 0.0089 <sup>2</sup> , 0.0075 <sup>3</sup> , 0.0094 <sup>4</sup>	ND	--	--	--	--	37	4.2	0.45	51	26	11	49	60		

**TABLE 3**  
**Rail Spur Soil Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppm)  
Page 2 of 2

**Notes:**

ppm	= Parts per million (mg/kg)	Pb	= Lead
SVOCs	= Semi-volatile Organic Compounds	Ni	= Nickel
PAHs	= Polycyclic aromatic hydrocarbons	Zn	= Zinc
PCBs	= Polychlorinated biphenyls	--	= Not analyzed
OCPs	= Organochlorine pesticides	<	= Less than indicated detection limit (not detected)
TEPH	= Total extractable petroleum hydrocarbons	ND	= Not detected (multiple analytes)
HEM	= Hexane extractable material (Oil & Grease)	1	= Fluoranthene
As	= Arsenic	2	= Chrysene
Cd	= Cadmium	3	= Pyrene
Cr	= Chromium	4	= Benzo (a) pyrene
Cu	= Copper	5	= Benzo (b) fluoranthene



**TABLE 4**  
**Rail Spur and Soil Stockpile Analytical Results - PAHs and PCBs**  
The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppm)  
Page 1 of 2

RAIL SPUR SAMPLES																	
COMPOUND/SAMPLE ID	RS-T1-20SW	RS-T1-10SW	RS-T1-C	RS-T1-10NE	RS-T1-20NE	RS-T2-20SW	RS-T2-10SW	RS-T2-C	RS-T2-10NE	RS-T2-20NE	RS-T3-20SW	RS-T3-10SW	RS-T3-C	RS-T3-10NE	RS-T3-20NE	ESL	CHHSL
Phenanthrene	<0.015	<0.020	<0.01	<0.015	<0.005	<0.0049	<0.0049	<0.01	<0.005	<0.015	<0.0051	<0.0099	<0.005	<0.005	<5.0	--	--
Fluoranthene	<0.015	<0.020	<0.01	<0.015	<0.005	<b>0.0058</b>	<b>0.0050</b>	<0.01	<0.005	<0.015	<b>0.0058</b>	<0.0099	<0.005	<0.005	<b>6.9</b>	2,300	--
Pyrene	<0.015	<0.020	<0.01	<0.015	<0.005	<b>0.0050</b>	<b>0.0051</b>	<0.01	<b>0.0051</b>	<0.015	<0.0051	<0.0099	<0.005	<0.005	<b>7.5</b>	3,400	--
Benzo(a)anthracene	<0.015	<0.020	<0.01	<0.015	<0.005	<0.0049	<0.0049	<0.01	<0.005	<0.015	<0.0051	<0.0099	<0.005	<0.005	<5.0	0.38	--
Chrysene	<0.015	<0.020	<0.01	<0.015	<0.005	<b>0.0057</b>	<0.0049	<0.01	<b>0.0052</b>	<0.015	<b>0.0055</b>	<0.0099	<0.005	<0.005	<b>8.9</b>	3.8	--
Benzo(b)fluoranthene	<0.015	<0.020	<0.01	<0.015	<0.005	<b>0.0086</b>	<0.0049	<0.01	<0.005	<0.015	<0.0051	<0.0099	<0.005	<0.005	<5.0	0.38	--
Benzo(k)fluoranthene	<0.015	<0.020	<0.01	<0.015	<0.005	<0.0049	<0.0049	<0.01	<0.005	<0.015	<0.0051	<0.0099	<0.005	<0.005	<5.0	0.38	--
Benzo(a)pyrene	<0.015	<0.020	<0.01	<0.015	<0.005	<b>0.0068</b>	<0.0049	<0.01	<0.005	<0.015	<0.0051	<0.0099	<0.005	<0.005	<b>9.4</b>	0.038	0.038

SOIL PILE NO. 1 SAMPLES																	
COMPOUND/SAMPLE ID	SP1 A-3'	SP1 B-6"	SP1 C-6'	SP1 D-2'	SP1 E-3'	SP1 F-6"	SP1 G-1'	SP1 H-7'	SP1 I-1.5'	SP1 J-3"	SP1 K-2'	SP1 L-2'				ESL	CHHSL
Phenanthrene	<0.005	<0.005	<0.005	<0.01	<0.0051	<b>0.0053</b>	<0.015	<0.005	<b>0.0085</b>	<0.005	<b>0.0062</b>	<0.01				--	--
Fluoranthene	<b>0.0059</b>	<b>0.0073</b>	<b>0.0055</b>	<0.01	<b>0.007</b>	<b>0.012</b>	<0.015	<0.005	<b>0.017</b>	<0.005	<b>0.014</b>	<0.01				2,300	--
Pyrene	<0.005	<b>0.0052</b>	<0.005	<0.01	<b>0.0056</b>	<b>0.011</b>	<0.015	<0.005	<b>0.013</b>	<0.005	<b>0.011</b>	<0.01				3,400	--
Benzo(a)anthracene	<0.005	<0.005	<0.005	<0.01	<0.0051	<b>0.0067</b>	<0.015	<0.005	<b>0.0084</b>	<0.005	<b>0.0074</b>	<0.01				0.38	--
Chrysene	<0.005	<b>0.009</b>	<0.005	<0.01	<b>0.0052</b>	<b>0.0082</b>	<0.015	<0.005	<b>0.0099</b>	<b>0.0078</b>	<b>0.0091</b>	<0.01				3.8	--
Benzo(b)fluoranthene	<b>0.0057</b>	<0.005	<0.005	<0.01	<0.0051	<b>0.012</b>	<0.015	<0.005	<0.0051	<0.005	<0.0049	<0.01				0.38	--
Benzo(k)fluoranthene	<0.005	<0.005	<0.005	<0.01	<0.0051	<b>0.0069</b>	<0.015	<0.005	<0.0051	<0.005	<0.0049	<0.01				0.38	--
Benzo(a)pyrene	<0.005	<b>0.0052</b>	<0.005	<b>0.011</b>	<0.0051	<b>0.0092</b>	<0.015	<0.005	<b>0.0085</b>	<0.005	<b>0.0079</b>	<0.01				0.038	0.038
Benzo(g,h,i)perylene	<0.005	<b>0.006</b>	<0.005	<0.01	<0.0051	<0.0051	<0.015	<0.005	<0.0051	<0.005	<0.0049	<0.01				--	--
Aroclor-1254	<0.0095	<b>0.019</b>	<b>0.086</b>	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096				0.22	0.089
Aroclor-1260	<0.0095	<b>0.002</b>	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096				0.22	0.089
Total PCBs		<b>0.021</b>	<b>0.086</b>													0.22	0.089

**TABLE 4**  
**Rail Spur and Soil Stockpile Analytical Results - PAHs and PCBs**  
The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppm)  
Page2 of 2

SOIL PILE NO. 2 SAMPLES																	
COMPOUND/SAMPLE ID	SP2 A-1'	SP2 B-6"														ESL	CHHSL
Acenaphthene	<0.02	0.018														3,400	--
Fluorene	<0.02	0.013														3,100	--
Phenanthrene	0.16	0.19														--	--
Anthracene	0.048	0.057														23,000	--
Fluoranthene	0.3	0.35														2,300	--
Pyrene	0.22	0.24														3,400	--
Benzo(a)anthracene	0.16	0.17														0.38	--
Chrysene	0.16	0.15														3.8	--
Benzo(b)fluoranthene	0.21	0.2														0.38	--
Benzo(k)fluoranthene	0.06	0.058														0.38	--
Benzo(a)pyrene	0.13	0.13														0.038	0.038
Indeno(1,2,3-cd)pyrene	0.051	0.05														0.38	--
Dibenz(a,h)anthracene	0.023	0.021														0.11	--
Benzo(g,h,i)perylene	0.058	0.057														--	--
Aroclor-1254	0.04	0.064														0.22	0.089
Aroclor-1260	0.017	0.025														0.22	0.089
Total PCBs	0.057	0.089														0.22	0.089

**Notes:**  
ppm = Parts per million (mg/kg)  
< = Less than indicated detection limit (not detected)  
-- = Not established  
ESL = Residential Direct Exposure Screening Level (RWQCB, December 2013, Table K-1)  
CHHSL = California Human Health Screening Level, Residential Direct Exposure (OEHHA, September 2010)  
**Red Font** = Meets or exceeds a screening level

**TABLE 5**  
**Herbicide and Metal Soil Analytical Results - Random Sampling Points**

The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppm)

Herbicides														
Date	Sample ID	Depth (feet)	2,4-D	2,4-DB	2,4,5-TP	2,4,5-T	Dalapon	Dicamba	Dichloroprop	Dinoseb	MCPA	MCPP	4-Nitrophenol	PCP
10/08/13	HAB1-1'	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<5.0	<5.0	<0.05	<0.05
	HAB2-1'	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<5.0	<5.0	<0.05	<0.05
	HAB3-1'	1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<25	<25	<0.25	<0.25
	HAB4-1'	1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<25	<25	<0.25	<0.25
	HAB5-1'	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<5.0	<5.0	<0.05	<0.05

Metals																			
Date	Sample ID	Depth (feet)	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	Va	Zn
06/17/14	HAB1	0.5	1.4	3.9	160	0.46	0.46	37	10	25	12	0.019	<0.25	41	<0.50	<0.25	<0.50	44	52
	HAB2	0.5	5.3	3.8	200	0.50	0.51	35	12	26	10	<0.018	<0.25	38	<0.50	<0.25	<0.50	48	57
	HAB3	0.5	3.4	4.1	180	0.49	0.45	35	11	25	7.5	0.027	<0.26	44	2.0	<0.26	<0.51	48	52
	HAB4	0.5	1.6	4.7	190	0.47	0.63	62	13	34	25	0.039	0.36	78	<0.50	<0.25	<0.50	41	75
	HAB5	0.5	1.2	3.8	140	0.35	0.39	38	9.9	22	10	0.023	0.37	49	<0.50	<0.25	<0.50	39	47

**Notes:**

- |   |  |
|---|--|
| ppm = parts per million (aka milligrams per kilogram [mg/kg]) | Co = Cobalt  |
| 2,4-D = 2,4-Dichlorophenoxyacetic acid                        | Cu = Copper  |
| 2,4-DB = 2,4-Dichlorophenoxybutanoic acid                     | Pb = Lead  |
| 2,4,5-TP = 2,4,5-Trichlorophenoxypropionic acid (Silvex)      | Hg = Mercury   |
| 2,4,5-T = 2,4,5-Trichlorophenoxyacetic acid                   | Mo = Molybdenum  |
| MCPA = 4-Chloro-2-methylphenoxyacetic acid                    | Ni = Nickel  |
| MCPP = 2-(4-chloro)-2-methylphenoxypropanoic acid             | Se = Selenium  |
| PCP = Pentachlorophenol                                       | Ag = Silver  |
| Sb = Antimony   | Th = Thallium  |
| As = Arsenic  | Va = Vanadium  |
| Ba = Barium   | Zn = Zinc  |
| Be = Beryllium  | < = Less than indicated detection limit (not detected) |
| Cd = Cadmium  | -- = Not analyzed                                      |
| Cr = Chromium   |  |

**TABLE 6**  
**Soil Stockpile Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppm)

Organics																			
Date	Sample ID	PCBs	OCPs	TPHg	TPHd	TPHmo	B	T	E	X	VOCs	PAHs							
06/18/14	SP1A-3'	ND	ND	<0.98	7.6*	58	<0.0048	<0.0048	<0.0048	<0.0096	ND	Fluoranthene = 0.0059, benzo (b) fluoranthene = 0.0057							
	SP1B-6"	0.019 <sup>a</sup> , 0.020 <sup>b</sup>	ND	<1.1	15*	99	<0.0045	<0.0045	<0.0045	<0.009	ND	Fluoranthene = 0.0073, pyrene = 0.0052, chrysene = 0.009, benzo (a) pyrene = 0.0052, benzo (g,h,i) perylene = 0.006							
	SP1C-6'	0.086 <sup>a</sup>	ND	<0.96	7.2*	61	<0.0048	<0.0048	<0.0048	<0.0096	ND	Fluoranthene = 0.0055							
	SP1D-2'	ND	ND	<1.1	9.5*	61	<0.0046	<0.0046	<0.0046	<0.0092	ND	Benzo (a) pyrene = 0.011							
	SP1E-3'	ND	ND	<0.94	11*	83	<0.0047	<0.0047	<0.0047	<0.0094	ND	Fluoranthene = 0.007, pyrene = 0.0056, chrysene = 0.0052							
	SP1F-6"	ND	ND	<1.0	9.1*	72	<0.0049	<0.0049	<0.0049	<0.0098	ND	Phenanthrene = 0.0053, fluoranthene = 0.012, pyrene = 0.011, benzo (a) anthracene = 0.0067, chrysene = 0.0082, benzo (b) fluoranthene = 0.012, benzo (k) fluoranthene = 0.0069, benzo (a) pyrene = 0.0092							
	SP1G-1'	ND	ND	<1.1	18*	110	<0.0048	<0.0048	<0.0048	<0.0096	ND	ND							
	SP1H-7'	ND	ND	<0.92	6.3*	58	<0.0046	<0.0046	<0.0046	<0.0092	ND	ND							
	SP1I-1.5'	ND	ND	<1.1	9.0*	67	<0.0049	<0.0049	<0.0049	<0.0098	ND	Phenanthrene = 0.0085, fluoranthene = 0.017, pyrene = 0.013, benzo (a) anthracene = 0.0084, chrysene = 0.0099, benzo (a) pyrene = 0.0085							
	SP1J-3"	ND	ND	<1.1	5.3*	43	<0.0047	<0.0047	<0.0047	<0.0094	ND	Chrysene = 0.0078							
	SP1K-2'	ND	ND	<1.0	9.2*	64	<0.0049	<0.0049	<0.0049	<0.0098	ND	Phenanthrene = 0.0062, fluoranthene = 0.014, pyrene = 0.011, benzo (a) anthracene = 0.0074, chrysene = 0.0091, benzo (a) pyrene = 0.0079							
	SP1L-2'	ND	ND	<1.0	5.7*	48	<0.0046	<0.0046	<0.0046	<0.0092	ND	ND							
	SP2A-1'	0.04 <sup>a</sup> , 0.017 <sup>b</sup>	ND	<1.0	23*	200	<0.0047	<0.0047	<0.0047	<0.0094	ND	Phenanthrene = 0.16, anthracene = 0.048, fluoranthene = 0.30, pyrene = 0.22, benzo (a) anthracene = 0.16, chrysene = 0.16, benzo (b) fluoranthene = 0.21, benzo (k) fluoranthene = 0.06, benzo (a) pyrene = 0.13, indeno (1,2,3-cd) pyrene = 0.051, dibenz (a,h) anthracene = 0.023, benzo (g,h,i) perylene = 0.058							
SP2B-6"	0.064 <sup>a</sup> , 0.025 <sup>b</sup>	ND	<0.96	23*	160	<0.0048	<0.0048	<0.0048	<0.0096	ND	Acenaphthylene = 0.018, fluorene = 0.013, phenanthrene = 0.19, anthracene = 0.057, fluoranthene = 0.35, pyrene = 0.24, benzo (a) anthracene = 0.17, chrysene = 0.15, benzo (b) fluoranthene = 0.20, benzo (k) fluoranthene = 0.058, benzo (a) pyrene = 0.13, indeno (1,2,3-cd) pyrene = 0.050, dibenz (a,h) anthracene = 0.021, benzo (g,h,i) perylene = 0.057								
Inorganics																			
Date	Sample ID	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	Va	Zn	Asbestos
06/18/14	SP1A-3'	6.0	6.2	200	0.46	0.28	30	9.6	22	9.7	0.021	<0.25	35	1.4	<0.25	<0.51	42	47	ND
	SP1B-6"	<0.51	5.6	170	0.41	0.55	31	9.7	22	11	0.024	<0.25	38	2.4	<0.25	<0.51	38	48	ND
	SP1C-6'	<0.52	5.5	190	0.47	0.27	35	11	24	12	0.025	<0.26	43	2.5	<0.26	<0.52	44	53	ND
	SP1D-2'	7.5	4.3	180	0.45	0.28	38	11	24	13	0.041	<0.25	46	<0.50	<0.25	<0.50	44	51	ND
	SP1E-3'	7.6	4.9	160	0.41	0.26	30	8.8	19	27	0.021	<0.25	34	<0.51	<0.25	<0.51	39	45	ND
	SP1F-6"	<0.49	5.2	190	0.46	0.36	38	10	24	13	0.030	<0.24	43	2.4	<0.24	<0.49	44	54	ND
	SP1G-1'	<0.51	6.7	190	0.47	0.34	37	10	24	13	0.030	0.27	42	<0.51	<0.25	<0.51	45	52	ND
	SP1H-7'	<0.50	6.7	190	0.48	0.32	31	9.8	22	11	0.023	<0.25	36	2.4	<0.25	<0.50	42	49	ND
	SP1I-1.5'	<0.51	5.8	200	0.46	<0.26	36	11	25	14	0.028	<0.26	41	2.3	<0.26	<0.51	45	56	ND
	SP1J-3"	<0.50	5.6	190	0.46	0.29	37	11	24	12	0.029	<0.25	42	<0.50	<0.25	<0.50	45	53	ND
	SP1K-2'	<0.50	5.9	190	0.45	0.32	35	9.6	22	12	0.025	<0.25	38	2.1	<0.25	<0.50	41	82	ND
	SP1L-2'	<0.50	5.6	180	0.44	0.29	31	9.1	20	11	0.023	<0.25	38	2.5	<0.25	<0.50	39	47	ND
	SP2A-1'	<0.47	3.1	120	0.24	<0.24	29	4.9	20	23	0.086	0.47	31	<0.47	<0.24	<0.47	29	63	ND
SP2B-6"	<0.50	4.4	180	0.31	0.30	38	7.2	28	23	0.076	0.6	38	<0.50	<0.25	<0.50	41	96	ND	

**TABLE 6**  
**Soil Stockpile Analytical Results**  
The Green  
5411 Martinelli Way  
Dublin, CA  
*(in ppm)*

**Notes:**

ppm	= Parts per million (or milligrams per kilogram [mg/kg])
PCBs	= Polychlorinated biphenyls by EPA Method 8082
OCPs	= Organochlorine pesticides by EPA Method 8081A
TPHg	= Total petroleum hydrocarbons as gasoline by EPA Method 8015B
TPHd	= Total petroleum hydrocarbons as diesel by EPA Method 8015B
TPHmo	= Total petroleum hydrocarbons as motor oil by EPA Method 8015B
BTEX	= Benzene, toluene, ethylbenzene and xylenes by EPA Method 8260B
VOCs	= Volatile organic compounds by EPA Method 8260B
SVOCs	= Semi-volatile organic compounds by EPA Method 8270C-SIM
PAHs	= Polycyclic aromatic hydrocarbons by EPA Method 8270C-SIM
Sb	= Antimony by EPA Method 6010B
As	= Arsenic by EPA Method 6010B
Ba	= Barium by EPA Method 6010B
Be	= Beryllium by EPA Method 6010B
Cd	= Cadmium by EPA Method 6010B
Cr	= Chromium by EPA Method 6010B
Co	= Cobalt by EPA Method 6010B
Cu	= Copper by EPA Method 6010B
Pb	= Lead by EPA Method 6010B
Hg	= Mercury by EPA Method 7471A
Mo	= Molybdenum by EPA Method 6010B
Ni	= Nickel by EPA Method 6010B
Se	= Selenium by EPA Method 6010B
Ag	= Silver by EPA Method 6010B
Th	= Thallium by EPA Method 6010B
Va	= Vanadium by EPA Method 6010B
Zn	= Zinc by EPA Method 6010B
<	= Less than indicated detection limit (not detected)
ND	= Not detected (multiple analytes)
*	= Sample exhibits chromatographic pattern which does not resemble standard
a	= Aroclor-1254 (PCB)
b	= Aroclor-1260 (PCB)

**TABLE 7  
HEALTH RISKS  
UCL PAH AND PCB CONCENTRATIONS - SP1 and RAIL SPUR DATA  
USING RWQCB ESLs and CHHSL for PCBs**

The Green  
5411 Martinelli Way  
Dublin, CA  
(in ppm)

COMPOUND	RESIDENTIAL DIRECT EXPOSURE ESL (CANCER)	RESIDENTIAL DIRECT EXPOSURE ESL (NON-CANCER)	UCL95 CONCENTRATION	CANCER RISK	HAZARD
Napthalene	3.1	--		0.0E+00	
Acenapthylene	--	--			
Acenapthene	--	3400			0.0E+00
Fluorene	--	3100			0.0E+00
Phenanthrene	--	--	0.0052		
Anthracene	--	23000			0.0E+00
Fluoranthene	--	2300	0.0075		3.3E-06
Pyrene	--	3400	0.0067		2.0E-06
Benzo(a)anthracene	0.38	--	0.0053	1.4E-08	
Chrysene	3.8	--	0.0066	1.7E-09	
Benzo(b)fluoranthene	0.38	--	0.0056	1.5E-08	
Benzo(k)fluoranthene	0.38	--	0.0049	1.3E-08	
Benzo(a)pyrene	0.038	--	0.0063	1.7E-07	
Indeno(1,2,3-cd)pyrene	0.38	--		0.0E+00	
Dibenz(a,h)anthracene	0.11	--		0.0E+00	
Benzo(g,h,i)perylene	--	--	0.0048		

**TOTALS: 2.1E-07 5.2E-06**

COMPOUND	RESIDENTIAL DIRECT EXPOSURE CHHSL (CANCER)	RESIDENTIAL DIRECT EXPOSURE ESL (NON-CANCER)	UCL95 CONCENTRATION	CANCER RISK	HAZARD
Total PCBs	0.089	1.1	0.0332	3.7E-07	3.0E-02

**TOTALS: 3.7E-07 3.0E-02**

COMPOUND	RESIDENTIAL DIRECT EXPOSURE ESL (CANCER)	RESIDENTIAL DIRECT EXPOSURE ESL (NON-CANCER)	UCL95 CONCENTRATION	CANCER RISK	HAZARD
TPHmo and HEM (ppm)	--	10,000	96.5		9.7E-03

**TOTALS: 0.0E+00 9.7E-03**

COMPOUND	RESIDENTIAL DIRECT EXPOSURE ESL (CANCER)	RESIDENTIAL DIRECT EXPOSURE ESL (NON-CANCER)	MAXIMUM CONCENTRATION	CANCER RISK	HAZARD
TPHd	--	240	98		4.1E-01
TPHmo	--	10,000	120		1.2E-02

**TOTALS: 0.0E+00 4.2E-01**

## **APPENDIX A**

### **REGULATORY CORRESPONDENCE**



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

January 30, 2014

Mr. Mike Parker (Sent via E-mail to: [mparker@quattrorealty.com](mailto:mparker@quattrorealty.com))  
Quattro Realty Group  
500 La Gonda Way, Suite 295  
Danville, CA 94526

Subject: Case File Review for SLIC Case No. RO0003131 and GeoTracker Global ID T10000005547,  
The Green, 5411 Martinelli Way, Dublin, CA 94568

Dear Mr. Parker:

Alameda County Environmental Health (ACEH) has opened a Spills, Leaks, Investigations, and Cleanup (SLIC) case for the above referenced site in order to review the proposed development of the site. A mix of residences and commercial development is currently planned for the 27-acre site. One of the supplemental mitigation measures presented in the Environmental Impact Report for the development requires that the Applicant/Developer notify ACEH of the proposed project and the intent to utilize the site for residential uses. If directed by ACEH, a site investigation or health risk assessment shall be completed prior to commencement of construction.

Our review of the case file, which is described in the Technical Comments below, has identified several issues that need to be addressed in order to complete assessment of the site. Therefore, we request that you **submit a Work Plan by March 31, 2014** that addresses the technical comments below.

#### **REQUEST FOR INFORMATION**

We request that you submit copies of any reports you have documenting additional investigation activities or other work that are relevant to the environmental site conditions and not currently in ACEH case files. This includes Phase I environmental site assessment reports and site investigations conducted for potential real estate transactions. ACEH case files may be reviewed online using the ACEH website (<http://www.acgov.org/aceh>). Specific relevant reports that appear to be missing from ACEH case files include the following:

ADR Environmental Group, Inc., *Phase I Environmental Site Assessment for the Future Emerald Place Property*, April 15, 2006.

Levine Fricke, *Due Diligence Environmental Review, Commerce One Parcel, Hacienda Drive and Interstate 580, Dublin, CA*, May 20, 2003.

Levine Fricke, *Limited Soil Sampling and Analysis Program, Commerce One Parcel, Hacienda Drive and Interstate 580, Dublin, CA*, October 9, 2003.

Terraphase, *Phase II Site Investigation Report, Parcel 16A Southwest Corner of Dublin Boulevard and Hacienda Drive, Dublin, California*, September 12, 2012.



Treadwell & Rollo, *Phase I Environmental Site Assessment Proposed IKEA Store Development, Interstate 580 and Hacienda Drive*, April 9, 2004.

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Treadwell & Rollo, *Soil Sampling and Chemical analysis, Martinelli Way at hacienda Drive, IKEA – Dublin Off-site Development, Dublin, California*, October 31, 2005.

## **TECHNICAL COMMENTS**

1. **Underground Storage Tank Removed in 2008.** On September 5, 2008, a 1,100-gallon steel underground storage tank (UST) was discovered during grading activities near the southwest corner of the site. The UST was removed on September 30, 2008. After removal of the UST, observations and confirmation soil sampling indicated that elevated concentrations of petroleum hydrocarbons were present in soils outside the excavation. Fuel leak case RO0002993 was opened by ACEH in February 2009. Tank pit soil overexcavation was conducted in May 2009. Further excavation in the southwestern portion of the excavation was conducted in September and October 2009 along with pumping of water from the excavation. The tank pit water sample collected in October 2009 detected TPH as gasoline and TPH as diesel at concentrations of 109 and 42,300 micrograms per liter ( $\mu\text{g/L}$ ), respectively. Additional pumping of groundwater from the tank pit was conducted in November 2009. Following the pumping in November 2009, a grab groundwater sample was collected from the tank pit. TPH as diesel was detected at a concentration of 114  $\mu\text{g/L}$  in the tank pit groundwater sample. Fuel leak case RO0002993 was closed by ACEH with a site management requirement that ACEH will re-evaluate the case if a change in land use to any residential or other conservative land use scenario is proposed. Residential land use is currently proposed for the site. ACEH has reviewed the case and evaluated site conditions under the framework of the State Water Resources Control Board Low-threat Closure Policy. Site conditions in the area of the former UST appear to meet the criteria for unrestricted use. ACEH is not requesting further work in the area of the former UST in the southwestern portion of the site at this time.
  
2. **Volatile Organic Compounds in Groundwater.** Volatile organic compounds (VOCs) were detected at concentrations up to 100  $\mu\text{g/L}$  in grab groundwater samples collected north of the site in 1998. The source of the VOCs was not identified but was suspected to be within Parcel 15 north of the site. Potential sources within Parcel 15 included two gasoline service station, a public works shop, and a laundry. In order to help assess whether VOCs in groundwater may pose a risk for the site, soil vapor samples were collected in a grid pattern from five locations by Ground Zero Analysis in 2013. VOCs were not detected in the five soil vapor samples at concentrations above relevant screening levels. In order to provide further information with regard to the location of the potential VOC sources and the five soil vapor samples collected at the site, we request that you present a map and table in the Work Plan requested below that shows the following:
  - The five 2013 soil vapor sampling locations collected by Ground Zero Analysis.
  - All grab groundwater data collected within 500 feet of the site boundary including but not restricted to data collected by Erler & Kalinowski in 1998, Versar in 1998, or Terraphase in 2012.
  - All soil vapor data collected within 500 feet of the site boundary including but not restricted to data collected by Erler & Kalinowski in 1998, Versar in 1998, or Terraphase in 2012.

- Locations of sanitary sewer lines which could act as sources.
  - Former site features within Parcels 15, 16, or 16A.
3. **Fuel Depot.** Further investigation of the Fuel Depot Area is necessary. On April 15, 1998, trenches were excavated to remove buried debris in the Fuel Depot Area as described in the Erler & Kalinowski June 19, 1998 report entitled, "*Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment.*" The trenches were backfilled with removed soil and "track-walked" for compaction. However, no soil samples were collected to define the extent of contamination within the tank pit. It is also not clear whether all debris was removed from the area. Grab groundwater samples were collected from 25-foot deep boreholes to evaluate the extent of groundwater contamination. Based on the results of the groundwater sampling, Erler & Kalinowski Report concluded that diesel fuel in groundwater was limited to the immediate vicinity of the fuel storage depot. The extent of soil contamination in the Fuel Depot area remains undefined. In the Work Plan requested below, please propose additional investigation to define the extent of soil and groundwater contamination in the Fuel Depot area.
4. **Railroad Spur.** Further investigation of the railroad spur appears to be necessary to evaluate whether railroad operations affected the near surface soils. Results from five soil borings along the railroad spur are presented in the Erler & Kalinowski June 19, 1998 report entitled, "*Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment.*" The borings extended to a depth of 6 to 9 feet with one soil sample collected at the interface between gravel fill (possibly railroad ballast) and first encountered soil (approximately 3.5 to 5.5 feet bgs). No soil samples appear to have been collected from near-surface soils. The extent of grading or removal of the railroad spur since 1998 is not clear. In the Work Plan requested below, we request the following:
- Description of the whether rails, rail ties, and ballast still remain at the site.
  - Description of the extent of grading that appears to have been conducted along the railroad spur.
  - Summary of results from previous investigations along the railroad spur.
  - If the railroad ballast remains on site, sampling of the railroad ballast will be required to evaluate for heavy metals such as lead, which was used in rail car bearings, heavy aliphatic petroleum hydrocarbons, creosote, and PCBs.
  - If the ballast has been or will be removed, sampling of the near surface soils adjacent to the ballast will be required.
  - Please propose soil sampling and analysis as appropriate to evaluate the former railroad spur.
5. **Incinerator.** An incinerator was formerly located in the northeastern corner of the site. In 2001, approximately 3,400 cubic yards of burn waste and impacted fill was removed from the site and disposed at the Chemical Waste management facility in Kettleman Hills, CA. In correspondence dated December 5, 2005, the California Department of Toxic Substances concluded that the site does not appear to pose a threat to human health and the environment under a residential land use scenario. Based on the DTSC evaluation, no further investigation of the Incinerator area is requested at this time.

6. **Site Grading and Stockpiles.** Site grading and stockpiling has been conducted at various times on this site. Since the grading and stockpiling has not been well documented, some investigation of the source of the stockpiled material may be necessary. In the Work Plan requested below, please describe the sampling and/or removal actions that will be undertaken for the soil stockpiles at the site.
7. **Herbicides.** The Phase I Environmental Site Assessment dated August 2, 2013 and prepared by Engeo Incorporated, recommended sampling of near-surface soils for herbicides within areas of proposed residential development. During the 2013 investigation by Ground Zero Analysis, soil samples were collected at a depth of 1 feet bgs from hand auger borings near five soil vapor sampling locations and were analyzed for chlorinated and nitrophenol herbicides. Herbicides were not reported at concentrations above relevant screening criteria. However, the soil samples were only analyzed for herbicides and not other constituents of concern such as metals are frequently detected in areas where chemical have been applied for weed control. The lack of metals data appears to be a data gap. In the Work Plan requested below, we request that you propose soil sampling with metals analysis for near-surface soil samples to address this data gap,
8. **Environmental Concern from Phase I Report.** The Phase I Environmental Site Assessment dated August 2, 2013 and prepared by Engeo Incorporated, recommended sampling of discolored soil that was observed east of the existing structure on the site. Please discuss this area in the Work Plan and whether sampling has been or will be conducted for this area.
9. **Transformers.** Please indicate whether any electrical transformers were previously present at the site.
10. **Well Along Western Boundary of Site.** One well was observed along the western property boundary as described in the Engeo "*Phase I Environmental Site Assessment*," dated August 2, 2013. In the Work Plan requested below, please describe future plans to investigate, utilize, and/or destroy this well.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **March 31, 2014** – Work Plan

Quattro Realty Group  
RO0003131  
January 30, 2014  
Page 5

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org). Case files can be reviewed online at the following website: <http://www.acgov.org/aceh/index.htm>.

Sincerely,



Digitally signed by Jerry Wickham  
DN: cn=Jerry Wickham, o=Alameda County Environmental  
Health, ou, email=jerry.wickham@acgov.org, c=US  
Date: 2014.01.30 18:02:33 -08'00'

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297  
Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Greg Stahl, Ground Zero Analysis, Inc., 1172 Kansas Avenue, Modesto, CA 95351 (*Sent via E-mail to: [gstahl@groundzeroanalysis.com](mailto:gstahl@groundzeroanalysis.com)*)

Ryan Batty, California Department of Toxic Substances Control, Sacramento, CA (*Sent via E-mail to: [rbatty@dtsc.ca.gov](mailto:rbatty@dtsc.ca.gov)*)

Jerry Wickham, ACEH (*Sent via E-mail to: [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)*)  
GeoTracker, eFile



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

May 7, 2014

Mr. Mike Parker (Sent via E-mail to: [mparker@quattrorealty.com](mailto:mparker@quattrorealty.com))  
Quattro Realty Group  
500 La Gonda Way, Suite 295  
Danville, CA 94526

Subject: Work Plan Review for SLIC Case No. RO0003131 and GeoTracker Global ID T10000005547, The Green, 5411 Martinelli Way, Dublin, CA 94568

Dear Mr. Parker:

Alameda County Environmental Health (ACEH) has reviewed the Spills, Leaks, Investigations, and Cleanup (SLIC) case for the above referenced site including the document entitled, "Workplan for Further Investigation," dated April 23, 2014 (Work Plan). The Work Plan proposes the following investigation activities:

- Soil and groundwater sampling in the former Fuel Depot area
- Shallow soil sampling along the former Railroad Spur
- Sampling of soil stockpiles
- Sampling for metals at five locations.

Based on our review of the Work Plan, we have several technical comments which will require modifications and/or additions to the Work Plan. We request that you submit a Revised Work Plan that addresses the technical comments below.

#### **TECHNICAL COMMENTS**

1. **Fuel Depot Borings.** The Work Plan proposes direct push soil borings at four locations. The proposed boring location that is within the blue outline of the Fuel Depot area as presented on Figure 9 of the Work Plan is acceptable. The remaining three proposed borings are approximately 100 feet south, 125 feet west, and 130 feet east, respectively, of the proposed boring within the Fuel Depot area. One of the primary purposes of the borings is to define the extent of soil contamination in the Fuel Depot area. Three of the four proposed borings appear to be too far from the Fuel Depot area to meet this objective. Therefore, we request that the plan for proposed borings within the Fuel Depot area be revised to include a total of six soil borings that are located within closer proximity to the Fuel Depot Area. Using the currently proposed boring within the Fuel Depot Area as a central point of reference (within the blue outline on Figure 9), we request that the remaining five soil borings be advanced approximately 50 feet northwest, 50 feet northeast, 50 feet east, 50 feet southwest, and 50 feet southeast of the centrally located boring.

We request that the soil borings be continuously sampled for logging and screening purposes to the total depth of the boring. Soil samples are to be visually logged in the field for soil type, color, moisture content, odor, and other observed features and screened with a photoionization (PID) detector. We request that soil samples be collected for laboratory analysis from any interval where staining, odor, or elevated PID readings are observed. If no staining, odor, or elevated PID readings are observed, collection of soil samples for laboratory analysis at five foot intervals is

acceptable. Soil samples are to be analyzed for TPH as gasoline, diesel, and fuel oil using EPA Method 8015 Fuel Screen; BTEX, fuel oxygenates, naphthalene, and lead scavengers (EDB and EDC) using EPA Method 8260B, organic lead using DHS LUFT Method, and total lead using EPA Method 6010B. Please include these modifications in the Revised Work Plan requested below.

The proposed collection of grab groundwater samples from each boring using a Hydropunch or similar discrete sampling equipment is acceptable. We request that the groundwater samples be analyzed for TPH as gasoline, diesel, and fuel oil using EPA Method 8015 Fuel Screen and volatile organic compounds (full scan including chlorinated hydrocarbons, oxygenates, and alcohols) using EPA Method 8260B. Please include these modifications in the Revised Work Plan requested below.

2. **Railroad Spur.** The Work Plan indicates that no evidence of the former rail spur was found. The area has been graded with no signs of the rails, ballast, or ties. The Work Plan proposes the collection of soil samples approximately 10 feet and 20 feet on either side of the former spur from a depth of approximately 2 feet. The proposed locations of the three transects is acceptable. However, we request that one additional soil sample be collected from each transect. In addition to the proposed offset samples, we request that one additional soil sample be collected directly along the projected former rail spur. At each of the three locations, soil samples are to be collected from depths of 0.5 feet below ground surface (bgs). The proposed analyses appear to be generally acceptable; however, the specific methods were not identified. In place of total oil and grease, we recommend analysis for hexane extractable materials using EPA method 9071B. Please include these modifications in the Revised Work Plan requested below.
3. **Herbicides/Metals.** The Work Plan proposes metals analysis of shallow soil samples from five locations previously sampled in 2013. The proposed scope of work is generally acceptable; however, the depth of the shallow soil samples is not specified. We request that the soil samples be collected from a depth of 0.5 feet bgs. Please include these modifications in the Revised Work Plan requested below.
4. **Site Grading and Stockpiles.** The Work Plan proposes collection of a composite sample from the soil and gravel stockpile. For soils that may be used on site, we request that at a minimum, the sampling be consistent with guidance in the California Department of Toxic Substances Control document entitled, "*Information Advisory, Clean Imported Fill Material*," dated October 2001. In order to assess the adequacy of proposed sampling, we request that the following information be included a Revised Work Plan:
  - Whether the soil will potentially be re-used on-site.
  - Volume of the soil stockpiles.
  - Source of fill. If unknown, please state unknown source.
  - Heterogeneity of the fill.
  - Whether the fill contains any debris or construction material.
  - Types of samples proposed (example composite or discrete).
  - Proposed distribution within the stockpile (depth, etc.).

Please note that composite soil sampling is generally not acceptable for volatile or semi-volatile analysis, soils with a high clay content due to difficulties in mixing, and for materials that are variable in character. Please include this additional information and proposal for stockpile soil sampling in the Revised Work Plan requested below.

5. **GeoTracker Submittals.** As described in the attached Responsible Party(ies) Legal Requirements/Obligations, all technical reports must be submitted to both the ACEH ftp site and the State Water Resource Control Board (SWRCB) GeoTracker website. Therefore, please claim your site on GeoTracker and upload the Work Plan and all future reports to the GeoTracker website. Pursuant to CCR Sections 2729 and 2729.1, beginning July 1, 2005 for SLIC cases, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Additionally, all permanent monitoring points utilized to collect groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website.

#### **TECHNICAL REPORT REQUEST**

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- **June 13, 2014 – Revised Work Plan**  
File to be named: WP\_R\_yyyy-mm-dd RO3131

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org). Case files can be reviewed online at the following website: <http://www.acgov.org/aceh/index.htm>.

