3R - 322**2013 AGWMR** 03/11/2014



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March 11, 2014

Glenn Von Gonten New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: Online Submission of 2013 Annual Groundwater Reports

Dear Mr. Von Gonten

LT Environmental (LTE), Inc., on behalf of Williams Field Services, LLC (Williams), is electronically submitting the attached 2013 annual groundwater monitoring reports for the following sites:

- Davis #1
- Dogie Compressor Station East Pit
- Florance #40
- Florance #47
- Ice Canyon Drip
- Jicarilla Contract #147-6
- Pritchard #2A.

If you have any questions regarding these reports please contact Ashley Ager with LTE at 970-385-1096 or <u>aager@ltenv.com</u> or Danny Ruetlinger with Williams at danny.reutlinger@williams.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Ashlay L agn

Ashley Ager Senior Geologist/Office Manager

cc: Danny Ruetlinger Attachments (7)

Brooke Herb Staff Geologist

2013 ANNUAL GROUNDWATER REPORT

ICE CANYON DRIP

ADMINISTRATIVE/ENVIRONOMENTAL ORDER NUMBER 3RP-322-0

FEBRUARY 2014

Prepared for:

WILLIAMS FIELD SERVICES, LLC Tulsa, Oklahoma



2013 ANNUAL GROUNDWATER REPORT

ICE CANYON DRIP ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER 3RP-322-0

FEBRUARY 2014

Prepared for:

WILLIAMS FIELD SERVICES, LLC PO Box 3483, MD 48-6 Tulsa, Oklahoma 74101

Prepared by:

LT ENVIRONMENTAL, INC. 2243 Main Avenue, Suite 3 Durango, Colorado 81301 (970) 385-1096



EX	ECUTIVE SUMMARY	ii
1.0		1
1.0	INTRODUCTION	1
	1.1 LOCATION	1
	1.2 HISTORY	1
2.0	METHODOLOGY	1
	2.1 WATER AND PRODUCT LEVEL MEASUREMENTS	2
	2.2 GROUNDWATER SAMPLING	2
	2.3 GROUNDWATER CONTOUR MAPS	2
	2.4 MONITORING WELL INSTALLATION AND DEVELOPMENT	3
3.0	RESULTS	3
4.0	CONCLUSIONS	4
5.0	RECOMMENDATIONS	4

TABLE OF CONTENTS

FIGURES

FIGURE 1	SITE LOCATION MAP
FIGURE 2	GROUNDWATER ELEVATION AND ANALYTICAL RESULTS
	(MARCH 2013)
FIGURE 3	GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (JUNE
	2013)
FIGURE 4	GROUNDWATER ELEVATION AND ANALYTICAL RESULTS
	(SEPTEMBER 2013)
FIGURE 5	GROUNDWATER ELEVATION AND ANALYTICAL RESULTS
	(DECEMBER 2013)
	TABLES
TABLE 1	GROUNDWATER ELEVATION SUMMARY

 TABLE 2
 GROUNDWATER LABORATORY ANALYTICAL RESULTS

APPENDICES

APPENDIX A	2013 FIELD NOTES

- APPENDIX B LABORATORY ANALYTICAL REPORTS
- APPENDIX C BOREHOLE LOG AND MONITORING WELL COMPLETION DIAGRAMS
- APPENDIX D WELL DEVELOPMENT FORMS



EXECUTIVE SUMMARY

Groundwater at the Ice Canyon Drip (Administrative/Environmental Order Number 3RP-322-0) (Site) is impacted by petroleum hydrocarbons due to a release from a former drip pit. During 2013, LT Environmental Inc., (LTE) was retained by Williams Field Services, LLC (Williams) to visit the Site and evaluate the status of groundwater monitoring wells, complete monitoring requirements, and install a new groundwater monitoring well.

Between March 2013 and December 2013, four groundwater monitoring events were conducted (March 2013, June 2013, September 2013, and December 2013). Groundwater monitoring well top-of-casing elevations were re-surveyed on June 19, 2013. Depth to groundwater data for the monitoring events conducted in 2013 indicated the groundwater flow direction was to the south-southwest.

Laboratory analytical results indicated benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations in groundwater monitoring wells MW-1, MW-3, and MW-7 were compliant with the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards in March 2013. Williams ceased groundwater sampling in these wells after the first quarter sampling event due to BTEX concentrations being compliant with the NMWQCC standards for eight or more quarters. Groundwater sampling ceased in monitoring wells MW-4, MW-5, and MW-8 after the second quarter monitoring event due to BTEX concentrations being compliant with the NMWQCC standards for eight or more quarters. In March 2013, 0.01 feet of free-phase hydrocarbons (PSH) was measured in monitoring wells MW-5 and SVE-4. Based on laboratory analytical results from previous and subsequent samples and observations made before and after March 2013, it is likely that the equipment was malfunctioning and no PSH was actually present. Monitoring well MW-6 had an insufficient volume of water to collect a sample in March, June, and September 2013. Laboratory analytical results indicated that BTEX concentrations were compliant with the NMWQCC groundwater standards in December 2013 in monitoring well MW-6. BTEX concentrations were compliant with the NMWQCC standards in samples collected from monitoring well SVE-4, except in June 2013, when the benzene concentration of 13 micrograms per liter exceeded the NMWQCC groundwater standard.

Groundwater monitoring well MW-2 was not sampled between March 2013 and December 2013 due to an obstruction in the well. On October 23, 2013, LTE installed MW-2R as a replacement well for MW-2. Monitoring well MW-2R is located south of MW-2 in order to facilitate the gathering of groundwater elevation and groundwater analytical data from the source area. Monitoring well MW-2R was immediately developed after installation. Monitoring well MW-2R was sampled in December 2013; laboratory analytical results indicate BTEX concentrations were compliant with the NMWQCC groundwater standards.

Groundwater monitoring wells will be monitored quarterly for groundwater elevations and presence of PSH. Groundwater samples will be collected from monitoring well SVE-4 quarterly until eight quarters of BTEX concentrations compliant with the NMWQCC standards have been documented.



1.0 INTRODUCTION

LT Environmental, Inc. (LTE), on behalf of Williams Field Services, LLC (Williams), has prepared this report detailing groundwater monitoring activities completed from March 2013 through December 2013 at the Ice Canyon Drip (Administrative/Environmental Order Number 3RP-322-0) (Site). The scope of work for this project includes quarterly monitoring of petroleum hydrocarbon impacts to groundwater resulting from the operation of a former drip pit.

1.1 LOCATION

The Site is located at latitude 36.485004 and longitude -107.522750 in Unit H, Section 13, Township 26 North, Range 7 West as depicted on Figure 1. The Site is in Ice Canyon in the San Juan Basin, Rio Arriba County, New Mexico.

1.2 HISTORY

Soil and groundwater was impacted by a former drip pit. Remediation included excavation of 383 cubic yards of impacted soil in June 1997. A soil sample from the bottom of the excavation at 23 feet below ground surface (bgs) contained 144 milligrams per kilogram (mg/kg) total petroleum hydrocarbons (TPH)-diesel range organics (DRO) and 278 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX). In November 1997, a groundwater monitoring well was installed in the excavation. The depth to groundwater was 38 feet bgs and a groundwater sample contained 19,523 micrograms per liter (μ g/L) of benzene. In January 1998, an additional 8,690 cubic yards of impacted soil was excavated. In May 1998, groundwater monitoring wells MW-1, MW-2, MW-3, and MW-4 were installed. In December 1998, a 4-inch soil vapor extraction (SVE) well was installed. In 2000, groundwater monitoring wells MW-5, MW-6, MW-7, and MW-8 were installed.

Between May 1998 and December 2012, groundwater at the Site was monitored. Groundwater monitoring well MW-2 and the SVE well have both contained phase-separated hydrocarbons (PSH) at some time between 1998 and 2013. Records regarding these activities can be found in previous groundwater reports submitted to the New Mexico Oil Conservation Division (NMOCD).

2.0 METHODOLOGY

During 2013, LTE conducted quarterly groundwater monitoring activities at the Site. The activities included measuring groundwater elevations at nine monitoring wells and collecting groundwater samples when possible at select wells. In March 2013, a site visit was conducted by LTE to observe site conditions and evaluate the status of the groundwater monitoring wells. Depth to groundwater and depth to product were measured and groundwater samples were collected, when possible, for laboratory analysis of BTEX. During the June 2013 site visit, LTE personnel conducted quarterly sampling and resurveyed existing monitoring well top-of-casings. On October 23, 2013, LTE installed MW-2R to replace MW-2 and immediately developed the well. Samples were collected from MW-2R in December 2013.



2.1 WATER AND PRODUCT LEVEL MEASUREMENTS

Groundwater level monitoring activities included recording depth to groundwater measurements with a Keck oil/water interface probe. The presence of PSH was investigated using the interface probe. The interface probe was decontaminated with Alconox[™] soap and rinsed with de-ionized water prior to each measurement. These data are summarized in Table 1.

2.2 GROUNDWATER SAMPLING

LTE conducted at least one quarterly sampling event at monitoring wells MW-1, MW-3, MW-4, MW-6, MW-7, MW-8, and SVE-4. Monitoring well MW-2 was not sampled due to an obstruction in the well. Prior to sampling groundwater, depth to groundwater and total depth of groundwater monitoring wells were measured with a Keck oil/water interface probe. Groundwater monitoring wells containing measurable PSH were not sampled. The volume of water in each monitoring well was calculated, and a minimum of three well casing volumes of water was purged from each well using a dedicated polyvinyl chloride (PVC) bailer. As water was removed from the well, pH, electric conductivity, and temperature were monitored. Groundwater monitoring wells were purged until these parameters stabilized, indicating that the purge water was representative of aquifer conditions, or until the well was purged dry. Stabilization was defined as three consecutive stable readings for each water property (\pm 0.4 units for pH, \pm 10 percent for electric conductivity, and \pm 2° Celsius for temperature). All purge water was containerized and disposed of at a facility designated by Williams. A copy of the 2013 quarterly field notes are presented in Appendix A.

Once each monitoring well was properly purged, groundwater samples were collected by filling three 40-milliliter (ml) glass vials. The laboratory-supplied vials were filled and capped with no air inside to prevent degradation of the sample. Samples were labeled with the date and time of collection, monitoring well designation, project name, collector's name, and parameters to be analyzed. Samples were stored on ice in a sealed cooler and maintained under chain-of-custody (COC) procedures. The samples were transferred to Hall Environmental Analysis Laboratory (HEAL) for analysis. COC forms were completed documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used (if any), analyses required, and sampler's signature. HEAL analyzed the samples for BTEX using United States Environmental Protection Agency (USEPA) Method 8021. COC forms are included in the laboratory analytical reports in Appendix B.

2.3 GROUNDWATER CONTOUR MAPS

LTE used existing top-of-casing well elevations and groundwater elevations obtained from monitoring wells during the March 2013 site visit to draft a groundwater contour map (Figure 2). LTE returned to the Site to re-survey top-of-casing well elevations on June 21, 2013. The updated top-of-casing elevations were used to draft groundwater contours and determine groundwater flow for the June, September, and December 2013 quarterly monitoring events (Figures 3 through 5). Contours were inferred based on groundwater elevations obtained and observations of physical characteristics at the Site (topography, proximity to irrigation ditches, etc.).



2.4 MONITORING WELL INSTALLATION AND DEVELOPMENT

LTE installed a monitoring well at the Site on October 23, 2013, using a GeoProbe[®] drill rig. An LTE Geologist logged continuous soil samples and described lithology using the Unified Soil Classification System (USCS). The borehole logs are included as Appendix C. The interval from immediately beneath the ground surface and then approximately every two feet thereafter were screened for volatile aromatic hydrocarbons as well as any soil that was stained or had a hydrocarbon odor. Screening was conducted with a photo-ionization detector (PID) equipped with a 10.6 electron volt lamp.

Monitoring well MW-2R was constructed with 2-inch diameter schedule 40 PVC and included 15 feet of 0.01-inch machine slotted flush-threaded PVC well screen. A clean 10-20 grade silica sand gravel pack was placed from the bottom of the boring to 2 feet above the top of the screen. Above the gravel pack, 3/8-inch bentonite chips were set to the surface. LTE installed a concrete surface completion and a steel well protector with locking cap around the PVC stick-up. The monitoring well construction diagram is included in Appendix C. After installation, the new monitoring well was surveyed and developed. The top-of-casing elevation was determined to an accuracy of no less than plus or minus 0.01 feet.

Groundwater monitoring well MW-2R was developed utilizing a clean, disposable PVC bailer. LTE purged fluid until the pH, specific conductivity, and temperature were stabilized and turbidity was reduced to the greatest extent possible. All purge water was collected and disposed of at the Dogie Compressor Station, New Mexico. A monitoring well development form is included as Appendix D. Monitoring well MW-2R was sampled in December 2013.

3.0 RESULTS

Depth to groundwater data during the 2013 monitoring events are summarized on Table 1. Groundwater flow direction was determined to be to the south/southwest except in September when flow direction was to the west (Figure 2 through 5).

Laboratory analytical results indicated BTEX concentrations in MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8 were compliant with the NMWQCC groundwater standards or were below the laboratory reporting detection limits during 2013. Sampling of these monitoring wells ceased since BTEX concentrations historically have been compliant with the NMWQCC standards. In March 2013, 0.01 feet of PSH was measured in monitoring wells MW-5 and SVE-4. Due to laboratory analytical results from previous and subsequent samples and observations made before and after March 2013, it is likely the equipment was malfunctioning and no PSH was actually present.

During the June 2013 monitoring event, laboratory analytical results indicated that SVE-4 exceeded the benzene concentration for the NMWQCC groundwater standard of 10 μ g/L with a concentration of 13 μ g/L. SVE-4 was compliant with NMWQCC groundwater standards during the September and December 2013 monitoring events. Groundwater monitoring well MW-2 was not sampled during the 2013 monitoring events due to an obstruction in the well. Laboratory



analytical results for groundwater are summarized in Table 2. Copies of the laboratory analytical results are in Appendix B.

The soil observed in soil boring MW-2R is a well graded sand that extended from the ground surface to 21 feet bgs. The well graded sand is underlain by a silty sand to the terminus of the groundwater monitoring well at 48 feet bgs. Groundwater was encountered at 38 feet bgs. Laboratory analytical results from groundwater sampling in December 2013 indicate no BTEX concentrations were detected.

4.0 CONCLUSIONS

A new monitoring well, MW-2R, installed in the original source area was sampled and laboratory analytical results indicated BTEX concentrations at the source have naturally attenuated. Groundwater sampled from surrounding monitoring wells did not contain detectable BTEX concentrations, except at monitoring well SVE-4, which contained 13 μ g/L of benzene in June 2013.

5.0 **RECOMMENDATIONS**

Williams ceased groundwater sampling at MW-1, MW-3, MW-4, MW-5, MW-7, and MW-8 in 2013 since eight or more consecutive quarters of sampling or recent and historical results indicated BTEX concentrations were compliant with the NMWQCC standards. Additionally, Williams intends to cease sampling at monitoring wells MW-6 and MW-2R. Monitoring well MW-6 typically does not contain a significant volume of groundwater to collect a sample and historical records indicate it was compliant with the NMWQCC standards in 2005. A sample collected in December of 2013 confirms these results. Since the groundwater sample collected after installation from monitoring well MW-2R was below laboratory detection limits, the well will not be sampled again. Groundwater samples will be collected from SVE-4 quarterly for analysis of BTEX until eight consecutive quarters are compliant with the NMWQCC groundwater at the nine monitoring wells quarterly.



