

March 24, 2015

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Rita and Tony Sullins
Don Sul Inc.
187 North L Street
Livermore, CA 94550

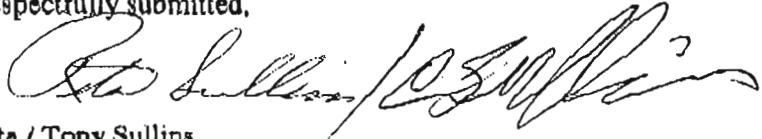
Re: Transmittal Letter
Site Location: Arrow Rentals
187 North L Street, Livermore, CA 94550

Dear Mr. Wickham:

On behalf of Rita and Tony Sullins, Don Sul Inc., Ground Zero Analysis, Inc. (GZA) prepared the 2nd 2014 Semi-Annual Groundwater Monitoring, dated March 24, 2015 that was sent to your office via electronic delivery per Alameda County's guidelines.

I declare under penalty of law that the information and/or recommendations contained in the above referenced document or report is true and correct to the best of my knowledge.

Respectfully submitted,



Rita / Tony Sullins
Property Owner
Don Sul Inc.
187 North L Street
Livermore, CA 94550



ANALYSIS, INC.

1172 Kansas Avenue, Suite A
Modesto, CA 95351
209.522.4119 - PH
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REPORT

Second Semi-Annual Groundwater Monitoring & Remedial Effectiveness

**Arrow Rentals Service
187 North L St.
Livermore, CA 94550**

**Project No. 1262.2
March 24, 2015**

Prepared for:
Tony & Rita Sullins
Arrow Rentals Service
187 North L St.
Livermore, CA 94550

Prepared by:
Ground Zero Analysis, Inc.
1172 Kansas Ave.
Modesto, California 95351
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March 24, 2015

Project No.: 1262.2
Project Name: Sullins (L St.)

Tony & Rita Sullins
Arrow Rentals Service
187 North L Street
Livermore, CA 94550

RE: Report: Second Semi-Annual Groundwater Monitoring & Remedial Effectiveness
Location: 187 North L Street, Livermore, CA 94550.
(ACEH Fuel Leak Case No. RO0000394)

Dear Mr. & Ms. Sullins:

Ground Zero Analysis, Inc. (Ground Zero) has prepared the following report for the groundwater monitoring event performed between December 2, 2014 and December 3, 2014 as well as the remedial activities performed during the second half of 2014. An elevated core of gasoline contamination persists in the location of and down-gradient (northwest) of the former underground storage tanks (USTs) and associated piping. Dual Phase Extraction (DPE) and air sparging (AS) systems which were started on November 15, 2011 and March 21, 2012, respectively, continue to operate.

If you have any questions, please do not hesitate to call me at (209) 522-4119.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Eric L. Price".

Eric L. Price, PG

cc: Jerry Wickham - ACEH
USTCUF (Via Geotracker)

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REPORT

Second Semi-Annual Groundwater Monitoring & Remedial Effectiveness

Arrow Rentals Services
187 North L St.
Livermore, CA

Project No. 1262.2
March 24, 2015

1.0 EXECUTIVE SUMMARY

Details of the groundwater monitoring and sampling event that took place between December 2, 2014 and December 3, 2014 as well as remediation activities performed during the second half of 2014 are included in this report.

All of the Sites shallow and intermediate depth groundwater monitoring wells were reported to be dry during the December 2014 monitoring event. The average groundwater elevation recorded in the deep monitoring wells was 425.49 feet above mean sea level (amsl) and the average depth to water (DTW) was 55.37 feet below ground surface (bgs). Groundwater elevation has decreased 10.97 feet since the June 2014 monitoring event and 19.03 feet since the December 2013 monitoring event. The deep groundwater flow was to the west-northwest with a gradient of approximately 0.012 feet per foot (ft/ft).

The analytical results show detectable concentrations of total petroleum hydrocarbons as gasoline (TPHg) present in the seven groundwater monitoring wells sampled. Historically, a persistent core of high concentrations has remained in the vicinity of wells W-1/W-1s/CMT-4, which are located adjacent to former USTs and associated piping trenches. A secondary core of high concentrations persists in the intermediate zone in the vicinity of MW-205, down-gradient of the Pitcock Release.

Ground Zero is currently implementing the Corrective Action Plan CAP which includes the operation of dual phase extraction (DPE) and air sparging (AS) systems to treat the residual contamination at the site. The DPE and AS remediation systems was started on November 15, 2011 and March 21, 2012, respectively. As of the end of the 4th Quarter 2014, the DPE system has removed a total of approximately 5,500 pounds, or approximately 846 gallons, of TPHg. During the second half of 2014, the DPE system operated for 1,084 hours and removed a total of approximately 1,828 pounds or 281 gallons of TPHg.

The site history and geologic setting are summarized in Ground Zero's *1st Semi-Annual Groundwater Monitoring and Remedial Effectiveness Report* dated July 24, 2014. A vicinity map is included as Figure 1 and a site map is included as Figure 2.

2.0 GROUNDWATER MONITORING

2.1 Groundwater Elevation and Flow

All of the Sites shallow and intermediate depth groundwater monitoring wells were reported to be dry during the December 2014 monitoring event. The average groundwater elevation in the deep wells was 425.49 feet amsl representing a decrease of 10.97 feet since June 2014 and a decrease of 19.03 feet since December 2013.

An average DTW of 55.37 feet bgs was recorded in the Sites deep wells. Depth to water has ranged from approximately 20 - 55 feet bgs from 1989 to 2014, with the December 2014 event representing the lowest groundwater elevation recorded at the Site. Well locations on- and off-site are shown on Figure 2 and on-site well locations are shown on Figure 3.

The wells are categorized according to the aquifer interval which the screened section intercepted. Well construction details are summarized in Table 1 and shown in vertical view on Figure 4. Hydrographs depicting the change in groundwater elevation for the shallow, intermediate and deep wells are included in Attachment A. Well categories are discussed below:

Shallow Wells (screened 20 – 45 feet bgs):

W-1s, W-Bs, W-3s, W-Es, and either {MW-4, MW-5, MW-6, MW-7 and MW-8} or {MW-105, MW-106, MW-107 and MW-108} depending on groundwater elevation

Intermediate Wells (screened 40 – 60 feet bgs):

W-1, W-3, W-A, MW-104, MW-205, MW-206, MW-207, MW-208

- Well W-1 is considered intermediate and is monitored; however the well is not utilized for groundwater gradient measurements due to modifications to the well top for remedial purposes.
- Monitoring well W-2 cannot be located following the construction of the housing complex to the south and southeast of the site.
- Monitoring well W-3 could not be monitored since an access agreement could not be obtained from Signature Properties.

Deep Wells (screened ~ 65 feet bgs):

MW-204, MW-305, MW-306, MW-307, MW-308

Deepest Wells (screened > 70 feet bgs):

MW-304, MW-404

Horizontal Groundwater Gradients

All of the shallow and intermediate wells were reported to be dry during the December 2014 monitoring event. The groundwater flow in the deep aquifer were calculated to be to the west-northwest at a slope of 0.012 ft/ft.

The historical shallow and intermediate groundwater elevation data are summarized in Table 2 and Table 3. The deep groundwater elevation data is summarized in Table 4.

Figures 5 illustrates the deep aquifer groundwater gradient map for the December 2014 monitoring event. A groundwater gradient map for the shallow and intermediate groundwater monitoring wells was not included since all of the wells were dry.

Vertical Groundwater Gradients

The vertical groundwater gradients could not be calculated for the December 2014 monitoring event since the intermediate groundwater monitoring wells were dry.

The historical vertical groundwater gradients are summarized in Table 5. Figure 3 shows the location of the well pairs used for calculating vertical groundwater gradients.

2.2 Groundwater Sampling Procedure

Between December 2, 2014 and December 3, 2014, Ground Zero staff recorded DTW measurements as well as purged and sampled the groundwater monitoring wells. The wells purged of at least three well volumes of stagnant water prior to sample collection unless the well is dewatered during purging. When pH, temperature, and electrical conductivity (EC) measurements had stabilized to within 10%, the groundwater monitoring wells are sampled. Care is taken to minimize sample agitation. The Continuous Multichannel Tubing (CMT®) wells are purged by hand with little volume and field parameters are not collected.

All groundwater samples were carefully transferred to the appropriate containers, checked for headspace, uniquely labeled, temporarily stored in an ice chest refrigerated to a temperature of less than 6°C, and delivered under chain-of-custody protocol to BC Labs of Bakersfield, California (ELAP #1186) for analysis.

All well purge water was placed in a 55 gallon Department of Transportation (DOT) approved container. Upon completing the groundwater monitoring event, all purge water was pumped from drums and into the DPE system for remediation prior to being discharged to the sanitary sewer system.

Groundwater monitoring field logs are included in Attachment B.

2.3 Laboratory Analyses

The groundwater samples were analyzed for:

- Benzene, Toluene, Ethyl Benzene and Xylene (BTEX) by EPA method 8260B
- TPHg by EPA method 8260B
- Methyl *tert*-butyl ether (MTBE) by EPA method 8260B

Analytical results from the December 2014 groundwater monitoring event are summarized in Table 6. Laboratory analytical results and chain of custody documentation are included in Attachment C.

3.0 FINDINGS AND DISCUSSION

3.1 Field Parameters

All of the monitoring wells that are consistently monitored for field parameters were dry and therefore not monitored during the December 2014 event. The historical field parameter results are summarized in Table 7. Field notes are included in Attachment B.

3.2 Laboratory Analytical Data

Due to low groundwater levels, the shallow CMT® wells have not been sampled since the DPE system was started in November 2011. It is anticipated that as groundwater levels rise, concentrations in the shallow wells will report decreased concentrations following extensive vadose zone remediation between 25 and 45 feet bgs.

Shallow Aquifer

- CMT® wells MW-4 thru MW-8 and MW-105 thru MW-108 were dry during the December 2014 groundwater monitoring event and were not sampled.
- Groundwater monitoring wells W-1s, W-3s, W-Bs and W-Es were dry during the December 2014 groundwater monitoring event and were not sampled.

Intermediate Aquifer

- CMT® wells MW-104 and MW-205 thru MW-208 were dry during the December 2014 groundwater monitoring event and were not sampled.
- Groundwater monitoring wells W-1 and W-A were dry during the December 2014 groundwater monitoring event and were not sampled.

Deep Aquifer

- The highest concentration of TPHg was reported as 1,800 micrograms per liter ($\mu\text{g}/\text{L}$) in MW-204.
- The highest concentration of benzene was reported as 1,600 micrograms per liter ($\mu\text{g}/\text{L}$) in MW-204.

- A deep well TPHg groundwater plume map is included as Figure 6.
- A deep well benzene groundwater plume map is included as Figure 7.
- The groundwater plume is localized in the vicinity of the former USTs and associated piping trenches and appears to be centered between wells MW-204 and MW-308.

Deepest Aquifer

- TPHg concentrations decreased in MW-304, while benzene concentrations increased slightly.
- TPHg and benzene concentrations decreased in MW-404.

4.0 REMEDIATION SYSTEM STATUS & EFFECTIVENESS

A DPE and AS remediation systems were installed at the site and operations commenced in November 2011 and March 2012, respectively. The well configuration is discussed as follows:

- Vadose zone well EW-1 is a vapor extraction well
- Shallow depth well W-1s is a vapor extraction well
- Intermediate depth well W-1 serves as either a dual phase extraction well or an air sparging well
- Intermediate depth well W-A serves as either a dual phase extraction well or an air sparging well.

Remediation wells W-1s and EW-1 are screened within the Upper Unit (screened across 10 to 45 feet bgs). Remediation wells W-1 and W-A are screened within the Lower Unit (screened across 42 to 57.5 feet bgs).

4.1 System Operation

The extracted vapors are treated with a thermal oxidizer and then discharged to ambient air under permit from the Bay Area Air Quality Management District (BAAQMD). The treated water is discharged to the municipal sewer system under permit from the City of Livermore.

The groundwater extracted by DPE is initially separated from the vapor phase via a knockout tank, with groundwater residing in the tank and the vapor phase continues on to the thermal oxidizer for treatment. The water is then pumped from the tank to an air stripper column to remove volatile organic petroleum hydrocarbons. The vapors generated by the air stripper are plumbed back to the thermal oxidizer joining the DPE extracted vapors. The treated groundwater is plumbed to two (2) 2,000 lbs. granulated activated carbon vessels in series after leaving the air stripper. The water is then monitored with an LEL sensor for contaminant levels while being discharged to the sewer system under associated permit requirements.

System operation commenced on November 15, 2011 (soil vapor extraction only), in compliance with the Alameda County Environmental Health (ACEH) directive extension. Various system repairs and modifications were completed following the initial start-up and full operation of the DPE system (soil vapor extraction only) began on November 29, 2011. Upon issuance of the groundwater discharge permit, the DPE system began full operation and extraction and treatment of both groundwater and soil vapor on January 18, 2012.

The DPE system was shut down on November 9, 2014 in anticipation of the fourth Quarter 2014 groundwater monitoring event that was performed between December 2 and December 3, 2014.

The DPE system operated for a total of 1,132 hours or approximately 47 days during the second half of 2014. The DPE system was shut down for the following time periods:

- July 10, 2014 thru July 25, 2014 – the DPE system shut down due to a malfunction of a water transfer pump
- August 13, 2014 thru August 27, 2014 – the DPE system shut down due to liquid ring pump failure
- August 27, 2014 thru September 9, 2014 – the DPE system remained shut down while parts were ordered to fix the liquid ring pump
- September 19, 2014 thru September 23, 2014 – the DPE system shut down due to power failure
- September 25, 2014 thru October 2, 2014 – the DPE system was shut down in order to switch from thermal to catalytic oxidation to reduce operation costs
- October 19, 2014 thru November 6, 2014 – the DPE system shut down due to a blown fuse associated with the thermal oxidizer blower
- November 7, 2014 thru December 2, 2014 – the DPE system shut down due to excessive heat in the oxidizer
- December 2, 2014 thru December 3, 2014 – the DPE system shut down during the 4th Quarter groundwater monitoring event. The system was restarted following the groundwater monitoring event

4.2 Treatment System Data

During the second half of 2014, the DPE system operated for 1,084 hours and removed a total of approximately 1,828 pounds or approximately 281 gallons of gasoline hydrocarbons as TPHg. As of the end of 2014, the DPE system has removed a total of approximately 5,500 pounds, or approximately 846 gallons, of gasoline hydrocarbons as TPHg in both vapor and groundwater phases.

Soil Vapor Extraction Mass Removal

During the second half of 2014, the DPE system removed approximately 1,825 pounds, or approximately 281 gallons of soil vapor gasoline hydrocarbons as TPHg. As of the end of 2014, the DPE system has removed approximately 5,370 pounds, or approximately 826 gallons of vapor phase TPHg.

The mass of TPHg treated by the thermal oxidizer is summarized in Table 8. The soil vapor extraction monitoring and laboratory data is summarized in Table 9.

Groundwater Extraction Mass Removal

The influent groundwater stream is sampled monthly and the analytical results are used to calculate the mass removed. During the second half of 2014, the DPE system removed approximately 3.3 pounds, or approximately 0.5 gallons, of gasoline hydrocarbons as TPHg. As of the end of 2014, the DPE system had removed approximately 130 pounds, or approximately 20 gallons of TPHg from groundwater extraction.

The mass of TPHg removed by groundwater extraction and treated by air stripping and running through granular activated carbon is summarized in Table 10. The groundwater extraction monitoring and laboratory data is summarized in Table 11.

Assumptions

- The concentration of TPHg removed by the system is assumed to be constant for the time period prior to the sample collection and following the previous sample collection.
- The volume of airflow is assumed to be constant for the time period prior to the sampling event and following the previous sampling event.
- Concentration of aqueous phase removal is based on actual analytical results taken from the line following the knockout drum and prior to the first groundwater storage tank. It is likely the concentrations, thus the mass removed from the extraction wells, is higher at the well than is measured at the sampling point for the following reasons:
 - The groundwater extraction is achieved by high vacuum and soil vapor extraction from the wells, which result in withdraws of both soil vapor and groundwater.
 - This air/water mixture is transported through 90 feet of piping to the DPE unit where the two phases are separated in the knockout drum. So in essence, the piping system acts as a linear air stripper causing the VOCs in the water to transfer into the vapor phase.

5.0 CONCLUSIONS & RECOMMENDATIONS

Conclusions

1. The deep groundwater plume appears to attenuate to the northeast at CMT® Cluster 6 but the extent of the plume is unknown to the north and west.
2. Concentrations in deep groundwater monitoring wells MW-204 and MW-307 appear to be fluctuating, but on an overall decreasing trend. Concentrations in deep wells MW-305, MW-306 and MW-308 appear to be fluctuating and stable, neither decreasing nor increasing.

3. Concentrations reported in the deep wells suggest that remediation is occurring in the core of the plume based on decreasing concentrations in core well MW-204. However, unstable trends in wells MW-305, MW-307 and MW-308 make it difficult to understand what is occurring in the deep aquifer up-gradient and down-gradient of the contaminant core. However, the new extraction well installed near MW-305 will likely drive the concentrations down.
4. Concentrations in the deepest monitoring wells MW-304 and MW-404 have been on a gradually increasing trend since April 2011, with wide fluctuations occurring during the 2013 and 2014 groundwater monitoring events.
5. Increasing contaminant concentrations in the site's deep wells (MW-304 & MW-404) is attributed to the historically low groundwater, extracting contaminants within the smear zone. The increased exposure of the smear zone will allow the newly installed extraction well to remove a greater mass in vapor phase.
6. Remediation by DPE and air sparging in wells W-A and W-1 appears to have decreased the contaminant mass in the core of the plume, as observed in monitoring wells W-1, W-A, W-1s, MW-104 and MW-204.

Recommendations

1. Continue remediation activities as well as operation and maintenance.
2. Evaluate the effectiveness of the newly installed extraction well in the forthcoming semi-annual report.
3. Include depth to water and analytical data from the two newly installed groundwater monitoring wells in the forthcoming semi-annual report.

6.0 LIMITATIONS

This report was prepared in accordance with the generally accepted standard of care and practice in effect at the time Services were rendered. It should be recognized that definition and evaluation of environmental conditions is an inexact science and that the state or practice of environmental geology/hydrology is changing and evolving and that standards existing at the present time may change as knowledge increases and the state of the practice continues to improve. Further, that differing subsurface soil characteristics can be experienced within a small distance and therefore cannot be known in an absolute sense. All conclusions and recommendations are based on the available data and information.

The tasks proposed and completed during this project were reviewed and approved by the local regulatory agency for compliance with the law. No warranty, expressed or implied, is made.

7.0 SIGNATURES & CERTIFICATION

This report was prepared by:



Andrew Dorn

Andrew Dorn, B.Sc. Geology
Staff Geologist
California GIT (#411)

This report was prepared under the direction of:

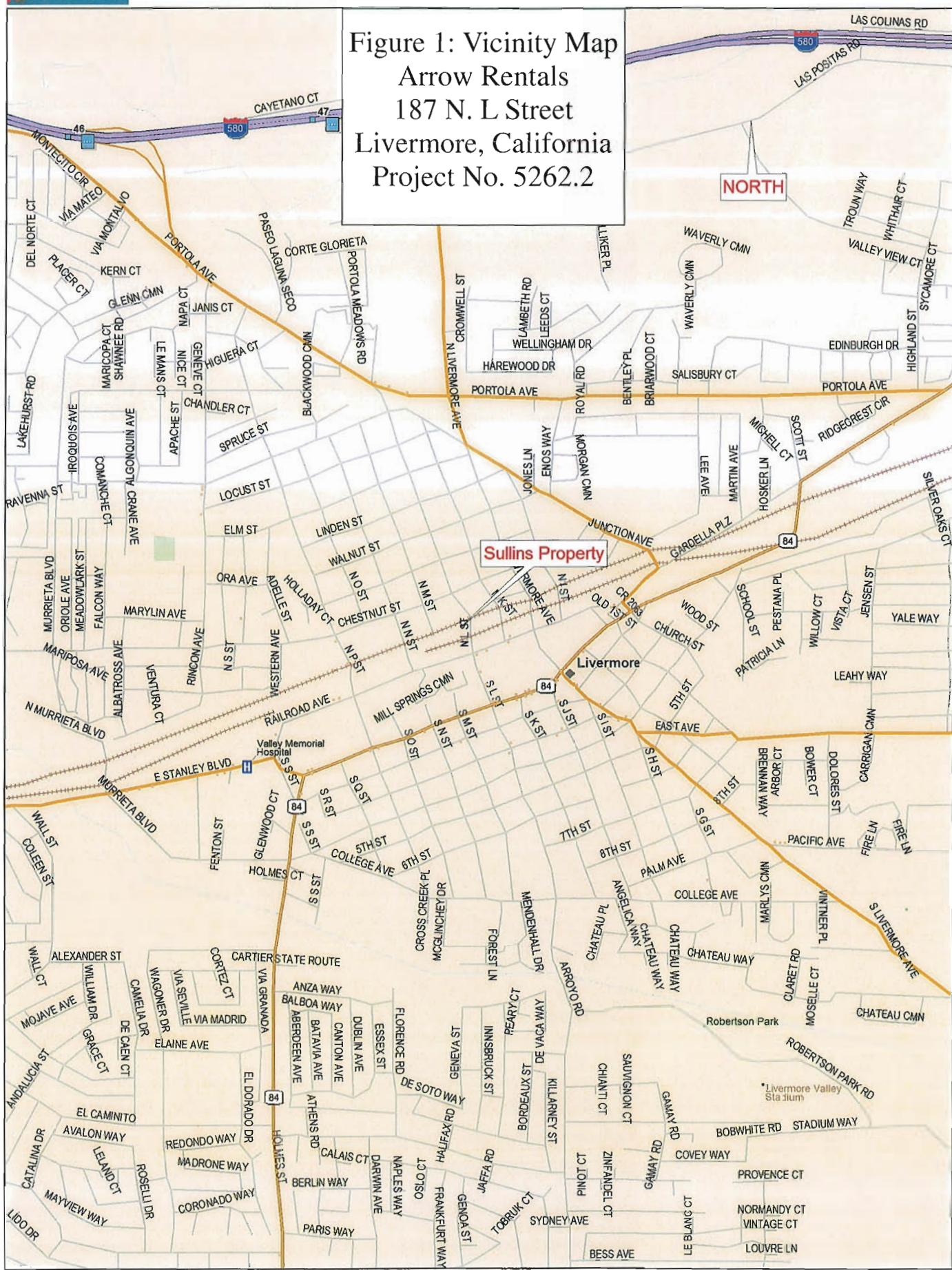


Eric L. Price, PG #8414



Figures

Figure 1: Vicinity Map
Arrow Rentals
187 N. L Street
Livermore, California
Project No. 5262.2



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www.delorme.com

TN
MN (13.7° E)

Scale 1 : 19,200

0 400 800 1200 1600 2000
400 800 1200 1600 2000
1" = 1,600.0 ft Data Zoom 13-4



NOTE:
 PROPERTY LINES ARE SHOWN FOR REFERENCE ONLY,
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STREET RIGHT OF WAY IS APPROXIMATE, BASED ON
 ASSESSOR'S PARCEL MAPS AND INFORMATION PROVIDED
 BY WOODWARD-CLYDE CONSULTANTS