Sincerely,



Digitally signed by Jerry Wickham  
DN: cn=Jerry Wickham, o=Alameda County Environmental  
Health, ou, email=jerry.wickham@acgov.org, c=US  
Date: 2014.05.07 09:49:00 -07'00'

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297  
Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Greg Stahl, Ground Zero Analysis, Inc., 1172 Kansas Avenue, Modesto, CA 95351 (Sent via E-mail to: [gstahl@groundzeroanalysis.com](mailto:gstahl@groundzeroanalysis.com))

Ryan Batty, California Department of Toxic Substances Control, Sacramento, CA (Sent via E-mail to: [rbatty@dtsc.ca.gov](mailto:rbatty@dtsc.ca.gov))

Jerry Wickham, ACEH (Sent via E-mail to: [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org))  
GeoTracker, eFile



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

June 11, 2014

Mr. Mike Parker (Sent via E-mail to: [mparker@quattrorealty.com](mailto:mparker@quattrorealty.com))  
Quattro Realty Group  
500 La Gonda Way, Suite 295  
Danville, CA 94526

Stephen Pilch  
Stockbridge/BHV Emerald Land Co., LLC  
4 Embarcadero Center  
San Francisco, CA 94111

Subject: Work Plan Review for SLIC Case No. RO0003131 and GeoTracker Global ID T10000005547,  
The Green, 5411 Martinelli Way, Dublin, CA 94568

Dear Mr. Parker and Mr. Pilch:

Alameda County Environmental Health (ACEH) has reviewed the Spills, Leaks, Investigations, and Cleanup (SLIC) case for the above referenced site including the document entitled, "*Addendum to Workplan for Further Investigation*," dated May 28, 2014 (Work Plan Addendum). The Work Plan Addendum, which was prepared in response to technical comments in ACEH correspondence dated May 7, 2014, is an addendum to a document entitled, "*Workplan for Further Investigation*," dated April 23, 2014 (Work Plan).

The proposed scope of work as modified in the Work Plan Addendum is conditionally approved and may be implemented provided that the technical comment below is addressed and incorporated during the proposed investigation. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan Addendum and technical comment below is proposed. We request that you address the following technical comment, perform the proposed work, and send us the reports described below.

#### **TECHNICAL COMMENTS**

1. **Stockpile Soil Analysis.** In addition to the proposed laboratory analyses for stockpile soil samples described in the Work Plan Addendum, we request that the stockpile soil samples also be analyzed for creosote and polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270, asbestos using polarized light microscopy, and PCBs using EPA Method 8082. Please present the results in the Site Investigation Report requested below for ACEH approval prior to reuse of the stockpiles on site.



Stockbridge/BHV Emerald Land Co., LLC  
RO0003131  
June 11, 2014  
Page 2

### TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- **October 10, 2014 – Site Investigation Report**  
File to be named: SWI\_R\_yyyy-mm-dd RO3131

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org). Case files can be reviewed online at the following website: <http://www.acgov.org/aceh/index.htm>.

Sincerely,



Digitally signed by Jerry Wickham  
DN: cn=Jerry Wickham, o=Alameda County Environmental  
Health, ou, email=jerry.wickham@acgov.org, c=US  
Date: 2014.06.11 10:15:30 -07'00'

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297  
Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Greg Stahl, Ground Zero Analysis, Inc., 1172 Kansas Avenue, Modesto, CA 95351 (*Sent via E-mail to: [gstahl@groundzeroanalysis.com](mailto:gstahl@groundzeroanalysis.com)*)

Ryan Batty, California Department of Toxic Substances Control, Sacramento, CA (*Sent via E-mail to: [rbatty@dtsc.ca.gov](mailto:rbatty@dtsc.ca.gov)*)

Jerry Wickham, ACEH (*Sent via E-mail to: [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)*)  
GeoTracker, eFile

**APPENDIX B**  
**DRILLING PERMIT**



# ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9308  
E-MAIL [whong@zone7water.com](mailto:whong@zone7water.com)

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 5411 Martinelli Way, Dublin, CA

PERMIT NUMBER 2014089

WELL NUMBER \_\_\_\_\_

APN 986-0033-004-00, 005-02 & 006-00

Coordinates Source Google Earth ft. Accuracy \_\_\_\_\_ ft.  
LAT: 37, 42', 12" N ft. LONG: 121, 53', 27" W ft.  
APN 986-0033-004, 005-2, & 006

PERMIT CONDITIONS  
(Circled Permit Requirements Apply)

CLIENT  
Name Stockbridge BHV Emerald Place Land Co. LLC  
Address 500 La Gonda Way Phone (925) 314-2700  
City Danville, CA Zip 94526

- A. GENERAL**
  1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date.
  2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller.
  3. Permit is void if project not begun within 90 days of approval date.
  4. Notify Zone 7 at least 24 hours before the start of work.

APPLICANT  
Name Ground Zero Analysis, Inc.  
Email gstahl@groundzeroanalysis.com (209) 522-4227  
Address 1172 Kansas Ave. Phone (209) 522-4119  
City Modesto, CA Zip 95351

- B. WATER SUPPLY WELLS**
  1. Minimum surface seal diameter is four inches greater than the well casing diameter.
  2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
  3. Grout placed by tremie.
  4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
  5. A sample port is required on the discharge pipe near the wellhead.

TYPE OF PROJECT:  
Well Construction  Geotechnical Investigation   
Well Destruction  Contamination Investigation   
Cathodic Protection  Other Phase II Invest. X

PROPOSED WELL USE:  
Domestic  Irrigation   
Municipal  Remediation   
Industrial  Groundwater Monitoring   
Dewatering  Other Soil/GW Sample X

DRILLING METHOD:  
Mud Rotary  Air Rotary  Hollow Stem Auger   
Cable Tool  Direct Push  Other Hand Auger 34

DRILLING COMPANY V&W Drilling, Inc.

DRILLER'S LICENSE NO. C-57 720904

WELL SPECIFICATIONS:  
Drill Hole Diameter \_\_\_\_\_ in. Maximum \_\_\_\_\_  
Casing Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.  
Surface Seal Depth \_\_\_\_\_ ft. Number \_\_\_\_\_

SOIL BORINGS:  
Number of Borings 40 Maximum \_\_\_\_\_  
Hole Diameter 2 in. Depth 15 ft.

ESTIMATED STARTING DATE 06/18/14  
ESTIMATED COMPLETION DATE 06/25/14

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-88.

APPLICANT'S SIGNATURE [Signature] Date 6/13/14

- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
  1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
  2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
  3. Grout placed by tremie.

**D. GEOTECHNICAL.** Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

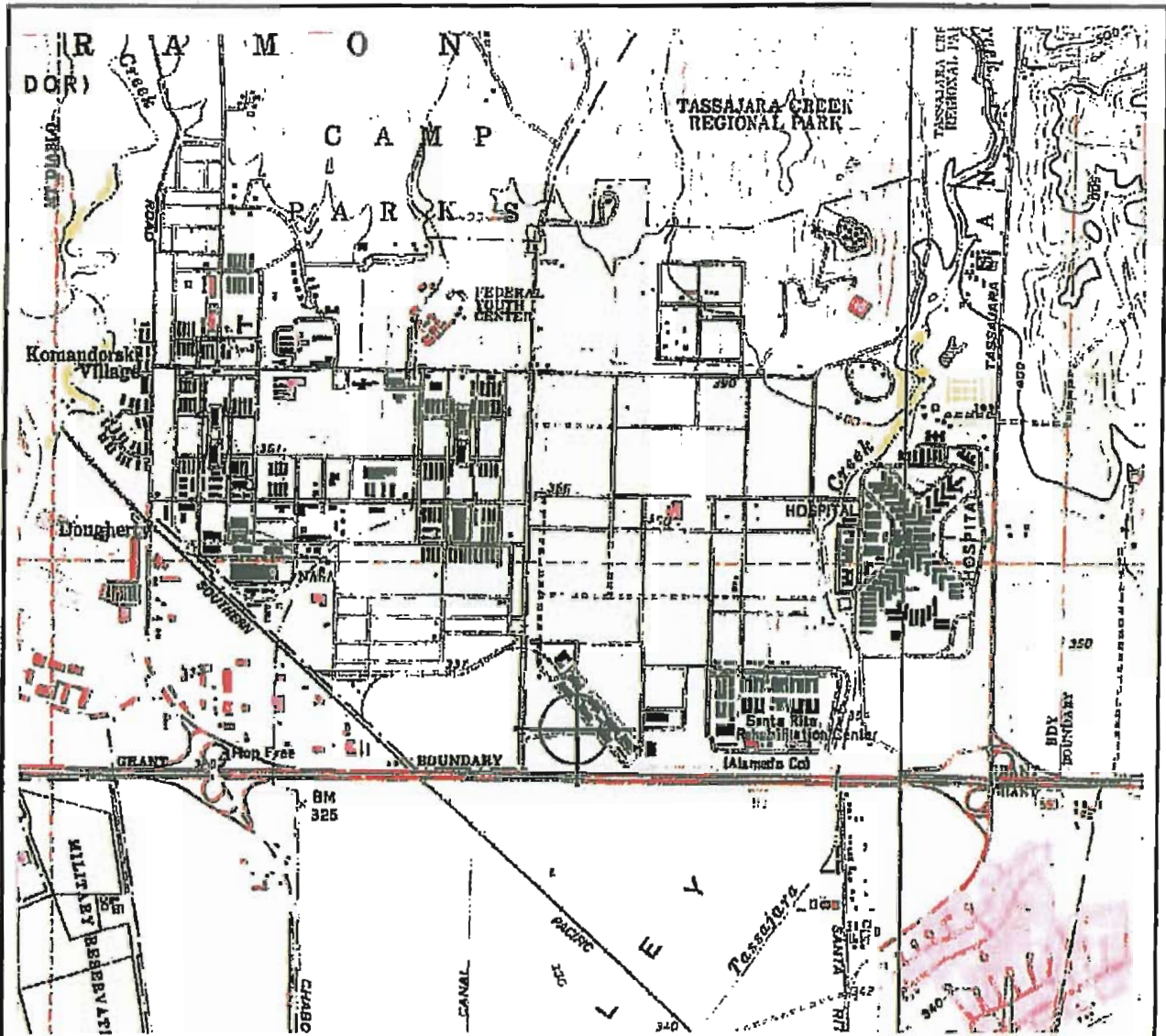
**E. CATHODIC.** Fill hole above anode zone with concrete placed by tremie.

**F. WELL DESTRUCTION.** See attached.

**G. SPECIAL CONDITIONS.** Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.

Approved [Signature] Date 6/16/14  
Wyman Hong

ATTACH SITE PLAN OR SKETCH



SCALE 1:24000



LEGEND



SITE LOCATION

NATIONAL GEODETIC VERTICAL DATUM OF 1929



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE: DUBLIN, CA.



SITE LOCATION MAP  
THE GREEN  
5411 MARTINELLI WAY  
DUBLIN, CA

FIGURE

1

FIG 1012/SITELOC



- LEGEND**
- Proposed Radon Soil Sample
  - ⊕ Proposed Gasprobe Soil & DW Sample
  - ✕ Proposed Rail Spur Soil Sample

- Approximate Property Line
- 1,2,3 Areas of Remediation
- Proposed Stockpile Sample

**FIGURE 9R**  
**PROPOSED SAMPLING LOCATIONS (Revised 05/16/14)**  
 Stockbridge - The Green  
 Dublin, California



## **APPENDIX C**

### **FIELD NOTES**

## Daily Field Report

Project Name: The Vreen

Field Technician: JLV &amp; VS

Date: 6/17/14

Project Activity: Hand auger + USA

Job Number: 942

Page: 1 of

8:00 gather equipment + supplies; load; travel (8:45 depart)

10:00 on site

- locate reoprop bearings first to mark for USA & stake with flags. locate SBI (S55°E off corner of building + 500 feet south east). Then mark off other 5 bearings by going 50 ft east, north east, north west, southeast, southwest. Mark street for USA.

- locate Railroad bearings. Take bearing and measure to locations w/ hip chain. Mark the central bearing (T1-T2-T3) then stake out 10' & 20' locations, perpendicular to bearing) both directions (north east & south west.)

- sample Railroad spur locations. Greg and I split up; he sampled at location T2 while I sampled T3. samples collected at 6" below grade into stainless steel tubes. Then taped (teflon), capped and put on ice.

- sample RS-T3-20SW collected at 12:10.

- sample RS-T3-10SW collected at 12:14.

- sample RS-T3-C collected at 12:20

- sample RS-T3-10NE collected at 12:24

- sample RS-T3-20NE collected at 12:25.

- move to T1.

- ~~RS-T1-C~~ RS-T1-C collected at 12:44

- RS-T1-10SW collected at 12:46

- RS-T1-10NE @ 12:48

- RS-T1-20SW @ 12:52

- RS-T1-20NE @ 12:55

Daily Field Report

Project Name: The green

Field Technician: J-V

Date: 6/17/14

Project Activity:

Job Number:

Page: 2 of

• continue onto HAB's without wreg.

• sample HAB4 collected from 6" below grade at 13:15.

• sample HAB1 collected at 13:25. sampled 6" below grade.

• sample HAB5 collected at 13:30.

• sample HAB2 collected at 13:45

• sample HAB3 collected at 13:55.

• 14:15 done on site.

• 15:30 back at office

- unload

- paperwork



**Daily Field Report**

Project Name: The Green

Field Technician: JLV

Date: 6/18/14

Project Activity: stockpile sampling

Job Number: ~~6118/14~~ 942

Page: 3 of   

6:30 load equipment & depart.

8:00 on site.

- set up next to stockpiled soil and start sampling.

- large soil pile is SP1; small gravel pile SP2.

- collect samples from various random depths.

- soil pile (stock pile) 1 (SP1): 2 samples collected @ each location

- sample SP1A-3' collected at 8:35

- sample SP1B-6" collected at 8:40

- SP1C-6' @ 8:55

- SP1D-2' @ 9:05

- SP1E-3' @ 9:18

- SP1F-6" @ 9:30

- SP1G-1' @ 9:45

- SP1H-7' @ 9:55

- SP1I-1.5' @ 10:05

- ~~SP1J-2'~~ <sup>3"</sup> SP1J-3" @ 10:10

- SP1K-2' @ 10:20

- SP1L-2' @ 10:30

- soil pile SP2:

- SP2A-1' @ 10:45

- SP2B-6" @ 11:00

11:15 stay on site

**Daily Field Report**

Project Name: The Green

Field Technician: Joe Vasquez

Date: 6/19/14

Project Activity: Soil borings

Job Number: 942

Page: 4 of

on site at 9:15; V & W on site at 9:30. check for USA conflicts; none.

- Drive rigs out into field and into location on SB1; the central boring.

• 9:45 start drilling SB1 w/ Geoprobe direct push rig.

continuous core every boring. sampler 2 3/4 inches in diameter.

- sample every 5 Ft till water. Hit water in the

20-24 Ft sample. water came up to 15 Ft and

kept rising. sample collected through 5 Ft of PVC screen.

• sample SB1 collected at 11:20 (water sample)

• move to SB2, the southwest boring.

• water sample SB2 collected at 13:15

• earlier I called wyman Harg regarding grout inspection. He

said he was busy on a site and might come out

after lunch. gave us ok to proceed without him.

• 13:45 wyman Harg on site. watched us for a few minutes

then took off. He'll be back tomorrow. gave us ok to

proceed.

• 13:40 move to SB3. at 12' we hit gravel, from

12 to ~14' poorly graded gravel. Very wet. we

advanced the hydropunch into the formation to 16 feet

then pulled back 4' to expose 4' of screen.

• SB3 collected at 14:30 through hydropunch.

- grout all holes.

- cleanup.

## Daily Field Report

Project Name: The Green

Field Technician: Joe Vasquez

Date: 6/20/14

Project Activity: soil borings

Job Number: 942

Page: 5 of

on site at 8:20; Angel w/ V&W already here and set up.

~ 8:35 start pushing SB4. (Northwest boring)

push to 20' bgs. All clay. Checked for water at 20' and water was at 12' as measured w/ water level

probe. Sample through 5' of PVC screen, with tubing & check valve

• collected sample SB4 at 9:35.

• 9:45. move to SB5 (the northeast boring); set up and start pushing.

- At 20 Ft broke through clay. Sampled w/ PVC screen.

• sample SB5 collected at 11:00

11:15 set up on SB6 (eastern boring) and start pushing.

• at 16' signs of water but hole kept collapsing.

So we advanced hydro-punch tool to 20 Feet then retracted 4 feet and were able to collect water sample.

• SB6 collected at 12:40

• called Rich, the Curtis & Tompkins courier and he's in Livermore so he can get samples shortly.

• 12:30 meet courier from Curtis & Tompkins for sample pickup.

• 12:45 done on site.

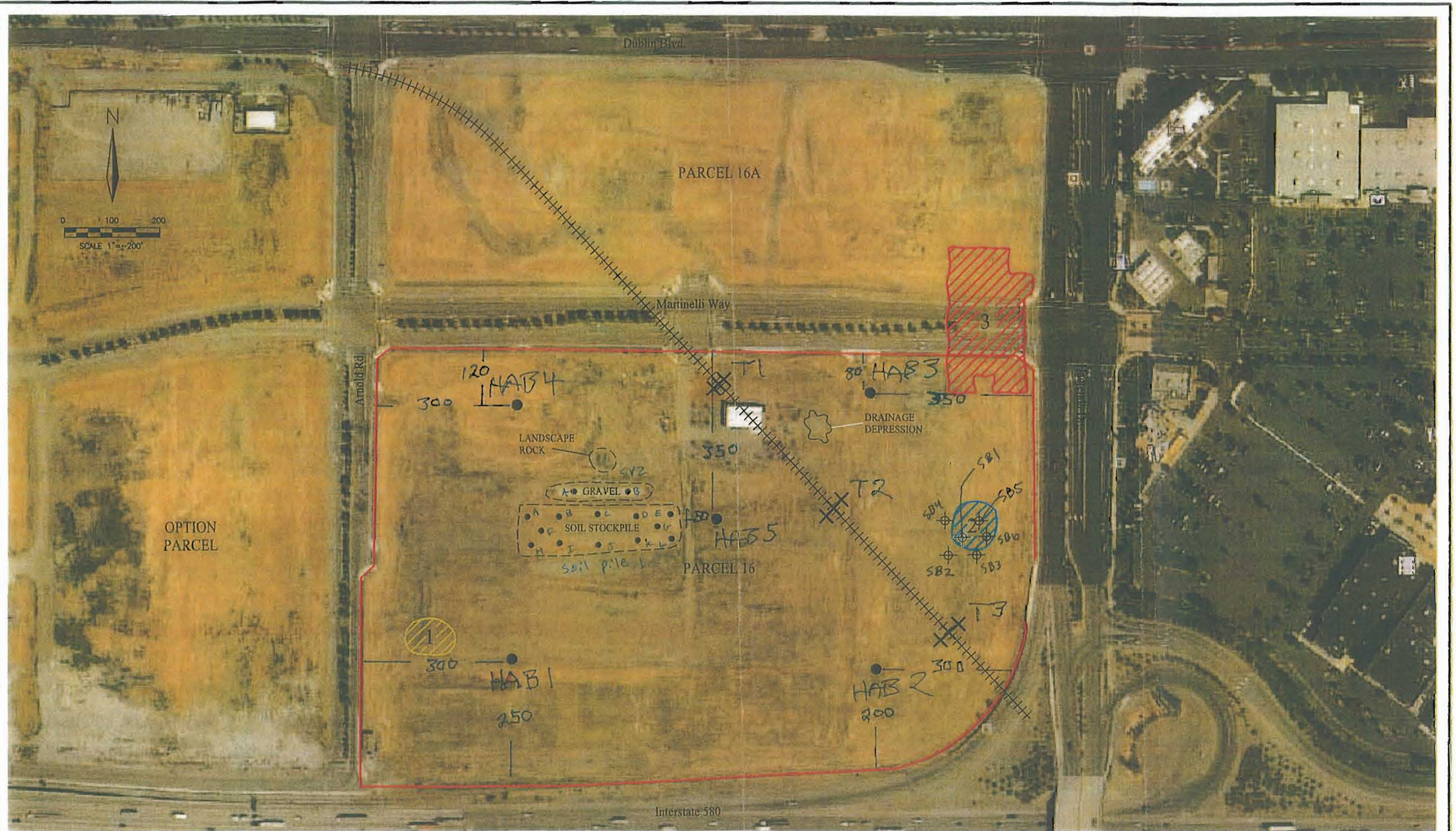


FIGURE 9R

PROPOSED SAMPLING LOCATIONS (Revised 05/16/14)

Stockbridge - The Green  
Dublin, California



- Approximate Property Line
- 1,2,3 Areas of Remediation
- Proposed Stockpile Sample

LEGEND

- Proposed Random Soil Sample
- ⊕ Proposed Geoprobe Soil & GW Sample
- ✕ Proposed Rail Spur Soil Sample

GROUND ZERO ANALYSIS

PROJECT 942  
 WELL/BORING NO. SBI  
 DATE/BY 6/19/14

INTERVAL/SAMPLE DESCRIPTION

LOG INTERVAL	0-5		5-6.5		6.5-8		8-12		12-16		16-20	
SAMPLE INTERVAL	0-4	4-5	5-6.5	6.5-8	8-12	12-16	16-20					
BLOWCOUNTS	-	-	-	-	-	-	-	-	-	-	-	-
% SAND	5	5	20	5	5	11-15	10-15					
GR SIZE/RANGE	FN (M) CRS	FN (M) CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS
ANGULARITY	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R
GRADING	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)
% GRAVEL	25	25	5	20	5-10							5
GR SIZE/RANGE	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS	(FN) CRS
ANGULARITY	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R
GRADING	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)	W (M)
COBBLES												
% FINES	70	70	75	75	85-90	85-90	80-85					
DRY STRENGTH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H
PLASTICITY	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H
COMPACTNESS/CONSISTENCY												
COLOR	dark brown/ almost black	medium dark brown	dark brown	dark brown	dark brown	dark brown to bluish grey	bluish grey to dark brown					
ODOR	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG
ORGANICS	N Y	N Y	N Y	N Y	N Y	N Y	N Y	N Y	N Y	N Y	N Y	N Y
MOISTURE	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE		loose	10:00		10:10	11:25						
COMMENTS	red mottling		Strong red mottling	red mottling	some red mottling	at 14' color changes + odor. color = bluish grayish brown. odor = hydrogen sulfide	odor = 16-16.5	no odor 16.5-20				
SAMPLE ID		SBI →	SBI-9		SBI-10	SBI-15						
NAME	Fat clay w/ gravel →		silt w/ sand	Fat clay w/ gravel	Fat clay	Fat clay	Fat clay					
SYMBOL	CH	CH	ML	CH	CH	CH	CH					

GROUND ZERO ANALYSIS

PROJECT 942  
 WELL/BORING NO. SB1  
 DATE/BY 6/19/19

INTERVAL/SAMPLE DESCRIPTION

LOG INTERVAL	20-21.5	21.5-22.5	22.5-24				
SAMPLE INTERVAL	20-21.5	21.5-22.5	22.5-24				
BLOWCOUNTS	-	-	-	-	-	-	-
% SAND	10	35	4-10				
GR SIZE/RANGE	(FN) M CRS	(FN) M CRS	(FN) M CRS	FN M CRS	FN M CRS	FN M CRS	FN M CRS
ANGULARITY	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W P	W P	W P	W P	W P	W P	W P
% GRAVEL							
GR SIZE/RANGE	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS
ANGULARITY	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W P	W P	W P	W P	W P	W P	W P
COBBLES							
% FINES	90	65	90-95				
DRY STRENGTH	N L M H VH	N L M H VH	N L M H VH	N L M H VH	N L M H VH	N L M H VH	N L M H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L M H	L M H	L M H	L M H	L M H	L M H	L M H
PLASTICITY	N L M H	N L M H	N L M H	N L M H	N L M H	N L M H	N L M H
CMPTNNS/CNSSTNCY							
COLOR	dark Brown-greenish Brn	bluish brown	dark brown to greenish Brn				
ODOR	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG
ORGANICS	N Y	N Y	N Y	N Y	N Y	N Y	N Y
MOISTURE	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE	11:05						
COMMENTS	stiff	Δ = 15' loose, wet	stiff				
SAMPLE ID	SP1-20						
NAME	Fat clay	Sandy fat clay	Fat clay				
SYMBOL	CH	CH	CH				

GROUND ZERO ANALYSIS

PROJECT 942  
 WELL/BORING NO. SB2  
 DATE/BY 6/19/14

INTERVAL/SAMPLE DESCRIPTION

LOG INTERVAL	0-5		5-6.5		6.5-12		12-16		16-23	
SAMPLE INTERVAL	0-4	4-5	5-6.5	6.5-8	8-12	12-16	16-20			
BLOWCOUNTS	-	-	-	-	-	-	-	-	-	-
% SAND	5	→	15-20	5	10-20	25-30	5-10			
GR SIZE/RANGE	(FN) M CRS	FN M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS
ANGULARITY	A SA (SR) R	A SA SR R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R
GRADING	W (D)	W F	W (D)	W (D)	W (D)	W (D)	W (D)	W (D)	W (D)	W (D)
% GRAVEL	25	→								
GR SIZE/RANGE	FN (CRS)	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS
ANGULARITY	A SA (SR) R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W (D)	W F	W F	W F	W F	W F	W F	W F	W F	W F
COBBLES										
% FINES	70	→	80-90	95	80-90	70-75	90-95			
DRY STRENGTH	N L (M) H VH	N L W H VH	N (L) W H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L M (H)	L M H	(L) M H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H	L (M) H
PLASTICITY	N L (M) H	N L W H	N (L) W H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H	N L (M) H
CMPCTNSS/CNSSTNCY										
COLOR	dark brown →		brown	dark brown	dark brown	dark brown to bluish brown	dark brown to greenish brown			
ODOR	(N) SL M STRNG	N SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(M) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG
ORGANICS	(N) Y	N Y	(M) Y	(N) Y	(M) Y	(M) Y	(M) Y	(M) Y	(M) Y	(M) Y
MOISTURE	(DRY) WST WET	DRY WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE			11:50		12:05	12:20				
COMMENTS					10-12' red mottling.	odor at 14'-16' + color change				
SAMPLE ID			SB2-5		SB2-10	SB2-15				
NAME	Fat clay w/ gravel →		silt/cl sand	Fat clay	Fat clay	Sandy Fat clay	Fat clay			
SYMBOL	CH →		ML	CH	CH	CH	CH			

GROUND ZERO ANALYSIS

PROJECT 942  
 WELL/BORING NO. SB2  
 DATE/BY 6/19/14

INTERVAL/SAMPLE DESCRIPTION

LOG INTERVAL	10-23	23-24						
SAMPLE INTERVAL	20-23	23-24						
BLOWCOUNTS	- -	- -	- -	- -	- -	- -	- -	- -
% SAND	5-10	<del>35-40</del>						
GR SIZE/RANGE	(FH) M CRS	(FH) M CRS	FH M CRS	FH M CRS	FH M CRS	FH M CRS	FH M CRS	FH M CRS
ANGULARITY	A SA <del>SR</del> R	A SA <del>SR</del> R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W <del>P</del>	W <del>P</del>	W P	W P	W P	W P	W P	W P
% GRAVEL								
GR SIZE/RANGE	FH CRS	FH CRS	FH CRS	FH CRS	FH CRS	FH CRS	FH CRS	FH CRS
ANGULARITY	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W P	W P	W P	W P	W P	W P	W P	W P
COBBLES								
% FINES	40-45	<del>60-65</del>						
DRY STRENGTH	N L <del>M</del> H VH	N L <del>M</del> H VH	N L M H VH	N L M H VH	N L M H VH	N L M H VH	N L M H VH	N L M H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L <del>M</del> H	L <del>M</del> H	L M H	L M H	L M H	L M H	L M H	L M H
PLASTICITY	N L <del>M</del> H	N L <del>M</del> H	N L M H	N L M H	N L M H	N L M H	N L M H	N L M H
CMPTNSS/CNSSTNCY	<del>+</del>							
COLOR	dark brown	brown						
ODOR	(N) SL M STRNG	(N) SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG	N SL M STRNG
ORGANICS	(N) Y	(N) Y	N Y	N Y	N Y	N Y	N Y	N Y
MOISTURE	DRY <del>MST</del> WET	DRY <del>MST</del> WET	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET	DRY MST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE	13:00							
COMMENTS		∇ screen 19-24						
SAMPLE ID	SB2-20							
NAME	Fat clay	Sandy fat clay						
SYMBOL	CH	CH						



GROUND ZERO ANALYSIS

PROJECT The Green (942)  
 WELL/BORING NO. SB3  
 DATE/BY 6/19/14

INTERVAL/SAMPLE DESCRIPTION

LOG INTERVAL	0-9		9-10	10-12	12-14	14-16	
SAMPLE INTERVAL	0-4	4-6 → 9	9-10	10-12	12-14	14-16	
BLOWCOUNTS	- -	- -	- -	- -	- -	- -	- -
% SAND	10	→	5			35	
GR SIZE/RANGE	(FN) M CRS	FN M CRS	(FN) M CRS	FN M CRS	FN M CRS	(FN) M CRS	FN M CRS
ANGULARITY	A SA <u>SR</u> R	A SA SR R	A SA <u>SR</u> R	A SA SR R	A SA SR R	A SA <u>SR</u> R	A SA SR R
GRADING	W <u>0</u>	W F	W <u>0</u>	W F	W F	W <u>0</u>	W F
% GRAVEL	25	→	20	35-40	100		
GR SIZE/RANGE	(FN) CRS	FN CRS	FN CRS	FN CRS	FN <u>CRS</u>	FN CRS	FN CRS
ANGULARITY	A SA <u>SR</u> R	A SA SR R	A SA SR R	A SA <u>SR</u> R	A SA <u>SR</u> R	A SA SR R	A SA SR R
GRADING	W <u>0</u>	W F	W F	<u>W</u> F	W <u>0</u>	W F	W F
COBBLES							
% FINES	65	→	75	60-65		65	
DRY STRENGTH	N L <u>0</u> H VH	N L M H VH	N <u>0</u> H VH	N L <u>0</u> H VH	N L M H VH	N L M H VH	N L M H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L <u>0</u> H	L M H	<u>0</u> M H	L <u>0</u> H	L M H	<u>0</u> M H	L M H
PLASTICITY	H L <u>0</u> H	N L M H	<u>0</u> L M H	N L M <u>0</u> H	N L M H	N L <u>0</u> H	N L M H
CMPCTNSS/CNSSTNCY							
COLOR	dark brown →		brown	dark brown	dark green	brown	
ODDR	(N) SL M STRNG	N SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	N SL M STRNG
ORGANICS	(N) Y	N Y	(N) Y	(N) Y	(N) Y	(N) Y	N Y
MOISTURE	(DRY) MST WET	DRY MST WET	(DRY) MST WET	DRY <u>MST</u> WET	DRY MST <u>WET</u>	DRY MST <u>WET</u>	DRY MST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE		13:45		13:55		14:10	14:15
COMMENTS		1" sand lense at 7.5'	dry very loose	gravel increases w/ depth. almost all gravel in shoe of sampler	green stone gravel w/ quartz	loose	
SAMPLE ID		SB3-5		SB3-10		SB3-15	SB3-16
NAME	Fat clay w/ gravel →		Silt w/ gravel	Fat clay w/ gravel	poorly graded gravel	Sandy fat clay →	
SYMBOL	CH →		ML	CH	GP	CH	

GROUND ZERO ANALYSIS

INTERVAL/SAMPLE DESCRIPTION

PROJECT The green (942)  
 WELL/BORING NO. SB4  
 DATE/BY 6/20/19

LOG INTERVAL	0 - 4.5		4.5 - 9.5		9.5 - 20		
SAMPLE INTERVAL	0-4	4- <del>8</del> 8.5	8.5-9.5	9.5-12	12-16	16-20	
BLOWCOUNTS	-	-	-	-	-	-	-
% SAND	5 →		10	10 → 5-10		5-10	
GR SIZE/RANGE	(FM) M CRS	FN M CRS	(FM) M CRS	(FM) M CRS	FN M CRS	(FM) M CRS	FN M CRS
ANGULARITY	A SA (SR) R	A SA SR R	A SA (SR) R	A SA (SR) R	A SA SR R	A SA (SR) R	A SA SR R
GRADING	W (P)	W P	W (P)	W (P)	W P	W (P)	W P
% GRAVEL	25 →		15				
GR SIZE/RANGE	FN (CRS)	FN CRS	(FN) CRS	FN CRS	FN CRS	FN CRS	FN CRS
ANGULARITY	A SA (SR) R	A SA SR R	A SA (SR) R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W (P)	W P	(W) P	W P	W P	W P	W P
COBBLES							
% FINES	70 →		75	90 → 90-95		90-95	
DRY STRENGTH	N L (M) H VH	N L M H VH	N (L) M H VH	N L (M) H VH	N L M H VH	N L (M) H VH	N L M H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L (M) H	L M H	(L) M H	L (M) H	L M H	L (M) H	L M H
PLASTICITY	N L (M) H	N L M H	(N) L M H	N L (M) H	N L M H	N L (M) H	N L M H
COMPACTNESS/CONSISTENCY							
COLOR	brown →		light brown	bluish brown →		bluish brown to grayish (light) brown	
ODOR	(N) SL M STRNG	N SL M STRNG	(N) SL M STRNG	N SL (M) STRNG	N SL (M) STRNG	(N) M STRNG	N SL M STRNG
ORGANICS	(N) Y	N Y	(N) Y	(N) Y	(N) Y	(N) Y	N Y
MOISTURE	(DRY) MST WET	DRY MST WET	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	DRY (MST) WET	DRY MST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE		6:45		8:55	9:10	9:25	
COMMENTS		PID=0	loose	PID=25.1	PID=22.1	PI came up to 12' odw + color decrease w/ depth PFD=3.9	
SAMPLE ID		SB4-5		SB4-10	SB4-15	SB4-20	
NAME	Fat clay w/ gravel →		silt w/ gravel	Fat clay →		Fat clay	
SYMBOL	CH	CH	ML	CH	CH	CH	

GROUND ZERO ANALYSIS

PROJECT The Green (942)  
 WELL/BORING NO. SBS  
 DATE/BY 6/20/14

INTERVAL/SAMPLE DESCRIPTION

LOG INTERVAL	0-6	6-11	11-19	19-20	19-20	19-20
SAMPLE INTERVAL	0-4-6	6-8 → 11	11-12	12-16	16- <del>17</del>	19-20
BLOWCOUNTS	-	-	-	-	-	-
% SAND	20	20 <del>CRS</del>	5 → → →			30
GR SIZE/RANGE	(FN) M CRS	(FN) M CRS	(FN) M CRS	FN M CRS	FN M CRS	(FN) M CRS FN M CRS
ANGULARITY	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA SR R	A SA SR R	A SA (SR) R A SA SR R
GRADING	W (P)	W (P)	W (P)	W F	W P	W (P) W P
% GRAVEL		5				
GR SIZE/RANGE	FN CRS	(FN) CRS	FN CRS	FN CRS	FN CRS	FN CRS FN CRS
ANGULARITY	A SA SR R	A (SA) SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R A SA SR R
GRADING	W P	W (P)	W P	W P	W P	W P W P
COBBLES						
% FINES	80	75-80	95 → → →			70
DRY STRENGTH	N (D) M H VH	N L (M) H VH	N L (M) H VH	N L M H VH	N L M H VH	N L (M) H VH N L M H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R N SLW R
TOUGHNESS	(D) M H	L (M) H	L (M) H	L M H	L M H	L (M) H L M H
PLASTICITY	N (L) M H	N L (M) H	N L (M) H	N L M H	N L M H	N L (M) H N L M H
CMPTNSS/CNSSTNCY						
COLOR	brown	brown	light brown →		dark brown	dark brown
ODOR	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	N SL M STRNG	(N) SL M STRNG	(N) SL M STRNG N SL M STRNG
ORGANICS	N (Y)	(N) Y	(N) Y	N Y	(N) Y	(N) Y N Y
MOISTURE	(DRY) MST WET	(DRY) MST WET	(DRY) MST WET	DRY MST WET	(DRY) MST WET	(DRY) MST WET DRY MST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG WEAK M STRNG
STRUCTURE	10:00	10:10	<del>10:10</del>	10:25	<del>10:25</del>	10:45
COMMENTS	red mottling PSD=0	PSD=0.7		PSD=0.7		last inch of soil in shoe of sampler was wet clayey sand. PSD=0.4
SAMPLE ID	<del>SBS-5</del>	SBS-10	<del>SBS-10</del>	SBS-15	<del>SBS-20</del>	SBS-20
NAME	silt w/ sand	Fat clay w/ sand	Fat clay →		Fat clay	Sandy fat clay
SYMBOL	ML	CH	CH →		CH	CH

GROUND ZERO ANALYSIS

(S10) 204-2225 mike

Rich

PROJECT The Green (942)

INTERVAL/SAMPLE DESCRIPTION

510 928-6700

WELL/BORING NO. SB6

DATE/BY 6/24/14

LOG INTERVAL	0-4	4-4.5	4.5-8	8-12	12-16		
SAMPLE INTERVAL	0-4	4-4.5	4.5-8	8-12	12-16		
BLDWCOUNTS	-	-	-	-	-	-	-
% SAND	5	25-30	5	20-30	5		
GR SIZE/RANGE	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	(FN) M CRS	FN M CRS	FN M CRS
ANGULARITY	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA (SR) R	A SA SR R	A SA SR R
GRADING	W (P)	W (P)	W (P)	W (P)	W (P)	W P	W P
% GRAVEL	20	60					
GR SIZE/RANGE	(FN) CRS	FN (CRS)	FN CRS	FN CRS	FN CRS	FN CRS	FN CRS
ANGULARITY	A SA (SR) R	A SA (SR) R	A SA SR R	A SA SR R	A SA SR R	A SA SR R	A SA SR R
GRADING	W (P)	W (P)	W P	W P	W P	W P	W P
COBBLES							
% FINES	75	10	95	70-80	95		
DRY STRENGTH	N L (M) H VH	N L M H VH	N L (M) H VH	N L (M) H VH	N L (M) H VH	N L M H VH	N L M H VH
DILATANCY	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R	N SLW R
TOUGHNESS	L (M) H	L M H	L (M) H	L (M) H	L (M) H	L M H	L M H
PLASTICITY	N L (M) H	N L M H	N L (M) H	N L (M) H	N L (M) H	N L M H	N L M H
COMPCTNS/CNSSTNCY							
COLOR	brown	light brown	dark brown	greenish dark brown	bluish brown		
ODOR	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	(N) SL M STRNG	N SL M STRNG	N SL M STRNG
ORGANICS	N (Y)	(N) Y	(N) Y	(N) Y	(N) Y	N Y	N Y
MOISTURE	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	(DRY) WST WET	DRY WST WET	DRY WST WET
HCL REACTION	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG	N WEAK STRNG
CEMENTATION	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG	WEAK M STRNG
STRUCTURE			11:35	11:45	12:05		
COMMENTS			PID=0.1	red mottling PID=0.8	red mottling, white calc. c/c PID=1.0		
SAMPLE ID			SB6-5	SB6-10	SB6-15		
NAME	Fat clay w/gravel	partly gravel w/ sand	Fat clay	sandy Fat clay w/sand	Fat clay		
SYMBOL	CH	CP	CH	CH	CH		