FIGURES





P:\Williams Four Corners\GIS\MXD\034013001_ICE_CANYON_DRIP\034013001_ICE_CANYON_FIG01_SL.mxd



P:Williams Field Services\GIS\MXD\034013010_ICE_CANYON_DRIP\034013001_ICE_CANYON_FIG02_GWELEV_GWANALY_2013_Q1.mxc









GROUNDWATER ELEVATION SUMMARY ICE CANYON DRIP WILLIAMS FIELD SERVICES, LLC

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Product (feet BTOC)	Product Thickness (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-1	4/6/2012	6.180.13	UNK	UNK	UNK	UNK
MW-1	6/14/2012	6 180 13	UNK	UNK	UNK	UNK
MW-1	9/27/2012	6,180,13	UNK	UNK	UNK	UNK
MW-1	12/7/2012	6 180 13	UNK	UNK	UNK	UNK
MW-1	3/4/2013	6.180.13	NP	NP	46.75	6.133.38
MW-1	6/27/2013**	6.180.15	NP	NP	47.37	6.132.78
MW-1	9/24/2013	6.180.15	NP	NP	44.54	6,135,61
MW-1	12/2/2013	6 180 15	NP	NP	43.67	6 136 48
10100 1	12/2/2013	0,100.15	111	111	15.07	0,150.10
MW-2	4/6/2012	UNK	UNK	UNK	UNK	UNK
MW-2	6/14/2012	UNK	UNK	UNK	UNK	UNK
MW-2	9/27/2012	UNK	UNK	UNK	UNK	UNK
MW-2	12/7/2012	UNK	UNK	UNK	UNK	UNK
MW-2	3/4/2013	UNK	NS-OB	NS-OB	NS-OB	NS-OB
MW-2	6/27/2013**	6.174.91	NS-OB	NS-OB	NS-OB	NS-OB
MW-2	9/24/2013	6 174 91	NS-OB	NS-OB	NS-OB	NS-OB
10100 2	<i>)/24/2015</i>	0,174.91	115 015		115 00	115 015
MW-2R	12/2/2013	6 174 30	NP	NP	37.67	6 136 63
11111 210	12/2/2013	0,171.50	111	111	57.07	0,150.05
MW-3	4/6/2012	6.174.19	UNK	UNK	UNK	UNK
MW-3	6/14/2012	6.174.19	UNK	UNK	UNK	UNK
MW-3	9/27/2012	6 174 19	UNK	UNK	UNK	UNK
MW-3	12/7/2012	6 174 19	UNK	UNK	UNK	UNK
MW-3	3/4/2013	6 174 19	NP	NP	40.66	6 133 53
MW-3	6/27/2013**	6 174 09	NP	NP	41.29	6,132,80
MW-3	9/24/2013	6 174 09	NP	NP	38.28	6135.81
MW-3	12/2/2013	6,174,09	NP	NP	37.49	6,136,60
		-,			••••	-,
MW-4	4/6/2012	6,173.73	UNK	UNK	UNK	UNK
MW-4	6/14/2012	6,173.73	UNK	UNK	UNK	UNK
MW-4	9/27/2012	6,173.73	UNK	UNK	UNK	UNK
MW-4	12/7/2012	6,173.73	UNK	UNK	UNK	UNK
MW-4	3/4/2013	6,173.73	NP	NP	40.45	6,133.28
MW-4	6/27/2013**	6,173.76	NP	NP	41.11	6,132.65
MW-4	9/24/2013	6,173.76	NP	NP	37.96	6,135.80
MW-4	12/2/2013	6,173.76	NP	NP	37.31	6,136.45
MW-5	4/6/2012	6,169.97	UNK	UNK	UNK	UNK
MW-5	6/14/2012	6,169.97	UNK	UNK	UNK	UNK
MW-5	9/27/2012	6,169.97	UNK	UNK	UNK	UNK
MW-5	12/7/2012	6,169.97	UNK	UNK	UNK	UNK
MW-5	3/4/2013 a	6,169.97	36.82	0.01	36.83	6,133.14
MW-5	6/27/2013**	6,170.01	NP	NP	37.45	6,132.56
MW-5	9/24/2013	6,170.01	NP	NP	34.29	6,135.72
MW-5	12/2/2013	6,170.01	NP	NP	33.67	6,136.34
<u>.</u>						
MW-6	4/6/2012	6,171.36	UNK	UNK	UNK	UNK
MW-6	6/14/2012	6,171.36	UNK	UNK	UNK	UNK
MW-6	9/27/2012	6,171.36	UNK	UNK	UNK	UNK
MW-6	12/7/2012	6,171.36	UNK	UNK	UNK	UNK
MW-6	3/4/2013	6,171.36	NP	NP	NS-IW	NS-IW



GROUNDWATER ELEVATION SUMMARY ICE CANYON DRIP WILLIAMS FIELD SERVICES, LLC

Well Name	Date	Top of Casing Elevation (feet AMSL)	Depth to Product (feet BTOC)	Product Thickness (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-6	6/27/2013**	6,171.36	NP	NP	NS-IW	NS-IW
MW-6	9/24/2013	6,171.36	NP	NP	35.50	6,135.86
MW-6	12/2/2013	6,171.36	NP	NP	34.94	6,136.42
MW-7	4/6/2012	6,171.56	UNK	UNK	UNK	UNK
MW-7	6/14/2012	6,171.56	UNK	UNK	UNK	UNK
MW-7	9/27/2012	6,171.56	UNK	UNK	UNK	UNK
MW-7	12/7/2012	6,171.56	UNK	UNK	UNK	UNK
MW-7	3/4/2013	6,171.56	NP	NP	38.28	6,133.28
MW-7	6/27/2013**	6,171.55	NP	NP	38.94	6,132.61
MW-7	9/24/2013	6,171.55	NP	NP	35.65	6,135.90
MW-7	12/2/2013	6,171.55	NP	NP	35.11	6,136.44
	-	-				
MW-8	4/6/2012	6,167.64	UNK	UNK	UNK	UNK
MW-8	6/14/2012	6,167.64	UNK	UNK	UNK	UNK
MW-8	9/27/2012	6,167.64	UNK	UNK	UNK	UNK
MW-8	12/7/2012	6,167.64	UNK	UNK	UNK	UNK
MW-8	3/4/2013	6,167.64	NP	NP	34.69	6,132.95
MW-8	6/27/2013**	6,167.69	NP	NP	35.31	6,132.38
MW-8	9/24/2013	6,167.69	NP	NP	31.74	6,135.95
MW-8	12/2/2013	6,167.69	NP	NP	31.48	6,136.21
					1	
SVE-4	4/6/2012	6,175.95	UNK	UNK	UNK	UNK
SVE-4	6/14/2012	6,175.95	UNK	UNK	UNK	UNK
SVE-4	9/27/2012	6,175.95	UNK	UNK	UNK	UNK
SVE-4	12/7/2012	6,175.95	UNK	UNK	UNK	UNK
SVE-4*	3/4/2013 a	6,175.95	42.72	0.01	42.73	6,133.23
SVE-4*	6/27/2013**	6,175.97	NP	NP	43.21	6,132.76
SVE-4	9/24/2013	6,175.97	NP	NP	40.23	6,135.74
SVE-4	12/2/2013	6,175.97	NP	NP	39.43	6,136.54

Notes:

 \ast Due to presence of product recovery device, this may not be static water level

** Top of casing elevation was resurveyed on 6/19/13

 $\label{eq:Groundwater elevation calculation in wells with product: (Top of Casing Elevation - Depth to Water) + (Product Thickness * 0.8) \\ AMSL - above mean sea level$

BTOC - below top of casing

NP - no product

NS-IW - well did not contain sufficient volume of water to be sampled

NS-OB - not sampled due to well obstruction

UNK - data is not known

a - Phase separated hydrocarbons not likely present in wells. Malfunction in interface probe.



Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	
NMWQCC Sta	ndard (µg/L)	10	750	750	620	
MW-1	6/4/1998	< 0.5	< 0.5	<0.5	<1.0	
MW-1	9/14/1998	<1	<1	<1	<2	
MW-1	12/9/1998	<1	<1	<1	<2	
MW-1	2/10/1999	< 0.5	<0.5	<0.5	<1	
MW-1	3/13/2001	<1.0	<1.0	<1.0	<1.0	
MW-1	5/4/2001	<1.0	<1.0	<1.0	<1.0	
MW-1	10/29/2001	<1.0	<2.0	<2.0	<2.0	
MW-1	3/25/2002	ND	ND	ND	ND	
MW-1	6/17/2002	ND	ND	ND	ND	
MW-1	12/16/2003	<2.0	<2.0	<2.0	<5.0	
MW-1	9/18/2004	<2.0	<2.0	<2.0	<5.0	
MW-1	12/8/2004	<2.0	<2.0	<2.0	<5.0	
MW-1	3/4/2005	<2.0	<2.0	<2.0	<5.0	
MW-1	6/16/2005	<2.0	<2.0	<2.0	<5.0	
MW-1	9/14/2005	<2.0	<2.0	<2.0	<5.0	
MW-1	3/30/2010	<1.0	<1.0	<1.0	<3.0	
MW-1	6/22/2010	<1.0	<1.0	<1.0	<3.0	
MW-1	9/16/2010	<1.0	<1.0	<1.0	<3.0	
MW-1	12/8/2010	<1.0	<1.0	<1.0	<3.0	
MW-1	3/10/2011	<1.0	<1.0	<1.0	<3.0	
MW-1	6/15/2011	<1.0	<1.0	<1.0	<3.0	
MW-1	9/13/2011	<1.0	<1.0	<1.0	<3.0	
MW-1	1/6/2012	<1.0	<1.0	<1.0	<3.0	
MW-1	4/6/2012	<1.0	<1.0	<1.0	<3.0	
MW-1	6/14/2012	<1.0	<1.0	<1.0	<3.0	
MW-1	9/27/2012	<1.0	<1.0	<1.0	<3.0	
MW-1	12/7/2012	<1.0	<1.0	<1.0	<3.0	
MW-1	3/4/2013	<1.0	<1.0	<1.0	<2.0	
MW-2	11/12/1997	19,523	31,288	886	7,437	
MW-2	6/4/1998	4,200	3,400	420	7,800	
MW-2	9/14/1998	1,900	640	340	4,300	
MW-2	12/9/1998	3,800	1,500	540	6,580	



Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Sta	andard (µg/L)	10	750	750	620
MW-2	2/10/1999	5,100	3,100	640	8,600
MW-2	4/27/1999	4,800	2,000	570	7,400
MW-2	9/20/1999	4,900	570	520	5,300
MW-2	11/16/1999	5,700	650	560	7,800
MW-2	2/7/2000	6,000	640	610	7,900
MW-2	5/18/2000	5,900	310	570	7,000
MW-2	5/18/2000	5,800	320	580	6,990
MW-2	11/13/2000	3,590	482	374	4,090
MW-2	3/13/2001	1,540	191	182	1,340
MW-2	5/4/2001	2,640	248	293	2,000
MW-2	10/29/2001	2,000	2.3	300	200
MW-2	3/25/2002	370	16	70	330
MW-2	6/17/2002	320	ND	65	150
MW-2	9/26/2002	320	4.6	49	210
MW-2	12/16/2003*	330	15	110	46
MW-2	9/18/2004*	1,900	<20	420	3,700
MW-2	12/8/2004	11	<2.0	2.9	37
MW-2	3/4/2005	<2.0	<2.0	<2.0	9.2
MW-2	6/16/2005	50	3.7	<2.0	8.9
MW-2	9/14/2005	160	5.9	5.2	35
MW-2	12/2/2005	146*	5.8	6.5	58.8
MW-2	7/14/2006	568*	<1.0	39.8	75.7
MW-2	4/6/2012	NS	NS	NS	NS
MW-2	6/14/2012	NS	NS	NS	NS
MW-2	9/27/2012	NS	NS	NS	NS
MW-2	12/7/2012	NS	NS	NS	NS
MW-2	3/4/2013	NS-OB	NS-OB	NS-OB	NS-OB
MW-2	6/27/2013	NS-OB	NS-OB	NS-OB	NS-OB
MW-2	9/24/2013	NS-OB	NS-OB	NS-OB	NS-OB
-	· · ·		T	T	
MW-2R	12/2/2013	<1.0	<1.0	<1.0	<2.0
MW-3	6/4/1998	<0.5	<0.5	<0.5	<1.0



Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	
NMWQCC Sta	ndard (µg/L)	10	750	750	620	
MW-3	9/14/1998	<1	<1	<1	<2	
MW-3	12/9/1998	<1	<1	<1	<2	
MW-3	2/10/1999	< 0.5	<0.5	<0.5	<1	
MW-3	11/13/2000	<1.0	<1.0	<1.0	<1.0	
MW-3	3/13/2001	<1.0	<1.0	<1.0	<1.0	
MW-3	5/4/2001	<1.0	<1.0	<1.0	<1.0	
MW-3	10/29/2001	<1.0	<2.0	<2.0	<2.0	
MW-3	3/25/2002	ND	ND	ND	ND	
MW-3	6/17/2002	ND	ND	ND	ND	
MW-3	12/16/2003	<2.0	<2.0	<2.0	<5.0	
MW-3	9/18/2004	<2.0	<2.0	<2.0	<5.0	
MW-3	12/8/2004	<2.0	<2.0	<2.0	<5.0	
MW-3	3/4/2005	<2.0	<2.0	<2.0	<5.0	
MW-3	6/16/2005	<2.0	<2.0	<2.0	<5.0	
MW-3	9/14/2005	<2.0	<2.0	<2.0	<5.0	
MW-3	12/2/2005	<2.0	<2.0	<2.0	<5.0	
MW-3	3/30/2010	<1.0	<1.0	<1.0	<3.0	
MW-3	9/16/2010	<1.0	<1.0	<1.0	<3.0	
MW-3	6/15/2011	<1.0	<1.0	<1.0	<3.0	
MW-3	1/6/2012	<1.0	<1.0	<1.0	<3.0	
MW-3	4/6/2012	NS	NS	NS	NS	
MW-3	6/14/2012	NS	NS	NS	NS	
MW-3	9/27/2012	NS	NS	NS	NS	
MW-3	12/7/2012	<1.0	<1.0	<1.0	<3.0	
MW-3	3/4/2013	<1.0	<1.0	<1.0	<2.0	
MW-4	6/19/1998	610	1,100	73	540	
MW-4	9/14/1998	58	65	7	35	
MW-4	12/9/1998	450	650	48	266	
MW-4	2/10/1999	1,400	3,100	150	1,000	
MW-4	4/27/1999	1,200	2,900	130	970	
MW-4	9/20/1999	540	450	64	237	
MW-4	11/16/1999	1,000	2,200	130	790	



GROUNDWATER LABORATORY ANALYTICAL RESULTS ICE CANYON DRIP WILLIAMS FIELD SERVICES, LLC

NHWQCC Standard ($\mu g/L$) 10 750 750 620 MW-4 2/7/2000 480 640 66 236 MW-4 5/18/2000 550 910 80 303 MW-4 11/13/2000 495 676 79.3 411 MW-4 3/13/2001 30.9 20.7 5.03 20.4 MW-4 5/4/2001 45.5 23.7 7.63 31.7 MW-4 3/25/2002 5.1 2 ND ND MW-4 4/25/2002 29 20 2.5 28 MW-4 9/26/2002 29 20 2.5 28 MW-4 12/16/2003 <2.0 <2.0 <5.0 MW-4 12/8/2004* 60 7.1 21 140 MW-4 12/8/2004 34 3.2 17 130 MW-4 12/8/2004 34 3.2 17 130 MW-4 12/4/2005 20 <2.0	Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-4 $2/7/2000$ 48064066 236 MW-4 $5/18/2000$ 55091080303MW-4 $11/13/2001$ 30.9 20.7 5.03 20.4 MW-4 $3/13/2001$ 30.9 20.7 5.03 20.4 MW-4 $5/4/2001$ 45.5 23.7 7.63 31.7 MW-4 $10/29/2001$ 11 3.3 <2.0 3.4 MW-4 $3/25/2002$ 5.1 2NDNDMW-4 $6/17/2002$ NDNDNDNDMW-4 $9/26/2002$ 29 20 2.5 28 MW-4 $12/16/2003$ <2.0 <2.0 <2.0 <5.0 MW-4 $9/18/2004^*$ 60 7.1 21 140 MW-4 $12/8/2004$ 34 3.2 17 130 MW-4 $3/4/2005$ 12 3.4 <2.0 8.5 MW-4 $6/16/2005$ 16 <2.0 7.5 35 MW-4 $9/14/2005$ 20 <2.0 13 72 MW-4 $12/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 <1.0 <3.0 MW-4 $6/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 </th <th>NMWQCC Sta</th> <th>ndard (µg/L)</th> <th>10</th> <th>750</th> <th>750</th> <th>620</th>	NMWQCC Sta	ndard (µg/L)	10	750	750	620
MW-4 $5/18/2000$ 55091080303MW-4 $11/13/2000$ 49567679.3411MW-4 $3/13/2001$ 30.920.75.0320.4MW-4 $5/4/2001$ 45.523.77.6331.7MW-4 $10/29/2001$ 113.3 <2.0 3.4MW-4 $3/25/2002$ 5.12NDNDMW-4 $6/17/2002$ NDNDNDNDMW-4 $9/26/2002$ 29202.528MW-4 $9/18/2004^*$ 607.121140MW-4 $9/18/2004^*$ 607.121140MW-4 $12/8/2004$ 343.217130MW-4 $3/4/2005$ 12 3.4 <2.0 8.5 MW-4 $6/16/2005$ 16 <2.0 7.5 35 MW-4 $9/14/2005$ 20 <2.0 8.5 58.6 MW-4 $1/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 1.3 13.4 MW-4 $6/22/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <t< th=""><th>MW-4</th><th>2/7/2000</th><th>480</th><th>640</th><th>66</th><th>236</th></t<>	MW-4	2/7/2000	480	640	66	236
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	MW-4	5/18/2000	550	910	80	303
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	MW-4	11/13/2000	495	676	79.3	411
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	MW-4	3/13/2001	30.9	20.7	5.03	20.4
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	MW-4	5/4/2001	45.5	23.7	7.63	31.7
MW-4 $3/25/2002$ 5.12NDNDMW-4 $6/17/2002$ NDNDNDNDMW-4 $9/26/2002$ 29 202.528MW-4 $12/16/2003$ < 2.0 < 2.0 < 2.0 < 5.0 MW-4 $9/18/2004*$ 60 7.121140MW-4 $12/8/2004$ 34 3.2 17130MW-4 $12/8/2004$ 34 3.2 17130MW-4 $3/4/2005$ 12 3.4 < 2.0 8.5 MW-4 $6/16/2005$ 16 < 2.0 7.5 35 MW-4 $9/14/2005$ 20 < 2.0 13 72 MW-4 $12/2/2005$ 12.8 < 2.0 8.5 58.6 MW-4 $12/2/2005$ 12.8 < 2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 < 1.0 < 1.0 < 3.0 MW-4 $6/22/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $6/22/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2011$ < 1.0 < 1.0 < 3.0 MW-4 $9/12/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 3.0 MW-4 $9/12/2012$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 1.0 < 3.0	MW-4	10/29/2001	11	3.3	<2.0	3.4
MW-4 $6/17/2002$ NDNDNDNDMW-4 $9/26/2002$ 29 202.528MW-4 $12/16/2003$ < 2.0 < 2.0 < 2.0 < 5.0 MW-4 $12/16/2003$ < 2.0 < 2.0 < 2.0 < 5.0 MW-4 $9/18/2004^*$ 60 7.1 21 140 MW-4 $12/8/2004$ 34 3.2 17 130 MW-4 $3/4/2005$ 12 3.4 < 2.0 8.5 MW-4 $6/16/2005$ 16 < 2.0 7.5 35 MW-4 $9/14/2005$ 20 < 2.0 13 72 MW-4 $12/2/2005$ 12.8 < 2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 < 1.0 1.3 13.4 MW-4 $3/30/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/12/2012$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 1.0 < 3.0	MW-4	3/25/2002	5.1	2	ND	ND
MW-4 $9/26/2002$ 29202.528MW-4 $12/16/2003$ < 2.0 < 2.0 < 5.0 MW-4 $9/18/2004^*$ 60 7.1 21 140 MW-4 $12/8/2004$ 34 3.2 17 130 MW-4 $3/4/2005$ 12 3.4 < 2.0 8.5 MW-4 $6/16/2005$ 16 < 2.0 7.5 35 MW-4 $9/14/2005$ 20 < 2.0 13 72 MW-4 $12/2/2005$ 12.8 < 2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 < 1.0 1.3 13.4 MW-4 $3/30/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 1.0 < 3.0 <tr< td=""><td>MW-4</td><td>6/17/2002</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td></tr<>	MW-4	6/17/2002	ND	ND	ND	ND
MW-4 $12/16/2003$ < 2.0 < 2.0 < 2.0 < 5.0 MW-4 $9/18/2004^*$ 60 7.121140MW-4 $12/8/2004$ 34 3.2 17130MW-4 $3/4/2005$ 12 3.4 < 2.0 8.5 MW-4 $6/16/2005$ 16 < 2.0 7.5 35 MW-4 $9/14/2005$ 20 < 2.0 13 72 MW-4 $1/2/2005$ 12.8 < 2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 < 1.0 1.3 13.4 MW-4 $3/30/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $6/22/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/16/2010$ < 1.0 < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 3.0 MW-4 $9/13/2011$ < 1.0 < 1.0 < 3.0 MW-4 $1/6/2012$ < 1.0 < 1.0 < 3.0 MW-4 $4/6/2012$ < 1.0 < 1.0 < 3.0 MW-4 $9/127/2012$ < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 3.0 MW-4 $9/27/2012$ < 1.0 < 1.0 < 1.0	MW-4	9/26/2002	29	20	2.5	28
MW-4 $9/18/2004^*$ 607.121140MW-4 $12/8/2004$ 34 3.2 17130MW-4 $3/4/2005$ 12 3.4 <2.0 8.5 MW-4 $6/16/2005$ 16 <2.0 7.5 35 MW-4 $9/14/2005$ 20 <2.0 13 72 MW-4 $12/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 1.3 13.4 MW-4 $3/30/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/22/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $3/10/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/15/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $1/6/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/14/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <2.0 MW-4 $6/27/2013$ <t< td=""><td>MW-4</td><td>12/16/2003</td><td><2.0</td><td><2.0</td><td><2.0</td><td><5.0</td></t<>	MW-4	12/16/2003	<2.0	<2.0	<2.0	<5.0
MW-4 $12/8/2004$ 34 3.2 17 130 MW-4 $3/4/2005$ 12 3.4 <2.0 8.5 MW-4 $6/16/2005$ 16 <2.0 7.5 35 MW-4 $9/14/2005$ 20 <2.0 13 72 MW-4 $12/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 1.3 13.4 MW-4 $3/30/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/22/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <2.0 MW-4	MW-4	9/18/2004*	60	7.1	21	140
MW-4 $3/4/2005$ 12 3.4 <2.0 8.5 MW-4 $6/16/2005$ 16 <2.0 7.5 35 MW-4 $9/14/2005$ 20 <2.0 13 72 MW-4 $12/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 1.3 13.4 MW-4 $3/30/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $3/30/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/22/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/12/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $1/6/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $4/6/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $12/7/2012$ <1.0 <1.0 <1.0 <2.0 MW-4 $3/4/2013$ <1.0 <1.0 <1.0 <2.0 MW-4 $6/27/2013$ <1.0 <1.0 <1.0 <2.0	MW-4	12/8/2004	34	3.2	17	130
MW-4 $6/16/2005$ 16 <2.0 7.5 35 MW-4 $9/14/2005$ 20 <2.0 13 72 MW-4 $12/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 1.3 13.4 MW-4 $3/30/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/22/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $12/8/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $3/4/2013<1.0<1.0<1.0<2.0MW-4$	MW-4	3/4/2005	12	3.4	<2.0	8.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	MW-4	6/16/2005	16	<2.0	7.5	35
MW-4 $12/2/2005$ 12.8 <2.0 8.5 58.6 MW-4 $7/14/2006$ 3.5 <1.0 1.3 13.4 MW-4 $3/30/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $6/22/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2010$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/16/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/13/2011$ <1.0 <1.0 <1.0 <3.0 MW-4 $1/6/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $9/27/2012$ <1.0 <1.0 <1.0 <3.0 MW-4 $3/4/2013$ <1.0 <1.0 <1.0 <2.0 MW-4 $6/27/2013$ <1.0 <1.0 <1.0 <2.0	MW-4	9/14/2005	20	<2.0	13	72
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	12/2/2005	12.8	<2.0	8.5	58.6
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	7/14/2006	3.5	<1.0	1.3	13.4
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	3/30/2010	<1.0	<1.0	<1.0	<3.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	6/22/2010	<1.0	<1.0	<1.0	<3.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	9/16/2010	<1.0	<1.0	<1.0	<3.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	12/8/2010	<1.0	<1.0	<1.0	<3.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	3/10/2011	<1.0	<1.0	<1.0	<3.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-4	6/15/2011	<1.0	<1.0	<1.0	<3.0
MW-4 1/6/2012 <1.0 <1.0 <1.0 <3.0 MW-4 4/6/2012 <1.0	MW-4	9/13/2011	<1.0	<1.0	<1.0	<3.0
MW-4 4/6/2012 <1.0 <1.0 <1.0 <3.0 MW-4 6/14/2012 <1.0	MW-4	1/6/2012	<1.0	<1.0	<1.0	<3.0
MW-4 6/14/2012 <1.0 <1.0 <1.0 <3.0 MW-4 9/27/2012 <1.0	MW-4	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-4 9/27/2012 <1.0 <1.0 <1.0 <3.0 MW-4 12/7/2012 <1.0	MW-4	6/14/2012	<1.0	<1.0	<1.0	<3.0
MW-4 12/7/2012 <1.0 <1.0 <1.0 <3.0 MW-4 3/4/2013 <1.0	MW-4	9/27/2012	<1.0	<1.0	<1.0	<3.0
MW-4 3/4/2013 <1.0 <1.0 <1.0 <2.0 MW-4 6/27/2013 <1.0	MW-4	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-4 6/27/2013 <1.0 <1.0 <2.0	MW-4	3/4/2013	<1.0	<1.0	<1.0	<2.0
	MW-4	6/27/2013	<1.0	<1.0	<1.0	<2.0



