AP - 44

ANNUAL MONITORING REPORT

YEAR(S): 2007

Highlander Environmental Corp.

Midland, Texas

CERTIFIED MAIL
RETURN RECEIPT NO. 7002 3150 0005 0508 7737

March 26, 2008

Mr. Wayne Price
New Mexico Energy, Minerals, & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Re: 2007 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, Eunice Monument Eumont (EME) SWD System H-13 Leak, Unit H, Section 13, T-20-S, R-36-E, Lea County, New Mexico, NMOCD CASE #1R0429 (AP-44)

Dear Mr. Price:

Highlander Environmental Corp. (Highlander) takes this opportunity to submit the 2007 Annual Groundwater Summary Report for the Rice Operating Company (ROC), Eunice Monument Eumont (EME) SWD System H-13 Leak.

Background

ROC discovered an accidental discharge at the above referenced site on July 3, 2002. The site location is shown on Figure 1. The soil had settled underneath a 4" asbestos/concrete system line causing it to break. According to the C-141 form (Initial) filed on July 11, 2002, the total volume spilled was 10 barrels with 5 barrels recovered and disposed of into the EME SWD system. The pipeline leak was permanently repaired to minimize the potential for further impairment.

Two delineation trenches were excavated on July 22, 2002, one on the east side of the system line and one on the west side of the line. Chloride concentrations in the east trench decreased to 254 mg/kg at a depth of 8 feet below ground surface, while the west trench exhibited elevated chloride levels to 12 feet below ground surface (bgs). A soil boring was installed on September 25, 2002 to further delineate the depth of impact. Based upon the chloride concentrations and relatively shallow groundwater (~31 feet bgs), this soil boring was completed as a monitoring well. The well was completed to a total depth of 41 feet bgs.

On December 13, 2002, the NMOCD was notified of groundwater impact. The monitoring well has been sampled on a quarterly basis since October 2002. The only constituent of concern (COC) at this site was chloride.

Stage 1 Abatement Plan Implementation

As part of the Stage 1 Abatement Plan two additional monitor wells were proposed for the site. These two monitor wells (MW-2 and MW-3) were installed on March 23, 2006. MW-2 was placed up-gradient of MW-1, while MW-3 was placed down-gradient. The wells were developed and sampled on March 27, 2006 and July 17, 2006. Both of the new monitor wells displayed similar qualities to the monitor well placed at the leak site (MW-1).

Also as part of the Stage I Abatement Plan, a water well database search was performed to encompass a ½ mile radius around the site. The database search revealed two wells in adjoining section of this site. Both wells were noted as "livestock watering wells" and both exhibited elevated chloride concentrations (1268 mg/L and 2680 mg/L). Based upon the results of the Stage I Abatement Plan implementation, it appears that the background water quality is impaired over the entire region, and not as a result of this spill incident.

RULE 19 RELEASE REQUEST and SOIL WORK PLAN

In a report to the NMOCD dated August 18, 2006, ROC requested release from NMOCD Rule 19 requirements. Additionally, ROC proposed additional assessment and remediation of chloride impacted soils for closure under NMOCD approval. The horizontal extent of chloride impacted soils was to be evaluated with a backhoe. Upon evaluation, the soils were to be excavated to a depth down below the root zone (minimum of 3.0' below ground surface) and either a clay cap or a 40 mil impervious liner was to be placed into the excavation. The excavated soils were to be evaluated and either placed back into the excavation or transported offsite for disposal. The OCD requested additional information in September 2006 which was provided in December 2006.

In a meeting between Mr. Wayne Price of the NMOCD, ROC and Highlander on July 18, 2007, the site was evaluated for release from Rule 19 and proposed excavation, evaluation, and placement of the clay liner beneath the root zone (3.0' bgs). It was noted in the discussion, that the site has revegetated (see attached photograph of site in Appendix B) and formed a natural evapotransporation barrier. As such, Mr. Price agreed with ROC that since the site has revegetated and formed a natural evapotransporation barrier, that ROC can be released from the proposed excavation and placement of the impervious liner. In a meeting with Mr. Ed Hansen of the NMOCD in January 2008, Mr. Hansen concurred with with Mr. Price on releasing ROC from excavating and placement of an impervious liner at the site. A revised release request for no excavation and placement of an impervious liner will be submitted to the NMOCD.

Monitor Well Sampling

The site monitor wells were sampled on January 24, April 2, July 10, and October 1, 2007. Prior to sampling, the wells were gauged for static water levels. The monitor well caps were opened and water level measurements were taken from the top of the casing. The measurements were taken to the nearest 0.01 feet.

The wells were then purged using a portable submersible pump. Approximately three casing volumes of water were purged from each well prior to sampling. The pump and associated tubing were decontaminated with a laboratory grade detergent and rinsed with deionized water. Cumulative water level measurements and purge volumes for the monitor wells are included in the Tables Section of this report.

The wells were also inspected for the presence of phase-separated hydrocarbons (PSH). Groundwater samples were collected as soon as possible after the groundwater returned to its static level. Groundwater samples were collected using clean disposable polyethylene bailers and disposable line. The samples were transferred into labeled and preserved containers provided by the laboratory. The samples were delivered under proper chain-of-custody control to Environmental Labs of Texas, Inc., Odessa, Texas and/or Cardinal Labs of Hobbs, New Mexico. The groundwater samples were analyzed for major anions, by methods 310.1, 9253 and 375.4, cations by method 6010B, Total Dissolved Solids (TDS) by method 160.1 and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) by method EPA 8021B. Copies of the laboratory reports are enclosed in Appendix A.

Monitor Well Sample Results

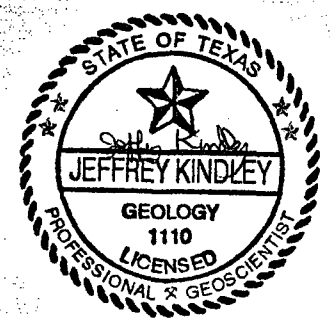
In 2007, there were no BTEX constituents detected at or above reporting limits for any of the monitor wells. Chloride and total dissolved solid (TDS) concentrations from all three monitor wells exceeded the Water Quality Control Commission (WQCC) standards of 250 mg/L for chloride and 1000 mg/L for TDS in all sampling events. The chloride and TDS concentrations are relatively consistent with each other and with reported concentrations in the area. Cumulative analytical data is summarized in the Table Section of this report.

Conclusions

1. In 2007, there were no BTEX constituents detected at or above reporting limits for any of the three monitor wells. To date, no hydrocarbon impact has been detected in any of the monitor wells and as such is not considered a Constituent of Concern at this site.
2. Chloride and total dissolved solid (TDS) concentrations from all three monitor wells exceeded the Water Quality Control Commission (WQCC) standards of 250 mg/L for chloride and 1000 mg/L for TDS in all sampling events. The chloride and TDS concentrations are relatively consistent with each other and with reported concentrations in the area.

3. A revised release request for no excavation and placement of an impervious liner will be submitted to the NMOCD.

4. Based upon the results of the Stage I Abatement Plan implementation, it appears that the background water quality is impaired over the entire region, and not as a result of this spill incident. Quarterly monitoring at this site will continue, until notified by the NMOCD and, if warranted, an annual report will be prepared and submitted to the NMOCD in the first quarter of 2009.



Respectfully Submitted,
HIGHLANDER ENVIRONMENTAL CORP.