FIGURE 2

Sullins (Arrow Rentals)
 187 North L Street
 Livermore, California



SITE MAP

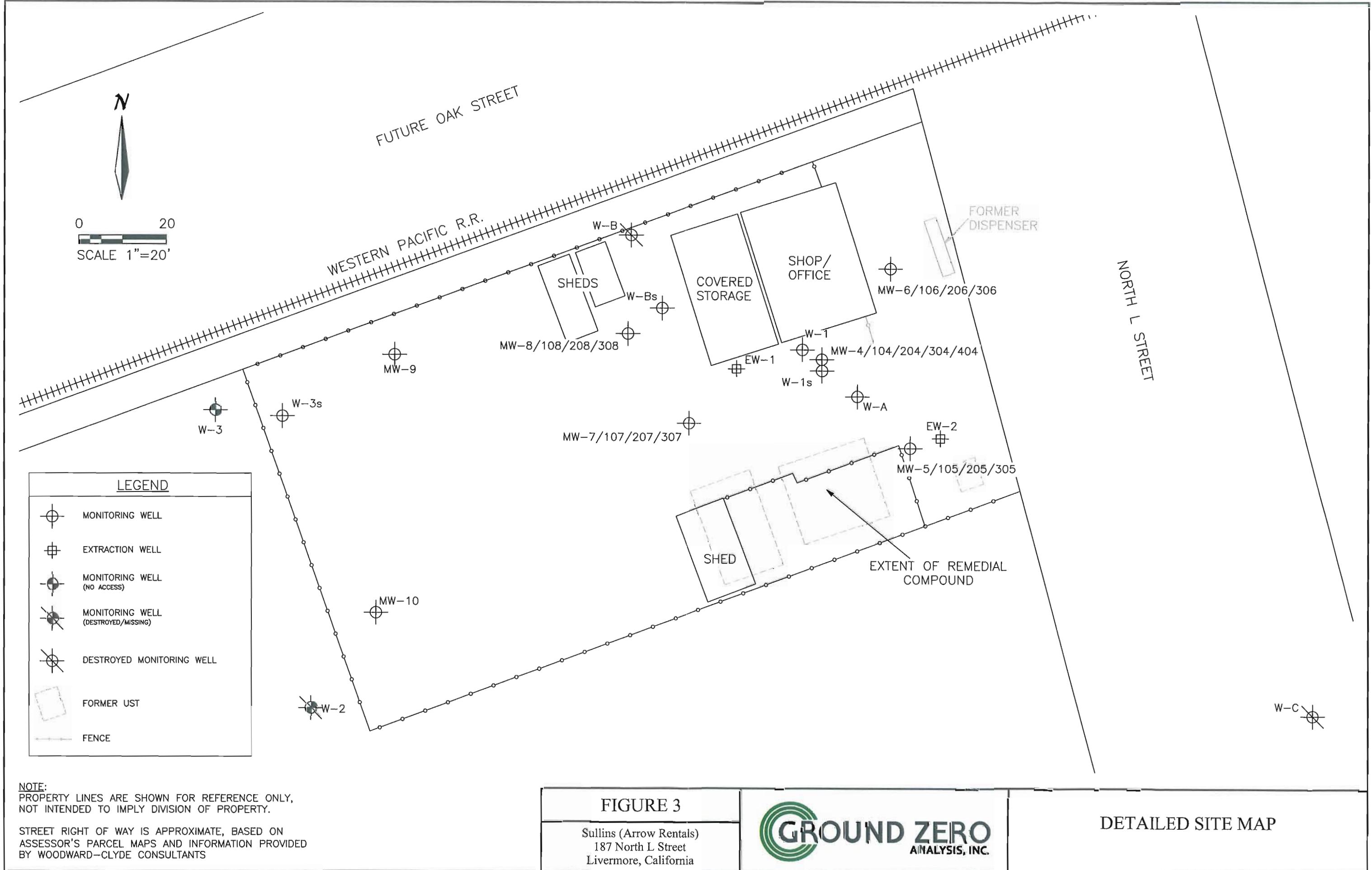
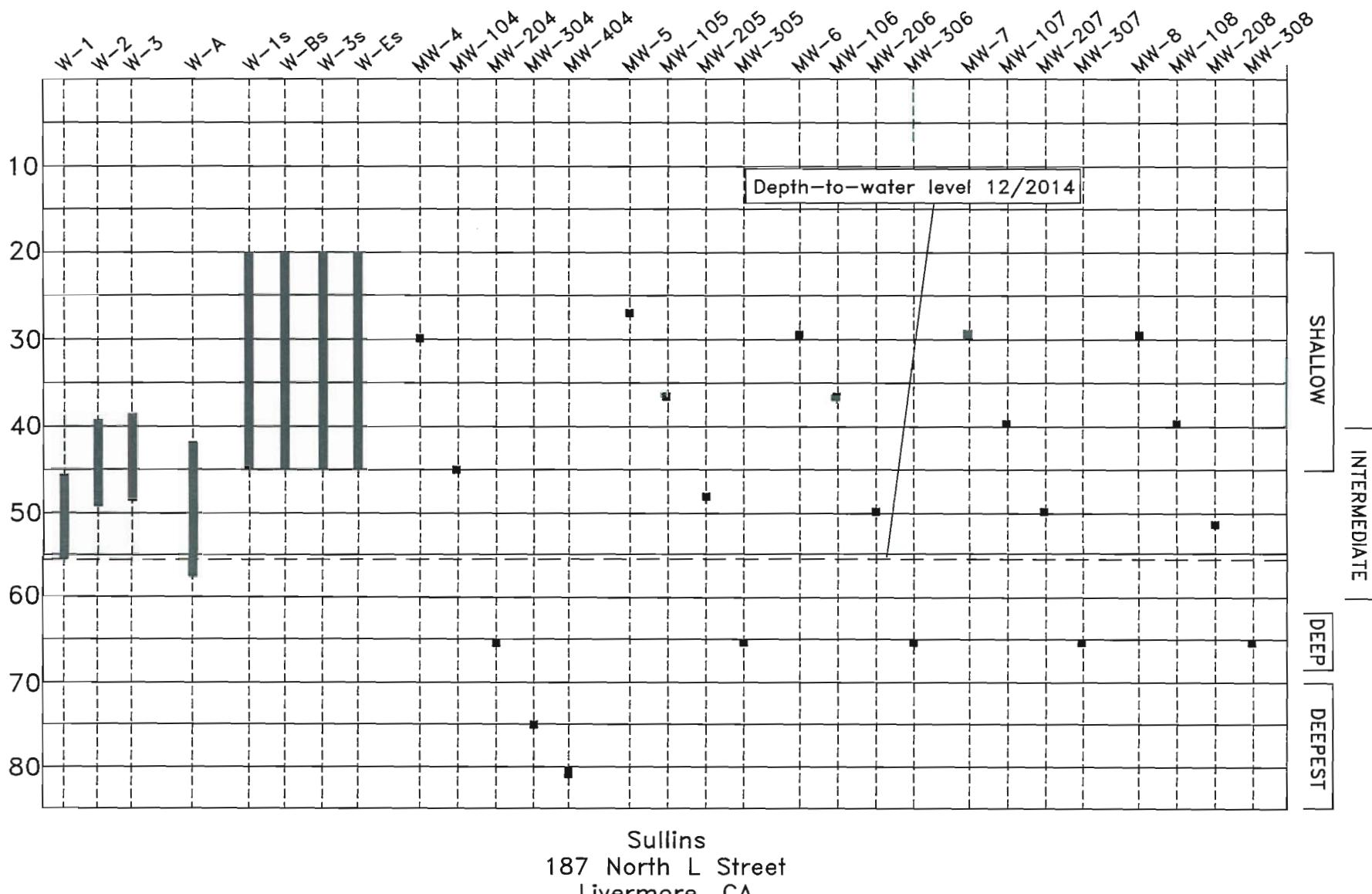
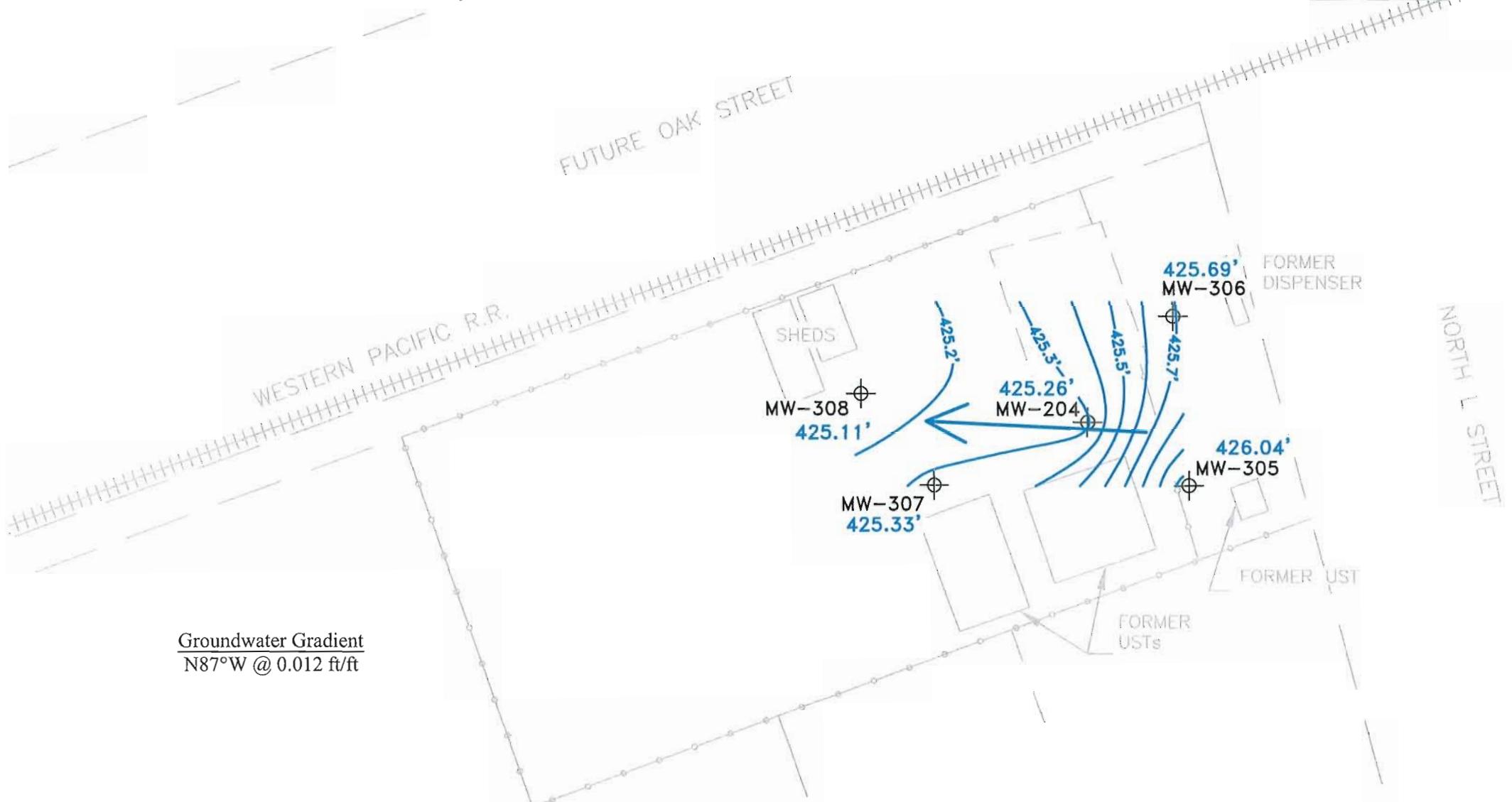
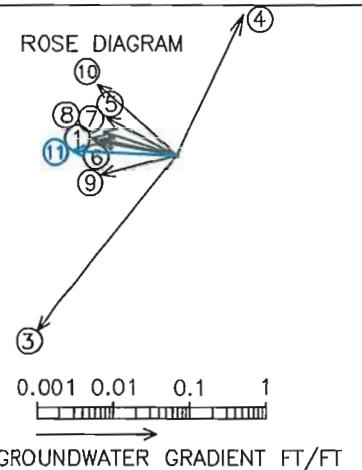


Figure 4:
Well Screened Interval Diagram





	DATE	BEARING	GRADIENT
1	10/16/06	N78°W	0.0140
2	04/17/07	UNDETERMINED	
3	12/19/07	S39°W	0.1800
4	04/07/08	N26°E	0.1000
5	10/25/11	N64°W	0.0114
6	05/30/12	N79°W	0.0100
7	11/19/12	N72°W	0.0089
8	06/24/13	N78°W	0.0091
9	12/03/13	S75°W	0.010
10	06/17/14	N49°W	0.012
11	12/02/14	N87°W	0.012



0 50
SCALE 1"=50'

LEGEND

- ⊕ MONITORING WELL
- ⊗ EXTRACTION WELL
- 426.04' GROUNDWATER ELEVATION

GROUNDWATER FLOW DETERMINED
USING CMT WELLS MW-305, MW-307
and MW-308.

CONTOUR INTERVAL = 0.1 FEET

NOTE:
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FIGURE 5

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

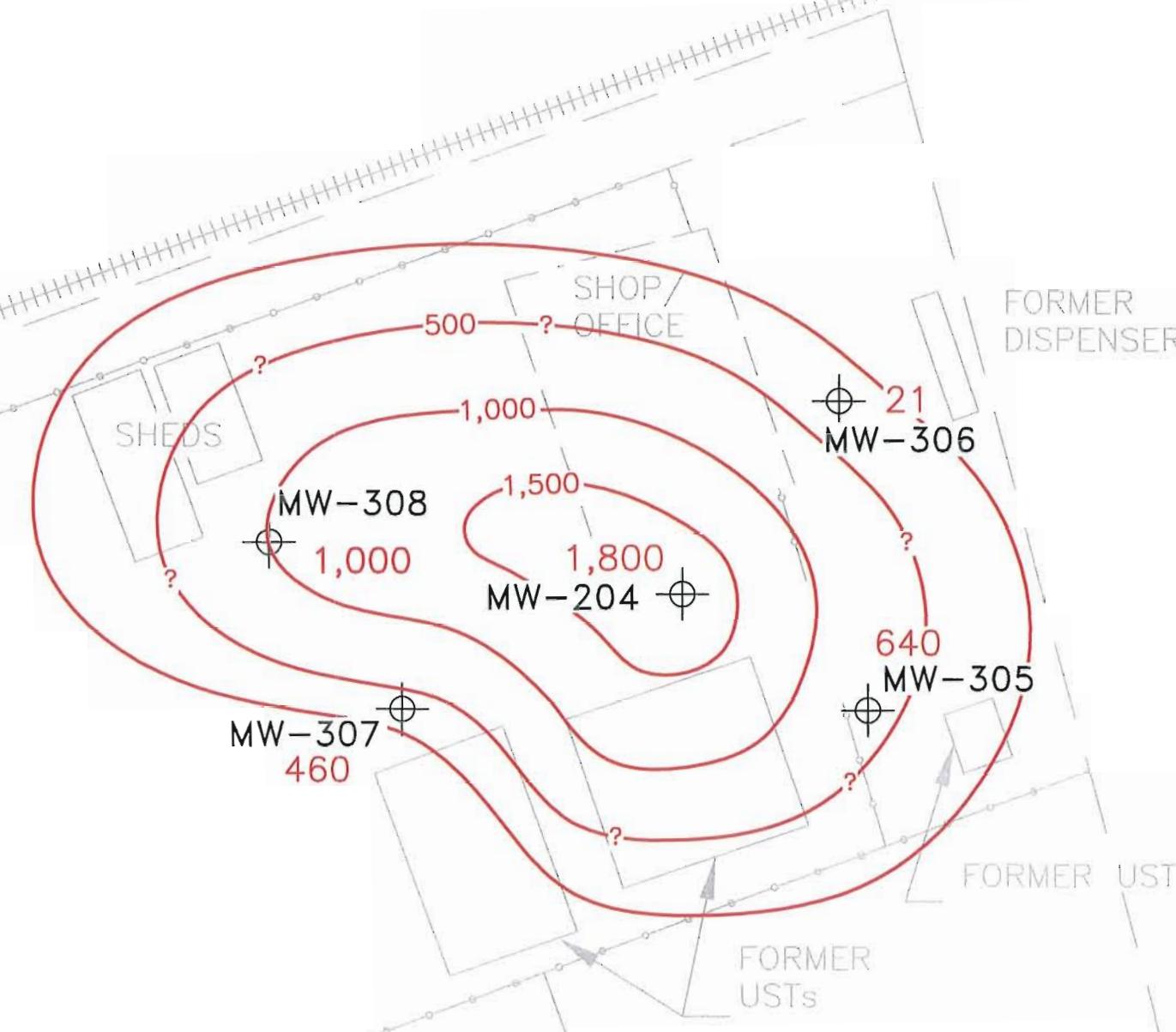


DEEP AQUIFER GROUNDWATER
GRADIENT MAP



LEGEND

- ⊕ MONITORING WELL
- ⊗ EXTRACTION WELL
- ?— ESTIMATED CONTOURS
- 1,800 = TPH-G CONCENTRATION (ug/L)
- CONTOUR INTERVAL = 500 ug/L



NOTE:
PROPERTY LINES ARE SHOWN FOR REFERENCE ONLY,
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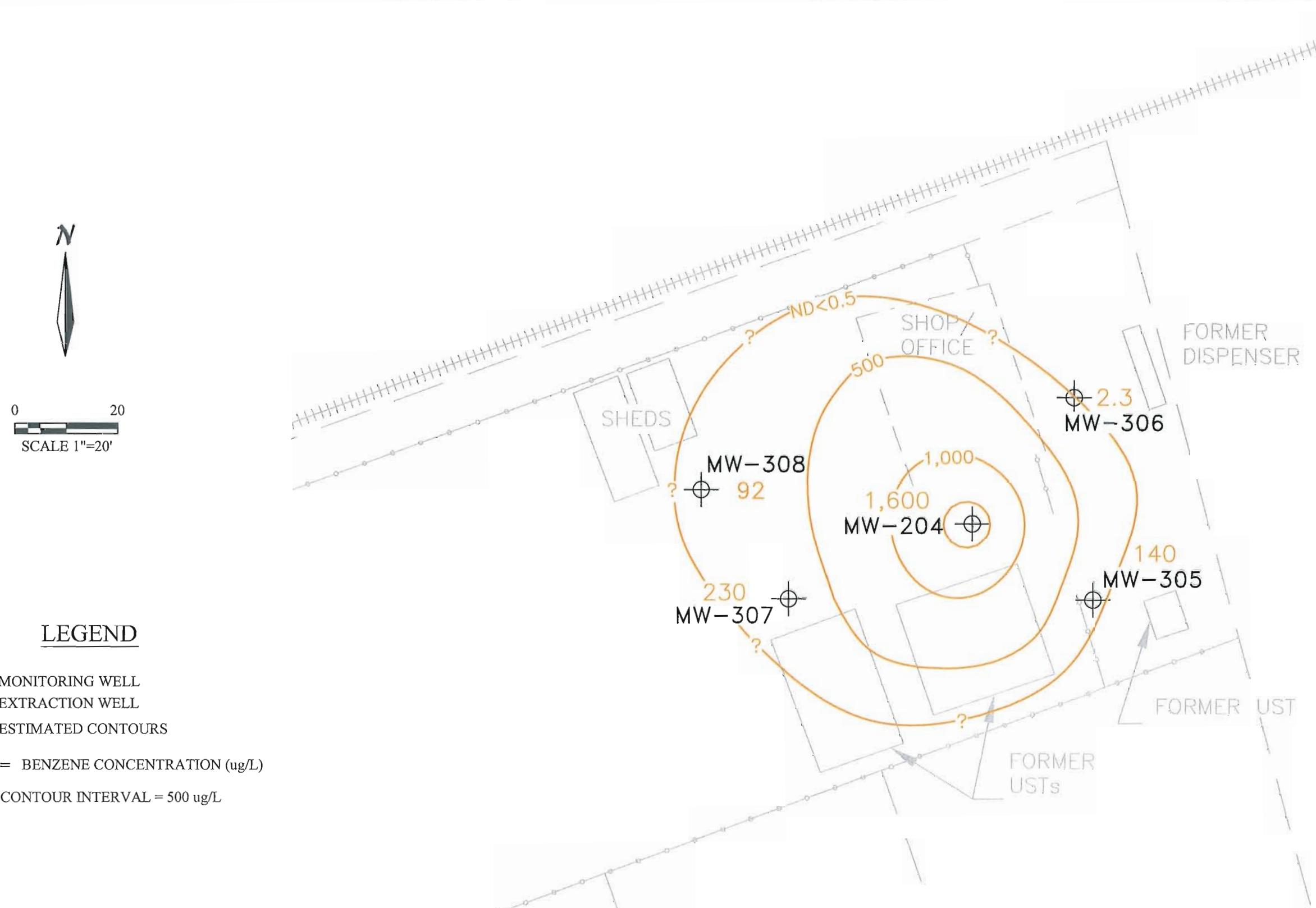
STREET RIGHT OF WAY IS APPROXIMATE, BASED ON
ASSESSOR'S PARCEL MAPS AND INFORMATION PROVIDED
BY WOODWARD-CLYDE CONSULTANTS

FIGURE 6

Sullins (Arrow Rentals)
187 North L Street
Livermore, California



DEEP AQUIFER TPHg GROUNDWATER
PLUME MAP



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FIGURE 7

Sullins (Arrow Rentals)
187 North L Street
Livermore, California



DEEP AQUIFER BENZENE GROUNDWATER PLUME MAP

Summary Tables

TABLE I
Summary of Well Construction

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Aquifer	Well/Boring Type	Well/Boring Number	Status	Date Drilled	Total Depth (ft)	Boring Diameter (in)	Well Casing Diameter (in)	Casing Type	Shot Size (in)	Sand Type	Well Screen		Filter Pack		Annular Seal		Grout Seal	
											From	To	From	To	From	To	From	To
Shallow	Vapor Extraction	W-1s	Active	03/1/96	45	?	6	PVC	0.010	#2/12	45	20	45	17	15	15	S	
	Monitoring	W-Bs	Active	03/12/96	45	?	6	PVC	0.010	#2/12	45	20	45	18	18	16	S	
	Monitoring	W-3s	Active	03/12/96	45	?	4	PVC	0.010	#2/12	45	20	45	18	18	16	S	
	Monitoring	W-Es	Active	03/13/96	45	?	2	PVC	0.010	#2/12	45	20	45	18	18	16	S	
	Monitoring	MW-4	Active	10/02/06	82	8	-	MCT	-	#2/12	30	29	30	20	16	16	S	
	Monitoring	MW-5	Active	10/09/06	68	8	-	MCT	-	#2/12	27	26	29	24	24	21.5	S	
	Monitoring	MW-6	Active	10/10/06	68	8	*	MCT	-	#2/12	30	29	31	27	27	24	S	
	Monitoring	MW-7	Active	10/04/06	69.5	8	-	MCT	-	#2/12	30	29	30	20	-	-	S	
	Monitoring	MW-8	Active	10/05/06	66.5	8	-	MCT	-	#2/12	30	29	30	20	18	18	S	
	Monitoring	MW-9	Active	01/27/15	65	8	2	PVC	0.010	#2/12	65	45	65	43	43	40	S	
Intermediate	Monitoring	MW-10	Active	01/27/15	65	8	2	PVC	0.010	#2/12	65	45	65	43	43	40	S	
	Vapor Extraction	EW-1	Active	10/03/06	25	10	4	PVC	0.010	#2/12	25	10	25	9.5	9.5	7.5	S	
	Vapor Extraction	EW-2	Active	01/26/15	60	8	2	PVC	0.010	#2/12	60	40	60	38	38	35	S	
	Vapor Extraction	W-1	Active	05/25/89	56.5	8	2	PVC	0.010	#2/12	55.5	45.5	55.5	41.5	41.5	39	S	
	Monitoring	W-2	Active	05/26/89	51.5	8	2	PVC	0.010	#2/12	49	39	49	36	36	22.5	S	
	Monitoring	W-3	Active	05/26/89	51.5	8	2	PVC	0.010	#2/12	48	38	48	34.5	34.5	32.5	S	
	Vapor Extraction	W-A	Active	07/12/90	63	12	4	PVC	0.010	#2/12	57.5	42	63	40	40	36.5	S	
	Monitoring	W-B *	Active	07/13/90	55	12	4	PVC	0.010	#2/12	55	40	55	32	32	30	S	
	Monitoring	W-C *	Active	07/11/90	55	8	2	PVC	0.010	#2	55	45	55	37.5	37.5	35	S	
	Monitoring	W-D *	Active	07/12/90	57.5	8	2	PVC	0.010	#2/12	57.5	42	57.5	39.5	34	32	S	
Deep	Monitoring	W-E *	Active	07/10/90	61	8	2	PVC	0.010	#2/12	60.5	40.5	61	37	30	29	S	
	Monitoring	MW-104	Active	10/02/06	51	8	-	MCT	-	#2/12	50.5	49.5	52	48	45	30	-	
	Monitoring	MW-105	Active	10/09/06	37	8	-	MCT	-	#2/12	37	36	39	34	35	29	-	
	Monitoring	MW-106	Active	10/10/06	37	8	-	MCT	-	#2/12	37	36	39	35	35	31	-	
	Monitoring	MW-107	Active	10/04/06	40	8	-	MCT	-	#2/12	40	39	42	37	37	30	-	
	Monitoring	MW-108	Active	10/05/06	40	8	-	MCT	-	#2/12	40	39	42	37	37	30	-	
	Monitoring	MW-205	Active	10/09/06	48	8	-	MCT	-	#2/12	48	47	50	45	45	39	-	
	Monitoring	MW-206	Active	10/10/06	50	8	-	MCT	-	#2/12	50	49	52	47	47	39	-	
	Monitoring	MW-207	Active	10/04/06	50	8	-	MCT	-	#2/12	50	49	52	47	47	42	-	
	Monitoring	MW-208	Active	10/05/06	52	8	-	MCT	-	#2/12	52	51	54	49	49	42	-	
Deepest	Monitoring	MW-204	Active	10/02/06	66.5	8	-	MCT	-	#2/12	66.5	65.5	68	64	64	52	-	
	Monitoring	MW-305	Active	10/09/06	68	8	-	MCT	-	#2/12	66	65	68	63	63	50	-	
	Monitoring	MW-306	Active	10/10/06	68	8	-	MCT	-	#2/12	66	65	68	63	63	52	-	
	Monitoring	MW-307	Active	10/04/06	69.5	8	-	MCT	-	#2/12	66	65	68	63	63	52	-	
	Monitoring	MW-308	Active	10/05/06	66.5	8	-	MCT	-	#2/12	66	65	66	63	63	54	-	
Deepest	Monitoring	MW-304	Active	10/02/06	75.5	8	-	MCT	-	#2/12	75.5	74.5	76	73	73	68	-	
	Monitoring	MW-404	Active	10/02/06	82	8	-	MCT	-	#2/12	81.5	80	81.5	79.5	80	76	-	

* = well was destroyed in 2008

TABLE 2
Summary of Groundwater Elevation and Gradient - Water Table Wells

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Date	Elevation of Groundwater*																Avg. Elv. (feet)	Avg. DTW (feet)	Gradient (ft/ft)	Bearing	
	W-1s	DTW	W-3s	DTW	W-Bs	DTW	W-Es	DTW													
	top of casing	479.09		476.98		478.82		474.66													
	top of screen	459.09	20	456.98	20	458.82	20	454.66	20												
	bottom of screen	434.09	45	431.98	45	433.82	45	429.66	45												
6/2/1989	435.93		432.48		-		-										434.21	43.83			
7/25/1990	-		-		434.20		431.58										432.89	43.85			
1/1/1992																		41.00			
4/24/1996	461.14		459.28		460.77		456.21										459.35	18.04			
11/22/1996	454.09		451.53		453.12		446.66										451.35	26.04			
7/15/1997	448.68		447.81		449.20		443.20										447.22	30.17			
10/29/1997	442.64	36.45	441.53		442.19		437.98										441.09	36.30			
4/27/1998	460.48	18.61	457.25		459.96		455.39										458.27	19.12			
10/23/1998	445.11	33.98	444.01		445.60		440.16										443.72	33.67			
4/9/1999	453.14	25.95	451.02		452.78		447.25										451.05	26.34			
10/5/1999	446.66	32.43	445.20		446.72		441.47										445.01	32.38			
4/5/2000	453.12	25.97	451.96		453.77		448.04										451.72	25.67			
10/26/2000	447.91	31.18	446.50		448.14		442.43										446.25	31.14			
4/18/2001	447.80	31.29	446.51		446.89		442.63										445.96	31.43			
11/13/2001	435.69	43.40	433.32		443.59		431.05										435.91	41.48			
2/15/2002	442.46		-		-		-										442.46	34.93			
3/15/2002	441.32		-	*	-	*	-										441.32	36.07			
4/16/2002	441.79		-	-	-	*	-										441.79	35.60			
4/30/2002	441.80	37.29	439.19		441.50		437.09										439.90	37.49			
9/30/2002	439.17	39.92	437.01		439.39		434.50										437.52	39.87			
3/19/2003	446.83	32.26	445.03		446.74		441.80										445.10	32.29			
9/16/2003	440.88		438.50		441.40		436.14										439.23	38.16			
4/29/2004	448.99	30.10	447.39	29.59	448.83	29.99	443.43	31.23									447.16	30.23	0.019	West	
7/7/2006	450.40	28.69	448.61	28.37	450.25	28.57	444.21	30.45									448.37	29.02	0.019	N76°W	

*Data prior to July 7, 2006 from Environmental Sampling Services 5/27/04 Groundwater Monitoring Report

Date	Elevation of Groundwater - Wells Surveyed October 16, 2006 in accordance with SWRCB Geotracker Requirements																			Avg. Elv. (feet)	Avg. DTW (feet)	Gradient (ft/ft)	Bearing									
	W-1s **	DTW	W-3s	DTW	W-Bs	DTW	W-Es	DTW	MW-4	DTW	MW-5	DTW	MW-6	DTW	MW-7	DTW	MW-8	DTW	MW-105	DTW	MW-106	DTW	MW-107	DTW	MW-108	DTW						
	top of casing	481.19		479.12		480.92		476.78		480.84		481.12		480.79		480.91		480.64		481.12		480.79		480.91		480.64						
	top of screen	461.19	20	459.12	20	460.92	20	456.78	20	451.84	29	455.12	26	451.79	29	451.91	29	451.64	29	445.12	36	444.79	36	441.91	39	441.64	39					
	bottom of screen	436.19	45	434.12	45	435.92	45	433.78	45	450.84	30	454.12	23	450.79	30	450.91	30	450.64	30	444.12	37	443.79	37	440.91	40	440.64	40					
10/16/06	447.81	33.38	446.17	32.95	447.93	32.99	442.75	34.03	-	-	-	-	-	-	-	-	-	447.97	33.15	447.11	33.68	446.77	34.14	446.34	34.40	446.61	33.58	0.014	N68°W			
04/17/07	449.64	31.55	448.35	30.77	449.51	31.41	444.58	32.20	454.09	26.75	-	-	-	-	-	-	-	-	-	-	-	-	448.92	31.99	-	448.20	31.58	0.016	N71°W			
12/19/07	438.88	42.31	437.46	41.66	444.51	36.41	433.10	43.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	443.07	37.72	442.26	38.65	442.60	38.04	440.27	39.78	0.033	S74°W
04/07/08	446.97	34.22	-	-	446.76	34.16	442.																									