4,210

610

350

1,900

9/14/1998

MW-5

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Sta	ndard (µg/L)	10	750	750	620
MW-5	12/9/1998	420	610	47	256
MW-5	9/20/1999	510	410	50	198
MW-5	2/10/1999	4,900	2,900	610	8,100
MW-5	11/16/1999	170	290	26	192
MW-5	2/7/2000	290	77	24	53.6
MW-5	5/18/2000	240	83	30	54
MW-5	11/13/2000	267	19.4	41.8	10.5
MW-5	3/13/2001	95.1	55.1	10.6	19.5
MW-5	5/4/2001	70.8	50.5	6.2	18.9
MW-5	10/29/2001	2.1	<2.0	<2.0	<2.0
MW-5	3/25/2002	2	ND	ND	ND
MW-5	6/17/2002	ND	ND	ND	ND
MW-5	9/26/2002	ND	3.6	ND	ND
MW-5	12/16/2003	250	16	24	26
MW-5	9/18/2004	32	6.9	<2.0	<5.0
MW-5	12/8/2004	54	5.6	<2.0	<5.0
MW-5	3/4/2005	110	18	4.3	12
MW-5	6/16/2005	21	8.6	<2.0	<5.0
MW-5	9/14/2005	24	3.9	<2.0	<5.0
MW-5	12/2/2005	73.4	7.1	<2.0	7.3
MW-5	7/18/2006	16.1	4.8	<1.0	4.2
MW-5	3/30/2010	1.4	<1.0	<1.0	<3.0
MW-5	6/22/2010	<1.0	<1.0	<1.0	<3.0
MW-5	9/16/2010	1.8	<1.0	<1.0	<3.0
MW-5	12/8/2010	<1.0	<1.0	<1.0	<3.0
MW-5	3/10/2011	<1.0	<1.0	<1.0	<3.0
MW-5	6/15/2011	2.7	<1.0	4.7	<3.0
MW-5	9/13/2011	1.7	<1.0	<1.0	<3.0
MW-5	1/6/2012	<1.0	<1.0	<1.0	<3.0
MW-5	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-5	6/14/2012	<1.0	<1.0	<1.0	<3.0
MW-5	9/27/2012	<1.0	<1.0	<1.0	<3.0
MW-5	12/7/2012	<1.0	<1.0	<1.0	<3.0



Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)			
NMWQCC Sta	andard (µg/L)	10	750	750	620			
MW-5	3/4/2013**	NS-FP	NS-FP	NS-FP	NS-FP			
MW-5	6/27/2013	<2.0	<2.0	<2.0	<4.0			
MW-6	4/27/1999	1,200	2,700	120	920			
MW-6	9/20/1999	1,200	1,100	570	5,400			
MW-6	11/16/1999	610	310	290	3,100			
MW-6	2/7/2000	580	48	260	2,600			
MW-6	5/18/2000	530	12	230	2,240			
MW-6	11/13/2000	846	25	278	2,700			
MW-6	3/13/2001	741	26.7	240	2,630			
MW-6	5/4/2001	1,190	41.7	369	4,140			
MW-6	10/29/2001	280	7.3	170	1,700			
MW-6	3/25/2002	280	7.3	170	1,700			
MW-6	6/17/2002*	220	2.1	140	670			
MW-6	12/16/2003	57	<20	210	1,800			
MW-6	12/8/2004	7.8	7.4	32	260			
MW-6	3/4/2005	12	12	43	230			
MW-6	6/16/2005	17	17	60	300			
MW-6	12/2/2005	<2.0	<2.0	<2.0	<5.0			
MW-6	4/6/2012	NS	NS	NS	NS			
MW-6	6/14/2012	NS	NS	NS	NS			
MW-6	9/27/2012	NS	NS	NS	NS			
MW-6	12/7/2012	NS	NS	NS	NS			
MW-6	3/4/2013	NS-IW	NS-IW	NS-IW	NS-IW			
MW-6	6/27/2013	NS-IW	NS-IW	NS-IW	NS-IW			
MW-6	9/24/2013	NS-IW	NS-IW	NS-IW	NS-IW			
MW-6	12/2/2013	<2.0	<2.0	<2.0	<4.0			
MW-7	9/20/1999	2.3	<0.5	0.5	7.5			
MW-7	11/16/1999	<0.5	< 0.5	0.5	<1.5			
MW-7	2/7/2000	<0.5	< 0.5	<0.5	<1.5			
MW-7	5/18/2000	<0.5	< 0.5	<0.5	<1.5			
MW-7	11/13/2000	<1.0	<1.0	<1.0	1.97			



Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Sta	ndard (µg/L)	10	750	750	620
MW-7	3/13/2001	<1.0	<1.0	<1.0	<1.0
MW-7	5/4/2001	<1.0	<1.0	<1.0	<1.0
MW-7	10/29/2001	<1.0	<2.0	<2.0	<2.0
MW-7	3/25/2002	ND	ND	ND	ND
MW-7	6/17/2002	ND	ND	ND	11
MW-7	12/16/2003	<2.0	<2.0	<2.0	<5.0
MW-7	9/18/2004	<2.0	<2.0	<2.0	<5.0
MW-7	12/8/2004	<2.0	<2.0	<2.0	<5.0
MW-7	3/4/2005	<2.0	<2.0	<2.0	<5.0
MW-7	6/16/2005	<2.0	<2.0	<2.0	<5.0
MW-7	9/14/2005	<2.0	<2.0	<2.0	<5.0
MW-7	12/2/2005	<2.0	<2.0	<2.0	<5.0
MW-7	7/14/2006	<1.0	<1.0	<1.0	<3.0
MW-7	3/30/2010	<1.0	<1.0	<1.0	<3.0
MW-7	6/22/2010	<1.0	<1.0	<1.0	<3.0
MW-7	9/16/2010	<1.0	<1.0	<1.0	<3.0
MW-7	12/8/2010	<1.0	<1.0	<1.0	<3.0
MW-7	3/10/2011	<1.0	<1.0	<1.0	<3.0
MW-7	6/15/2011	<1.0	<1.0	<1.0	<3.0
MW-7	9/13/2011	<1.0	<1.0	<1.0	<3.0
MW-7	1/6/2012	<1.0	<1.0	<1.0	<3.0
MW-7	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-7	6/14/2012	<1.0	<1.0	<1.0	<3.0
MW-7	9/27/2012	<1.0	<1.0	<1.0	<3.0
MW-7	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-7	3/4/2013	<1.0	<1.0	<1.0	<2.0
MW-8	11/16/1999	9.9	21	6.1	76
MW-8	2/7/2000	9.4	3.4	11	20.8
MW-8	5/18/2000	0.8	<0.5	1	<1.5
MW-8	11/13/2000	<1.0	<1.0	<1.0	<1.0
MW-8	3/13/2001	<1.0	<1.0	<1.0	<1.0
MW-8	5/4/2001	<1.0	<1.0	<1.0	<1.0



Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)			
NMWQCC Sta	NMWQCC Standard (µg/L)		750	750	620			
MW-8	10/29/2001	<1.0	<2.0	<2.0	<2.0			
MW-8	3/25/2002	ND	ND	ND	ND			
MW-8	6/17/2002	ND	ND	ND	ND			
MW-8	9/26/2002	ND	ND	ND	ND			
MW-8	12/16/2003	<2.0	<2.0	<2.0	<5.0			
MW-8	9/18/2004	<2.0	<2.0	<2.0	<5.0			
MW-8	12/8/2004	<2.0	<2.0	<2.0	<5.0			
MW-8	3/4/2005	<2.0	<2.0	<2.0	<5.0			
MW-8	6/16/2005	<2.0	<2.0	<2.0	<5.0			
MW-8	9/14/2005	<2.0	<2.0	<2.0	<5.0			
MW-8	12/2/2005	<2.0	<2.0	<2.0	<5.0			
MW-8	7/14/2006	<1.0	<1.0	<1.0	<3.0			
MW-8	3/30/2010	<1.0	<1.0	<1.0	<3.0			
MW-8	6/22/2010	<1.0	<1.0	<1.0	<3.0			
MW-8	9/16/2010	<1.0	<1.0	<1.0	<3.0			
MW-8	12/8/2010	<1.0	<1.0	<1.0	<3.0			
MW-8	3/10/2011	<1.0	<1.0	<1.0	<3.0			
MW-8	6/15/2011	<1.0	<1.0	<1.0	<3.0			
MW-8	9/13/2011	<1.0	<1.0	<1.0	<3.0			
MW-8	1/6/2012	<1.0	<1.0	<1.0	<3.0			
MW-8	4/6/2012	<1.0	<1.0	<1.0	<3.0			
MW-8	6/14/2012	<1.0	<1.0	<1.0	<3.0			
MW-8	9/27/2012	<1.0	<1.0	<1.0	<3.0			
MW-8	12/7/2012	<1.0	<1.0	<1.0	<3.0			
MW-8	3/4/2013	<1.0	<1.0	<1.0	<3.0			
MW-8	6/27/2014	<2.0	<2.0	<2.0	<4.0			
SVE-4	2/7/2000	10,000	22,000	690	7,500			
SVE-4	2/7/2000	10,000	21,000	680	7,300			
SVE-4	3/4/2005*	370	280	530	6,900			
SVE-4	6/16/2005*	99	29	<10	5,600			
SVE-4	12/2/2005	18.2	19.6	27.5	633			
SVE-4	3/30/2010	5.9	1.5	113	400			



GROUNDWATER LABORATORY ANALYTICAL RESULTS ICE CANYON DRIP WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Sta	ndard (µg/L)	10	750	750	620
SVE-4	6/22/2010	6.9	<5.0	105	413
SVE-4	9/16/2010	<1.0	<1.0	9	<3.0
SVE-4	12/8/2010	1.3	<1.0	18.8	29.2
SVE-4	3/10/2011	5.3	<5.0	120	499
SVE-4	6/15/2011	4.7	1.6	84.7	247
SVE-4	9/13/2011	6.7	1.7	86.3	193
SVE-4	1/6/2012	5.6	<5.0	63.1	42.1
SVE-4	4/6/2012	3.7	63.9	2.3	142
SVE-4	6/14/2012	3.1	52.7	1.5	121
SVE-4	9/27/2012	NS	NS	NS	NS
SVE-4	12/7/2012	<5.0	38.5	<5.0	92.6
SVE-4	3/4/2013**	NS-FP	NS-FP	NS-FP	NS-FP
SVE-4	6/27/2013	13	<5.0	<5.0	170
SVE-4	9/24/2013	<5.0	<5.0	45	210
SVE-4	12/2/2013	<5.0	<5.0	10	34

Notes:

< - indicates result is less than laboratory reporting detection limit

* - indicates sample was diluted

Bold - indicates sample exceeds NMWQCC standard

ND - not dectected

NMWQCC - New Mexico Water Quality Control Commission

NS - not sampled

NS-FP - not sampled due to the presence of phase seperated hydrocarbons in the well

NS-IW - well did not contain sufficient volume of water to be sampled

NS-OB - not sampled due to well obstruction

 $\mu g/L$ - micrograms per liter

** - Phase separated hydrocarbons not likely present in wells. Malfunction in interface probe.



APPENDIX A

2013 FIELD NOTES



Water Sample Collection Form								
Sample Loc	pple Location Ice Canyon Drip				Client Williams Field Services, LLC			
Sample Dat	e	3/4/2013	_	Project Name Historical Groundwater				
Sample Tim	ne	8:27			Project #	034013001		
Sample ID		MW-1			Sampler	Brooke Herb		
Analyses		BTEX 802	1		-			
Matrix		Groundwat	er		Laboratory	Hall Environmental		
Turn Aroun	d Time	Standard		Sh	ipping Method	Hand delivery		
Depth to W	ater	46.75			TD of Well	48.21		
Time		8:00		D	epth to Product	NA		
Vol. of H2C) to purge	1.46* 0.16	= 0.23 * 3 =	= 0.70	-			
101.011120	o puige	(height of we	ater column	* 0.1631 f	or 2" well or 0.6.	524 for 4" well) * 3 well vols		
Method of I	Purging	PVC Bailer	•	0				
Method of S	Sampling	PVC Bailer	•					
	Vol	H2O	nH					
	Removed	removed	(standard	Temp.	Conductivity			
Time	(gallons)	(gallons)	units)	(°C)	(μs)	Comments		
						Clear with black flecks, roots,		
8:17	0.15	0.15	6.59	14.4	2.26	no odor, no sheen		
						Bailed Dry		
Comments								
Commentes								
Describe Deviations from SOP: Well bailed dry immediately. Was able to collect enough								
groundwate	er to 1111 3 V	UAS 14						
Signature:	Ľ	Snooke Her	6		Date:	3/4/2013		