Jeffrey Kindley, P.G.
Senior Environmental Geologist

cc: ROC, Edward Hansen – NMOCD
Enclosures: Figures, Tables, Laboratory Analysis

FIGURES

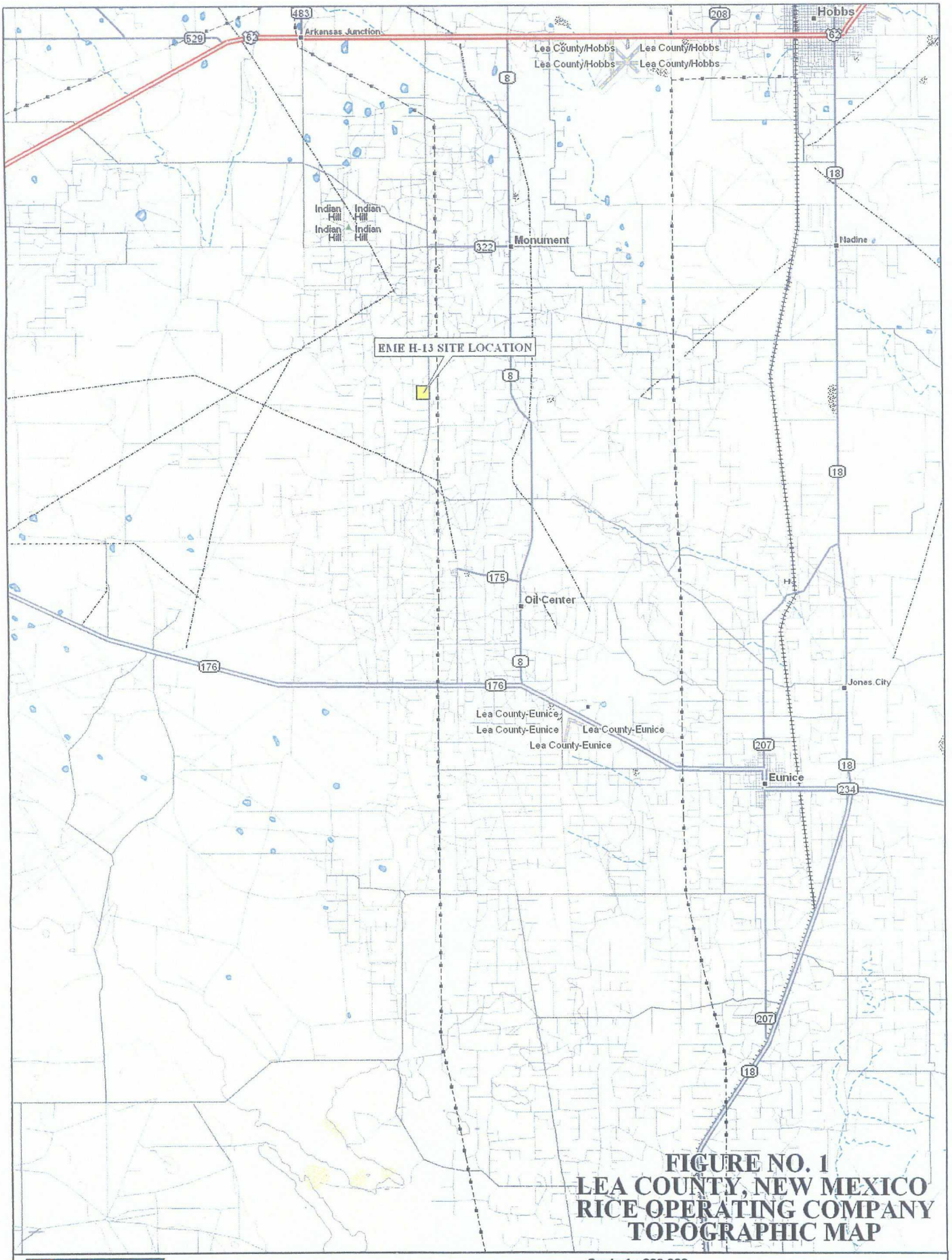


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

DeLORME

www.delorme.com

Scale 1 : 200,000
1" = 3.16 mi

TN
MN
8.7°E

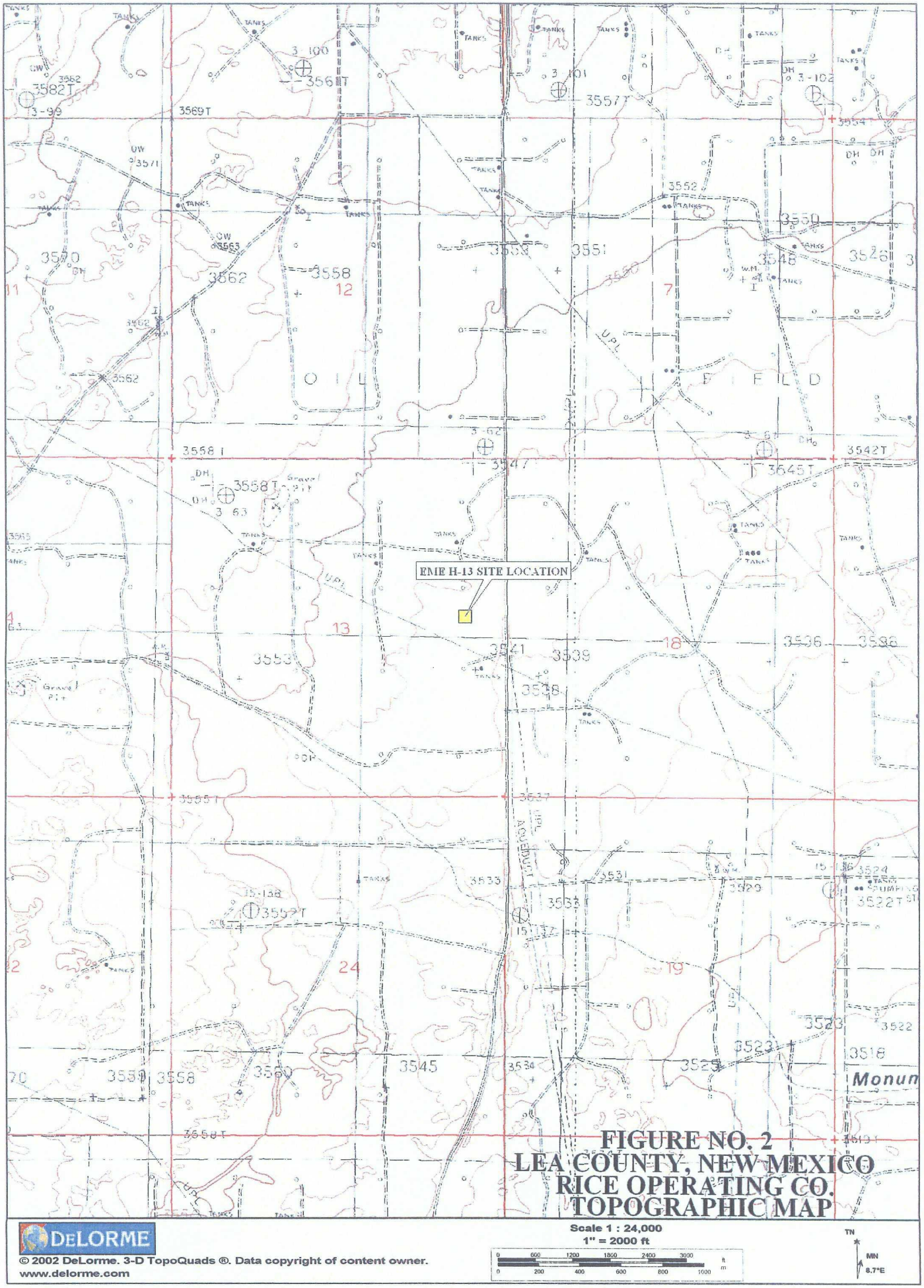
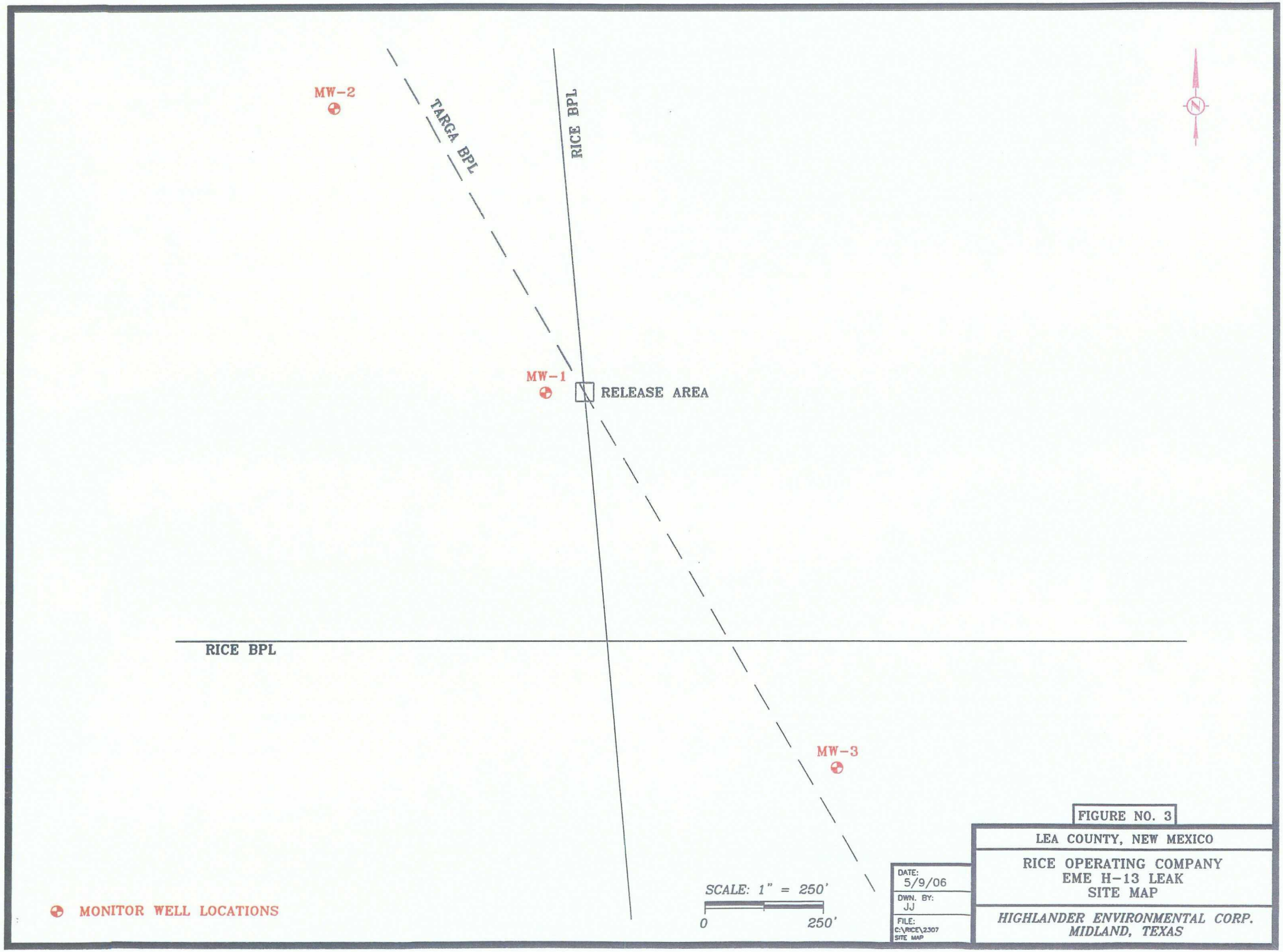
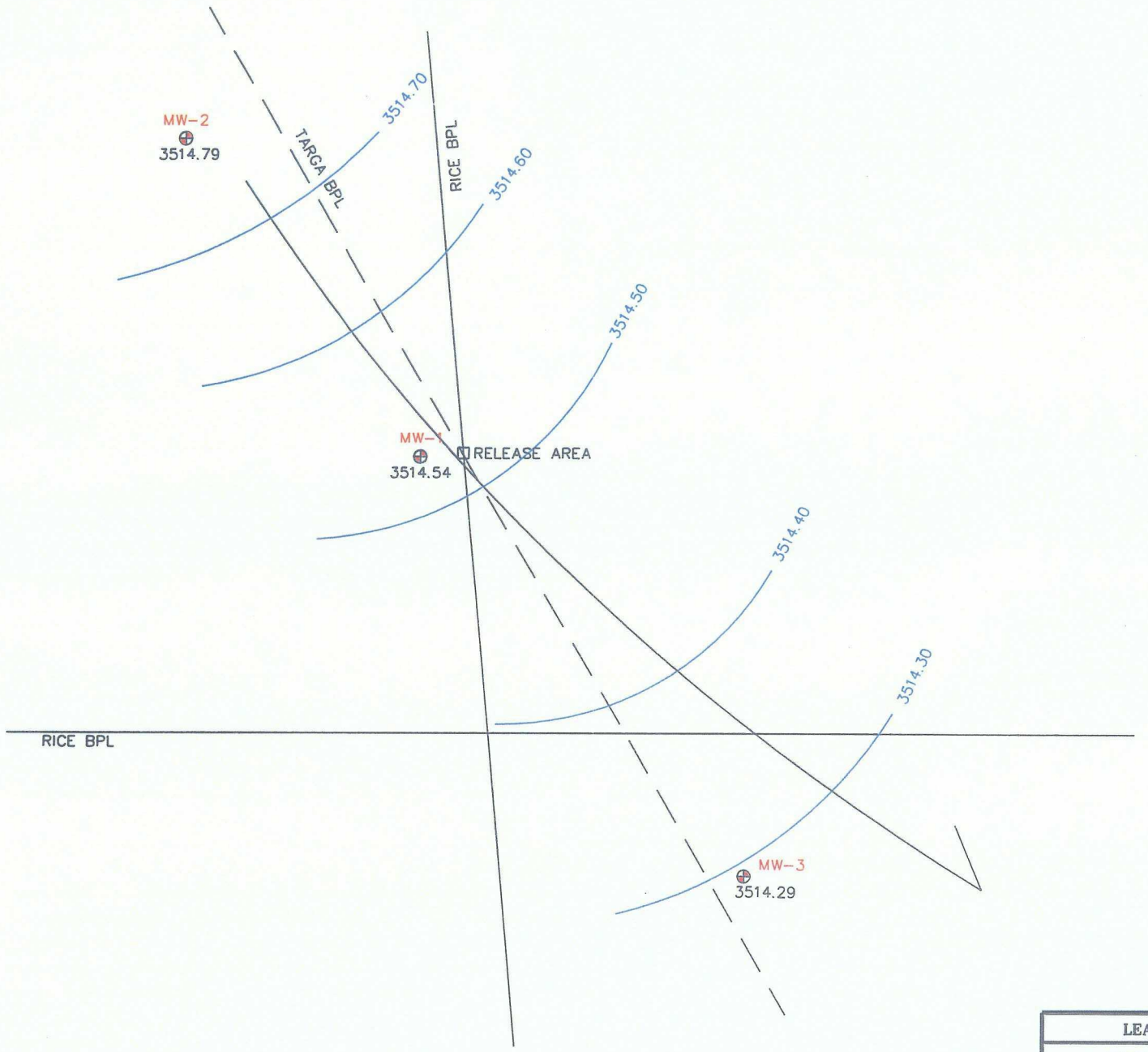