TABLE 3
Summary of Groundwater Elevation and Gradient - Intermediate Wells

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Date	Elevation of Groundwater - Wells Surveyed October 16, 2006 in accordance with SWRCB Geotracker Requirements																											
		W-1**	DTW	W-A**	DTW	W-B	DTW	W-C	DTW	W-D	DTW	W-E	DTW	MW-104	DTW	MW-205	DTW	MW-206	DTW	MW-207	DTW	MW-208	DTW	Avg. Elv.	Avg. DTW	Gradient	Bearing	
top of casing	480.77		481.04		480.74		481.61		477.03		476.56		480.84		481.12		480.79		480.91		480.64		(feet)	(feet)	(ft/ft)			
top of screen	435.27	45.5	439.04	42	440.74	40	436.61	45	435.03	42	436.06	40.5	431.34	49.5	434.12	47	431.79	49	431.91	49	429.64	51						
bottom of screen	425.27	55.5	423.54	57.5	425.74	55	426.61	55	419.53	57.5	416.26	60.3	430.34	50.5	433.12	48	430.79	50	430.91	50	428.64	52						
10/16/2006	-	-	-	-	-	-	-	-	-	-	442.63	33.93	444.85	35.99	446.75	34.37	447.03	33.76	446.27	34.64	445.12	35.52	445.44	34.70	0.012	N63°W		
4/17/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	448.57	32.22	447.13	33.78	447.05	33.59	447.58	33.20	0.022	S68°W			
12/19/2007	-	-	438.36	42.68	-	-	-	-	-	-	-	435.98	44.86	-	-	436.10	44.69	434.33	46.58	433.92	46.72	435.74	45.11	0.04	N76°W			
4/7/2008	-	-	446.72	34.32	-	-	-	-	-	-	-	443.10	37.74	444.84	36.28	446.38	34.41	444.84	36.07	443.66	36.98	444.92	35.97	northwest	variable			
10/8-9/2008	-	-	-	-	Wells Destroyed on 4/18/2008										431.08	49.76	434.51	46.61	431.32	49.47	-	-	430.68	49.96	431.90	48.95	0.12	N20°W
4/8/2011	-	-	453.38	27.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	453.38	27.66	N/A	N/A		
10/26/2011	445.28	35.49	445.60	35.44	-	-	-	-	-	-	444.83	36.01	444.00	37.12	443.25	37.54	442.79	38.12	442.05	38.59	443.75	37.14	0.025	N52°W				
** 5/30/2012	441.21	39.56	441.50	39.54	-	-	-	-	-	-	441.78	39.06	442.43	38.69	441.39	39.40	440.37	40.54	440.05	40.59	441.25	39.63	0.020	S89°W				
** 11/19/2012	439.12	41.65	438.12	42.92	-	-	-	-	-	-	439.29	41.55	439.08	42.04	438.11	42.68	437.70	43.21	437.35	43.29	438.40	42.48	0.015	N36°W				
** 6/24/2013	443.53	37.24	444.19	36.85	-	-	-	-	-	-	443.76	37.08	444.33	36.79	443.74	37.05	442.74	38.17	442.47	38.17	443.54	37.34	0.014	N73°W				
** 12/3/2013	444.43	36.34	445.11	35.93	-	-	-	-	-	-	444.54	36.30	445.13	35.99	444.74	36.05	444.77	36.14	444.37	36.27	444.73	36.15	0.013	N32°W				
** 6/16/14	436.71	44.06	436.97	44.07	-	-	-	-	-	-	437.15	43.69	437.70	43.42	436.64	44.15	435.92	44.99	431.78	48.86	436.12	44.75	0.076	N74°W				
12/2/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

"-" = well dry or depth to water measurement could not be obtained

Starting 10/26/11 - Gradient calculated using a 3-point problem with CMT wells 205, 206 & 208

** = The well tops of W-A and W-1 were modified for the DPE system, therefore the depth-to-water data is irrelevant and was not used for groundwater contour or avg. groundwater elevation calculations

TABLE 4
Summary of Groundwater Elevation and Gradient - Deep Deepest Wells

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Date	Elevation of Groundwater - Wells Surveyed October 16, 2006 in accordance with SWRCB Geotracker Requirements												DEEPEST WELLS					
	DEEP WELLS								GROUNDWATER				DEEPEST WELLS					
	MW-204	DTW	MW-305	DTW	MW-306	DTW	MW-307	DTW	MW-308	DTW	Avg. Elv.	Avg. DTW	Gradient	Bearing	MW-304	DTW	MW-404	DTW
top of casing	480.84		481.12		480.79		480.91		480.64		(feet)				480.84		480.84	
top of screen	415.34	65.5	416.12	65	415.79	65	415.91	65	415.64	65					406.34	74.5	400.84	80.0
bottom of screen	414.34	66.5	415.12	66	414.79	66	414.91	66	414.64	66					405.34	75.5	399.34	81.5
10/16/2006	447.09	33.75	447.44	33.68	447.29	33.50	446.63	34.28	446.37	34.27	446.96	33.90	0.014	N78°W	442.76	38.08	444.37	36.47
4/17/2007	-	-	448.49	32.63	449.08	31.71	-	-	-	-	448.79	32.17	-	-	-	-	448.82	32.02
12/19/2007	435.73	45.11	-	-	443.19	37.60	435.20	45.71	434.93	45.71	437.26	43.53	0.18	S39°W	435.45	45.39	435.51	45.33
4/7/2008	446.42	34.42	446.56	34.56	442.68	38.11	446.86	34.05	445.59	35.05	445.62	35.24	0.1	N26°E	441.42	39.42	446.18	34.66
10/8-9/2008	429.90	50.94	444.51	36.61	432.28	48.51	-	-	442.09	38.55	437.20	43.65	-	-	-	-	432.20	48.64
4/8/2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/26/2011	445.22	35.62	445.74	35.38	445.34	35.45	-	-	445.55	35.09	445.46	35.39	0.0114	N64°W	445.14	35.70	445.07	35.77
5/30/2012	441.06	39.78	441.37	39.75	440.96	39.83	440.56	40.35	440.24	40.40	440.84	40.02	0.0100	N79°W	440.95	39.89	440.85	39.99
11/19/2012	438.53	42.31	438.84	42.28	438.46	42.33	438.04	42.87	437.72	42.92	438.32	42.54	0.0089	N72°W	438.40	42.44	438.33	42.51
6/24/2013	443.75	37.09	444.05	37.07	443.69	37.10	443.16	37.75	442.87	37.77	443.50	37.36	0.0091	N78°W	443.66	37.18	443.50	37.34
12/3/2013	444.78	36.06	445.01	36.11	444.67	36.12	444.14	36.77	443.97	36.67	444.51	36.35	0.0100	S75°W	444.66	36.18	444.54	36.30
6/16/2014	436.62	44.22	436.89	44.23	436.57	44.22	436.11	44.80	436.10	44.54	436.46	44.40	0.012	N49°W	436.51	44.33	436.40	44.44
12/2/2014	425.26	55.58	426.04	55.08	425.69	55.10	425.33	55.58	425.11	55.53	425.49	55.37	0.012	N87°W	425.72	55.12	425.62	55.22

"-" = well dry or depth to water measurement could not be obtained

Starting 10/26/11 - Gradient calculated using a 3-point problem with CMT wells 305, 307 & 308

TABLE 5
Summary of Vertical Groundwater Gradients

Sullins (Arrow Rentals)
187 North L Street
Livermore, CA

Date	Well Pair	Mid Points (TS-BS & TS-BS)	gw/ls	bs/bs	GW Elevation (Head)	Vertical Head diff.	Vertical Dist diff.	Vertical Gradient
16-Oct-06	MW-104	430.84	431.34	430.34	444.85	2.240	16.00	0.140
	MW-204	414.84	415.34	414.34	447.09			
16-Oct-06	MW-205	433.62	434.12	433.12	446.75	0.690	18.00	0.038
	MW-305	415.62	416.12	415.12	447.44			
19-Apr-07	MW-107	441.41	441.91	440.91	448.92	-1.790	10.00	-0.179
	MW-207	431.41	431.91	430.91	447.13			
19-Apr-07	MW-206	431.29	431.79	430.79	446.75	0.510	16.00	0.032
	MW-306	415.29	415.79	414.79	447.44			
19-Dec-07	MW-204	414.84	415.34	414.34	435.73	-0.280	9.00	-0.031
	MW-304	405.84	406.34	405.34	435.45			
19-Dec-07	MW-304	405.84	406.34	405.34	435.45	0.060	5.75	0.010
	MW-404	400.09	400.84	399.34	435.51			
19-Dec-07	MW-207	431.41	431.91	430.91	434.33	0.870	16.00	0.054
	MW-307	415.41	415.91	414.91	435.20			
7-Apr-08	MW-204	414.84	415.34	414.34	446.42	-5.000	9.00	-0.556
	MW-304	405.84	406.34	405.34	441.42			
7-Apr-08	MW-205	433.62	434.12	433.12	446.75	1.720	18.00	0.096
	MW-305	415.62	416.12	415.12	447.44			
7-Apr-08	MW-206	431.29	431.79	430.79	446.75	-3.700	16.00	-0.231
	MW-306	415.29	415.79	414.79	447.44			
7-Apr-08	MW-207	431.41	431.91	430.91	444.84	2.020	16.00	0.126
	MW-307	415.41	415.91	414.91	446.86			
8-Oct-08	MW-204	414.84	415.34	414.34	429.90		9.00	N/A
	MW-304	405.84	406.34	405.34	-			
8-Oct-08	MW-205	433.62	434.12	433.12	434.51	10.000	18.00	0.556
	MW-305	415.62	416.12	415.12	444.51			
8-Oct-08	MW-206	431.29	431.79	430.79	431.32	0.960	16.00	0.060
	MW-306	415.29	415.79	414.79	432.28			
8-Oct-08	MW-207	431.41	431.91	430.91	-		16.00	N/A
	MW-307	415.41	415.91	414.91	-			
25-Oct-11	MW-204	414.84	415.34	414.34	445.22	-0.080	9.00	-0.009
	MW-304	405.84	406.34	405.34	445.14			
25-Oct-11	MW-205	433.62	434.12	433.12	444.00	1.740	18.00	0.097
	MW-305	415.62	416.12	415.12	445.74			
25-Oct-11	MW-206	431.29	431.79	430.79	443.25	2.090	16.00	0.131
	MW-306	415.29	415.79	414.79	445.34			
25-Oct-11	MW-207	431.41	431.91	430.91	442.79		16.00	N/A
	MW-307	415.41	415.91	414.91	-			
30-May-12	MW-204	414.84	415.34	414.34	441.06	-0.110	9.00	-0.012
	MW-304	405.84	406.34	405.34	440.95			
30-May-12	MW-205	433.62	434.12	433.12	442.43	-1.060	18.00	-0.059
	MW-305	415.62	416.12	415.12	441.37			
30-May-12	MW-206	431.29	431.79	430.79	441.39	-0.430	16.00	-0.027
	MW-306	415.29	415.79	414.79	440.96			
30-May-12	MW-207	431.41	431.91	430.91	440.37	0.190	16.00	0.012
	MW-307	415.41	415.91	414.91	-			
19-Nov-12	MW-204	414.84	415.34	414.34	438.53	-0.130	9.00	-0.014
	MW-304	405.84	406.34	405.34	438.40			
19-Nov-12	MW-205	433.62	434.12	433.12	439.08	-0.240	18.00	-0.013
	MW-305	415.62	416.12	415.12	438.84			
19-Nov-12	MW-206	431.29	431.79	430.79	438.11	0.350	16.00	0.022
	MW-306	415.29	415.79	414.79	438.46			
19-Nov-12	MW-207	431.41	431.91	430.91	437.70	0.340	16.00	0.021
	MW-307	415.41	415.91	414.91	438.04			
24-Jun-13	MW-204	414.84	415.34	414.34	443.75	-0.090	9.00	-0.010
	MW-304	405.84	406.34	405.34	443.66			
24-Jun-13	MW-205	433.62	434.12	433.12	444.33	-0.280	18.00	-0.016
	MW-305	415.62	416.12	415.12	444.05			
24-Jun-13	MW-206	431.29	431.79	430.79	443.74	-0.050	16.00	-0.003
	MW-306	415.29	415.79	414.79	443.69			
24-Jun-13	MW-207	431.41	431.91	430.91	442.74	0.420	16.00	0.026
	MW-307	415.41	415.91	414.91	443.16			
3-Dec-13	MW-204	414.84	415.34	414.34	444.78	-0.120	9.00	-0.013
	MW-304	405.84	406.34	405.34	444.66			
3-Dec-13	MW-205	433.62	434.12	433.12	445.13	-0.120	18.00	-0.007
	MW-305	415.62	416.12	415.12	445.01			
3-Dec-13	MW-206	431.29	431.79	430.79	444.74	-0.070	16.00	-0.004
	MW-306	415.29	415.79	414.79	444.67			
3-Dec-13	MW-207	431.41	431.91	430.91	444.77	-0.630	16.00	-0.039
	MW-307	415.41	415.91	414.91	444.14			
16-Jun-14	MW-204	414.84	415.34	414.34	436.62	-0.110	9.00	-0.012
	MW-304	405.84	406.34	405.34	436.51			
16-Jun-14	MW-205	433.62	434.12	433.12	437.70	-0.810	18.00	-0.045
	MW-305	415.62	416.12	415.12	436.89			
16-Jun-14	MW-206	431.29	431.79	430.79	436.64	-0.070	16.00	-0.004
	MW-306	415.29	415.79	414.79	436.57			
16-Jun-14	MW-207	431.41	431.91	430.91	435.92	0.190	16.00	0.012
	MW-307	415.41	415.91	414.91	436.11			

TABLE 6
Summary of Groundwater Analytical Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Wells	Date	TPHg	TPHd	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TAME	TBA	1,2 DCA	EDB
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
W-1	11/1988 (?)	210,000	300,000	29,000	30,000	5,400	24,000	-	-	-	-	-	-	-
	9/13/1995	666,000	-	65,000	78,000	6,400	36,000	<12500	-	-	-	-	-	-
	10/19/2006	77,000	-	9,700	11,000	2,000	10,000	-	-	-	-	-	-	-
	10/20/2006	110,000	-	4,600	7,200	3,900	11,000	-	-	-	-	-	-	-
	12/20/2007	140,000	-	20,000	17,000	3,000	16,000	<2000	-	-	-	-	-	-
	4/8/2011	68,900	-	13,800	8,150	1,520	11,600	<200	-	-	-	-	-	-
	10/26/2011	76,000	-	15,000	6,100	910	11,000	-	-	-	-	-	-	-
	5/30/2012	25,000	-	4,500	840	600	1,900	-	-	-	-	-	-	-
	11/19/2012	36,000	-	6,300	1,700	1,900	6,200	-	-	-	-	-	-	-
	6/26/2013	43,000	-	6,200	1,700	1,900	5,500	190	-	-	-	-	-	-
	12/5/2013	15,000	-	2,100	580	440	1,900	13	-	-	-	-	-	-
	6/17/2014	25,000	-	2,200	210	1,500	2,900	23	-	-	-	-	-	-
	12/3/2014													
								DRY						
W-2	11/1988 (?)	360	<50	6.7	2.1	0.5	1.3	-	-	-	-	-	-	-
	9/13/1995	90	-	<0.5	<0.5	<0.5	<0.5	<5	-	-	-	-	-	-
	4/8/2011							well location unknown						
W-3	11/1988 (?)	11,000	2,200	290	120	150	140	-	-	-	-	-	-	-
	9/13/1995	27,000	-	5,600	290	460	280	<2500	-	-	-	-	-	-
	4/7/2011	193	-	7.8	<0.5	0.5	<1	<0.5	-	-	-	-	-	-
	10/26/2011							no access agreement						
W-A	1990	10,000	2,400	6,800	5,500	620	3,400	-	-	-	-	-	-	-
(dup)	1990	-	-	6,900	5,600	620	6,800	-	-	-	-	-	-	-
	10/20/2006	450	-	40	19	21	33	-	-	-	-	-	-	-
	10/29/2007	40,000	-	4,000	330	1,600	3,000	<100	-	-	-	-	-	-
	4/8/2011	13,200	-	2,370	128	439	523	<20	-	-	-	-	-	-
	10/26/2011	18,000	-	3,500	410	970	870	-	-	-	-	-	-	-
	6/7/2012	37,000	-	3,500	700	660	1700	-	-	-	-	-	-	-
	11/21/2012	7,500	-	1,900	110	300	440	-	-	-	-	-	-	-
	6/25/2013	10,000	-	2,800	370	520	1,100	56	-	-	-	-	-	-
	12/5/2013	2,800	-	930	54	59	220	7.2	-	-	-	-	-	-
	6/17/2014	6,100	-	2,200	84	170	250	21	-	-	-	-	-	-
	12/3/2014							DRY						
W-B	1990	13,000	1,700	22,000	7,900	2,000	4,000	-	-	-	-	-	-	-
(dup)	1990	21,000	1,600	21,000	7,300	1,800	3,700	-	-	-	-	-	-	-
								Abandoned April 14, 2008						
W-C	1990	<10	<100	<1	<1	<1	<1	-	-	-	-	-	-	-
								Abandoned April 14, 2008						
W-D	1990	100	<100	1	2	2	1	-	-	-	-	-	-	-
								Abandoned April 14, 2008						
W-E	1990	<10	<100	<1	<1	<1	<1	-	-	-	-	-	-	-
	9/13/1995	95	-	4	<0.5	<0.5	<0.5	<0.5	18	-	-	-	-	-
								Abandoned April 14, 2008						
W-1s	3/22/1996	6,400	-	580	470	85	1,100	<500	-	-	-	-	-	-
	11/22/1996	170,000	-	13,000	18,000	3,500	18,000	<10000	-	-	-	-	-	-
	7/15/1997	140,000	38,000	12,000	12,000	2,600	16,000	<800	-	-	-	-	-	-
	10/29/1997	650,000	180,000	14,000	19,000	7,800	35,000	<3000	-	-	-	-	-	-
	4/27/1998	6,700	2,200	410	250	77	870	<30	-	-	-	-	-	-
	10/23/1998	99,000	18,000	9,800	9,400	1,800	11,000	<600	-	-	-	-	-	-
	4/9/1999	70,000	24,000	6,500	7,000	1,800	8,900	360	-	-	-	-	-	-
	10/5/1999	82,000	60,000	5,500	4,500	2,500	14,000	<300	-	-	-	-	-	-
	4/5/2000	47,000	15,000	4,300	2,300	1,500	6,100	170	-	-	-	-	-	-
	10/26/2000	50,000	1,200	3,800	1,800	1,700	7,600	<50	-	-	-	-	-	-
	4/18/2001	54,000	6,800	5,200	1,800	1,500	7,000	<330	-	-	-	-	-	-
	11/13/2001	750,000	-	9,500	7,800	7,200	33,000	<2000	-	-	-	-	-	-
	4/30/2002	66,000	8,200	6,000	2,700	2,300	11,000	<1200	-	-	-	-	-	-
	9/30/2002	51,000	1,200	5,600	1,500	2,000	9,400	<1000	-	-	-	-	-	-
	3/19/2003	49,000	9,800	3,400	880	1,300	7,300	<500	-	-	-	-	-	-
	9/16/2003	53,000	24,000	4,100	1,200	1,400	6,600	<1000	-	-	-	-	-	-
	4/29/2004	39,000	5,900	3,700	1,200	810	4,700	<2500	-	-	-	-	-	-
	7/7/2006	23,000	<500	4,000	710	1,200	2,900	<100	<500	<500	<500	<1000	<50	<50
	10/17/2006	35,000	<470	5,000	1,300	1,500	3,500	-	-	-	-	-	-	-
	10/19/2006	40,000	-	6,000	3,800	1,300	4,400	-	-	-	-	-	-	-
	10/20/2006	32,000	-	2,100	2,700	1,200	3,600	-	-	-	-	-	-	-
	4/19/2007	21,000	-	2,200	460	1,200	1,800	<200	-	-	-	-	-	-
	10/29/2007	68,000	-	19,000	830	2,700	4,000	<400	-	-	-	-	-	-
	4/8/2008	30,000	-	2,600	340	1,800	1,700	<120	-	-	-	-	-	-
	10/9/2008	39,000	-	3,900	340	1,400	2,000	<250	-	-	-	-	-	-
	4/8/2011	13,400	-	2,040	239	1,180	877	<20	-	-	-	-	-	-
	10/26/2011	12,000	-	2,900	280	520	530	-	-	-	-	-	-	-
	5/30/2012	11,000	-	490	83	140	740	-	-	-	-	-	-	-
	11/21/2012	3,600	-	320	47	33	180	-	-	-	-	-	-	-
	6/26/2013	1,700	-	530	11	8.1	18	<10	-	-	-	-	-	-
	12/4/2013	1,100	-	140	16	7.8	120	7.4	-	-	-	-	-	-
	6/17/2014	320	-	9	<1	<1	<2	<1	-	-	-	-	-	-
	12/3/2014							DRY						

TABLE 6
Summary of Groundwater Analytical Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Wells	Date	TPHg	TPHd	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TAME	TBA	1,2 DCA	EDB
		ug L	ug L	ug L	ug L	ug L	ug L	ug L	ug L	ug L	ug L	ug L	ug L	ug L
W-3s	3/22/1996	100	-	13	6.9	5.3	14	<5	-	-	-	-	-	-
	11/22/1996	3,200	-	270	29	63	100	<100	-	-	-	-	-	-
	7/15/1997	2,100	340	230	7	33	51	<20	-	-	-	-	-	-
	10/29/1997	2,800	750	630	31	71	69	<30	-	-	-	-	-	-
	4/27/1998	<50	<50	<0.5	<0.5	<0.5	<0.5	<3	-	-	-	-	-	-
	10/23/1998	3,800	1,000	500	28	90	37	35	-	-	-	-	-	-
	4/9/1999	980	430	240	4	37	3	<12	-	-	-	-	-	-
	10/5/1999	1,500	1,000	290	9.5	53	9.8	<6	-	-	-	-	-	-
	4/5/2000	810	320	150	3	9	5.7	<5	-	-	-	-	-	-
	10/26/2000	310	120	83	3.5	6.4	1.2	<5	-	-	-	-	-	-
	4/18/2001	2,300	1,600	320	8	16	7	<20	-	-	-	-	-	-
	11/13/2001	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/30/2002	1,400	490	320	5.5	24	5	<25	-	-	-	-	-	-
	3/19/2003	5,300	1,500	920	24	140	27	<25	-	-	-	-	-	-
	3/19/2003	5,300	1,500	920	24	140	27	<25	-	-	-	-	-	-
	9/16/2003	1,600	1,400	270	1.7	5.2	<0.5	<5	-	-	-	-	-	-
	4/29/2004	1,300	400	210	5.1	23	4.5	<25	-	-	-	-	-	-
	7/7/2006	110	<50	44	0.77	<0.5	<0.5	<1	<5	<5	<5	<10	<0.5	<0.5
	10/17/2006	1,300	<50	95	<2	2	<2	-	-	-	-	-	-	-
	4/19/2007	320	-	83	<2.5	<2.5	<2.5	<5	-	-	-	-	-	-
	12/19/2007	69	-	1.3	<0.5	<0.5	<1	<2	-	-	-	-	-	-
	4/8/2011	937	-	422	<5	6.5	<10	<5	-	-	-	-	-	-
	10/25/2011	190	-	5.2	0.76	1.3	2.1	-	-	-	-	-	-	-
	5/30/2012	110	-	33	0.51	1.1	0.5	-	-	-	-	-	-	-
	11/19/2012	71	-	<0.3	<0.3	<0.3	<0.6	-	-	-	-	-	-	-
	6/25/2013	85	-	6	0.82	0.36	0.75	<1.0	-	-	-	-	-	-
	12/3/2013	16	-	6.2	<0.5	<0.5	<1	<0.5	-	-	-	-	-	-
	6/17/2014	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/3/2014	-	-	-	-	-	-	-	-	-	-	-	-	-
DRY														
W-Bs	3/22/1996	61,000	-	9,800	8,000	2,200	11,000	<5000	-	-	-	-	-	-
	11/22/1996	47,000	-	5,100	3,100	1,400	7,800	<2500	-	-	-	-	-	-
	7/15/1997	66,000	17,000	7,800	4,900	1,900	10,000	<600	-	-	-	-	-	-
	10/29/1997	44,000	27,000	6,000	500	1,500	6,400	380	-	-	-	-	-	-
	4/27/1998	63,000	17,000	6,100	5,400	1,900	9,100	<600	-	-	-	-	-	-
	10/23/1998	48,000	9,600	6,700	1,200	1,500	6,200	<300	-	-	-	-	-	-
	4/9/1999	39,000	12,000	4,100	1,900	1,400	5,600	<300	-	-	-	-	-	-
	10/5/1999	38,000	7,300	3,800	390	1,600	5,900	<60	-	-	-	-	-	-
	4/5/2000	34,000	9,600	3,500	1,200	1,400	4,700	<150	-	-	-	-	-	-
	10/26/2000	23,000	650	2,500	210	1,100	2,600	150	-	-	-	-	-	-
	4/18/2001	20,000	2,500	2,400	180	880	1,800	<20	-	-	-	-	-	-
	11/13/2001	17,000	3,600	2,000	130	1,100	1,700	<150	-	-	-	-	-	-
	4/30/2002	13,000	2,300	1,000	38	660	360	<170	-	-	-	-	-	-
	9/30/2002	7,100	1,500	940	28	260	93	<250	-	-	-	-	-	-
	3/19/2003	14,000	3,900	1,200	77	820	900	<120	-	-	-	-	-	-
	9/16/2003	9,400	1,900	1,300	36	580	160	<150	-	-	-	-	-	-
	4/29/2004	15,000	3,300	2,400	170	1,300	950	<200	-	-	-	-	-	-
	7/7/2006	11,000	<50	1,900	160	820	440	<40	<200	<200	<200	<400	<20	<20
	10/17/2006	6,500	<47	1,000	37	410	83	-	-	-	-	-	-	-
	10/20/2006	630	<47	39	8.5	1.7	20	-	-	-	-	-	-	-
	4/19/2007	12,000	-	1,500	100	900	620	<100	-	-	-	-	-	-
	12/19/2007	8,200	-	360	<50	380	<100	<200	-	-	-	-	-	-
	4/8/2008	4,400	-	410	15	460	71	<50	-	-	-	-	-	-
	4/8/2011	6,960	-	1,280	56.2	632	432	<10	-	-	-	-	-	-
	10/25/2011	4,900	-	250	23	230	38	-	-	-	-	-	-	-
	5/30/2012	310	-	7.6	0.46	18	3	-	-	-	-	-	-	-
	11/19/2012	1,100	-	31	3.9	23	17	-	-	-	-	-	-	-
	6/25/2013	580	-	34	2.4	3.9	1.8	6.1	-	-	-	-	-	-
	12/12/2013	1,600	-	62	3.8	31	5.1	<0.5	-	-	-	-	-	-
	6/17/2014	190	-	26	1	1	3	<0.5	-	-	-	-	-	-
	12/3/2014	-	-	-	-	-	-	-	-	-	-	-	-	-
DRY														
W-Es	3/22/1996	<50	-	<0.5	<0.5	<0.5	<0.5	<5	-	-	-	-	-	-
	11/22/1996	280	-	24	0.6	1.8	2.2	<5	-	-	-	-	-	-
	7/15/1997	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/1997	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/27/1998	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/23/1998	82	69	<0.5	0.8	<0.5	0.8	4	-	-	-	-	-	-
	4/9/1999	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/5/1999	68	88	<0.5	<0.5	<0.5	<1.0	4	-	-	-	-	-	-
	4/5/2000	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/26/2000	110	<50	0.7	<0.5	<0.5	<1.0	<5	-	-	-	-	-	-
	4/18/2001	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/13/2001	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/30/2002	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/19/2003	86	61	<0.5	<0.5	<0.5	<0.5	<5	-	-	-	-	-	-
	4/17/2007	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/29/2004	55	87	0.62	<0.5	<0.5	<0.5	<5	-	-	-	-	-	-
	7/7/2006	<25	<50	<0.5	<0.5	<0.5	<0.5	2.4	<5	<5	<5	<10	<0.5	<0.5
	10/17/2006	<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	4/17/2007	<50	-	<0.5	<0.5	<0.5	<0.5	<5	-	-	-	-	-	-
	12/19/2007	<50	-	<0.5	<0.5	<0.5	<1	<2	-	-	-	-	-	-
	4/7/2008	<50	-	<0.5	<0.5	<0.5	<1	<5	-	-	-	-	-	-
	10/8/2008	<50	-	<0.5	<0.5	<0.5	<1	<5	-	-	-	-	-	-
	4/8/2011	<50	-	<0.5	<0.5	<0.5	<1	0.5	-	-	-	-	-	-
	10/26/2011	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/29/2012	<50	-	<0.5	<0.5	<0.5	<1	0.84	-	-	-	-	-	-
	11/19/2012	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/25/2013	<50	-	<0.3	<0.3	<0.3	<0.6	1	-	-	-	-	-	-
	12/3/2013	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/17/2014	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/3/2014	-	-	-	-	-	-	-	-	-	-	-	-	-
DRY														