		<u>Water San</u>	iple Colle	<u>ction Form</u>				
Sample Location	Ice Canyon	Drip	Client Williams Field Services, LLC					
Sample Date	3/4/2013	1	Project Name Historical Groundwater					
Sample Time	NA	NA		Project # 034013001				
Sample ID	MW-2	MW-2		Sampler	Brooke Herb			
Analyses	NA			L.				
Matrix	NA			Laboratory	NA			
Turn Around Time	NA		Sh	ipping Method	NA			
Depth to Water	NA			TD of Well	NA			
Time	8:45		D	epth to Product	NA			
Vol. of H2O to purge								
	(height of w	ater column	* 0.1631 f	or 2" well or 0.6	524 for 4" well) * 3 well vols			
Method of Purging	NA							
Method of Sampling	NA							
Vol. Removed Time (gallons)	Total Vol H2O removed (gallons)	pH (standard units)	Temp.	Conductivity	Comments			
(guilous)	(guildins)	unitsy	(0)	(µ3)	Comments			
Comments: Obstructio	Comments : Obstruction in well at 30.52 feet. Was unable to get probe past it.							
Water was not encountered.								
Describe Deviations f	rom SOP:							
Signature: Brooke Herb Date: 3/4/2013								
· · · · · · · · · · · · · · · · · · ·				-				



Sample Location	on	Ico Convon							
		ice Callyon	Drip	Client Williams Field Services, LLC					
Sample Date		3/4/2013		Project Name Historical Groundwater					
Sample Time		9:35			Project #	034013001			
Sample ID		MW-3			Sampler	Brooke Herb			
Analyses		BTEX 8021			1				
Matrix		Groundwate	er		Laboratory	Hall Environmental			
Turn Around T	Гime	Standard		Sh	ipping Method	Hand delivery			
Depth to Wate	er	40.66			TD of Well	46.12			
Time		9:00		De	epth to Product	NA			
Vol. of H2O to	o purge	5.46* 0.16	= 0.87 * 3 =	2.62					
	1 0	(height of wo	ter column ^s	* 0.1631 fo	r 2" well or 0.652	24 for 4" well) * 3 well vols			
Method of Pur	ging	PVC Bailer							
Method of San	npling	PVC Bailer							
	Vol	Total Vol	ոԱ						
R	v or. Removed	removed	(standard	Temp.	Conductivity				
Time ((gallons)	(gallons)	units)	(°C)	(μs)	Comments			
9:10	0.25	0.25	6.83	14.2	1,571	Brown, silty			
	0.25	0.50	7.02	14.5	1,538	Darker brown, more silt			
	0.25	0.75	7.07	14.4	1,563	More silt			
	0.25	1.00	7.16	14.2	1,548	No change			
	1.00	2.00	7.14	14.5	1,554	No change			
	0.25	2.25	7.21	14.6	1,530	No change			
	0.25	2.50	7.23	14.4	1,529	No change			
	0.25	2.75	7.23	14.4	1,534	No change			
9:33	0.25	3.00	7.23	14.4	1,532	No change			
						<u>U</u>			
Comments:			•						
		4 00							
Describe Devi	iations fr	om SOP:							
Signature:	2	nooke Her	6		Date:	3/4/2013			



Water Sample Collection Form								
Sample Loc	ation	Ice Canyon	Drip	Client		Williams Field Services, LLC		
Sample Dat	e	3/4/2013	-	Project Name		Historical Groundwater		
Sample Tim	ne	10:10			Project #	034013001		
Sample ID		MW-4			Sampler	Brooke Herb		
Analyses		BTEX 802	1		-			
Matrix		Groundwat	er		Laboratory	Hall Environmental		
Turn Aroun	d Time	Standard		Sh	ipping Method	Hand delivery		
Depth to Wa	ater	40.45			TD of Well	46.29		
Time		9:45		D	epth to Product	NA		
Vol. of H2C) to purge	5.84 * 0.16	= 0.93 * 3	= 2.80				
		(height of we	ater column	* 0.1631 f	or 2" well or 0.65	524 for 4" well) * 3 well vols		
Method of F	Purging	PVC Bailer						
Method of S	Sampling	PVC Bailer	:					
		Total Vol						
	Vol.	H2O	pН					
	Removed	removed	(standard	Temp.	Conductivity			
Time	(gallons)	(gallons)	units)	(°C)	(µs)	Comments		
9:50	0.25	0.25	7.00	15.5	1,522	Clear with a light brown tint		
	0.25	0.50	6.89	15.4	1,549	No change		
	0.25	0.75	6.93	15.7	1,518	more silt		
	0.25	1.00	6.98	15.5	1,534	No change		
	1.00	2.00	7.16	15.0	1,499	More silt, dark grayish brown		
	0.25	2.25	7.20	14.9	1,530	Very silty		
	0.25	2.50	7.19	15.0	1,531	No change		
	0.25	2.75	7.27	15.0	1,542	No change		
	0.25	3.00	7.25	15.0	1,532	No change		
10:10	0.25	3.25	7.25	15.1	1538	No change		
Comments:								
Describe D	eviations fr	rom SOP:						
Signature: Brooke Herb Date:						3/4/2013		



Water Sample Collection Form							
Sample Loc	ation	Ice Canyon Drip		Client Williams Field Services, LLC			
Sample Dat	e	3/4/2013		Project Name Historical Groundwater			
Sample Tim	ne	NA			Project #	034013001	
Sample ID		MW-5			Sampler	Brooke Herb	
Analyses		NA			-		
Matrix		NA			Laboratory	NA	
Turn Aroun	d Time	NA		Sh	ipping Method	NA	
Depth to W	ater	36.83			TD of Well	NM	
Time		11:00		De	pth to Product	36.82	
Vol. of H2C) to purge				1		
		(height of wa	ater column	* 0.1631 fc	or 2" well or 0.6.	524 for 4" well) * 3 well vols	
Method of I	Purging	NA					
Method of S	Sampling	NA					
Time	Vol. Removed (gallons)	Total Vol H2O removed (gallons)	pH (standard units)	Temp. (°C)	Conductivity (µs)	Comments	
Comments	No sample	was collecte	d due to the	e presence	of product.		
Describe D	eviations fr	om SOP:					
Signature:	Signature: Brooke Herb Date: 3/4/2013						



Water Sample Collection Form								
Sample Loc	ation	Ice Canyon	Drip	Client Williams Field Services, LLC				
Sample Dat	e	3/4/2013	-	Project Name Historical Groundwater				
Sample Tin	ne	NA			Project #	034013001		
Sample ID		MW-6			Sampler	Brooke Herb		
Analyses		NA						
Matrix		NA			Laboratory	NA		
Turn Aroun	d Time	NA		Sh	ipping Method	NA		
Depth to W	ater	DRY			TD of Well	37.52		
Time		10:50		De	epth to Product	NA		
Vol. of H2C) to purge							
		(height of we	ater column	* 0.1631 f	or 2" well or 0.6	524 for 4" well) * 3 well vols		
Method of I	Purging	NA						
Method of S	Sampling	NA						
	Vol. Removed	Total Vol H2O removed	pH (standard	Temp.	Conductivity			
Time	(gallons)	(gallons)	units)	(°C)	(µs)	Comments		
Comments	well dry at	BVC looked	ogs.					
NO SUITACE	completion,	FVC IOCKEU	l.					
Describe D	Describe Deviations from SOP:							
Signature:	P	Grooke Her	b		Date:	3/4/2013		



Water Sample Collection Form							
Sample Loc	ation	Ice Canyon	Drip		Client	Williams Field Services, LLC	
Sample Dat	e	3/4/2013	_	Project Name Historical Groundwater			
Sample Tim	ne	11:40		Project # 034013001			
Sample ID		MW-7		Sampler Brooke Herb			
Analyses		BTEX 8021		· · ·			
Matrix		Groundwat	er		Laboratory	Hall Environmental	
Turn Aroun	d Time	Standard		Sh	ipping Method	Hand delivery	
Depth to W	ater	38.28			TD of Well	43.78	
Time		9:45		De	epth to Product	NA	
Vol. of H2C) to purge	5.5 * 0.16 =	= 0.88 * 3 =	2.64			
		(height of wo	ater column	* 0.1631 fe	or 2" well or 0.65	24 for 4" well) * 3 well vols	
Method of I	Purging	PVC Bailer	•				
Method of S	Sampling	PVC Bailer	•				
		Total Vol					
	Vol.	H2O	pH				
	Removed	removed	(standard	Temp.	Conductivity		
Time	(gallons)	(gallons)	units)	(°C)	(µs)	Comments	
10:30	0.25	0.25	7.25	13.7	1,482	clear, no silt, odor	
	0.25	0.50	7.31	13.9	1,534	no change	
	0.25	0.75	7.30	13.7	1,525	minor silt	
	0.25	1.00	7.37	13.6	1,512	no change	
10:40						Bailed Dry	
Comments	Returned to	o collect sam	ple at 11:4()			
Describe D	Describe Deviations from SOP: Well bailed dry before 3 casing volumes were purged						
Signature: Brooke Herb Date: 3/4/2013						3/4/2013	


Water Sample Collection Form									
Sample Loc	cation	Ice Canyon	Drip		Client Williams Field Services, LLC				
Sample Dat	te	3/4/2013		Project Name Historical Groundwater					
Sample Tin	ne	11:35			Project #	034013001			
Sample ID		MW-8			Sampler	Brooke Herb			
Analyses		BTEX 8021	l						
Matrix		Groundwate	er		Laboratory	Hall Environmental			
Turn Aroun	nd Time	Standard		Sł	nipping Method	Hand delivery			
Depth to W	ater	34.69			TD of Well	42.05			
Time		11:00		D	epth to Product	NA			
Vol. of H20	O to purge	7.36 * 0.16	= 1.17 * 3 =	3.53					
	1 0	(height of wa	ater column *	0.1631 for 2	2" well or 0.6524	for 4" well) * 3 well vols			
Method of I	Purging	PVC Bailer							
Method of S	Sampling	PVC Bailer							
Time	Vol. Removed (gallons)	Total Vol H2O removed (gallons)	pH (standard units)	Temp.	Conductivity	Comments			
11.15			7 30	15.0	(µs)	very silty dark gravish brown			
11.15	0.25	0.23	7.30	15.0	1,555	no change			
	0.25	0.50	7.20	15.2	1,500	no change			
	0.25	1.00	7.31	15.1	1,580	no change			
	1.00	2.00	7.32	15.1	1,585	no change			
	0.50	2.50	7.33	15.1	1,597	no change			
	0.25	2.75	7.34	15.1	1,583	no change			
	0.25	3.00	7.34	15.1	1,580	no change			
	0.25	3.25	7.35	15.0	1,578	no change			
11:35	0.25	3.50	7.35	15.0	1,581	no change			
Comments:									
Describe D	eviations fi	rom SOP:							
		1.4							
Signature:	Ľ	Snooke Her	6		Date:	3/4/2013			



Water Sample Collection Form								
Sample Loc	ation	Ice Canyon	Drip		Client	Williams Field Services, LLC		
Sample Date 3/4/2013		3/4/2013	1		Project Name	Historical Groundwater		
Sample Tim	ne	NA			Project #	034013001		
Sample ID		SVE-4"			Sampler	Brooke Herb		
Analyses		NA			-			
Matrix		NA			Laboratory	NA		
Turn Aroun	d Time	NA		Sh	ipping Method	NA		
Depth to W	ater	42.73			TD of Well	NM		
Time		8:35		D	epth to Product	42.72		
Vol. of H2C) to purge							
	F 8-	(height of we	ater column	* 0.1631 fe	or 2" well or 0.65	524 for 4" well) * 3 well vols		
Method of H	Purging	NA						
Method of S	Sampling	NA						
Time	Vol. Removed (gallons)	Total Vol H2O removed (gallons)	Total Vol H2OpHconductivityremoved(standard units)Temp.Conductivity(°C)(μs)Comments					
Comments	No sample	was collecte	d due to the	e presence	of product.			
Product reco	overy sock i	n well; retur	ned to well	after DTV	V and DTP data	a were gathered.		
Describe D	eviations fr	om SOP:						
Signature:	12	Brooke Her	b		Date:	3/4/2013		



	Water Sa	mple Collection Form	n
Sample Location Sample Date Sample Time Sample ID Analyses Matrix Turn Around Time Trip Blank Depth to Water Time Vol. of H2O to purge Method of Purging Method of Sampling	Water So Ce Canyon ODA/13 DOD NW-4 BTEX GW Std. Ves 41.11 1137 5.18 x.102 (height of water colo Bottom Value 1.	Client Client Project Name Project # Sampler Laboratory Shipping Method Other QA/QC TD of Well Depth to Product Depth to Product Depth to Product	2 Williams <u>Groundwater</u> 034013010 BHENS Hell Drop offs Ifed.ex NA <u>46.29</u> <u>NA</u> <u>3 = 2.53</u> or 0.6524 for 4" well) * 3 well vols
$\begin{array}{c c c} & Vol. \\ Removed \\ \hline (gal.) \\ \hline U 40 & D. 35 \\ \hline 0.35 \\ \hline 0.25 \\ \hline 0.75 \\ \hline 0.35 \\$	Total Vol H20 pH removed (gal.) pH 0.25 0.25 0.50 0.85 0.75 0.90 1.05 1.07 2.00 7.25 2.25 7.26 2.50 1.27 2.50 1.27 2.50 1.27 2.75 7.26 .75 7.26	Temp. Conductivity $28 (C)$ (us or ms) $18 \cdot 319104s$ 10.6 10.6 10.6 10.6 10.6 10.6 10.6 10.6 10.8 10.6 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10.00	Comments Clear no odor no silt Minor silt more silt light grayish Brown no change Silty U
Comments: Describe Deviations fro Signature:	om SOP:	Date:	1/27 3

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	Water Sa	ample Collection Form	
Sample Location	100 60 0110001	client (1) illiams	
Sample Date	407113	Project Name Groundwater	
Sample Time	1340	Project # 03403010	
Sample ID	MW-5	Sampler Bters	
Analyses	BIEX		
Matrix	<u> </u>	Laboratory Hall	
Turn Around Time	<u>Sta</u> ,	Shipping Method Proport / Holex	
Trip Blank	Ves	Other QA/QC <u>NA</u>	
Depth to Water	<u> </u>		
Time	1050	Depth to Product Nr	
Vol. of H2O to purge	$\frac{4.31 \times 103}{\text{(height of water coll})}$	umn * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols	
Method of Purging	Botton Valu	e Baiter	
Method of Sampling	12 (1	<u> </u>	
	Total Vol		
Vol.	H2O	Temp. Conductivity	
Time (gal.)	(gal.) (std. units)	(C) (us or ms) Comments	
1250 0.25	0.25 0.88	19.9 1.910 Clear w BK particles	
0,25	0.50 6.89	V8.2 1.93 grayish clear slight HCC	Sec.
0.25	0:75 6.87	IF. Le 196 Went SIHU dank-gray	151K
	DAIE	N PL J J	:
	BAUL		
	Ľ.		
			•
· · · · · · · · · · · · · · · · · · ·			
<u> </u>			:
Comments:	e well (?)	1300 - Bailed dry	•
Why and	e to fil	2 pon preserved vons	
Water &	caesed w	1 Her	
Describe Deviations fr	om SOP: Spa Jun	<u>ν</u>	
	I A		19 - P
Signature: TA	Mh	Date: 0/77/12	
Signature:	<u>ol</u> 1		

			Water Sa	mple Colle	ection Form		
Sample Loc	ation	lee an	num	Nio	Client	Williams	
Sample Dat	te	4/2-	FIB	∽ '\ <u>`</u> F	roject Name	Groundwater	
Sample Tim	ne	1245 Project # 03401390					
Sample ID		MW	1-8		Sampler	Btero	
Analyses		BT	X 802				
Matrix		_ GN)		Laboratory	Hall	
Turn Aroun	d Time	<u>STD</u>	•	Ship	ping Method	_propoff	
Trip Blank		<u>Ves</u>	2	ін. (Other QA/QC	-NA 112.05	
Depth to W	ater	35.	31	ن ب	TD of Well	4200	
Time		1910	*	Dep	th to Product	<u>NF</u>	
Vol. of H2O	to purge	(e. 74	<u> 10°</u>	3 - 163	<u>. () X ~</u>	or 0.6524 for 4" well) * 3 well vols	
Method of	• Purging	Kath	o Valv	l Buil	1 joi 2 wei v l V		
Method of	Sampling		1 0000	((
	· -	Total Vol					
	Vol.	H2O					
	Removed	removed	pH (stal.units)	Temp.		Comments	
Time	(gal.)	(gal.)	(sta. units)	186 7	105 8	Minor Sill MORN NOON	
1918	0.00	0.25	1710	10.0	1882	Silty Brougo	
	0.25		1 9	1710	18103	no change	
	0.25	D.7	7.8	18.0	1899	Very Silty prours	
:	0.20	1.572	7 11	11.3	1877	nochange	
	0.30	2.00	1 26	11.3	1869	11 0	
	050	2.50	4.25	174	1898		
	0 25	2.75	7.26	17.0	1938	11	
	0.25	3,00	7.27	17.0	1908	l II	
	0.25	3.25	7.28	6.9	1940	l u	
	0.25	3.50	1.28	16.9	1928	Vi	
·.							
		<u> </u>	1	L	· ·	l	
Comments						······································	
·····		,	<u> </u>		,,		

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Describe De	eviations fro	om SOP:		<u> </u>		· · · · · · · · · · · · · · · · · · ·	
					······		
	\sim	11	·······	······································	Deter	107712	
Signature		H^{0}			Jate:		
	\sim			<u></u>			