FIGURE NO. 2
LEA COUNTY, NEW MEXICO
RICE OPERATING CO.
TOPOGRAPHIC MAP


MW-2
TARGA BPL
RICE BPL
MW-1
RELEASE AREA
RICE BPL
MW-3
N
MONITOR WELL LOCATIONS
SCALE: 1" = 250'
0
250'
DATE: 5/9/06
DWN. BY: JJ
FILE: C:\RICE\2307 SITE MAP
FIGURE NO. 3
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
EME H-13 LEAK
SITE MAP
HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



MONITOR WELL LOCATIONS
C.I. = 0.10'

SCALE: 1" = 250'

0 250'

DWN. BY: RC

FILE: C:\RICE\2307 SITE MAP

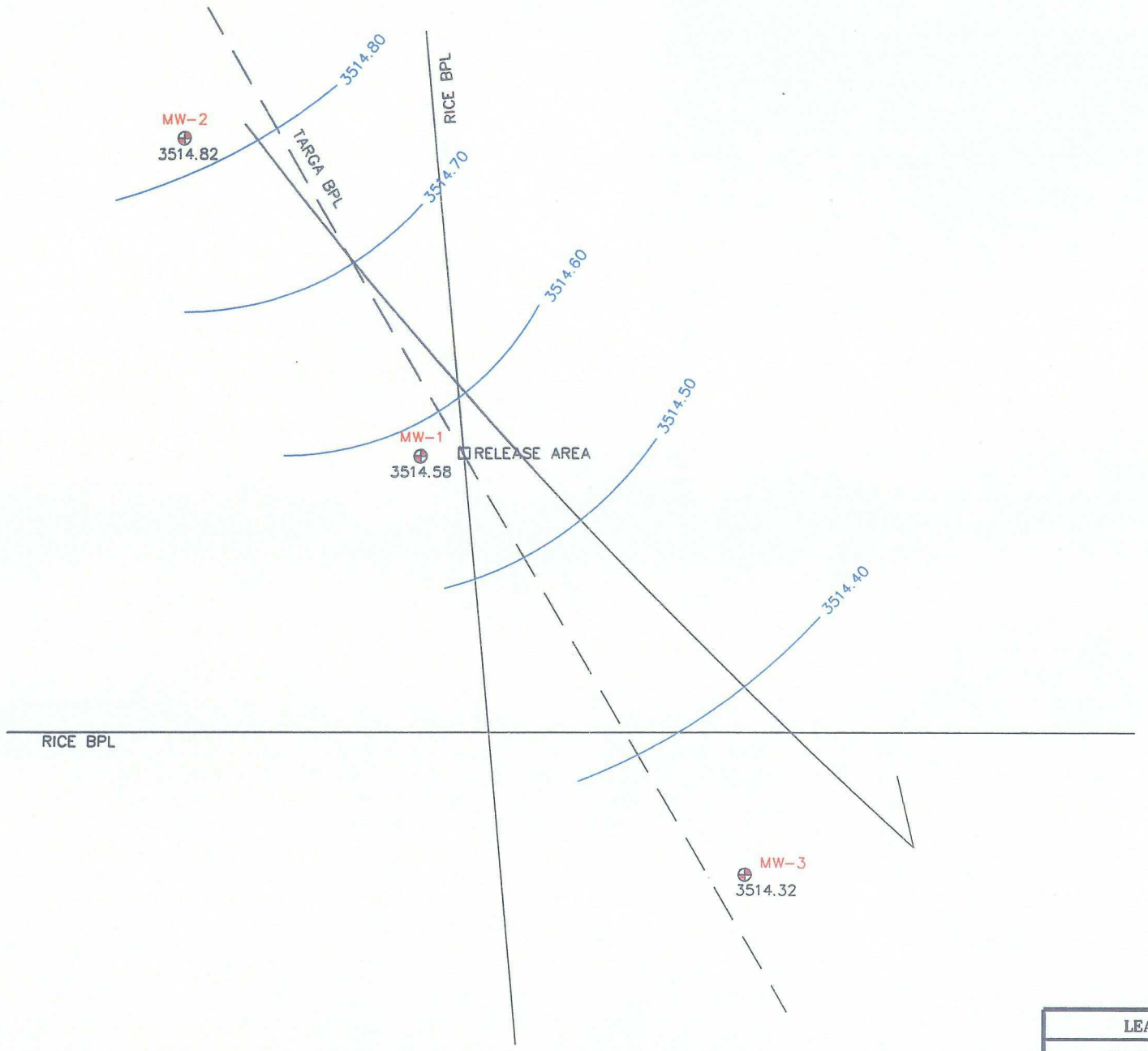
FIGURE NO. 4

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

EME H-13 LEAK
GROUNDWATER GRADIENT MAP
GAUGED ON 1-24-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



MONITOR WELL LOCATIONS
C.I. = 0.10'

SCALE: 1" = 250'

0 250'

DWN. BY: RC

FILE: C:\RICE\2307 SITE MAP

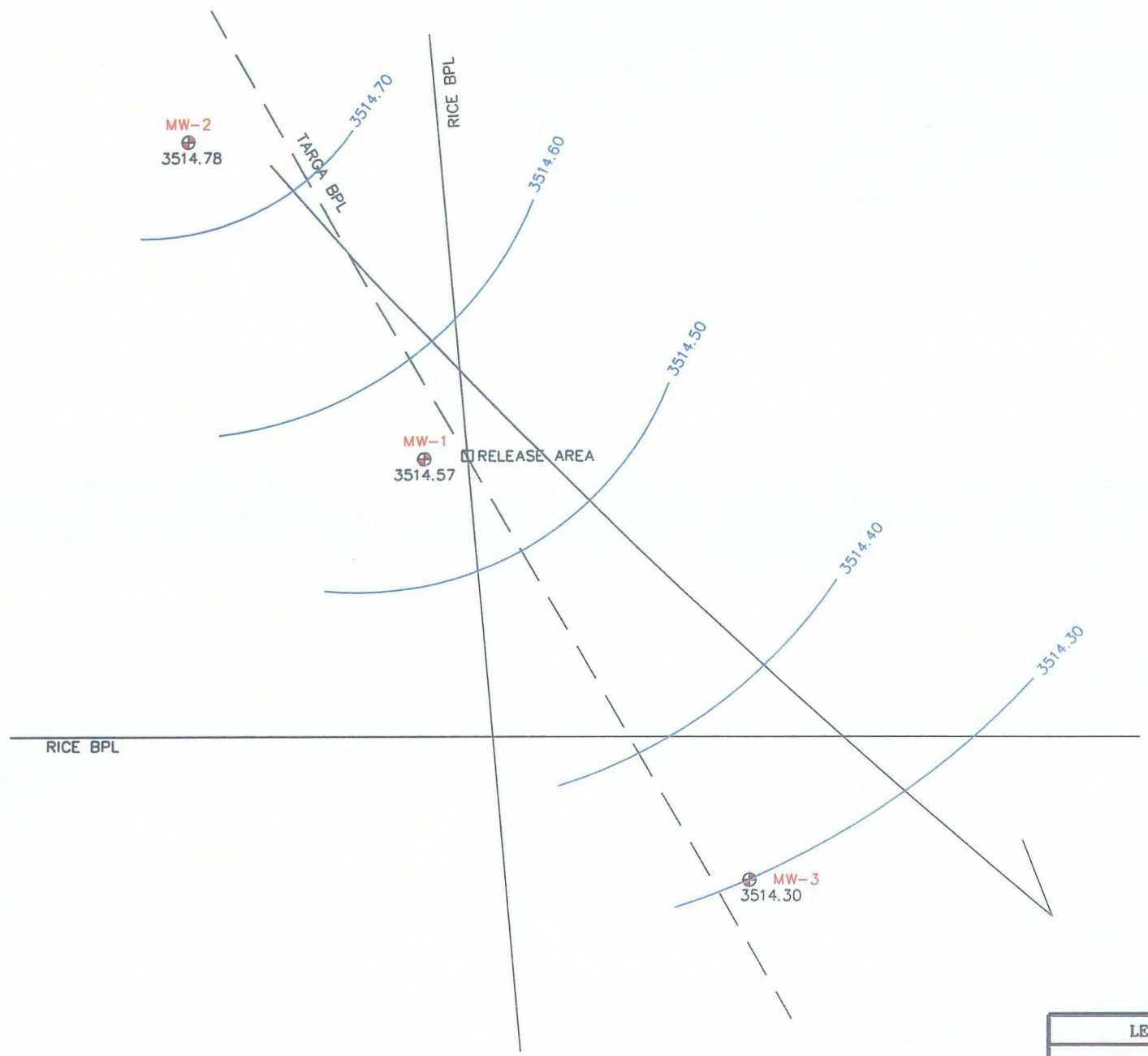
FIGURE NO. 5

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

EME H-13 LEAK
GROUNDWATER GRADIENT MAP
GAUGED ON 4-2-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



MONITOR WELL LOCATIONS
C.I. = 0.10'