TABLE 6
Summary of Groundwater Analytical Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Wells	Date	TPHg	TPHd	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TAME	TBA	1,2 DCA	EDB
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-4	10/16/2006							DRY						
	4/17/2007							DRY						
	10/29/2007	460,000	-	24,000	21,000	3,800	19,000	<500	-	-	-	-	-	-
	12/19/2007							DRY						
	4/8/2011							DRY						
	10/26/2011	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/2012	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/19/2012							DRY						
	6/25/2013							DRY						
	12/3/2013							DRY						
	6/17/2014							DRY						
	12/3/2014							DRY						
MW-5	10/16/2006							DRY						
	4/19/2007							DRY						
	12/19/2007							DRY						
	4/8/2011							DRY						
	10/26/2011							DRY						
	5/30/2012							DRY						
	11/19/2012							DRY						
	6/25/2013							DRY						
	12/3/2013							DRY						
	6/17/2014							DRY						
	12/3/2014							DRY						
MW-6	10/16/2006							DRY						
	4/17/2007							DRY						
	12/19/2007							DRY						
	4/8/2011	220	-	3.2	<0.5	<0.5	<1	<0.5	-	-	-	-	-	-
	10/26/2011							DRY						
	5/30/2012							DRY						
	11/19/2012							DRY						
	6/25/2013							DRY						
	12/3/2013							DRY						
	6/17/2014							DRY						
	12/3/2014							DRY						
MW-7	10/16/2006							DRY						
	4/17/2007							DRY						
	12/19/2007							DRY						
	4/8/2011							DRY						
	10/26/2011							DRY						
	5/30/2012							DRY						
	11/19/2012							DRY						
	6/25/2013							DRY						
	12/3/2013							DRY						
	6/17/2014							DRY						
	12/3/2014							DRY						
MW-8	10/16/2006							DRY						
	4/17/2007							DRY						
	12/19/2007							DRY						
	4/8/2011	765	-	119	<2	3.0	6.0	<2	-	-	-	-	-	-
	10/26/2011							DRY						
	5/30/2012							DRY						
	11/19/2012							DRY						
	6/25/2013							DRY						
	12/3/2013							DRY						
	6/17/2014							DRY						
	12/3/2014							DRY						
MW-104	10/19/2006	960	-	250	170	20	83	-	-	-	-	-	-	-
	4/18/2007							DRY						
	10/29/2007	1,300	-	210	82	110	380	<5	-	-	-	-	-	-
	12/19/2007							DRY						
	4/8/2008	32,000	-	7,100	1,400	680	1,800	<250	-	-	-	-	-	-
	4/8/2011	18,500	-	13,700	212	266	384	250	-	-	-	-	-	-
	10/26/2011	25,000	-	8,400	120	490	740	-	-	-	-	-	-	-
	5/30/2012	18,000	-	4,200	280	490	1,300	<10	-	-	-	-	-	-
	11/19/2012	12,000	-	6,100	280	310	530	32	-	-	-	-	-	-
	6/25/2013	15,000	-	6,600	160	490	490	120	-	-	-	-	-	-
	12/5/2013	6,000	-	840	100	150	350	20	-	-	-	-	-	-
	6/17/2014	7,200	-	2,400	76	320	510	30	-	-	-	-	-	-
	12/3/2014							DRY						
MW-105	10/16/2006	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/2007	13,000	-	4,300	980	490	1,500	<250	-	-	-	-	-	-
	12/19/2007							DRY						
	4/8/2008	11,000	-	3,800	70	40	110	<50	-	-	-	-	-	-
	4/8/2011	11,300	-	5,870	135	518	1,110	<40	-	-	-	-	-	-
	10/26/2011	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/2012							DRY						
	11/19/2012							DRY						
	6/25/2013							DRY						
	12/3/2013							DRY						
	6/17/2014							DRY						
	12/3/2014							DRY						

TABLE 6
Summary of Groundwater Analytical Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Wells	Date	TPHg	TPHd	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TAME	TBA	J,2 DCA	EDB									
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L									
MW-106	10/16/2006	56	-	2.2	<0.5	0.57	<0.5	-	-	-	-	-	-	-									
	4/19/2007	240	-	7.6	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-									
	10/29/2007	86	-	<0.5	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-									
	12/20/2007	54	-	1.0	<0.5	<0.5	<0.5	<1	<2	-	-	-	-	-									
	4/8/2008							DRY															
	10/8/2008	90	-	0.6	<0.5	<0.5	<1	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/14/2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/8/2011	247	-	9.3	<0.5	<0.5	<0.5	<1	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/26/2011	190	-	1.7	<0.3	<0.3	<0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/2012							DRY															
	11/19/2012							DRY															
	6/25/2013							DRY															
	12/3/2013							DRY															
	6/17/2014							DRY															
	12/3/2014							DRY															
MW-107	10/19/2006	320	-	430	290	33	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/2007	7,400	-	3,400	150	140	140	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/19/2007							DRY															
	4/8/2008	18,000	-	6,100	700	380	480	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/8/2011	20,400	-	15,100	<200	360	<400	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/26/2011	16,000	-	6,400	28	140	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/2012							DRY															
	11/19/2012							DRY															
	6/25/2013							DRY															
	12/3/2013							DRY															
	6/17/2014							DRY															
	12/3/2014							DRY															
MW-108	10/16/2006	3,400	-	790	46	<20	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/2007	<20,000	-	5,400	<200	400	220	<400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/2007	310	-	55	3.2	10	14	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/19/2007							DRY															
	4/8/2008	2,200	-	1,100	24	26	140	<25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/9/2008	2,100	-	490	8.4	35	40	<12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/8/2011	4,000	-	1,640	10.8	123	84.2	89.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/26/2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/2012							DRY															
	11/19/2012							DRY															
	6/25/2013							DRY															
	12/3/2013							DRY															
	6/17/2014							DRY															
	12/3/2014							DRY															
MW-204	10/19/2006	5,800	-	560	420	110	580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/2007	<10,000	-	2,700	650	210	970	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/2007	710	-	18	9.9	11	34	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/20/2007	22,000	-	4,700	1,100	490	1,400	<800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/8/2008	9,800	-	1,800	340	520	560	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/8/2008	18,000	-	9,200	360	130	370	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/8/2011	2,520	-	1,140	27.8	72.8	30.6	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/26/2011	7,400	-	1,900	38	250	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/2012	3,800	-	770	44	76	170	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/19/2012	4,800	-	1,900	88	220	470	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/25/2013	3,500	-	660	27	230	310	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/5/2013	3,100	-	390	32	120	190	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/17/2014	2,300	-	790	37	100	210	0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/3/2014	1,800	-	1,600	39	130	270	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-205	10/16/2006	<2000	-	880	63	<20	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/17/2006	5,100	-	2,000	190	52	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/2007	<40,000	-	14,000	550	<400	<800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/19/2007							DRY															
	4/8/2008	31,000	-	20,000	640	510	1,400	<250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/8/2011	33,600	-	25,000	232	640	448	<200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/26/2011	26,000	-	11,000	130	240	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/29/2012	40,000	-	15,000	150	860	1,100	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/2012	5,100	-	1,700	26	210	360	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/25/2013	37,000	-	13,000	120	900	970	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/5/2013	12,000	-	3,400	30	270	370	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/17/2014	9,900	-																				

TABLE 6
Summary of Groundwater Analytical Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Wells	Date	TPHg	TPHd	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TAME	TBA	1,2 DCA	EDB
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-207	10/19/2006	1,000	-	170	52	18	67	-	-	-	-	-	-	-
	4/18/2007	<25,000	-	9,700	480	<250	250	<500	-	-	-	-	-	-
	12/19/2007							DRY						
	4/7/2008	32,000	-	12,000	350	580	790	<250	-	-	-	-	-	-
	4/8/2011	19,500	-	15,000	<100	180	<200	108	-	-	-	-	-	-
	10/26/2011	18,000	-	7,600	38	160	280	-	-	-	-	-	-	-
	5/29/2012	24,000	-	11,000	87	310	340	190	-	-	-	-	-	-
	11/21/2012	21,000	-	14,000	65	310	190	140	-	-	-	-	-	-
	6/24/2013	25,000	-	12,000	77	300	180	120	-	-	-	-	-	-
	12/4/2013	13,000	-	7,200	68	330	210	93	-	-	-	-	-	-
	6/17/2014	6,600	-	5,900	53	240	110	84	-	-	-	-	-	-
	12/3/2014						DRY							
MW-208	10/17/2006	1,500	-	520	39	<10	100	-	-	-	-	-	-	-
	4/19/2007	<10,000	-	2,500	<100	<100	<100	<200	-	-	-	-	-	-
	12/19/2007							DRY						
	4/8/2008	19,000	-	3,900	230	550	1,200	<200	-	-	-	-	-	-
	4/8/2011	12,300	-	5,820	75	432	270	<50	-	-	-	-	-	-
	10/26/2011	7,400	-	1,600	97	60	210	-	-	-	-	-	-	-
	5/29/2012	11,000	-	2,600	42	220	170	<10	-	-	-	-	-	-
	11/21/2012	11,000	-	3,500	37	310	130	39	-	-	-	-	-	-
	6/24/2013	5,000	-	1,100	18	34	50	45	-	-	-	-	-	-
	12/4/2013	5,300	-	540	15	150	84	17	-	-	-	-	-	-
	6/17/2014	3,300	-	1,100	34	77	110	31	-	-	-	-	-	-
	12/3/2014						DRY							
MW-304	10/19/2006	3,300	-	290	240	56	530	-	-	-	-	-	-	-
	4/19/2007	<10,000	-	3,100	450	<100	420	<200	-	-	-	-	-	-
	12/20/2007	1,500	-	380	43	32	110	<40	-	-	-	-	-	-
	4/7/2008	820	-	100	36	36	98	<5	-	-	-	-	-	-
	4/8/2011	2,880	-	657	32.3	93.5	262	<5	-	-	-	-	-	-
	10/26/2011	6,500	-	1,600	45	190	350	-	-	-	-	-	-	-
	5/30/2012	1,600	-	190	13	39	100	-	-	-	-	-	-	-
	11/19/2012	5,100	-	1,600	67	250	500	-	-	-	-	-	-	-
	6/25/2013	6,100	-	2,000	87	220	480	<20	-	-	-	-	-	-
	12/5/2013	1,600	-	270	31	94	230	<0.5	-	-	-	-	-	-
	6/17/2014	3,000	-	1,300	96	62	390	9	-	-	-	-	-	-
	12/3/2014	2,000	-	1,500	53	120	250	<0.5	-	-	-	-	-	-
MW-305	10/16/2006	<50	-	1.8	<0.5	<0.5	0.67	-	-	-	-	-	-	-
	4/19/2007	<20,000	-	3,600	<200	<200	<200	<400	-	-	-	-	-	-
	12/19/2007							DRY						
	4/8/2008	290	-	42	14	8.1	28	<5	-	-	-	-	-	-
	4/8/2011	862	-	193	10.4	27.6	69.1	<5	-	-	-	-	-	-
	10/26/2011	1,300	-	280	37	20	49	-	-	-	-	-	-	-
	5/29/2012	920	-	260	3.6	18	30	-	-	-	-	-	-	-
	11/21/2012	3,700	-	1,300	17	170	230	-	-	-	-	-	-	-
	6/25/2013	1,800	-	560	12	41	75	<20	-	-	-	-	-	-
	12/4/2013	2,700	-	1,200	21	88	240	0.36	-	-	-	-	-	-
	6/17/2014	2,300	-	940	36	130	150	3.8	-	-	-	-	-	-
	12/3/2014	640	-	140	4.2	49	67	<0.5	-	-	-	-	-	-
MW-306	10/16/2006	<50	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	4/18/2007	<50	-	3.1	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
	12/20/2007	<50	-	0.54	<0.5	<0.5	<1	<2	-	-	-	-	-	-
	4/7/2008	<50	-	<0.5	<0.5	<0.5	<1	<5	-	-	-	-	-	-
	4/8/2011	<50	-	10.4	<0.5	<0.5	<1	<0.5	-	-	-	-	-	-
	10/26/2011	75	-	0.5	<0.3	<0.3	<0.6	-	-	-	-	-	-	-
	5/30/2012	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/2012	44	-	1.2	<0.3	<0.3	<0.6	-	-	-	-	-	-	-
	6/24/2013	<50	-	0.8	<0.3	<0.3	0.24	<1	-	-	-	-	-	-
	12/4/2013	47	-	<0.5	<0.5	<0.5	<1	<0.5	-	-	-	-	-	-
	6/17/2014	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/3/2014	21	-	2.3	0.34	<0.5	0.52	<0.5	-	-	-	-	-	-
MW-307	10/19/2006	<50	-	2.3	1.5	<0.5	4.7	-	-	-	-	-	-	-
	4/18/2007	<4000	-	1,300	250	78	310	<80	-	-	-	-	-	-
	12/19/2007	1,500	-	200	50	59	140	<40	-	-	-	-	-	-
	4/7/2008	2,500	-	720	110	69	160	<25	-	-	-	-	-	-
	4/8/2011	70	-	24.3	3.8	0.6	3.3	<0.5	-	-	-	-	-	-
	10/26/2011	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/29/2012	2,000	-	540	4.2	57	110	4.5	-	-	-	-	-	-
	11/21/2012	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/24/2013	1,300	-	480	7.2	43	54	<20	-	-	-	-	-	-
	12/3/2013	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/17/2014	1,100	-	520	8	43	28	1.6	-	-	-	-	-	-
	12/3/2014	460	-	230	8.4	49	42	<0.5	-	-	-	-	-	-
MW-308	10/16/2006	<50	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	4/19/2007	<10,000	-	1,600	<100	<100	<100	<200	-	-	-	-	-	-
	12/19/2007	190	-	25	1.5	7.2	8.4	<4	-	-	-	-	-	-
	4/7/2008	770	-	150	10	48	45	<5	-	-	-	-	-	-
	4/8/2011	3,240	-	1,230	18.6	187	125	<10	-	-	-	-	-	-
	10/26/2011	2,900	-	610	9.2	73	53	-	-	-	-	-	-	-
	5/29/2012	1,200	-	89	5.1	18	25	-	-	-	-	-	-	-
	11/21/2012	4,800	-	930	46	160	210	-	-	-	-	-	-	-
	6/24/2013	2,600	-	610	22	110	87	<20	-	-	-	-	-	-
	12/12/2013	3,200	-	520	14	140	75	0.6	-	-	-	-	-	-
	6/17/2014	3,000	-	1,300	20	110	58	9.1	-	-	-	-	-	-
	12/3/2014	1,000	-	92	3	39	20	0.21	-	-	-	-	-	-

TABLE 6
Summary of Groundwater Analytical Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Wells	Date	TPHg	TPhd	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TAME	TBA	1,2 DCA	EDB
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-404	10/19/2006	1,700	-	120	73	27	280	-	-	-	-	-	-	-
	4/18/2007	<10,000	-	1,400	440	130	550	<200	-	-	-	-	-	-
	12/19/2007	2,200	-	160	63	92	300	<40	-	-	-	-	-	-
	4/8/2008							DRY						
	4/8/2011	119	-	90.8	1.4	1.0	2.6	<0.5	-	-	-	-	-	-
	10/26/2011	1,500	-	400	9.1	46	65	-	-	-	-	-	-	-
	5/30/2012	1,200	-	260	11	34	80	-	-	-	-	-	-	-
	11/19/2012	1,100	-	230	<6.0	46	84	-	-	-	-	-	-	-
	6/25/2013	98	-	840	22	60	140	<20	-	-	-	-	-	-
	12/5/2013	2,500	-	540	57	140	290	3.2	-	-	-	-	-	-
	6/17/2014	6,500	-	4,500	100	130	240	21	-	-	-	-	-	-
	12/3/2014	980	-	270	11	50	93	<0.5	-	-	-	-	-	-

pre-2006 data adapted from Environmental Sampling Services 5/27/04 Groundwater Monitoring Report

"- = not analyzed

TABLE 7
Summary of Field Parameters

Sullins (Arrow Rentals)

187 North L Street

Livermore, California

Date	W-1s					W-3s					W-Bs					W-Es				
	pH	E.C.	Temp °C	ORP	DO	pH	E.C.	Temp °C	ORP	DO	pH	E.C.	Temp °C	ORP	DO	pH	E.C.	Temp °C	ORP	DO
7/7/2006	-	-	-	-128.5	0.13	-	-	-	-	0.07	-	-	-	-107.3	0.09	7.05	339	20.9	32.9	0.06
12/29/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/8/2008	6.76	514	24.8	-95.5	-	-	-	-	-	-	-	-	-	-	0.28	7.07	503	25.1	121.4	6.85
10/8-9/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/7-8/2011	6.17	967	19.1	-221.5	0.37	6.63	964	18.1	40.7	0.72	6.61	780	18.5	-198.2	0.02	7.03	790	19.5	141.3	1.06
10/26/2011	6.65	1012	18.1	-121.5	0.16	6.65	914	17.9	-57.6	0.52	6.51	722	17.6	-115.8	0.38	-	-	-	-	-
5/30/2012	6.60	1574	21.4	-351.9	0.00	6.89	761	20.3	-66.9	0.11	6.88	676	20.9	-87.3	0.79	-	-	-	-	-
11/19/2012	6.16	1301	18.6	-119.7	0.06	6.75	834	17.2	-65.1	0.19	7.04	825	17.2	-39.2	0.18	-	-	-	-	-
6/24/2013	6.71	1333	21.9	-159.8	0.07	6.43	1243	20.3	-60.2	1.03	6.75	919	21.2	-92.1	0.84	7.09	951	21.8	160.6	0.61
12/3-5/2013	6.73	1086	20.4	-50.0	0.35	6.57	1003	18.4	72.8	1.27	6.86	810	19.4	-53.1	1.19	-	-	-	-	-
6/16-17/2014	6.47	1309	21.3	-79.0	0.31	-	-	-	-	-	7.05	803	21.0	-50.1	1.64	-	-	-	-	-
12/2-3/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Date	W-1					W-3					W-A				
	pH	E.C.	Temp °C	ORP	DO	pH	E.C.	Temp °C	ORP	DO	pH	E.C.	Temp °C	ORP	DO
4/7-8/2011	6.30	917	19.0	-164.3	0.40	6.94	928	18.3	-185.7	0.10	6.85	907	18.9	-254.5	0.04
10/26/2011	6.45	1073	17.8	-60.9	0.20	-	-	-	-	-	6.70	1019	18.0	-120.2	0.15
5/30/2012	6.71	1062	20.7	-98.7	0.95	-	-	-	-	-	6.83	1127	20.3	-90.3	0.15
11/19/2012	7.04	965	17.3	-97.0	0.12	-	-	-	-	-	6.92	1185	18.0	-139.9	0.17
6/24/2013	6.73	1156	20.5	-110.6	0.28	-	-	-	-	-	6.84	1255	20.5	-124.1	1.85
12/3-5/2013	6.82	1051	20.5	-135.6	0.16	-	-	-	-	-	7.03	1210	20.2	-118.1	0.70
6/16-17/2014	6.70	1097	21.1	-101.3	0.18	-	-	-	-	-	6.42	1352	20.7	-135.0	0.17
12/2-3/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

" - " = insufficient data no result reported

TABLE 8
Estimation of Mass Removal Via Soil Vapor Extraction

Sullins (Arrow Rentals)
 187 North L Street
 Livermore, California

Sample Date	Flow	TPH-G	Meter	Days	Operation Duration			Volume Removed		Pounds Removed
					CFM	mg/m3	total days	days in period	hours	
11/15/11				10,382		0				
12/08/11	90	2,380	10,437	2		55	3,300	297,000	8,410	44
01/05/12	136	3,360	10,961	24		524	31,440	4,275,840	121,078	897
03/08/12	152	3,490	11,841	61		37	880	52,800	8,025,600	227,259
05/16/12	99	251	13,496	130		69	1,655	99,300	9,830,700	278,374
04/11/13	56	37	16,119	239		109	2,623	157,380	8,813,280	249,564
08/22/13	133	130	17,925	314		75	1,806	108,360	14,411,880	408,098
09/03/13	65	710	18,211	326		12	286	17,160	1,115,400	31,585
09/20/13	127	330	18,619	343		17	408	24,480	3,108,960	88,036
10/11/13	102.5	99	18,957	357		14	338	20,280	2,078,700	58,862
10/22/13	95	210	19,221	368		11	264	15,840	1,504,800	42,611
11/06/13	80	120	19,584	383		15	363	21,780	1,742,400	49,339
01/15/14	155	600	20,281	412		29	697	41,820	6,482,100	183,552
01/30/14	87.5	180	20,640	427		15	359	21,540	1,884,750	53,370
02/11/14	125	250	20,928	439		12	288	17,280	2,160,000	61,164
03/18/14	28	0.9	21,266	454		14	338	20,280	567,840	16,079
04/01/14	102.5	85	21,601	467		14	335	20,100	2,060,250	58,340
04/15/14	28	1,100	21,604	468		0	3.0	180	5,040	143
04/28/14	125	560	21,914	481		13	310	18,600	2,325,000	65,837
05/09/14	95	1,000	21,916	481		0	2.0	120	11,400	323
06/26/14	60	1,200	21,968	483		2	52	3,120	187,200	5,301
07/10/14	72.5	170	21,975	483		0	7.0	420	30,450	862
07/25/14	87.5	1,100	21,979	483		0	4.0	240	21,000	595
08/12/14	76	190	22,410	501		18	431	25,860	1,965,360	55,653
09/23/14	110	2,000	22,688	513		12	278	16,680	1,834,800	51,956
10/02/14	103	12,000	22,735	515		2	47	2,820	290,460	8,225
11/06/14	110	10,000	23,041	527		13	306	18,360	2,019,600	57,189
12/02/14	105	13,000	23,059	528		1	18	1,080	113,400	3,211
									TOTAL	5,370

TABLE 9
Summary of DPE System Soil Vapor Extraction Data

Sullins (Arrow Rentals)
187 North L Street
Livermore, California

Well	Date	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	PID
		mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	ppm
SVE-INF	12/8/2011	2380	7.1	5.6	2.9	15.5	200
	1/5/2012	3360	29.8	15.8	23.6	70.4	262
	3/8/2012	3490	30.4	28.6	12	55.2	282
	5/16/2012	251	7.86	4.43	2.34	9.56	51.1
	4/11/2013	37	13	2.9	2.1	5.9	-
	9/23/2014	2,000	12	6.4	1.9	11	737
	10/2/2014	12,000	36	10	<50	37	248
	11/6/2014	10,000	52	22	20	140	1917
	12/2/2014	13,000	97	22	16	110	1772
SVE-INF UPPER	8/22/2013*	13	0.064	0.076	0.0096	0.078	12.5
(EW-1 & W-1s)	9/3/2013	130	2.2	2.2	4.3	19	23.8
	9/20/2013*	330	0.85	1.5	<2.5	1.3	36.9
	10/11/2013	91	2.4	1.6	4.0	14	32.9
	10/22/2013*	210	1.5	3.7	<2.5	2.6	51.1
	11/6/2013	44	0.77	1.2	3.7	12	35.9
	1/15/2014*	600	1.3	1.2	0.09	1.3	72.9
	1/30/2014	31	1.5	2.6	0.19	0.32	85.2
	2/11/2014*	250	0.72	0.79	0.093	0.52	45.1
	7/25/2014	1,100	3.4	0.58	0.57	3.2	150
	8/12/2014	190	0.31	0.17	0.046	0.69	358
SVE-INF LOWER	8/22/2013	410	59	13	4.9	22	73.6
(W-1 & W-A)	9/3/2013*	710	38	9.5	8.3	28	81.4
	9/20/2013	-	-	-	-	-	-
	10/11/2013*	99	12	2.7	3.1	8.6	69.1
	10/22/2013	410	29	7.1	0.87	4.2	130
	11/6/2013*	120	15	4.5	7.7	22	60.9
	1/15/2014	1,800	50	12	2.2	12	205
	1/30/2014*	180	19	42	2	3.7	220
	2/11/2014	200	<1	3.2	0.44	1.5	149.2
	3/18/2014	0.89	<20	0.01	0.011	0.041	-
	4/1/2014	85	16	1.8	4.6	10	-
	4/15/2014	1,100	46	11	17	49	99.9
	4/28/2014	560	21	4.5	4.3	12	-
	5/9/2014	1,000	76	12	13	28	159
	6/26/2014	1,200	15	1.7	1.9	5.6	290
	7/10/2014	170	7.5	8.5	11	31	294
	8/12/2014	61	0.15	0.19	ND<0.5	0.51	183
W-1 SVE-INF	5/16/2013	100	16	4.8	5.2	11	48.1
W-A SVE-INF	5/16/2013	39	2.3	0.64	0.83	1.7	16.1
EW-1 SVE-INF	5/16/2013	22	0.065	0.069	0.12	0.54	7.6
W-1s SVE-INF	5/16/2013	85	<0.08	0.16	0.35	1.4	32.6