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Water Sample Collection Form								
Sample Loc	ation	100. Ca.	111477		Client	William S		
Sample Dat	e	U/2-7	1127		Project Name	Broundwater		
Sample Tim	e	1350)		Project # 034013010			
Sample ID		SVR-	- 411		Sampler	Bitterb		
Analyses		BTG	(·			
Matrix		_GW	· · · · · · · · · · · · · · · · · · ·		Laboratory	Hall		
Turn Aroun	d Time	<u>Std</u>	- 1	. Ship	ping Method	Chop off there		
Trip Blank		Ve	<u>, 5</u>		Other QA/QC	NH 112 52		
Depth to W	ater	<u> </u>			TD of Well	<u> </u>		
Time		134	5	Dep	th to Product $$	1V/1 2 2 2 9		
Vol. of H2O	to purge	<u>0.6</u>	x .16.	$S_i = C$	1.07 X	5 0 5524 for A" well) * 3 well vols		
	. M	(height	of water col	umn * 0.16:	sijorz wend	0.8524 jui 4 weny 5 wen vois		
Method of I	Purging \//(Someline	Park		10 R	aler			
iviethod of :	sampling		<u>(n V(2)</u>	VE VI				
	Vol	Total Vol						
	Removed	removed	pН	Temp.	Conductivity			
Time	(gal.)	(gal.)	(std. units)	(C)	(us or ms)	Comments		
				N ¹				
					·			
					·	······································		
			· · · ·					
! 	<u> </u>			· · · ·				
· · · · · · · · · · · · · · · · · · ·								
	hase		J 199 L	New	tin the	Vo arramotas		
Comments:	THING	<u>an un</u>	N IN	$\frac{\pi n}{2}$ n.	m. art	served VIDAC		
<u>IUD ></u>	UNNE.	$\frac{(17)}{1-1}$	T	-2 III				
MART	X (A)	UNT DI	<u>~-</u> t	11~\		· · · · · · · · · · · · · · · · · · ·		
	<u></u>		· ·		·			
Describe De	viations fro	m SOP: St	p Alm	re				
Describe De			<u>~ 100</u>	<u>v</u>				
·		\square			10	Tanka		
Signature	: 770	W/S		<u> </u>	Date: U	IUTII		

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Water Sample Collection Form											
Sample Location ILE CANYON DRIP Client Williams											
Sample Date	e	9/24	B		Project Name	groundwater					
Sample Tim	е	_14SC	<u>></u>		Project #						
Sample ID		SVE4			Sampler	Daniel neuman					
Analyses		BTEX	STEX								
Matrix		HCL			Laboratory	Lall					
Turn Around	d Time	51	d	. Ship	pping Method	Christive					
Trip Blank		Yes			Other QA/QC	N/A					
Depth to Wa	ater	40:25		Dev	ID of Well	42:82					
Time		$\frac{142}{1200}$	11007-0	, 2 ∽∽∽ /	ጠ 10 Product ヘン	D 2 HOW P - T COCRUS					
Vol. of H2O	to purge	<u>45.8'よ-</u> (height	40,人ンニー of water col	umn * 0.16	ン _{(の} らみ(4_ 31 for 2" well	<u>= 2,544(1/6) = 1,02,65</u> or 0.6524 for 4" well) * 3 well vols					
Method of P	Purging	Bottom	Value E	Sailer							
Method of S	Sampling	ι	11	٠ ·							
		Total Vol		·							
	Vol.	H2O		·Tomn	Conductivity						
Time	(gal.)	removed (gal.)	std. units)	(C)	(us or ms)	Comments					
1440	25	.25	177.18	17.5	225	Black, HLodor, silty					
1446	$\overline{a0}$.45	1,37	17.9	2,29	1					
1947	25	.70	7,35	16.6	229						
1448	.15	.85	7:34	16.6	2.32	<u> </u>					
1449	.15	1.00	7,34	16,3	233	11 (7)					
	<u> </u>										
					· · · · · · · · · · · · · · · · · · ·						
				<u> </u>		······································					
 			· · · · · · · · · · · · · · · · · · ·			<u> </u>					
		<u> </u>	l		L	Eana Dela					
Comments:	<u>Bailin</u>	y Dry	OBTAIN	<u>ed 51</u>	MPLE	FROM Dailer					
Betoke	up	Baile	d Dry,								
		· · / ·	/		1						
Bailer	Cracke	d Had	70 14	p/41e.	T W.tl	n a new orie					
Describe De	eviations fro	m SOP: +	sailed	dry	, hefo	re Brasing volumes					
			/		Deter	9/211/3					
Signature	Une.	\leq	2		Date:						

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,		<u></u>	Water So	mple Coll	ection Form	<u> </u>				
Sample Loc	ation	ILC Ce	h. fon		Client	Williams				
Sample Dat	te	12/2/13	>		Project Name Historical GW					
Sample Tin	ne	1621			Project #	034013010				
Sample ID		MW-26	2	•	Sampler	DH				
Analyses	(BIEX		·		<u></u>				
Matrix		<u>Gw</u>			Laboratory	HAN				
Turn Aroun	d Time	Standar	<u>d</u>	. Ship	ping Method	Christing				
Trip Blank		yes			Other QA/QC	Standard				
Depth to W	/ater	37.67	7		TD of Well	49.68				
Time		1546		Dep	th to Product	<u>N//K</u>				
Vol. of H2C) to purge	<u>Csal</u> Theight	of water col	umn * 0.163	31 for 2" well	or 0.6524 for 4" well) * 3 well vols				
Method of	Purging	Bailer								
Method of	Sampling	Bailer								
		Total Vol		6	1					
	Vol.	H2O		<u>(F)</u>	Conductivity					
There	Removed	removed	pH (ctd_unite)	Lenp.	Lusor ms)	Comments				
				604	1970	Clear ING DAUT				
15 76	23	. 40	707	60.7	1438	Clar Sliff ader				
	25	7/-	167	601	1939	Shiptly Clandy Shiptozer				
—	125		200	847	1933	Ch dy and the He adea				
	25	100	6.96	597	1891					
	125	1 (5 7)	6 99	595	1850	11				
	25	1.75	6.99	594	1785	11				
	1.25	200	702	59.2	1727	11				
<u> </u>	.50	2.50	7.02	59.2	1723	1				
<u> </u>	<u> </u>	3 00	2.04	59.0	1646	(1				
	050	3.00	706	58.8	1640	11.				
	1.50	4,00	208	39.0	16 36	1 (A				
	.50	4.50	2.04	58.8	1648	ct				
	. 50	5.00	206	58.8	1634	Less cloudy				
	1.00	6.00	7.07	388	1640	Less (love)				
Comments	:			÷.						
		<u> </u>	-,	s.						
					\$					
					· · ·	<u></u>				
Describe D	eviations fro	om SOP:	<u>,</u>							
Signature	:	~			Date:	12/2/13				
<u> </u>			<u> </u>							

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			Mator S	ample Cal	lection Form	3
		G.	water st	umple con		
Sample Loc	ation	Sle G	anyon	_	Client	Williams
Sample Dat	e	12121	٢ <u>٢</u>	_	Project Name	Historical Grandhase
Sample Tim	e	1654		_	Project #	034013010
Sample ID		19-PNS	VE 4	_	Sampler	DH
Analyses		NETEN		-		
Matrix		ant		,	Laboratory	Hall
Turn Aroun	d Time	Stando	11/0	- Shij	oping Method	Christine
Trip Blank		ves		-	Other QA/QC	Standard
Depth to W	ater	39.43		-	TD of Well	43.82
Time		1620		- Der	oth to Product	NA
	+	Q 7.	1	-		
VOL OT M20	to purge	0.15 10 /hoight	of water col	lumn * 0.16	31 for 2" well	or 0.6524 for 4" well) * 3 well vols
Mathad of	Durging	RAID	P			
	Furging	Rada	10			
iviethoù of a	samping	Dure	<u> </u>			
	Vol	Total Vol		(=)		
	Removed	H2O removed	Ha	Temp.	Conductivity	
Time	(gal.)	(gal.)	(std. units)	(ce)	(us or ms)	Comments
1628	.25	125	211	59.5	167	Cleve He olon
10/ 2	1	57	1.12	59.7	1.70	11
		.75	6.62	59.4	1,69	Char orange Ave, He oder
	20	100	6.10	59.7	1.70	11
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1.00	6.11	597	1.74	11
	50	2.60		<u> </u>	1,72	Dick (1) in the odd
	21	2.00	6.6	545	1.76	Ost ch ) a the att Sheen
	2.2.10	000	6.65	$\frac{f(x)}{f(x)} = \frac{f(x)}{f(x)}$	175	Bay by Down
	• 2 5	a 70	0.07	747	170	11
	000	1.10	0.68	50.0	1/4	BLAC DE WARD B. Dan
	.17	2.87	6.60	1700	1.75	DALK, SHECK / TE OCCA 1-20110 710
	-15	3,00	50,00	512	1.76	I RIIO
	~ LQ	5,10	6.61	540	1.64	a led they
				<u> </u>		
			<u> </u>			
Comments:	A	Bailed	Dox	(eto	n to	Sample
		V	<i></i>			
			<del></del>			
		······································	<u></u>			
<del></del>					<u></u>	· · · · · · · · · · · · · · · · · · ·
Docoribe De	wistions fra		810		Dec 1	helmed for Secola
Describe De		nn Jupi	Uhalle.	Well	WIX 1	CANING IN JUNNALA
1.					/··	
	·	2-			Date:	12/2/17

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Sample Location       IC G CONVON       Client W. [liams         Sample Date       12 [2] [3] [5]       Project Name Historical Liword Water         Sample IIme       12 [3] [5]       Project Name Historical Liword Water         Sample ID       MU-G       Sampler [W]         Analyses       STEP       Laboratory HALL         Turn Around Time       Sundard       Shipping Method Chr. (st. n.e.         Time       J. (a)       Yes       Other 0A/QC         Old F120 to purge       Belley Ald * 360 * 0.6002/08 k3 * 1.8       Method of Sampling         Method of Sampling       Bail lell       Method of Sampling       Sau lell         Method of Sampling       Sau lell       Term       Conductivity       Comments         Vol.       Total Vol       H20       Story GL 0.0000 (k3 + 0.0000 (k2 + 0.0		Water S	ample Collection For	<u>m</u>	parties							
Sample Date       Project Name Historicul furund Waled         Sample Time       THE Project #         Sample D       MU-6         Sample D       Multiple Sample D         Matrix       Conduction         Matrix       Conductory HAL         Depth to Water       Guide Conductory Hall         Depth to Water       Guide Conductory Hall         Method of Purging       Bale 3:44(4: 360: 0.60208(3 = 1.8)         Method of Purging       Bail lel         Method of Purging       Conductivity         Comments       Bail lel         Vol.       Total Vol         H20       Data (cill (cill units) (cill	Sample Location	IF CONVON	Clier	newilliams								
Sample Time The Temp Project # Project # Sampler DN Project # Sampler DN Project # Sampler DN Project # Sampler DN Project #	Sample Date	12/2/13 Project Name Historical Ground Water										
Sample ID MW-6 Sampler DN Analyses BTEX Matrix (W Turn Around Time Slandord Shipping Method Christine Trip Blank Ves Other QA/CC Slandord Depth to Water 34.94 The JGAU Perform To of Well 38.68 Time JGAU Perform To of Well 38.68 (feight of Water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols Method of Purging Bai Pell Method of Sampling Ja Pell Vol. of H20 to purge 38.63-34.94 * 3.60 * 0.600208 x3 * 1.8 (feight of Water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols Method of Sampling Ja Pell Vol. of H20 to purge 38.63 - 31.94 * 20.000 price of the product W/A Nethod of Sampling Ja Pell Vol. Total Vol H20 Pals Collect Vol Time (gal) (sat, mits) (9 (us offes)) Comments (gal) (sat, mits) (9 (us offes)) Comments (0, 15 0.65 7.05 56.8 4.44 Strong HC 000Pell (lecut- 0.32 0.50 7.05 56.8 4.44 Strong HC 000Pell (lecut- 0.33 3, 36 0, 15 0.60 7.03 56.9 4, 44 Strong HC 000Pell (lecut- 0.33 3, 36 Comments: Bai Ing Dry Sample Collected affer Well recharged Describe Deviations from S0P: Bailed Dify SumPle Collected Affect	Sample Time	1045 DW 1645	1045 Project #									
Analyses       BTEX         Matrix       GW       Laboratory HALL         Turn Around Time       Stupping Method       Christine         Tip Blank       Yes       Other Q/QC Stundard         Depth to Water       34.944       TD of Well 38.62       Gamma         Time	Sample ID	MW-6	Sample	er DN								
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Analyses	BTEX	BTEX									
Turn Around Time       Stapping Method Christing         Trip Blank       Ves       Other QA/QC Standard         Depth to Water       34 94       To of Well 38 66         Time       1620       The Product M/A         Vol. of H20 to purge       38.6Q-34.44 ± 3.60 ± 0.6002.08 $\chi^3 = 1.8$ (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols         Method of Purging       Bai let       (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols         Method of Sampling       Stai let       (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols         Method of Sampling       Stai let       (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols         Method of Sampling       Stai let       (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols         Method of Sampling       Stai let       (c)       (us or mas)         Method of Sampling       Stai let       Staing Hic dage gray degray degray of let       2.33         If QaD $\lambda$ 2.5 $O$ 3.5 $G$ 4.44       Staing Hic dage gray dimendigray       2.33         If QaD $\lambda$ 2.5 $O$ 3.6 $A$ 4.43       Staing Hic dage gray dimendigray       2.33         If QaD $\lambda$ 3.6 $A$ 4.43       Staing Hic dage gray d	Matrix	GW	Laborator	V HALL								
Trip Blank Ves Other QACC Standard Depth to Water 34.94 Time JCQU ("Spectro Product M/A Wol. of H20 to purge Bailed" 36.62" D. 6002008 X = 1.8 (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols Method of Purging Bailed Method of Sampling Bailed Vol. Total Vol H20 pH Temp. Conductivity Comments (gal) (gal) (std. units) (Q) (us or (ms)) Comments Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64, 4.43 9% ray HC 0DOF, Clear, 4.33 Q, 15 C, 65 7.04 (68" 64 4.44 9% ray for 4.445 9% ray HC 0DOF, 1.55 Comments: Bail, ny Dry Sample Collected affer Well recharged Describe Devisitions from SOP: Bailed Dify Sumple Collected Affec	Turn Around Time	Standard	Shipping Metho	d <u>Christine</u>								
Depth to Water Time $\frac{34, 44}{1620}$ $\frac{34, 44}{1620}$ $\frac{36, 42}{1620}$ $\frac{36, 42, 34, 44 = 3, 60 = 0, 6002, 08, 3 = 1, 8}{16002, 08, 3 = 1, 8}$ $\frac{1600}{16000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 0000, 00$	Trip Blank	Ves	Other QA/Q	c <u>Standard</u>	l							
Time $1(G2U)$ , "Pefoth to Product $N/A$ Vol. of H2O to purge $36.G-34.44=3(G2)=0.600QOB \chi^{3} = 1.8$ (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols Method of Purging $Gai   e  E$ Vol. Total Vol H2O I Removed (gal.) (std. units) (C) (us or(ms)) Comments (gal.) (std. units) (C) (us or(ms)) Comments (G) US C.S. C.A.O.S.T.A. 4.4.4 Shorey HC ODOE, (lecur 0, 25 0.50 7.05 5.6.8 4.4.46 Shorey HC ODOE, (lecur 0, 15 0.405 7.04 (effertial 4.4.43 Shorey HC doe, grow, sectionent, stup 0, 15 0.405 7.03 5.6.9 4.4.4 No c na. N.g. 0, 15 0.407 7.03 5.6.9 4.4.4 No c na. N.g. Comments: Bai ling Dry Sample Collected after Method of Sample Comments: Bai ling Dry Sample Collected Affec	Depth to Water	34,94	$ \frac{3}{2}$ TD of We	<u>    38    62                            </u>	l							
Vol. of H20 to purge $\frac{38.69-34.44+3.60=0.6003.088.5=1.8}{(helph of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols}{Bai lel!}$ Method of Purging $\frac{Bai lel!}{Sai lel!}$ $\frac{Vol. + 120}{H20}$ pH Temp. Conductivity Comments (gal.) (cal.) (us orms) Comments (gal.) (cal.) (cal.) (cal.) (cal.) (comments) (c) (us orms) Comments (c) (us orms) Comments (c) (us orms) (cal.) (close, grey, geven the 0.15 0.65 7.04 (comments) (close, grey, geven the 2.32, 33, 3, 34 0.15 0.65 7.04 (comments) (close, grey, geven the 2.32, 34, 35 (c) 15 0.65 7.04 (comments) (close, grey, geven the 2.32, 34, 36 (c) 15 0.65 7.04 (comments) (close, grey, geven the (c) 15 0.65 7.04 (comments) (close, grey, geven the (comments: Bai, l, ny Dry, Sample Collected after (vell rectroriged) Describe Deviations from SOP: Bai led Dry Sum Ple. Collected After	Time	1620	Depth to Produc	ct_N/A	I							
Integration of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols         Method of Purging       Bai lek         Method of Sampling       Bai lek         Vol.       H20         Removed       pH         Time       (gal.)         (gal.)       (gal.)         0.25       0.50         0.25       0.50         0.15       0.65         0.15       0.65         0.15       0.60         0.15       0.60         0.15       0.60         0.15       0.60         10       10         10       10         10       10         10       10         11       10         12       10.15         13       10.15         14       10         15       10.42         15       10.42         16       10         17.04       10.42         18       10.42         19.15       10.42         10.15       10.42         10.15       10.42         10.15       10.42         10.15       10.42 </td <td>Vol. of H2O to purge</td> <td>38.62-34.94=3.</td> <td>68 = 0.600208;</td> <td>(3 ~ 1.8</td> <td>l</td>	Vol. of H2O to purge	38.62-34.94=3.	68 = 0.600208;	(3 ~ 1.8	l							
Method of Purging <u>Bai / PE</u> Method of Sampling <u>Bai / PE</u> Vol. H20 Removed pH Temp. Conductivity <u>Comments</u> [Gal) (sd. units) (C) (us or (ms)) <u>Comments</u> [Gal) (sd.) (std. units) (C) (us or (ms)) <u>Comments</u> D. 25 0.50 7.05 56.8 4.146 Storng HC obse. grow, 6650 on H0 D. 25 0.50 7.04 668 Sea 4.43 Storng HC obse. grow, 6650 on H0 2.33 D. 15 0.65 7.04 668 Sea 4.43 Storng HC obse. grow, 6650 on H0 2.33 D. 15 0.60 7.03 56.9 4.44 Storng HC obse. grow, 5650 on H0 2.34 2.34 2.36 <u>D. 15 0.60 7.03 56.9 4.44 No Charles</u> <u>D. 15 0.60 7.03 56.9 4.44 Storng HC obse. grow, 5650 on H0</u> 2.33 <u>D. 15 0.60 7.03 56.9 4.44 Storng HC obse. grow, 5650 on H0</u> <u>D. 15 0.60 7.03 56.9 4.44 Storng HC obse. grow, 5650 on H0</u> <u>2.37</u> <u>3.34</u> <u>3.36</u> <u>D. 15 0.60 7.03 56.9 4.44 Storng HC obse. grow, 5650 on H0</u> <u>2.33</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u> <u>3.36</u>		(height of water co	olumn * 0.1631 for 2" we	l or 0.6524 for 4" well) * 3 well vols	I							
Method of Sampling J& 1/2 K Vol. H20 Removed pH (gal.) (sol. units) (C) (us or(ms)) Comments (gal.) (sol. units) (c) (us or(ms)) (sol. units) (c) (us or (ms)) (sol. units) (sol. units) (c) (us or (ms)) (sol. units) (sol. un	Method of Purging	<u>pai lek</u>	n n									
Vol.       Total Vol H2O removed (gal.)       PH (std. units)       Temp. (C)       Conductivity (us or ms)       Comments       PPE         1620       0.25       0.25       0.25       6.90       51.2       4.41       strong HC ODDF, (lecur, 0.15       0.25       0.25       7.04       66% and 66% and 0.15       4.42       strong HC odde, group, graver, graver, graver, graver, graver, graver, 0.15       0.40       7.03       56,9       4.42       strong HC ddde, group, stdiment, graver, 3.36       3.32         0.15       0.40       7.03       56,9       4.42       Mc unanege       3.33         0.15       0.40       7.03       56,9       4.42       Mc unanege       3.36         1       1       1       1       1       1       2.33         1       1       1       1       1       1       3.36         1       1       1       1       1       1       3.36         1       1       1       1       1       1       1       3.36         1       1       1       1       1       1       1       1       3.36         1       1       1       1       1       1       1       1       1	Method of Sampling	Dailer										
Removed (gal.)       PH (gal.)       Temp. (std. units)       Conductivity (us or ms)       Comments       PPE         1620       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25       0.25<	Vol	Total Vol										
Time (gal) (gal) (std. units) (C) (us or (ms) <u>comments</u> 1620 2.25 0.25 6.90 57.2 4.44 strong HC ODOF, Clear. 0.25 0.50 7.05 56.8 4.46 strong HC ODOF, Clear. 0.15 0.65 7.04 66%2.4 4.43 strong HC dole, grow, sodiment, grow 0.15 0.80 7.03 56.9 4.47 No chances 0.15 0.80 7.03 56.9 4.47 tec 0.15 0.80 7.03 56.9 4.47 No chances 0.15 0.90 7.00 7.03 7.00 7.00 7.00 7.00 7.00 7.0	Removed	H2O removed PH	Temp. Conductivit									
Comments: Bailing Dry Sample Collected affect	Time (gal.)	(gal.) (std. units)	(C) (us or(ms)	) Comments	PH							
Comments: Bailing Dry Sample Collected after Well recharged Describe Deviations from SOP: Bailed Diy Scample Collected Affec	1620 0.25	025 690	57,2 4,41	stiong HC ODOR, (lear,	221							
Comments: Bailing Dry Sample Collected after Well recharged Describe Deviations from SOP: Bailed Diy Scample Collected Addiec	0.25	0.50 7.05	56.8 4.46	Stiona HL ador, gray grassion Hig	2 32							
Comments: Bailing Dry Sample Collected Affec	0.15	0.65 7.04	66 364 4,43	Stiong HCodce grow sediment, grass	2.34							
Comments: Bailing Dry Sample Collected after Well recharged	0,15	0,80 7.03	569 4.47	Nochaner	2.36							
Comments: Bailing Dry Sample Collected after Well recharged				5-2	:							
Comments: Bailing Dry Sample Collected Afflec Well recharged					:							
Comments: Bailing Dry Sample Collected affer Well recharged												
Comments: Bailing Dry Sample Collected after Well recharged Describe Deviations from SOP: Bailed Dry Sample Collected Affec												
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Comments: Bailing Dry Sample Collected after Well recharged Describe Deviations from SOP: Bailed Dry Sample Collected Adder												
Well recharged Describe Deviations from SOP: Bailed Diy sample Collected Addrec	Comments: Bail:	NO DON SOM	ale Callecte	d atter								
Describe Deviations from SOP: Bailed Diy sample Collected Affec	(Nell mile	horand Star										
Describe Deviations from SOP: Bailed Diy sample Collected Affec	went lech	wyeu										
Describe Deviations from SOP: Bailed Diy sample Collected Affec												
Describe Deviations from SOP: Bailed Dry sample Collected Affler			<u>, 1</u>									
Describe Deviations non-sor. Las real pro- Soo of the Corrections non-	Describe Deviations fr	m SOP: Boiled	Dry same	the Collected Harter								
unit recharged	WALL RECHO	MG2d MG2	1017 500. 1									
Signature: 10/2/13Date: 12/2/13	Signature: )	$\frac{1}{2}$	Date:	121213								
		·····										