SCALE: 1" = 250'

0 250'

DWN. BY: RC

FILE: C:\RICE\2307 SITE MAP

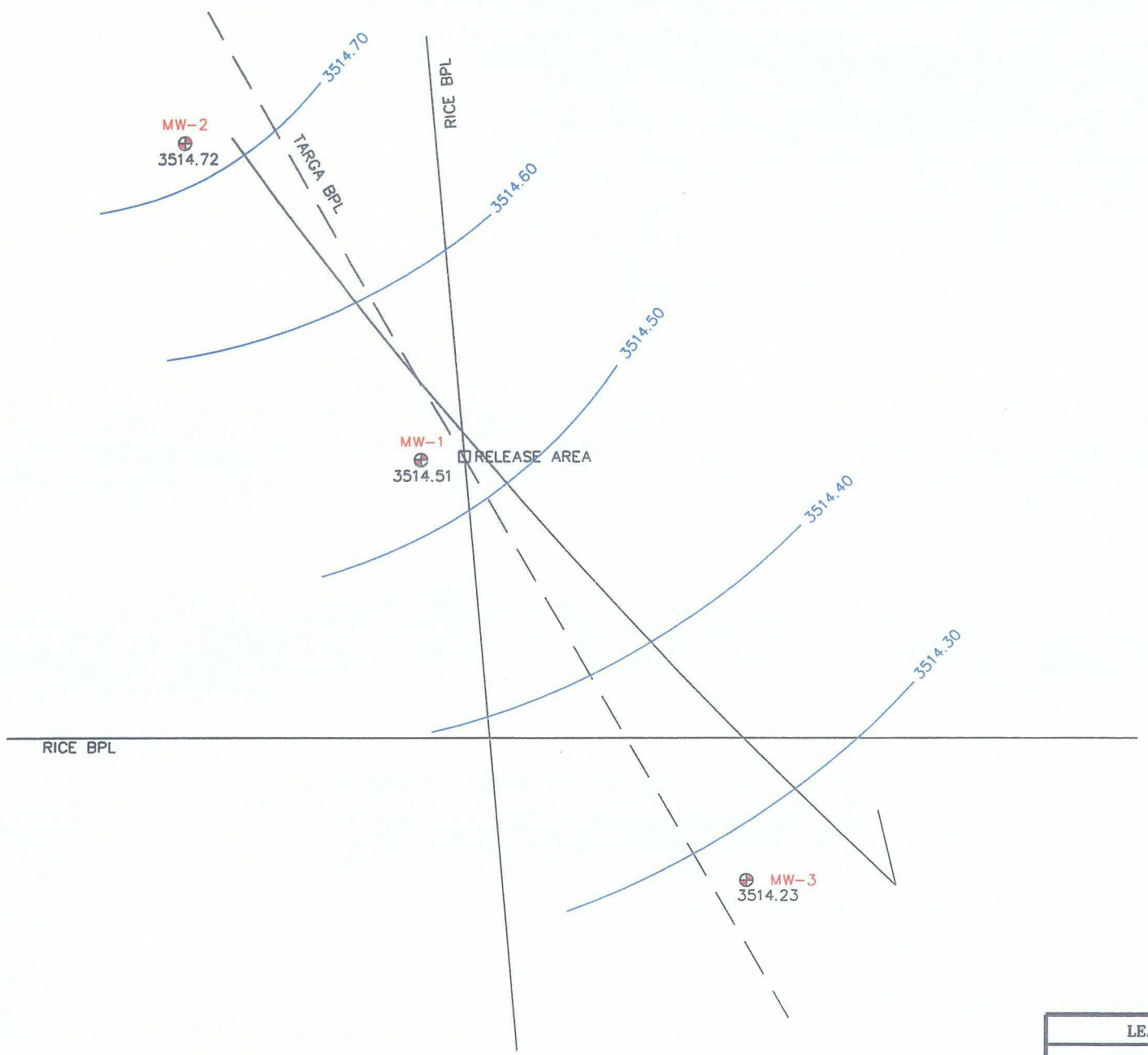
FIGURE NO. 6

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

EME H-13 LEAK
GROUNDWATER GRADIENT MAP
GAUGED ON 7-10-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



MONITOR WELL LOCATIONS
C.I. = 0.10'

SCALE: 1" = 250'

0 250'

DWN. BY: RC

FILE: C:\RICE\2307 SITE MAP

FIGURE NO. 7

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

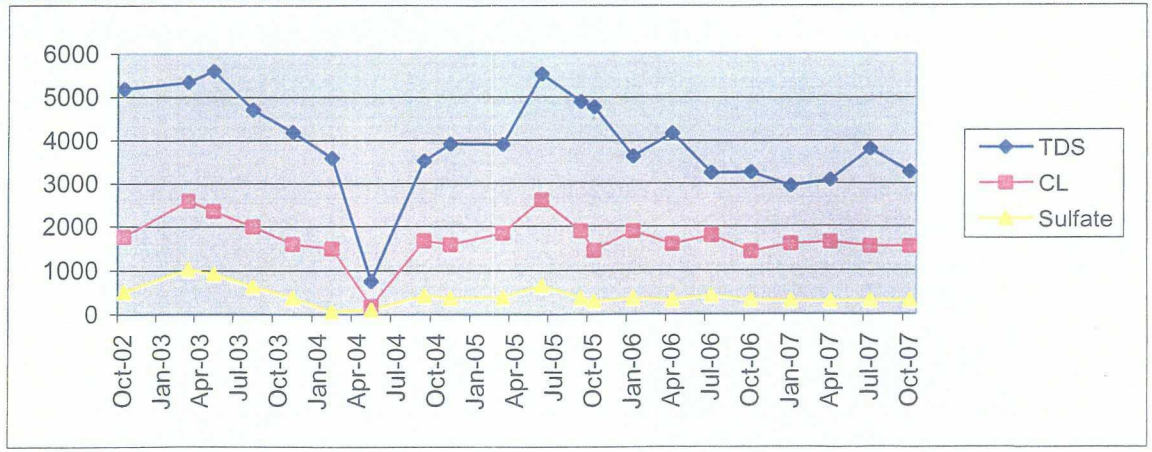
EME H-13 LEAK
GROUNDWATER GRADIENT MAP
GAUGED ON 10-1-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLES

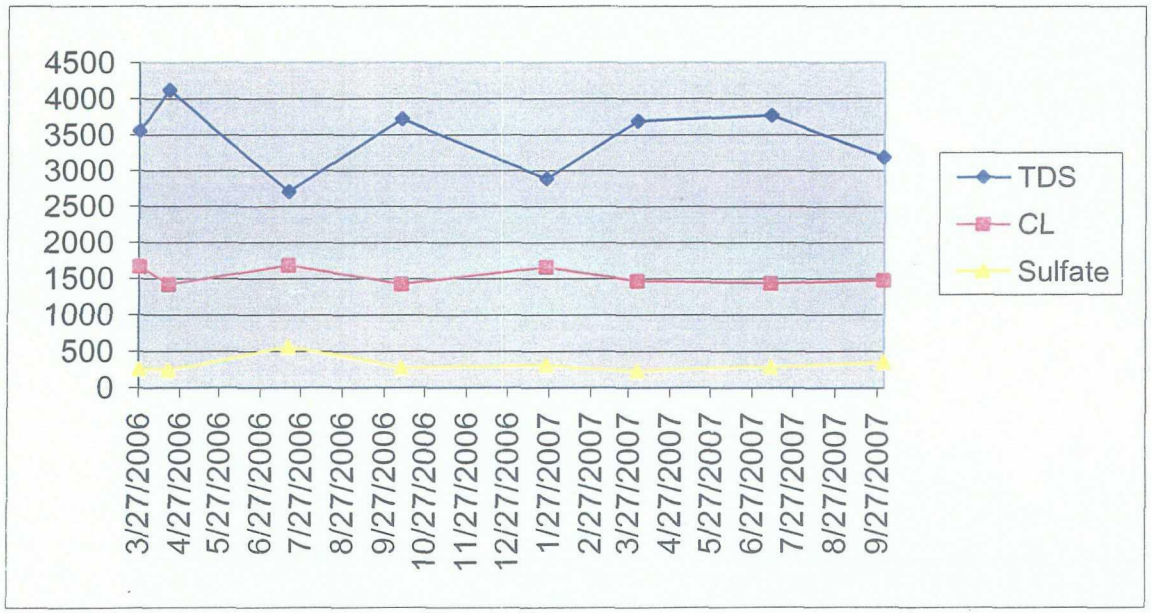
Rice Engineering Operating
H-13
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	33.19	43.94	1.72	5.25	10/29/02	1770	5180	<0.001	<0.001	<0.001	<0.001	497	
1	33.18	43.90	1.71	5.10	03/06/03	2600	5340	<0.001	<0.001	<0.001	<0.001	1020	
1	33.20	43.91	1.21	5.10	05/29/03	2360	5600	<0.001	<0.001	<0.001	<0.001	920	
1	33.40	43.90	1.68	5.04	08/22/03	2000	4700	<0.001	<0.001	<0.001	<0.001	622	
1	33.35	43.91	1.60	5.00	11/19/03	1600	4180	<0.001	<0.001	<0.001	0.001	370	
1	33.41	43.90	1.67	5.00	02/18/04	1500	3580	<0.002	<0.002	<0.002	<0.002	44	
1	33.56	43.90	1.65	5.00	05/27/04	177	751	<0.001	<0.001	<0.001	<0.001	90.8	
1	33.40	44.10	1.71	5.14	09/07/04	1680	3510	<0.001	<0.001	<0.001	<0.001	418	
1	32.85	44.10	1.80	5.40	11/24/04	1590	3900	<0.001	<0.001	<0.001	<0.001	358	
1	32.19	44.10	1.91	25.0	03/30/05	1850	3890	<0.001	<0.001	<0.001	<0.001	376	
1	31.93	44.10	1.95	10.0	06/21/05	2610	5520	<0.001	<0.001	<0.001	<0.001	641	
1	XXX	XXX	XXX	XXX	09/16/05	1900	4880	<0.001	<0.001	<0.001	<0.001	358	
1	31.70	44.10	2.00	6.0	10/19/05	1450	4760	<0.001	<0.001	<0.001	<0.001	286	
1	31.59	44.10	2.00	8.0	01/18/06	1900	3620	<0.001	<0.001	<0.001	<0.001	351	
1	31.66	44.10	2.00	8.0	04/18/06	1600	4160	<0.001	<0.001	<0.001	<0.001	307	
1	31.75	44.10	2.00	10.0	07/17/06	1800	3240	<0.001	<0.001	<0.001	<0.001	412	
1	31.77	44.10	2.00	10.0	10/09/06	1430	3260	<0.001	<0.001	<0.001	<0.001	308	Clear
1	31.72	44.32	2.00	8.0	01/24/07	1610	2940	<0.001	<0.001	<0.001	<0.001	292	Clear/no odor
1	31.68	44.32	2.00	8.0	04/02/07	1640	3070	<0.001	<0.001	<0.001	<0.001	287	Clear/no odor
1	31.69	44.32	2.00	8.0	07/10/07	1550	3800	<0.001	<0.001	<0.001	<0.002	302	Clear
1	31.75	44.32	2.00	7.0	10/01/07	1550	3264	<0.001	<0.001	<0.001	<0.003	300	Clear/no odor