# GROUND ZERO ANALYSIS

No 3346

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO.		PROJECT NAME/SITE						ANALYSIS REQUESTED													PO. #:	
942		[Handwritten Site Name]						<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX (602/8020)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHg (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">OXYGENATES (8260)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">601/8010</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8260 FULL SCAN</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">5035 EXTRACTION EDF NEEDED</div> </div>														
SAMPLERS		(SIGN)					NO. CONTAINERS	SAMPLE TYPE														REMARKS
		(PRINT)	DATE	TIME	COMP	GRAB			PRES. USED	ICED												
SBI-5		[Signature]	6/11/14	10:30		X		X			X	X					X					
SBI-10				10:10							X	X					X					
SBI-15				10:25							X	X					X					
SBI-20				11:05							X	X					X					
SB2-5				11:50							X	X					X					
SB2-10				17:05							X	X					X					
SB2-15				12:20							X	X					X					
SB2-20				17:00							X	X					X					
SB3-5				17:45							X	X					X					
SB3-10				17:55							X	X					X					
SB3-15				14:10							X	X					X					
SB3-16				14:15							X	X					X					

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	LABORATORY:	PLEASE SEND RESULTS TO:
[Signature]	6/20/14	330	[Signature]	[Handwritten Lab Name]	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	REQUESTED TURNAROUND TIME:	
				[Handwritten Turnaround Time]	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RECEIPT CONDITION:	PROJECT MANAGER:
					[Handwritten Name]

# GROUND ZERO ANALYSIS

Nº 3345

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO. 942		PROJECT NAME/SITE Stokebridge The Green					ANALYSIS REQUESTED											RO. #:
SAMPLERS (SIGN) / (PRINT) Joe Vazquez / Joe Vazquez							NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHg (8015)	TPHd (8015)	OXYGENATES (8260)	601/8010	8260 FULL SCAN	5035 EXTRACTION	EDF NEEDED	REMARKS	
SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED												
SB1	6/20/14	11:20		X	HCl	Y	5	W	X	X			X					
SB2	6/20/14	11:45		X	HCl	Y	5	W	X	X			X					
SB3	6/20/14	14:30		X	HCl	X	5	W	X	X			Y					
SB4	6/20/14	9:35		X	HCl	Y	5	W	X	X			Y					
SB5	6/20/14	11:00		Y	HCl	Y	5	W	X	X			X					
SB6	6/20/14	12:40		X	HCl	X	5	W	X	X			X					
RELINQUISHED BY: Joe Vazquez	DATE 6/20/14	TIME 1330	RECEIVED BY: 	LABORATORY: Culbert	PLEASE SEND RESULTS TO: Joe Vazquez													
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	LABORATORY: Culbert	PLEASE SEND RESULTS TO: Joe Vazquez													
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	REQUESTED TURNAROUND TIME: Standard	PLEASE SEND RESULTS TO: Joe Vazquez													
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	RECEIPT CONDITION:	PROJECT MANAGER: Joe Vazquez													

# GROUND ZERO ANALYSIS

No 3343

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO. 9412		PROJECT NAME/SITE Steckbridge The Green						ANALYSIS REQUESTED												RO. #:		
SAMPLERS <i>Joe Volpoco</i> (SIGN)								NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020) TPHg (8015) TPHd (8015) OXYGENATES (8260) 601/8010 8260 FULL SCAN METALS (301/110) METALS (301/110) 5035 EXTRACTION EDF NEEDED												REMARKS
(PRINT)																						
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED															
RS-T1-20SW		6/17/14	12:52		X	none	X															
RS-T1-10SW		↓	12:46																	Run 5 hrs		
RS-T1-C		↓	12:44																	10 min		
RS-T1-10NE		↓	12:48																	10 min		
RS-T1-20NE		↓	12:55																			
RS-T2-70SW		6/17/14	12:27		X	none	X															
RS-T2-10SW		↓	12:11																			
RS-T2-C		↓	12:15																			
RS-T2-11NE		↓	12:22																			
RS-T2-20NE		↓	12:25																			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				LABORATORY:				PLEASE SEND RESULTS TO:										
<i>Joe Volpoco</i>		6/20/14	1330	<i>[Signature]</i>				<i>Center 1</i>				<i>[Faded text]</i>										
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				REQUESTED TURNAROUND TIME:														
								<i>Standard</i>														
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				RECEIPT CONDITION:				PROJECT MANAGER:										
												<i>Greg Clark</i>										

# GROUND ZERO ANALYSIS

Nº 3341

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO. 942		PROJECT NAME/SITE Chickadee - The Village						ANALYSIS REQUESTED										RO. #:			
SAMPLERS Joe Vargy / Joe Varguez		(SIGN) (PRINT)						NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHb (8015)	TPHd (8015)	OXYGENATES (8260)	601/8010	8260 FULL SCAN	CAM (7 ANALYTES)	PAH (101/110)	PCBs (212)	5035 EXTRACTION	EDF NEEDED	REMARKS
SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED															
KS-T3-10SW	1/17/14	12:10		X	Pres	X	1	G						X	X	X	X	X			
KS-T3-10SW		12:14		X										X	X	X	X	X		KLW clean	
KS-T3-C		12:20		X										X	X	X	X	X		but cleanup	
KS-T3-16NE		12:24		X										X	X	X	X	X		no HEM	
KS-T3-26NE		12:28		X										X	X	X	X	X			
RELINQUISHED BY: Joe Vargy	DATE 1/20/14	TIME 1330	RECEIVED BY: <i>[Signature]</i>		LABORATORY: <i>[Signature]</i>					PLEASE SEND RESULTS TO: <i>[Signature]</i>											
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:		REQUESTED TURNAROUND TIME: Standard					PROJECT MANAGER: Greg Smith											
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:		RECEIPT CONDITION:																



# GROUND ZERO ANALYSIS

Nº 3342

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO. 942		PROJECT NAME/SITE Starkbridge The Commons						ANALYSIS REQUESTED											RO. #:
SAMPLERS (SIGN) Joe Vargas		(PRINT) Joe Vasquez						NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHg (8015)	TPHd (8015)	OXYGENATES (8260)	601/8010	8260 FULL SCAN	5035 EXTRACTION EDF NEEDED	REMARKS		
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED												
HAB1		6/17/11	13:25				X							X					
HAB2		↓	13:45											X					
HAB3		↓	13:55											X					
HAB4		↓	13:15											X					
HAB5		↓	13:33											X					
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY:					PLEASE SEND RESULTS TO:								
Joe Vargas		6/17/11	1330	[Signature]		[Signature]					[Signature]								
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME:					PROJECT MANAGER:								
						Standard													
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		RECEIPT CONDITION:													
						[Signature]													

# GROUND ZERO ANALYSIS

No 3344

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO. 742		PROJECT NAME/SITE at exchange TRG 2000						ANALYSIS REQUESTED											PO. #:			
SAMPLERS Joe Vargy / Joe Vargy		(SIGN) (PRINT)						NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPH (8015)	TPH (8015)	OXYGENATES (8260)	601/8010	8260 FULL SCAN	OCPS	CAN 17 ANALYSIS	PAH/PAHs (8270)	PCB (8270)	5035 EXTRACTION	EDF NEEDED	REMARKS
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED															
SP1A-3'		6/19/14	8:35		X	X	X	2	S	X	X	X	X	X	X	X	X	X	X	X		
SP1B-4"			8:40					2		X	X	X	X	X	X	X	X	X	X	X		
SP1C-6'			8:55					2		X	X	X	X	X	X	X	X	X	X	X		
SP1D-2'			9:15					2		X	X	X	X	X	X	X	X	X	X	X		
SP1E-3'			9:18					2		X	X	X	X	X	X	X	X	X	X	X		
SP1F-6"			9:30					2		X	X	X	X	X	X	X	X	X	X	X		
SP1G-1'			9:45					2		X	X	X	X	X	X	X	X	X	X	X		
SP1H-2'			9:55					2		X	X	X	X	X	X	X	X	X	X	X		
SP1I-1.5'			10:05					2		X	X	X	X	X	X	X	X	X	X	X		
SP1J-3"			10:10					2		X	X	X	X	X	X	X	X	X	X	X		
SP1K-2'			10:20					2		X	X	X	X	X	X	X	X	X	X	X		
SP1L-2'			10:30					2		X	X	X	X	X	X	X	X	X	X	X		
SP2A-1'			10:45					2		X	X	X	X	X	X	X	X	X	X	X		
SP2B-6"			11:00					2		X	X	X	X	X	X	X	X	X	X	X		
RELINQUISHED BY: Joe Vargy		DATE 6/20/14	TIME 1330	RECEIVED BY: 				LABORATORY: 1023 J Trenton				PLEASE SEND RESULTS TO: Ground Zero Analysis Lab 175 Market Ave Bridgeton NJ 08302										
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				REQUESTED TURNAROUND TIME: Standard														
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:				RECEIPT CONDITION:				PROJECT MANAGER: Joe Vargy										

# GROUND ZERO ANALYSIS

No 3338

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO.		PROJECT NAME/SITE						ANALYSIS REQUESTED											PO. #:
A42		Stitchbridge Thru Green						NO. CONTAINERS SAMPLE TYPE BTEX (602/8020) TPHg (8015) TPHd (8015) / Inert OXYGENATES (8260) 601/8010 8260 FULL SCAN Lead Arsenic Lead 5035 EXTRACTION EDF NEEDED											
SAMPLERS		(SIGN) Joe Vasquez																	
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED												REMARKS
SB4-5		6/20/14	4:45		X		X												
SB4-10			4:55																
SB4-15			9:10																
SB4-20			9:25																
SB5-5			10:00																
SB5-10			10:10																
SB5-15			10:25																
SB5-20			10:45																
SB6-5			11:35																
SB6-10			11:45																
SB6-15			12:05																
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY:					PLEASE SEND RESULTS TO:								
Joe Vasquez		6/20/14	13:30			Ground Zero Analysis, Inc.					1172 Kansas Ave Northbrook, IL 60062								
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME:					PROJECT MANAGER:								
						Standard										Craig Clark			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		RECEIPT CONDITION:													

## **APPENDIX D**

### **BORING LOGS**



LOCATION: 5411 MARTINELLI WAY, DUBLIN, CA  
 DATE DRILLED: 06/19/2014 LOGGED BY: JOE VASQUEZ REVIEWED BY: GREG STAHL, PG 5023  
 DRILLING COMPANY: V&W DRILLING, INC. DRILLER: ANGEL ALCARAZ METHOD: DIRECT PUSH  
 BORE HOLE DIAMETER: 2.75 INCHES DEPTH DRILLED: 24 FEET DEPTH TO WATER - INITIAL: 21.5 FEET STATIC: 15 FEET  
 SURFACE SEAL TYPE: NEAT CEMENT GROUT INTERVAL: 0 FEET TO: 24 FEET  
 COMMENTS: SB1 DRILLED AS CONTINUOUS-CORE DIRECT PUSH SOIL BORING; GROUNDWATER SAMPLE SB1 COLLECTED THROUGH TEMPORARY PVC SCREEN AND CASING.

WELL DETAIL	DEPTH (FT.)	GW SAMPLE INTERVAL	SAMPLE ID BLOWCOUNT	U.S.C.S. LOG	DESCRIPTION
	0-5'			CH	FAT CLAY WITH GRAVEL (CH); 5% FINE, POORLY GRADED SAND; 25% FINE, POORLY GRADED GRAVEL; 70% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; DARK BROWN; NO ODOR; ORGANICS; DRY; RED MOTTLING.
	5'-6.5'		SB1-5	ML	SILT WITH SAND (ML); 20% FINE, POORLY GRADED SAND; 5% GRAVEL; 75% FINES; MODERATE DRY STRENGTH; LOW TOUGHNESS; LOW PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY; RED MOTTLING.
	6.5'-8'			CH	FAT CLAY WITH GRAVEL (CH); 5% FINE, POORLY GRADED SAND; 20% FINE, POORLY GRADED GRAVEL; 75% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY; RED MOTTLING.
	8'-21.5'		SB1-10		FAT CLAY (CH); 5-10% SAND; 5-10% GRAVEL; 85-90% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; DARK BROWN, COLOR CHANGE AT 14' TO DARK BLUISH BROWN, BACK TO BROWN AT 16'; NO ODOR 8-14', SLIGHT TO MODERATE HYDROCARBON ODOR 14-16.5', NO ODOR 16.5-21.5'; NO ORGANICS; DRY 8-20, MOIST 20-21.5.
	21.5'-22.5'		SB1-15	CH	SANDY FAT CLAY (CH); 35% FINE, POORLY GRADED SAND; 65% FINES; LOW DRY STRENGTH; LOW TOUGHNESS; LOW-MODERATE PLASTICITY; BLUISH BROWN; NO ODOR OR ORGANICS; WET; LOOSE.
	22.5'-24'		SB1-20	CH	FAT CLAY (CH); 5-10% FINE, POORLY GRADED SAND; 90-95% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; DARK BROWN TO GREENISH BROWN; NO ODOR OR ORGANICS; MOIST; STIFF.



*Gregory P. Stahl*



LOCATION: 5411 MARTINELLI WAY, DUBLIN, CA

DATE DRILLED: 06/19/2014

LOGGED BY: JOE VASQUEZ

REVIEWED BY: GREG STAHL, PG 5023

DRILLING COMPANY: V&W DRILLING, INC.

DRILLER: ANGEL ALCARAZ

METHOD: DIRECT PUSH

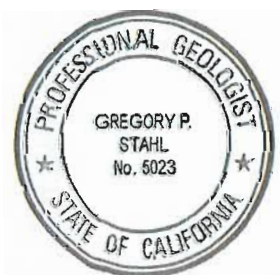
BORE HOLE DIAMETER: 2.75 INCHES DEPTH DRILLED: 24 FEET DEPTH TO WATER - INITIAL: 23 FEET STATIC: NOT MEASURED

SURFACE SEAL TYPE: NEAT CEMENT GROUT

INTERVAL: 0 FEET TO: 24 FEET

COMMENTS: SB2 DRILLED AS CONTINUOUS-CORE DIRECT PUSH SOIL BORING; GROUNDWATER SAMPLE SB2 COLLECTED THROUGH TEMPORARY PVC SCREEN AND CASING.

WELL DETAIL	DEPTH (FT.)	GW SAMPLE INTERVAL	SAMPLE ID BLOWCOUNT	U.S.C.S. LOG	DESCRIPTION
	0-5'			CH	FAT CLAY WITH GRAVEL (CH); 5% FINE, POORLY GRADED SAND; 25% COARSE, POORLY GRADED GRAVEL; 70% FINES; MODERATE DRY STRENGTH; HIGH TOUGHNESS; MODERATE PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY.
	2				
	4		SB2-5		
	5'-6.5'			ML	SILT WITH SAND (ML); 10-20% FINE, POORLY GRADED SAND; 80-90% FINES; LOW DRY STRENGTH; LOW TOUGHNESS; LOW PLASTICITY; BROWN; NO ODOR OR ORGANICS; DRY.
	6				
	6.5'-8'			CH	FAT CLAY (CH); 5% SAND; 95% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY.
	8				
	8'-12'		SB2-10	CH	FAT CLAY WITH SAND (CH); 10-20% FINE, POORLY GRADED SAND; 80-90% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY; RED MOTTLING FROM 10-12'.
	10				
	12'-16'		SB2-15	CH	SANDY FAT CLAY (CH); 25-30% FINE, POORLY GRADED SAND; 70-75% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; DARK BROWN-BLUIISH BROWN; NONE-SLIGHT HYDROCARBON ODOR; NO ORGANICS; DRY; ODOR AND COLOR CHANGE AT 14-16'.
	14				
	16'-23'		SB2-20	CH	FAT CLAY (CH); 5-10% FINE, POORLY GRADED SAND; 90-95% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE-HIGH TOUGHNESS; MODERATE-HIGH PLASTICITY; DARK BROWN TO GREENISH BROWN; NO ODOR OR ORGANICS; DRY TO MOIST.
	16				
	18	SB2			
	20				
	22				
	23'-24'			CH	SANDY FAT CLAY (CH); 35-40% FINE, POORLY GRADED SAND; 60-65% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; BROWN; NO ODOR OR ORGANICS; MOIST.
	24				
	26				
	28				
	30				
	32				
	34				
	36				
	38				



*Gregory P. Stahl*



LOCATION: 5411 MARTINELLI WAY, DUBLIN, CA

DATE DRILLED: 06/19/2014 LOGGED BY: JOE VASQUEZ REVIEWED BY: GREG STAHL, PG 5023

DRILLING COMPANY: V&W DRILLING, INC. DRILLER: ANGEL ALCARAZ METHOD: DIRECT PUSH

BORE HOLE DIAMETER: 2.75 INCHES DEPTH DRILLED: 16 FEET DEPTH TO WATER - INITIAL: 12 FEET STATIC: NOT MEASURED

SURFACE SEAL TYPE: NEAT CEMENT GROUT INTERVAL: 0 FEET TO: 16 FEET

COMMENTS: SB3 DRILLED AS CONTINUOUS-CORE DIRECT PUSH SOIL BORING; GROUNDWATER SAMPLE SB3 COLLECTED WITH HYDROPUNCH SAMPLING TOOL.

WELL DETAIL	DEPTH (FT.)	GW SAMPLE INTERVAL	SAMPLE ID BLOWCOUNT	U.S.C.S. LOG	DESCRIPTION
	0-9'				GRAVELLY FAT CLAY (CH); 10% FINE, POORLY GRADED SAND; 25% FINE, POORLY GRADED GRAVEL; 65% FINES; MODERATE DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY; 1" SAND LENSE AT 7.5'.
	2				
	4		SB3-5	CH	
	6				
	8				9'-10' SILT WITH GRAVEL (ML); 5% FINE, POORLY GRADED SAND; 20% GRAVEL; 75% FINES; LOW DRY STRENGTH; LOW TOUGHNESS; NONE-LOW PLASTICITY; BROWN; NO ODOR OR ORGANICS; DRY; LOOSE.
	10		SB3-10	ML	
	12			CH	10-12' FAT CLAY WITH GRAVEL (CH); 35-40% WELL GRADED GRAVEL; 60-65% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; HIGH PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; MOIST; GRAVEL CONTENT INCREASES WITH DEPTH.
	14			GP	12'-14' POORLY GRADED GRAVEL (GP); 100% CSE GREENSTONE AND QUARTZ GRAVEL; DARK GREEN; NO ODOR OR ORGANICS; WET.
	16		SB3-15	CH	14'-16' SANDY FAT CLAY (CH); 35% FINE, POORLY GRADED SAND; 65% FINES; LOW-MODERATE DRY STRENGTH; LOW TOUGHNESS; MODERATE PLASTICITY; BROWN; NO ODOR OR ORGANICS; WET; LOOSE.
	18		SB3-16		
	20				
	22				
	24				
	26				
	28				
	30				
	32				
	34				
	36				
	38				



*Handwritten signature of Gregory P. Stahl*

LOCATION: 5411 MARTINELLI WAY, DUBLIN, CA

DATE DRILLED: 06/20/2014 LOGGED BY: JOE VASQUEZ REVIEWED BY: GREG STAHL, PG 5023

DRILLING COMPANY: V&W DRILLING, INC. DRILLER: ANGEL ALCARAZ METHOD: DIRECT PUSH

BORE HOLE DIAMETER: 2.75 INCHES DEPTH DRILLED: 20 FEET DEPTH TO WATER - INITIAL: 20 FEET STATIC: 12 FEET

SURFACE SEAL TYPE: NEAT CEMENT GROUT INTERVAL: 0 FEET TO: 20 FEET

COMMENTS: SB4 DRILLED AS CONTINUOUS-CORE DIRECT PUSH SOIL BORING; GROUNDWATER SAMPLE SB4 COLLECTED THROUGH TEMPORARY PVC SCREEN AND CASING.

WELL DETAIL	DEPTH (FT.)	GW SAMPLE INTERVAL	SAMPLE ID BLOWCOUNT	U.S.C.S. LOG	DESCRIPTION
	0-2				0-8.5' GRAVELLY FAT CLAY (CH); 5% FINE, POORLY GRADED SAND; 25% COARSE, POORLY GRADED GRAVEL; 70% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; BROWN; NO ODOR OR ORGANICS; DRY.
	2-4			CH	
	4-6		SB4-5 (PID=0)		
	6-8				
	8-10		SB4-10 (PID=25.1)	ML	8.5'-9.5' SILT WITH GRAVEL (ML); 10% FINE, POORLY GRADED SAND; 15% FINE, WELL GRADED GRAVEL; 70% FINES; LOW DRY STRENGTH; LOW TOUGHNESS; NO PLASTICITY; LIGHT BROWN; NO ODOR OR ORGANICS; DRY; LOOSE.
	10-12				9.5'-20' FAT CLAY (CH); 5-10% FINE, POORLY GRADED SAND; 90-95% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE-HIGH TOUGHNESS; MODERATE-HIGH PLASTICITY; BLUISH BROWN-GRAYISH LIGHT BROWN; MODERATE HYDROCARBON ODOR 9.5-16', NO ODOR 16-20'; NO ORGANICS; DRY-MOIST; ODOR & DISCOLORED SOIL DECREASES WITH DEPTH.
	12-14				
	14-16	SB4	SB4-15 (PID=22.1)	CH	
	16-18				
	18-20		SB4-20 (PID=3.9)		
	20-22				
	22-24				
	24-26				
	26-28				
	28-30				
	30-32				
	32-34				
	34-36				
	36-38				



*Gregory P. Stahl*





LOCATION: 5411 MARTINELLI WAY, DUBLIN, CA

DATE DRILLED: 06/20/2014 LOGGED BY: JOE VASQUEZ REVIEWED BY: GREG STAHL, PG 5023

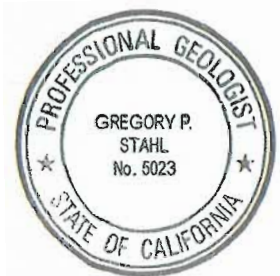
DRILLING COMPANY: V&W DRILLING, INC. DRILLER: ANGEL ALCARAZ METHOD: DIRECT PUSH

BORE HOLE DIAMETER: 2.75 INCHES DEPTH DRILLED: 20 FEET DEPTH TO WATER - INITIAL: 20 FEET STATIC: NOT MEASURED

SURFACE SEAL TYPE: NEAT CEMENT GROUT INTERVAL: 0 FEET TO: 20 FEET

COMMENTS: SB5 DRILLED AS CONTINUOUS-CORE DIRECT PUSH SOIL BORING; GROUNDWATER SAMPLE SB5 COLLECTED THROUGH TEMPORARY PVC SCREEN AND CASING.

WELL DETAIL	DEPTH (FT.)	GW SAMPLE INTERVAL	SAMPLE ID BLOWCOUNT	U.S.C.S. LOG	DESCRIPTION
	0-6'			ML	SILT WITH SAND (ML); 20% FINE, POORLY GRADED SAND; 80% FINES; LOW DRY STRENGTH; LOW TOUGHNESS; LOW PLASTICITY; BROWN; NO ODOR; ORGANICS; DRY; RED MOTTLING.
	2				
	4				
	6		SB5-5 (PID=0)		
	6'-11'			CH	FAT CLAY WITH SAND (CH); 20% FINE, POORLY GRADED SAND; 5% FINE, POORLY GRADED GRAVEL, 75% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; BROWN; NO ODOR OR ORGANICS; DRY.
	8				
	10		SB5-10 (PID=0.7)		
	11'-19'			CH	FAT CLAY (CH); 5% FINE, POORLY GRADED SAND; 95% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; LIGHT BROWN-DARK BROWN; NO ODOR OR ORGANICS; DRY.
	12				
	14		SB5-15 (PID=0.7)		
	16				
	18				
	19'-20'		SB5-20 (PID=0.4)	CH	SANDY FAT CLAY(CH); 30% FINE, POORLY GRADED SAND; 70% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY-MOIST; LAST 1" OF SOIL, IN SHOE OF SAMPLER, WAS WET CLAYEY SAND.
	20				
	22				
	24				
	26				
	28				
	30				
	32				
	34				
	36				
	38				



*Gregory P. Stahl*



LOCATION: 5411 MARTINELLI WAY, DUBLIN, CA

DATE DRILLED: 06/20/2014

LOGGED BY: JOE VASQUEZ

REVIEWED BY: GREG STAHL, PG 5023

DRILLING COMPANY: V&W DRILLING, INC.

DRILLER: ANGEL ALCARAZ

METHOD: DIRECT PUSH

BORE HOLE DIAMETER: 2.75 INCHES

DEPTH DRILLED: 20 FEET

DEPTH TO WATER - INITIAL: 16 FEET

STATIC: NOT MEASURED

SURFACE SEAL TYPE: NEAT CEMENT GROUT

INTERVAL: 0 FEET

TO: 20 FEET

COMMENTS: SB6 DRILLED AS CONTINUOUS-CORE DIRECT PUSH SOIL BORING; GROUNDWATER SAMPLE SB6 COLLECTED THROUGH HYDROPUNCH

SAMPLING TOOL.

WELL DETAIL	DEPTH (FT.)	GW SAMPLE INTERVAL	SAMPLE ID BLOWCOUNT	U.S.C.S. LOG	DESCRIPTION
	0-4'			CH	FAT CLAY WITH GRAVEL (CH); 5% FINE, POORLY GRADED SAND; 20% FINE, POORLY GRADED GRAVEL; 75% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; BROWN; NO ODOR; ORGANICS; DRY.
	4-4.5'		SB6-5 (PID=0.1)	GP	POORLY GRADED GRAVEL WITH SAND (GP); 30% FINE, POORLY GRADED SAND; 60% COARSE, POORLY GRADED GRAVEL; 10% FINES; LIGHT BROWN; NO ODOR OR ORGANICS; DRY.
	4.5'-8'			CH	FAT CLAY (CH); 5% FINE, POORLY GRADED SAND; 95% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; DARK BROWN; NO ODOR OR ORGANICS; DRY.
	8'-12'		SB6-10 (PID=0.8)	CH	SANDY FAT CLAY (CH); 20-30% FINE, POORLY GRADED SAND; 70-80% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE PLASTICITY; GREENISH DARK BROWN; NO ODOR OR ORGANICS; DRY; RED MOTTLING.
	12'-16'		SB6-15 (PID=1.0)	CH	FAT CLAY(CH); 5% FINE, POORLY GRADED SAND; 95% FINES; MODERATE-HIGH DRY STRENGTH; MODERATE TOUGHNESS; MODERATE-HIGH PLASTICITY; BLuish BROWN; NONE-SLIGHT ODOR; NO ORGANICS; DRY; RED MOTTLING AND WHITE CALCIFICATION.
	16'				WET ● 16 FEET, HOLE COLLAPSING
	16'-20'				NOT SAMPLED, HYDROPUNCH TOOL ADVANCED TO AVOID HOLE COLLAPSE.



*Gregory P. Stahl*

**APPENDIX E**  
**LABORATORY REPORTS**



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 258352  
ANALYTICAL REPORT


Ground Zero Analysis, Inc.  
1172 Kansas Ave  
Modesto, Ca 95351

Project : 942  
Location : Stockbridge The Green  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SB1	258352-001
SB2	258352-002
SB3	258352-003
SB4	258352-004
SB5	258352-005
SB6	258352-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:



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Mike J. Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 06/27/2014

**CASE NARRATIVE**

Laboratory number: 258352  
Client: Ground Zero Analysis, Inc.  
Project: 942  
Location: Stockbridge The Green  
Request Date: 06/20/14  
Samples Received: 06/20/14

This data package contains sample and QC results for six water samples, requested for the above referenced project on 06/20/14. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B):**

No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

SB1 (lab # 258352-001), SB4 (lab # 258352-004), and SB5 (lab # 258352-005) had pH greater than 2. No other analytical problems were encountered.

# GROUND ZERO ANALYSIS

258352

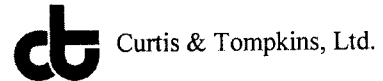
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## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO. 942		PROJECT NAME/SITE Stockbridge The Green						ANALYSIS REQUESTED										PO. #:		
SAMPLERS (SIGN) Joe Vasquez		(PRINT) Joe Vasquez						NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)    TPHB (8015)    TPHd (8015) / Fuel Oil    OXYGENATES (8260)    601/8010    8260 FULL SCAN VOCs    5035 EXTRACTION    EDF NEEDED										REMARKS
SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED	BTEX (602/8020)			TPHB (8015)	TPHd (8015) / Fuel Oil	OXYGENATES (8260)	601/8010	8260 FULL SCAN VOCs	5035 EXTRACTION	EDF NEEDED				
1 SB1	6/19/14	11:20		X	HCl	X	5	W	X	X		X				X				
2 SB2	6/19/14	13:15		X	HCl	X	5	W	X	X		X				X				
3 SB3	6/19/14	14:30		X	HCl	X	5	W	X	X		X				X				
4 SB4	6/20/14	9:35		X	HCl	X	5	W	X	X		X				X				
5 SB5	6/20/14	11:00		X	HCl	X	5	W	X	X		X				X				
6 SB6	6/20/14	12:40		X	HCl	X	5	W	X	X		X				X				
RELINQUISHED BY: Joe Vasquez	DATE 6/20/14	TIME 1330	RECEIVED BY: <i>[Signature]</i>		LABORATORY: Curtis & Tomkins		PLEASE SEND RESULTS TO: Ground Zero Analysis, Inc. 1172 Kansas Ave Modesto, CA 95351													
RELINQUISHED BY: <i>[Signature]</i>	DATE 6/20/14	TIME 1530	RECEIVED BY: <i>[Signature]</i>		REQUESTED TURNAROUND TIME: Standard															
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:		RECEIPT CONDITION:		PROJECT MANAGER: Brey Stahl													

what on 12 cold RA

**COOLER RECEIPT CHECKLIST**



Login # 258352 Date Received 9/20/14 Number of coolers 3  
 Client Ground Zero Analysis Project 942

Date Opened 9/23/14 By (print) MC (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) 4.5/5.9/5.5

Samples received on ice & cold without a temperature blank; temp taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

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### Total Volatile Hydrocarbons

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/20/14

Field ID: SB1	Batch#: 212564
Type: SAMPLE	Sampled: 06/19/14
Lab ID: 258352-001	Analyzed: 06/24/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	128	77-128

Field ID: SB2	Batch#: 212611
Type: SAMPLE	Sampled: 06/19/14
Lab ID: 258352-002	Analyzed: 06/25/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	77-128

Field ID: SB3	Batch#: 212611
Type: SAMPLE	Sampled: 06/19/14
Lab ID: 258352-003	Analyzed: 06/25/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	77-128

Field ID: SB4	Batch#: 212611
Type: SAMPLE	Sampled: 06/20/14
Lab ID: 258352-004	Analyzed: 06/25/14

Analyte	Result	RL
Gasoline C7-C12	170 Y	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	77-128

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

**Total Volatile Hydrocarbons**

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/20/14

Field ID:	SB5	Batch#:	212611
Type:	SAMPLE	Sampled:	06/20/14
Lab ID:	258352-005	Analyzed:	06/25/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	77-128

Field ID:	SB6	Batch#:	212611
Type:	SAMPLE	Sampled:	06/20/14
Lab ID:	258352-006	Analyzed:	06/25/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	77-128

Type:	BLANK	Batch#:	212564
Lab ID:	QC746345	Analyzed:	06/24/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	77-128

Type:	BLANK	Batch#:	212611
Lab ID:	QC746526	Analyzed:	06/25/14

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	77-128

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746344	Batch#:	212564
Matrix:	Water	Analyzed:	06/24/14
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,017	102	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	116	77-128

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	212564
MSS Lab ID:	258345-001	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/24/14
Diln Fac:	1.000		

Type: MS Lab ID: QC746346

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.72	2,000	1,839	91	74-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	77-128

Type: MSD Lab ID: QC746347

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,911	95	74-120	4	27

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	120	77-128

RPD= Relative Percent Difference

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746525	Batch#:	212611
Matrix:	Water	Analyzed:	06/25/14
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,038	104	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	77-128

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	SB6	Batch#:	212611
MSS Lab ID:	258352-006	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Type: MS Lab ID: QC746527

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	20.68	2,000	2,119	105	74-120

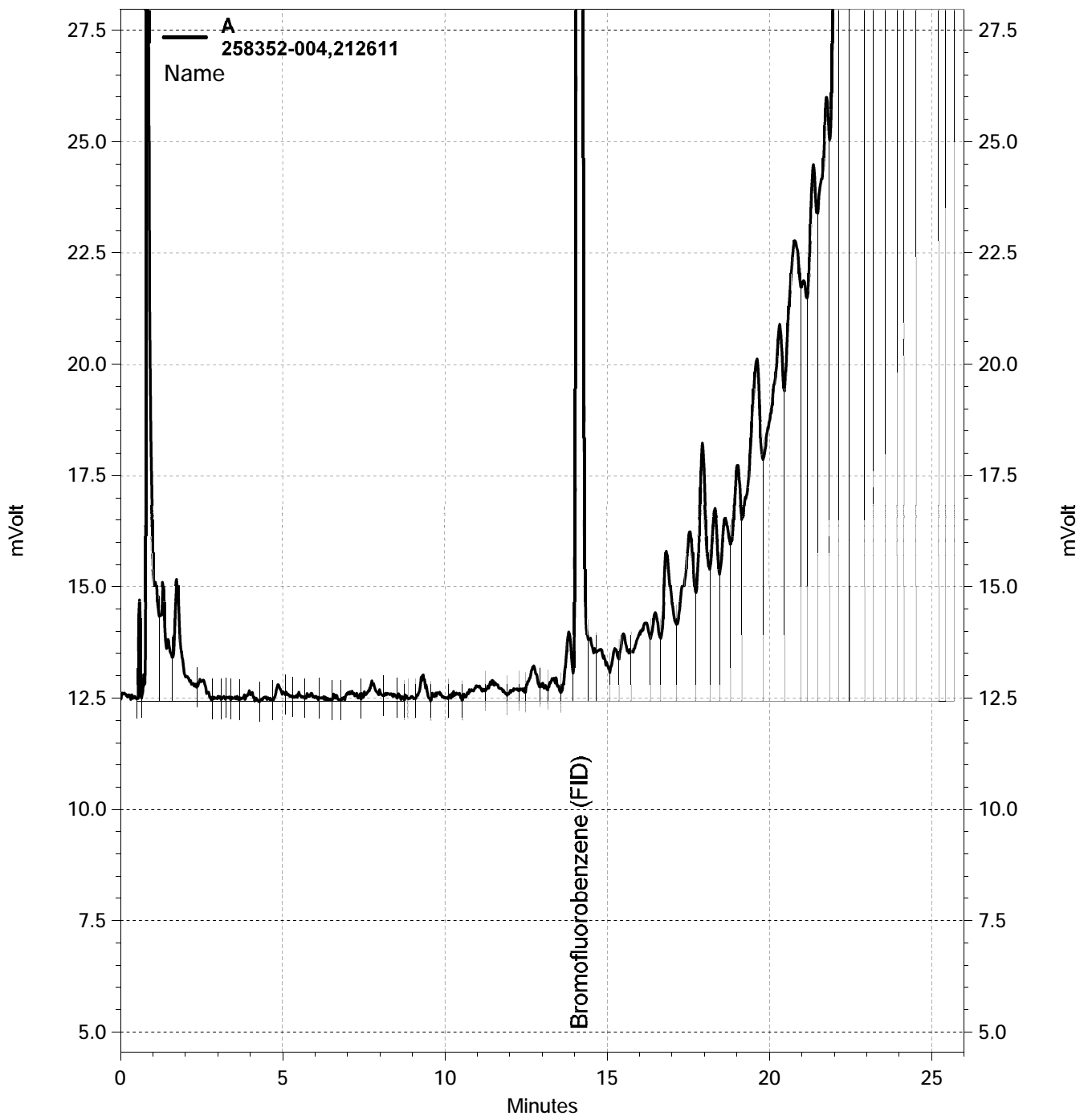
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	123	77-128

Type: MSD Lab ID: QC746528

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,130	105	74-120	1	27

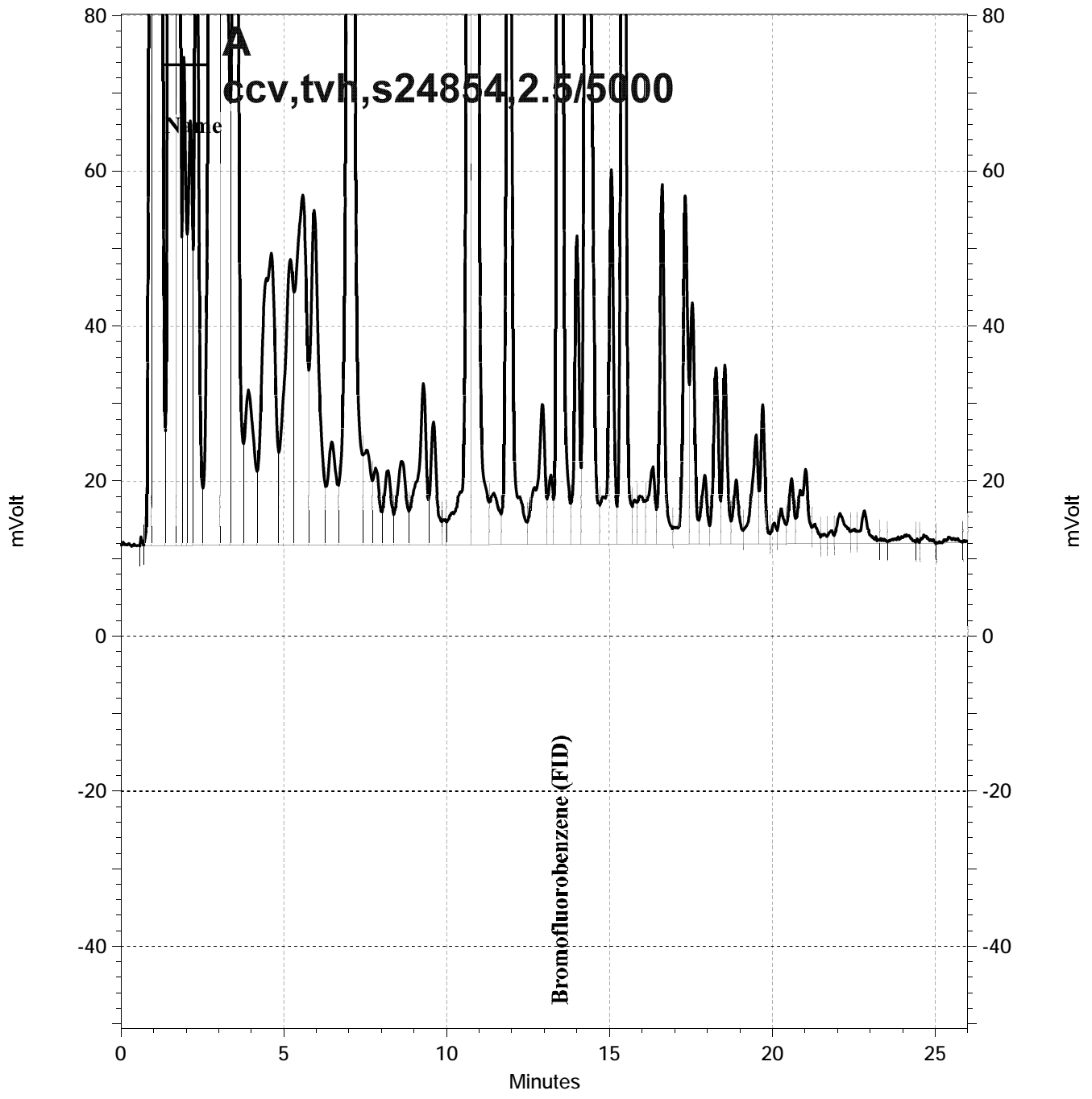
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	77-128

RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC19\Data\176-009, A





— \\Lims\gdrive\ezchrom\Projects\GC04\Data\175-005, A





## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3520C
Project#:	942	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	212576
Units:	ug/L	Prepared:	06/24/14
Diln Fac:	1.000	Analyzed:	06/25/14

Type: BS Lab ID: QC746395

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,895	76	61-120

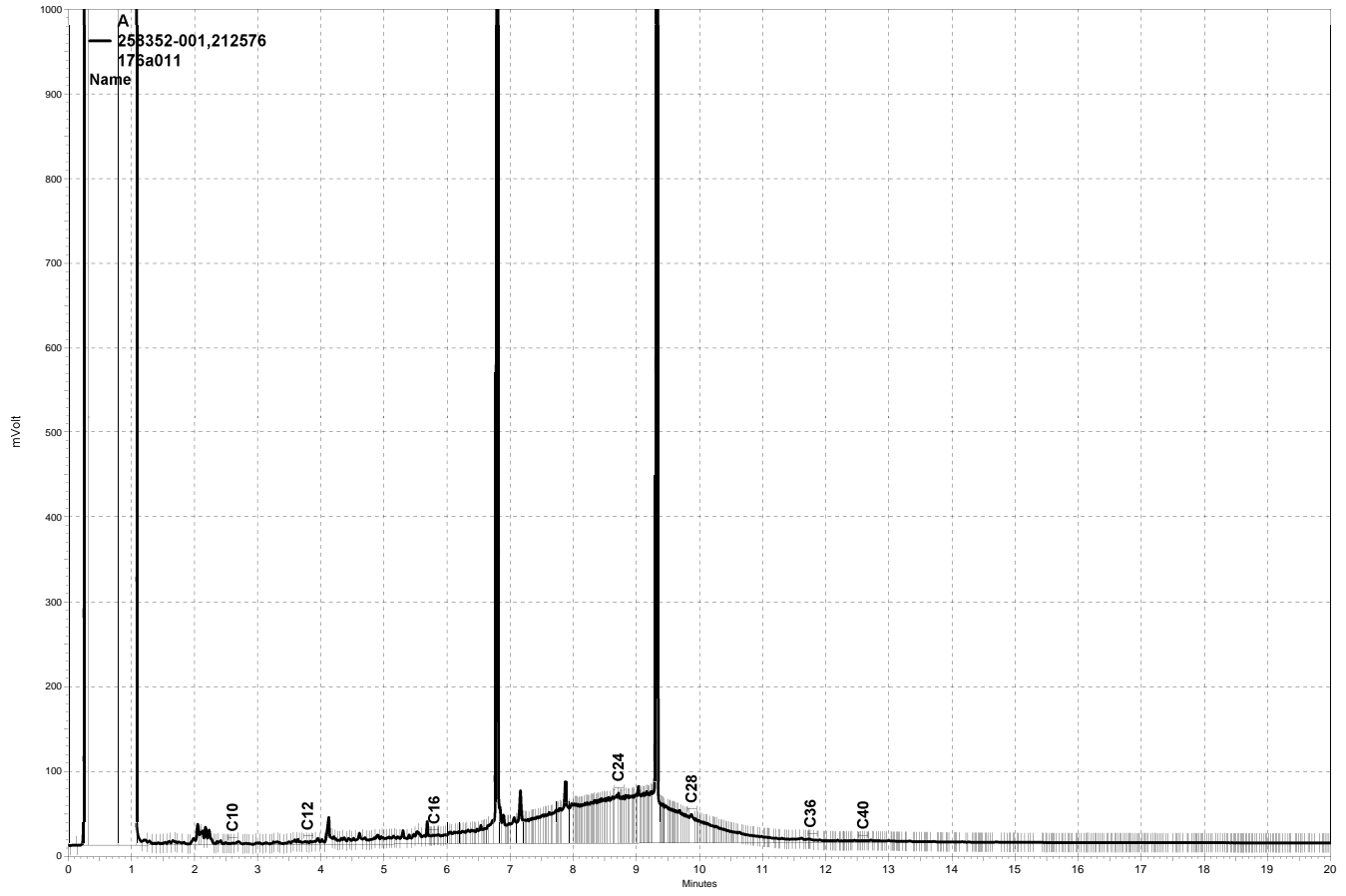
Surrogate	%REC	Limits
o-Terphenyl	98	66-129

Type: BSD Lab ID: QC746396

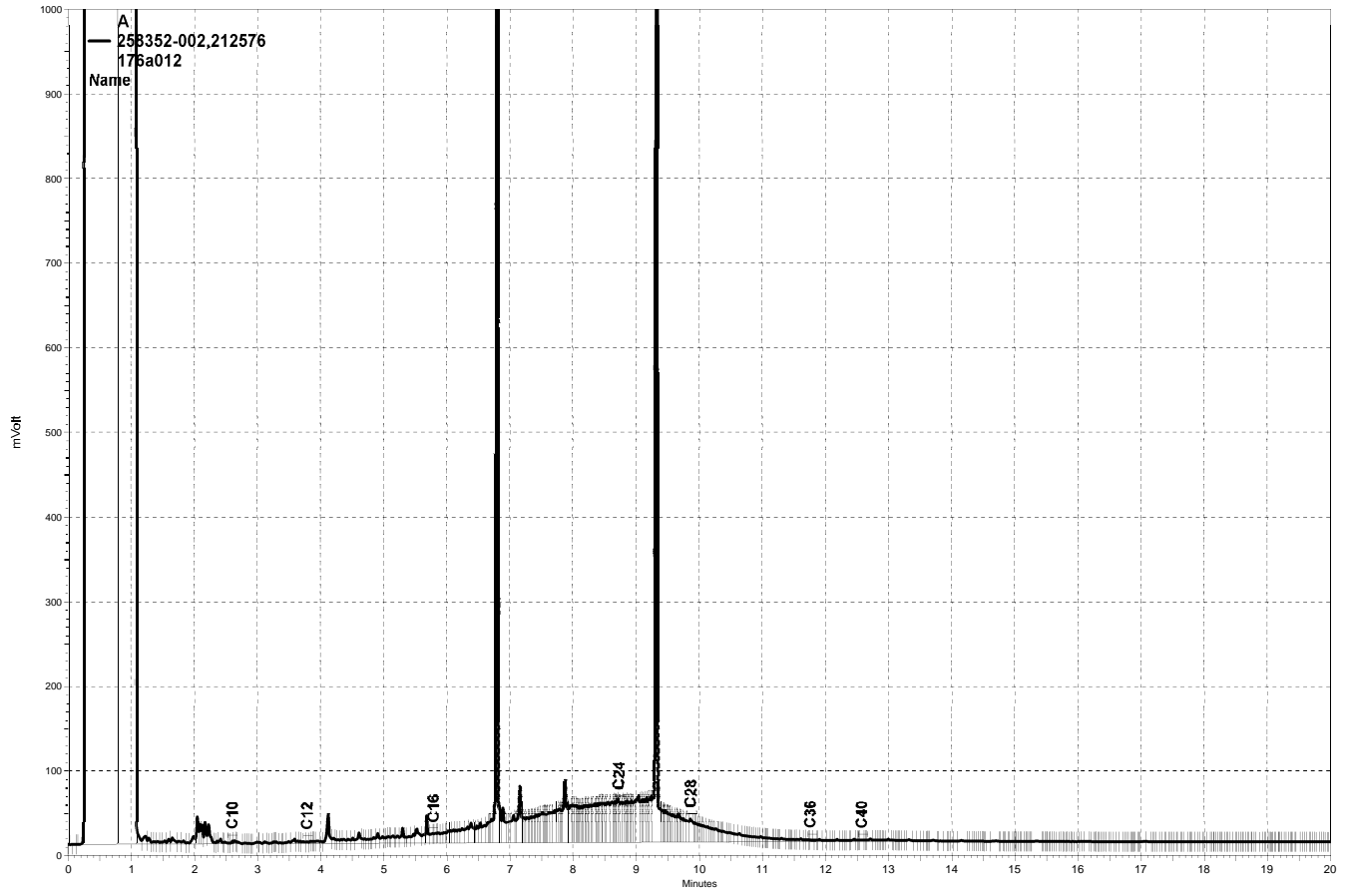
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,048	82	61-120	8	45

Surrogate	%REC	Limits
o-Terphenyl	103	66-129

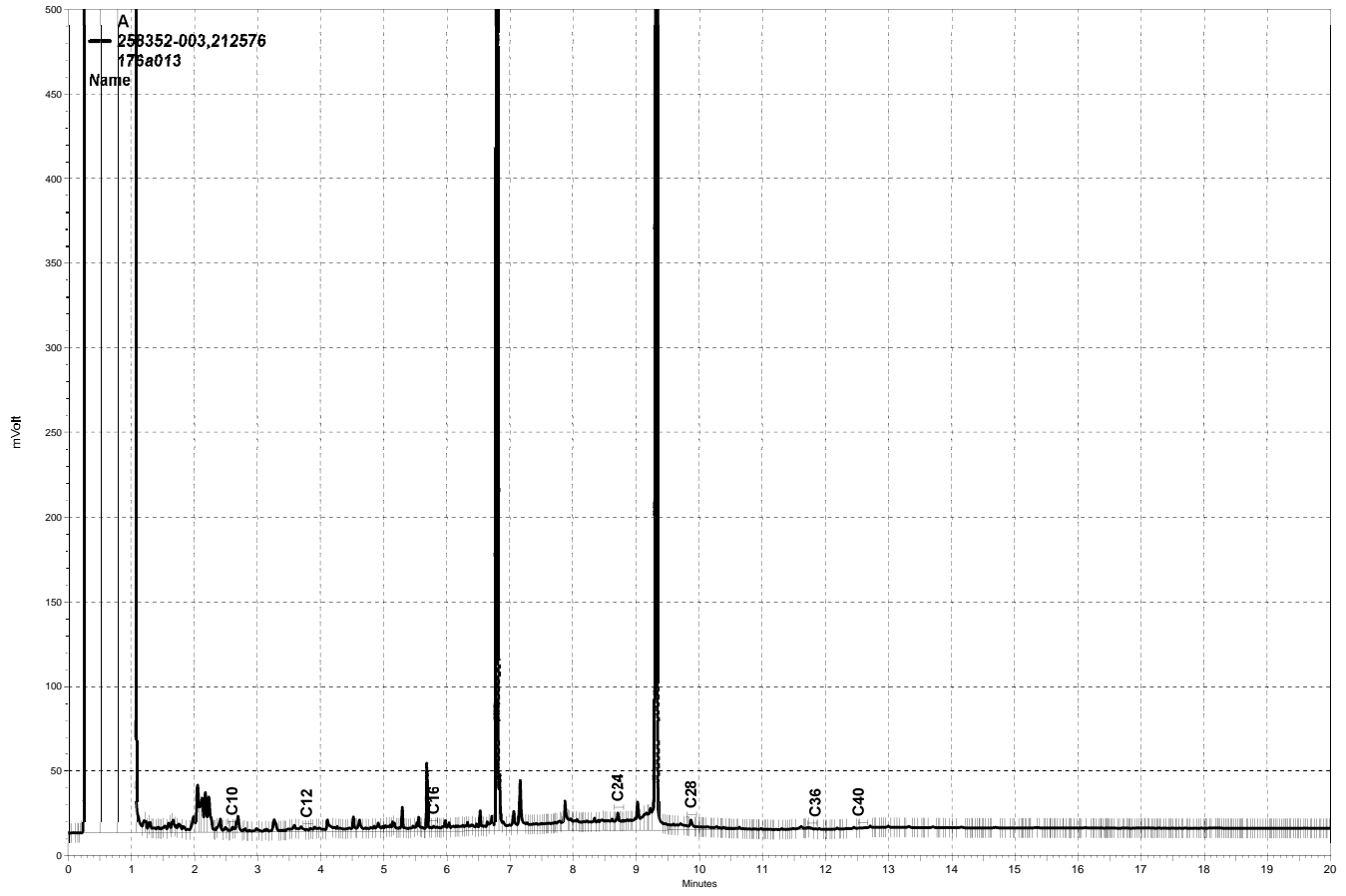
RPD= Relative Percent Difference



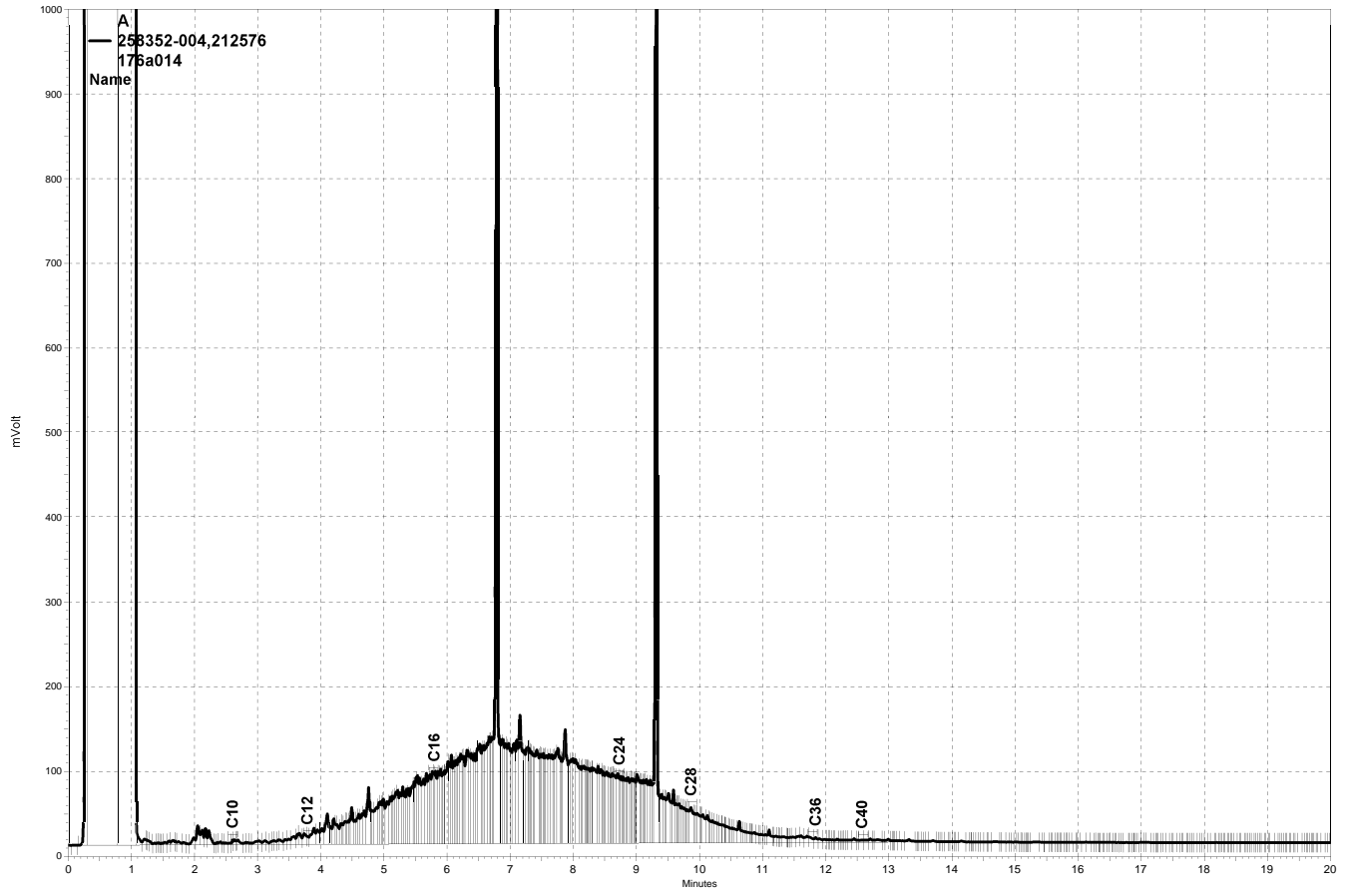
— \\Lims\gdrive\ezchrom\Projects\GC26\Data\176a011, A



— \\Lims\gdrive\ezchrom\Projects\GC26\Data\176a012, A

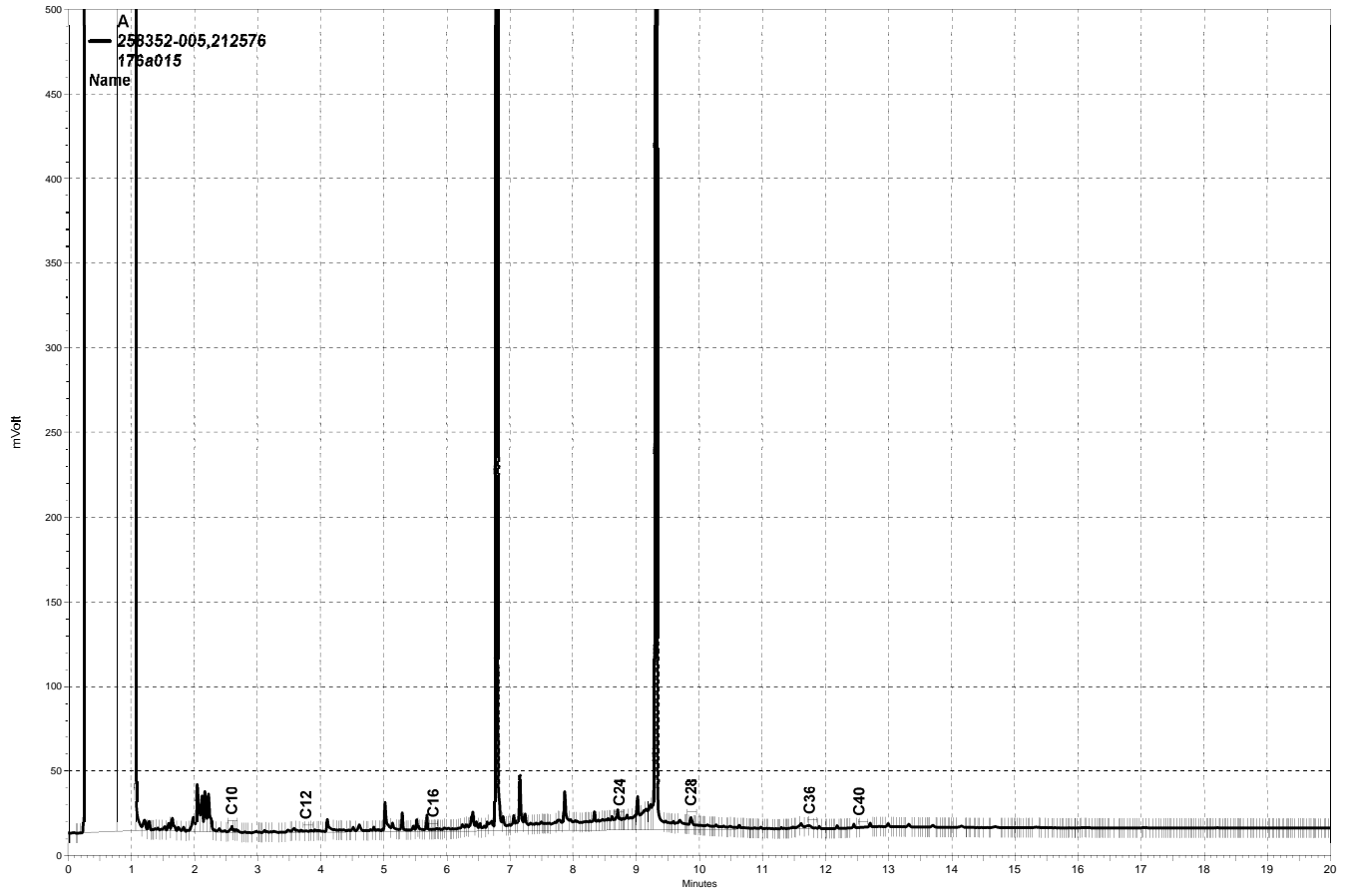


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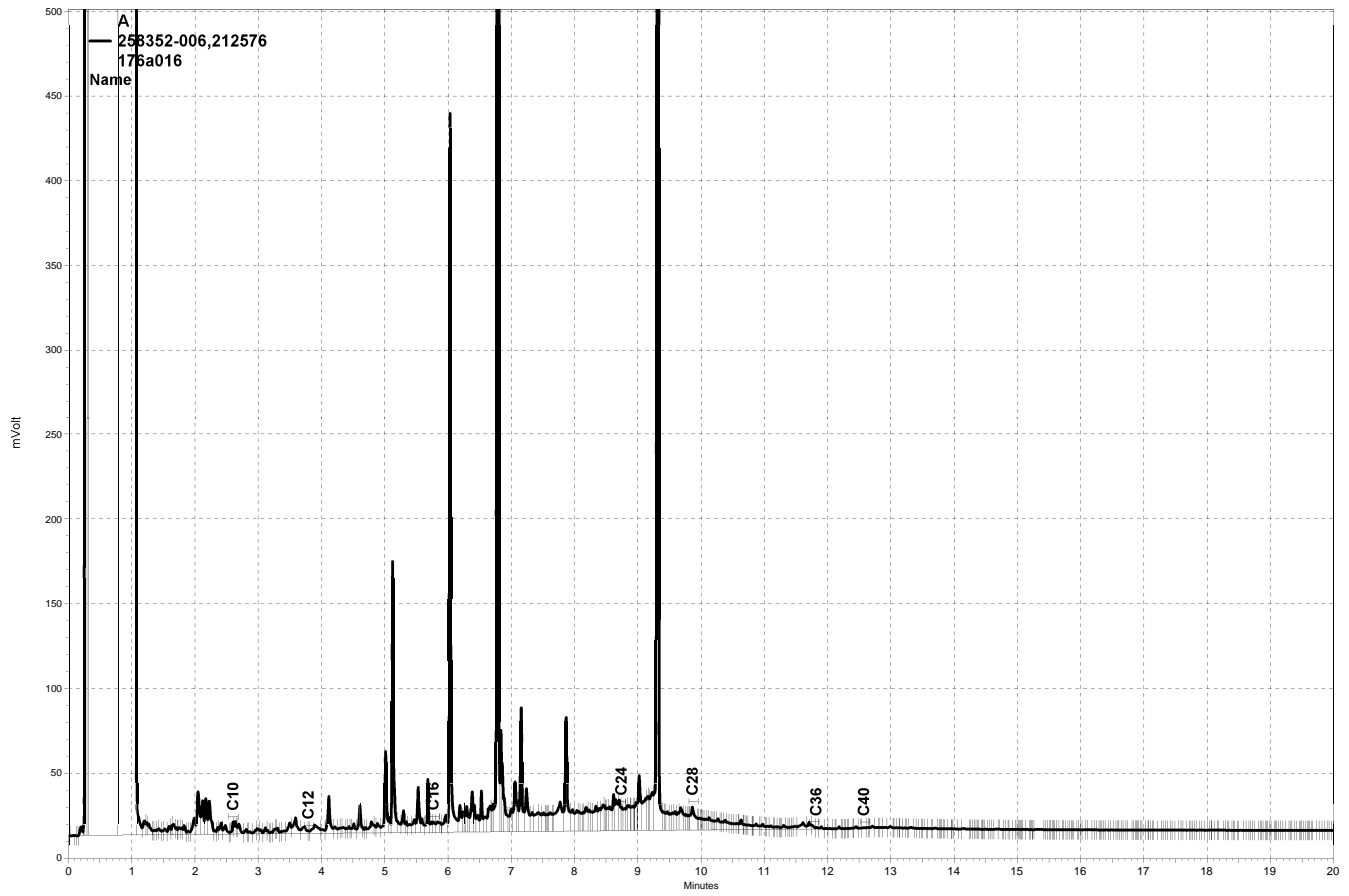


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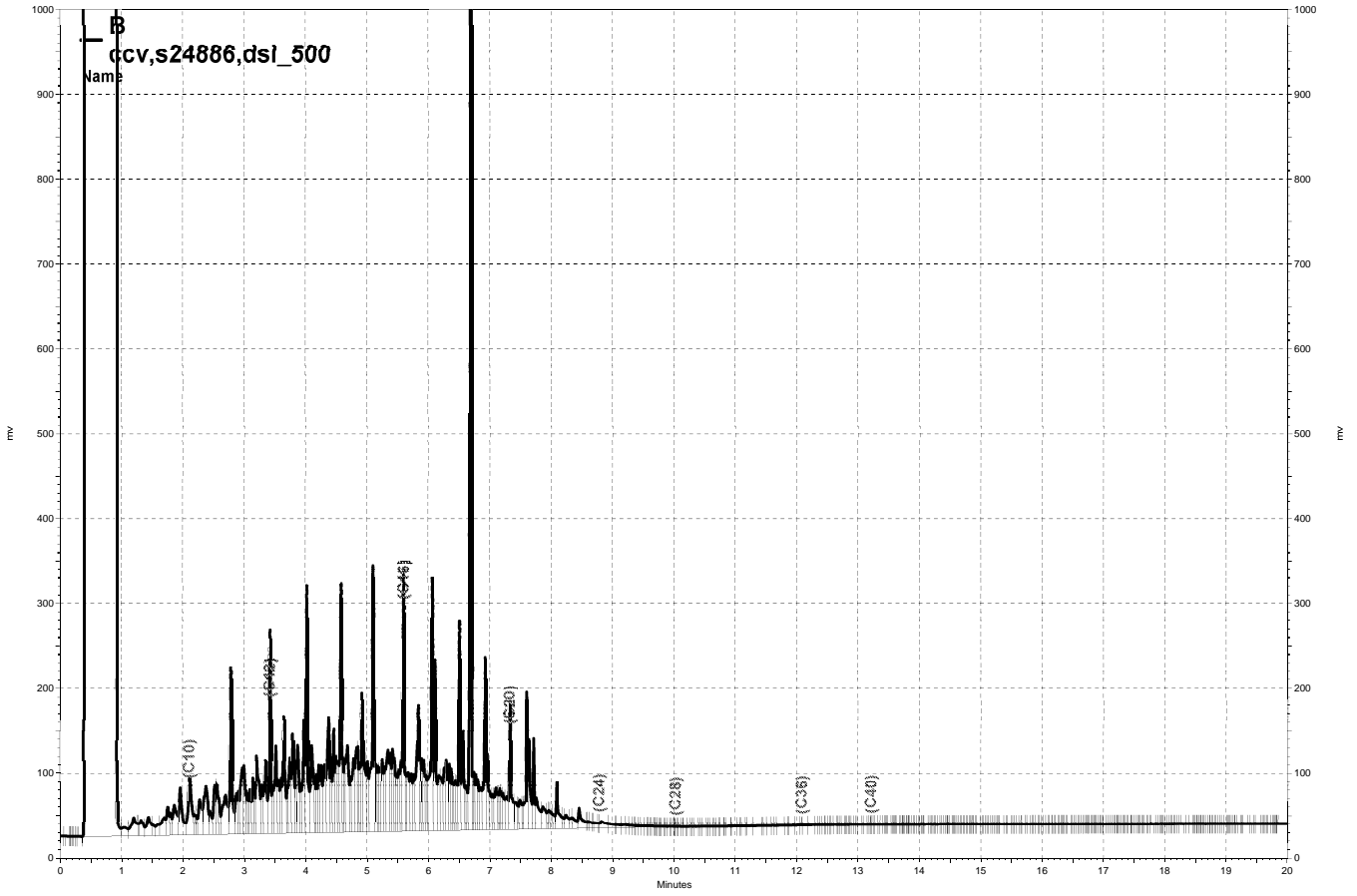




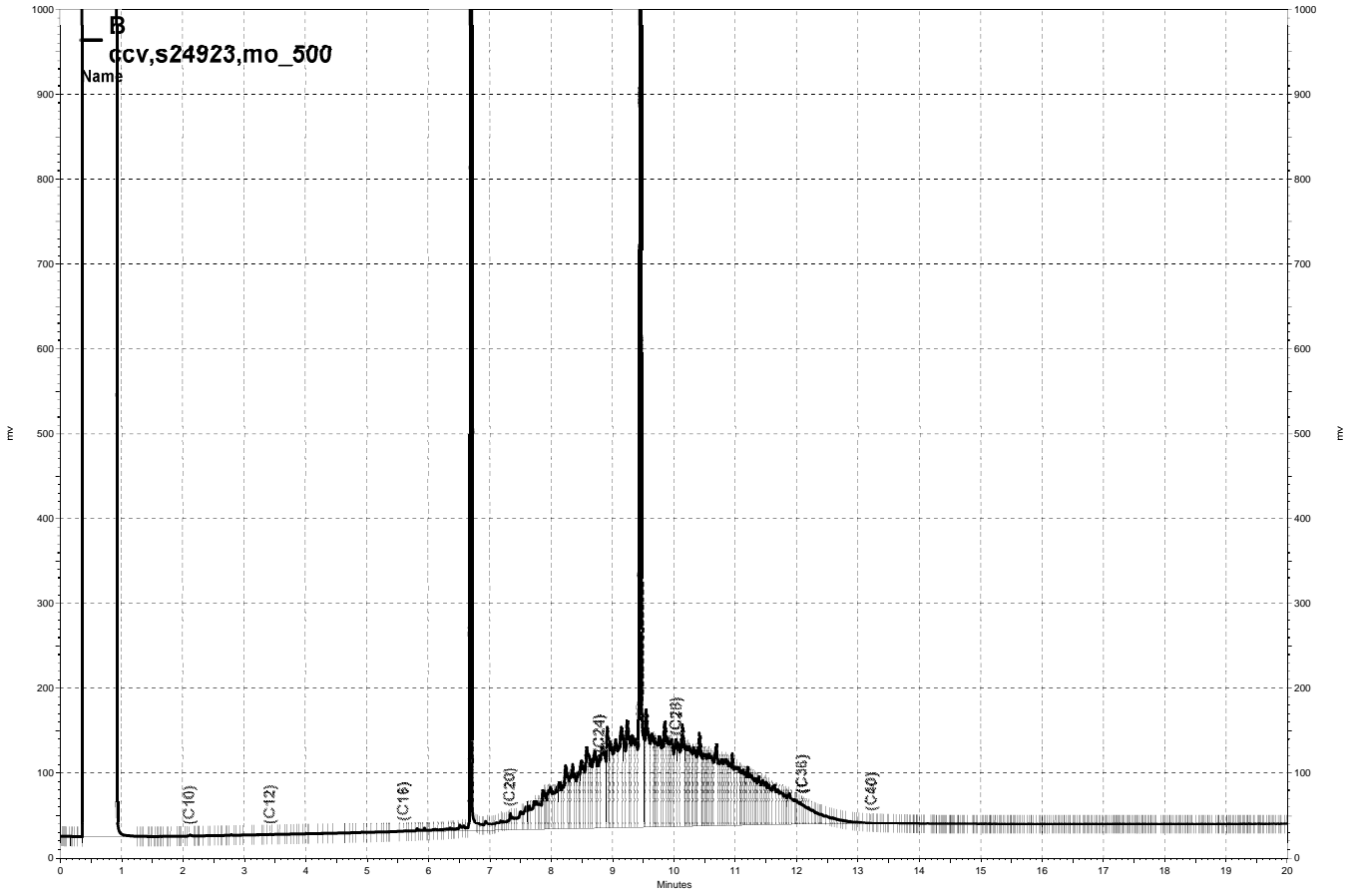
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— \\Lims\gdrive\ezchrom\Projects\GC26\Data\176a016, A



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\176b004, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\176b003, B

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1	Batch#:	212598
Lab ID:	258352-001	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	0.6	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1	Batch#:	212598
Lab ID:	258352-001	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2	Batch#:	212598
Lab ID:	258352-002	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	3.8	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2	Batch#:	212598
Lab ID:	258352-002	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected  
 RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3	Batch#:	212598
Lab ID:	258352-003	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	0.7	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3	Batch#:	212598
Lab ID:	258352-003	Sampled:	06/19/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	77-136
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4	Batch#:	212598
Lab ID:	258352-004	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	1.0	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4	Batch#:	212598
Lab ID:	258352-004	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	91	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5	Batch#:	212598
Lab ID:	258352-005	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	6.4	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5	Batch#:	212598
Lab ID:	258352-005	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6	Batch#:	212598
Lab ID:	258352-006	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	1.8	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6	Batch#:	212598
Lab ID:	258352-006	Sampled:	06/20/14
Matrix:	Water	Received:	06/20/14
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	91	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected  
 RL= Reporting Limit



Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	212598
Units:	ug/L	Analyzed:	06/25/14
Diln Fac:	1.000		

Type: BS                      Lab ID: QC746465

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.49	110	65-134
Benzene	25.00	25.54	102	80-124
Trichloroethene	25.00	25.84	103	80-120
Toluene	25.00	23.64	95	80-122
Chlorobenzene	25.00	24.91	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-120

Type: BSD                      Lab ID: QC746466

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.65	123	65-134	11	20
Benzene	25.00	28.53	114	80-124	11	20
Trichloroethene	25.00	29.13	117	80-120	12	20
Toluene	25.00	26.30	105	80-122	11	20
Chlorobenzene	25.00	27.74	111	80-120	11	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	86	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746467	Batch#:	212598
Matrix:	Water	Analyzed:	06/25/14
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258352	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746467	Batch#:	212598
Matrix:	Water	Analyzed:	06/25/14
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected

RL= Reporting Limit



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 258357
ANALYTICAL REPORT

Ground Zero Analysis, Inc.
1172 Kansas Ave
Modesto, Ca 95351

Project : 942
Location : Stockbridge The Green
Level : II

Table with 2 columns: Sample ID and Lab ID. Rows include SB1-5 through SB3-16 with corresponding Lab IDs from 258357-001 to 258357-012.

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Isabelle Choy
Isabelle Choy
Project Manager
isabelle.choy@ctberk.com

Date: 07/08/2014

### CASE NARRATIVE

Laboratory number: 258357  
Client: Ground Zero Analysis, Inc.  
Project: 942  
Location: Stockbridge The Green  
Request Date: 06/20/14  
Samples Received: 06/20/14

This data package contains sample and QC results for twelve soil samples, requested for the above referenced project on 06/20/14. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B):**

No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

SB1-15 (lab # 258357-003) was diluted due to high hydrocarbons. SB2-15 (lab # 258357-007) contains high hydrocarbons. No other analytical problems were encountered.

**Metals (EPA 6010B):**

No analytical problems were encountered.

**Organic Lead (CA LUFT) (OL):**

Cal Science in Garden Grove, CA performed the analysis (not NELAP certified). Please see the Cal Science case narrative.

# GROUND ZERO ANALYSIS

258357

№ 3340

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO.		PROJECT NAME/SITE						ANALYSIS REQUESTED										RO. #:			
942		Stockbridge The Green																			
SAMPLERS							NO. CONTAINERS	SAMPLE TYPE	ANALYSIS REQUESTED										REMARKS		
(SIGN) <i>Joe Vasquez</i> (PRINT) Joe Vasquez									BTEX (602/8020)	TPH <sub>B</sub> (8015)	TPH <sub>d</sub> (8015)	OXYGENATES (8260)	601/8010	8260 FULL SCAN	lead	organic lead	5035 EXTRACTION	EDF NEEDED			
SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED															
1	SBI-5	6/19/14	10:00		X	none	X	1	S	X	X			X	X	X				X	
2	SBI-10		10:10							X	X			X	X	X				X	
3	SBI-15		10:25							X	X			X	X	X				X	
4	SBI-20		11:05							X	X			X	X	X				X	
5	SB2-5		11:50							X	X			X	X	X				X	
6	SB2-10		12:05							X	X			X	X	X				X	
7	SB2-15		12:20							X	X			X	X	X				X	
8	SB2-20		13:00							X	X			X	X	X				X	
9	SB3-5		13:45							X	X			X	X	X				X	
10	SB3-10		13:55							X	X			X	X	X				X	
11	SB3-15		14:10							X	X			X	X	X				X	
12	SB3-16	↓	14:15		↓	↓	↓	↓	↓	X	X			X	X	X				X	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	LABORATORY:	PLEASE SEND RESULTS TO:
<i>Joe Vasquez</i>	6/20/14	1330	<i>[Signature]</i>	Curtis & Tomkins	
<i>[Signature]</i>	6/20/14	1330	<i>[Signature]</i>		
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	REQUESTED TURNAROUND TIME:	ground zero analysis, Inc. 1172 Kansas Ave Modesto, CA 95351
				Standard	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RECEIPT CONDITION:	PROJECT MANAGER:
					Breg Stahl

START on ke cold RC

**COOLER RECEIPT CHECKLIST**



Curtis & Tompkins, Ltd.