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**APPENDIX B** 

LABORATORY ANALYTICAL RESULTS





March 11, 2013

Julie Linn LTE 2243 Main Ave Suite 3 Durango, CO 81301 TEL: (970) 385-1096 FAX

RE: Ice Canyon Drip

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

OrderNo.: 1303300

Dear Julie Linn:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/7/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/11/2013

CLIENT: LTE	LTE Client Sample ID: MW-1						
<b>Project:</b> Ice Canyon Drip	Collection Date: 3/4/2013 8:27:00 AM						
Lab ID: 1303300-001	Matrix:	AQUEOU	S	Received I	Date: 3/7/20	13 9:56:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	
EPA METHOD 8021B: VOLATILES						Analyst: NSB	
Benzene	ND	1.0	Р	µg/L	1	3/7/2013 3:24:32 PM	
Toluene	ND	1.0	Р	µg/L	1	3/7/2013 3:24:32 PM	
Ethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 3:24:32 PM	
Xylenes, Total	ND	2.0	Р	µg/L	1	3/7/2013 3:24:32 PM	
1,2,4-Trimethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 3:24:32 PM	
1,3,5-Trimethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 3:24:32 PM	
Surr: 4-Bromofluorobenzene	90.0	69.4-129	Р	%REC	1	3/7/2013 3:24:32 PM	

Qualifiers:	

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/11/2013

CLIENT: LTE			(	Client Sampl	e ID: MW-3	
<b>Project:</b> Ice Canyon Drip				Collection I	Date: 3/4/20	13 9:35:00 AM
Lab ID: 1303300-002	Matrix:	AQUEOU	S	Received I	Date: 3/7/20	13 9:56:00 AM
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: <b>NSB</b>
Benzene	ND	1.0	Р	µg/L	1	3/7/2013 3:54:38 PM
Toluene	ND	1.0	Р	µg/L	1	3/7/2013 3:54:38 PM
Ethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 3:54:38 PM
Xylenes, Total	ND	2.0	Р	µg/L	1	3/7/2013 3:54:38 PM
1,2,4-Trimethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 3:54:38 PM
1,3,5-Trimethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 3:54:38 PM
Surr: 4-Bromofluorobenzene	93.4	69.4-129	Р	%REC	1	3/7/2013 3:54:38 PM

<b>Qualifiers:</b>	

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/11/2013

CLIENT: LTE			0	Client Sample	<b>ID:</b> MW-4	
<b>Project:</b> Ice Canyon Drip				Collection D	ate: 3/4/20	13 10:10:00 AM
Lab ID: 1303300-003	Matrix:	AQUEOUS		Received D	ate: 3/7/20	13 9:56:00 AM
Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0	Р	µg/L	1	3/7/2013 4:24:46 PM
Toluene	ND	1.0	Р	µg/L	1	3/7/2013 4:24:46 PM
Ethylbenzene	ND	1.0	Ρ	µg/L	1	3/7/2013 4:24:46 PM
Xylenes, Total	ND	2.0	Ρ	µg/L	1	3/7/2013 4:24:46 PM
1,2,4-Trimethylbenzene	ND	1.0	Ρ	µg/L	1	3/7/2013 4:24:46 PM
1,3,5-Trimethylbenzene	ND	1.0	Ρ	µg/L	1	3/7/2013 4:24:46 PM
Surr: 4-Bromofluorobenzene	87.2	69.4-129	Р	%REC	1	3/7/2013 4:24:46 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/11/2013

CLIENT: LTE			C	Client Sample	e ID: MW-7	12 11 40 00 AM						
Project: Ice Canyon Drip				Collection L	<b>Pate:</b> 3/4/20	13 11:40:00 AM						
Lab ID: 1303300-004	Matrix:	AQUEOUS		<b>Received Date:</b> 3/7/2013 9:56:00 AM								
Analyses	Result	RL (	Qual	Units	DF	Date Analyzed						
EPA METHOD 8021B: VOLATILES						Analyst: NSB						
Benzene	ND	1.0	Р	µg/L	1	3/7/2013 4:54:46 PM						
Toluene	ND	1.0	Ρ	µg/L	1	3/7/2013 4:54:46 PM						
Ethylbenzene	ND	1.0	Р	µg/L	1	3/7/2013 4:54:46 PM						
Xylenes, Total	ND	2.0	Ρ	µg/L	1	3/7/2013 4:54:46 PM						
1,2,4-Trimethylbenzene	ND	1.0	Ρ	µg/L	1	3/7/2013 4:54:46 PM						
1,3,5-Trimethylbenzene	ND	1.0	Ρ	µg/L	1	3/7/2013 4:54:46 PM						
Surr: 4-Bromofluorobenzene	87.6	69.4-129	Р	%REC	1	3/7/2013 4:54:46 PM						

Qualifiers:	

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/11/2013

CLIENT: LTE			C	Client Sample	e <b>ID:</b> MW-8	
<b>Project:</b> Ice Canyon Drip				Collection I	Date: 3/4/20	13 11:35:00 AM
Lab ID: 1303300-005	Matrix:	AQUEOUS		Received I	Date: 3/7/20	13 9:56:00 AM
Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.0	Р	µg/L	2	3/7/2013 5:24:54 PM
Toluene	ND	2.0	Ρ	µg/L	2	3/7/2013 5:24:54 PM
Ethylbenzene	ND	2.0	Ρ	µg/L	2	3/7/2013 5:24:54 PM
Xylenes, Total	ND	4.0	Ρ	µg/L	2	3/7/2013 5:24:54 PM
1,2,4-Trimethylbenzene	ND	2.0	Ρ	µg/L	2	3/7/2013 5:24:54 PM
1,3,5-Trimethylbenzene	ND	2.0	Ρ	µg/L	2	3/7/2013 5:24:54 PM
Surr: 4-Bromofluorobenzene	89.4	69.4-129	Ρ	%REC	2	3/7/2013 5:24:54 PM

Qualifiers:	

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1303300** 

11-Mar-13

### Client: LTE

Project: Ice Canyon Drip

Sample ID 5ML RB	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles										
Client ID: PBW	Batcl	h ID: R9	057	F	RunNo: <b>S</b>	9057								
Prep Date:	Analysis E	Date: 3/	7/2013	S	SeqNo: 2	258308	Units: µg/L	ιs: μ <b>g/L</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	ND	1.0												
Toluene	ene ND 1.0													
Ethylbenzene	ND	1.0												
Xylenes, Total	ND	2.0												
1,2,4-Trimethylbenzene	ND	1.0												
1,3,5-Trimethylbenzene	ND	1.0												
Surr: 4-Bromofluorobenzene	19		20.00		96.6	69.4	129							
Sample ID 100NG BTEX LCS	Samp1	ype: LC	s	Tes	tCode: E	PA Method	8021B: Volat	iles						
Client ID: LCSW	Batcl	h ID: R9	057	F	RunNo: 🥵	9057								
Prep Date:	Analysis E	Date: 3/	7/2013	5	SeqNo: 2	258309	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	19	1.0	20.00	0	95.2	80	120							
Toluene	19	1.0	20.00	0	95.6	80	120							
Ethylbenzene	19	1.0	20.00	0	96.6	80	120							
Xylenes, Total	59	2.0	60.00	0	98.8	80	120							
1,2,4-Trimethylbenzene	19	1.0	20.00	0	94.3	80	120							
-				0 985 80 120										
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.5	80	120							

#### **Qualifiers:**

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - S Spike Recovery outside accepted recovery limits



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name:	LTE	, γ ν	ork Orc	ler N	lumb	oer:	1303300
Received by/date	× 1/2	minin					
Logged By:	NC) Lindsay Mangin	0'310' H1'S				(Jose	ky Hoppo
		0/7/2010 9.30.00 AM					
Completed By:	Lindsay Mangin	3///2013 12:46:36 PM				()	by Henger
Reviewed By:	10	030112013					
Chain of Cus	<u>tody</u>						
1. Were seals	intact?		Yes		No	i	Not Present 🗸
2. Is Chain of C	Custody complete?		Yes	✓	No	•	Not Present
3. How was the	e sample delivered?		- <u>Clien</u>	<b>_</b>	Co	Je.	ER \$ 03/072/13
l oa in							()
<u>4</u> Coolors are	propert? (and 19, for cooler	ano cific information)	Vac		No	: .	NA
4. Coolers are	presentr (see 19. for cooler	specific information)	res	.•	NU	•	NA
5. Was an atte	mpt made to cool the samp	les?	Yes		No	1	NA
6. Were all sar	nples received at a tempera	ture of >0° C to 6.0°C	Yes	.✔	No	: :	NA
7. Sample(s) ir	n proper container(s)?		Yes	✓	No		
8. Sufficient sa	ample volume for indicated to	est(s)?	Yes	.∕`	No		
9. Are samples	s (except VOA and ONG) pro	operly preserved?	Yes	4	No		
10. Was preserv	vative added to bottles?		Yes	i	No	✓.	NA
11 VOA vials h	ave zero headspace?		Yes	~	No	÷	No VOA Vials
12. Were any sa	ample containers received b	roken?	Yes	ii	No	~	i
13. Does paper	work match bottle labels?		Yes	~	No		# of preserved
(Note discre	pancies on chain of custody	·)					for pH:
14. Are matrice:	s correctly identified on Chai	in of Custody?	Yes	✓	No	•	(<2 or >12 unless noted)
15, Is it clear wh	nat analyses were requested	1?	Yes	<b>V</b> :	No	÷	Adjusted ?
16, were all hol (If no, notify	customer for authorization.)		Yes		NO	i	Checked by:
Special Hand	ling (if applicable)						Checked by.
17 Was client r	notified of all discrepancies v	with this order?	Vae	:	No		NA 🖌
			103				
Persor	Notified:	Date:		_		_	
By Wh	om:	Via:	eMai		P	ione	Fax In Person
Regard	ang:		1.11.9.46 / APRIL 6 / America and		uterin e en er		
Cilent	msuucions.						

18. Additional remarks:

19 Cooler Information

ŀ	Cooler No	Temp ⁰C	Condition	Seal Intact	Seal No	Seal Date	Signed By
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

July 22, 2013

Ashley Ager LTE 2243 Main Ave Suite 3 Durango, CO 81301 TEL: (970) 946-1093 FAX

RE: Ice Canyon Drip

OrderNo.: 1306C42

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/28/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report
Lab Order 1306C42

Date Reported: 7/22/2013

CLIENT: LTE Client Sample ID: MW-4							
<b>Project:</b> Ice Canyon Drip	Ice Canyon Drip Collection Date: 6/27/2013 12:00:00 PM						
Lab ID: 1306C42-001	Matrix:	AQUEOUS	Received 1	<b>Date:</b> 6/2	28/2013 10:00:00 AM		
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 8021B: VOLATILES					Analys	t: NSB	
Benzene	ND	1.0	µg/L	1	7/1/2013 5:19:05 PM	R11690	
Toluene	ND	1.0	µg/L	1	7/1/2013 5:19:05 PM	R11690	
Ethylbenzene	ND	1.0	µg/L	1	7/1/2013 5:19:05 PM	R11690	
Xylenes, Total	ND	2.0	µg/L	1	7/1/2013 5:19:05 PM	R11690	
Surr: 4-Bromofluorobenzene	107	69.4-129	%REC	1	7/1/2013 5:19:05 PM	R11690	

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 1 of 7
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report
Lab Order 1306C42

Hall Environmental Analysis Laboratory, Inc.	