* = sample collected following 2 weeks of extraction from the upper/lower zone

TABLE 10
Estimation of Mass Removal Via Groundwater Extraction

Sullins (Arrow Rentals)
 187 North L Street
 Livermore, California

Date/Time	Hours		GW Removed		Lab	Removal Calculations			
	Meter	in period	Cummulative (gallons)	In Period (gallons)	(ug/L)	(grams/L)	(grams/gal.)	(lbs./gal.)	(lbs./period)
12/7/2011	10428	-	0	-	-	-	-	-	0.00
12/13/2011	10442	13.5	1060	1060	2400	0.00240	0.00063	0.00000140	0.67
1/13/2012	11137	695.1	1378	318	6400	0.00640	0.00169	0.00000373	0.54
1/18/2012	11244	106.9	1445	67	3800	0.00380	0.00100	0.00000221	0.07
1/19/2012	11256	11.7	3180	1735	2800	0.00280	0.00074	0.00000163	1.28
3/8/2012	11841	585.7	7700	4520	190	0.00019	0.00005	0.00000011	0.23
4/3/2012	12466	624.6	19873	12173	810	0.00081	0.00021	0.00000047	2.60
5/3/2012	13186	719.8	38308	18435	1000	0.00100	0.00026	0.00000058	4.87
5/16/2012	13496	310.6	43854	5546	2800	0.00280	0.00074	0.00000163	4.10
6/7/2012	13498	1.8	43993	139	5000	0.00500	0.00132	0.00000291	0.18
7/9/2012	13661	163.2	46169	2176	2600	0.00260	0.00069	0.00000151	1.49
8/16/2012	14369	707.9	55565	9396	2300	0.00230	0.00061	0.00000134	5.71
9/13/2012	15041	671.4	69172	13607	1800	0.00180	0.00048	0.00000105	6.47
10/16/2012	15073	32.3	70660	1488	1800	0.00180	0.00048	0.00000105	0.71
12/13/2012	15532	459.2	83968	13308	1800	0.00180	0.00048	0.00000105	6.33
2/4/2013	16107	574.6	83968	0	1300	0.00130	0.00034	0.00000076	0.00
2/14/2013	16113	6.5	84680	712	1300	0.00130	0.00034	0.00000076	0.24
4/10/2013	16114	0.8	84680	0	2000	0.00200	0.00053	0.00000116	0.00
4/26/2013	16322	208.0	86053	1373	2000	0.00200	0.00053	0.00000116	0.73
5/3/2013	16490	167.6	86810	757	1600	0.00160	0.00042	0.00000093	0.32
5/16/2013	16527	37.0	89138	2328	1600	0.00160	0.00042	0.00000093	0.98
6/6/2013*	16585	58.1	92164	3026	2071	0.00207	0.00055	0.00000121	1.66
6/26/2013*	16729	144.5	96926	4762	2071	0.00207	0.00055	0.00000121	2.61
7/31/2013*	17395	665.7	134007	37081	2071	0.00207	0.00055	0.00000121	20.29
8/22/2013*	17925	530.0	146673	12666	2071	0.00207	0.00055	0.00000121	6.93
9/3/2013	18211	285.8	170214	23541	1200	0.00120	0.00032	0.00000070	7.46
9/27/2013	18623	412.1	170214	0	1300	0.00130	0.00034	0.00000076	0.00
10/11/2013	18957	334.0	202421	32207	870	0.00087	0.00023	0.00000051	7.40
10/22/2013	19221	264.1	202421	0	1700	0.00170	0.00045	0.00000099	0.00
11/6/2013	19584	363.0	236820	34399	1400	0.00140	0.00037	0.00000082	12.72
1/15/2014	20281	697.0	236820	0	2600	0.00260	0.00069	0.00000151	0.00
1/30/2014	20640	359.0	262180	25360	2500	0.00250	0.00066	0.00000146	16.75
2/11/2014	20928	288.0	262180	0	1700	0.00170	0.00045	0.00000099	0.00
2/25/2014	21263	335.5	267519	5339	1700	0.00170	0.00045	0.00000099	2.40
3/18/2014	21266	3.0	267705	186	2600	0.00260	0.00069	0.00000151	0.13
4/1/2014	21601	335.0	289708	22003	340	0.00034	0.00009	0.00000020	1.98
4/15/2014	21604	2.5	290023	315	2000	0.00200	0.00053	0.00000116	0.17
4/28/2014	21914	310.6	307746	17723	1800	0.00180	0.00048	0.00000105	8.43
5/9/2014	21916	1.6	307746	0	2300	0.00230	0.00061	0.00000134	0.00
6/26/2014	21968	52.0	307746	0	610	0.00061	0.00016	0.00000036	0.00
7/10/2014	21975	7.0	311948	4202	2,000	0.00200	0.00053	0.00000116	2.22
8/12/2014	22410	435.0	311956	8	2,500	0.00250	0.00066	0.00000146	0.01
9/23/2014	22688	278.0	312643	687	2,200	0.00220	0.00058	0.00000128	0.40
11/6/2014	23041	353.0	314037	1394	1,700	0.00170	0.00045	0.00000099	0.63
12/2/2014	23059	18.0	314037	0	2,700	0.00270	0.00071	0.00000157	0.00
							Total	130	

* = TPH-G concentration for this date is an average of the lab data from all previous events

TABLE 11
Summary of DPE System Groundwater Extraction Data

Sullins (Arrow Rentals)
 187 North L Street
 Livermore, California

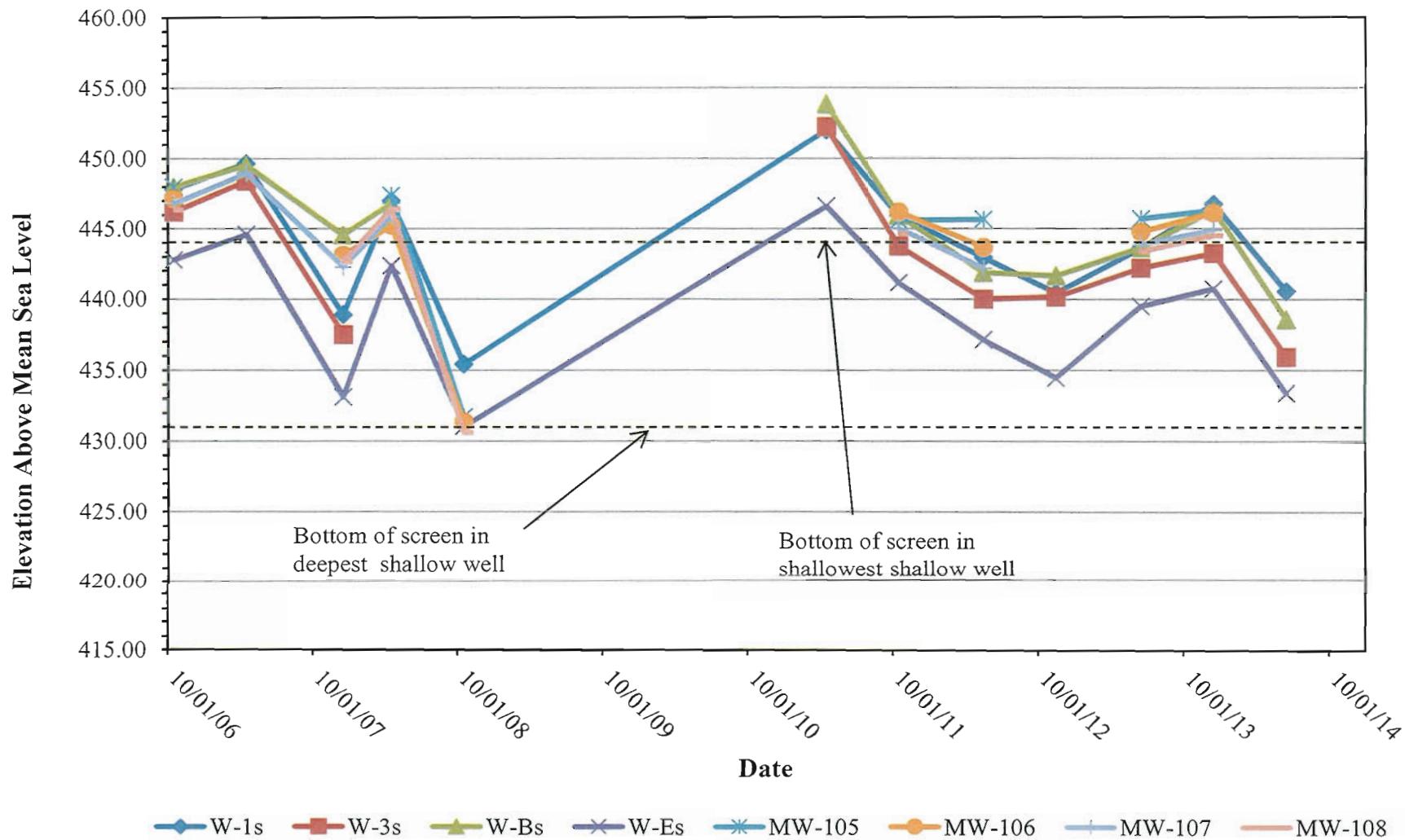
Well	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-Gasoline	MTBE
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
GW-INF	12/13/2011	110	9.4	2.5	510	2,400	-
(GW INF KO)	1/13/2012	110	120	74	510	6,400	-
(W-1 & W-A)	1/18/2012	44	54	39	360	3,800	-
	1/19/2012	37	43	39	280	2,800	-
	3/8/2012	7.3	8.3	2.3	19	190	-
	4/3/2012	8.6	9.7	3.4	36	810	-
	5/3/2012	300	160	26	280	2,800	-
	6/7/2012	72	89	23	260	5,000	-
	7/9/2012	110	51	21	120	2,600	-
	8/16/2012	47	35	19	99	2,300	-
	9/13/2012	74	26	14	70	1,800	-
	10/16/2012	140	44	46	110	1,800	-
	2/4/2013	130	40	32	110	1,300	-
	4/10/2013	200	58	48	160	2,000	-
	5/7/2013	<0.3	<0.3	<0.3	<0.6	<50	-
	5/16/2013	96	30	32	110	1,600	5.5
	8/22/2013	<0.3	<0.3	<0.3	<0.6	<50	-
	9/3/2013*	190	35	26	150	1,200	-
	9/27/2013	94	30	12	120	1,300	-
	10/11/2013*	99	18	24	88	870	-
	10/22/2013	130	62	30	210	1,700	-
	11/6/2013*	120	22	35	140	1,400	-
	1/15/2014	43	18	19	150	2,600	-
	1/30/2014	98	30	45	170	2,500	2.4
	2/11/2014	100	35	20	150	1,700	<12
	2/25/2014	150	45	27	180	1,700	4.2
	3/18/2014	61	14	18	80	2,600	-
	4/1/2014	19	2.6	4.9	19	340	-
	4/15/2014	52	10	14	53	2,000	-
	4/28/2014	17	3	7.7	22	1,800	-
	5/9/2014	98	22	33	120	2,300	3.4
	6/26/2014	17	1	2.5	9.1	610	0.87
	7/10/2014	96	17	34	170	2,000	ND<0.5
	8/12/2014	81	41	18	350	2,500	-
	9/23/2014	97	51	38	450	2,200	-
	11/6/2014	130	42	28	460	1,700	1.3
	12/2/2014	190	65	50	550	2,700	2.0
W-1 GW-INF	5/16/2013	96	30	32	110	1,600	5.5
W-A GW-INF	5/16/2013	67	15	16	54	1,000	2.6

* = sample collected following 2 weeks of extraction from the upper/lower zone

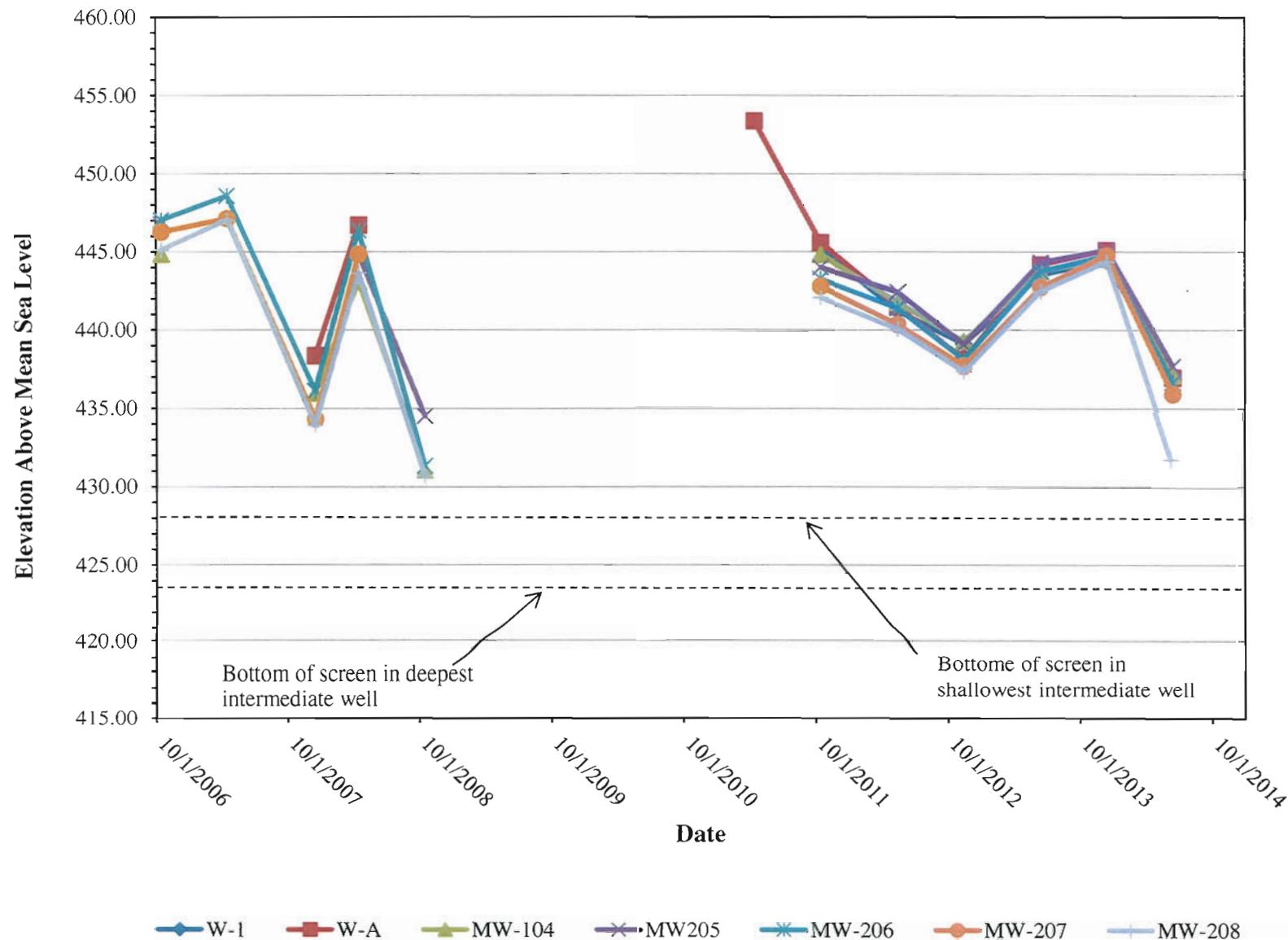
Attachment A

Hydrographs

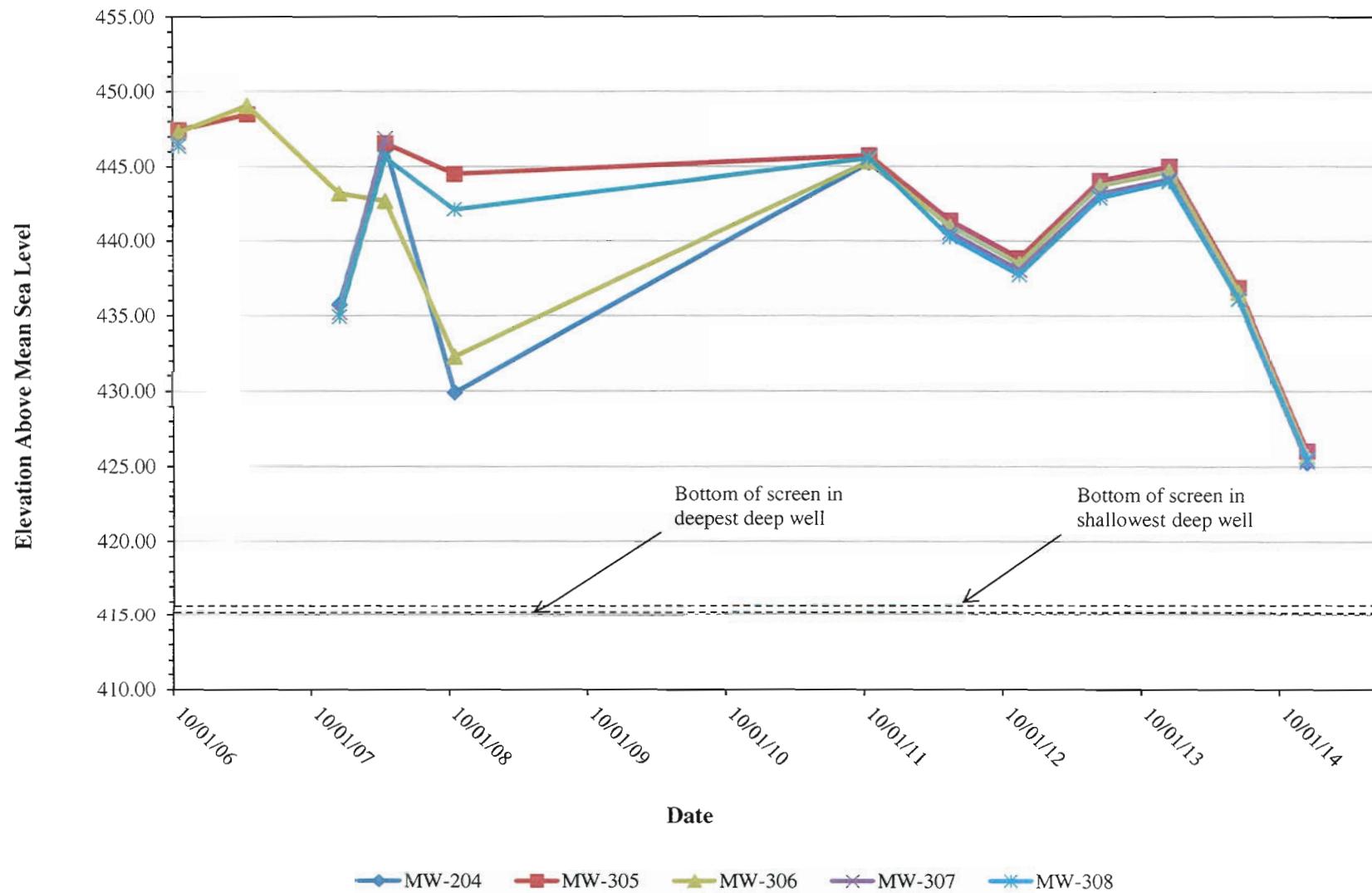
Hydrograph: Shallow Groundwater Monitoring Wells



Hydrograph: Intermediate Groundwater Monitoring Wells



Hydrograph: Deep Groundwater Monitoring Wells



Attachment B

Groundwater Monitoring Field Logs

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

COPY

Project Name: Sullins (L St)

Well I.D.: MW-306

Project No.: 1262.2

Date: 12/03/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other _____

Pumping Rate: _____ gal/min

Well Constructed TD (ft): 66.00'

* Well TD (ft):

Silt Thickness (ft):

Initial DTW (ft): 55.10

Water column height (ft): 10.4

One casing volume (gal): _____

**** Final DTW (ft):** _____

Casing diameter (in): CMT

Sample Containers used: 4 # VOAs x preserved non-preserved
 # amber liters preserved non-preserved
 # polys preserved non-preserved
 # polys preserved non-preserved

Notes: _____

Sampled By:

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Purged Water Drummed: Yes No

No. of Drums:

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

Project Name: Sullins (L St)

Well I.D.: MW-307

Project No.: 1262.2

Date: 12/03/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
1030	.1						Start
	.2						Wait by Gravimetric Lab
1055	.3						No ch
1100							Sampled

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other _____

Pumping Rate: _____ gal/min

Well Constructed TD (ft):	66.00'
* Well TD (ft):	
Silt Thickness (ft):	
Initial DTW (ft):	55.58
Water column height (ft):	10.42
One casing volume (gal):	.1
** Final DTW (ft):	
Casing diameter (in):	CMT

Sample Containers used: 4 # VOAs x preserved non-preserved
amber liter preserved non-preserved
polys preserved non-preserved
polys preserved non-preserved

Notes:
Sampled By:

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Gallons per foot of casing. 2" dia. = 0.17, 3" dia. = 0.38 4" dia. = 0.65, 5" dia. = 1.02, 6" dia. = 1.48

Purged Water Drummed: Yes No

No. of Drums:

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

Project Name: Sullins (L St)

Well I.D.: MW-204.....

Project No.: 1262.2

Date: 12/03/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other _____

Pumping Rate: _____ gal/min

Well Constructed TD (ft): 66.50'
 * Well TD (ft): _____
 Silt Thickness (ft): _____
 Initial DTW (ft): 55.08
 Water column height (ft): 11.42
 One casing volume (gal): 1
 ** Final DTW (ft): _____
 Casing diameter (in): CMT

Sample Containers used: 4 # VOAs x preserved non-preserved
 # amber liters preserved non-preserved
 # polys preserved non-preserved
 # polvs preserved non-preserved

Notes: . . .

Sampled By:

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Purged Water Drummed: Yes No

No. of Drums:

K:\Jobs\SLJobs\Sullins (L St.) 12622\12622\TECH\Blank GWM Field Logs

12/1/2014

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

Project Name: Sullins (L St)

Well I.D.: MW-305

Project No.: 1262.2

Date: 12/03/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other _____

Pumping Rate: _____ gal/min

Well Constructed TD (ft): 66.00'

* Well TD (ft);

Silt Thickness (ft):

Initial DTW (ft): 55.08

Water column height (ft): 10.92

One casing volume (gal):

** Final DTW (ft):

Casing diameter (in): CMT

Sample Containers used: 4 # VOAs x preserved non-preserved
 # amber liters preserved non-preserved
 # polys preserved non-preserved
 # polys preserved non-preserved

Notes: _____

Sampled By

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Purged Water Drummed: Yes No

No. of Drums:

C:\Jobs\SLJobs\Sullins (I- St) 12622\12622\TECH\Blank GWM Field Logs

12/1/2014

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

Project Name: Sullins (L St)

Well I.D.: MW-308

Project No.: 1262.2

Date: 12/3/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other _____

Pumping Rate: gal/min

Well Constructed TD (ft): 66.00'
* Well TD (ft): _____
Silt Thickness (ft): 55.53
Initial DTW (ft): 55.53
Water column height (ft): 10.47
One casing volume (gal): , i
** Final DTW (ft): _____
Casing diameter (in): CMT

Sample Containers used: 4 # VOAs x preserved non-preserved
 # amber liters preserved non-preserved
 # polys preserved non-preserved
 # polys preserved non-preserved

Notes: _____

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Purged Water Drummed: Yes No

Gallons per foot of casing. 2" dia. = 0.17, 3" dia. = 0.38 4" dia. = 0.65, 5" dia. = 1.02, 6" dia. = 1.48

No. of Drums:

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

Project Name: Sullins (L St)

Well I.D.: MW-304

Project No.: 1262.2

Date: 12/03/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other _____

Pumping Rate: _____ gal/min

Well Constructed TD (ft): 75.50'
* Well TD (ft): _____
Silt Thickness (ft): _____
Initial DTW (ft): 55.12
Water column height (ft): 20.38
One casing volume (gal): .2
** Final DTW (ft): _____
Casing diameter (in): CMT

Sample Containers used: Plastic # VOAs 1 preserved non-preserved
Plastic # amber liters 0 preserved non-preserved
Plastic # polys 1 preserved non-preserved
Plastic # polys 1 preserved non-preserved

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Gallons per foot of casing. 2" dia. = 0.17. 3" dia. = 0.38 4" dia. = 0.65. 5" dia. = 1.02. 6" dia. = 1.48

Purged Water Drummed: Yes No

No. of Drums:

Ground Zero Analysis, Inc.

Groundwater Monitoring Field Log

Project Name: Sullins (L St)

Well I.D.: MW-404

Project No.: 1262.2

Date: 12/03/14

Project Location: 187 N. L Street

Livermore, CA

Samples sent to: BC Labs

Purge Method: Dedicated Waterra Centrifugal pump with dedicated tubing Other CMT

Pumping Rate: _____ gal/min

CM

Well Constructed TD (ft): 81.50'

* Well TD (ft):

Silt Thickness (ft):

Initial DTW (ft): 55.23

Water column height (ft): 26.2

One casing volume (gal): 3

** Final DTW (ft): _____

Casing diameter (in): CMT

Sample Containers used: 4 # VOAs x preserved non-preserved
 # amber liters preserved non-preserved
 # polys preserved non-preserved
 # polvs preserved non-preserved

Notes:

Sampled By:

Sample Method: Waterra Bailer Other

* = measured ** = @ sampling

Gallons per foot of casing. 2" dia. = 0.17. 3" dia. = 0.38 4" dia. = 0.65. 5" dia. = 1.02. 6" dia. = 1.48

Purged Water Drummed: Yes No

No. of Drums:

Daily Field Record

Project	SULLINS (Arrow Rentair)	Page 1 of
Project #	5262 Task 3	
Location	187 North L Street, Livermore Ca	
Weather	Cloudy	
Date	12/03/14	
Time on job	0630	to 1736
Record Keeper	A. Scoma	
Wind	51.5 mi	Temp 68°

PERSONNEL ONSITE		TIME ONSITE	
Name	Company	In	Out
Anthony Scoma	Ground Zero	0630	1636

Time	Location of Work / Work Performed / Field Equipment Used / etc.
0630	Leave Modesto, on site 0730 Monitored wells 306, 307, 201, 305, 308, 309, 404 W.A, W.I. CMt well. Hand Pumped 306 20 to 25 min, w water, Sampled. water from Holes. Placed new Hose down Well 306
	Hand pumped remaining CMt well, pumped the 3 casing columns and sampled. noted color and odor of water.
	Dumped purge water into DPC storage tank
	Sampled Wells for TPH G, BTEX & MTBE 8260 (4 hrs. in)
	Wells W.A & W.I were dry.
	Scanned wells
	System start up 1630
	Leave site 1636 Modesto 1736 off

Continued On Next Page

Daily Field Record

Page 1 of 1

Project Sullins 187 North L Street
 Project # 5262 Task 7
 Location 187 North L Street Livermore
 Weather Rain

Date 12/02/14
 Time on job 0830 to 1630
 Record Keeper A. Scam
 Wind slight Temp 59

PERSONNEL ONSITE		TIME ONSITE	
Name	Company	In	Out
Anthony Scam	Ground Zero	1018	1436
Andrew Dorn	Ground Zero	1018	

Time	Location of Work / Work Performed / Field Equipment Used / etc.
1018	ARRIVED ON-SITE - SYSTEM OFF DUE TO HIGH OXIDIZER
1020	STARTED UP SYSTEM 1035 SYSTEM AT TEMP. 1040 23058.8 TOTL H2S
	VACUUM 17 "Hg TEMP 1480° MANIFOLD ALL WELLS ON LINE, EW-1 1/2" OPEN
	EW-1 KO-drum program 75% Flow = 105 CFM
1100	COLLECTED GW-DIS SAMPLE
1105	CLOSED EW-1
	VACUUM INCREASED TO 17.5 "Hg
	FLOW DECREASED TO 90 CFM
	TOTALIZER = 72798.5 GALLONS
1205	PID EFFLUENT 7.4 INFLUENT 1772 (Sample Initiated SVE-INF) Flow 1215
1400	Removed cont. Hose's, Heavy Rain
1410	Sampled GW-TWF
1416	System off
1436	Going to Modesto office, 536, COE's full out. Covering P.V. Modesto

Continued On Next Page

Water Level Monitoring Record

Sullivs (L st)

Project Name

Date 12/03/14

MP = Measuring Point

I = Inaccessible

GL = Ground Level

Project No. 5362 Task 2
Technician A. S. Cima

Well No.	Sample Order	Time	Well Casing Dia.	Water Level Below MP (100th/foot)	Total Depth (100th/foot)	Depth to Floating Product (100th/foot)	Floating Product Thickness (100th/foot)	Well Condition*:			Remarks
								G = Good	F = Fair	P = Poor	
MW-306	0304			53.10	66.00						
MW-307	0811			53.58	66.00						
MW-304	0810			53.08	66.50						
MW-305	0821			53.08	66.00						
MW-308	0339			53.53	66.00						
MW-304	0844			53.12	75.50						
MW-404	0912			53.52	81.50						
W-A	0355			dm	55.00						
W-1	0913			dm	51.40						

Notes:

Ground Zero Analysis, Inc.