Login # 258357 Date Received 9/20/14 Number of coolers 3  
 Client Ground Zero Analysis Project 942

Date Opened 9/23/14 By (print) MC (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A

3. Were custody papers dry and intact when received?  YES NO

4. Were custody papers filled out properly (ink, signed, etc)?  YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form)  YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) 4.5/5.9/5.5

Samples received on ice & cold without a temperature blank; temp taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES  NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO  N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO  N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





Client Sample ID : SB2-15

Laboratory Sample ID :

258357-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	10	Y	0.95	0.050	mg/Kg	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	330		1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	24	Y	5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Lead	5.1		0.24	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB2-20

Laboratory Sample ID :

258357-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	8.8	Y	0.99	0.30	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Acetone	20		19	0.8	ug/Kg	As Recd	0.9615	EPA 8260B	EPA 5030B
Lead	4.9		0.26	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB3-5

Laboratory Sample ID :

258357-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	6.3	Y	0.99	0.30	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	47		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Lead	7.7		0.27	0.074	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB3-10

Laboratory Sample ID :

258357-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	9.0	Y	0.99	0.30	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	69		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Acetone	34		19	0.8	ug/Kg	As Recd	0.9434	EPA 8260B	EPA 5030B
Lead	6.4		0.26	0.073	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB3-15

Laboratory Sample ID :

258357-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Motor Oil C24-C36	5.3		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Lead	4.6		0.26	0.071	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB3-16

Laboratory Sample ID :

258357-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	5.3		0.24	0.066	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Y = Sample exhibits chromatographic pattern which does not resemble standard









## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746256	Batch#:	212544
Matrix:	Soil	Analyzed:	06/24/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.120	112	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	258349-007	Batch#:	212544
Matrix:	Soil	Sampled:	06/23/14
Units:	mg/Kg	Received:	06/23/14
Basis:	as received	Analyzed:	06/24/14

Type: MS Lab ID: QC746258

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.05443	10.20	8.962	88	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	67-137

Type: MSD Lab ID: QC746259

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.804	8.472	86	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	67-137

RPD= Relative Percent Difference



## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746549	Batch#:	212619
Matrix:	Soil	Analyzed:	06/25/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.108	111	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	258396-006	Batch#:	212619
Matrix:	Soil	Sampled:	06/24/14
Units:	mg/Kg	Received:	06/24/14
Basis:	as received	Analyzed:	06/26/14

Type: MS Lab ID: QC746551

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.06876	9.091	8.739	95	42-120

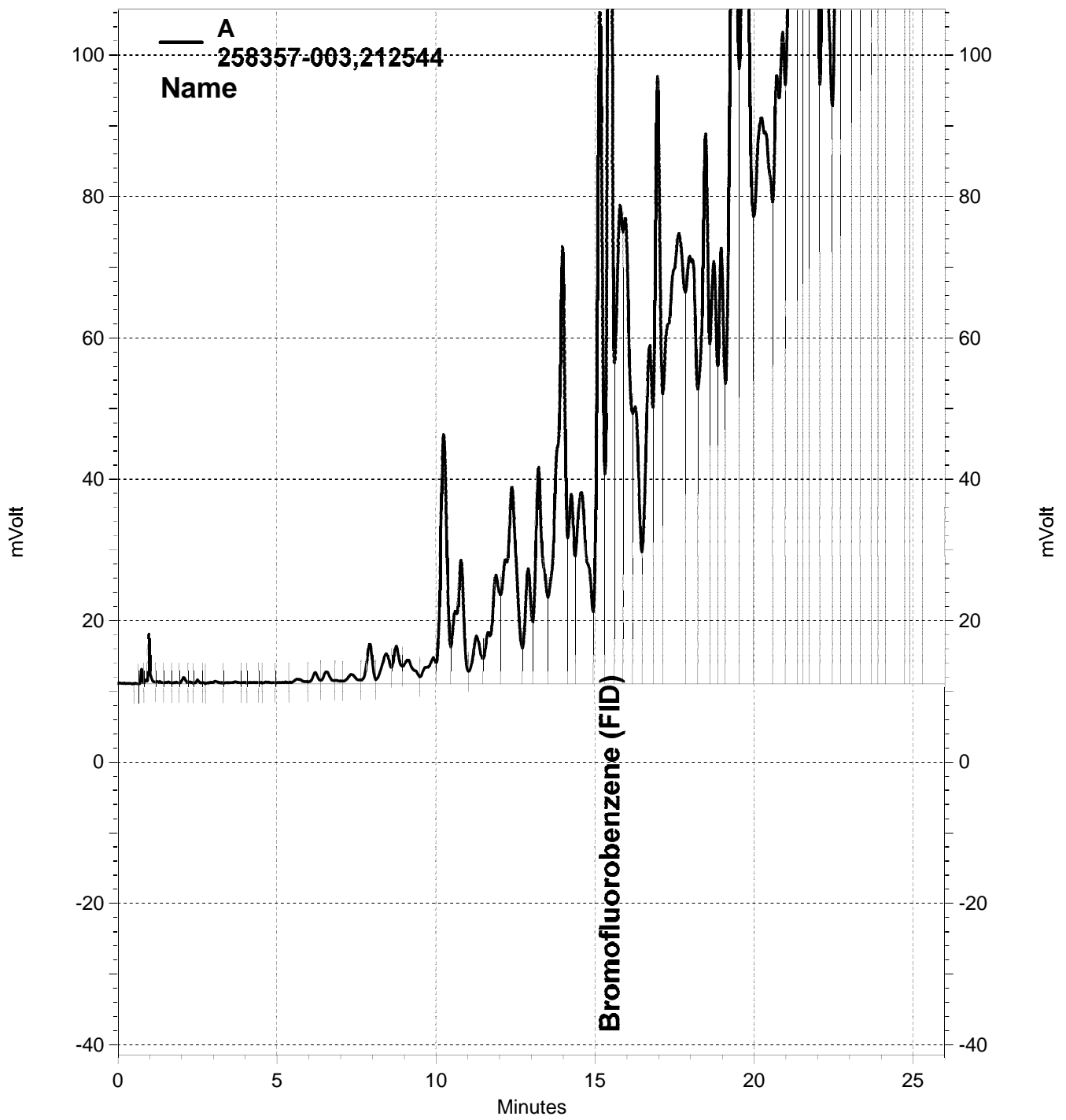
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	67-137

Type: MSD Lab ID: QC746552

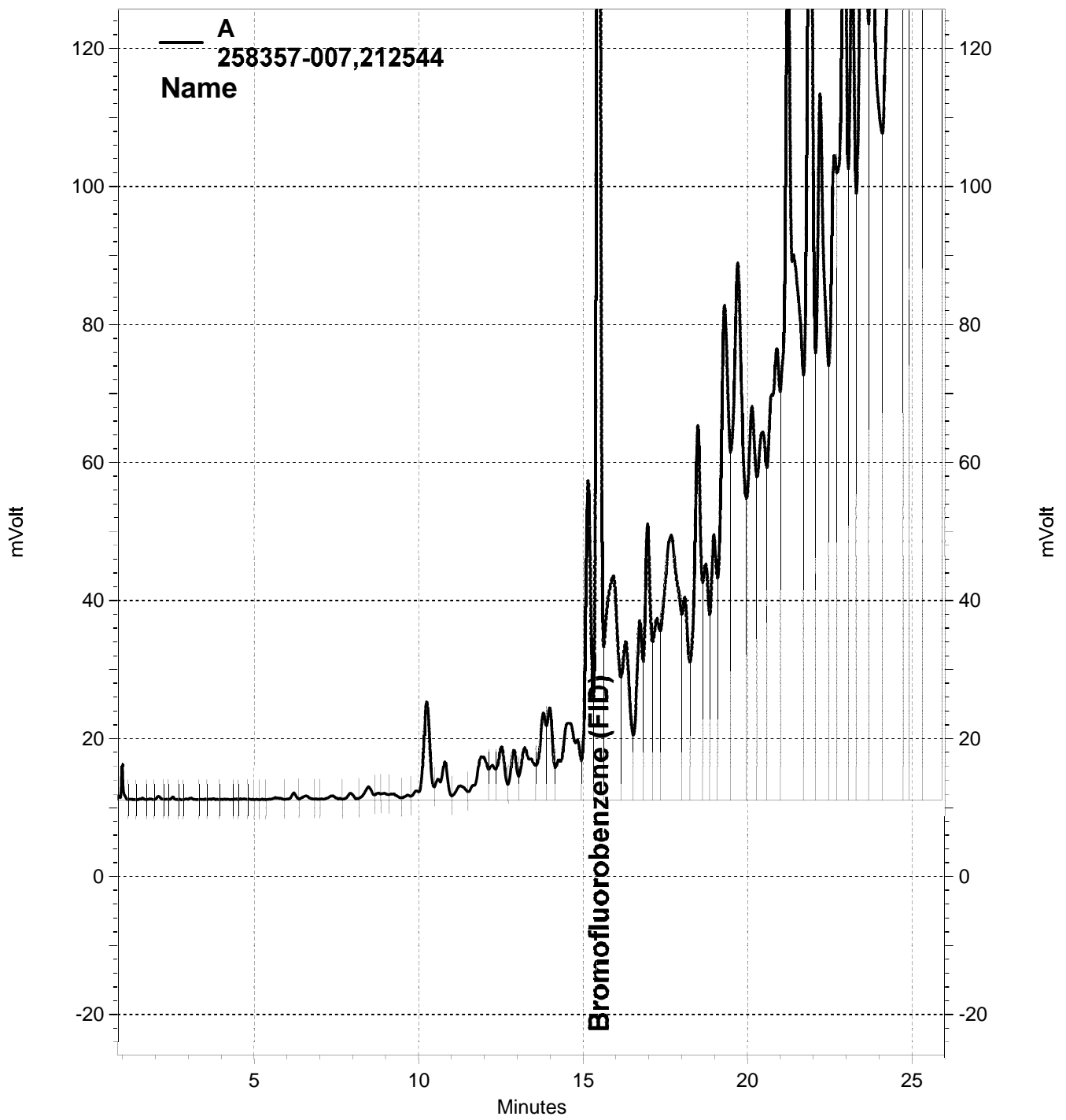
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.31	10.15	98	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	67-137

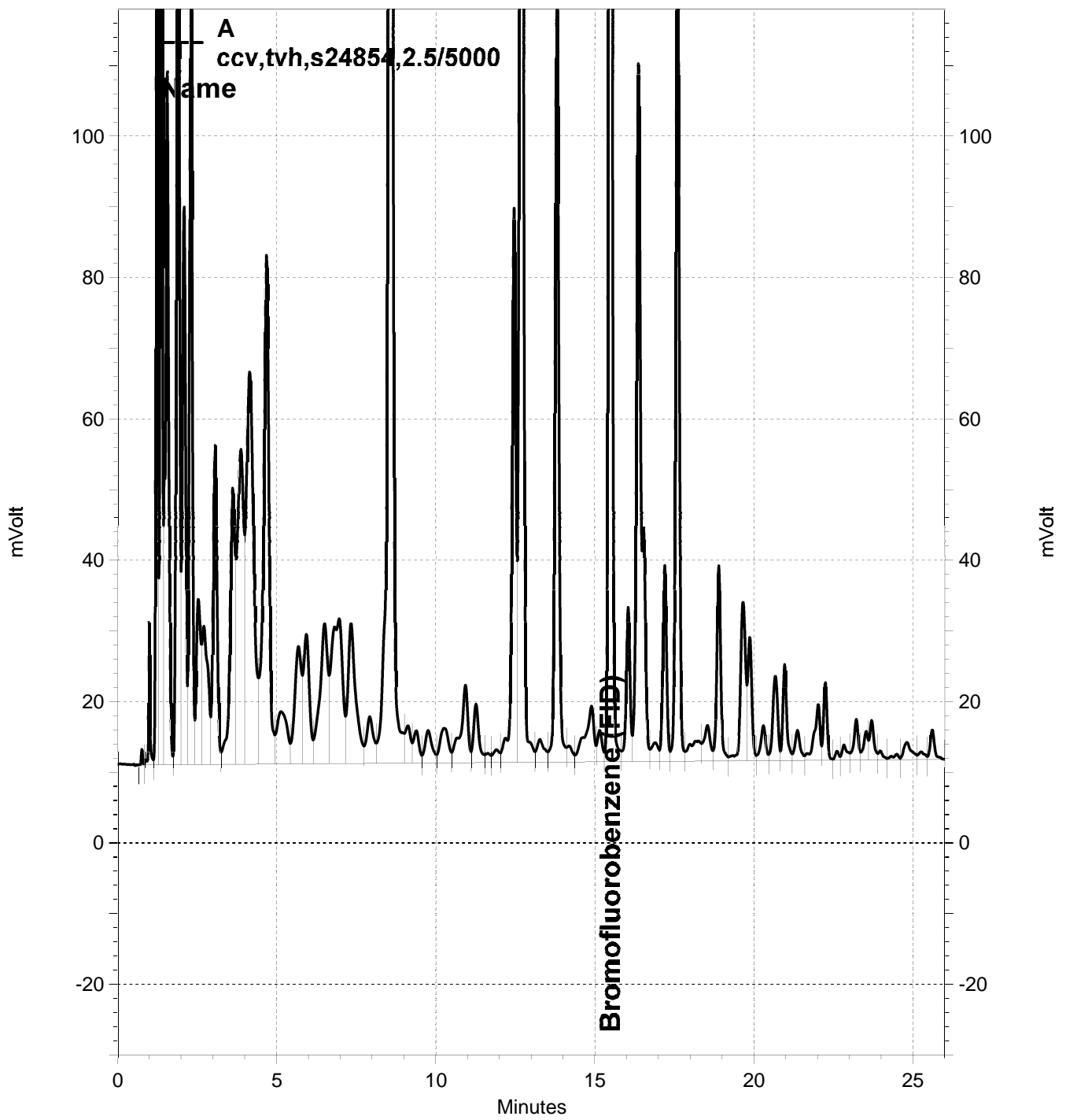
RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\175-016, A



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\175-020, A



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\175-003, A









Total Extractable Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	06/19/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received	Prepared:	06/26/14
Batch#:	212692	Analyzed:	06/27/14

Type: BLANK Diln Fac: 1.000  
 Lab ID: QC746862

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	97	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746863	Batch#:	212692
Matrix:	Soil	Prepared:	06/26/14
Units:	mg/Kg	Analyzed:	06/27/14

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.61	48.15	97	61-132

Surrogate	%REC	Limits
o-Terphenyl	108	64-136

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Field ID:	SP1 J-3"	Batch#:	212692
MSS Lab ID:	258353-010	Sampled:	06/18/14
Matrix:	Soil	Received:	06/20/14
Units:	mg/Kg	Prepared:	06/26/14
Basis:	as received	Analyzed:	06/27/14
Diln Fac:	5.000		

Type: MS Lab ID: QC746864

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	5.314	50.27	50.79	90	40-146

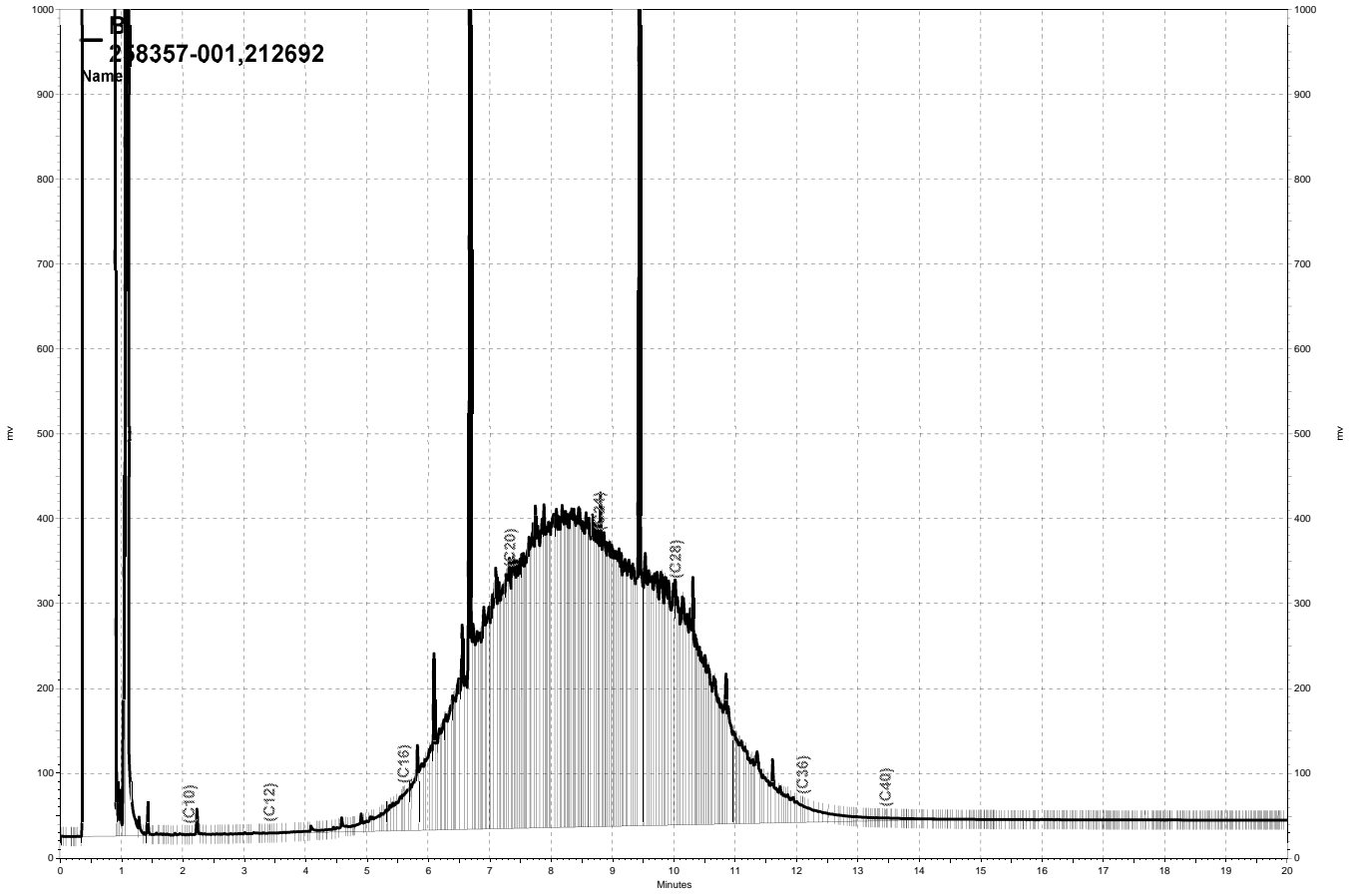
Surrogate	%REC	Limits
o-Terphenyl	98	64-136

Type: MSD Lab ID: QC746865

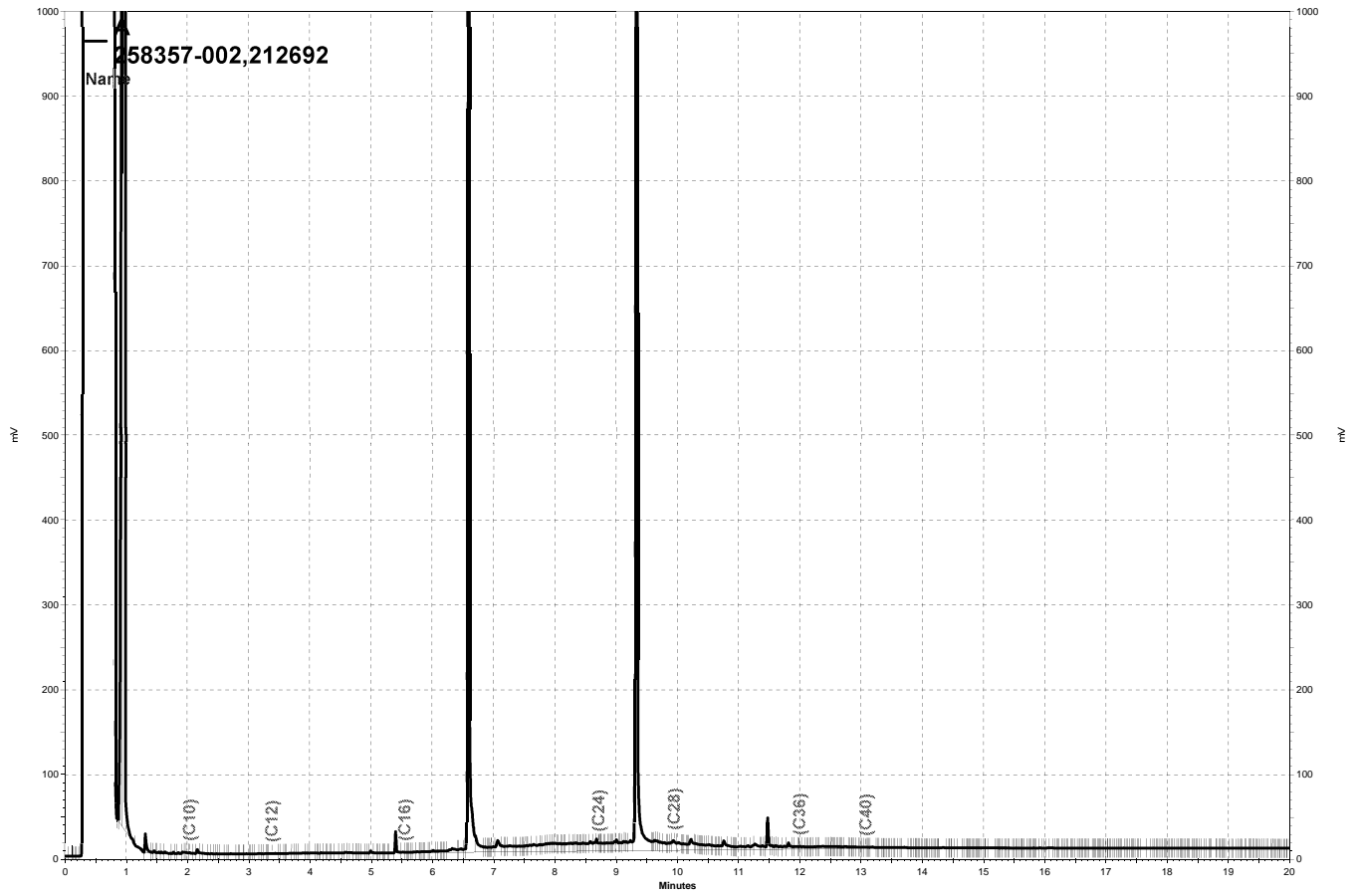
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.35	49.73	88	40-146	2	56

Surrogate	%REC	Limits
o-Terphenyl	94	64-136

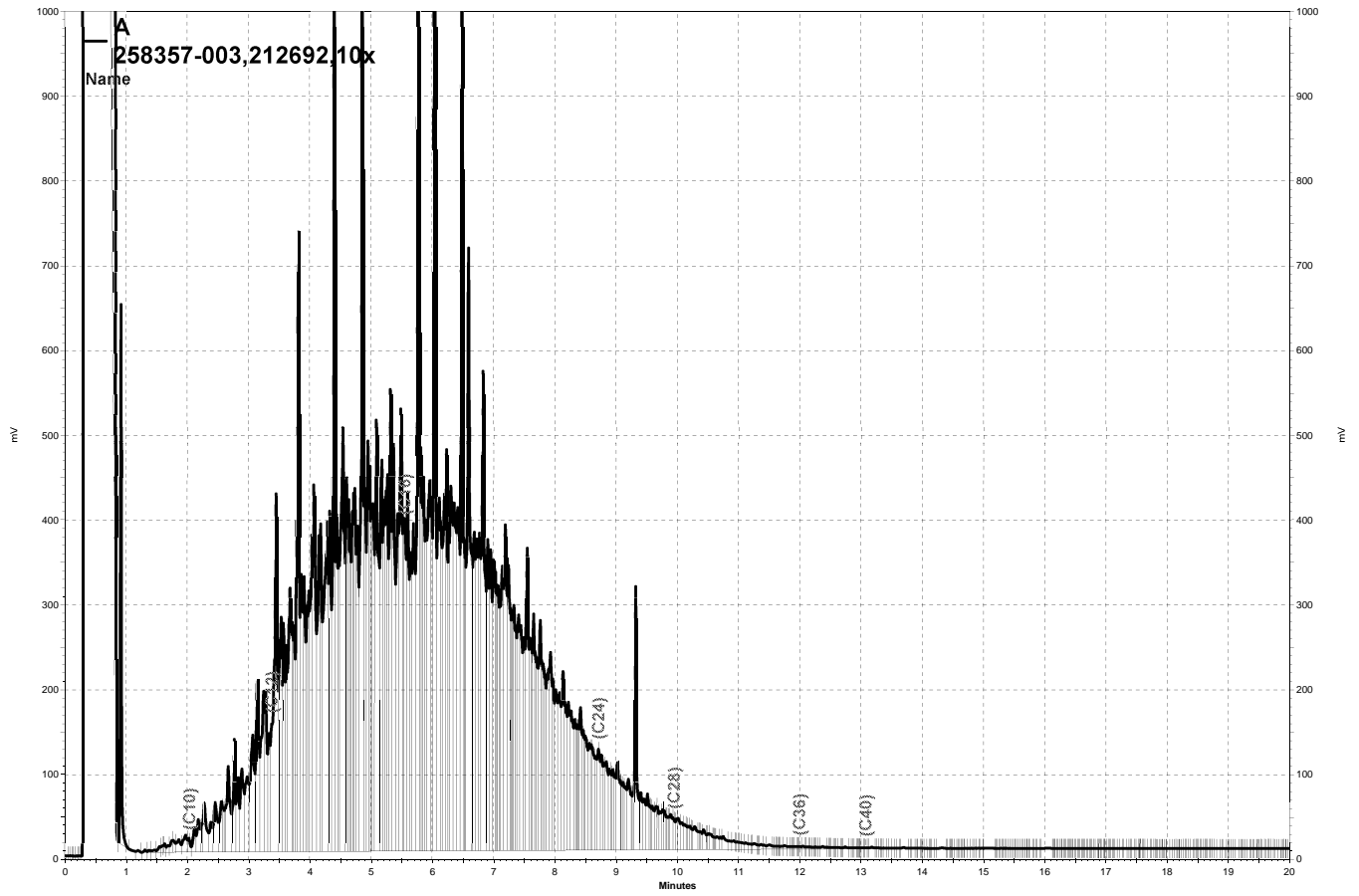
RPD= Relative Percent Difference



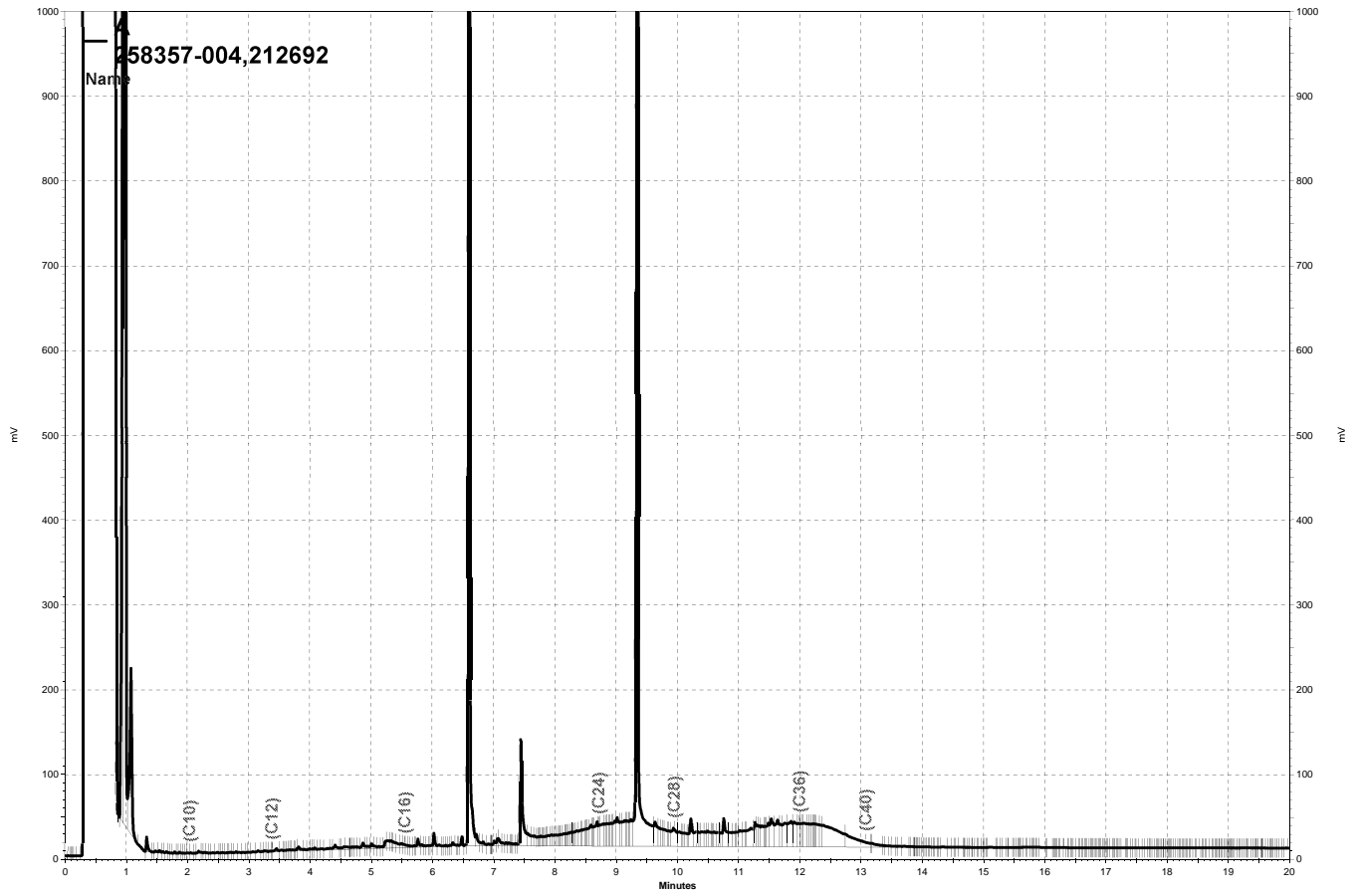
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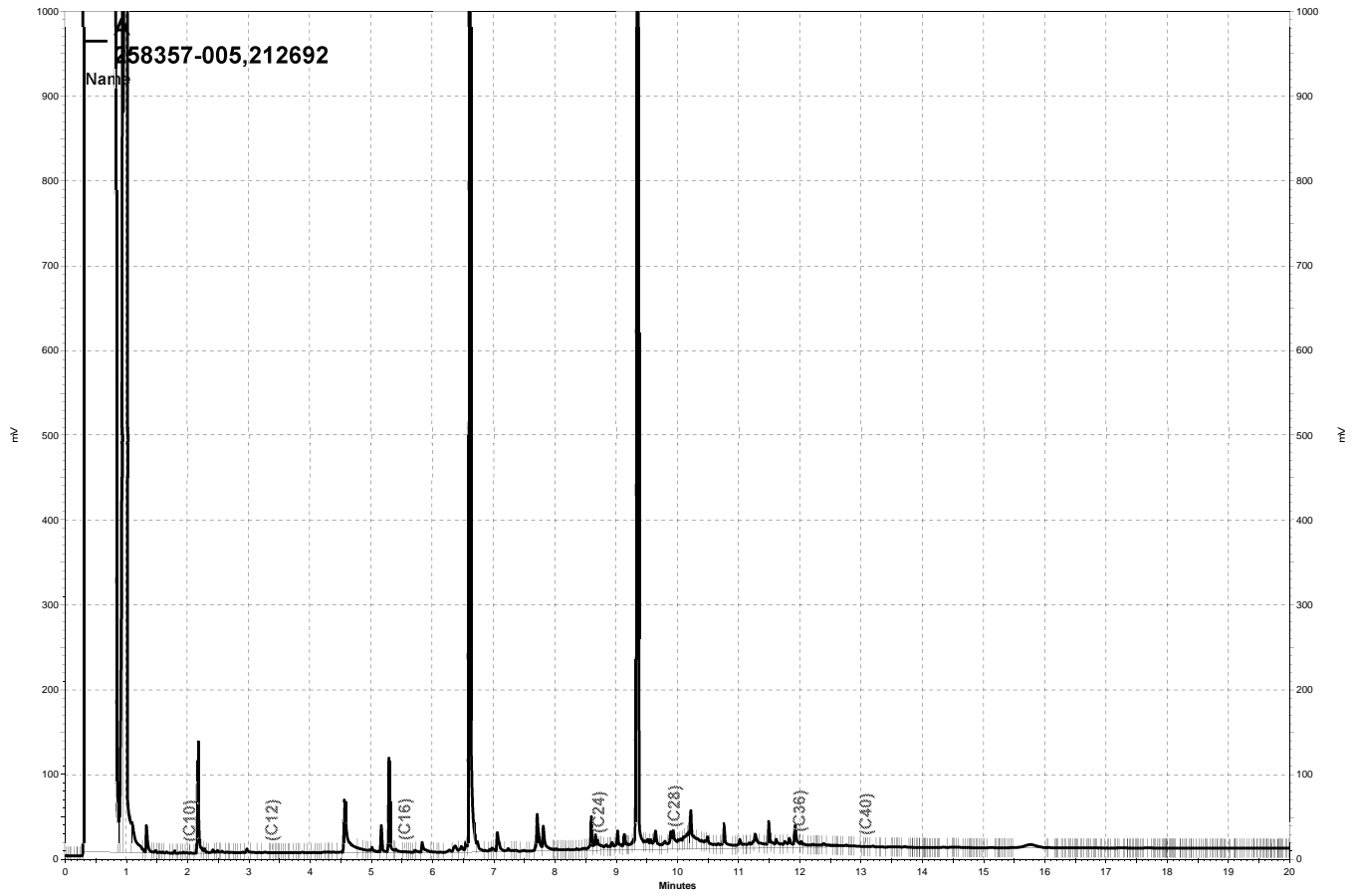
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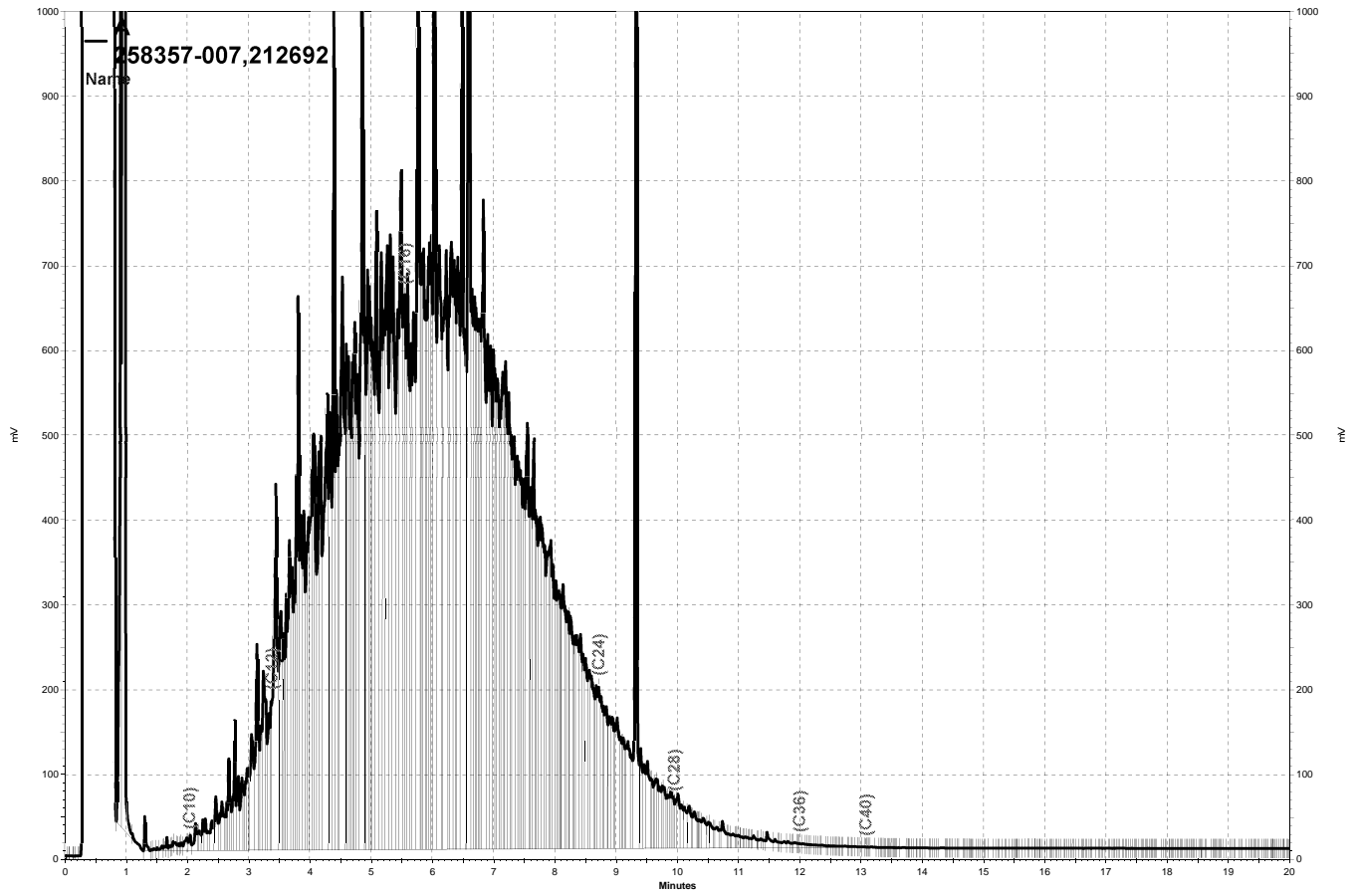


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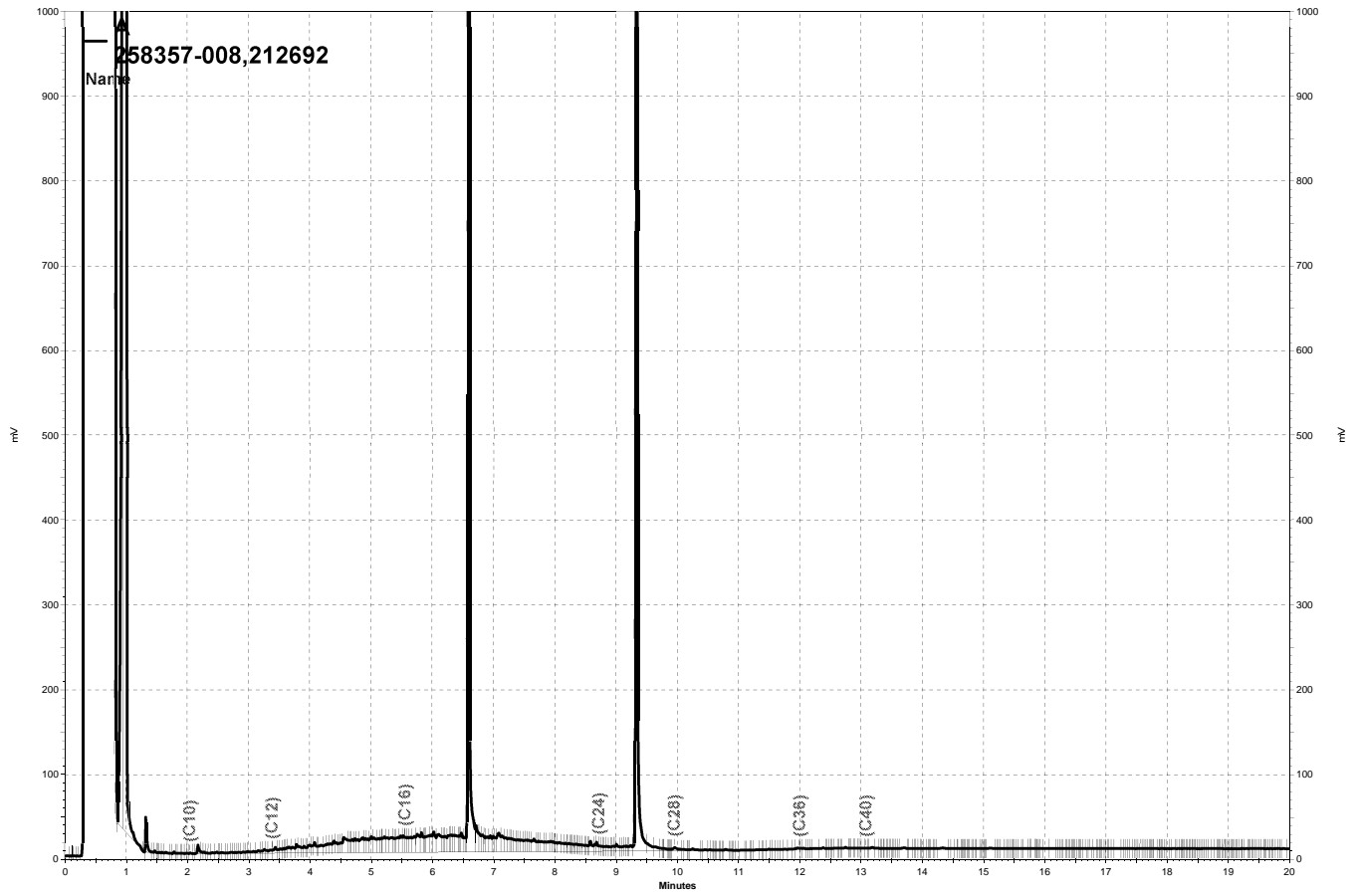


— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\178a008, A

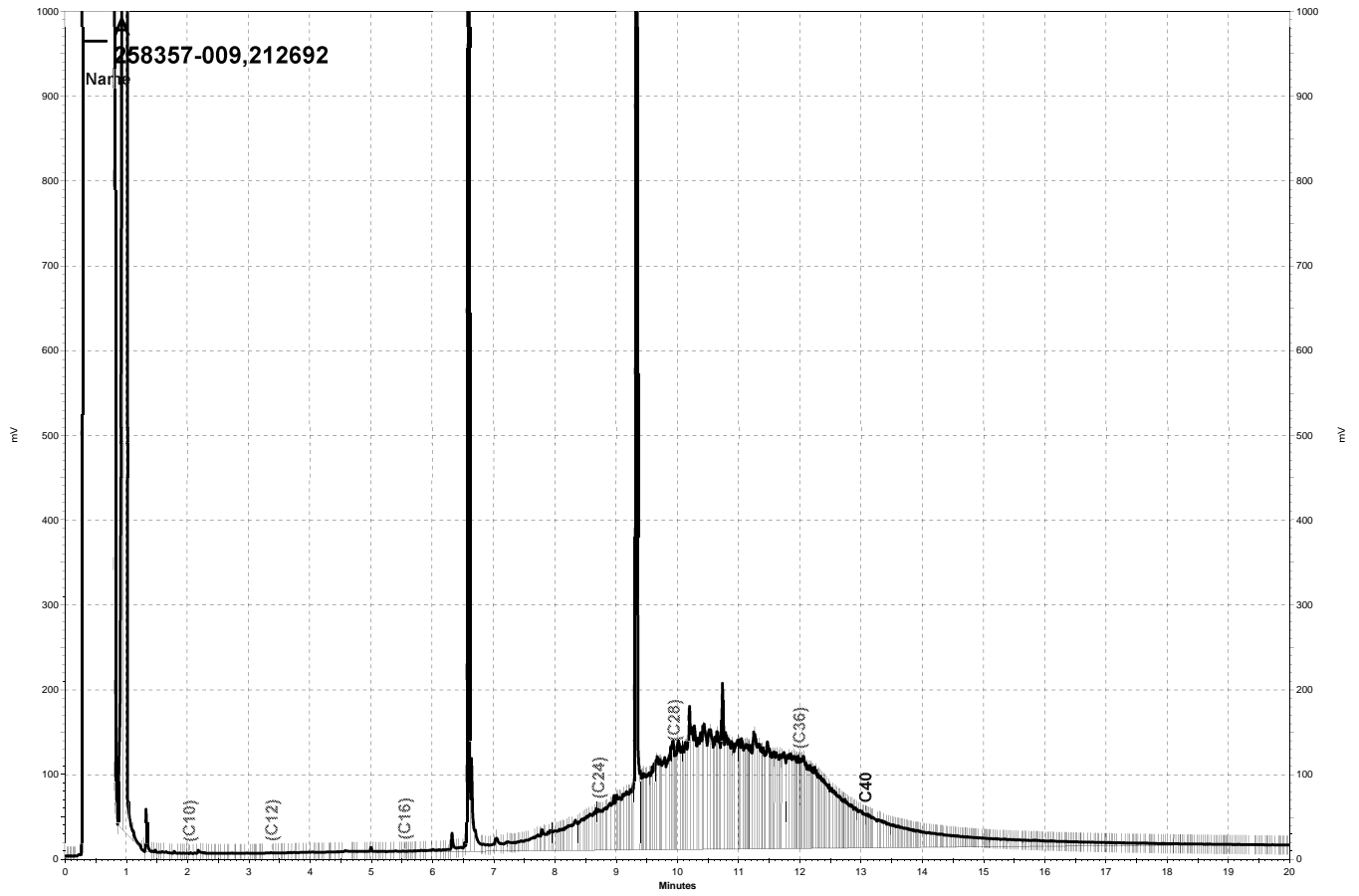




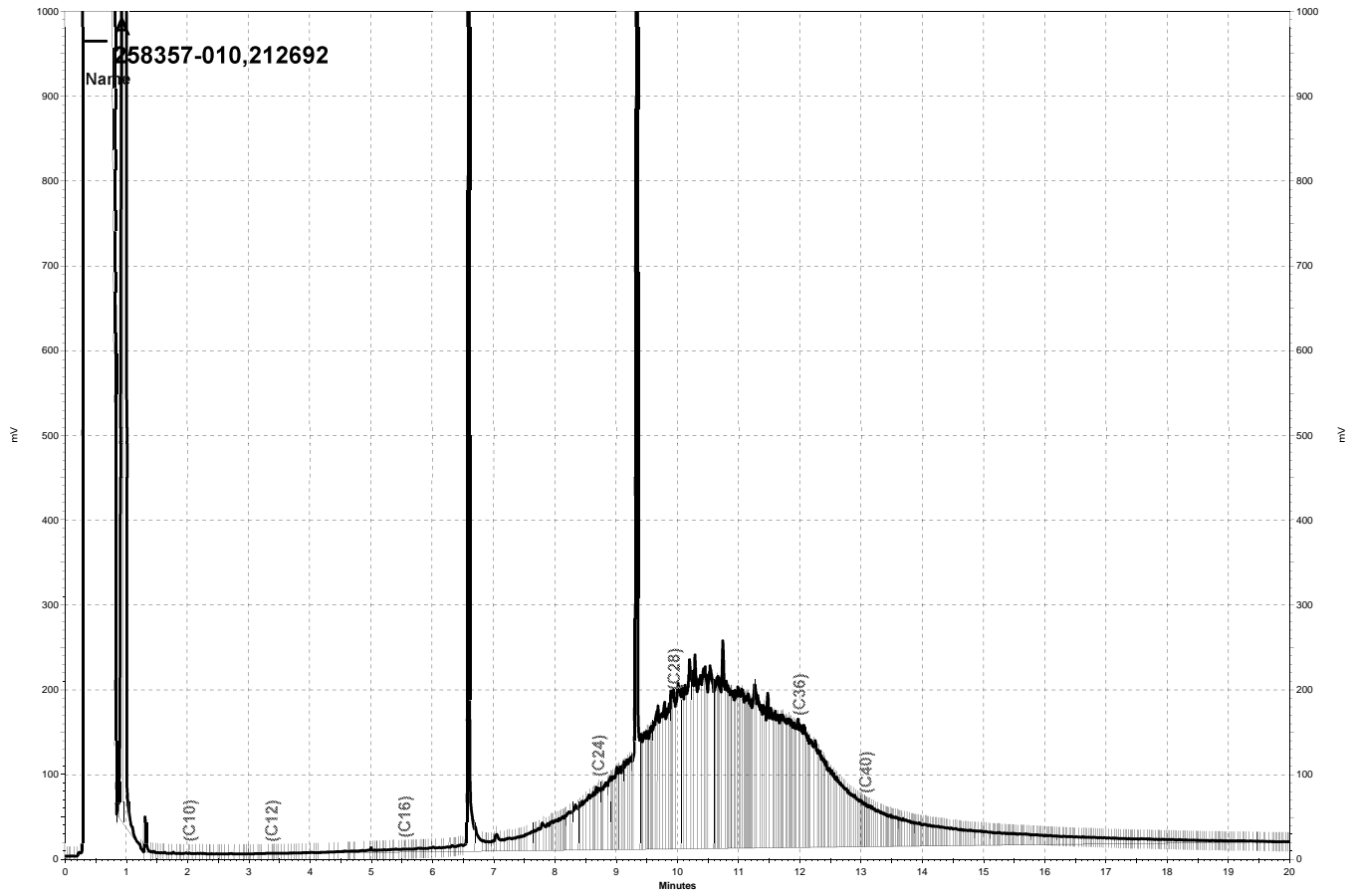
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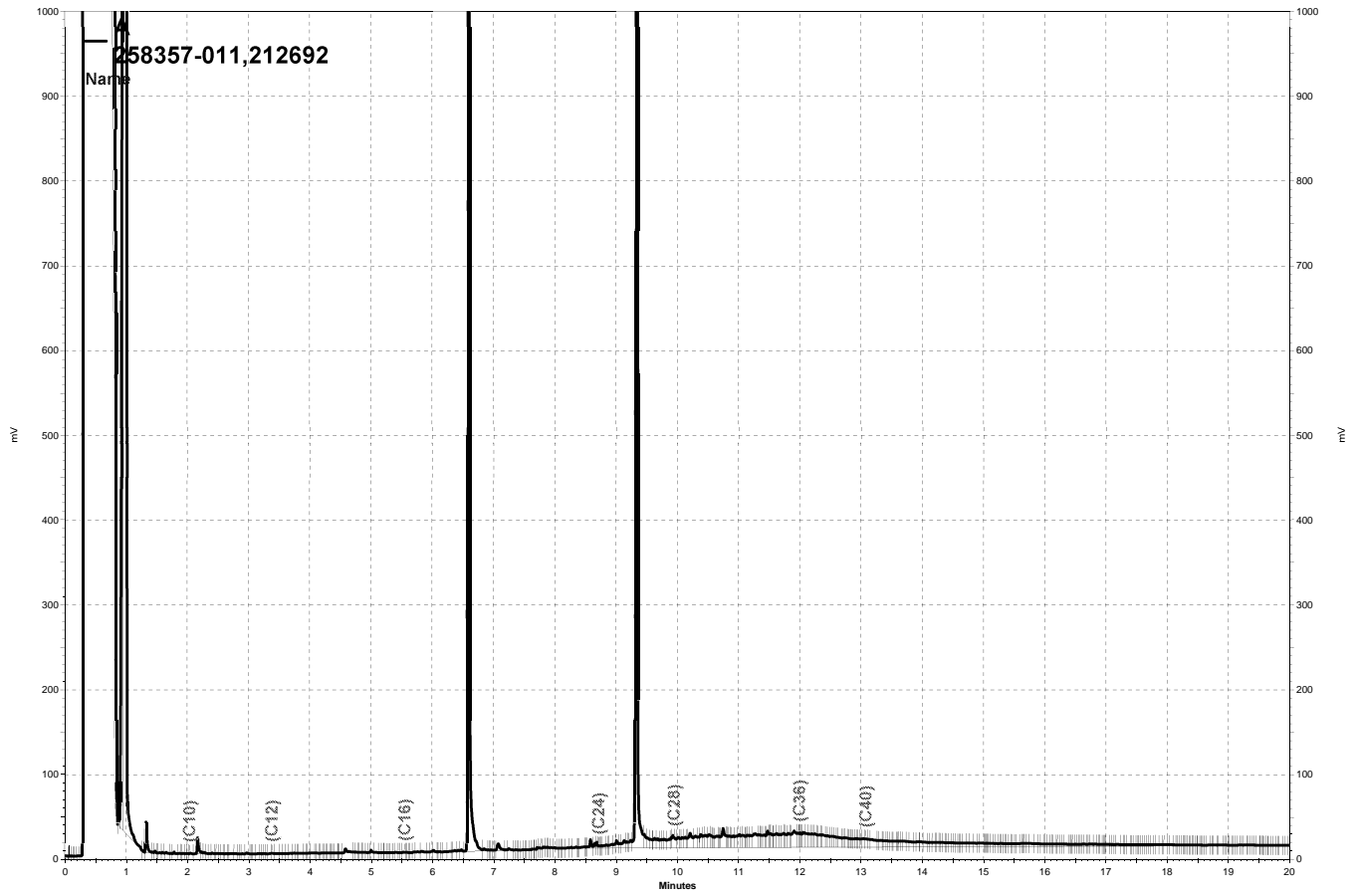
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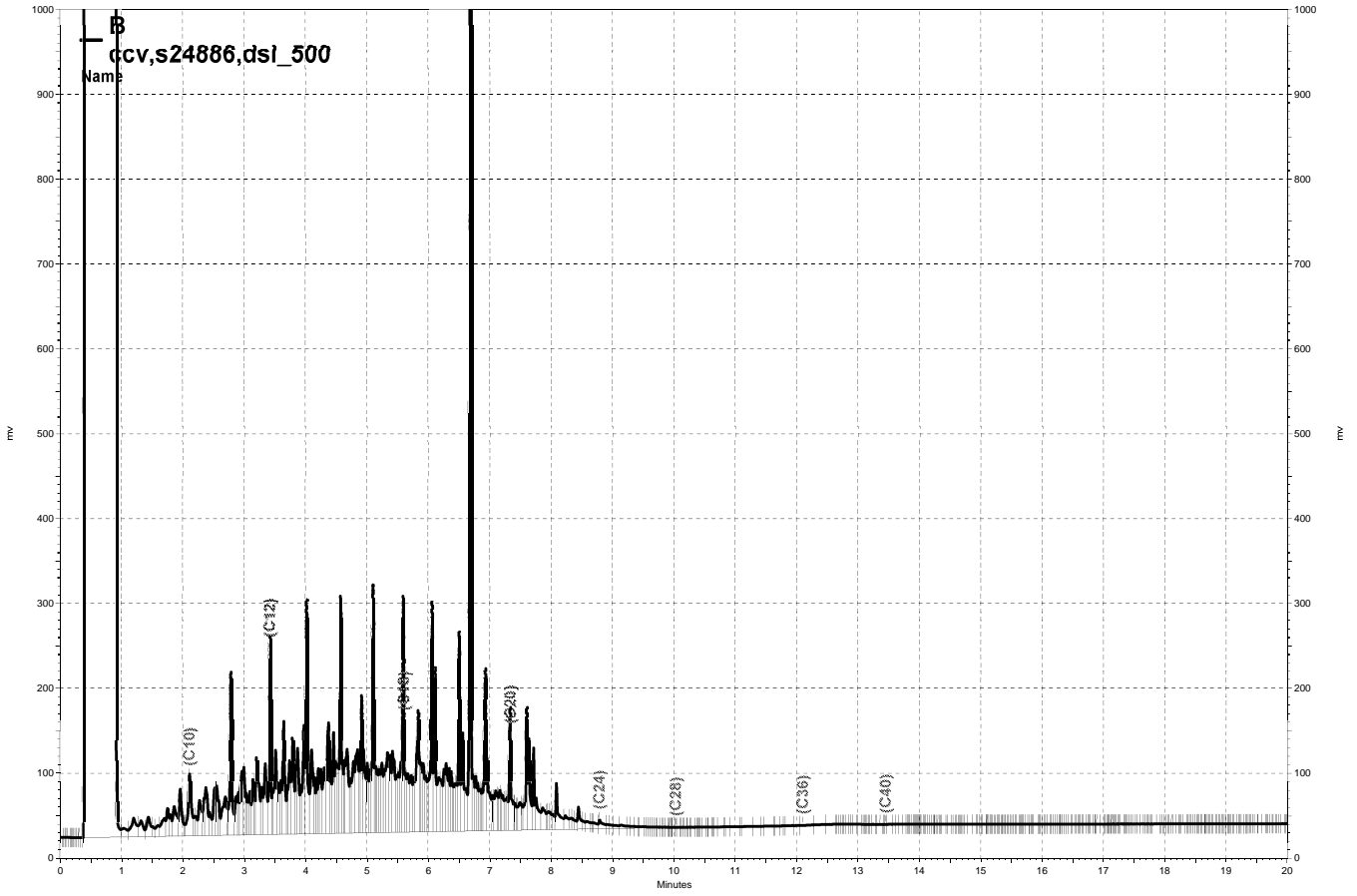
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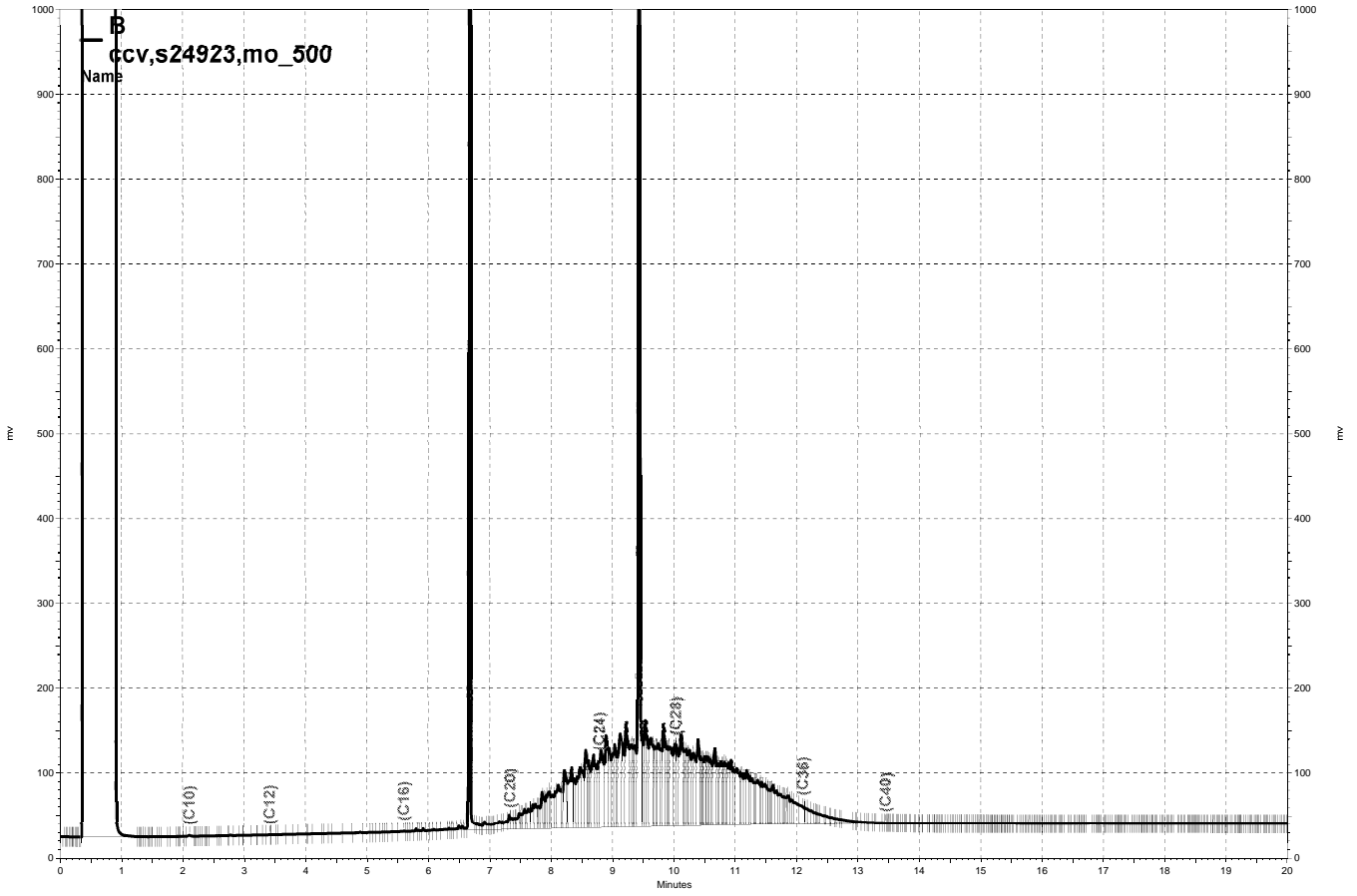
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\\Lims\gdrive\ezchrom\Projects\GC15B\Data\178b004, B



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\178b003, B

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-5	Diln Fac:	0.9785
Lab ID:	258357-001	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.8
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected

RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-5	Diln Fac:	0.9785
Lab ID:	258357-001	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	111	76-128
1,2-Dichloroethane-d4	121	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	87	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-10	Diln Fac:	0.9174
Lab ID:	258357-002	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.2
Chloromethane	ND	9.2
Vinyl Chloride	ND	9.2
Bromomethane	ND	9.2
Chloroethane	ND	9.2
Trichlorofluoromethane	ND	4.6
Acetone	ND	18
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.2
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.2
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.2
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	ND	4.6

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-10	Diln Fac:	0.9174
Lab ID:	258357-002	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	107	76-128
1,2-Dichloroethane-d4	117	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	84	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-15	Diln Fac:	4.902
Lab ID:	258357-003	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/26/14

Analyte	Result	RL
Freon 12	ND	49
Chloromethane	ND	49
Vinyl Chloride	ND	49
Bromomethane	ND	49
Chloroethane	ND	49
Trichlorofluoromethane	ND	25
Acetone	ND	98
Freon 113	ND	25
1,1-Dichloroethene	ND	25
Methylene Chloride	ND	98
Carbon Disulfide	ND	25
MTBE	ND	25
trans-1,2-Dichloroethene	ND	25
Vinyl Acetate	ND	250
1,1-Dichloroethane	ND	25
2-Butanone	ND	49
cis-1,2-Dichloroethene	ND	25
2,2-Dichloropropane	ND	25
Chloroform	ND	25
Bromochloromethane	ND	25
1,1,1-Trichloroethane	ND	25
1,1-Dichloropropene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Trichloroethene	ND	25
1,2-Dichloropropane	ND	25
Bromodichloromethane	ND	25
Dibromomethane	ND	25
4-Methyl-2-Pentanone	ND	49
cis-1,3-Dichloropropene	ND	25
Toluene	ND	25
trans-1,3-Dichloropropene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	49
1,3-Dichloropropane	ND	25
Tetrachloroethene	ND	25

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-15	Diln Fac:	4.902
Lab ID:	258357-003	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/26/14

Analyte	Result	RL
Dibromochloromethane	ND	25
1,2-Dibromoethane	ND	25
Chlorobenzene	ND	25
1,1,1,2-Tetrachloroethane	ND	25
Ethylbenzene	ND	25
m,p-Xylenes	ND	25
o-Xylene	ND	25
Styrene	ND	25
Bromoform	ND	25
Isopropylbenzene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
1,2,3-Trichloropropane	ND	25
Propylbenzene	ND	25
Bromobenzene	ND	25
1,3,5-Trimethylbenzene	ND	25
2-Chlorotoluene	ND	25
4-Chlorotoluene	ND	25
tert-Butylbenzene	ND	25
1,2,4-Trimethylbenzene	ND	25
sec-Butylbenzene	26	25
para-Isopropyl Toluene	ND	25
1,3-Dichlorobenzene	ND	25
1,4-Dichlorobenzene	ND	25
n-Butylbenzene	ND	25
1,2-Dichlorobenzene	ND	25
1,2-Dibromo-3-Chloropropane	ND	25
1,2,4-Trichlorobenzene	ND	25
Hexachlorobutadiene	ND	25
Naphthalene	ND	25
1,2,3-Trichlorobenzene	ND	25

Surrogate	%REC	Limits
Dibromofluoromethane	90	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	96	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-20	Diln Fac:	0.9747
Lab ID:	258357-004	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.7
Chloromethane	ND	9.7
Vinyl Chloride	ND	9.7
Bromomethane	ND	9.7
Chloroethane	ND	9.7
Trichlorofluoromethane	ND	4.9
Acetone	ND	19
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.7
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.7
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.7
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-20	Diln Fac:	0.9747
Lab ID:	258357-004	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	106	76-128
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	84	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-5	Diln Fac:	0.9804
Lab ID:	258357-005	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.8
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected

RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-5	Diln Fac:	0.9804
Lab ID:	258357-005	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	107	76-128
1,2-Dichloroethane-d4	118	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	86	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-10	Diln Fac:	0.9579
Lab ID:	258357-006	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.6
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-10	Diln Fac:	0.9579
Lab ID:	258357-006	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	107	76-128
1,2-Dichloroethane-d4	120	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	86	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-15	Diln Fac:	0.9690
Lab ID:	258357-007	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.7
Chloromethane	ND	9.7
Vinyl Chloride	ND	9.7
Bromomethane	ND	9.7
Chloroethane	ND	9.7
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.7
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.7
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.7
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-15	Diln Fac:	0.9690
Lab ID:	258357-007	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	106	76-128
1,2-Dichloroethane-d4	119	80-137
Toluene-d8	92	80-120
Bromofluorobenzene	85	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-20	Diln Fac:	0.9615
Lab ID:	258357-008	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.6
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Acetone	20	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB2-20	Diln Fac:	0.9615
Lab ID:	258357-008	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	94	80-120
Bromofluorobenzene	87	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-5	Diln Fac:	0.9208
Lab ID:	258357-009	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.2
Chloromethane	ND	9.2
Vinyl Chloride	ND	9.2
Bromomethane	ND	9.2
Chloroethane	ND	9.2
Trichlorofluoromethane	ND	4.6
Acetone	ND	18
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.2
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.2
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.2
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	ND	4.6

ND= Not Detected

RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-5	Diln Fac:	0.9208
Lab ID:	258357-009	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-10	Diln Fac:	0.9434
Lab ID:	258357-010	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.4
Chloromethane	ND	9.4
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Chloroethane	ND	9.4
Trichlorofluoromethane	ND	4.7
Acetone	34	19
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.7
MTBE	ND	4.7
trans-1,2-Dichloroethene	ND	4.7
Vinyl Acetate	ND	47
1,1-Dichloroethane	ND	4.7
2-Butanone	ND	9.4
cis-1,2-Dichloroethene	ND	4.7
2,2-Dichloropropane	ND	4.7
Chloroform	ND	4.7
Bromochloromethane	ND	4.7
1,1,1-Trichloroethane	ND	4.7
1,1-Dichloropropene	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
Dibromomethane	ND	4.7
4-Methyl-2-Pentanone	ND	9.4
cis-1,3-Dichloropropene	ND	4.7
Toluene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
2-Hexanone	ND	9.4
1,3-Dichloropropane	ND	4.7
Tetrachloroethene	ND	4.7

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-10	Diln Fac:	0.9434
Lab ID:	258357-010	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Chlorobenzene	ND	4.7
1,1,1,2-Tetrachloroethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7
Styrene	ND	4.7
Bromoform	ND	4.7
Isopropylbenzene	ND	4.7
1,1,2,2-Tetrachloroethane	ND	4.7
1,2,3-Trichloropropane	ND	4.7
Propylbenzene	ND	4.7
Bromobenzene	ND	4.7
1,3,5-Trimethylbenzene	ND	4.7
2-Chlorotoluene	ND	4.7
4-Chlorotoluene	ND	4.7
tert-Butylbenzene	ND	4.7
1,2,4-Trimethylbenzene	ND	4.7
sec-Butylbenzene	ND	4.7
para-Isopropyl Toluene	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
n-Butylbenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7
1,2-Dibromo-3-Chloropropane	ND	4.7
1,2,4-Trichlorobenzene	ND	4.7
Hexachlorobutadiene	ND	4.7
Naphthalene	ND	4.7
1,2,3-Trichlorobenzene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-15	Diln Fac:	0.9434
Lab ID:	258357-011	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.4
Chloromethane	ND	9.4
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Chloroethane	ND	9.4
Trichlorofluoromethane	ND	4.7
Acetone	ND	19
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.7
MTBE	ND	4.7
trans-1,2-Dichloroethene	ND	4.7
Vinyl Acetate	ND	47
1,1-Dichloroethane	ND	4.7
2-Butanone	ND	9.4
cis-1,2-Dichloroethene	ND	4.7
2,2-Dichloropropane	ND	4.7
Chloroform	ND	4.7
Bromochloromethane	ND	4.7
1,1,1-Trichloroethane	ND	4.7
1,1-Dichloropropene	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
Dibromomethane	ND	4.7
4-Methyl-2-Pentanone	ND	9.4
cis-1,3-Dichloropropene	ND	4.7
Toluene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
2-Hexanone	ND	9.4
1,3-Dichloropropane	ND	4.7
Tetrachloroethene	ND	4.7

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-15	Diln Fac:	0.9434
Lab ID:	258357-011	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Chlorobenzene	ND	4.7
1,1,1,2-Tetrachloroethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7
Styrene	ND	4.7
Bromoform	ND	4.7
Isopropylbenzene	ND	4.7
1,1,2,2-Tetrachloroethane	ND	4.7
1,2,3-Trichloropropane	ND	4.7
Propylbenzene	ND	4.7
Bromobenzene	ND	4.7
1,3,5-Trimethylbenzene	ND	4.7
2-Chlorotoluene	ND	4.7
4-Chlorotoluene	ND	4.7
tert-Butylbenzene	ND	4.7
1,2,4-Trimethylbenzene	ND	4.7
sec-Butylbenzene	ND	4.7
para-Isopropyl Toluene	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
n-Butylbenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7
1,2-Dibromo-3-Chloropropane	ND	4.7
1,2,4-Trichlorobenzene	ND	4.7
Hexachlorobutadiene	ND	4.7
Naphthalene	ND	4.7
1,2,3-Trichlorobenzene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	88	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-16	Diln Fac:	0.9921
Lab ID:	258357-012	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.9
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	9.9
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	9.9
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	9.9
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB3-16	Diln Fac:	0.9921
Lab ID:	258357-012	Batch#:	212600
Matrix:	Soil	Sampled:	06/19/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	86	79-128

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746471	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
1,1-Dichloroethene	25.00	24.44	98	68-135
Benzene	25.00	25.65	103	80-127
Trichloroethene	25.00	26.27	105	77-129
Toluene	25.00	25.16	101	79-125
Chlorobenzene	25.00	27.47	110	78-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	88	79-128



**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746472	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746472	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	106	76-128
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	85	79-128

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

Purgeable Organics by GC/MS			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-5	Batch#:	212600
MSS Lab ID:	258357-001	Sampled:	06/19/14
Matrix:	Soil	Received:	06/20/14
Units:	ug/Kg	Analyzed:	06/25/14
Basis:	as received		

Type: MS Diln Fac: 0.9542  
 Lab ID: QC746520

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5858	47.71	44.11	92	46-138
Benzene	<0.6825	47.71	44.40	93	51-125
Trichloroethene	<0.7108	47.71	45.71	96	41-146
Toluene	<0.7476	47.71	41.94	88	45-123
Chlorobenzene	<0.6128	47.71	43.73	92	39-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	118	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	85	79-128

Type: MSD Diln Fac: 0.9634  
 Lab ID: QC746521

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.17	45.62	95	46-138	2	51
Benzene	48.17	44.90	93	51-125	0	46
Trichloroethene	48.17	46.60	97	41-146	1	55
Toluene	48.17	43.00	89	45-123	2	59
Chlorobenzene	48.17	44.09	92	39-120	0	54

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	85	79-128

RPD= Relative Percent Difference

**Batch QC Report**

Purgeable Organics by GC/MS			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746571	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746571	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	85	79-128

ND= Not Detected

RL= Reporting Limit

<b>Lead</b>			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3050B
Project#:	942	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Sampled:	06/19/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received	Prepared:	06/25/14

Field ID	Type	Lab ID	Result	RL	Batch#	Analyzed
SB1-5	SAMPLE	258357-001	6.6	0.26	212629	07/02/14
SB1-10	SAMPLE	258357-002	8.3	0.23	212629	07/02/14
SB1-15	SAMPLE	258357-003	7.3	0.25	212629	07/02/14
SB1-20	SAMPLE	258357-004	7.6	0.25	212629	07/02/14
SB2-5	SAMPLE	258357-005	6.3	0.25	212629	07/02/14
SB2-10	SAMPLE	258357-006	6.6	0.26	212629	07/02/14
SB2-15	SAMPLE	258357-007	5.1	0.24	212630	07/03/14
SB2-20	SAMPLE	258357-008	4.9	0.26	212630	07/03/14
SB3-5	SAMPLE	258357-009	7.7	0.27	212630	07/03/14
SB3-10	SAMPLE	258357-010	6.4	0.26	212630	07/03/14
SB3-15	SAMPLE	258357-011	4.6	0.26	212630	07/03/14
SB3-16	SAMPLE	258357-012	5.3	0.24	212630	07/03/14
	BLANK	QC746600	ND	0.25	212629	07/02/14
	BLANK	QC746605	ND	0.25	212630	07/03/14

ND= Not Detected  
 RL= Reporting Limit

Batch QC Report

Lead			
Lab #:	258357	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3050B
Project#:	942	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Received:	06/20/14
Units:	mg/Kg	Prepared:	06/25/14
Basis:	as received		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Sampled	Analyzed
	BS		QC746601		100.0	92.95	93	80-120			212629		07/02/14
	BSD		QC746602		100.0	94.72	95	80-120	2	20	212629		07/02/14
SP1 A-3'	MS	258353-001	QC746603	9.750	99.01	93.82	85	52-122			212629	06/18/14	07/02/14
SP1 A-3'	MSD	258353-001	QC746604		104.2	95.43	82	52-122	3	49	212629	06/18/14	07/02/14
	BS		QC746606		100.0	90.51	91	80-120			212630		07/03/14
	BSD		QC746607		100.0	88.39	88	80-120	2	20	212630		07/03/14
SB2-15	MS	258357-007	QC746608	5.064	105.3	90.73	81	52-122			212630	06/19/14	07/03/14
SB2-15	MSD	258357-007	QC746609		108.7	93.65	82	52-122	0	49	212630	06/19/14	07/03/14

RPD= Relative Percent Difference



Laboratory Job Number 258357

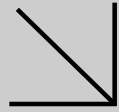
Subcontracted Products

Cal Science





Calscience



**WORK ORDER NUMBER: 14-06-1853**

*The difference is service*



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**Analytical Report For**

**Client:** Curtis & Tompkins, Ltd.

**Client Project Name:** 258357

**Attention:** Mike J. Dahlquist  
2323 Fifth Street  
Berkeley, CA 94710-2407

*Vikas Patel*

Approved for release on 07/03/2014 by:  
Vikas Patel  
Project Manager

ResultLink ▶

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# Contents

Client Project Name: 258357  
Work Order Number: 14-06-1853

1	Work Order Narrative. . . . .	3
2	Client Sample Data. . . . .	4
	2.1 DHS LUFT Organic Lead (Solid). . . . .	4
3	Quality Control Sample Data. . . . .	6
	3.1 MS/MSD. . . . .	6
	3.2 LCS/LCSD. . . . .	7
4	Sample Analysis Summary. . . . .	8
5	Glossary of Terms and Qualifiers. . . . .	9
6	Chain-of-Custody/Sample Receipt Form. . . . .	10

**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/25/14. They were assigned to Work Order 14-06-1853.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: [http://www.calscience.com/PDF/New\\_York.pdf](http://www.calscience.com/PDF/New_York.pdf)

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Calscience

## Analytical Report

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1853  
Preparation: DHS LUFT  
Method: DHS LUFT  
Units: mg/kg

Project: 258357

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SB1-5</b>	<b>14-06-1853-1-A</b>	<b>06/19/14 10:00</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB1-10</b>	<b>14-06-1853-2-A</b>	<b>06/19/14 10:10</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB1-15</b>	<b>14-06-1853-3-A</b>	<b>06/19/14 10:25</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB1-20</b>	<b>14-06-1853-4-A</b>	<b>06/19/14 11:05</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB2-5</b>	<b>14-06-1853-5-A</b>	<b>06/19/14 11:50</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB2-10</b>	<b>14-06-1853-6-A</b>	<b>06/19/14 12:05</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB2-15</b>	<b>14-06-1853-7-A</b>	<b>06/19/14 12:20</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB2-20</b>	<b>14-06-1853-8-A</b>	<b>06/19/14 13:00</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1853  
Preparation: DHS LUFT  
Method: DHS LUFT  
Units: mg/kg

Project: 258357

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SB3-5</b>	<b>14-06-1853-9-A</b>	<b>06/19/14 13:45</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB3-10</b>	<b>14-06-1853-10-A</b>	<b>06/19/14 13:55</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB3-15</b>	<b>14-06-1853-11-A</b>	<b>06/19/14 14:10</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB3-16</b>	<b>14-06-1853-12-A</b>	<b>06/19/14 14:15</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>Method Blank</b>	<b>099-10-020-1718</b>	<b>N/A</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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## Quality Control - Spike/Spike Duplicate

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1853  
Preparation: DHS LUFT  
Method: DHS LUFT

Project: 258357

Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-2124-1	Sample	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S01
14-06-2124-1	Matrix Spike	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S01
14-06-2124-1	Matrix Spike Duplicate	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Organic Lead	ND	25.00	21.40	86	24.50	98	22-148	14	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

## Quality Control - LCS

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1853  
Preparation: DHS LUFT  
Method: DHS LUFT

Project: 258357

Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>099-10-020-1718</b>	<b>LCS</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Organic Lead		25.00	24.90	100	72-126	


  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

# Sample Analysis Summary Report

Work Order: 14-06-1853

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
DHS LUFT	DHS LUFT	309	FLAA3	1

  
Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841



## Glossary of Terms and Qualifiers

Work Order: 14-06-1853

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Curtis & Tompkins, Ltd.  
 Analytical Laboratories, Since 1878  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510) 486-0900  
 (510) 486-0532

**14-06-1853**

Project Number: 258357  
 Site: Stockbridge The Green

Subcontract Laboratory:  
 Cal Science  
 7440 Lincoln Way  
 Garden Grove, CA 92841-1432  
 (714) 895-5494  
 ATTN: Vik Patel

Results due: Report Level: II

Please send report to: Mike J. Dahlquist (mike.dahlquist@ctberk.com)  
 \*\*\* Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
1 SB1-5	06/19 10:00	Soil	OL	258357-001	
2 SB1-10	06/19 10:10	Soil	OL	258357-002	
3 SB1-15	06/19 10:25	Soil	CL	258357-003	
4 SB1-20	06/19 11:05	Soil	CL	258357-004	
5 SB2-5	06/19 11:50	Soil	OL	258357-005	
6 SB2-10	06/19 12:05	Soil	CL	258357-006	
7 SB2-15	06/19 12:20	Soil	OL	258357-007	
8 SB2-20	06/19 13:00	Soil	OL	258357-008	
9 SB3-5	06/19 13:45	Soil	OL	258357-009	
10 SB3-10	06/19 13:55	Soil	OL	258357-010	
11 SB3-15	06/19 14:10	Soil	OL	258357-011	
12 SB3-16	06/19 14:15	Soil	OL	258357-012	

Return to Contents

Notes:	Relinquished By:	Received By:
	<i>Mikelle Chong</i>	
	Date/Time: <i>06/24/14 1530</i>	Date/Time:
		<i>Vik Patel</i>
	Date/Time:	Date/Time: <i>6/25/14 0930</i>

Signature on this form constitutes a firm Purchase Order for the services requested above.