Date Reported: 7/22/2013

CLIENT: LTE	Client Sample ID: MW-8							
<b>Project:</b> Ice Canyon Drip	Collection Date: 6/27/2013 12:45:00 PM							
Lab ID: 1306C42-002	Matrix:	AQUEOUS	Received l	<b>Date:</b> 6/2	28/2013 10:00:00 AM			
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analyst	: NSB		
Benzene	ND	2.0	µg/L	2	7/1/2013 6:49:54 PM	R11690		
Toluene	ND	2.0	µg/L	2	7/1/2013 6:49:54 PM	R11690		
Ethylbenzene	ND	2.0	µg/L	2	7/1/2013 6:49:54 PM	R11690		
Xylenes, Total	ND	4.0	µg/L	2	7/1/2013 6:49:54 PM	R11690		
Surr: 4-Bromofluorobenzene	111	69.4-129	%REC	2	7/1/2013 6:49:54 PM	R11690		

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 2 of 7
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report
Lab Order 1306C42

CLIENT. I TE			Client Same	lo ID• M	W 5		
Project: Ice Canvon Drin	Collection Date: 6/27/2013 1:40:00 PM						
Lab ID: 1306C42-003	Matrix: A	QUEOUS	Received	Date: 6/2	28/2013 10:00:00 AM	[	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB	
Benzene	ND	2.0	µg/L	2	7/1/2013 7:20:20 PM	R11690	

2.0

2.0

4.0

69.4-129

µg/L

µg/L

µg/L

%REC

ND

ND

ND

106

### Hall Environmental Analysis Laboratory, Inc.

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Date Reported: 7/22/2013

7/1/2013 7:20:20 PM

7/1/2013 7:20:20 PM

7/1/2013 7:20:20 PM

2 7/1/2013 7:20:20 PM

2

2

2

R11690

R11690

R11690

R11690

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 3 of 7
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report Lab Order 1306C42 Date Reported: 7/22/2013

CLIENT: LTE			Client Sampl	e ID: SA	/E-4"			
Project: Ice Canyon Drip Lab ID: 1306C42-004	Collection Date:         6/27/2013         1:50:00 PM           Matrix:         AQUEOUS         Received Date:         6/28/2013         10:00:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analys	: NSB		
Benzene	13	5.0	µg/L	5	7/2/2013 10:29:12 PM	R11718		
Toluene	ND	5.0	μg/L	5	7/2/2013 10:29:12 PM	R11718		
Ethylbenzene	ND	5.0	µg/L	5	7/2/2013 10:29:12 PM	R11718		
Xylenes, Total	170	10	µg/L	5	7/2/2013 10:29:12 PM	R11718		
Surr: 4-Bromofluorobenzene	106	69.4-129	%REC	5	7/2/2013 10:29:12 PM	R11718		

# Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 4 of 7
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report Lab Order 1306C42 Date Reported: 7/22/2013

CLIENT: LTE Project: Ice Canvon Drip	Client Sample ID: Trip Blank Collection Date:							
Lab ID: 1306C42-005	Matrix: AQUEOUS Received Date: 6/28/2013 10:00:00							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8021B: VOLATILES					Analys	t: NSB		
Benzene	ND	1.0	µg/L	1	7/1/2013 8:20:45 PM	R11690		
Toluene	ND	1.0	µg/L	1	7/1/2013 8:20:45 PM	R11690		
Ethylbenzene	ND	1.0	µg/L	1	7/1/2013 8:20:45 PM	R11690		
Xylenes, Total	ND	2.0	µg/L	1	7/1/2013 8:20:45 PM	R11690		
Surr: 4-Bromofluorobenzene	107	69.4-129	%REC	1	7/1/2013 8:20:45 PM	R11690		

# Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 5 of 7
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

WO#: 1306C42 22-Jul-13

Client:	LTE										
Project:	Ice Car	nyon Drip									
Sample ID	B9	Samp	Гуре: М	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBW	Batc	h ID: <b>R1</b>	1690	F	RunNo: 1	1690				
Prep Date:		Analysis [	Date: 7/	/1/2013	Ś	SeqNo: 3	331778	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Xylenes, Total		ND	2.0								
Surr: 4-Bron	nofluorobenzene	22		20.00		110	69.4	129			
Sample ID	100NG BTEX L	CS Samp	Гуре: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	LCSW	Batc	h ID: <b>R1</b>	1690	F	RunNo: 1	1690				
Prep Date:		Analysis [	Date: 7/	/1/2013	Ş	SeqNo: 3	331779	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		21	1.0	20.00	0	104	80	120			
Toluene		21	1.0	20.00	0	104	80	120			
Ethylbenzene		21	1.0	20.00	0	104	80	120			
Xylenes, Total		63	2.0	60.00	0	105	80	120			
Surr: 4-Bron	nofluorobenzene	22		20.00		112	69.4	129			
Sample ID	1306C42-001AN	IS Samp	Гуре: М	6	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	MW-4	Batc	h ID: <b>R1</b>	1690	F	RunNo: 1	1690				
Prep Date:		Analysis [	Date: 7/	/1/2013	Ś	SeqNo: 331784		Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		20	1.0	20.00	0	99.5	80	120			
Toluene		20	1.0	20.00	0	97.8	80	120			
Ethylbenzene		20	1.0	20.00	0	99.4	80	120			
Xylenes, Total		60	2.0	60.00	0	100	80	120			
Surr: 4-Bron	nofluorobenzene	22		20.00		110	69.4	129			
Sample ID	1306C42-001AN	ISD Samp	Гуре: М	SD	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	MW-4	Batc	h ID: <b>R1</b>	1690	F	RunNo: 1	1690				
Prep Date:		Analysis [	Date: 7/	/1/2013	Ş	SeqNo: 3	331785	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		20	1.0	20.00	0	101	80	120	1.25	20	
Toluene		20	1.0	20.00	0	100	80	120	2.46	20	
Ethylbenzene		20	1.0	20.00	0	101	80	120	1.18	20	
Xylenes, Total		61	2.0	60.00	0	102	80	120	2.11	20	
Surr: 4-Bron	nofluorobenzene	22		20.00		111	69.4	129	0	0	

#### **Qualifiers:**

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 6 of 7

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc

LTE

WO#: 1306C42 22-Jul-13

#### **Project:** Ice Canyon Drip Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Client ID: Batch ID: R11718 RunNo: 11718 Prep Date: Analysis Date: 7/2/2013 SeqNo: 332833 Units: µg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Benzene ND 1.0 Toluene ND 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 19 20.00 97.5 69.4 129 Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSW Batch ID: R11718 RunNo: 11718 Prep Date: Analysis Date: 7/2/2013 SeqNo: 332834 Units: µg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual 20 20.00 1.0 0 98.4 80 120 Benzene Toluene 20 1.0 20.00 0 99.1 80 120 Ethylbenzene 20 1.0 20.00 0 99.5 80 120 60 2.0 60.00 0 99.6 80 120 Xylenes, Total Surr: 4-Bromofluorobenzene 20 20.00 102 69.4 129

**Qualifiers:** 

**Client:** 

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit



#### Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: L1	TE .	Work Order Number:	1306C42	2		Rcpi	tNo: 1
Received by/date:_	AT 06/28/1	3		:			
Logged By:	Anne Thorne	6/28/2013 10:00:00 AM	1	a.	ne Am	~	
Completed By:	Anne Thorne	6/29/2013		a.	ne An	_	
Reviewed By:	TO	07/01/13					
Chain of Custo	dy	, ,					
1. Custody seals i	intact on sample bottles?		Yes 🗌		No 🗌	Not Present	$\checkmark$
2. Is Chain of Cus	stody complete?		Yes 🖌		No 🗆	Not Present	
3. How was the sa	ample delivered?		<u>Courier</u>				
Log In							
4. Was an attemp	ot made to cool the samples	?	Yes 🛛		No 🗆	NA	
5. Were all sampl	es received at a temperature	e of >0° C to 6.0°C	Yes 🗹	] I	No 🗌	. NA	
6. Sample(s) in p	roper container(s)?		Yes 🖌		No 🗌		
7. Sufficient samp	ble volume for indicated test(	s)?	Yes 🔽		No 🗌		
8. Are samples (e	except VOA and ONG) prope	rly preserved?	Yes 🔽		No 🗌		
9. Was preservati	ive added to bottles?		Yes		No 🗹	NA	
10.VOA vials have	e zero headspace?		Yes 🔽		No 🗌	No VOA Vials	
11. Were any sam	ple containers received brok	en?	Yes [		No 🗹	# of preserved	
12. Does paperwor (Note discrepa	rk match bottle labels? ncies on chain of custody)		Yes 🔽		No 🗌	bottles checke for pH:	d (<2 or >12 unless noted)
13. Are matrices co	prrectly identified on Chain o	f Custody?	Yes 🔽		No 🗌	Adjusted	?
14. Is it clear what	analyses were requested?		Yes 🗹		No 🗌		
15. Were all holdin (If no, notify cu	g times able to be met? stomer for authorization.)		Yes 🗹		No 🗌	Checked	by:
Special Handlir	ng (if applicable)						
16. Was client noti	fied of all discrepancies with	this order?	Yes 🗌	]	No 🗌	NA	

Person Notified:	Date
By Whom:	Via: 🗌 eMail 🗌 Phone 🗌 Fax 🗌 In Person
Regarding:	
Client Instructions:	

17. Additional remarks:

#### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

October 03, 2013

Ashley Ager LTE 2243 Main Ave Suite 3 Durango, CO 81301 TEL: (970) 946-1093 FAX

RE: Ice Canyon Drip

OrderNo.: 1309C90

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/26/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**Analytical Report** Lab Order 1309C90

Hall Environmental Anal	lysis Laboratory, Inc.	

Date Reported: 10/3/2013

CLIENT: LTE	Client Sample ID: SVE 4 Collection Date: 9/24/2013 2:50:00 PM									
<b>Project:</b> Ice Canyon Drip										
Lab ID: 1309C90-001	Matrix:	AQUEOUS	<b>Received</b>	<b>Date:</b> 9/2	26/2013 10:00:00 AM					
Analyses	Result	RL Qual	Units	DF	Date Analyzed	Batch				
EPA METHOD 8021B: VOLATILES					Analyst	NSB				
Methyl tert-butyl ether (MTBE)	ND	12	µg/L	5	9/27/2013 7:05:44 PM	R13687				
Benzene	ND	5.0	µg/L	5	9/27/2013 7:05:44 PM	R13687				
Toluene	ND	5.0	µg/L	5	9/27/2013 7:05:44 PM	R13687				
Ethylbenzene	45	5.0	µg/L	5	9/27/2013 7:05:44 PM	R13687				
Xylenes, Total	210	10	µg/L	5	9/27/2013 7:05:44 PM	R13687				
1,2,4-Trimethylbenzene	82	5.0	µg/L	5	9/27/2013 7:05:44 PM	R13687				
1,3,5-Trimethylbenzene	35	5.0	µg/L	5	9/27/2013 7:05:44 PM	R13687				
Surr: 4-Bromofluorobenzene	132	85-136	%REC	5	9/27/2013 7:05:44 PM	R13687				

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	Е	Value above quantitation range

- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Not Detected at the Reporting Limit Page 1 of 3 Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

Hall Envi	ronment	al Anal	ysis I	Laborat	ory, Inc.						03-Oct-13
Client: Project:	LTE Ice Cany	on Drip									
Sample ID 5M	L RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PB	w	Batch	n ID: <b>R1</b>	3687	F	RunNo: 1	3687				
Prep Date:		Analysis D	ate: 9/	27/2013	S	SeqNo: 3	89905	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl eth	ier (MTBE)	ND	2.5								
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Xylenes, Total		ND	2.0								
1,2,4-Trimethylbenz	zene	ND	1.0								
1,3,5-Trimethylbenz	zene	ND	1.0								
Surr: 4-Bromofluc	orobenzene	22		20.00		111	85	136			
Sample ID 100	ONG BTEX LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LC	sw	Batch	n ID: <b>R1</b>	3687	F	RunNo: 1	3687				
Prep Date:		Analysis D	ate: 9/	27/2013	S	SeqNo: 3	89906	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl eth	ier (MTBE)	19	2.5	20.00	0	95.4	76.8	124			
Benzene		20	1.0	20.00	0	97.6	80	120			
Toluene		20	1.0	20.00	0	99.2	80	120			
Ethylbenzene		20	1.0	20.00	0	100	80	120			
Xylenes, Total		62	2.0	60.00	0	104	80	120			
1,2,4-Trimethylbenz	zene	21	1.0	20.00	0	104	80	120			
1,3,5-Trimethylbenz	zene	21	1.0	20.00	0	106	80	120			
Surr: 4-Bromofluc	probenzene	23		20.00		114	85	136			
Sample ID 130	09C89-001AMS	SampT	ype: <b>MS</b>	6	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: Bat	tchQC	Batch	n ID: <b>R1</b>	3687	F	RunNo: 1	3687				
Prep Date:		Analysis D	ate: 9/	27/2013	S	SeqNo: 3	89911	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl eth	ier (MTBE)	90	12	100.0	0	89.6	56.1	130			
Benzene		110	5.0	100.0	0	110	73.4	119			
Toluene		110	5.0	100.0	9.090	105	80	120			
Ethylbenzene		150	5.0	100.0	44.38	104	80	120			
Xylenes, Total		510	10	300.0	208.0	101	80	120			
1,2,4-Trimethylbenz	zene	200	5.0	100.0	105.7	95.0	80	120			
1,3,5-Trimethylbenz	zene	120	5.0	100.0	11.61	107	80	120			
Surr: 4-Bromofluc	orobenzene	130		100.0		131	85	136			

#### **Qualifiers:**

* Value exceeds Maximum Contaminant Level.

**QC SUMMARY REPORT** 

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Р Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit RL

Page 2 of 3

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

### WO#: **1309C90**

03-Oct-13

### Client: LTE

Project: Ice Canyon Drip

Sample ID 1309C89-001AM	D SampType: MSD TestCode: EPA Method 8021B: Volatiles									
Client ID: BatchQC	BatchQC Batch ID: R13687 RunNo: 13687									
Prep Date:	Analysis D	ate: <b>9/</b> 2	27/2013	5	SeqNo: 3	89912	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	97	12	100.0	0	96.9	56.1	130	7.86	20	
Benzene	110	5.0	100.0	0	112	73.4	119	0.928	20	
Toluene	110	5.0	100.0	9.090	105	80	120	0.193	20	
Ethylbenzene	150	5.0	100.0	44.38	105	80	120	0.666	20	
Xylenes, Total	510	10	300.0	208.0	101	80	120	0.540	20	
1,2,4-Trimethylbenzene	200	5.0	100.0	105.7	98.1	80	120	1.54	20	
1,3,5-Trimethylbenzene	120	5.0	100.0	11.61	109	80	120	1.46	20	
Surr: 4-Bromofluorobenzene	130		100.0		131	85	136	0	0	

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit



#### Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: LTE	Name: LTE Work Order Number: 1309C90				RcptNo: 1	
Received by/date:	09/26/21	013		<u> </u>		
ر Logged By: Ashley Gallegos	9/26/2013 10:00:00 AM		AZ			
Completed By: Ashley Gallegos	9/26/2013 6:01:42 PM		A			
Reviewed By:	09/27/1	3	Û .			
Chain of Custody				·····		
1. Custody seals intact on sample bottles	?	Yes	No 🗔	Not Present 🗹		
2. Is Chain of Custody complete?		Yes 🖌	No 🗌	Not Present		
3. How was the sample delivered?		Courier				
Log In						
4. Was an attempt made to cool the sam	ples?	Yes 🗹	No 🗌			
5. Were all samples received at a temper	ature of >0° C to 6.0°C	Yes 🖌	No 🗌			
6. Sample(s) in proper container(s)?		Yes 🔽	No 🗌			
7. Sufficient sample volume for indicated	test(s)?	Yes 🔽	No			
8. Are samples (except VOA and ONG) properly preserved?		Yes 🗸	No 🗌			
9. Was preservative added to bottles?		Yes	No 🗹	NA 🗌		
10.VOA vials have zero headspace?		Yes 🔽	No 🗌	No VOA Vials 🗌		
11. Were any sample containers received broken?		Yes	No 🗹			
12. Does paperwork match bottle labels?		Ves 🗸	No 🗌	# of preserved bottles checked for pH		
(Note discrepancies on chain of custody)				(<2 oi	>12 unless noted)	
13. Are matrices correctly identified on Chain of Custody?		Yes 🔽	No 🗌	Adjusted?		
14. Is it clear what analyses were requested?		Yes 🗹	No 🗌			
15. Were all holding times able to be met? (If no. notify customer for authorization.)		Yes 🗹	No 📋	Checked by:		
	,					
<u>Special Handling (if applicable)</u>						
16. Was client notified of all discrepancies	with this order?	Yes	No 🗌	NA 🔽		
Person Notified:	Date					
By Whom:	Via:	eMail P	hone 🗍 Fax	In Person		
Regarding:		1411-1411-1411-1411-1411-1411-1411-141				
Client Instructions:		N				

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			


Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

December 11, 2013

Ashley Ager LTE 2243 Main Ave Suite 3 Durango, CO 81301 TEL: (970) 946-1093 FAX

RE: Ice Canyon Drip

OrderNo.: 1312260

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/5/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1312260

Hall Environmental Analysis	Laboratory, Inc.
Han Environmental Indiysis	Laboratory, Inc.