1172 Kansas Avenue, Modesto, CA 95351

Attachment C

Laboratory Analytical Data Sheets



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 07/17/2014

Project Manager

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Client Project: 1262.2

BCL Project: Sullins

BCL Work Order: 1415634

Invoice ID: B178451

Enclosed are the results of analyses for samples received by the laboratory on 7/11/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Christina Herndon
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
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1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeroanalysis.com

Chain of Custody

1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeroanalysis.com

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1415634 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 17	06/06/14	Page 1 Of 2				
Submission #: 14-15634										
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID					
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		YES <input type="checkbox"/> NO <input type="checkbox"/>					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____ Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97	Container: VOA	Thermometer ID: 207	Date/Time: 7/1/14 18:00	Analyst Init: JWL				
Temperature: (A) 5.9 °C / (C) 6.2 °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A	4								
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml KPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments: Sample Numbering Compiled By: JWL	Date/Time: 7/1/14 18:00 S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16									

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1415634 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM			Rev. No. 17	06/05/14	Page <u>2</u> Of <u>2</u>			
Submission #: <u>14-15634</u>										
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID				
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: _____	Container: <u>Tedlar</u> Thermometer ID: _____			Date/Time <u>7/11/14</u>	Analyst Init <u>JWV</u> 1850				
	Temperature: (A) <u>Room Temp</u> °C / (C) _____ °C									
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	()	()	()	()	()	()	()	()	()	()
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG <u>Tedlar Bag</u>										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments:										
Sample Numbering Completed By: <u>JWV</u>				Date/Time: <u>7/11/14 @ 1850</u>				IS:\WPDoc\WordPerfect\LAB_DOCS\FORMS\ISAMNEC16		
A = Actual / C = Corrected										

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1415634-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	--- Sullins --- GW-INF Andrew Dorn of GTIM	Receive Date: 07/11/2014 18:00 Sampling Date: 07/10/2014 14:20 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): GW-INF Matrix: W Sample QC Type (SACode): CS Cooler ID:
1415634-02	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	--- Sullins --- SVE-INF Lower Andrew Dorn of GTIM	Receive Date: 07/11/2014 18:00 Sampling Date: 07/10/2014 14:30 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): SVE-INF Lower Matrix: GS Sample QC Type (SACode): CS Cooler ID:



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1415634-01	Client Sample Name: Sullins, GW-INF, 7/10/2014 2:20:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	96	ug/L	0.50	0.083	EPA-8260B	ND		1
Ethylbenzene	34	ug/L	0.50	0.098	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Toluene	17	ug/L	0.50	0.093	EPA-8260B	ND		1
Total Xylenes	170	ug/L	1.0	0.36	EPA-8260B	ND		1
p- & m-Xylenes	130	ug/L	0.50	0.28	EPA-8260B	ND		1
o-Xylene	40	ug/L	0.50	0.082	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	2000	ug/L	100	14	Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time			Instrument	Dilution	QC Batch ID
			Date	Time	Analyst			
1	EPA-8260B	07/14/14	07/14/14	18:20	JCC	MS-V14	1	BXG1162
2	EPA-8260B	07/14/14	07/15/14	14:35	JCC	MS-V14	2	BXG1162



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1415634-02	Client Sample Name: Sullins, SVE-INF Lower, 7/10/2014 2:30:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	75000	ug/m3	2000	220	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	500	200	EPA-TO-15	ND	A01	2
Ethylbenzene	11000	ug/m3	500	23	EPA-TO-15	ND	A01	2
Methyl t-butyl ether	ND	ug/m3	200	42	EPA-TO-15	ND	A01	2
Toluene	8500	ug/m3	2000	200	EPA-TO-15	ND	A01	1
p- & m-Xylenes	25000	ug/m3	500	49	EPA-TO-15	ND	A01	2
o-Xylene	6100	ug/m3	500	31	EPA-TO-15	ND	A01	2
Total Xylenes	31000	ug/m3	1000	80	EPA-TO-15	ND	A01	2
Total Petroleum Hydrocarbons	170000	ug/m3	20000	3900	EPA-TO-15	ND	A01	2
4-Bromofluorobenzene (Surrogate)	101	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	126	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	07/14/14	07/14/14 18:29	MJB	MS-A1	1000	BXG1068
2	EPA-TO-15	07/14/14	07/14/14 12:58	MJB	MS-A1	100	BXG1068

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXG1162						
Benzene	BXG1162-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BXG1162-BLK1	ND	ug/L	0.50	0.098	
Methyl t-butyl ether	BXG1162-BLK1	ND	ug/L	0.50	0.11	
Toluene	BXG1162-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BXG1162-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BXG1162-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BXG1162-BLK1	ND	ug/L	0.50	0.082	
Total Purgeable Petroleum Hydrocarbons	BXG1162-BLK1	ND	ug/L	50	7.2	
1,2-Dichloroethane-d4 (Surrogate)	BXG1162-BLK1	111	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXG1162-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXG1162-BLK1	91.4	%	80 - 120 (LCL - UCL)		



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		
							Percent Recovery	RPD	Lab Quals
QC Batch ID: BXG1162									
Benzene	BXG1162-BS1	LCS	24.727	25.000	ug/L	98.9	70 - 130		
Toluene	BXG1162-BS1	LCS	23.096	25.000	ug/L	92.4	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXG1162-BS1	LCS	10.250	10.000	ug/L	102	75 - 125		
Toluene-d8 (Surrogate)	BXG1162-BS1	LCS	10.100	10.000	ug/L	101	80 - 120		
4-Bromofluorobenzene (Surrogate)	BXG1162-BS1	LCS	9.8900	10.000	ug/L	98.9	80 - 120		



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	RPD	Percent Recovery
QC Batch ID: BXG1162 Used client sample: Y - Description: GW-INF, 07/10/2014 14:20										
Benzene	MS	1415634-01	96.220	101.71	25.000	ug/L	22.0	70 - 130	Q03	
	MSD	1415634-01	96.220	111.89	25.000	ug/L	9.5	62.7	20	70 - 130
Toluene	MS	1415634-01	16.935	36.098	25.000	ug/L	76.7	70 - 130		
	MSD	1415634-01	16.935	37.934	25.000	ug/L	5.0	84.0	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1415634-01	ND	10.930	10.000	ug/L	109	75 - 125		
	MSD	1415634-01	ND	10.580	10.000	ug/L	3.3	106		75 - 125
Toluene-d8 (Surrogate)	MS	1415634-01	ND	10.630	10.000	ug/L	106	80 - 120		
	MSD	1415634-01	ND	10.580	10.000	ug/L	0.5	106		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1415634-01	ND	10.340	10.000	ug/L	103	80 - 120		
	MSD	1415634-01	ND	10.390	10.000	ug/L	0.5	104		80 - 120

BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXG1068						
Benzene	BXG1068-BLK1	ND	ug/m3	2.0	0.22	
1,1-Difluoroethane	BXG1068-BLK1	ND	ug/m3	5.0	2.0	
Ethylbenzene	BXG1068-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXG1068-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXG1068-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXG1068-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXG1068-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXG1068-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXG1068-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXG1068-BLK1	104	%	70 - 130 (LCL - UCL)		

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)**Quality Control Report - Laboratory Control Sample**

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		
							Percent Recovery	RPD	Lab Quals
QC Batch ID: BXG1068									
Benzene	BXG1068-BS1	LCS	12.744	15.974	ug/m3	79.8	70 - 130		
	BXG1068-BSD1	LCSD	12.910	15.974	ug/m3	80.8	1.3	70 - 130	30
1,1-Difluoroethane	BXG1068-BS1	LCS	ND		ug/m3		70 - 130		
	BXG1068-BSD1	LCSD	ND		ug/m3		70 - 130	30	
Ethylbenzene	BXG1068-BS1	LCS	21.832	21.711	ug/m3	101	70 - 130		
	BXG1068-BSD1	LCSD	21.811	21.711	ug/m3	100	0.1	70 - 130	30
Methyl t-butyl ether	BXG1068-BS1	LCS	16.797	18.026	ug/m3	93.2	70 - 130		
	BXG1068-BSD1	LCSD	16.779	18.026	ug/m3	93.1	0.1	70 - 130	30
Toluene	BXG1068-BS1	LCS	18.465	18.842	ug/m3	98.0	70 - 130		
	BXG1068-BSD1	LCSD	18.454	18.842	ug/m3	97.9	0.1	70 - 130	30
p- & m-Xylenes	BXG1068-BS1	LCS	52.865	43.421	ug/m3	122	70 - 130		
	BXG1068-BSD1	LCSD	52.436	43.421	ug/m3	121	0.8	70 - 130	30
o-Xylene	BXG1068-BS1	LCS	25.827	21.711	ug/m3	119	70 - 130		
	BXG1068-BSD1	LCSD	25.862	21.711	ug/m3	119	0.1	70 - 130	30
Total Xylenes	BXG1068-BS1	LCS	78.692	65.132	ug/m3	121	70 - 130		
	BXG1068-BSD1	LCSD	78.297	65.132	ug/m3	120	0.5	70 - 130	30
4-Bromofluorobenzene (Surrogate)	BXG1068-BS1	LCS	71.6	71.6	ug/m3	100	70 - 130		
	BXG1068-BSD1	LCSD	72.5	71.6	ug/m3	101	1.2	70 - 130	

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/17/2014 17:52
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
Q03	Matrix spike recovery(s) is(are) not within the control limits.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 07/31/2014

Project Manager

Ground Zero Analysis, Inc.

1172 Kansas Avenue

Modesto, CA 95354

Client Project: 1262.2

BCL Project: Sullins

BCL Work Order: 1416829

Invoice ID: B179444

Enclosed are the results of analyses for samples received by the laboratory on 7/25/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Christina Herndon
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Report ID: 1000260465

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1416829 Page 1 of 2

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Report ID: 1000260465

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Page 3 of 9



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1416829 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM					Rev. No. 17	06/05/14	Page <u>1</u> Of <u>1</u>	
Submission #: <u>14-16829</u>										
SHIPPING INFORMATION						SHIPPING CONTAINER			FREE LIQUID	
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:						
All samples received? Yes <input type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>—</u>	Container: <u>Teller</u>	Thermometer ID: <u>—</u>	Date/Time <u>7/25/14 2118</u>					
		Temperature: (A) <u>Room Temp</u> (C) <u>—</u> °C	Analyst Init <u>JWJ</u>							
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE/NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	()	()	()	()	()	()	()	()	()	
40ml VOA VIAL	()	()	()	()	()	()	()	()	()	
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG <u>Teller Bag</u>	A									
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments: _____										
Sample Numbering Completed By: <u>JWJ</u>	Date/Time: <u>7/25/14 @ 2140</u> IS:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16									
A = Actual / C = Corrected										

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/31/2014 11:40
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1416829-01	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: SVE-INF Upper Sampled By: Andrew Dorn of GTIM	Receive Date: 07/25/2014 21:18 Sampling Date: 07/25/2014 12:30 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): SVE-INF Upper Matrix: GS Sample QC Type (SACode): CS Cooler ID:

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/31/2014 11:40

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1416829-01	Client Sample Name: Sullins, SVE-INF Upper, 7/25/2014 12:30:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	3400	ug/m3	40	4.4	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	100	40	EPA-TO-15	ND	A01	1
Ethylbenzene	570	ug/m3	100	4.6	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	40	8.4	EPA-TO-15	ND	A01	1
Toluene	580	ug/m3	40	4.0	EPA-TO-15	ND	A01	1
p- & m-Xylenes	2500	ug/m3	100	9.8	EPA-TO-15	ND	A01	1
o-Xylene	700	ug/m3	100	6.2	EPA-TO-15	ND	A01	1
Total Xylenes	3200	ug/m3	200	16	EPA-TO-15	ND	A01	1
Total Petroleum Hydrocarbons	1100000	ug/m3	200000	39000	EPA-TO-15	ND	A01	2
4-Bromofluorobenzene (Surrogate)	137	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	93.7	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	EPA-TO-15	07/27/14	07/27/14 12:02	MJB	MS-A1	20	BXG2291
2	EPA-TO-15	07/27/14	07/27/14 16:41	MJB	MS-A1	1000	BXG2291

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/31/2014 11:40

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXG2291						
Benzene	BXG2291-BLK1	ND	ug/m3	2.0	0.22	
1,1-Difluoroethane	BXG2291-BLK1	ND	ug/m3	5.0	2.0	
Ethylbenzene	BXG2291-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXG2291-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXG2291-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXG2291-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXG2291-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXG2291-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXG2291-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXG2291-BLK1	115	%	70 - 130 (LCL - UCL)		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/31/2014 11:40

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		
							RPD	Percent Recovery	Lab RPD
QC Batch ID: BXG2291									
Benzene	BXG2291-BS1	LCS	13.485	15.974	ug/m3	84.4		70 - 130	
	BXG2291-BSD1	LCSD	13.955	15.974	ug/m3	87.4	3.4	70 - 130	30
1,1-Difluoroethane	BXG2291-BS1	LCS	ND		ug/m3			70 - 130	
	BXG2291-BSD1	LCSD	ND		ug/m3			70 - 130	30
Ethylbenzene	BXG2291-BS1	LCS	19.023	21.711	ug/m3	87.6		70 - 130	
	BXG2291-BSD1	LCSD	19.149	21.711	ug/m3	88.2	0.7	70 - 130	30
Methyl t-butyl ether	BXG2291-BS1	LCS	17.269	18.026	ug/m3	95.8		70 - 130	
	BXG2291-BSD1	LCSD	17.835	18.026	ug/m3	98.9	3.2	70 - 130	30
Toluene	BXG2291-BS1	LCS	18.982	18.842	ug/m3	101		70 - 130	
	BXG2291-BSD1	LCSD	19.174	18.842	ug/m3	102	1.0	70 - 130	30
p- & m-Xylenes	BXG2291-BS1	LCS	45.319	43.421	ug/m3	104		70 - 130	
	BXG2291-BSD1	LCSD	45.254	43.421	ug/m3	104	0.1	70 - 130	30
o-Xylene	BXG2291-BS1	LCS	22.340	21.711	ug/m3	103		70 - 130	
	BXG2291-BSD1	LCSD	22.301	21.711	ug/m3	103	0.2	70 - 130	30
Total Xylenes	BXG2291-BS1	LCS	67.659	65.132	ug/m3	104		70 - 130	
	BXG2291-BSD1	LCSD	67.555	65.132	ug/m3	104	0.2	70 - 130	30
4-Bromofluorobenzene (Surrogate)	BXG2291-BS1	LCS	78.8	71.6	ug/m3	110		70 - 130	
	BXG2291-BSD1	LCSD	78.2	71.6	ug/m3	109	0.8	70 - 130	

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 07/31/2014 11:40**Project:** Sullins**Project Number:** 1262.2**Project Manager:** Project Manager**Notes And Definitions**

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 09/05/2014

Project Manager

Ground Zero Analysis, Inc.

1172 Kansas Avenue
Modesto, CA 95354

Client Project: 12622
BCL Project: Sullins
BCL Work Order: 1418512
Invoice ID: B182461

Enclosed are the results of analyses for samples received by the laboratory on 8/12/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Christina Herndon
Client Service Rep



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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O INC 1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeranalysis.com

Chain of Custody

1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeranalysis.com

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1418512 Page 1 of 3

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Report ID: 1000272324

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Page 3 of 15

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1418512 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 17	06/05/14	Page 1 Of 2		
Submission #: 14-18512										
SHIPPING INFORMATION						SHIPPING CONTAINER		FREE LIQUID		
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		YES <input type="checkbox"/> NO <input type="checkbox"/>						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals <input type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97	Container: Pe	Thermometer ID: 207	Date/Time: 8/12/14 22:50					
		Temperature: (A) 2.7 °C / (C) 2.9 °C			Analyst Init: M/L					
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PT PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A4	()	()	()	()	()	()	()	()	()
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE.										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: _____

Sample Numbering Completed By: M/L

Date/Time: 8/12/14 @ 23:15

IS:\WPD\WordPerfect\LAB_DOCS\FORMS\ISAMREC16

A = Actual / C = Corrected

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1418512 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 17 06/05/14 Page 2 Of 2			
Submission #: 14-18512									
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)				SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)			FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/>		
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>									
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <input type="checkbox"/> Container: Tedlar Thermometer ID: <input type="checkbox"/> Temperature: (A) Room Temp (C) <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/> Date/Time 8/12/14 2250 Analyst Init MVI					
SAMPLE CONTAINERS	SAMPLE NUMBERS								
	1	2	3	4	5	6	7	8	9
QT GENERAL MINERAL/ GENERAL									
PT PE UNPRESERVED									
QT INORGANIC CHEMICAL METALS									
PT INORGANIC CHEMICAL METALS									
PT CYANIDE									
PT NITROGEN FORMS									
PT TOTAL SULFIDE									
2oz. NITRATE / NITRITE									
PT TOTAL ORGANIC CARBON									
PT TOX									
PT CHEMICAL OXYGEN DEMAND									
PTA PHENOLICS									
40ml VOA VIAL TRAVEL BLANK									
40ml VOA VIAL	()	()	()	()	()	()	()	()	()
QT EPA 413.1, 413.2, 418.1									
PT ODOR									
RADIOLOGICAL									
BACTERIOLOGICAL									
40 ml VOA VIAL- 504									
QT EPA 508/608/8080									
QT EPA 515.1/8150									
QT EPA 525									
QT EPA 525 TRAVEL BLANK									
40ml EPA 547									
40ml EPA 531.1									
8oz Amber EPA 548									
QT EPA 549									
QT EPA 632									
QT EPA 8015M									
QT AMBER									
8 OZ. JAR									
32 OZ. JAR									
SOIL SLEEVE									
PCB VIAL									
PLASTIC BAG Tedlar Bag	A	A							
FERROUS IRON									
ENCORE									
SMART KIT									
Summa Canister									

Comments: _____

Sample Numbering Completed By: MVI Date/Time: 8/12/14 @ 2315 I:\WPDoc\WordPerfect\LAB_DOCS\FORMS\AMREC16

A = Actual / C = Corrected

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02
Project: Sullins
Project Number: 12622
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1418512-01	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: GW-INF Sampled By: Andrew Dorn of GTIM	Receive Date: 08/12/2014 22:50 Sampling Date: 08/12/2014 14:25 Sample Depth: --- Lab Matrix: Water Sample Type: Wastewater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): GW-INF Matrix: W Sample QC Type (SACode): CS Cooler ID:
1418512-02	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: SVE-INF Upper Sampled By: Andrew Dorn of GTIM	Receive Date: 08/12/2014 22:50 Sampling Date: 08/12/2014 10:30 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): SVE-INF Upper Matrix: GS Sample QC Type (SACode): CS Cooler ID:
1418512-03	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: SVE-INF Lower Sampled By: Andrew Dorn of GTIM	Receive Date: 08/12/2014 22:50 Sampling Date: 08/12/2014 14:00 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): SVE-INF Lower Matrix: GS Sample QC Type (SACode): CS Cooler ID:

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1418512-01	Client Sample Name: Sullins, GW-INF, 8/12/2014 2:25:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	81	ug/L	2.5	0.42	EPA-8260B	ND	A01	1
Ethylbenzene	18	ug/L	0.50	0.098	EPA-8260B	ND		2
Toluene	41	ug/L	0.50	0.093	EPA-8260B	ND		2
Total Xylenes	350	ug/L	5.0	1.8	EPA-8260B	ND	A01	1
p- & m-Xylenes	240	ug/L	2.5	1.4	EPA-8260B	ND	A01	1
o-Xylene	110	ug/L	2.5	0.41	EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	2500	ug/L	250	36	Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	112	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	92.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	108	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 03:11	JMS	MS-V12	5	BXH0972
2	EPA-8260B	08/13/14	08/14/14 02:54	JMS	MS-V12	1	BXH0972

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1418512-02	Client Sample Name: Sullins, SVE-INF Upper, 8/12/2014 10:30:00AM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	310	ug/m3	100	11	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	250	100	EPA-TO-15	ND	A01	1
Ethylbenzene	46	ug/m3	250	12	EPA-TO-15	ND	J,A01	1
Methyl t-butyl ether	ND	ug/m3	100	21	EPA-TO-15	ND	A01	1
Toluene	170	ug/m3	100	10	EPA-TO-15	ND	A01	1
p- & m-Xylenes	450	ug/m3	250	24	EPA-TO-15	ND	A01	1
o-Xylene	240	ug/m3	250	16	EPA-TO-15	ND	J,A01	1
Total Xylenes	690	ug/m3	500	40	EPA-TO-15	ND	A01	1
Total Xylenes	420	ug/m3	2500	200	EPA-TO-15	ND	J,A01	2
Total Petroleum Hydrocarbons	190000	ug/m3	50000	9800	EPA-TO-15	ND	A01	2
4-Bromofluorobenzene (Surrogate)	104	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	111	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-TO-15	08/13/14	08/13/14 14:47	MJB	MS-A1	50	BXH0941
2	EPA-TO-15	08/13/14	08/14/14 21:53	MJB	MS-A1	250	BXH0941



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1418512-03	Client Sample Name: Sullins, SVE-INF Lower, 8/12/2014 2:00:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	150	ug/m3	200	22	EPA-TO-15	ND	J,A01	1
1,1-Difluoroethane	ND	ug/m3	500	200	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	500	23	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	200	42	EPA-TO-15	ND	A01	1
Toluene	190	ug/m3	200	20	EPA-TO-15	ND	J,A01	1
p- & m-Xylenes	390	ug/m3	500	49	EPA-TO-15	ND	J,A01	1
o-Xylene	120	ug/m3	500	31	EPA-TO-15	ND	J,A01	1
Total Xylenes	510	ug/m3	1000	80	EPA-TO-15	ND	J,A01	1
Total Petroleum Hydrocarbons	61000	ug/m3	20000	3900	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	109	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	08/13/14	08/13/14 15:22	MJB	MS-A1	100	BXH0941

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH0972						
Benzene	BXH0972-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BXH0972-BLK1	ND	ug/L	0.50	0.098	
Toluene	BXH0972-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BXH0972-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BXH0972-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BXH0972-BLK1	ND	ug/L	0.50	0.082	
Total Purgeable Petroleum Hydrocarbons	BXH0972-BLK1	ND	ug/L	50	7.2	
1,2-Dichloroethane-d4 (Surrogate)	BXH0972-BLK1	103	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXH0972-BLK1	94.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXH0972-BLK1	97.7	%	80 - 120 (LCL - UCL)		

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)**Quality Control Report - Laboratory Control Sample**

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	<u>Control Limits</u>		
								Percent Recovery	RPD	Lab Quals
QC Batch ID: BXH0972										
Benzene	BXH0972-BS1	LCS	29.810	25.000	ug/L	119		70 - 130		
Toluene	BXH0972-BS1	LCS	28.590	25.000	ug/L	114		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXH0972-BS1	LCS	10.170	10.000	ug/L	102		75 - 125		
Toluene-d8 (Surrogate)	BXH0972-BS1	LCS	10.460	10.000	ug/L	105		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXH0972-BS1	LCS	9.6400	10.000	ug/L	96.4		80 - 120		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BXH0972 Used client sample: N										
Benzene	MS	1418228-06	ND	29.480	25.000	ug/L		118		70 - 130
	MSD	1418228-06	ND	28.500	25.000	ug/L	3.4	114	20	70 - 130
Toluene	MS	1418228-06	ND	28.390	25.000	ug/L		114		70 - 130
	MSD	1418228-06	ND	27.090	25.000	ug/L	4.7	108	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1418228-06	ND	9.5300	10.000	ug/L		95.3		75 - 125
	MSD	1418228-06	ND	9.9200	10.000	ug/L	4.0	99.2		75 - 125
Toluene-d8 (Surrogate)	MS	1418228-06	ND	9.8800	10.000	ug/L		98.8		80 - 120
	MSD	1418228-06	ND	9.7900	10.000	ug/L	0.9	97.9		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1418228-06	ND	10.220	10.000	ug/L		102		80 - 120
	MSD	1418228-06	ND	10.330	10.000	ug/L	1.1	103		80 - 120

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH0941						
Benzene	BXH0941-BLK1	ND	ug/m3	2.0	0.22	
1,1-Difluoroethane	BXH0941-BLK1	ND	ug/m3	5.0	2.0	
Ethylbenzene	BXH0941-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXH0941-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXH0941-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXH0941-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXH0941-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXH0941-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXH0941-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXH0941-BLK1	100	%	70 - 130 (LCL - UCL)		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		
							Percent Recovery	RPD	Lab Quals
QC Batch ID: BXH0941									
Benzene	BXH0941-BS1	LCS	17.919	15.974	ug/m3	112	70 - 130		
	BXH0941-BSD1	LCSD	18.290	15.974	ug/m3	114	2.0	70 - 130	30
1,1-Difluoroethane	BXH0941-BS1	LCS	ND		ug/m3		70 - 130		
	BXH0941-BSD1	LCSD	ND		ug/m3		70 - 130	30	
Ethylbenzene	BXH0941-BS1	LCS	28.393	21.711	ug/m3	131	70 - 130		
	BXH0941-BSD1	LCSD	27.924	21.711	ug/m3	129	1.7	70 - 130	30
Methyl t-butyl ether	BXH0941-BS1	LCS	18.974	18.026	ug/m3	105	70 - 130		
	BXH0941-BSD1	LCSD	18.996	18.026	ug/m3	105	0.1	70 - 130	30
Toluene	BXH0941-BS1	LCS	23.165	18.842	ug/m3	123	70 - 130		
	BXH0941-BSD1	LCSD	22.709	18.842	ug/m3	121	2.0	70 - 130	30
p- & m-Xylenes	BXH0941-BS1	LCS	60.052	43.421	ug/m3	138	70 - 130		
	BXH0941-BSD1	LCSD	57.711	43.421	ug/m3	133	4.0	70 - 130	30
o-Xylene	BXH0941-BS1	LCS	29.678	21.711	ug/m3	137	70 - 130		
	BXH0941-BSD1	LCSD	28.263	21.711	ug/m3	130	4.9	70 - 130	30
Total Xylenes	BXH0941-BS1	LCS	89.730	65.132	ug/m3	138	70 - 130		
	BXH0941-BSD1	LCSD	85.974	65.132	ug/m3	132	4.3	70 - 130	30
4-Bromofluorobenzene (Surrogate)	BXH0941-BS1	LCS	77.1	71.6	ug/m3	108	70 - 130		
	BXH0941-BSD1	LCSD	77.0	71.6	ug/m3	108	0.2	70 - 130	

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/05/2014 17:02

Project: Sullins

Project Number: 12622

Project Manager: Project Manager

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 09/30/2014

Project Manager

Ground Zero Analysis, Inc.