From: (510) 486-0900  
Sample Control  
Curtis & Tompkins  
2323 5th Street

Origin ID: JEMA



J14101402070326

Berkeley, CA 94710

Ship Date: 24JUN14  
Act/Wgt: 22.5 LB  
CAD: 7603800/INET3490

0853

Delivery Address Bar Code



SHIP TO: (714) 895-5494

BILL THIRD PARTY

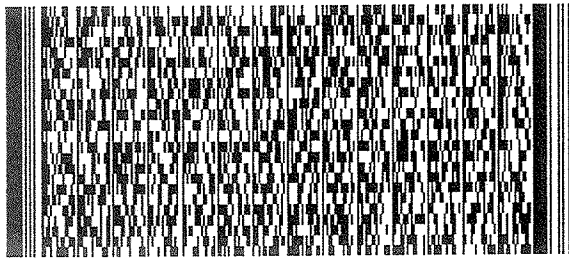
Vik Patel  
Cal Science Environmental Lab  
7440 LINCOLN WAY

Ref # 258354,355,357,358  
Invoice #  
PO #  
Dept #

GARDEN GROVE, CA 92841

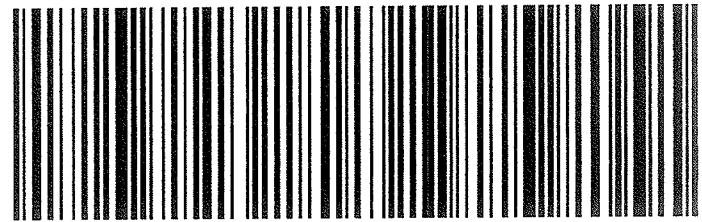
WED - 25 JUN AA  
STANDARD OVERNIGHT

TRK# 7704 0891 0356  
0201



92 APVA

92841  
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SNA



522G5/9BC4/F220

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Return to Contents

**SAMPLE RECEIPT FORM**

Cooler 1 of 1

CLIENT: CDT

DATE: 06/25/14

**TEMPERATURE:** Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.0 °C - 0.3 °C (CF) = 1.7 °C     Blank     Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature:     Air     Filter    Checked by: IS

**CUSTODY SEALS INTACT:**

Cooler     \_\_\_\_\_     No (Not Intact)     Not Present     N/A    Checked by: IS

Sample     \_\_\_\_\_     No (Not Intact)     Not Present    Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels. <input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:**

**Solid:**  4ozCGJ     8ozCGJ     16ozCGJ     Sleeve (\_\_\_\_)     EnCores®     TerraCores®     2ozCGJ

**Aqueous:**  VOA     VOAh     VOAn<sub>2</sub>     125AGB     125AGBh     125AGBp     1AGB     1AGBna<sub>2</sub>     1AGBs

500AGB     500AGJ     500AGJs     250AGB     250CGB     250CGBs     1PB     1PBna     500PB

250PB     250PBn     125PB     125PBz<sub>na</sub>     100PJ     100PJna<sub>2</sub>     \_\_\_\_\_     \_\_\_\_\_     \_\_\_\_\_

**Air:**  Tedlar®     Canister    **Other:**  \_\_\_\_\_    **Trip Blank Lot#:** \_\_\_\_\_    **Labeled/Checked by:** 802

**Container:** C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope    **Reviewed by:** 802

**Preservative:** h: HCL n: HNO<sub>3</sub> na<sub>2</sub>:Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> na: NaOH p: H<sub>3</sub>PO<sub>4</sub> s: H<sub>2</sub>SO<sub>4</sub> u: Ultra-pure z<sub>na</sub>: ZnAc<sub>2</sub>+NaOH f: Filtered    **Scanned by:** 802

Return to Contents



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900


Laboratory Job Number 258358  
ANALYTICAL REPORT

Ground Zero Analysis, Inc.  
1172 Kansas Ave  
Modesto, Ca 95351

Project : 942  
Location : Stockbridge The Green  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SB4-5	258358-001
SB4-10	258358-002
SB4-15	258358-003
SB4-20	258358-004
SB5-5	258358-005
SB5-10	258358-006
SB5-15	258358-007
SB5-20	258358-008
SB6-5	258358-009
SB6-10	258358-010
SB6-15	258358-011

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Isabelle Choy  
Project Manager  
isabelle.choy@ctberk.com

Date: 07/08/2014

## CASE NARRATIVE

Laboratory number: 258358  
Client: Ground Zero Analysis, Inc.  
Project: 942  
Location: Stockbridge The Green  
Request Date: 06/20/14  
Samples Received: 06/20/14

This data package contains sample and QC results for eleven soil samples, requested for the above referenced project on 06/20/14. The samples were received cold and intact.

### TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

### TPH-Extractables by GC (EPA 8015B):

Matrix spikes QC747034, QC747035 (batch 212734) were not reported because the parent sample required a dilution that would have diluted out the spikes. No other analytical problems were encountered.

### Volatile Organics by GC/MS (EPA 8260B):

SB4-10 (lab # 258358-002) and SB4-15 (lab # 258358-003) were diluted due to high hydrocarbons. SB6-15 (lab # 258358-011) contains high hydrocarbons. No other analytical problems were encountered.

### Metals (EPA 6010B):

No analytical problems were encountered.

### Organic Lead (CA LUFT) (OL):

Cal Science in Garden Grove, CA performed the analysis (not NELAP certified). Please see the Cal Science case narrative.

258358

# GROUND ZERO ANALYSIS

No 3333

## CHAIN OF CUSTODY RECORD ANALYSIS REQUEST

PROJECT NO.		PROJECT NAME/SITE						ANALYSIS REQUESTED										RO. #:		
942		Stochbridge The Green																		
SAMPLERS							NO. CONTAINERS	SAMPLE TYPE	ANALYSIS REQUESTED										REMARKS	
(SIGN)																				
(PRINT)																				
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED			BTEX (602/8020)	TPH <sub>g</sub> (8015)	TPH <sub>d</sub> (8015) / Fuel o.i.	OXYGENATES (8260)	601/8010	8260 FULL SCAN VOCs	Lead	Organic Lead	5035 EXTRACTION	EDF NEEDED	
1	SB4-5	6/20/14	8:45		X	none	X	1	S	X	X			X	X	X			X	
2	SB4-10		8:55							X	X			X	X	X			X	
3	SB4-15		9:10							X	X			X	X	X			X	
4	SB4-20		9:25							X	X			X	X	X			X	
5	SB5-5		10:00							X	X			X	X	X			X	
6	SB5-10		10:10							X	X			X	X	X			X	
7	SB5-15		10:25							X	X			X	X	X			X	
8	SB5-20		10:45							X	X			X	X	X			X	
9	SB6-5		11:35							X	X			X	X	X			X	
10	SB6-10		11:45							X	X			X	X	X			X	
11	SB6-15		12:05							X	X			X	X	X			X	

RELINQUISHED BY: <i>Joe Vasquez</i>	DATE 6/20/14	TIME 1330	RECEIVED BY: <i>[Signature]</i>	LABORATORY: Curtis & Tomkins	PLEASE SEND RESULTS TO: Ground zero Analysis, Inc. 1172 Kansas Ave Modesto, CA 95351
RELINQUISHED BY: <i>[Signature]</i>	DATE 6/20/14	TIME 1530	RECEIVED BY: <i>[Signature]</i>	REQUESTED TURNAROUND TIME: Standard	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	RECEIPT CONDITION:	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	PROJECT MANAGER: Greg Stahl	

note on re cold PC



COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 058358 Date Received 8/20/14 Number of coolers 3
Client Ground Zero Analysis Project 942

Date Opened 8/23/14 By (print) MC (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 4.5/5.9/5.5

Samples received on ice & cold without a temperature blank; temp taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.

### Detections Summary for 258358

Client : Ground Zero Analysis, Inc.  
 Project : 942  
 Location : Stockbridge The Green

Client Sample ID : SB4-5

Laboratory Sample ID :

258358-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	18	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	32		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Lead	5.7		0.26	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB4-10

Laboratory Sample ID :

258358-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	26	Y	0.99	0.052	mg/Kg	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	3,900		9.9	3.0	mg/Kg	As Recd	10.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	290		50	15	mg/Kg	As Recd	10.00	EPA 8015B	EPA 3550B
sec-Butylbenzene	31		25	3.1	ug/Kg	As Recd	5.000	EPA 8260B	EPA 5030B
Lead	5.0		0.24	0.066	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB4-15

Laboratory Sample ID :

258358-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	5.2	Y	0.94	0.050	mg/Kg	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	970		5.0	1.5	mg/Kg	As Recd	5.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	100		25	7.6	mg/Kg	As Recd	5.000	EPA 8015B	EPA 3550B
Lead	5.2		0.25	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB4-20

Laboratory Sample ID :

258358-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	4.9		0.26	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB5-5

Laboratory Sample ID :

258358-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	4.7		0.25	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB5-10

Laboratory Sample ID :

258358-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	3.8		0.24	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB5-15

Laboratory Sample ID :

258358-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	5.6		0.24	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB5-20

Laboratory Sample ID :

258358-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	4.2		0.24	0.066	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB6-5

Laboratory Sample ID :

258358-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	4.4		0.25	0.070	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB6-10

Laboratory Sample ID :

258358-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Lead	4.6		0.26	0.071	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB6-15

Laboratory Sample ID :

258358-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	64		0.99	0.30	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Lead	6.1		0.23	0.065	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	06/20/14
Basis:	as received	Received:	06/20/14

Field ID:	SB4-5	Batch#:	212544
Type:	SAMPLE	Analyzed:	06/25/14
Lab ID:	258358-001		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

Field ID:	SB4-10	Batch#:	212544
Type:	SAMPLE	Analyzed:	06/25/14
Lab ID:	258358-002		

Analyte	Result	RL
Gasoline C7-C12	26 Y	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	137	67-137

Field ID:	SB4-15	Batch#:	212544
Type:	SAMPLE	Analyzed:	06/25/14
Lab ID:	258358-003		

Analyte	Result	RL
Gasoline C7-C12	5.2 Y	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	113	67-137

Field ID:	SB4-20	Batch#:	212544
Type:	SAMPLE	Analyzed:	06/25/14
Lab ID:	258358-004		

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

### Total Volatile Hydrocarbons

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	06/20/14
Basis:	as received	Received:	06/20/14

Field ID:	SB5-5	Batch#:	212544
Type:	SAMPLE	Analyzed:	06/25/14
Lab ID:	258358-005		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Field ID:	SB5-10	Batch#:	212541
Type:	SAMPLE	Analyzed:	06/25/14
Lab ID:	258358-006		

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	67-137

Field ID:	SB5-15	Batch#:	212570
Type:	SAMPLE	Analyzed:	06/24/14
Lab ID:	258358-007		

Analyte	Result	RL
Gasoline C7-C12	ND	0.91

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	67-137

Field ID:	SB5-20	Batch#:	212570
Type:	SAMPLE	Analyzed:	06/24/14
Lab ID:	258358-008		

Analyte	Result	RL
Gasoline C7-C12	ND	0.91

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	06/20/14
Basis:	as received	Received:	06/20/14

Field ID: SB6-5                                      Batch#: 212570  
 Type: SAMPLE    Analyzed: 06/24/14  
 Lab ID: 258358-009

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	67-137

Field ID: SB6-10                                      Batch#: 212570  
 Type: SAMPLE    Analyzed: 06/24/14  
 Lab ID: 258358-010

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-137

Field ID: SB6-15                                      Batch#: 212570  
 Type: SAMPLE    Analyzed: 06/25/14  
 Lab ID: 258358-011

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-137

Type: BLANK    Batch#: 212541  
 Lab ID: QC746247                                      Analyzed: 06/24/14

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-137

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

**Total Volatile Hydrocarbons**

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	06/20/14
Basis:	as received	Received:	06/20/14

Type: BLANK                                      Batch#: 212544  
 Lab ID: QC746257                                Analyzed: 06/24/14

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Gasoline C7-C12	ND	0.20

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Bromofluorobenzene (FID)	103	67-137

Type: BLANK                                      Batch#: 212570  
 Lab ID: QC746367                                Analyzed: 06/24/14

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Gasoline C7-C12	ND	0.20

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Bromofluorobenzene (FID)	103	67-137

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746246	Batch#:	212541
Matrix:	Soil	Analyzed:	06/24/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.025	102	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	67-137



Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	258349-001	Batch#:	212541
Matrix:	Soil	Sampled:	06/23/14
Units:	mg/Kg	Received:	06/23/14
Basis:	as received	Analyzed:	06/24/14

Type: MS Lab ID: QC746251

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.09033	10.31	8.820	85	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	67-137

Type: MSD Lab ID: QC746252

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.87	9.295	85	42-120	0	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	120	67-137

RPD= Relative Percent Difference

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746256	Batch#:	212544
Matrix:	Soil	Analyzed:	06/24/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.120	112	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	258349-007	Batch#:	212544
Matrix:	Soil	Sampled:	06/23/14
Units:	mg/Kg	Received:	06/23/14
Basis:	as received	Analyzed:	06/24/14

Type: MS Lab ID: QC746258

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.05443	10.20	8.962	88	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	67-137

Type: MSD Lab ID: QC746259

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.804	8.472	86	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	67-137

RPD= Relative Percent Difference

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746366	Batch#:	212570
Matrix:	Soil	Analyzed:	06/24/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.126	113	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8015B
Field ID:	SB5-15	Diln Fac:	1.000
MSS Lab ID:	258358-007	Batch#:	212570
Matrix:	Soil	Sampled:	06/20/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Type: MS Lab ID: QC746368

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.09825	10.31	9.111	87	42-120

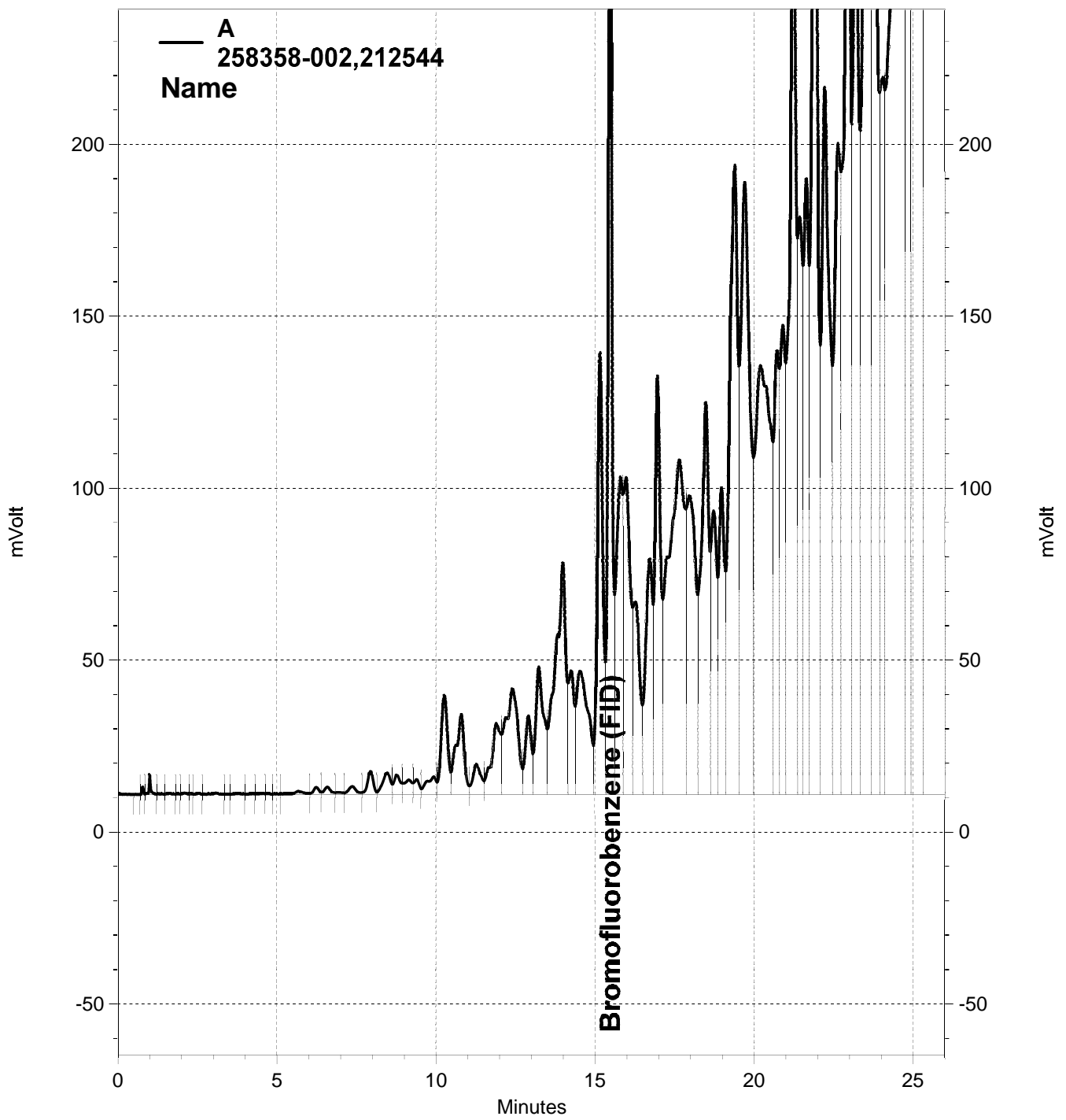
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-137

Type: MSD Lab ID: QC746369

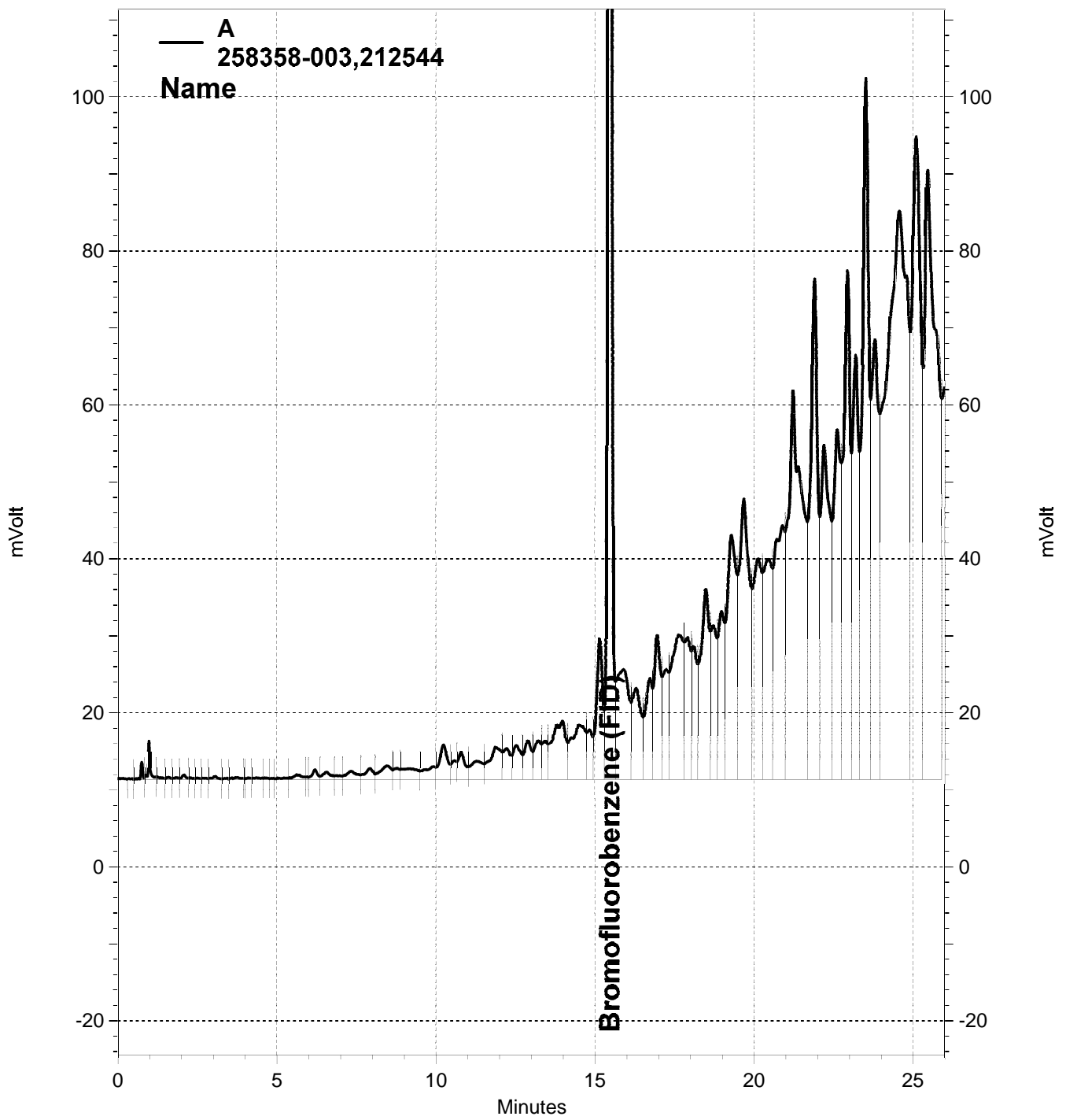
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.31	9.327	90	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	67-137

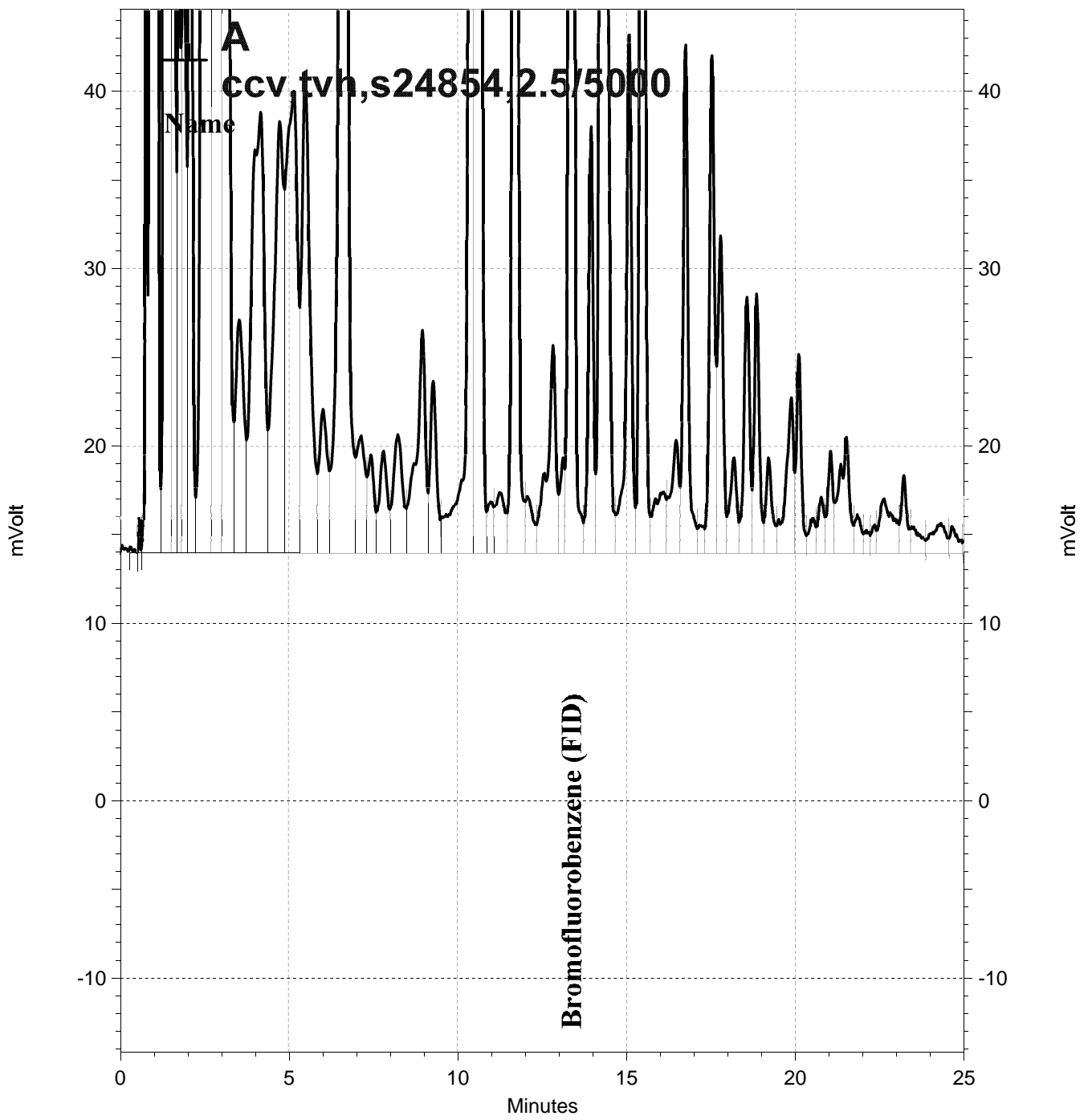
RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\175-030, A



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\175-031, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\175-003, A



Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	06/20/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received		

Field ID:	SB4-5	Batch#:	212692
Type:	SAMPLE	Prepared:	06/26/14
Lab ID:	258358-001	Analyzed:	06/27/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	18 Y	1.0
Motor Oil C24-C36	32	5.0

Surrogate	%REC	Limits
o-Terphenyl	101	64-136

Field ID:	SB4-10	Batch#:	212692
Type:	SAMPLE	Prepared:	06/26/14
Lab ID:	258358-002	Analyzed:	06/27/14
Diln Fac:	10.00		

Analyte	Result	RL
Diesel C10-C24	3,900	9.9
Motor Oil C24-C36	290	50

Surrogate	%REC	Limits
o-Terphenyl	DO	64-136

Field ID:	SB4-15	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-003	Analyzed:	06/30/14
Diln Fac:	5.000		

Analyte	Result	RL
Diesel C10-C24	970	5.0
Motor Oil C24-C36	100	25

Surrogate	%REC	Limits
o-Terphenyl	120	64-136

Field ID:	SB4-20	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-004	Analyzed:	06/28/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	101	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	06/20/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received		

Field ID:	SB5-5	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-005	Analyzed:	06/28/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	86	64-136

Field ID:	SB5-10	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-006	Analyzed:	06/28/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	98	64-136

Field ID:	SB5-15	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-007	Analyzed:	06/28/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	95	64-136

Field ID:	SB5-20	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-008	Analyzed:	06/28/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	96	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	06/20/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received		

Field ID:	SB6-5	Batch#:	212734
Type:	SAMPLE	Prepared:	06/27/14
Lab ID:	258358-009	Analyzed:	06/28/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	98	64-136

Field ID:	SB6-10	Batch#:	212800
Type:	SAMPLE	Prepared:	06/30/14
Lab ID:	258358-010	Analyzed:	07/01/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	89	64-136

Field ID:	SB6-15	Batch#:	212800
Type:	SAMPLE	Prepared:	06/30/14
Lab ID:	258358-011	Analyzed:	07/01/14
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	64	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	90	64-136

Type:	BLANK	Batch#:	212692
Lab ID:	QC746862	Prepared:	06/26/14
Diln Fac:	1.000	Analyzed:	06/27/14

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	97	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	06/20/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received		

Type:	BLANK	Batch#:	212734
Lab ID:	QC747032	Prepared:	06/27/14
Diln Fac:	1.000	Analyzed:	06/28/14

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	100	64-136

Type:	BLANK	Batch#:	212800
Lab ID:	QC747296	Prepared:	06/30/14
Diln Fac:	1.000	Analyzed:	07/01/14

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	86	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746863	Batch#:	212692
Matrix:	Soil	Prepared:	06/26/14
Units:	mg/Kg	Analyzed:	06/27/14

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.61	48.15	97	61-132

Surrogate	%REC	Limits
o-Terphenyl	108	64-136

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Field ID:	SP1 J-3"	Batch#:	212692
MSS Lab ID:	258353-010	Sampled:	06/18/14
Matrix:	Soil	Received:	06/20/14
Units:	mg/Kg	Prepared:	06/26/14
Basis:	as received	Analyzed:	06/27/14
Diln Fac:	5.000		

Type: MS Lab ID: QC746864

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	5.314	50.27	50.79	90	40-146

Surrogate	%REC	Limits
o-Terphenyl	98	64-136

Type: MSD Lab ID: QC746865

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.35	49.73	88	40-146	2	56

Surrogate	%REC	Limits
o-Terphenyl	94	64-136

RPD= Relative Percent Difference

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC747033	Batch#:	212734
Matrix:	Soil	Prepared:	06/27/14
Units:	mg/Kg	Analyzed:	06/28/14

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.45	48.50	96	61-132

Surrogate	%REC	Limits
o-Terphenyl	115	64-136

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC747297	Batch#:	212800
Matrix:	Soil	Prepared:	06/30/14
Units:	mg/Kg	Analyzed:	07/01/14

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.89	42.48	85	61-132

Surrogate	%REC	Limits
o-Terphenyl	100	64-136



Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3550B
Project#:	942	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	212800
MSS Lab ID:	258236-026	Sampled:	06/19/14
Matrix:	Soil	Received:	06/19/14
Units:	mg/Kg	Prepared:	06/30/14
Basis:	as received	Analyzed:	07/01/14
Diln Fac:	10.00		

Type: MS Lab ID: QC747298

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.897	49.77	55.69	102	40-146

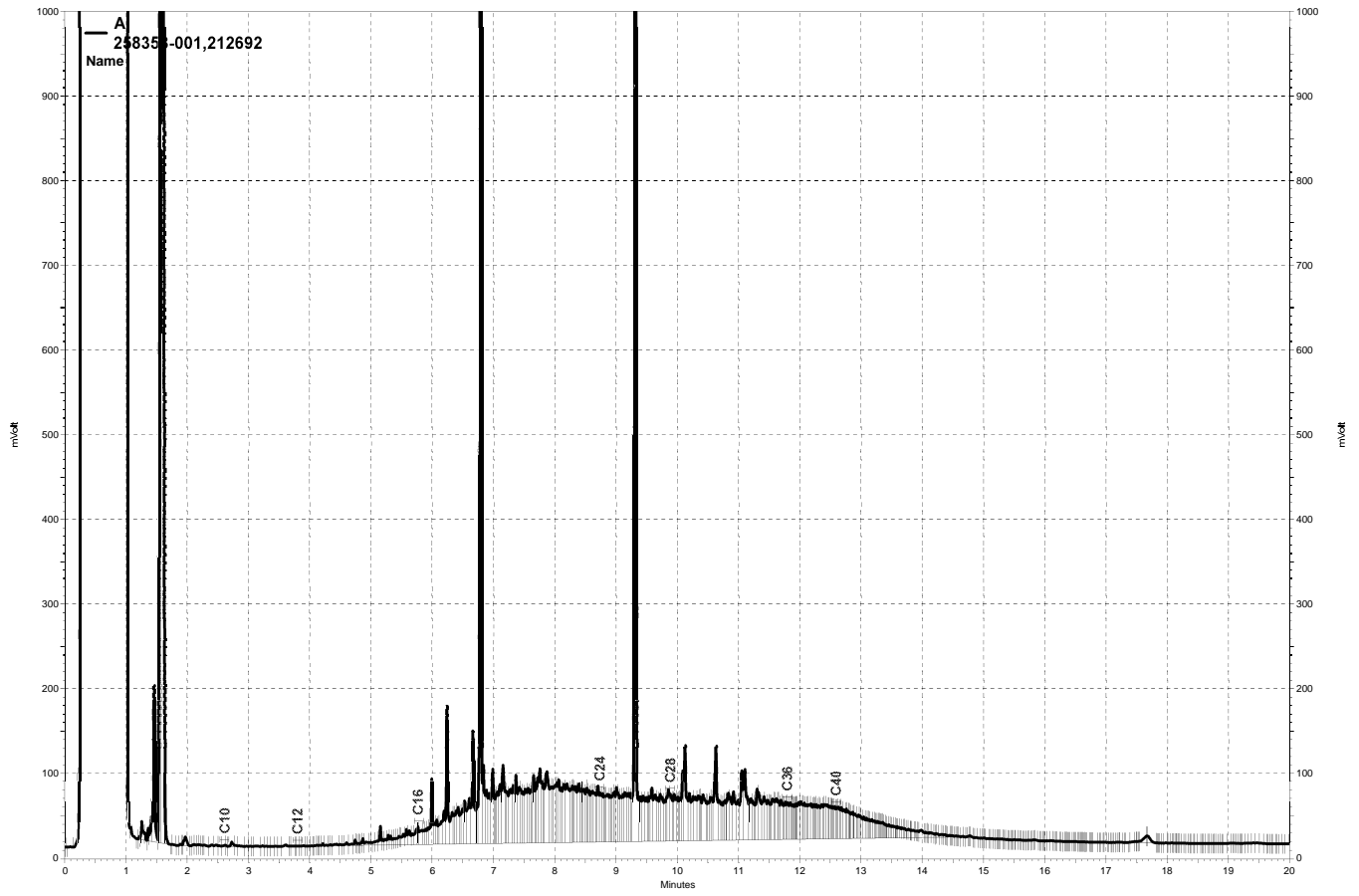
Surrogate	%REC	Limits
o-Terphenyl	DO	64-136

Type: MSD Lab ID: QC747299

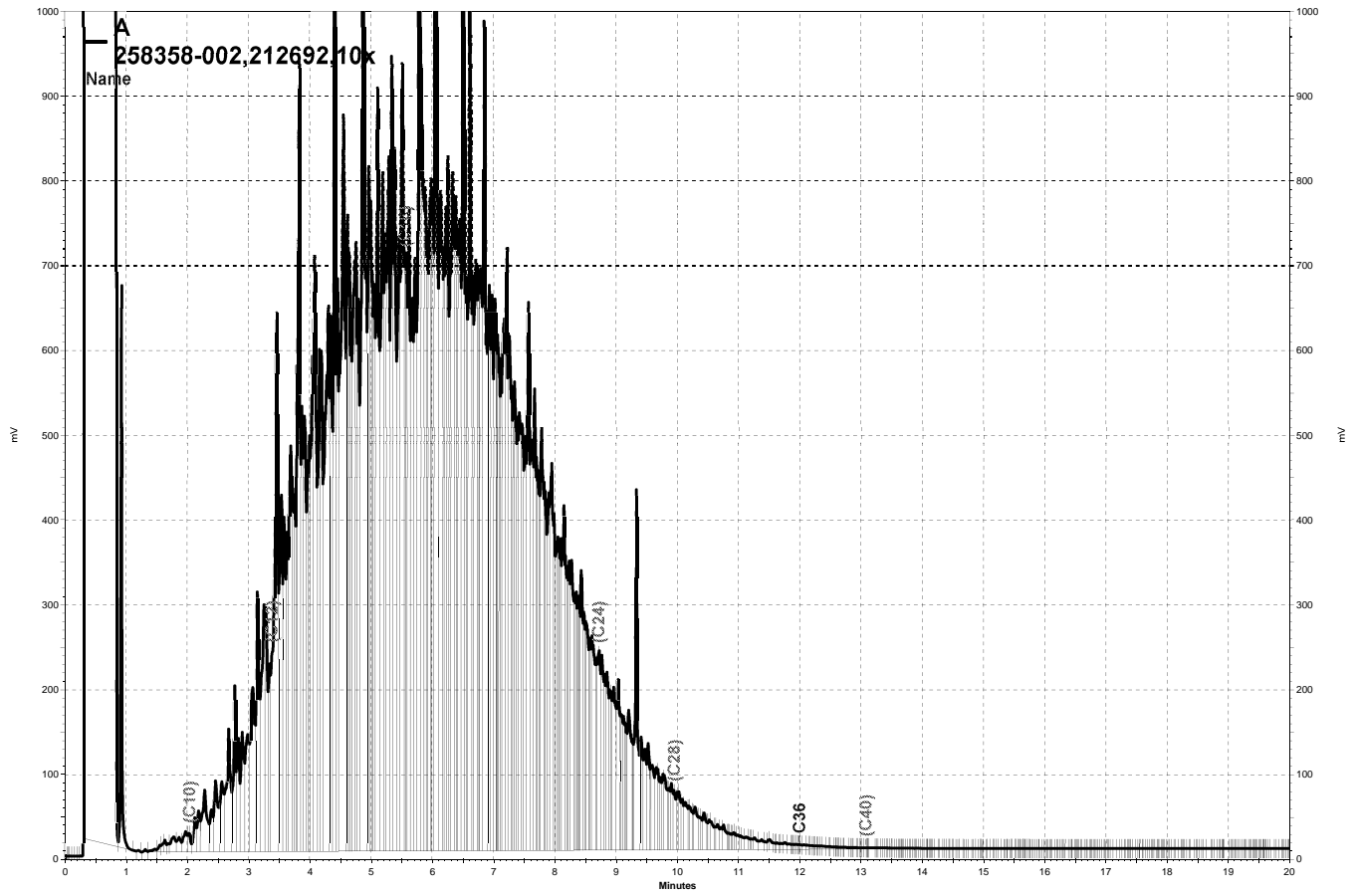
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.85	66.50	124	40-146	18	56

Surrogate	%REC	Limits
o-Terphenyl	DO	64-136

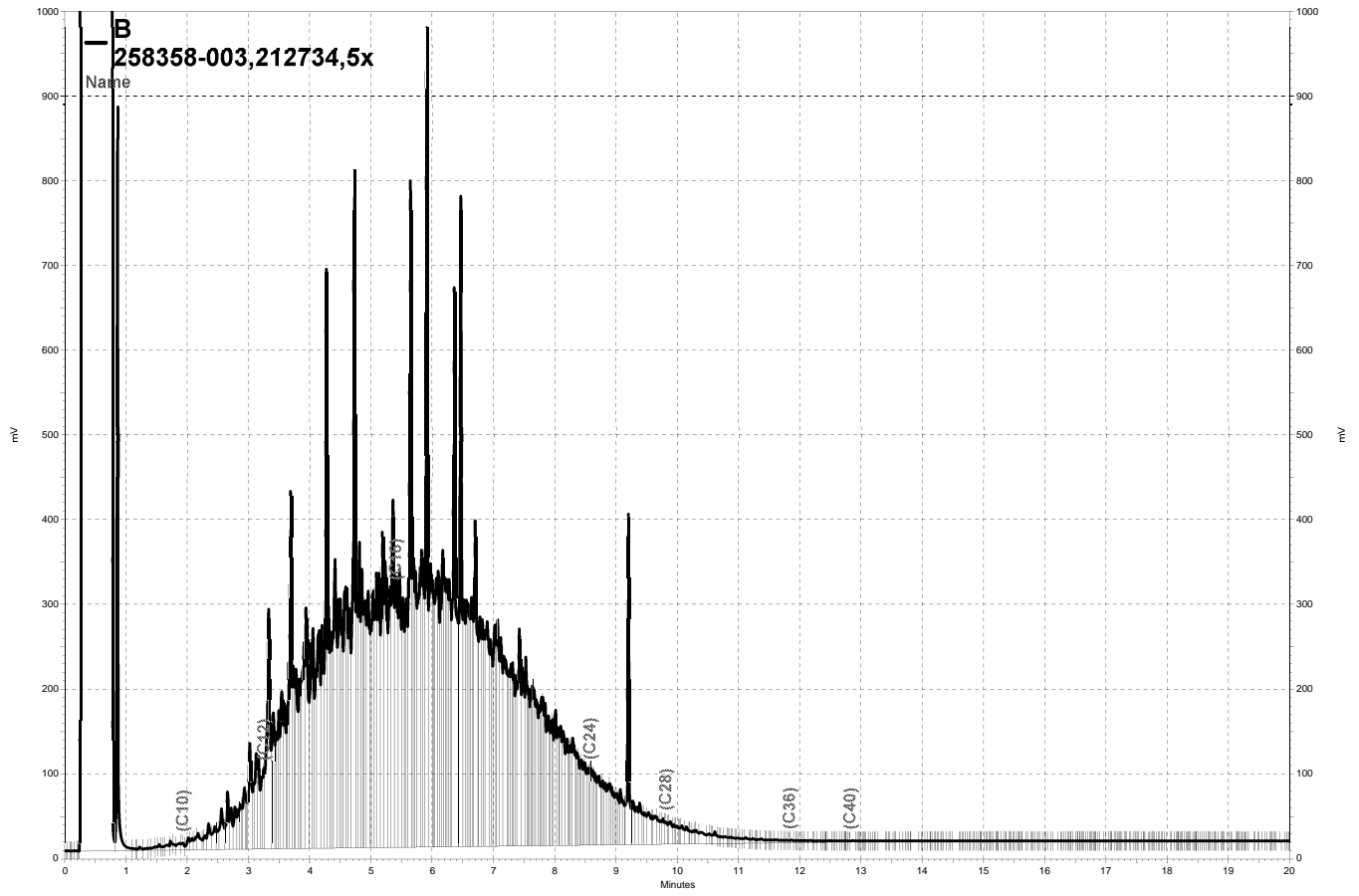
DO= Diluted Out  
 RPD= Relative Percent Difference