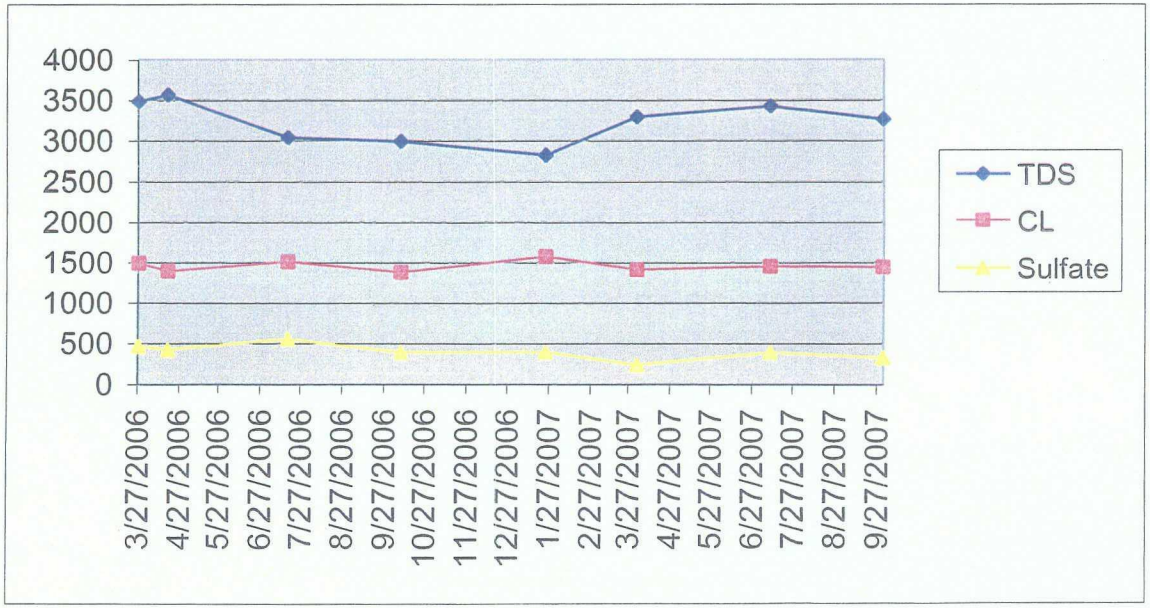


Rice Engineering Operating
H-13
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	30.69	43.10	2.00	8.00	03/27/06	1670	3560	<0.001	<0.001	<0.001	<0.001	264	
2	30.66	43.10	2.00	8.00	04/18/06	1420	4120	<0.001	<0.001	<0.001	<0.001	237	
2	30.80	43.10	2.00	10.00	07/17/06	1690	2710	<0.001	<0.001	<0.001	<0.001	562	
2	30.85	43.10	2.00	10.00	10/09/06	1430	3720	<0.001	<0.001	<0.001	<0.001	284	Clear
2	30.78	43.03	2.00	6.00	01/24/07	1660	2890	<0.001	<0.001	<0.001	<0.001	300	Pumping
2	30.75	43.03	2.00	8.00	04/02/07	1470	3690	<0.001	<0.001	<0.001	<0.001	231	Pumping
2	30.79	43.03	2.00	8.00	07/10/07	1440	3770	<0.001	<0.001	<0.001	<0.002	291	Pumping
2	30.85	43.03	1.90	7.00	10/01/07	1480	3189	<0.001	<0.001	<0.001	<0.003	348	Clear



Rice Engineering Operating H-13 Lea County, New Mexico													
MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	31.89	46.00	2.30	8.00	03/27/06	1490	3480	<0.001	<0.001	<0.001	<0.001	472	
3	31.85	46.00	2.30	10.00	04/18/06	1390	3560	<0.001	<0.001	<0.001	<0.001	426	
3	32.08	46.00	2.20	10.00	07/17/06	1510	3035	<0.001	<0.001	<0.001	<0.001	557	
3	32.04	46.00	2.20	10.00	10/09/06	1380	2990	<0.001	<0.001	<0.001	<0.001	393	Clear
3	31.96	46.00	2.20	8.00	01/24/07	1570	2820	<0.001	<0.001	<0.001	<0.001	398	Pumping
3	31.93	46.00	2.30	8.00	04/02/07	1410	3290	<0.001	<0.001	<0.001	<0.001	242	Pumping
3	31.95	46.00	2.20	8.00	07/10/07	1450	3420	<0.001	<0.001	<0.001	<0.001	392	Pumping
3	32.02	46.00	2.20	8.00	10/01/07	1440	3257	<0.001	<0.001	<0.001	<0.003	332	Clear



PHOTOGRAPHS

PHOTOGRAPHIC DOCUMENTATION
Rice Operating Company
EME SWD System H-13, Lea County, New Mexico

1. View of the revegetated site.

APPENDIX A

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME H-13 Leak

Project Number: None Given

Location: T20S-R36E-Sec13H~Lea County New Mexico

Lab Order Number: 7D05009

Report Date: 04/13/07

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7D05009-01	Water	04/02/07 09:15	04-05-2007 13:20
Monitor Well #2	7D05009-02	Water	04/02/07 11:00	04-05-2007 13:20
Monitor Well #3	7D05009-03	Water	04/02/07 10:10	04-05-2007 13:20

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7D05009-01) Water									
Benzene	ND	0.00100	mg/L	1	ED70905	04/09/07	04/09/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.2 %*	*80-120*		"	"	"	"	
Monitor Well #2 (7D05009-02) Water									
Benzene	ND	0.00100	mg/L	1	ED70905	04/09/07	04/09/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*108 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.8 %*	*80-120*		"	"	"	"	
Monitor Well #3 (7D05009-03) Water									
Benzene	ND	0.00100	mg/L	1	ED70905	04/09/07	04/09/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.6 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7D05009-01) Water									
Total Alkalinity	**224**	2.00	mg/L	1	ED70509	04/05/07	04/06/07	EPA 310.1M	
Chloride	**1640**	25.0	"	50	ED71003	04/10/07	04/10/07	EPA 300.0	
Total Dissolved Solids	**3070**	10.0	"	1	ED71008	04/05/07	04/06/07	EPA 160.1	
Sulfate	**287**	25.0	"	50	ED71003	04/10/07	04/10/07	EPA 300.0	
Monitor Well #2 (7D05009-02) Water									
Total Alkalinity	**260**	2.00	mg/L	1	ED70509	04/05/07	04/06/07	EPA 310.1M	
Chloride	**1470**	25.0	"	50	ED71003	04/10/07	04/10/07	EPA 300.0	
Total Dissolved Solids	**3690**	10.0	"	1	ED71008	04/05/07	04/06/07	EPA 160.1	
Sulfate	**231**	25.0	"	50	ED71003	04/10/07	04/10/07	EPA 300.0	
Monitor Well #3 (7D05009-03) Water									
Total Alkalinity	**256**	2.00	mg/L	1	ED70509	04/05/07	04/06/07	EPA 310.1M	
Chloride	**1410**	25.0	"	50	ED71003	04/10/07	04/10/07	EPA 300.0	
Total Dissolved Solids	**3290**	10.0	"	1	ED71008	04/05/07	04/06/07	EPA 160.1	
Sulfate	**242**	25.0	"	50	ED71003	04/10/07	04/10/07	EPA 300.0	

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7D05009-01) Water									
Calcium	**329**	8.10	mg/L	100	ED71313	04/13/07	04/13/07	EPA 6010B	
Magnesium	**134**	1.80	"	50	"	"	"	"	
Potassium	**14.0**	0.600	"	10	"	"	"	"	
Sodium	**629**	4.30	"	100	"	"	"	"	
Monitor Well #2 (7D05009-02) Water									
Calcium	**312**	8.10	mg/L	100	ED71313	04/13/07	04/13/07	EPA 6010B	
Magnesium	**130**	1.80	"	50	"	"	"	"	
Potassium	**12.8**	0.600	"	10	"	"	"	"	
Sodium	**606**	4.30	"	100	"	"	"	"	
Monitor Well #3 (7D05009-03) Water									
Calcium	**269**	4.05	mg/L	50	ED71313	04/13/07	04/13/07	EPA 6010B	
Magnesium	**113**	1.80	"	"	"	"	"	"	
Potassium	**12.7**	0.600	"	10	"	"	"	"	
Sodium	**682**	4.30	"	100	"	"	"	"	