1172 Kansas Avenue
Modesto, CA 95354

Client Project: 1262.2

BCL Project: Sullins

BCL Work Order: 1422338

Invoice ID: B184761

Enclosed are the results of analyses for samples received by the laboratory on 9/23/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Christina Herndon
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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O INC. 1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeroanalysis.com

Chain of Custody

O INC. 1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeroanalysis.com

Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groupzeroanalysis.com

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Report ID: 1000281417

4100 Allas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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BC Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1422338 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 18	09/04/14	Page 1 Of 2					
Submission #: 14-22338											
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID					
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>					
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/>			Comments: _____								
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____							
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____	Container: Teller	Thermometer ID: _____	Date/Time: 9/23/14 2145	Analyst Init: MWL					
		Temperature: (A) Room Temp / (C) _____ °C									
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL											
PT PE UNPRESERVED											
QT INORGANIC CHEMICAL METALS											
PT INORGANIC CHEMICAL METALS											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE /NITRITE											
PT TOTAL ORGANIC CARBON											
PT TOX											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 413.1, 413.2, 418.1											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz Amber EPA 548											
QT EPA 549											
QT EPA 632											
QT EPA 8015M											
QT AMBER											
8 OZ. JAR											
32 OZ. JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG Teller Bag A											
FERROUS IRON											
ENCORE											
SMART KIT											
Summa Canister											
Comments: _____											
Sample Numbering Completed By: MWL		Date/Time: 9/23/14 @ 22:20		(S:\WPDec\WordPerfect\LAB_DOCS\FORMS\ISAMREC)							
A = Actual / C = Corrected											

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Chain of Custody and Cooler Receipt Form for 1422338 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM			Rev. No. 18	09/04/14	Page <u>A</u> of <u>1</u>			
Submission #: <u>14-22338</u>					<u>14-22338</u> 2 of 2					
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input checked="" type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: <small>Intact Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></small>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Emissivity: <u>0.98</u> Container: <u>Pe</u> Thermometer ID: <u>207</u> Temperature: (A) <u>0.8</u> °C / (C) <u>0.4</u> °C		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date/Time <u>9/23/14 2145</u> Analyst Init <u>MW</u>						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL			<u>ABCD</u>	<u>ABCD</u>						
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 801SM										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments:										
Sample Numbering Completed By: <u>MW</u>	Date/Time: <u>9/23/14 @ 23:22:00</u> S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC1									
A = Actual / C = Corrected										

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1422338-01	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: SVE-INF Sampled By: Andrew Dorn of GTIM	Receive Date: 09/23/2014 21:45 Sampling Date: 09/23/2014 11:29 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): SVE-INF Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1422338-02	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: GW-INTER Sampled By: Andrew Dorn of GTIM	Receive Date: 09/23/2014 21:45 Sampling Date: 09/23/2014 12:14 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): GW-INTER Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1422338-03	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: GW-INF Sampled By: Andrew Dorn of GTIM	Receive Date: 09/23/2014 21:45 Sampling Date: 09/23/2014 12:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): GW-INF Matrix: W Sample QC Type (SACode): CS Cooler ID:		



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1422338-01	Client Sample Name: Sullins, SVE-INF, 9/23/2014 11:29:00AM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	12000	ug/m3	500	55	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	250	100	EPA-TO-15	ND	A01	2
Ethylbenzene	1900	ug/m3	250	12	EPA-TO-15	ND	A01	2
Methyl t-butyl ether	ND	ug/m3	100	21	EPA-TO-15	ND	A01	2
Toluene	6400	ug/m3	500	50	EPA-TO-15	ND	A01	1
p- & m-Xylenes	7400	ug/m3	250	24	EPA-TO-15	ND	A01	2
o-Xylene	3500	ug/m3	250	16	EPA-TO-15	ND	A01	2
Total Xylenes	11000	ug/m3	500	40	EPA-TO-15	ND	A01	2
Total Petroleum Hydrocarbons	2000000	ug/m3	10000	2000	EPA-TO-15	ND	A01	2
4-Bromofluorobenzene (Surrogate)	72.2	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	31.4	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	09/25/14	09/26/14 20:24	MJB	MS-A1	250	BXI2354
2	EPA-TO-15	09/25/14	09/25/14 15:01	MJB	MS-A1	50	BXI2354

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1422338-02	Client Sample Name: Sullins, GW-INTER, 9/23/2014 12:14:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	7.2	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	93.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	09/24/14	09/25/14 14:30	JMS	MS-V12	1	BXI2365

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1422338-03	Client Sample Name: Sullins, GW-INF, 9/23/2014 12:30:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	97	ug/L	2.5	0.42	EPA-8260B	ND	A01	1
Ethylbenzene	38	ug/L	0.50	0.098	EPA-8260B	ND		2
Toluene	51	ug/L	0.50	0.093	EPA-8260B	ND		2
Total Xylenes	450	ug/L	5.0	1.8	EPA-8260B	ND	A01	1
p- & m-Xylenes	310	ug/L	2.5	1.4	EPA-8260B	ND	A01	1
o-Xylene	140	ug/L	2.5	0.41	EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	2200	ug/L	50	7.2	Luft-GC/MS	ND		2
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260B	09/24/14	09/25/14 15:27	JMS	MS-V12	5	BXI2365
2	EPA-8260B	09/24/14	09/25/14 14:48	JMS	MS-V12	1	BXI2365

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXI2365						
Benzene	BXI2365-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BXI2365-BLK1	ND	ug/L	0.50	0.098	
Toluene	BXI2365-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BXI2365-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BXI2365-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BXI2365-BLK1	ND	ug/L	0.50	0.082	
Total Purgeable Petroleum Hydrocarbons	BXI2365-BLK1	ND	ug/L	50	7.2	
1,2-Dichloroethane-d4 (Surrogate)	BXI2365-BLK1	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXI2365-BLK1	92.2	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXI2365-BLK1	105	%	80 - 120 (LCL - UCL)		

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
 1172 Kansas Avenue
 Modesto, CA 95354

Reported: 09/30/2014 14:12
 Project: Sullins
 Project Number: 1262.2
 Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		
							Percent Recovery	RPD	Lab Quals
QC Batch ID: BXI2365									
Benzene	BXI2365-BS1	LCS	22.850	25.000	ug/L	91.4	70 - 130		
Toluene	BXI2365-BS1	LCS	23.260	25.000	ug/L	93.0	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXI2365-BS1	LCS	10.040	10.000	ug/L	100	75 - 125		
Toluene-d8 (Surrogate)	BXI2365-BS1	LCS	9.9300	10.000	ug/L	99.3	80 - 120		
4-Bromofluorobenzene (Surrogate)	BXI2365-BS1	LCS	10.110	10.000	ug/L	101	80 - 120		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		
									RPD	Percent Recovery	Lab Quals
QC Batch ID: BXI2365 Used client sample: N											
Benzene	MS	1421647-01	ND	22.330	25.000	ug/L		89.3		70 - 130	
	MSD	1421647-01	ND	22.120	25.000	ug/L	0.9	88.5	20	70 - 130	
Toluene	MS	1421647-01	ND	22.050	25.000	ug/L		88.2		70 - 130	
	MSD	1421647-01	ND	22.510	25.000	ug/L	2.1	90.0	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1421647-01	ND	10.250	10.000	ug/L		102		75 - 125	
	MSD	1421647-01	ND	9.5900	10.000	ug/L	6.7	95.9		75 - 125	
Toluene-d8 (Surrogate)	MS	1421647-01	ND	9.5800	10.000	ug/L		95.8		80 - 120	
	MSD	1421647-01	ND	10.010	10.000	ug/L	4.4	100		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1421647-01	ND	10.380	10.000	ug/L		104		80 - 120	
	MSD	1421647-01	ND	10.090	10.000	ug/L	2.8	101		80 - 120	



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXI2354						
Benzene	BXI2354-BLK1	ND	ug/m3	2.0	0.22	
1,1-Difluoroethane	BXI2354-BLK1	ND	ug/m3	5.0	2.0	
Ethylbenzene	BXI2354-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXI2354-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXI2354-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXI2354-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXI2354-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXI2354-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXI2354-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXI2354-BLK1	100	%	70 - 130 (LCL - UCL)		



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		
							Percent Recovery	RPD	Lab Quals
QC Batch ID: BXI2354									
Benzene	BXI2354-BS1	LCS	16.463	15.974	ug/m3	103	70 - 130		
	BXI2354-BSD1	LCSD	16.421	15.974	ug/m3	103	0.3	70 - 130	30
1,1-Difluoroethane	BXI2354-BS1	LCS	ND		ug/m3		70 - 130		
	BXI2354-BSD1	LCSD	ND		ug/m3		70 - 130	30	
Ethylbenzene	BXI2354-BS1	LCS	22.583	21.711	ug/m3	104	70 - 130		
	BXI2354-BSD1	LCSD	23.104	21.711	ug/m3	106	2.3	70 - 130	30
Methyl t-butyl ether	BXI2354-BS1	LCS	19.576	18.026	ug/m3	109	70 - 130		
	BXI2354-BSD1	LCSD	19.641	18.026	ug/m3	109	0.3	70 - 130	30
Toluene	BXI2354-BS1	LCS	21.152	18.842	ug/m3	112	70 - 130		
	BXI2354-BSD1	LCSD	21.393	18.842	ug/m3	114	1.1	70 - 130	30
p- & m-Xylenes	BXI2354-BS1	LCS	47.664	43.421	ug/m3	110	70 - 130		
	BXI2354-BSD1	LCSD	48.597	43.421	ug/m3	112	1.9	70 - 130	30
o-Xylene	BXI2354-BS1	LCS	23.782	21.711	ug/m3	110	70 - 130		
	BXI2354-BSD1	LCSD	24.312	21.711	ug/m3	112	2.2	70 - 130	30
Total Xylenes	BXI2354-BS1	LCS	71.445	65.132	ug/m3	110	70 - 130		
	BXI2354-BSD1	LCSD	72.909	65.132	ug/m3	112	2.0	70 - 130	30
4-Bromofluorobenzene (Surrogate)	BXI2354-BS1	LCS	72.6	71.6	ug/m3	101	70 - 130		
	BXI2354-BSD1	LCSD	72.5	71.6	ug/m3	101	0.1	70 - 130	



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 09/30/2014 14:12
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 10/09/2014

Project Manager

Ground Zero Analysis, Inc.

1172 Kansas Avenue
Modesto, CA 95354

Client Project: 5262
BCL Project: Sullins
BCL Work Order: 1423337
Invoice ID: B185492

Enclosed are the results of analyses for samples received by the laboratory on 10/3/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Christina Herndon
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Report ID: 1000284470

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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GROUND ZERO ANALYSIS, INC.
 1172 Kansas Avenue
 Modesto, CA
 (209) 522-4119 Fax 522-4227
 E-mail: gza@groundzerounalysis.com

Project #: 14-23337 Billing To: Ground Zero Analysis, Inc.

Site Address: 187 North L Street, Livermore, CA

Project Name:		Analysis Requested		Purchase Order #		Laboratory:	
S262 Site 1105				BC Lab S			
Global ID No.:	EDF Report: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Turnaround Time: <input checked="" type="checkbox"/> Standard 1 day <input type="checkbox"/> 2 day <input type="checkbox"/> 3 day <input type="checkbox"/> 5 day					
Client: Ground Zero Analysis, Inc.	Rep At: Ground Zero Analysis, Inc.	Email Lab Report (.pdf): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Chem/Address: 1172 Kansas Avenue	Type of Event: GWM Sys Monitoring Drilling Other	Email EDF Lab Report (.zip): <input type="checkbox"/> Yes <input type="checkbox"/> No					
City, State, Zip: Modesto, CA 95351	Client Email: gza@groundzerounalysis.com	Mail Lab Report: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Client Phone: (209) 522-4119	Client Fax: (209) 522-4227						
Sampling Info:	Sampled By (Initials): <u>RP</u> , GZA						
Date	Time	EDF Field ID	Sample I.D./Description / Location				
10/2/14	12:31	-1	SVE-TMF	1G -			
TPH-G, BTEX, MTBE (TD-15)							
Preservation Type							
Matrix (Soil, Water, Gas, Other)							
No. of Containers							
Special Instructions / Remarks							
CHK BY <input checked="" type="checkbox"/> DISTRIBUTION <input type="checkbox"/> SUB-OUT							
Signature: <u>Marcus Pier</u>		Print Name: <u>Marcus Pier</u>		Date: <u>10-3-14</u>		Time: <u>10:15</u>	
Received & Relinquished by: <u>Ross Dickey</u>		Print Name: <u>Ross Dickey</u>		Date: <u>10-3-14</u>		Time: <u>10:15</u>	
Received & Relinquished by: <u>Ross Dickey</u>		Print Name: <u>Ross Dickey</u>		Date: <u>10-3-14</u>		Time: <u>10:20</u>	
Please return cooler / ice chest to Ground Zero Analysis, Inc. REC- <u>10/3/14 15:20 REL-<u>10/3/14 19:00</u></u>							
Rev. 3/2014							

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1423337 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 18	09/04/14	Page 1 Of 1				
Submission #: 14-23337										
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)		SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/>						
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		None <input checked="" type="checkbox"/> Comments:						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <input type="checkbox"/>	Container: <i>Tedlar</i>	Thermometer ID: <input type="checkbox"/>	Date/Time: <i>10/3/14 19:00</i>						
Temperature: (A) <i>Ram</i> °C / (C) <i>Temp</i> °C					Analyst Init: <i>M</i>					
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL	<i>Tedlar</i>	R								
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: _____ Date/Time: *10/3/14 19:10* [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\ISAMREC]

A = Actual / C = Corrected

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 10/09/2014 10:14

Project: Sullins

Project Number: 5262

Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1423337-01	COC Number: --- Project Number: --- Sampling Location: --- Sampling Point: SVE-INF Sampled By: Andrew Dorn	Receive Date: 10/03/2014 19:00 Sampling Date: 10/02/2014 12:31 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: Location ID (FieldPoint): Matrix: Sample QC Type (SACode): Cooler ID:

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 10/09/2014 10:14
Project: Sullins
Project Number: 5262
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1423337-01	Client Sample Name: SVE-INF, 10/2/2014 12:31:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	36000	ug/m3	20000	2200	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	50000	20000	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	50000	2300	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	20000	4200	EPA-TO-15	ND	A01	1
Toluene	10000	ug/m3	20000	2000	EPA-TO-15	ND	J,A01	1
p- & m-Xylenes	37000	ug/m3	50000	4900	EPA-TO-15	ND	J,A01	1
o-Xylene	ND	ug/m3	50000	3100	EPA-TO-15	ND	A01	1
Total Xylenes	37000	ug/m3	100000	8000	EPA-TO-15	ND	J,A01	1
Total Petroleum Hydrocarbons	12000000	ug/m3	2000000	390000	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	90.1	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	10/06/14	10/06/14 13:06	MJB	MS-A1	10000	BXJ0380

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 10/09/2014 10:14
Project: Sullins
Project Number: 5262
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXJ0380						
Benzene	BXJ0380-BLK1	ND	ug/m3	2.0	0.22	
1,1-Difluoroethane	BXJ0380-BLK1	ND	ug/m3	5.0	2.0	
Ethylbenzene	BXJ0380-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXJ0380-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXJ0380-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXJ0380-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXJ0380-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXJ0380-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXJ0380-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXJ0380-BLK1	72.2	%	70 - 130 (LCL - UCL)		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 10/09/2014 10:14
Project: Sullins
Project Number: 5262
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		
								Percent Recovery	RPD	Lab Quals
QC Batch ID: BXJ0380										
Benzene	BXJ0380-BS1	LCS	18.731	15.974	ug/m3	117		70 - 130		
	BXJ0380-BSD1	LCSD	19.149	15.974	ug/m3	120	2.2	70 - 130	30	
1,1-Difluoroethane	BXJ0380-BS1	LCS	ND		ug/m3			70 - 130		
	BXJ0380-BSD1	LCSD	ND		ug/m3			70 - 130	30	
Ethylbenzene	BXJ0380-BS1	LCS	21.359	21.711	ug/m3	98.4		70 - 130		
	BXJ0380-BSD1	LCSD	21.402	21.711	ug/m3	98.6	0.2	70 - 130	30	
Methyl t-butyl ether	BXJ0380-BS1	LCS	18.787	18.026	ug/m3	104		70 - 130		
	BXJ0380-BSD1	LCSD	18.992	18.026	ug/m3	105	1.1	70 - 130	30	
Toluene	BXJ0380-BS1	LCS	22.256	18.842	ug/m3	118		70 - 130		
	BXJ0380-BSD1	LCSD	22.373	18.842	ug/m3	119	0.5	70 - 130	30	
p- & m-Xylenes	BXJ0380-BS1	LCS	41.046	43.421	ug/m3	94.5		70 - 130		
	BXJ0380-BSD1	LCSD	41.037	43.421	ug/m3	94.5	0.0	70 - 130	30	
o-Xylene	BXJ0380-BS1	LCS	20.412	21.711	ug/m3	94.0		70 - 130		
	BXJ0380-BSD1	LCSD	20.243	21.711	ug/m3	93.2	0.8	70 - 130	30	
Total Xylenes	BXJ0380-BS1	LCS	61.458	65.132	ug/m3	94.4		70 - 130		
	BXJ0380-BSD1	LCSD	61.280	65.132	ug/m3	94.1	0.3	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	BXJ0380-BS1	LCS	55.2	71.6	ug/m3	77.1		70 - 130		
	BXJ0380-BSD1	LCSD	46.8	71.6	ug/m3	65.3	16.6	70 - 130		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 10/09/2014 10:14
Project: Sullins
Project Number: 5262
Project Manager: Project Manager

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 11/12/2014

Project Manager

Ground Zero Analysis, Inc.

1172 Kansas Avenue
Modesto, CA 95354

Client Project: 1262.2

BCL Project: Sullins

BCL Work Order: 1426518

Invoice ID: B188454

Enclosed are the results of analyses for samples received by the laboratory on 11/6/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Christina Herndon
Client Service Rep



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Chain of Custody

Kansas Avenue
Modesto, CA
9 Fax 522-4227
aeroanalysis.com

Project #:		Project Name:		Billing To: Ground Zero Analysis, Inc.		Analysis Requested		Laboratory: BC LASS							
12-6-2-2		Survey's													
Site Address:		187 NORTH 111 STREET, Livermore, CA													
Global ID No.:		N/A		EDF Report: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Client: Ground Zero Analysis, Inc.		Rep. Auto: GroundZero Analysis, Inc.		Rep. Auto: <input checked="" type="checkbox"/> Drilling <input type="checkbox"/> Soil Monitoring <input type="checkbox"/> Other											
Client Address: 1172 Kansas Avenue		Type of Event: DMM		Email: gza@groundzerocalanalysis.com											
City, State, Zip: Modesto, CA 95351		Client Email: gza@groundzerocalanalysis.com		Client Phone: (209) 522-4119											
Sampling Info:		Sampled By (Initials): AD		Matrix (Soil, Water, Gases, Other)		Preservation Type		TPH-G, BTEX & MTBE (70-15)							
Sampling Info:		Sampled By (Initials): AD		No. of Containers:		TPH-G, BTEX & MTBE (8260)									
Date	Time	EDF Field ID	Sample ID	Description / Location											
11-6-14	12:15	-1	111-111-1111		X										
11-6-14	12:35	-2	Ground-111F			X									
Turnaround Time: <input checked="" type="checkbox"/> Standard 1 day 2 day 3 day 5 day															
Purchase Order #: _____															
Special Instructions / Remarks															
<input type="checkbox"/> Mail Lab Report: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Email EDF Lab Report (.zip): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Email Lab Report: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No															
<table border="1"> <tr> <td>CHK BY</td> <td>DISTRIBUTION</td> </tr> <tr> <td><i>AD</i></td> <td><i>BC LASS</i></td> </tr> <tr> <td colspan="2">SUB-OUT <input type="checkbox"/></td> </tr> </table>										CHK BY	DISTRIBUTION	<i>AD</i>	<i>BC LASS</i>	SUB-OUT <input type="checkbox"/>	
CHK BY	DISTRIBUTION														
<i>AD</i>	<i>BC LASS</i>														
SUB-OUT <input type="checkbox"/>															
Received/Released by: <i>BC LASS</i> Signature: <i>Andrew Dean</i> Date: 11-6-14 Time: 1:30 PM Received/Released by: <i>BC LASS</i> Signature: <i>Ross Dickens</i> Date: 11-6-14 Time: 1:30 PM Received/Released by: <i>BC LASS</i> Signature: <i>Ross Dickens</i> Date: 11-6-14 Time: 1:30 PM															
Print Name: <i>Andrew Dean</i> <i>Ross Dickens</i> <i>Ross Dickens</i>															

Please return cooler / ice chest to Ground Zero Analysis, Inc. REC 11-6-14 1033 11-6-14 Rev. 3/2014



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1426518 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 18	09/04/14	Page 1 Of 2				
Submission #: 14-26518										
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID				
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input type="checkbox"/> None <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/>		Comments:								
Custody Seals	Ice Chest <input type="checkbox"/> Intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:							
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____	Container: Teller	Thermometer ID: _____	Date/Time: 11/6/14 2135	Analyst Init: M/L				
Temperature: (A) _____ °C / (C) _____ °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG PT Teller Bag A										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments: _____	Sample Numbering Completed By: <i>M/L</i>		Date/Time: 11/6/14 @ 2230		(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\ISAMREC)					
A = Actual / C = Corrected										

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Chain of Custody and Cooler Receipt Form for 1426518 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 18	09/04/14	Page 2 Of 2		
Submission #: 14-26518										
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____						SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/>		
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input type="checkbox"/> Comments: _____ Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>										
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98 Container: PE Thermometer ID: 202				Date/Time: 11/6/14 2:25 Analyst Init: M				
Temperature: (A) 0.8 °C / (C) 0.4 °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml RPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments: _____	Sample Numbering Completed By: <u>MVR</u>				Date/Time: 11/6/14 @ 2230					
A = Actual / C = Corrected					IS:\WPDoc\WeidPerfect\LAB_DOCS\FORMS\1SAMREC					

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1426518-01	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: Influent Sampled By: Andrew Dorn of GTIM	Receive Date: 11/06/2014 21:35 Sampling Date: 11/06/2014 12:15 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): Influent Matrix: W Sample QC Type (SACode): CS Cooler ID:
1426518-02	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: GW-INF Sampled By: Andrew Dorn of GTIM	Receive Date: 11/06/2014 21:35 Sampling Date: 11/06/2014 12:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): GW-INF Matrix: W Sample QC Type (SACode): CS Cooler ID:

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1426518-01	Client Sample Name: Sullins, Influent, 11/6/2014 12:15:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	52000	ug/m3	2000	220	EPA-TO-15	ND	A01	1
Ethylbenzene	20000	ug/m3	2500	120	EPA-TO-15	ND	A01	2
Methyl t-butyl ether	ND	ug/m3	1000	210	EPA-TO-15	ND	A01	2
Toluene	22000	ug/m3	1000	100	EPA-TO-15	ND	A01	2
p- & m-Xylenes	110000	ug/m3	2500	240	EPA-TO-15	ND	A01	2
o-Xylene	29000	ug/m3	2500	160	EPA-TO-15	ND	A01	2
Total Xylenes	140000	ug/m3	5000	400	EPA-TO-15	ND	A01	2
Total Petroleum Hydrocarbons	10000000	ug/m3	400000	78000	EPA-TO-15	ND	A01	3
4-Bromofluorobenzene (Surrogate)	85.6	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	101	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	EPA-TO-15	11/07/14	11/11/14 12:25	MJB	MS-A1	1000	BXK0525
2	EPA-TO-15	11/07/14	11/07/14 12:25	MJB	MS-A1	500	BXK0525
3	EPA-TO-15	11/07/14	11/11/14 15:07	MJB	MS-A1	2000	BXK0525

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1426518-02	Client Sample Name: Sullins, GW-INF, 11/6/2014 12:35:00PM, Andrew Dorn						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	130	ug/L	5.0	0.83	EPA-8260B	ND	A01	1
Ethylbenzene	28	ug/L	0.50	0.098	EPA-8260B	ND	A01	2
Methyl t-butyl ether	1.3	ug/L	0.50	0.11	EPA-8260B	ND	A01	2
Toluene	42	ug/L	0.50	0.093	EPA-8260B	ND	A01	2
Total Xylenes	460	ug/L	10	3.6	EPA-8260B	ND	A01	1
p- & m-Xylenes	330	ug/L	5.0	2.8	EPA-8260B	ND	A01	1
o-Xylene	130	ug/L	5.0	0.82	EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	1700	ug/L	50	7.2	Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	95.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	94.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	EPA-8260B	11/07/14	11/08/14 02:29	JMS	MS-V12	10	BXK0587
2	EPA-8260B	11/07/14	11/08/14 02:46	JMS	MS-V12	1	BXK0587

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXK0587						
Benzene	BXK0587-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BXK0587-BLK1	ND	ug/L	0.50	0.098	
Methyl t-butyl ether	BXK0587-BLK1	ND	ug/L	0.50	0.11	
Toluene	BXK0587-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BXK0587-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BXK0587-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BXK0587-BLK1	ND	ug/L	0.50	0.082	
Total Purgeable Petroleum Hydrocarbons	BXK0587-BLK1	ND	ug/L	50	7.2	
1,2-Dichloroethane-d4 (Surrogate)	BXK0587-BLK1	97.5	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXK0587-BLK1	98.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXK0587-BLK1	98.4	%	80 - 120 (LCL - UCL)		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		
								Percent Recovery	RPD	Lab Quals
QC Batch ID: BXK0587										
Benzene	BXK0587-BS1	LCS	26.470	25.000	ug/L	106		70 - 130		
Toluene	BXK0587-BS1	LCS	22.460	25.000	ug/L	89.8		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXK0587-BS1	LCS	9.8400	10.000	ug/L	98.4		75 - 125		
Toluene-d8 (Surrogate)	BXK0587-BS1	LCS	10.210	10.000	ug/L	102		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXK0587-BS1	LCS	9.7100	10.000	ug/L	97.1		80 - 120		



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	Control Limits			
							RPD	Percent Recovery	RPD	Percent Recovery
QC Batch ID: BXK0587		Used client sample: N								
Benzene	MS	1425343-30	ND	28.580	25.000	ug/L		114		70 - 130
	MSD	1425343-30	ND	27.200	25.000	ug/L	4.9	109	20	70 - 130
Toluene	MS	1425343-30	ND	24.710	25.000	ug/L		98.8		70 - 130
	MSD	1425343-30	ND	25.380	25.000	ug/L	2.7	102	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1425343-30	ND	9.6600	10.000	ug/L		96.6		75 - 125
	MSD	1425343-30	ND	8.8300	10.000	ug/L	9.0	88.3		75 - 125
Toluene-d8 (Surrogate)	MS	1425343-30	ND	10.030	10.000	ug/L		100		80 - 120
	MSD	1425343-30	ND	10.390	10.000	ug/L	3.5	104		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1425343-30	ND	9.3700	10.000	ug/L		93.7		80 - 120
	MSD	1425343-30	ND	10.090	10.000	ug/L	7.4	101		80 - 120