Date Reported: 12/11/2013

CLIENT: LTE	Client Sample ID: MW-2							
<b>Project:</b> Ice Canyon Drip	Collection Date: 12/2/2013 4:21:00 PM							
Lab ID: 1312260-001	Matrix: A	AQUEOUS	ate: 12/5/2	2/5/2013 10:00:00 AM				
Analyses	Result	RL Qua	Units	DF	Date Analyzed			
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>			
Benzene	ND	1.0	µg/L	1	12/7/2013 4:16:56 AM			
Toluene	ND	1.0	µg/L	1	12/7/2013 4:16:56 AM			
Ethylbenzene	ND	1.0	µg/L	1	12/7/2013 4:16:56 AM			
Xylenes, Total	ND	2.0	µg/L	1	12/7/2013 4:16:56 AM			
Surr: 4-Bromofluorobenzene	101	85-136	%REC	1	12/7/2013 4:16:56 AM			

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method	d Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 1 of 6
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and T	OC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report Lab Order 1312260 Date Reported: 12/11/2013

CLIENT: LTE			Client Sample	<b>ID:</b> MW-6		
<b>Project:</b> Ice Canyon Drip	Collection Date: 12/2/2013 4:45:00 PM					
Lab ID: 1312260-002	Matrix: A	AQUEOUS	<b>Received</b> D	ate: 12/5/2	013 10:00:00 AM	
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>	
Benzene	ND	2.0	µg/L	2	12/9/2013 11:55:25 PM	
Toluene	ND	2.0	µg/L	2	12/9/2013 11:55:25 PM	
Ethylbenzene	ND	2.0	µg/L	2	12/9/2013 11:55:25 PM	
Xylenes, Total	ND	4.0	µg/L	2	12/9/2013 11:55:25 PM	
Surr: 4-Bromofluorobenzene	101	85-136	%REC	2	12/9/2013 11:55:25 PM	

# Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 2 of 6
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report Lab Order 1312260 Date Reported: 12/11/2013

CLIENT: LTE	Client Sample ID: SVE-4						
<b>Project:</b> Ice Canyon Drip			Collection D	ate: 12/2/2	013 4:54:00 PM		
Lab ID: 1312260-003	Matrix:	AQUEOUS	Received D	ate: 12/5/2	013 10:00:00 AM		
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>		
Benzene	ND	5.0	µg/L	5	12/10/2013 12:25:29 AM		
Toluene	ND	5.0	µg/L	5	12/10/2013 12:25:29 AM		
Ethylbenzene	10	5.0	µg/L	5	12/10/2013 12:25:29 AM		
Xylenes, Total	34	10	µg/L	5	12/10/2013 12:25:29 AM		
Surr: 4-Bromofluorobenzene	107	85-136	%REC	5	12/10/2013 12:25:29 AM		

# Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	d Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 3 of 6
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and T	OC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report Lab Order 1312260 Date Reported: 12/11/2013

CLIENT: LTE Project: Lee Canvon Drin			Client Sample	e <b>ID:</b> Trip B	lank		
Lab ID: 1312260-004	Matrix: AQUEOUS Received Date: 12/5/2013 10:00:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	1.0	µg/L	1	12/10/2013 1:55:51 AM		
Toluene	ND	1.0	µg/L	1	12/10/2013 1:55:51 AM		
Ethylbenzene	ND	1.0	µg/L	1	12/10/2013 1:55:51 AM		
Xylenes, Total	ND	2.0	µg/L	1	12/10/2013 1:55:51 AM		
Surr: 4-Bromofluorobenzene	101	85-136	%REC	1	12/10/2013 1:55:51 AM		

# Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 4 of 6
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Er	nvironment	al Anal	ysis I	Laborat	ory, Inc.						11-Dec-13
Client:	LTE	<b>D</b> :									
Project:	Ice Cany	on Drip									
Sample ID	5ML RB	Samp	Гуре: М	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBW	Batc	h ID: <b>R1</b>	5341	F	RunNo: 1	5341				
Prep Date:		Analysis [	Date: 12	2/6/2013	5	SeqNo: 4	41968	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Xylenes, Total		ND	2.0								
Surr: 4-Bron	nofluorobenzene	19		20.00		92.7	85	136			
Sample ID	100NG BTEX LCS	Samp ⁻	Гуре: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	LCSW	Batc	h ID: <b>R1</b>	5341	F	RunNo: <b>1</b>	5341				
Prep Date:		Analysis [	Date: 12	2/6/2013	5	SeqNo: 4	41969	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		21	1.0	20.00	0	105	80	120			
Toluene		21	1.0	20.00	0	104	80	120			
Ethylbenzene		21	1.0	20.00	0	103	80	120			
Xylenes, Total		63	2.0	60.00	0	105	80	120			
Surr: 4-Bron	nofluorobenzene	19		20.00		97.0	85	136			
Sample ID	B16	Samp	Гуре: М	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBW	Batc	h ID: <b>R1</b>	5367	F	RunNo: 1	5367				
Prep Date:		Analysis [	Date: 12	2/9/2013	S	SeqNo: 4	42688	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Xylenes, Total		ND	2.0								
Surr: 4-Bron	nofluorobenzene	19		20.00		94.4	85	136			
Sample ID	100NG BTEX LCS	Samp ⁻	Гуре: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	LCSW	Batc	h ID: <b>R1</b>	5367	F	RunNo: <b>1</b>	5367				
Prep Date:		Analysis [	Date: 12	2/9/2013	S	SeqNo: 4	42689	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		22	1.0	20.00	0	108	80	120			
Toluene		22	1.0	20.00	0	108	80	120			
Ethylbenzene		21	1.0	20.00	0	106	80	120			
Xylenes, Total		65	2.0	60.00	0	108	80	120			
Surr: 4-Bron	nofluorobenzene	21		20.00		104	85	136			

#### **Qualifiers:**

* Value exceeds Maximum Contaminant Level.

**QC SUMMARY REPORT** 

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Р Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 5 of 6

### Client: LTE

Project: Ice Canyon Drip

Sample ID 1312260-003AM	<b>S</b> SampT	ype: <b>MS</b>	3	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: SVE-4	Batch	n ID: <b>R1</b>	5367	F	unNo: 1	5367				
Prep Date:	Analysis D	ate: 12	2/10/2013	S	eqNo: 4	42696	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	120	5.0	100.0	0	116	73.4	119			
Toluene	120	5.0	100.0	0	116	80	120			
Ethylbenzene	120	5.0	100.0	10.14	114	80	120			
Xylenes, Total	380	10	300.0	33.96	115	80	120			
Surr: 4-Bromofluorobenzene	110		100.0		111	85	136			
Sample ID 1312260-003AM	SD SampT	ype: <b>MS</b>	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Sample ID 1312260-003AM Client ID: SVE-4	SD SampT Batch	ype: <b>MS</b> 1D: <b>R1</b>	SD 5367	Tes F	tCode: El	PA Method 5367	8021B: Volat	iles		
Sample ID 1312260-003AM: Client ID: SVE-4 Prep Date:	<b>SD</b> SampT Batch Analysis D	ÿpe: M\$ n ID: R1 Date: 12	SD 5367 2/10/2013	Tes F S	Code: El tunNo: 1 teqNo: 4	PA Method 5367 42697	8021B: Volat Units: μg/L	iles		
Sample ID 1312260-003AM Client ID: SVE-4 Prep Date: Analyte	SD SampT Batcl Analysis D Result	ÿpe: <b>M\$</b> n ID: <b>R1</b> Date: <b>12</b> PQL	SD 5367 2/10/2013 SPK value	Tes F S SPK Ref Val	Code: EF unNo: 1 eqNo: 4 %REC	PA Method 5367 42697 LowLimit	<b>8021Β: Volat</b> Units: μg/L HighLimit	iles %RPD	RPDLimit	Qual
Sample ID 1312260-003AM Client ID: SVE-4 Prep Date: Analyte Benzene	SD SampT Batch Analysis D Result 120	Type: MS n ID: R1 Date: 12 PQL 5.0	5367 2/10/2013 SPK value 100.0	Tes F S SPK Ref Val 0	Code: Ef cunNo: 19 ceqNo: 4 %REC 117	PA Method 5367 42697 LowLimit 73.4	8021B: Volat Units: µg/L HighLimit 119	iles %RPD 0.637	RPDLimit 20	Qual
Sample ID 1312260-003AM Client ID: SVE-4 Prep Date: Analyte Benzene Toluene	SD SampT Batch Analysis D Result 120 120	Type: MS n ID: R1 Date: 12 PQL 5.0 5.0	<b>5367</b> 2/10/2013 SPK value 100.0 100.0	Tes F S SPK Ref Val 0 0	Code: Ef RunNo: 1 GeqNo: 4 <u>%REC</u> 117 117	PA Method 5367 42697 LowLimit 73.4 80	8021B: Volat Units: µg/L HighLimit 119 120	<pre>iles     %RPD     0.637     0.403</pre>	RPDLimit 20 20	Qual
Sample ID 1312260-003AM Client ID: SVE-4 Prep Date: Analyte Benzene Toluene Ethylbenzene	SD SampT Batch Analysis D Result 120 120 120	Type: MS n ID: R1 Date: 12 PQL 5.0 5.0 5.0	<b>5367</b> <b>2/10/2013</b> <b>SPK value</b> 100.0 100.0 100.0	Tes F SPK Ref Val 0 0 10.14	Code: Ef unNo: 19 SeqNo: 4 <u>%REC</u> 117 117 113	PA Method 5367 42697 LowLimit 73.4 80 80	8021B: Volat Units: μg/L HighLimit 119 120 120	%RPD 0.637 0.403 1.08	RPDLimit 20 20 20	Qual
Sample ID 1312260-003AMS Client ID: SVE-4 Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	SD SampT Batch Analysis D Result 120 120 120 380	Type: MS n ID: R1 Date: 12 PQL 5.0 5.0 5.0 10	5367 2/10/2013 SPK value 100.0 100.0 100.0 300.0	Tes F SPK Ref Val 0 10.14 33.96	Code: EF RunNo: 19 GeqNo: 4 %REC 117 117 113 115	PA Method 5367 42697 LowLimit 73.4 80 80 80	8021B: Volat Units: μg/L HighLimit 119 120 120 120	%RPD 0.637 0.403 1.08 0.150	RPDLimit 20 20 20 20 20	Qual

#### **Qualifiers:**

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

HALL
ANALYSIS
LABORATORY

### Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: LTE	Work Order Number: 1312260		RcptNo:	1
Received by/date: MG- 12,	105/13		<u> </u>	
Logged By: Anne Thorne	2/5/2013 10:00:00 AM	anne Arm	-	
Completed By: Anne Thorne	2/6/2013	am Am	~	
Reviewed By: A 12/DC	6/13			
Chain of Custody				
1. Custody seals intact on sample bottles?	Yes 🗌	No 🗔	Not Present 🗹	
2. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present	
3. How was the sample delivered?	Courier			
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🔽	] No 🗌	NA 🗆	
5. Were all samples received at a temperature of	of >0° C to 6.0°C Yes ✔	No 🗌	NA	
6. Sample(s) in proper container(s)?	Yes 🔽	No 🗌		
7. Sufficient sample volume for indicated test(s)	? Yes 🗹	No 🗌		
8. Are samples (except VOA and ONG) properly	r preserved? Yes 🗹	No 🗌		
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗌	
10.VOA vials have zero headspace?	Yes 🗹	No 🗌	No VOA Vials 🗌	
11. Were any sample containers received broker	n? Yes	No 🗹	# of preserved	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗸	No 🗌	for pH:	r >12 unless noted)
13. Are matrices correctly identified on Chain of C	Custody? Yes 🗹	No 🗌	Adjusted?	
14. Is it clear what analyses were requested?	Yes 🗸	No 🗌		
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗌	Checked by:	
Special Handling (if applicable)				
16. Was client notified of all discrepancies with the	is order? Yes	No 🗌	NA 🗹	_
Person Notified:	Date			

Regarding: Client Instructions:

Via:

eMail Phone Fax In Person

17. Additional remarks:

By Whom:

### 18. Cooler Information

1	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
	1	1.0	Good	Yes			

4/4/13/1800 / Josether Wast	B         B         K         F           Date:         Time:         Relinquished by:	Date: Time: Relinquished by:								Trip Blan	12/13/1654 GW SUE-4	wing light and mu-6	2/2/15/102 an mw-2	Date Time Matrix Sample Red	□ EDD (Type)	Accreditation □ NELAP □ Other	Standard 🛛 Level 4 (Full \	2A/QC Package:	mail or Fax#: BCGGerron Henve	2009 # 00-305-109 6	Duraman (n BISON	Tailing Address: 2243 Maim	<b>F</b>	Slient: JTEN insomerita	Chain-of-Custody Rec
tens M	AM	Received								·K	VOA	VOIA	V04/	quest ID Conta	Sample	Sample On Ice:	Validation)	N_N	Project		Project	Ave Ice		X Sta	cord
While the	104 Indital	d by:									13 HUL	13 HCL	3 HUL	ainer Preservative and # Type	• Temperature:	rr Lewin Hiel	THEY HE		Manager:		#: /	Canyon V		ndard 🗆 Rush_	round Time:
-12/05/13/0C	0 12/3/13 1845 Date Time	Date Time	-							-204	202	-W-	-cul	HEAL NO	1.0	C WACAN		2			•	うせ			·
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APPENDIX C

BOREHOLE LOG AND MONITORING WELL COMPLETION DIAGRAMS





•				In a stall Number:	Dale:	·.
	ompliance " El T Environme 243 Main Ave urango, Colo	ngineering " Ren ntal, Inc. nue, Suite 3 orado 81301	nediation	MW JN CE CUNYON Project: Logged By:	WWWBRC 12	di ∰
	TODINC WE	LL COMPLETIO	N DIAGRAM	Daniel neuman	Hole Diameter: Total Depth:	
BORING LOG/MON	Elevation:	Detector	Drilling Method:	Samplug magne	Depth to Water:	
	Casing Dismeter:	Casing Length:	Slot Size:	Stot Langth:		
Casing Type:		Grout:	Comments:			
Gravel Pack:	Sear				Well	
Penetration Resistance Moisture Content /apor (ppm)	Staining Sample #	Depth Sample (ft. bgs.) Run	Soil/Rock Type	Lithology/Remarks	Completion	
NO wet O	NO N/A		SAM N So	r me As Above	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
wu wet o	YO WA		50	me as above	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
NU wet O	ND N	20 21 A 22	T sm u	T Vet 7,5YF 31 Dark Brown	3 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	X

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2	ſ		Complia T Envi 243 Ma Jurang	ince " E Ironme ain Ave o, Cok	ngineeri ontal, ind enue, Si orado 81	ng " Rei ). lite 3 (301	n	Boring/Weil Number: MW-2K-Cawyon Project: Logged By:	Date: 10/23/13 Project Number: Drilled By:	
BORI	NGLO	G/MON	ITORI	NG WE	LL COM	PLETIO	N DIAG	RAM	Daniel neuman Sampling Method:	Hole Diameter: Total Depth:
Casina Ta		· · ·	Casing D	lameter:	Casing Long	th:	Slot Size:		Slot Length:	Depth to Water:
Gravel Pa			Seal:		Grout:		Comments:	<u>.                                    </u>		
Penetration Resistance	Moisture Content	[/] apor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type		Lithology/Remarks	Well Completion
	wet	× O	ЧО	N/A	22 23 24 25 26 27	X	SM	7,5 8096 1096 1096 NR San	s yr 3/3 Dher Bourn Fine coarse sitt	
JU L	vet	0	νU	w/A	28 29 30 31 32	X	SM	NR San	ie as above	X X X X X X

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BORI	NG LOG	/MON	TORIN	G WEL	L COM	PLETIO	N DIAGR	AM	Sampling Method:	Hole Diama	ter: Total Depth:
Lat/Long:			Elevation:		Detector:	-	Drilling Metho	u.		Depth to W	ater:
Casing Ty	pe:		Cosing Dia	meler:	Casing Lengt	h:	Slot Size:		Stot Lengui.		
			Seal:		Grout:		Comments:				
	а. 10 ш	Î		#		Semple	e et		t ithology/Rem	arks	Well Completion
Penetratic Resistanc	Moistur Conten	Vapor (pj	Stainin	Sample	Depth (ft. bgs.)	Run	Soil/R Typ				+.
NO	wet	0	NU	NA	33	SM		Sa	me as at	XONE	
ho	wet	0	3575 36,02	NIP	35 36 37	MARKET A	4	NR	sm 80 Fine 10 course 10 silt 5y 2,5/1	Black	
MU	SAT	0 74,60	NO 36,75 39,50	N A MWII 38:75 34:50	38 39 40		sm	SA SY	T 80 Fine 10 Toasse 10 silt BIS/I Black SYR3/3 Da	7, SYR 3/3 Davk Brow NK Brow W	
					41 42 43 44		Sm	N1 51	R AT 90 Fine 10 Louise 105ilt 7:5 YE 3/3	e Daik Bu	Null

BURGLOU CUSTOM XIS

Ľ	Íz		omplia T Envi 243 Ma urango	nce "E ronme ain Av o, Col	ingineeri ental, In enue, S orado 8	ng " Rei c. uite 3 1301 <u>(</u>	nediatio	n 	Boring/Well Number: MW-25 i carilla Confract 10/23/12 Project: Logged By: Data in Confract 10/23/12 Project: Drilled By: Data in Confract 10/23/12	; 
BORI	NG LOG	/MON	ITORI	NG WE	LL COM	PLETIO	N DIAG	RAM	Samoling Method: Hole Diameter: Total Depth:	
Lat/Long:			Elevation:		Detector:		DI HINK MAG		Depth to Water:	
Casing Ty	pe:		Casing Di	ameter:	Casing Leng	th:	Slot Size:		Slot Length:	
Gravel Pac	*:	<u> </u>	Seal:		Grout:		Comments:			
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	- <del>Star</del> St	$\frac{13}{100} \frac{99}{100} \frac{100}{100} $ $\frac{13}{100} \frac{99}{100} \frac{100}{100} $ $\frac{13}{100} \frac{99}{100} \frac{100}{100} $ $\frac{100}{100} \frac{100}{100} \frac{100}{100} $ $\frac{100}{100} \frac{100}{100} \frac{100}{100$	tic
					495		Sm	SAT SM BO	44'-48'	
					46			10 10 7,5	roause silt yk 3/3 Dark Brown	
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APPENDIX D

MONITORING WELL DEVELOPMENT FORMS



					2000 a 198	
LT Environ 2243 North Ma Durango, Colo (970) 385-1096	<b>mental, Inc.</b> ain Avenue, Suite orado 81301 5	ə #3			de la companya de la comp	
		<u>Moni</u>	toring Well I	<u>Developmen</u>	t Form	
Р	Project Name:	San Juan Basin Groun	ndwater I	C Can	4,01.	
Pro	ject Number:	34013010		=	V 18	
	Well Name:	MW-2	R		Sampler:	Chris Brun,
	Start Date:	<u> </u>			Start Time:	
De	pth to Water: Time:	38.94	· · · · · · · · · · · · · · · · · · ·	T	Depth of Well: Depth to Product:	50.39
Cas Metho Method	sing Volume: d of Purging: of Sampling:	$\frac{(1.65 \times 0.031)}{\text{Dedicated PVC Bailer}}$	<u>= 1,90 × 4</u> r	5 = 9,50	(height of water colu	mn * 0.1631 for 2" well or 0.6524 for <u>4" well)</u>
Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp. (F)	Conductivity (us or ms)	Comments
S. 18	1.00	00.1	76.46	GL Z	2.05	Bran, Farbia
15:21	2.00	2,00	-6.42	29.9	1.76	SAX
15:24		3,50	$\frac{1}{2}$	C9 01	2.05	CAA
15.20	\$.00	5,00	6.71	47,1	7.1.22	SAA
15:36	(,00	6,00	6.78	C9.7	1,80	SAZ.
15:40	7.00	7,00	6.76	59.9	1.85	SAA
<u>                                     </u>	<u> </u>	8,00	<u> </u>	<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	2.02	<u>SAA</u>
	4,00	9.00	6.72	57.4	7,17	CAA
15:50	<u> </u>	N OD	1 19	CAN	1,9,7	SAA
16:03	12.00	12,00	6:77	59.5	2,01	SAA
16:07	13-00	13.00	1.42	542	1.98	SAX
16:11	14.00	4.00	6.72	59.4	2.00	SAA-
16:15	15.00	15,00	6,70	59.2	6.79	<u> </u>
			·			
<b>├</b> ─── <b>├</b>				<u></u>	·	
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