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Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED70905 - EPA 5030C (GC)										
Blank (ED70905-BLK1)				Prepared & Analyzed: 04/09/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*53.2*		*ug/l*	*50.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.2*		*"*	*50.0*		*88.4*	*80-120*			
LCS (ED70905-BS1)				Prepared & Analyzed: 04/09/07						
Benzene	0.0494	0.00100	mg/L	0.0500		98.8	80-120			
Toluene	0.0471	0.00100	"	0.0500		94.2	80-120			
Ethylbenzene	0.0476	0.00100	"	0.0500		95.2	80-120			
Xylene (p/m)	0.0904	0.00100	"	0.100		90.4	80-120			
Xylene (o)	0.0502	0.00100	"	0.0500		100	80-120			
Surrogate: a,a,a-Trifluorotoluene	*52.9*		*ug/l*	*50.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.5*		*"*	*50.0*		*91.0*	*80-120*			
Calibration Check (ED70905-CCV1)				Prepared: 04/09/07 Analyzed: 04/10/07						
Benzene	51.6		ug/l	50.0		103	80-120			
Toluene	49.4		"	50.0		98.8	80-120			
Ethylbenzene	48.1		"	50.0		96.2	80-120			
Xylene (p/m)	86.7		"	100		86.7	80-120			
Xylene (o)	50.0		"	50.0		100	80-120			
Surrogate: a,a,a-Trifluorotoluene	*54.6*		*"*	*50.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.8*		*"*	*50.0*		*89.6*	*80-120*			
Matrix Spike (ED70905-MS1)	**Source: 7D05009-01**			Prepared & Analyzed: 04/09/07						
Benzene	0.0510	0.00100	mg/L	0.0500	ND	102	80-120			
Toluene	0.0492	0.00100	"	0.0500	ND	98.4	80-120			
Ethylbenzene	0.0480	0.00100	"	0.0500	ND	96.0	80-120			
Xylene (p/m)	0.0886	0.00100	"	0.100	ND	88.6	80-120			
Xylene (o)	0.0503	0.00100	"	0.0500	ND	101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*53.9*		*ug/l*	*50.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.3*		*"*	*50.0*		*86.6*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED70905 - EPA 5030C (GC)										
Matrix Spike Dup (ED70905-MSD1)	**Source: 7D05009-01**			Prepared & Analyzed: 04/09/07						
Benzene	0.0496	0.00100	mg/L	0.0500	ND	99.2	80-120	2.78	20	
Toluene	0.0474	0.00100	"	0.0500	ND	94.8	80-120	3.73	20	
Ethylbenzene	0.0470	0.00100	"	0.0500	ND	94.0	80-120	2.11	20	
Xylene (p/m)	0.0859	0.00100	"	0.100	ND	85.9	80-120	3.09	20	
Xylene (o)	0.0485	0.00100	"	0.0500	ND	97.0	80-120	4.04	20	
Surrogate: a,a,a-Trifluorotoluene	*54.1*		*ug/l*	*50.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.9*		*"*	*50.0*		*85.8*	*80-120*			

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED70509 - General Preparation (WetChem)										
Blank (ED70509-BLK1)				Prepared: 04/05/07 Analyzed: 04/06/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (ED70509-BS1)				Prepared: 04/05/07 Analyzed: 04/06/07						
Bicarbonate Alkalinity	178	2.00	mg/L	200		89.0	85-115			
Reference (ED70509-SRM1)				Prepared: 04/05/07 Analyzed: 04/06/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch ED71003 - General Preparation (WetChem)										
Blank (ED71003-BLK1)				Prepared & Analyzed: 04/10/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (ED71003-BS1)				Prepared & Analyzed: 04/10/07						
Chloride	12.0	0.500	mg/L	10.0		120	80-120			
Sulfate	12.0	0.500	"	10.0		120	80-120			
Calibration Check (ED71003-CCV1)				Prepared & Analyzed: 04/10/07						
Chloride	9.00		mg/L	10.0		90.0	80-120			
Sulfate	9.76		"	10.0		97.6	80-120			
Duplicate (ED71003-DUP1)	**Source: 7D05009-01**			Prepared & Analyzed: 04/10/07						
Sulfate	254	25.0	mg/L		287			12.2	20	
Chloride	1590	25.0	"		1640			3.10	20	
Duplicate (ED71003-DUP2)	**Source: 7D05014-05**			Prepared & Analyzed: 04/10/07						
Sulfate	1860	50.0	mg/L		1860			0.00	20	
Chloride	1390	50.0	"		1410			1.43	20	

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED71003 - General Preparation (WetChem)										
Matrix Spike (ED71003-MS1)		**Source: 7D05009-01**		Prepared & Analyzed: 04/10/07						
Sulfate	721	25.0	mg/L	500	287	86.8	80-120			
Chloride	2080	25.0	"	500	1640	88.0	80-120			
Matrix Spike (ED71003-MS2)		**Source: 7D05014-05**		Prepared & Analyzed: 04/10/07						
Sulfate	2840	50.0	mg/L	1000	1860	98.0	80-120			
Chloride	2480	50.0	"	1000	1410	107	80-120			
Batch ED71008 - General Preparation (WetChem)										
Blank (ED71008-BLK1)				Prepared: 04/05/07 Analyzed: 04/06/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (ED71008-DUP1)		**Source: 7D05009-01**		Prepared: 04/05/07 Analyzed: 04/06/07						
Total Dissolved Solids	3700	10.0	mg/L		3070			18.6	20	

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Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED71313 - 6010B/No Digestion										
Blank (ED71313-BLK1)				Prepared & Analyzed: 04/13/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (ED71313-CCV1)				Prepared & Analyzed: 04/13/07						
Calcium	2.00		mg/L	2.00		100	85-115			
Magnesium	2.01		"	2.00		100	85-115			
Potassium	1.93		"	2.00		96.5	85-115			
Sodium	2.07		"	2.00		104	85-115			
Duplicate (ED71313-DUP1)		**Source: 7D05009-01**		Prepared & Analyzed: 04/13/07						
Calcium	329	8.10	mg/L		329			0.00	20	
Magnesium	134	1.80	"		134			0.00	20	
Potassium	14.2	0.600	"		14.0			1.42	20	
Sodium	628	4.30	"		629			0.159	20	

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 4/13/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: EME H-13 Leak

Project #:

Project Loc: T20S-R36E-Sec13 H ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 7005009

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: GW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP)	Volatiles	Semivolatiles	BTEX 6021B/5030 (TOTAL: X)	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Monitor Well #1			4/2/2007	9:15		3	X		2				1		GW			X	X					X			X		X
02	Monitor Well #2			4/2/2007	11:00		3	X		2				1		GW			X	X					X			X		X
03	Monitor Well #3			4/2/2007	10:10		3	X		2				1		GW			X	X					X			X		X

Special Instructions:

Please email to : kpope@riceswd.com matt@riceswd.com rozanne@valornet.com
jpurvis@riceswd.com

Relinquished by:	Date	Time	Received by	Date	Time
Rozanne Johnson	4-5-07	6:00	James Johnson	4-5-07	6:01
Relinquished by: James Johnson	4-5-07	1:20	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Fann	4-5-07	1:20

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: -2.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 4-5-07 1:20

Lab ID #: 1D05009

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	2.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	(Yes)	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 285886

for

Rice Operating Co.

Project Manager: Kristin Pope

EME H-13 Leak

30-JUL-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

30-JUL-07

Project Manager: **Kristin Pope**
Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Reference: XENCO Report No: **285886**
EME H-13 Leak
Project Address: T20S R36E S13H Lea County New Mexico

Kristin Pope:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 285886. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 285886 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Sample Cross Reference 285886

Rice Operating Co., Hobbs, NM

EME H-13 Leak

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Monitor Well # 1	W	Jul-10-07 09:45		285886-001
Monitor Well # 2	W	Jul-10-07 10:35		285886-002
Monitor Well # 3	W	Jul-10-07 08:50		285886-003

Certificate of Analysis Summary 285886

Rice Operating Co., Hobbs, NM

Project Name: EME H-13 Leak

Project Id:

Contact: Kristin Pope

Project Location: T20S R36E S13H Lea County New Mexic

Date Received in Lab: Jul-12-07 03:25 pm

Report Date: 30-JUL-07

Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	285886-001		285886-002		285886-003		
	Field Id:	Monitor Well # 1		Monitor Well # 2		Monitor Well # 3		
	Depth:							
	Matrix:	WATER		WATER		WATER		
	Sampled:	Jul-10-07 09:45		Jul-10-07 10:35		Jul-10-07 08:50		
Alkalinity by EPA 310.1	*Extracted:*							
	Analyzed:	Jul-19-07 16:00		Jul-19-07 16:00		Jul-19-07 16:00		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Alkalinity, Total (as CaCO3)		310	4.00	290	4.00	320	4.00	
BTEX by EPA 8021B	*Extracted:*	Jul-18-07 08:00		Jul-18-07 08:00		Jul-18-07 08:00		
	Analyzed:	Jul-19-07 00:19		Jul-19-07 00:40		Jul-19-07 01:01		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	
Toluene		ND	0.0010	ND	0.0010	ND	0.0010	
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	
Total Xylenes		ND		ND		ND		
Total BTEX		ND		ND		ND		
Inorganic Anions by EPA 300	*Extracted:*							
	Analyzed:	Jul-18-07 19:08		Jul-18-07 19:28		Jul-18-07 19:48		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Chloride		1550	25.0	1490	25.0	1450	25.0	
Sulfate		302	25.0	291	25.0	392	25.0	
Metals per ICP by SW846 6010B	*Extracted:*							
	Analyzed:	Jul-13-07 09:21		Jul-13-07 09:21		Jul-13-07 09:21		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Calcium		346	0.100	327	0.100	310	0.100	
Magnesium		139	0.010	141	0.010	138	0.010	
Potassium		11.4	0.500	9.18	0.500	9.25	0.500	
Sodium		557	0.500	480	0.500	581	0.500	
Residue, Filterable (TDS) by EPA 160.1	*Extracted:*							
	Analyzed:	Jul-13-07 16:35		Jul-13-07 16:35		Jul-13-07 16:35		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Total dissolved solids		3800	5.00	3770	5.00	3420	5.00	

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: EME H-13 Leak

Work Order #: 285886 **Project ID:**

Lab Batch #: 700581 **Sample:** 285886-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0430	0.0500	86	80-120	

Lab Batch #: 700581 **Sample:** 285886-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0469	0.0500	94	80-120	

Lab Batch #: 700581 **Sample:** 285886-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0432	0.0500	86	80-120	

Lab Batch #: 700581 **Sample:** 286015-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0421	0.0500	84	80-120	

Lab Batch #: 700581 **Sample:** 286015-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0487	0.0500	97	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: EME H-13 Leak

Work Order #: 285886 **Project ID:**

Lab Batch #: 700581 **Sample:** 497352-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0484	0.0500	97	80-120	

Lab Batch #: 700581 **Sample:** 497352-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0470	0.0500	94	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: EME H-13 Leak

Work Order #: 285886 **Project ID:**

Lab Batch #: 700766 **Sample:** 700766-1-BKS **Matrix:** Water
Date Analyzed: 07/19/2007 **Date Prepared:** 07/19/2007 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

Alkalinity by EPA 310.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Alkalinity, Total (as CaCO3)	ND	200	180	90	80-120	