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXK0525						
Benzene	BXK0525-BLK1	ND	ug/m3	2.0	0.22	
Ethylbenzene	BXK0525-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXK0525-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXK0525-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXK0525-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXK0525-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXK0525-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXK0525-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXK0525-BLK1	67.0	%	70 - 130 (LCL - UCL)		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		
								Percent Recovery	RPD	Lab Quals
QC Batch ID: BXK0525										
Benzene	BXK0525-BS1	LCS	17.159	15.974	ug/m3	107		70 - 130		
	BXK0525-BSD1	LCSD	17.348	15.974	ug/m3	109	1.1	70 - 130	30	
Ethylbenzene	BXK0525-BS1	LCS	24.368	21.711	ug/m3	112		70 - 130		
	BXK0525-BSD1	LCSD	22.544	21.711	ug/m3	104	7.8	70 - 130	30	
Methyl t-butyl ether	BXK0525-BS1	LCS	18.646	18.026	ug/m3	103		70 - 130		
	BXK0525-BSD1	LCSD	19.173	18.026	ug/m3	106	2.8	70 - 130	30	
Toluene	BXK0525-BS1	LCS	21.687	18.842	ug/m3	115		70 - 130		
	BXK0525-BSD1	LCSD	21.495	18.842	ug/m3	114	0.9	70 - 130	30	
p- & m-Xylenes	BXK0525-BS1	LCS	51.324	43.421	ug/m3	118		70 - 130		
	BXK0525-BSD1	LCSD	46.517	43.421	ug/m3	107	9.8	70 - 130	30	
o-Xylene	BXK0525-BS1	LCS	23.717	21.711	ug/m3	109		70 - 130		
	BXK0525-BSD1	LCSD	21.489	21.711	ug/m3	99.0	9.9	70 - 130	30	
Total Xylenes	BXK0525-BS1	LCS	75.041	65.132	ug/m3	115		70 - 130		
	BXK0525-BSD1	LCSD	68.006	65.132	ug/m3	104	9.8	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	BXK0525-BS1	LCS	70.0	71.6	ug/m3	97.7		70 - 130		
	BXK0525-BSD1	LCSD	67.8	71.6	ug/m3	94.7	3.2	70 - 130		



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 11/12/2014 12:31
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 12/08/2014

Project Manager

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Client Project: 1262.2
BCL Project: Sullins
BCL Work Order: 1428515
Invoice ID: B190422

Enclosed are the results of analyses for samples received by the laboratory on 12/2/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Christina Herndon
Client Service Rep



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Chain of Custody and Cooler Receipt Form for 1428515 Page 1 of 3



1172 Kansas Avenue
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gza@groundzeroanalysis.com

Chain of Custody

Page 1 of 1

Project #: 14.28515		Billing To: Ground Zero Analysis, Inc.		Analysis Requested		Laboratory: BC LABS	
Project #: 1262.2	Project Name: SULLINS						
Site Address: 187 NORTH L STREET, LIVERMORE, CA							
Global ID No.: N/A	EDF Report: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Rpt Attn: Ground Zero Analysis, Inc.	Type of Event: GWM <input checked="" type="checkbox"/> Sys Monitoring <input type="checkbox"/> Drilling <input type="checkbox"/> Other	No. of Coolers: 4	Preservation Type: HCl	Turnaround Time: (S) = Standard 1 day 2 day 3 day 5 day	
Client: Ground Zero Analysis, Inc.					X		
Client Address: 1172 Kansas Avenue					X		
City, State, Zip: Modesto, CA 95351							
Client Phone: (209) 522-4119							
Sampling Info:	Sampled By (Initials): AS, GZA					Email Lab Report (.pdf): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Date: 12-2-14	Time: 1910	EDF Field ID: -1	Sample I.D./Description / Location: GW-INF	No. of Coolers: 4	Preservation Type: HCl	Email EDF Lab Report (.zip): <input type="checkbox"/> Yes <input type="checkbox"/> No	
12-2-14	1215	-2	SVE-INF	1	NAME	Mail Lab Report: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Special Instructions / Remarks							
CHK BY <input checked="" type="checkbox"/> DISTRIBU ^{TION} <input type="checkbox"/> SUB-OUT							
Signature		Print Name		Company		Date: 12/02/14	Time: 1630
Received / Relinquished by: Ross Dickey		Anthony Swain		Ground Zero		12-2-14	2630
Received / Relinquished by: Ross Dickey		Ross Dickey		BC LAB		12-2-14	1810
Received / Relinquished by: Ross Dickey		ROSS DICKEY		BC LAB		Rev. 3/2014	
Please return cooler / ice chest to Ground Zero Analysis, Inc. REC. REC. 12-9-14 18:10 REL. REL. 12-2-14 2013 12-2-14 2013							

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1428515 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 1B	09/04/14	Page 1 Of 2				
Submission #: 14-28515										
SHIPPING INFORMATION				SHIPPING CONTAINER		FREE LIQUID				
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/>		Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/>		YES <input type="checkbox"/> NO <input type="checkbox"/>						
BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)		Other <input type="checkbox"/> (Specify)								
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Boxes <input checked="" type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98	Container: Amber	Thermometer ID: 208	Date/Time: 12/14/2015					
		Temperature: (A) 15 °C / (C) 13 °C			Analyst Init KLB					
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
PT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
1oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABCD									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
10 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
3oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
3 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments:										
Sample Numbering Completed By:	<i>12-31-14</i>									
= Actual / C = Corrected										
Date/Time: <i>12-31-14</i>	IS:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC1									

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Chain of Custody and Cooler Receipt Form for 1428515 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 1B	Date/Time 09/04/14	Page 2 of 2				
Submission #: 14-28515										
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID					
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)			Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)		YES <input type="checkbox"/> NO <input type="checkbox"/>					
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals		Ice Chest <input type="checkbox"/> Container <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:								
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity:	Container: <i>Tedlar</i>	Thermometer ID:	Date/Time 12-24-2015	Analyst Init 99				
		Temperature: (A) <i>40mL</i>	°C / (C) Temp	°C						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG <i>Tedlar</i>			A							
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments:										
Sample Numbering Completed By: <i>M</i>	Date/Time 12-24-2015									
A = Actual / C = Corrected	S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\1SAMREC									

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1428515-01	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: GW-INF Sampled By: AS of GTIM	Receive Date: 12/02/2014 22:15 Sampling Date: 12/02/2014 14:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): GW-INF Matrix: W Sample QC Type (SACode): CS Cooler ID:
1428515-02	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: SVE-INF Sampled By: AS of GTIM	Receive Date: 12/02/2014 22:15 Sampling Date: 12/02/2014 12:15 Sample Depth: --- Lab Matrix: Air Sample Type: Vapor or Air Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): SVE-INF Matrix: GS Sample QC Type (SACode): CS Cooler ID:



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40

Projct: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428515-01	Client Sample Name:		Sullins, GW-INF, 12/2/2014 2:10:00PM, AS				
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	190	ug/L	2.5	0.42	EPA-8260B	ND	A01	1
Ethylbenzene	50	ug/L	0.50	0.098	EPA-8260B	ND		2
Methyl t-butyl ether	2.0	ug/L	0.50	0.11	EPA-8260B	ND		2
Toluene	65	ug/L	0.50	0.093	EPA-8260B	ND		2
Total Xylenes	550	ug/L	5.0	1.8	EPA-8260B	ND	A01	1
p- & m-Xylenes	410	ug/L	2.5	1.4	EPA-8260B	ND	A01	1
o-Xylene	140	ug/L	2.5	0.41	EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	2700	ug/L	250	36	Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-8260B	12/05/14	12/07/14 20:25	MGC	MS-V5	5	BXL0547
2	EPA-8260B	12/05/14	12/06/14 16:17	MGC	MS-V5	1	BXL0547

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	1428515-02	Client Sample Name: Sullins, SVE-INF, 12/2/2014 12:15:00PM, AS						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	97000	ug/m3	4000	440	EPA-TO-15	ND	A01	1
Ethylbenzene	16000	ug/m3	2500	120	EPA-TO-15	ND	A01	2
Methyl t-butyl ether	ND	ug/m3	1000	210	EPA-TO-15	ND	A01	2
Toluene	22000	ug/m3	1000	100	EPA-TO-15	ND	A01	2
p- & m-Xylenes	90000	ug/m3	2500	240	EPA-TO-15	ND	A01	2
o-Xylene	21000	ug/m3	2500	160	EPA-TO-15	ND	A01	2
Total Xylenes	110000	ug/m3	5000	400	EPA-TO-15	ND	A01	2
Total Petroleum Hydrocarbons	13000000	ug/m3	1000000	200000	EPA-TO-15	ND	A01	3
4-Bromofluorobenzene (Surrogate)	98.5	%	70 - 130 (LCL - UCL)		EPA-TO-15			1
4-Bromofluorobenzene (Surrogate)	116	%	70 - 130 (LCL - UCL)		EPA-TO-15			2
4-Bromofluorobenzene (Surrogate)	103	%	70 - 130 (LCL - UCL)		EPA-TO-15			3

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time	Analyst				
1	EPA-TO-15	12/03/14	12/03/14 15:11	MJB	MS-A1	2000	BXL0295	
2	EPA-TO-15	12/03/14	12/03/14 14:37	MJB	MS-A1	500	BXL0295	
3	EPA-TO-15	12/03/14	12/03/14 15:49	MJB	MS-A1	5000	BXL0295	

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL0547						
Benzene	BXL0547-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BXL0547-BLK1	ND	ug/L	0.50	0.098	
Methyl t-butyl ether	BXL0547-BLK1	ND	ug/L	0.50	0.11	
Toluene	BXL0547-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BXL0547-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BXL0547-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BXL0547-BLK1	ND	ug/L	0.50	0.082	
Total Purgeable Petroleum Hydrocarbons	BXL0547-BLK1	ND	ug/L	50	7.2	
1,2-Dichloroethane-d4 (Surrogate)	BXL0547-BLK1	105	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXL0547-BLK1	99.5	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXL0547-BLK1	97.7	%	80 - 120 (LCL - UCL)		

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		
								Percent Recovery	RPD	Lab Quals
QC Batch ID: BXL0547										
Benzene	BXL0547-BS1	LCS	23.720	25.000	ug/L	94.9		70 - 130		
Toluene	BXL0547-BS1	LCS	23.460	25.000	ug/L	93.8		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXL0547-BS1	LCS	9.9000	10.000	ug/L	99.0		75 - 125		
Toluene-d8 (Surrogate)	BXL0547-BS1	LCS	9.9500	10.000	ug/L	99.5		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXL0547-BS1	LCS	9.9400	10.000	ug/L	99.4		80 - 120		

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Report ID: 1000303961

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

Page 10 of 14



Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Recovery
QC Batch ID: BXL0547			Used client sample: N							
Benzene	MS	1428724-10	ND	26.170	25.000	ug/L		105		70 - 130
	MSD	1428724-10	ND	25.490	25.000	ug/L	2.6	102	20	70 - 130
Toluene	MS	1428724-10	ND	25.240	25.000	ug/L		101		70 - 130
	MSD	1428724-10	ND	25.010	25.000	ug/L	0.9	100	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1428724-10	ND	9.8600	10.000	ug/L		98.6		75 - 125
	MSD	1428724-10	ND	9.9600	10.000	ug/L	1.0	99.6		75 - 125
Toluene-d8 (Surrogate)	MS	1428724-10	ND	9.7600	10.000	ug/L		97.6		80 - 120
	MSD	1428724-10	ND	9.9200	10.000	ug/L	1.6	99.2		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1428724-10	ND	9.8700	10.000	ug/L		98.7		80 - 120
	MSD	1428724-10	ND	9.8300	10.000	ug/L	0.4	98.3		80 - 120

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL0295						
Benzene	BXL0295-BLK1	ND	ug/m3	2.0	0.22	
Ethylbenzene	BXL0295-BLK1	ND	ug/m3	5.0	0.23	
Methyl t-butyl ether	BXL0295-BLK1	ND	ug/m3	2.0	0.42	
Toluene	BXL0295-BLK1	ND	ug/m3	2.0	0.20	
p- & m-Xylenes	BXL0295-BLK1	ND	ug/m3	5.0	0.49	
o-Xylene	BXL0295-BLK1	ND	ug/m3	5.0	0.31	
Total Xylenes	BXL0295-BLK1	ND	ug/m3	10	0.80	
Total Petroleum Hydrocarbons	BXL0295-BLK1	ND	ug/m3	200	39	
4-Bromofluorobenzene (Surrogate)	BXL0295-BLK1	124	%	70 - 130 (LCL - UCL)		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		
								Percent Recovery	RPD	Lab Quals
QC Batch ID: BXL0295										
Benzene	BXL0295-BS1	LCS	16.622	15.974	ug/m3	104		70 - 130		
	BXL0295-BSD1	LCSD	17.370	15.974	ug/m3	109	4.4	70 - 130	30	
Ethylbenzene	BXL0295-BS1	LCS	17.486	21.711	ug/m3	80.5		70 - 130		
	BXL0295-BSD1	LCSD	17.520	21.711	ug/m3	80.7	0.2	70 - 130	30	
Methyl t-butyl ether	BXL0295-BS1	LCS	17.035	18.026	ug/m3	94.5		70 - 130		
	BXL0295-BSD1	LCSD	17.662	18.026	ug/m3	98.0	3.6	70 - 130	30	
Toluene	BXL0295-BS1	LCS	18.854	18.842	ug/m3	100		70 - 130		
	BXL0295-BSD1	LCSD	18.985	18.842	ug/m3	101	0.7	70 - 130	30	
p- & m-Xylenes	BXL0295-BS1	LCS	40.608	43.421	ug/m3	93.5		70 - 130		
	BXL0295-BSD1	LCSD	39.843	43.421	ug/m3	91.8	1.9	70 - 130	30	
o-Xylene	BXL0295-BS1	LCS	20.881	21.711	ug/m3	96.2		70 - 130		
	BXL0295-BSD1	LCSD	19.844	21.711	ug/m3	91.4	5.1	70 - 130	30	
Total Xylenes	BXL0295-BS1	LCS	61.489	65.132	ug/m3	94.4		70 - 130		
	BXL0295-BSD1	LCSD	59.687	65.132	ug/m3	91.6	3.0	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	BXL0295-BS1	LCS	80.9	71.6	ug/m3	113		70 - 130		
	BXL0295-BSD1	LCSD	79.8	71.6	ug/m3	111	1.4	70 - 130		

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/08/2014 12:40
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.

Date of Report: 12/17/2014

Project Manager

Ground Zero Analysis, Inc.

1172 Kansas Avenue
Modesto, CA 95354

Client Project: 1262.2

BCL Project: Sullins

BCL Work Order: 1428908

Invoice ID: B191028

Enclosed are the results of analyses for samples received by the laboratory on 12/4/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Christina Herndon
Client Service Rep



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Volatile Organic Analysis (EPA Method 8260B)

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Laboratories, Inc.
Environmental Testing Laboratory Since 19

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Custody and Cooler Receipt Form

Project #:		Project Name:		Billing To: Ground Zero Analysis, Inc.		Analysis Requested						Laboratory:		
1262-2	SULLINS												BC LABS	
Site Address:		187 NORTH L STREET, LIVERMORE, CA												
Global ID No.: NIA		EDF Report: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											Purchase Order #	
Client: Ground Zero Analysis, Inc.		Rep Attn: Ground Zero Analysis, Inc.											Tumaround Time: <input checked="" type="checkbox"/> Standard 1 day 2 day 3 day 5 day	
Client Address: 1172 Kansas Avenue		Type of Event: GWM <input checked="" type="checkbox"/> Gas Monitoring <input type="checkbox"/> Drilling <input type="checkbox"/> Other											Email Lab Report (.pdf): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
City, State, Zip: Modesto, CA 95351		Client Email: gza@groundzeroanalysis.com											Email EDF Lab Report (.zip): <input type="checkbox"/> Yes <input type="checkbox"/> No	
Client Phone: (209) 522-4119		Client Fax: (209) 522-4227											Mail Lab Report: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sampling Info:		Sampled By (Initials): GZA											Special Instructions / Remarks	
Date	Time	EDF Field ID	Sample I.D./Description / Location		No. of Containers	Matrix (Soil, Water, Gas, Other)	Preservation Type							
12/3/14	1005	-1	MW - 306		4	W HCl	X							
12/3/14	1100	-2	MW - 307		4		X							
12/3/14	1155	-3	MW - 204		4		X							
12/3/14	1255	-4	MW - 305		4		X							
12/3/14	1330	-5	MW - 308		4		X							
12/3/14	1414	-6	MW - 304		4		X							
12/3/14	1540	-7	MW - 404		4	V	V	X						
CHK BY DISTRIBUTION SUB-OUT														
Signature		Print Name		Company		Date:		Time:						
Received / Relinquished by: <i>Anthony</i>		Anthony, Sierra		Ground Zero		12/03/14		1640 12:48:14						
Received / Relinquished by: <i>Ross Dickey</i>		Ross Dickey		BC LAB		12-4-14		1640						
Received / Relinquished by: <i>Ross Dickey</i>		Ross Dickey		BC LAB		12-4-14		1885						
REC #: 12-4-14 18:45 REL #: 12-1-14 0003										12-4-14 2203				

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Report ID: 1000306703



Chain of Custody and Cooler Receipt Form for 1428908 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 18	09/04/14	Page <u>1</u> Of <u>1</u>				
Submission #: 14-28908										
SHIPPING INFORMATION		SHIPPING CONTAINER		FREE LIQUID						
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)		Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify)		YES <input type="checkbox"/> NO <input type="checkbox"/>						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments:								
Custody Seals <input type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/>		Comments:								
All samples received? Yes <input type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u>	Container: <u>VOA</u>	Thermometer ID: <u>208</u>	Date/Time <u>12/4/14 20:03</u>	Analyst Init <u>KIB</u>				
Temperature: (A) <u>2.8</u> °C / (C) <u>30</u> °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC1	ABC2	All CD	ABCD	ABC1	ABC2	ABC3	ABC4	ABC5	ABC6
OT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 53L1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										
Comments:										
Sample Numbering Completed By: <u>91</u>	Date/Time: <u>12/4/14 22:15</u>	(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC)								
A = Actual / C = Corrected										

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/17/2014 10:41

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1428908-01	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-306 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 10:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-306 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1428908-02	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-307 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 11:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-307 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1428908-03	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-204 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 11:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-204 Matrix: W Sample QC Type (SACode): CS Cooler ID:

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1428908-04	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-305 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 12:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-305 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1428908-05	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-308 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 13:30 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-308 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1428908-06	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-304 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 14:14 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-304 Matrix: W Sample QC Type (SACode): CS Cooler ID:

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BC**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1428908-07	COC Number: --- Project Number: Sullins Sampling Location: --- Sampling Point: MW-404 Sampled By: GZA of GTIM	Receive Date: 12/04/2014 22:03 Sampling Date: 12/03/2014 15:40 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600100116 Location ID (FieldPoint): MW-404 Matrix: W Sample QC Type (SACode): CS Cooler ID:

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Ground Zero Analysis, Inc.
1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/17/2014 10:41

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-01	Client Sample Name:	Sullins, MW-306, 12/3/2014 10:05:00AM, GZA					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	2.3	ug/L	0.50	0.083	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Toluene	0.34	ug/L	0.50	0.093	EPA-8260B	ND	J	1
Total Xylenes	0.52	ug/L	1.0	0.36	EPA-8260B	ND	J	1
p- & m-Xylenes	0.39	ug/L	0.50	0.28	EPA-8260B	ND	J	1
o-Xylene	0.13	ug/L	0.50	0.082	EPA-8260B	ND	J	1
Total Purgeable Petroleum Hydrocarbons	21	ug/L	50	7.2	Luft-GC/MS	ND	J	1
1,2-Dichloroethane-d4 (Surrogate)	124	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/12/14	12/14/14 05:24	JPT	MS-V13	1	BXL1246

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1172 Kansas Avenue
Modesto, CA 95354

Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-02	Client Sample Name: Sullins, MW-307, 12/3/2014 11:00:00AM, GZA						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	230	ug/L	2.5	0.42	EPA-8260B	ND	A01	1
Ethylbenzene	49	ug/L	0.50	0.098	EPA-8260B	ND		2
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		2
Toluene	8.4	ug/L	0.50	0.093	EPA-8260B	ND		2
Total Xylenes	42	ug/L	1.0	0.36	EPA-8260B	ND		2
p- & m-Xylenes	32	ug/L	0.50	0.28	EPA-8260B	ND		2
o-Xylene	9.7	ug/L	0.50	0.082	EPA-8260B	ND		2
Total Purgeable Petroleum Hydrocarbons	460	ug/L	50	7.2	Luft-GC/MS	ND		2
1,2-Dichloroethane-d4 (Surrogate)	85.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	124	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	EPA-8260B	12/12/14	12/14/14 17:28	JPT	MS-V13	5	BXL1246
2	EPA-8260B	12/12/14	12/14/14 05:48	JPT	MS-V13	1	BXL1246



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Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-03	Client Sample Name: Sullins, MW-204, 12/3/2014 11:55:00AM, GZA						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1600	ug/L	12	2.1	EPA-8260B	ND	A01	1
Ethylbenzene	130	ug/L	6.2	1.2	EPA-8260B	ND	A01	2
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		3
Toluene	39	ug/L	0.50	0.093	EPA-8260B	ND		3
Total Xylenes	270	ug/L	12	4.5	EPA-8260B	ND	A01	2
p- & m-Xylenes	210	ug/L	6.2	3.5	EPA-8260B	ND	A01	2
o-Xylene	64	ug/L	6.2	1.0	EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	1800	ug/L	620	90	Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	94.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	85.2	%	75 - 125 (LCL - UCL)		EPA-8260B			2
1,2-Dichloroethane-d4 (Surrogate)	44.2	%	75 - 125 (LCL - UCL)		EPA-8260B			3
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	83.8	%	80 - 120 (LCL - UCL)		EPA-8260B			3
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	81.5	%	80 - 120 (LCL - UCL)		EPA-8260B			3

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-8260B	12/12/14	12/15/14	14:07	JPT	MS-V13	25	BXL1246
2	EPA-8260B	12/12/14	12/14/14	18:41	JPT	MS-V13	12.500	BXL1246
3	EPA-8260B	12/12/14	12/14/14	07:01	JPT	MS-V13	1	BXL1246

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Reported: 12/17/2014 10:41

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-04	Client Sample Name: Sullins, MW-305, 12/3/2014 12:55:00PM, GZA						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	140	ug/L	1.0	0.17	EPA-8260B	ND	A01	1
Ethylbenzene	49	ug/L	0.50	0.098	EPA-8260B	ND		2
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		2
Toluene	4.2	ug/L	0.50	0.093	EPA-8260B	ND		2
Total Xylenes	67	ug/L	1.0	0.36	EPA-8260B	ND		2
p- & m-Xylenes	51	ug/L	0.50	0.28	EPA-8260B	ND		2
o-Xylene	15	ug/L	0.50	0.082	EPA-8260B	ND		2
Total Purgeable Petroleum Hydrocarbons	640	ug/L	50	7.2	Luft-GC/MS	ND		2
1,2-Dichloroethane-d4 (Surrogate)	89.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	79.5	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260B	12/12/14	12/14/14 17:04	JPT	MS-V13	2	BXL1246
2	EPA-8260B	12/12/14	12/14/14 07:25	JPT	MS-V13	1	BXL1246

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Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-05	Client Sample Name: Sullins, MW-308, 12/3/2014 1:30:00PM, GZA						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	92	ug/L	0.50	0.083	EPA-8260B	ND		1
Ethylbenzene	39	ug/L	0.50	0.098	EPA-8260B	ND		1
Methyl t-butyl ether	0.21	ug/L	0.50	0.11	EPA-8260B	ND	J	1
Toluene	3.0	ug/L	0.50	0.093	EPA-8260B	ND		1
Total Xylenes	20	ug/L	1.0	0.36	EPA-8260B	ND		1
p- & m-Xylenes	17	ug/L	0.50	0.28	EPA-8260B	ND		1
o-Xylene	3.4	ug/L	0.50	0.082	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	1000	ug/L	50	7.2	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	111	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	119	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-8260B	12/12/14	12/14/14 06:12		JPT	MS-V13	1	BXL1246



Ground Zero Analysis, Inc.
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Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-06	Client Sample Name:	Sullins, MW-304, 12/3/2014 2:14:00PM, GZA					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1500	ug/L	12	2.1	EPA-8260B	ND	A01	1
Ethylbenzene	120	ug/L	6.2	1.2	EPA-8260B	ND	A01	2
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		3
Toluene	53	ug/L	0.50	0.093	EPA-8260B	ND		3
Total Xylenes	250	ug/L	12	4.5	EPA-8260B	ND	A01	2
p- & m-Xylenes	190	ug/L	6.2	3.5	EPA-8260B	ND	A01	2
o-Xylene	59	ug/L	6.2	1.0	EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	2000	ug/L	620	90	Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	88.8	%	75 - 125 (LCL - UCL)		EPA-8260B			2
1,2-Dichloroethane-d4 (Surrogate)	49.6	%	75 - 125 (LCL - UCL)		EPA-8260B			3
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	108	%	80 - 120 (LCL - UCL)		EPA-8260B			3
4-Bromofluorobenzene (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	92.0	%	80 - 120 (LCL - UCL)		EPA-8260B			3

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	EPA-8260B	12/12/14	12/15/14 14:31	JPT	MS-V13	25	BXL1246
2	EPA-8260B	12/12/14	12/14/14 18:16	JPT	MS-V13	12.500	BXL1246
3	EPA-8260B	12/12/14	12/14/14 06:37	JPT	MS-V13	1	BXL1246

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Reported: 12/17/2014 10:41
Project: Sullins
Project Number: 1262.2
Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1428908-07	Client Sample Name: Sullins, MW-404, 12/3/2014 3:40:00PM, GZA						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	270	ug/L	2.5	0.42	EPA-8260B	ND	A01	1
Ethylbenzene	50	ug/L	0.50	0.098	EPA-8260B	ND		2
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		2
Toluene	11	ug/L	0.50	0.093	EPA-8260B	ND		2
Total Xylenes	93	ug/L	1.0	0.36	EPA-8260B	ND		2
p- & m-Xylenes	72	ug/L	0.50	0.28	EPA-8260B	ND		2
o-Xylene	21	ug/L	0.50	0.082	EPA-8260B	ND		2
Total Purgeable Petroleum Hydrocarbons	980	ug/L	50	7.2	Luft-GC/MS	ND		2
1,2-Dichloroethane-d4 (Surrogate)	84.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	85.7	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	108	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-8260B	12/12/14	12/14/14	17:52	JPT	MS-V13	5	BXL1246
2	EPA-8260B	12/12/14	12/14/14	07:49	JPT	MS-V13	1	BXL1246



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Reported: 12/17/2014 10:41

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1246						
Benzene	BXL1246-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BXL1246-BLK1	ND	ug/L	0.50	0.098	
Methyl t-butyl ether	BXL1246-BLK1	ND	ug/L	0.50	0.11	
Toluene	BXL1246-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BXL1246-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BXL1246-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BXL1246-BLK1	ND	ug/L	0.50	0.082	
Total Purgeable Petroleum Hydrocarbons	BXL1246-BLK1	ND	ug/L	50	7.2	
1,2-Dichloroethane-d4 (Surrogate)	BXL1246-BLK1	101	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXL1246-BLK1	96.7	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXL1246-BLK1	92.7	%	80 - 120 (LCL - UCL)		

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Reported: 12/17/2014 10:41

Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BXL1246		Used client sample: N								
Benzene	MS	1428224-20	ND	23.380	25.000	ug/L		93.5		70 - 130
	MSD	1428224-20	ND	22.950	25.000	ug/L	1.9	91.8	20	70 - 130
Toluene	MS	1428224-20	ND	24.080	25.000	ug/L		96.3		70 - 130
	MSD	1428224-20	ND	23.910	25.000	ug/L	0.7	95.6	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1428224-20	ND	9.5100	10.000	ug/L		95.1		75 - 125
	MSD	1428224-20	ND	9.8200	10.000	ug/L	3.2	98.2		75 - 125
Toluene-d8 (Surrogate)	MS	1428224-20	ND	10.040	10.000	ug/L		100		80 - 120
	MSD	1428224-20	ND	10.040	10.000	ug/L	0	100		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1428224-20	ND	9.9700	10.000	ug/L		99.7		80 - 120
	MSD	1428224-20	ND	10.050	10.000	ug/L	0.8	100		80 - 120

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Project: Sullins

Project Number: 1262.2

Project Manager: Project Manager

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.