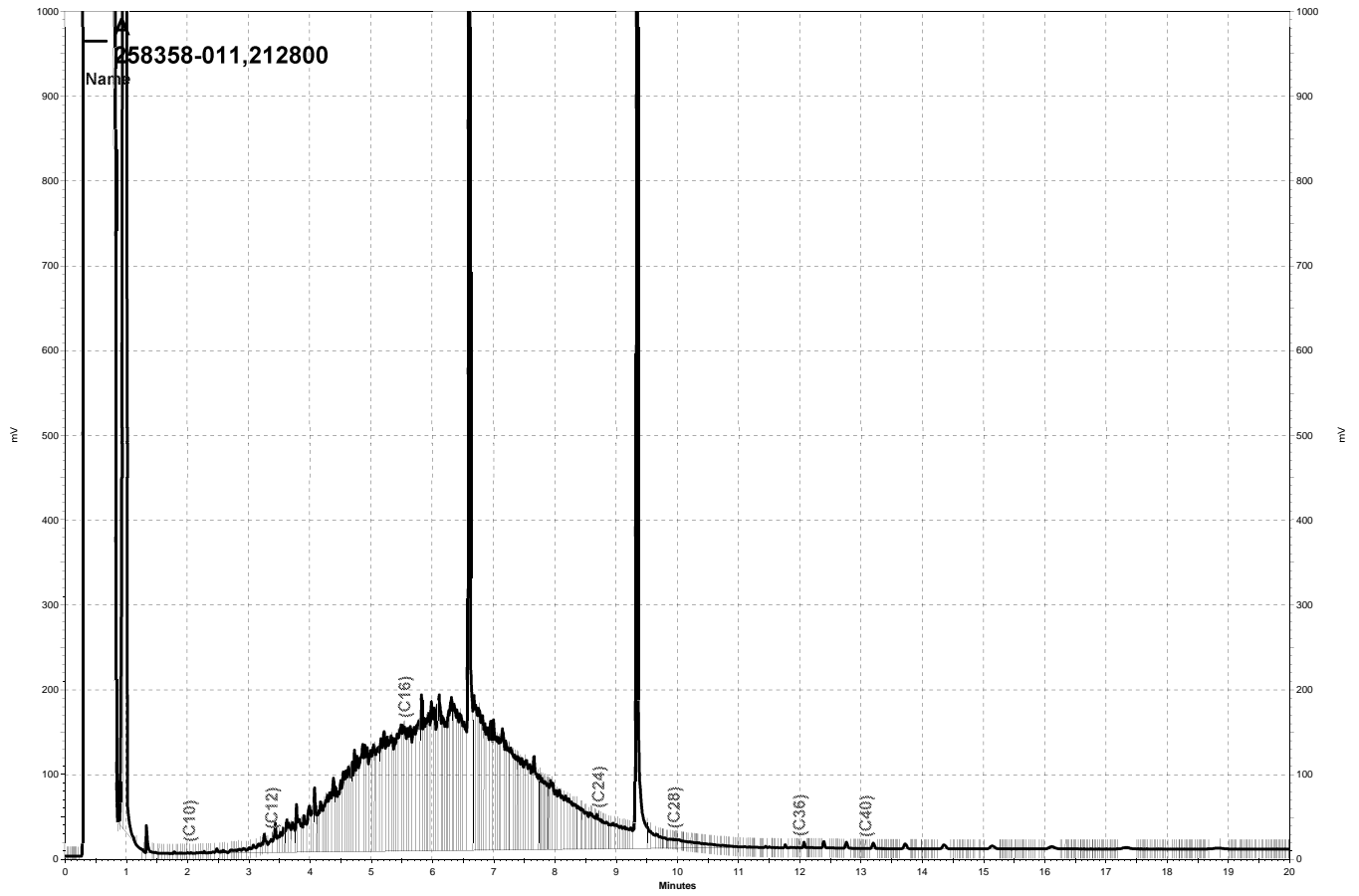
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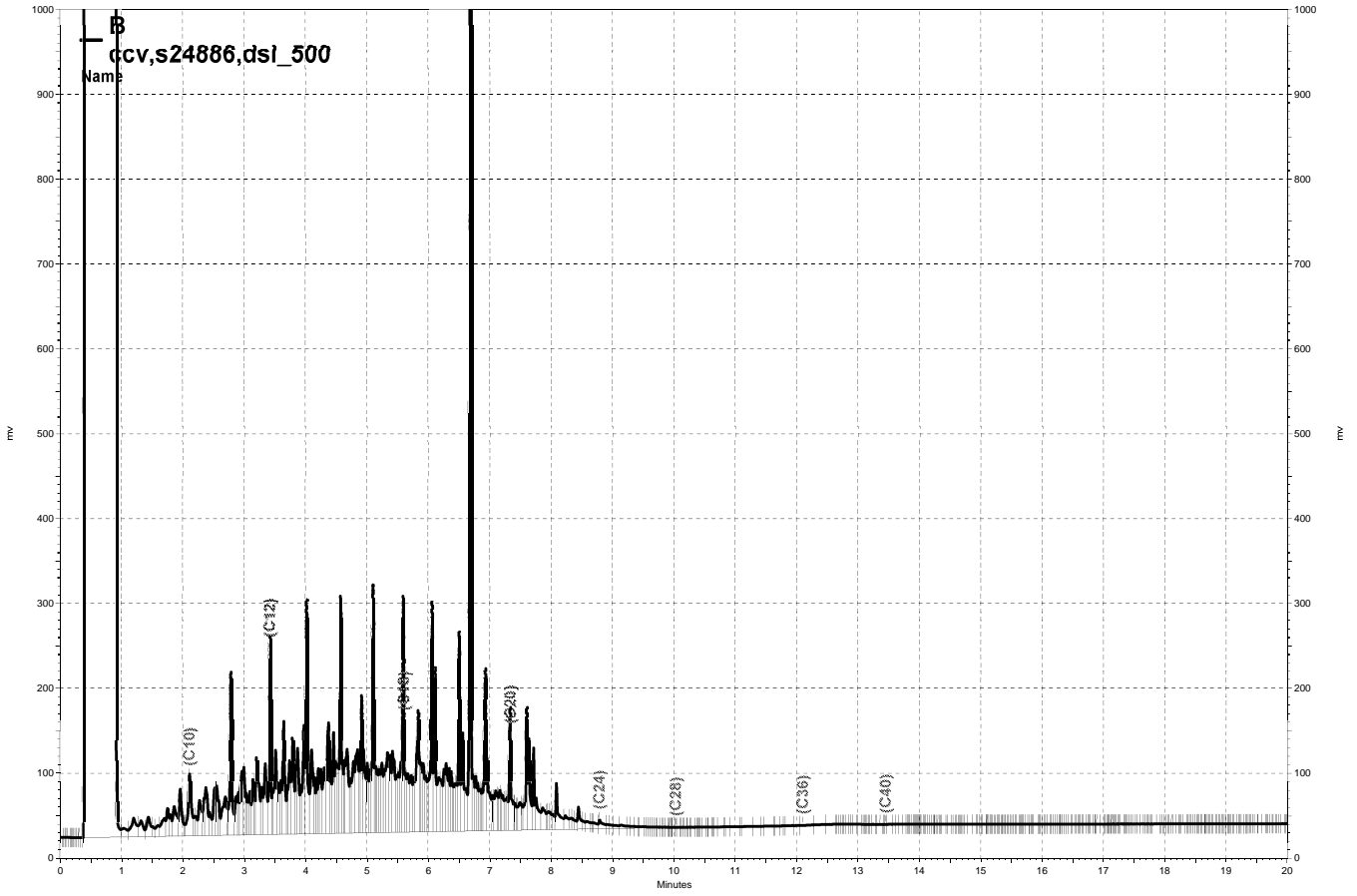
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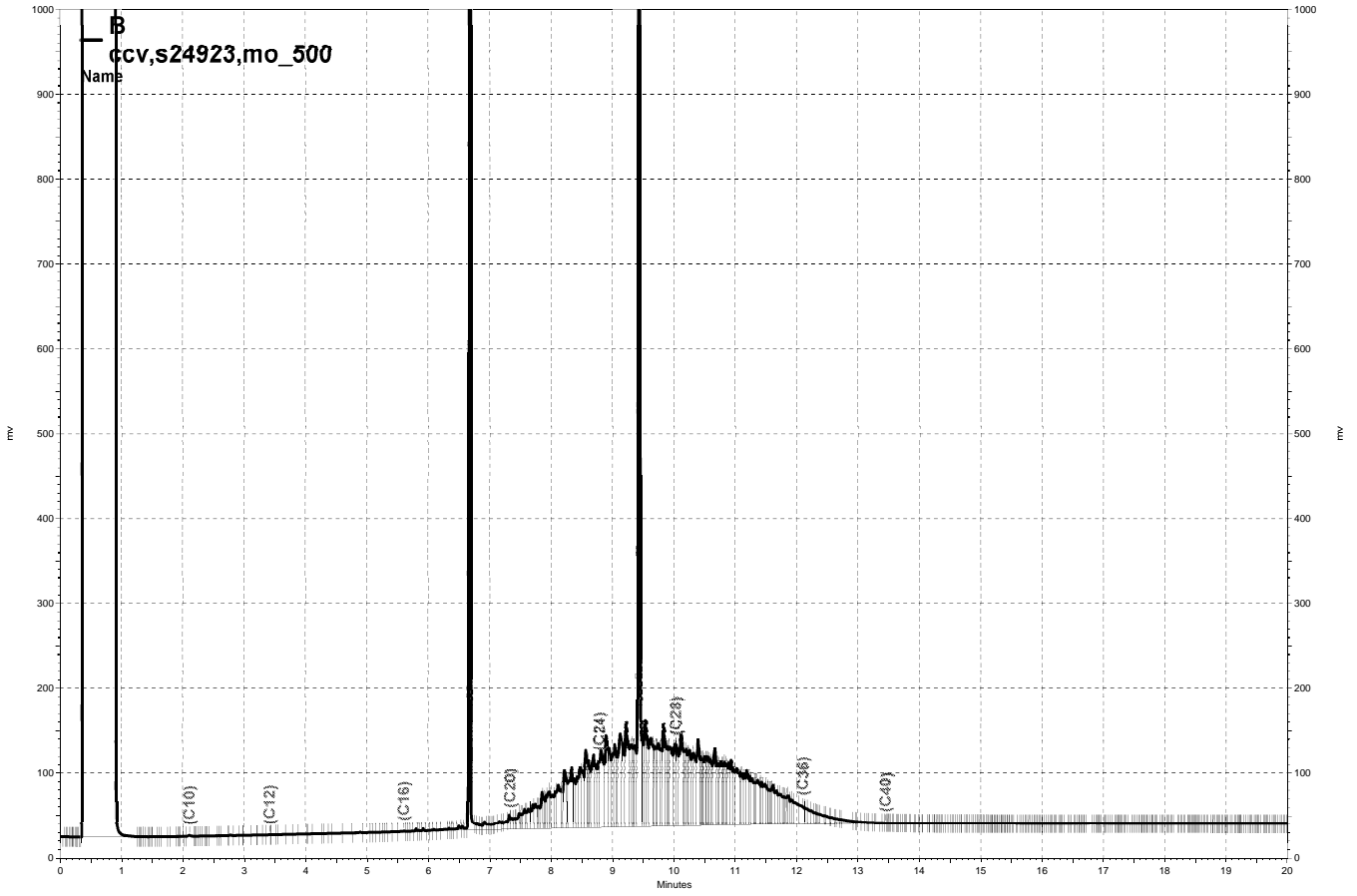
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### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-5	Diln Fac:	0.9862
Lab ID:	258358-001	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.9
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.9
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.9
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.9
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected

RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-5	Diln Fac:	0.9862
Lab ID:	258358-001	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	117	76-128
1,2-Dichloroethane-d4	120	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-10	Diln Fac:	5.000
Lab ID:	258358-002	Batch#:	212600
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/26/14

Analyte	Result	RL
Freon 12	ND	50
Chloromethane	ND	50
Vinyl Chloride	ND	50
Bromomethane	ND	50
Chloroethane	ND	50
Trichlorofluoromethane	ND	25
Acetone	ND	100
Freon 113	ND	25
1,1-Dichloroethene	ND	25
Methylene Chloride	ND	100
Carbon Disulfide	ND	25
MTBE	ND	25
trans-1,2-Dichloroethene	ND	25
Vinyl Acetate	ND	250
1,1-Dichloroethane	ND	25
2-Butanone	ND	50
cis-1,2-Dichloroethene	ND	25
2,2-Dichloropropane	ND	25
Chloroform	ND	25
Bromochloromethane	ND	25
1,1,1-Trichloroethane	ND	25
1,1-Dichloropropene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Trichloroethene	ND	25
1,2-Dichloropropane	ND	25
Bromodichloromethane	ND	25
Dibromomethane	ND	25
4-Methyl-2-Pentanone	ND	50
cis-1,3-Dichloropropene	ND	25
Toluene	ND	25
trans-1,3-Dichloropropene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	50
1,3-Dichloropropane	ND	25
Tetrachloroethene	ND	25

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-10	Diln Fac:	5.000
Lab ID:	258358-002	Batch#:	212600
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/26/14

Analyte	Result	RL
Dibromochloromethane	ND	25
1,2-Dibromoethane	ND	25
Chlorobenzene	ND	25
1,1,1,2-Tetrachloroethane	ND	25
Ethylbenzene	ND	25
m,p-Xylenes	ND	25
o-Xylene	ND	25
Styrene	ND	25
Bromoform	ND	25
Isopropylbenzene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
1,2,3-Trichloropropane	ND	25
Propylbenzene	ND	25
Bromobenzene	ND	25
1,3,5-Trimethylbenzene	ND	25
2-Chlorotoluene	ND	25
4-Chlorotoluene	ND	25
tert-Butylbenzene	ND	25
1,2,4-Trimethylbenzene	ND	25
sec-Butylbenzene	31	25
para-Isopropyl Toluene	ND	25
1,3-Dichlorobenzene	ND	25
1,4-Dichlorobenzene	ND	25
n-Butylbenzene	ND	25
1,2-Dichlorobenzene	ND	25
1,2-Dibromo-3-Chloropropane	ND	25
1,2,4-Trichlorobenzene	ND	25
Hexachlorobutadiene	ND	25
Naphthalene	ND	25
1,2,3-Trichlorobenzene	ND	25

Surrogate	%REC	Limits
Dibromofluoromethane	92	76-128
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	108	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-15	Diln Fac:	2.488
Lab ID:	258358-003	Batch#:	212600
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/26/14

Analyte	Result	RL
Freon 12	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	12
Acetone	ND	50
Freon 113	ND	12
1,1-Dichloroethene	ND	12
Methylene Chloride	ND	50
Carbon Disulfide	ND	12
MTBE	ND	12
trans-1,2-Dichloroethene	ND	12
Vinyl Acetate	ND	120
1,1-Dichloroethane	ND	12
2-Butanone	ND	25
cis-1,2-Dichloroethene	ND	12
2,2-Dichloropropane	ND	12
Chloroform	ND	12
Bromochloromethane	ND	12
1,1,1-Trichloroethane	ND	12
1,1-Dichloropropene	ND	12
Carbon Tetrachloride	ND	12
1,2-Dichloroethane	ND	12
Benzene	ND	12
Trichloroethene	ND	12
1,2-Dichloropropane	ND	12
Bromodichloromethane	ND	12
Dibromomethane	ND	12
4-Methyl-2-Pentanone	ND	25
cis-1,3-Dichloropropene	ND	12
Toluene	ND	12
trans-1,3-Dichloropropene	ND	12
1,1,2-Trichloroethane	ND	12
2-Hexanone	ND	25
1,3-Dichloropropane	ND	12
Tetrachloroethene	ND	12

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-15	Diln Fac:	2.488
Lab ID:	258358-003	Batch#:	212600
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/26/14

Analyte	Result	RL
Dibromochloromethane	ND	12
1,2-Dibromoethane	ND	12
Chlorobenzene	ND	12
1,1,1,2-Tetrachloroethane	ND	12
Ethylbenzene	ND	12
m,p-Xylenes	ND	12
o-Xylene	ND	12
Styrene	ND	12
Bromoform	ND	12
Isopropylbenzene	ND	12
1,1,2,2-Tetrachloroethane	ND	12
1,2,3-Trichloropropane	ND	12
Propylbenzene	ND	12
Bromobenzene	ND	12
1,3,5-Trimethylbenzene	ND	12
2-Chlorotoluene	ND	12
4-Chlorotoluene	ND	12
tert-Butylbenzene	ND	12
1,2,4-Trimethylbenzene	ND	12
sec-Butylbenzene	ND	12
para-Isopropyl Toluene	ND	12
1,3-Dichlorobenzene	ND	12
1,4-Dichlorobenzene	ND	12
n-Butylbenzene	ND	12
1,2-Dichlorobenzene	ND	12
1,2-Dibromo-3-Chloropropane	ND	12
1,2,4-Trichlorobenzene	ND	12
Hexachlorobutadiene	ND	12
Naphthalene	ND	12
1,2,3-Trichlorobenzene	ND	12

Surrogate	%REC	Limits
Dibromofluoromethane	91	76-128
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	87	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-20	Diln Fac:	0.9597
Lab ID:	258358-004	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.6
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-20	Diln Fac:	0.9597
Lab ID:	258358-004	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	110	76-128
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	87	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-5	Diln Fac:	0.9560
Lab ID:	258358-005	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.6
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-5	Diln Fac:	0.9560
Lab ID:	258358-005	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	110	76-128
1,2-Dichloroethane-d4	118	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-10	Diln Fac:	0.9346
Lab ID:	258358-006	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.3
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.7
Acetone	ND	19
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.7
MTBE	ND	4.7
trans-1,2-Dichloroethene	ND	4.7
Vinyl Acetate	ND	47
1,1-Dichloroethane	ND	4.7
2-Butanone	ND	9.3
cis-1,2-Dichloroethene	ND	4.7
2,2-Dichloropropane	ND	4.7
Chloroform	ND	4.7
Bromochloromethane	ND	4.7
1,1,1-Trichloroethane	ND	4.7
1,1-Dichloropropene	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
Dibromomethane	ND	4.7
4-Methyl-2-Pentanone	ND	9.3
cis-1,3-Dichloropropene	ND	4.7
Toluene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
2-Hexanone	ND	9.3
1,3-Dichloropropane	ND	4.7
Tetrachloroethene	ND	4.7

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-10	Diln Fac:	0.9346
Lab ID:	258358-006	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Chlorobenzene	ND	4.7
1,1,1,2-Tetrachloroethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7
Styrene	ND	4.7
Bromoform	ND	4.7
Isopropylbenzene	ND	4.7
1,1,2,2-Tetrachloroethane	ND	4.7
1,2,3-Trichloropropane	ND	4.7
Propylbenzene	ND	4.7
Bromobenzene	ND	4.7
1,3,5-Trimethylbenzene	ND	4.7
2-Chlorotoluene	ND	4.7
4-Chlorotoluene	ND	4.7
tert-Butylbenzene	ND	4.7
1,2,4-Trimethylbenzene	ND	4.7
sec-Butylbenzene	ND	4.7
para-Isopropyl Toluene	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
n-Butylbenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7
1,2-Dibromo-3-Chloropropane	ND	4.7
1,2,4-Trichlorobenzene	ND	4.7
Hexachlorobutadiene	ND	4.7
Naphthalene	ND	4.7
1,2,3-Trichlorobenzene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	112	76-128
1,2-Dichloroethane-d4	119	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	88	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-15	Diln Fac:	0.9690
Lab ID:	258358-007	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.7
Chloromethane	ND	9.7
Vinyl Chloride	ND	9.7
Bromomethane	ND	9.7
Chloroethane	ND	9.7
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.7
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.7
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.7
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-15	Diln Fac:	0.9690
Lab ID:	258358-007	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	111	76-128
1,2-Dichloroethane-d4	119	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	88	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-20	Diln Fac:	0.9901
Lab ID:	258358-008	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.9
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	9.9
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	9.9
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	9.9
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB5-20	Diln Fac:	0.9901
Lab ID:	258358-008	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	112	76-128
1,2-Dichloroethane-d4	119	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	87	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6-5	Diln Fac:	0.9843
Lab ID:	258358-009	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	9.8
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected

RL= Reporting Limit



### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6-5	Diln Fac:	0.9843
Lab ID:	258358-009	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	112	76-128
1,2-Dichloroethane-d4	120	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6-10	Diln Fac:	0.8881
Lab ID:	258358-010	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Freon 12	ND	8.9
Chloromethane	ND	8.9
Vinyl Chloride	ND	8.9
Bromomethane	ND	8.9
Chloroethane	ND	8.9
Trichlorofluoromethane	ND	4.4
Acetone	ND	18
Freon 113	ND	4.4
1,1-Dichloroethene	ND	4.4
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.4
MTBE	ND	4.4
trans-1,2-Dichloroethene	ND	4.4
Vinyl Acetate	ND	44
1,1-Dichloroethane	ND	4.4
2-Butanone	ND	8.9
cis-1,2-Dichloroethene	ND	4.4
2,2-Dichloropropane	ND	4.4
Chloroform	ND	4.4
Bromochloromethane	ND	4.4
1,1,1-Trichloroethane	ND	4.4
1,1-Dichloropropene	ND	4.4
Carbon Tetrachloride	ND	4.4
1,2-Dichloroethane	ND	4.4
Benzene	ND	4.4
Trichloroethene	ND	4.4
1,2-Dichloropropane	ND	4.4
Bromodichloromethane	ND	4.4
Dibromomethane	ND	4.4
4-Methyl-2-Pentanone	ND	8.9
cis-1,3-Dichloropropene	ND	4.4
Toluene	ND	4.4
trans-1,3-Dichloropropene	ND	4.4
1,1,2-Trichloroethane	ND	4.4
2-Hexanone	ND	8.9
1,3-Dichloropropane	ND	4.4
Tetrachloroethene	ND	4.4

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6-10	Diln Fac:	0.8881
Lab ID:	258358-010	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Analyte	Result	RL
Dibromochloromethane	ND	4.4
1,2-Dibromoethane	ND	4.4
Chlorobenzene	ND	4.4
1,1,1,2-Tetrachloroethane	ND	4.4
Ethylbenzene	ND	4.4
m,p-Xylenes	ND	4.4
o-Xylene	ND	4.4
Styrene	ND	4.4
Bromoform	ND	4.4
Isopropylbenzene	ND	4.4
1,1,2,2-Tetrachloroethane	ND	4.4
1,2,3-Trichloropropane	ND	4.4
Propylbenzene	ND	4.4
Bromobenzene	ND	4.4
1,3,5-Trimethylbenzene	ND	4.4
2-Chlorotoluene	ND	4.4
4-Chlorotoluene	ND	4.4
tert-Butylbenzene	ND	4.4
1,2,4-Trimethylbenzene	ND	4.4
sec-Butylbenzene	ND	4.4
para-Isopropyl Toluene	ND	4.4
1,3-Dichlorobenzene	ND	4.4
1,4-Dichlorobenzene	ND	4.4
n-Butylbenzene	ND	4.4
1,2-Dichlorobenzene	ND	4.4
1,2-Dibromo-3-Chloropropane	ND	4.4
1,2,4-Trichlorobenzene	ND	4.4
Hexachlorobutadiene	ND	4.4
Naphthalene	ND	4.4
1,2,3-Trichlorobenzene	ND	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	113	76-128
1,2-Dichloroethane-d4	120	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6-15	Diln Fac:	0.9940
Lab ID:	258358-011	Batch#:	212600
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Freon 12	ND	9.9
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	9.9
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	9.9
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	9.9
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB6-15	Diln Fac:	0.9940
Lab ID:	258358-011	Batch#:	212600
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/25/14

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	84	79-128

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746238	Batch#:	212538
Matrix:	Soil	Analyzed:	06/24/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.71	107	68-135
Benzene	25.00	28.29	113	80-127
Trichloroethene	25.00	28.26	113	77-129
Toluene	25.00	26.59	106	79-125
Chlorobenzene	25.00	28.93	116	78-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	76-128
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	89	79-128

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746239	Batch#:	212538
Matrix:	Soil	Analyzed:	06/24/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746239	Batch#:	212538
Matrix:	Soil	Analyzed:	06/24/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	107	76-128
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	91	79-128

ND= Not Detected

RL= Reporting Limit



**Batch QC Report**

Purgeable Organics by GC/MS			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB4-5	Diln Fac:	0.9766
MSS Lab ID:	258358-001	Batch#:	212538
Matrix:	Soil	Sampled:	06/20/14
Units:	ug/Kg	Received:	06/20/14
Basis:	as received	Analyzed:	06/24/14

Type: MS Lab ID: QC746253

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5904	48.83	47.00	96	46-138
Benzene	<0.6879	48.83	47.88	98	51-125
Trichloroethene	<0.7164	48.83	47.83	98	41-146
Toluene	<0.7534	48.83	43.69	89	45-123
Chlorobenzene	<0.6177	48.83	44.12	90	39-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	118	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	88	79-128

Type: MSD Lab ID: QC746254

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.83	48.78	100	46-138	4	51
Benzene	48.83	48.25	99	51-125	1	46
Trichloroethene	48.83	50.03	102	41-146	5	55
Toluene	48.83	44.44	91	45-123	2	59
Chlorobenzene	48.83	45.39	93	39-120	3	54

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	117	80-137
Toluene-d8	94	80-120
Bromofluorobenzene	89	79-128

RPD= Relative Percent Difference

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC746471	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
1,1-Dichloroethene	25.00	24.44	98	68-135
Benzene	25.00	25.65	103	80-127
Trichloroethene	25.00	26.27	105	77-129
Toluene	25.00	25.16	101	79-125
Chlorobenzene	25.00	27.47	110	78-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	88	79-128

**Batch QC Report**

Purgeable Organics by GC/MS			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Field ID:	SB1-5	Batch#:	212600
MSS Lab ID:	258357-001	Sampled:	06/19/14
Matrix:	Soil	Received:	06/20/14
Units:	ug/Kg	Analyzed:	06/25/14
Basis:	as received		

Type: MS Diln Fac: 0.9542  
 Lab ID: QC746520

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5858	47.71	44.11	92	46-138
Benzene	<0.6825	47.71	44.40	93	51-125
Trichloroethene	<0.7108	47.71	45.71	96	41-146
Toluene	<0.7476	47.71	41.94	88	45-123
Chlorobenzene	<0.6128	47.71	43.73	92	39-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	118	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	85	79-128

Type: MSD Diln Fac: 0.9634  
 Lab ID: QC746521

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.17	45.62	95	46-138	2	51
Benzene	48.17	44.90	93	51-125	0	46
Trichloroethene	48.17	46.60	97	41-146	1	55
Toluene	48.17	43.00	89	45-123	2	59
Chlorobenzene	48.17	44.09	92	39-120	0	54

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	85	79-128

RPD= Relative Percent Difference

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746571	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 5030B
Project#:	942	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC746571	Batch#:	212600
Matrix:	Soil	Analyzed:	06/25/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	85	79-128

ND= Not Detected

RL= Reporting Limit

<b>Lead</b>			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3050B
Project#:	942	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	212630
Matrix:	Soil	Sampled:	06/20/14
Units:	mg/Kg	Received:	06/20/14
Basis:	as received	Prepared:	06/25/14
Diln Fac:	1.000	Analyzed:	07/03/14

Field ID	Type	Lab ID	Result	RL
SB4-5	SAMPLE	258358-001	5.7	0.26
SB4-10	SAMPLE	258358-002	5.0	0.24
SB4-15	SAMPLE	258358-003	5.2	0.25
SB4-20	SAMPLE	258358-004	4.9	0.26
SB5-5	SAMPLE	258358-005	4.7	0.25
SB5-10	SAMPLE	258358-006	3.8	0.24
SB5-15	SAMPLE	258358-007	5.6	0.24
SB5-20	SAMPLE	258358-008	4.2	0.24
SB6-5	SAMPLE	258358-009	4.4	0.25
SB6-10	SAMPLE	258358-010	4.6	0.26
SB6-15	SAMPLE	258358-011	6.1	0.23
	BLANK	QC746605	ND	0.25

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Lead</b>			
Lab #:	258358	Location:	Stockbridge The Green
Client:	Ground Zero Analysis, Inc.	Prep:	EPA 3050B
Project#:	942	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	SB2-15	Batch#:	212630
MSS Lab ID:	258357-007	Sampled:	06/19/14
Matrix:	Soil	Received:	06/20/14
Units:	mg/Kg	Prepared:	06/25/14
Basis:	as received	Analyzed:	07/03/14

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC746606		100.0	90.51	91	80-120		
BSD	QC746607		100.0	88.39	88	80-120	2	20
MS	QC746608	5.064	105.3	90.73	81	52-122		
MSD	QC746609		108.7	93.65	82	52-122	0	49

RPD= Relative Percent Difference

Laboratory Job Number 258358

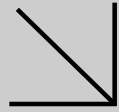
Subcontracted Products

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**WORK ORDER NUMBER: 14-06-1854**

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**Analytical Report For**

**Client:** Curtis & Tompkins, Ltd.

**Client Project Name:** 258358

**Attention:** Mike J. Dahlquist  
2323 Fifth Street  
Berkeley, CA 94710-2407

*Vikas Patel*

Approved for release on 07/03/2014 by:  
Vikas Patel  
Project Manager

ResultLink ▶

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# Contents

Client Project Name: 258358  
Work Order Number: 14-06-1854

1	Work Order Narrative. . . . .	3
2	Client Sample Data. . . . .	4
	2.1 DHS LUFT Organic Lead (Solid). . . . .	4
3	Quality Control Sample Data. . . . .	6
	3.1 MS/MSD. . . . .	6
	3.2 LCS/LCSD. . . . .	8
4	Sample Analysis Summary. . . . .	10
5	Glossary of Terms and Qualifiers. . . . .	11
6	Chain-of-Custody/Sample Receipt Form. . . . .	12

**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/25/14. They were assigned to Work Order 14-06-1854.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: [http://www.calscience.com/PDF/New\\_York.pdf](http://www.calscience.com/PDF/New_York.pdf)

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

## Analytical Report

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1854  
Preparation: DHS LUFT  
Method: DHS LUFT  
Units: mg/kg

Project: 258358

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SB4-5</b>	<b>14-06-1854-1-A</b>	<b>06/20/14 08:45</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB4-10</b>	<b>14-06-1854-2-A</b>	<b>06/20/14 08:55</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB4-15</b>	<b>14-06-1854-3-A</b>	<b>06/20/14 09:10</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB4-20</b>	<b>14-06-1854-4-A</b>	<b>06/20/14 09:25</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB5-5</b>	<b>14-06-1854-5-A</b>	<b>06/20/14 10:00</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB5-10</b>	<b>14-06-1854-6-A</b>	<b>06/20/14 10:10</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB5-15</b>	<b>14-06-1854-7-A</b>	<b>06/20/14 10:25</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB5-20</b>	<b>14-06-1854-8-A</b>	<b>06/20/14 10:45</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L02</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## Analytical Report

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1854  
Preparation: DHS LUFT  
Method: DHS LUFT  
Units: mg/kg

Project: 258358

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SB6-5</b>	<b>14-06-1854-9-A</b>	<b>06/20/14 11:35</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L02</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB6-10</b>	<b>14-06-1854-10-A</b>	<b>06/20/14 11:45</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L02</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>SB6-15</b>	<b>14-06-1854-11-A</b>	<b>06/20/14 12:05</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L02</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>Method Blank</b>	<b>099-10-020-1718</b>	<b>N/A</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	
<b>Method Blank</b>	<b>099-10-020-1719</b>	<b>N/A</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L02</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Organic Lead		ND		1.00		1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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## Quality Control - Spike/Spike Duplicate

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1854  
Preparation: DHS LUFT  
Method: DHS LUFT

Project: 258358

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-2124-1	Sample	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S01
14-06-2124-1	Matrix Spike	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S01
14-06-2124-1	Matrix Spike Duplicate	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Organic Lead	ND	25.00	21.40	86	24.50	98	22-148	14	0-18	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - Spike/Spike Duplicate

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1854  
Preparation: DHS LUFT  
Method: DHS LUFT

Project: 258358

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1905-3	Sample	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S02
14-06-1905-3	Matrix Spike	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S02
14-06-1905-3	Matrix Spike Duplicate	Solid	FLAA3	07/01/14	07/01/14 17:06	140701S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Organic Lead	1.060	25.00	22.00	84	21.70	83	22-148	1	0-18	



Calscience

## Quality Control - LCS

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1854  
Preparation: DHS LUFT  
Method: DHS LUFT

Project: 258358

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>099-10-020-1718</b>	<b>LCS</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L01</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Organic Lead		25.00	24.90	100	72-126	


  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits





Calscience

## Quality Control - LCS

Curtis & Tompkins, Ltd.  
2323 Fifth Street  
Berkeley, CA 94710-2407

Date Received: 06/25/14  
Work Order: 14-06-1854  
Preparation: DHS LUFT  
Method: DHS LUFT

Project: 258358

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>099-10-020-1719</b>	<b>LCS</b>	<b>Solid</b>	<b>FLAA3</b>	<b>07/01/14</b>	<b>07/01/14 17:06</b>	<b>140701L02</b>
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Organic Lead		25.00	24.80	99	72-126	

  
Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

# Sample Analysis Summary Report

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Work Order: 14-06-1854

Page 1 of 1

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
DHS LUFT	DHS LUFT	309	FLAA3	1

  
Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

## Glossary of Terms and Qualifiers

Work Order: 14-06-1854

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Curtis & Tompkins, Ltd.  
 Analytical Laboratories, Since 1878  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510) 486-0900  
 (510) 486-0532

**14-06-1854**

Project Number: 258358  
 Site: Stockbridge The Green

Subcontract Laboratory:  
 Cal Science  
 7440 Lincoln Way  
 Garden Grove, CA 92841-1432  
 (714) 895-5494  
 ATTN: Vik Patel

Results due: Report Level: II

Please send report to: Mike J. Dahlquist (mike.dahlquist@ctberk.com)  
 \*\*\* Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
1 SB4-5	06/20 08:45	Soil	OL	258358-001	
2 SB4-10	06/20 08:55	Soil	OL	258358-002	
3 SB4-15	06/20 09:10	Soil	OL	258358-003	
4 SB4-20	06/20 09:25	Soil	OL	258358-004	
5 SB5-5	06/20 10:00	Soil	OL	258358-005	
6 SB5-10	06/20 10:10	Soil	OL	258358-006	
7 SB5-15	06/20 10:25	Soil	OL	258358-007	
8 SB5-20	06/20 10:45	Soil	OL	258358-008	
9 SB6-5	06/20 11:35	Soil	OL	258358-009	
10 SB6-10	06/20 11:45	Soil	OL	258358-010	
11 SB6-15	06/20 12:05	Soil	OL	258358-011	

Notes:	Relinquished By:	Received By:
	<i>Mikelle Clong</i>	
	Date/Time: 06/24/14 1530	Date/Time:
		<i>V. Patel</i>
	Date/Time:	Date/Time: 6/25/14 0930

Signature on this form constitutes a firm Purchase Order for the services requested above.

From: (510) 486-0900  
Sample Control  
Curtis & Tompkins  
2323 5th Street

Origin ID: JEMA



J14101402070326

Berkeley, CA 94710

Ship Date: 24JUN14  
ActWgt: 22.5 LB  
CAD: 7603800/INET3490

Delivery Address Bar Code



0854

SHIP TO: (714) 895-5494

BILL THIRD PARTY

Vik Patel  
Cal Science Environmental Lab  
7440 LINCOLN WAY

Ref # 258354,355,357,358  
Invoice #  
PO #  
Dept #

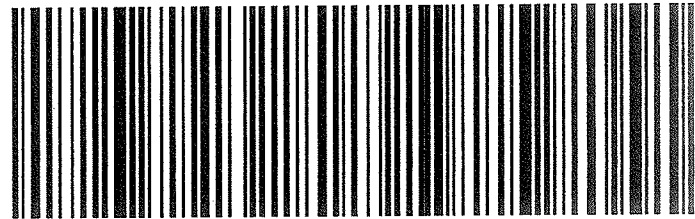
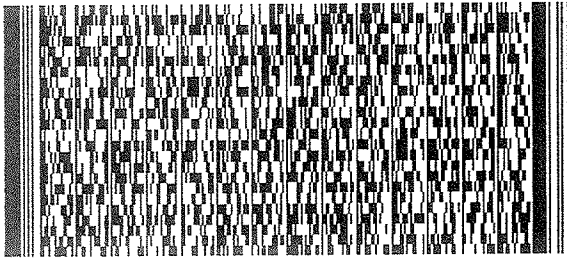
GARDEN GROVE, CA 92841

WED - 25 JUN AA  
STANDARD OVERNIGHT

TRK# 7704 0891 0356  
0201

92841  
CA-US  
SNA

92 APVA



522G5/9BC4/F220

After printing this label:

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Return to Contents

**SAMPLE RECEIPT FORM**

Cooler 1 of 1

CLIENT: edT

DATE: 06/25/14

**TEMPERATURE:** Thermometer ID: SC2 (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Temperature 2.0 °C - 0.3°C (CF) = 1.7 °C     Blank     Sample

Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature:     Air     Filter    Checked by: IS

**CUSTODY SEALS INTACT:**

Cooler     \_\_\_\_\_     No (Not Intact)     Not Present     N/A    Checked by: IS

Sample     \_\_\_\_\_     No (Not Intact)     Not Present    Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels. <input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:**

**Solid:**  4ozCGJ     8ozCGJ     16ozCGJ     Sleeve (\_\_\_\_)     EnCores®     TerraCores®     2ozCGJ

**Aqueous:**  VOA     VOAh     VOAna<sub>2</sub>     125AGB     125AGBh     125AGBp     1AGB     1AGBna<sub>2</sub>     1AGBs

500AGB     500AGJ     500AGJs     250AGB     250CGB     250CGBs     1PB     1PBna     500PB

250PB     250PBn     125PB     125PBznn     100PJ     100PJna<sub>2</sub>     \_\_\_\_\_     \_\_\_\_\_     \_\_\_\_\_

**Air:**  Tedlar®     Canister    **Other:**  \_\_\_\_\_    **Trip Blank Lot#:** \_\_\_\_\_    **Labeled/Checked by:** 802

**Container:** C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope    **Reviewed by:** [Signature]

**Preservative:** h: HCL n: HNO<sub>3</sub> na<sub>2</sub>:Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> na: NaOH p: H<sub>3</sub>PO<sub>4</sub> s: H<sub>2</sub>SO<sub>4</sub> u: Ultra-pure znn: ZnAc<sub>2</sub>+NaOH f: Filtered    **Scanned by:** [Signature]

Return to Contents