Lab Batch #: 700581 **Sample:** 497352-1-BKS **Matrix:** Water
Date Analyzed: 07/18/2007 **Date Prepared:** 07/18/2007 **Analyst:** CELKEE
Reporting Units: mg/L **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Benzene	ND	0.0500	0.0510	102	70-125	
Toluene	ND	0.0500	0.0511	102	70-125	
Ethylbenzene	ND	0.0500	0.0551	110	71-129	
m,p-Xylene	ND	0.1000	0.0989	99	70-131	
o-Xylene	ND	0.0500	0.0523	105	71-133	

Lab Batch #: 700599 **Sample:** 700599-1-BKS **Matrix:** Water
Date Analyzed: 07/18/2007 **Date Prepared:** 07/18/2007 **Analyst:** LATCOR
Reporting Units: mg/L **Batch #:** 1

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	10.0	100	90-110	
Sulfate	ND	10.0	10.1	101	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS Recoveries

Project Name: EME H-13 Leak

Work Order #: 285886
Lab Batch #: 700599
Date Analyzed: 07/18/2007
QC- Sample ID: 285873-001 S
Reporting Units: mg/L

Date Prepared: 07/18/2007
Batch #: 1

Project ID:
Analyst: LATCOR
Matrix: Water

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	549	250	1060	204	90-110	X
Sulfate	1830	250	2250	168	90-110	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: EME H-13 Leak

Work Order # : 285886 **Project ID:**

Lab Batch ID: 700581 **QC- Sample ID:** 286015-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/18/2007 **Date Prepared:** 07/18/2007 **Analyst:** CELKEE

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.0500	0.0438	88	0.0500	0.0473	95	8	70-125	25	
Toluene	ND	0.0500	0.0439	88	0.0500	0.0475	95	8	70-125	25	
Ethylbenzene	ND	0.0500	0.0468	94	0.0500	0.0509	102	8	71-129	25	
m,p-Xylene	ND	0.1000	0.0837	84	0.1000	0.0912	91	8	70-131	25	
o-Xylene	ND	0.0500	0.0442	88	0.0500	0.0478	96	9	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: EME H-13 Leak

Work Order #: 285886

Lab Batch #: 700766 **Project ID:**
Date Analyzed: 07/19/2007 **Date Prepared:** 07/19/2007 **Analyst:** WRU
QC- Sample ID: 285882-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Alkalinity by EPA 310.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	308	312	1	20	

Lab Batch #: 700599
Date Analyzed: 07/18/2007 **Date Prepared:** 07/18/2007 **Analyst:** LATCOR
QC- Sample ID: 285873-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	549	549	0	20	
Sulfate	1830	1810	1	20	

Lab Batch #: 700406
Date Analyzed: 07/13/2007 **Date Prepared:** 07/13/2007 **Analyst:** LATCOR
QC- Sample ID: 285748-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Metals per ICP by SW846 6010B	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Calcium	139	139	0	25	
Magnesium	ND	32.6	NC	25	
Potassium	5.09	4.54	11	25	
Sodium	106	104	2	25	

Lab Batch #: 700387
Date Analyzed: 07/13/2007 **Date Prepared:** 07/13/2007 **Analyst:** LATCOR
QC- Sample ID: 285882-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	1470	1430	3	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope Kpope@riceswd.com
Company Name: RICE Operating Company
Company Address: 122 W. Taylor Street
City/State/Zip: Hobbs, New Mexico 88240
Telephone No: (505) 393-9174 Fax No: (505) 397-1471
Sampler Signature: Rozanne Johnson e-mail: rozanne@valornet.com

Project Name: EME #13 Load
Project #:
Project Loc: T20S R36E S 13 H Lea Cty New Mexico
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 285886

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (2) 40ml VOA	H2SO4	NaOH	Na2S2O3	None (1) 1 LITRE HDPE	Other (Specify)	Matrix: GW=Drinking Water SL=Sludge	CW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH: 418.1	TPH: 8015M	TPH: TX 1005	TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or (BTEX 8260	RCI	N.O.R.M.	TCLP:	TOTAL:	Total Dissolved Solids	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Monitor Well #1			7-10-07	9:45		3			2				1									X	X				X					X		X
02	" " #2			"	10:35		3			2				1									X	X				X					X		X
03	" " #3			"	8:50		3			2				1									X	X				X					X		X

Special Instructions:
Please email to: Kpope@riceswd.com matt@riceswd.com
jpurvis@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	7-12-07	12:30		7-12-07	12:31
Relinquished by:	Date	Time	Received by:	Date	Time
	7-12	3:26			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Lam	7-12-07	3:25

Laboratory Comments:

Sample Containers Intact?	N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	N
Sample Hand Delivered	N
by Sampler/Client Rep. ?	N
by Courier? UPS DHL FedEx Lone Star	

Temperature Upon Receipt: -.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 7-12-07 3:25

Lab ID #: GIL 288- 285896

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	-.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/03/07
Reporting Date: 10/09/07
Project Owner: NOT GIVEN
Project Name: EME H-13 LEAK
Project Location: T20S-R36E-SEC13 H~LEA COUNTY, NM

Sampling Date: 10/01/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		10/09/07	10/06/07	10/06/07	10/08/07	10/04/07	10/04/07
H13433-1	MONITOR WELL #1	646	316	127	9.00	5,410	232
H13433-2	MONITOR WELL #2	695	269	117	8.55	5,310	228
H13433-3	MONITOR WELL #3	647	276	119	9.15	5,330	224
Quality Control		NR	50.6	50.8	1.98	9,770	NR
True Value QC		NR	50.0	50.0	2.00	10,000	NR
% Recovery		NR	101	102	99.1	97.7	NR
Relative Percent Difference		NR	2.5	3.2	3.6	< 0.1	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		10/04/07	10/09/07	10/04/07	10/04/07	10/04/07	10/06/07
H13433-1	MONITOR WELL #1	1,550	300	0	283	7.11	3,264
H13433-2	MONITOR WELL #2	1,480	348	0	278	7.14	3,189
H13433-3	MONITOR WELL #3	1,440	332	0	273	7.13	3,257
Quality Control		500	45.6	NR	988	7.01	NR
True Value QC		500	50.0	NR	1000	7.00	NR
% Recovery		100	91.3	NR	98.8	100	NR
Relative Percent Difference		< 0.1		NR	1.2	< 0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

10-10-07
Date

H13433 RICE

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/03/07
Reporting Date: 10/05/07
Project Number: NOT GIVEN
Project Name: EME H-13 LEAK
Project Location: T20S-R36E-SEC13 H - LEA COUNTY, NM

Sampling Date: 10/01/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: CK

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		10/04/07	10/04/07	10/04/07	10/04/07
H13433-1	MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
H13433-2	MONITOR WELL #2	<0.001	<0.001	<0.001	<0.003
H13433-3	MONITOR WELL #3	<0.001	<0.001	<0.001	<0.003
Quality Control		0.105	0.102	0.101	0.103
True Value QC		0.100	0.100	0.100	0.300
% Recovery		105	102	101	103
Relative Percent Difference		1.7	<0.1	0.9	<0.1

METHOD: EPA SW-846 8021B

Chemist

10/10/07
Date

H13433b Rice

101 East Marland - Hobbs, New Mexico 88240
Tel (505) 393-2326
Fax (505) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company — PO#
Project Manager: Kristin Farris-Pope, Project Scientist	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (505) 393-9174 — Fax#: (505)397-1471
Phone #: (505) 393-9174	Fax #: (505)397-1471
Project #:	Project Name: EME H-13 Leak
Project Location: T20S-R36E-Sec13 H ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (505)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2007)	TIME
H13433-1	Monitor Well #1	G	3	X				2				1		10-1	9:40
2	Monitor Well #2	G	3	X				2				1		10-1	10:40
3	Monitor Well #3	G	3	X				2				1		10-1	8:50

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content		Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																X	X	X		
	X																X	X	X		
	X																X	X	X		

Relinquished by: Rozanne Johnson	Date: 10-3-07	Time: 1:14 pm	Received by: [signature]
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)

Date: 10/3/07 Time: 1:14 pm

Phone Results: Yes / No

Fax Results: Yes / No Additional Fax Number:

REMARKS:

Email Results to: kpope@riceswd.com, lweinheimer@riceswd.com, rozanne@valornet.com

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes [X] No [ ] Intact: Yes [X] No [ ]

CHECKED BY: (Initials) SB

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME H-13 Leak

Project Number: None Given

Location: T20S R36E Sec. 13 H- Lea County, NM

Lab Order Number: 7A29015

Report Date: 02/02/07

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7A29015-01	Water	01/24/07 09:35	01-29-2007 10:20
Monitor Well #2	7A29015-02	Water	01/24/07 10:55	01-29-2007 10:20
Monitor Well #3	7A29015-03	Water	01/24/07 12:05	01-29-2007 10:20

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7A29015-01) Water									
Benzene	ND	0.00100	mg/L	1	EA73103	01/31/07	01/31/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*81.5 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.0 %*		*80-120*		"	"	"	
Monitor Well #2 (7A29015-02) Water									
Benzene	ND	0.00100	mg/L	1	EA73103	01/31/07	02/01/07	EPA 8021B	
Toluene	**0.00139**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000281]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00135**	0.00100	"	"	"	"	"	"	
Xylene (o)	**J [0.000696]**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*112 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.8 %*		*80-120*		"	"	"	
Monitor Well #3 (7A29015-03) Water									
Benzene	ND	0.00100	mg/L	1	EA73103	01/31/07	02/01/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.8 %*		*80-120*		"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7A29015-01) Water									
Total Alkalinity	**226**	2.00	mg/L	1	EA73003	01/30/07	01/30/07	EPA 310.1M	
Chloride	**1610**	25.0	"	50	EA72918	01/29/07	01/30/07	EPA 300.0	
Total Dissolved Solids	**2940**	10.0	"	1	EA73007	01/29/07	01/30/07	EPA 160.1	
Sulfate	**292**	25.0	"	50	EA72918	01/29/07	01/30/07	EPA 300.0	
Monitor Well #2 (7A29015-02) Water									
Total Alkalinity	**212**	2.00	mg/L	1	EA73003	01/30/07	01/30/07	EPA 310.1M	
Chloride	**1660**	25.0	"	50	EA72918	01/29/07	01/30/07	EPA 300.0	
Total Dissolved Solids	**2890**	10.0	"	1	EB70206	01/31/07	02/01/07	EPA 160.1	
Sulfate	**300**	25.0	"	50	EA72918	01/29/07	01/30/07	EPA 300.0	
Monitor Well #3 (7A29015-03) Water									
Total Alkalinity	**224**	2.00	mg/L	1	EA73003	01/30/07	01/30/07	EPA 310.1M	
Chloride	**1570**	25.0	"	50	EA72918	01/29/07	01/30/07	EPA 300.0	
Total Dissolved Solids	**2820**	10.0	"	1	EB70206	01/31/07	02/01/07	EPA 160.1	
Sulfate	**398**	25.0	"	50	EA72918	01/29/07	01/30/07	EPA 300.0	

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7A29015-01) Water									
Calcium	350	20.2	mg/L	250	EA73006	01/30/07	01/31/07	EPA 6010B	
Magnesium	154	1.80	"	50	"	"	"	"	
Potassium	15.0	0.600	"	10	"	"	"	"	
Sodium	542	10.8	"	250	"	"	"	"	
Monitor Well #2 (7A29015-02) Water									
Calcium	350	20.2	mg/L	250	EA73006	01/30/07	01/31/07	EPA 6010B	
Magnesium	151	1.80	"	50	"	"	"	"	
Potassium	13.9	0.600	"	10	"	"	"	"	
Sodium	525	10.8	"	250	"	"	"	"	
Monitor Well #3 (7A29015-03) Water									
Calcium	300	20.2	mg/L	250	EA73006	01/30/07	01/31/07	EPA 6010B	
Magnesium	122	1.80	"	50	"	"	"	"	
Potassium	12.2	0.600	"	10	"	"	"	"	
Sodium	647	10.8	"	250	"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME H-13 Leak
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA73103 - EPA 5030C (GC)										
Blank (EA73103-BLK1)				Prepared: 01/31/07 Analyzed: 02/01/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*39.2*		*ug/l*	*40.0*		*98.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.7*		*"*	*40.0*		*91.8*	*80-120*			
LCS (EA73103-BS1)				Prepared: 01/31/07 Analyzed: 02/01/07						
Benzene	0.0535	0.00100	mg/L	0.0500		107	80-120			
Toluene	0.0516	0.00100	"	0.0500		103	80-120			
Ethylbenzene	0.0473	0.00100	"	0.0500		94.6	80-120			
Xylene (p/m)	0.0912	0.00100	"	0.100		91.2	80-120			
Xylene (o)	0.0425	0.00100	"	0.0500		85.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*47.3*		*ug/l*	*40.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.6*		*"*	*40.0*		*114*	*80-120*			
Calibration Check (EA73103-CCV1)				Prepared: 01/31/07 Analyzed: 02/02/07						
Benzene	41.7		ug/l	50.0		83.4	80-120			
Toluene	43.6		"	50.0		87.2	80-120			
Ethylbenzene	48.1		"	50.0		96.2	80-120			
Xylene (p/m)	86.1		"	100		86.1	80-120			
Xylene (o)	42.0		"	50.0		84.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.7*		*"*	*40.0*		*94.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.9*		*"*	*40.0*		*89.8*	*80-120*			
Matrix Spike (EA73103-MS1)	**Source: 7A29015-03**			Prepared: 01/31/07 Analyzed: 02/01/07						
Benzene	0.0446	0.00100	mg/L	0.0500	ND	89.2	80-120			
Toluene	0.0477	0.00100	"	0.0500	ND	95.4	80-120			
Ethylbenzene	0.0492	0.00100	"	0.0500	ND	98.4	80-120			
Xylene (p/m)	0.0953	0.00100	"	0.100	ND	95.3	80-120			
Xylene (o)	0.0427	0.00100	"	0.0500	ND	85.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.7*		*ug/l*	*40.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.0*		*"*	*40.0*		*115*	*80-120*			

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA73103 - EPA 5030C (GC)										
Matrix Spike Dup (EA73103-MSD1)	**Source: 7A29015-03**			Prepared: 01/31/07 Analyzed: 02/01/07						
Benzene	0.0456	0.00100	mg/L	0.0500	ND	91.2	80-120	2.22	20	
Toluene	0.0477	0.00100	"	0.0500	ND	95.4	80-120	0.00	20	
Ethylbenzene	0.0467	0.00100	"	0.0500	ND	93.4	80-120	5.21	20	
Xylene (p/m)	0.0930	0.00100	"	0.100	ND	93.0	80-120	2.44	20	
Xylene (o)	0.0407	0.00100	"	0.0500	ND	81.4	80-120	4.80	20	
Surrogate: a,a,a-Trifluorotoluene	*42.2*		*ug/l*	*40.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.1*		"	*40.0*		*97.8*	*80-120*			

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA72918 - General Preparation (WetChem)										
Blank (EA72918-BLK1)				Prepared: 01/29/07 Analyzed: 01/30/07						B
Sulfate	0.465	0.500	mg/L							J
Chloride	ND	0.500	"							
LCS (EA72918-BS1)				Prepared: 01/29/07 Analyzed: 01/30/07						
Sulfate	11.9	0.500	mg/L	10.0		119	80-120			
Chloride	11.5	0.500	"	10.0		115	80-120			
Calibration Check (EA72918-CCV1)				Prepared: 01/29/07 Analyzed: 01/30/07						
Chloride	10.8		mg/L	10.0		108	80-120			
Calibration Check (EA72918-CCV2)				Prepared: 01/29/07 Analyzed: 01/30/07						
Chloride	0.00		mg/L	10.0			80-120			
Sulfate	0.00		"	10.0			80-120			
Duplicate (EA72918-DUP1)	Source: 7A29004-01			Prepared: 01/29/07 Analyzed: 01/30/07						
Chloride	3250	50.0	mg/L		3270			0.613	20	
Sulfate	529	50.0	"		554			4.62	20	
Duplicate (EA72918-DUP2)	Source: 7A29015-01			Prepared: 01/29/07 Analyzed: 01/30/07						
Chloride	1610	25.0	mg/L		1610			0.00	20	
Sulfate	295	25.0	"		292			1.02	20	
Matrix Spike (EA72918-MS1)	Source: 7A29004-01			Prepared: 01/29/07 Analyzed: 01/30/07						
Sulfate	1580	50.0	mg/L	1000	554	103	80-120			
Chloride	4220	50.0	"	1000	3270	95.0	80-120			
Matrix Spike (EA72918-MS2)	Source: 7A29015-01			Prepared: 01/29/07 Analyzed: 01/30/07						S-08
Chloride	2230	25.0	mg/L	500	1610	124	80-120			
Sulfate	851	25.0	"	500	292	112	80-120			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME H-13 Leak
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA73003 - General Preparation (WetChem)										
Blank (EA73003-BLK1)				Prepared & Analyzed: 01/30/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (EA73003-BS1)				Prepared & Analyzed: 01/30/07						
Bicarbonate Alkalinity	184	2.00	mg/L	200		92.0	85-115			
Duplicate (EA73003-DUP1)		Source: 7A29013-01		Prepared & Analyzed: 01/30/07						
Total Alkalinity	254	2.00	mg/L		256			0.784	20	
Reference (EA73003-SRM1)				Prepared & Analyzed: 01/30/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch EA73007 - Filtration Preparation										
Blank (EA73007-BLK1)				Prepared: 01/29/07 Analyzed: 01/30/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EA73007-DUP1)		Source: 7A29004-01		Prepared: 01/29/07 Analyzed: 01/30/07						
Total Dissolved Solids	5220	10.0	mg/L		5220			0.00	20	
Batch EB70206 - Filtration Preparation										
Blank (EB70206-BLK1)				Prepared: 01/31/07 Analyzed: 02/01/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EB70206-DUP1)		Source: 7A29012-01		Prepared: 01/31/07 Analyzed: 02/01/07						
Total Dissolved Solids	1170	10.0	mg/L		1120			4.37	20	

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA73006 - 6010B/No Digestion										
Blank (EA73006-BLK1)				Prepared: 01/30/07 Analyzed: 01/31/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EA73006-CCV1)				Prepared: 01/30/07 Analyzed: 01/31/07						
Calcium	2.05		mg/L	2.00		102	85-115			
Magnesium	2.13		"	2.00		106	85-115			
Potassium	1.81		"	2.00		90.5	85-115			
Sodium	1.90		"	2.00		95.0	85-115			
Duplicate (EA73006-DUP1)	**Source: 7A29012-01**			Prepared: 01/30/07 Analyzed: 01/31/07						
Calcium	104	4.05	mg/L		102			1.94	20	
Magnesium	44.4	0.360	"		46.5			4.62	20	
Potassium	9.46	0.600	"		10.0			5.55	20	
Sodium	234	2.15	"		239			2.11	20	

Rice Operating Co.	Project: EME H-13 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

S-08	Value outside Laboratory historical or method prescribed QC limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 2/2/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: EME H-13 Leak

Project #:

Project Loc: T20S-R36E-Sec13 H ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 7A29015

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
																											TCLP:							
																											TOTAL:			X				
01	Monitor Well #1			1/24/2007	9:35		3	X		2				1		GW					X	X					X			X				X
02	Monitor Well #2			1/24/2007	10:55		3	X		2				1		GW					X	X					X			X				X
03	Monitor Well #3			1/24/2007	12:05		3	X		2				1		GW					X	X					X			X				X

Special Instructions:

Please email to : kpope@riceswd.com mfranks@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	1-29-07	6:00	James Johnson	1-29-07	6:01
Relinquished by: James Johnson	1-29-07	10:20	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	1-29-07	10:20

Laboratory Comments:

Sample Containers Intact? Y (N)
VOCs Free of Headspace? Y (N)
Labels on container(s) Y (N)
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered Y (N)
by Sampler/Client Rep.? Y (N)
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: -0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

lient: RIK Dp.

ate/ Time: 1/29/07 10:20

ab ID # : 7A29015

itials: CK

Sample Receipt Checklist

					Client Initials
1	Temperature of container/ cooler?	Yes	No	-0.5 °C	
2	Shipping container in good condition?	Yes	No		
3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
5	Chain of Custody present?	Yes	No		
6	Sample instructions complete of Chain of Custody?	Yes	No		
7	Chain of Custody signed when relinquished/ received?	Yes	No		
8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
9	Container label(s) legible and intact?	Yes	No	Not Applicable	
10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
11	Containers supplied by ELOT?	Yes	No		
12	Samples in proper container/ bottle?	Yes	No	See Below	
13	Samples properly preserved?	Yes	No	See Below	
14	Sample bottles intact?	Yes	No		
15	Preservations documented on Chain of Custody?	Yes	No		
16	Containers documented on Chain of Custody?	Yes	No		
17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
18	All samples received within sufficient hold time?	Yes	No	See Below	
19	Subcontract of sample(s)?	Yes	No	Not Applicable	
20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

ontact: _____ Contacted by: _____ Date/ Time: _____

egarding: _____

orrective Action Taken:

heck all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event