1R - 427-176

REPORTS

DATE:

2-18-11

Rice Environmental Consulting & Safety
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

CERTIFIED MAIL
RETURN RECIEPT NO. 7008 1140 0001 3070 5276

February18th, 2011

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

RE: **ICP REPORT and TERMINATION REQUEST**
Rice Operating Company – EME SWD System
EME jct. G-1 (1R427-176): UL/G sec. 1 T20S R36E

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the EME Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the EME SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage/usage basis.

Background and Previous Work
The site is located approximately 2.5 miles south-west of Monument, New Mexico at UL/G sec. 1 T20S R36E as shown on the Site Location Map (Figure 1). NM OSE records indicate that groundwater will likely be encountered at a depth of approximately 40 +/- feet.

In 2004 ROC initiated work on the former EME G-1 junction. The site was delineated using a backhoe to form an excavation 30 x 30 x 12 feet deep and soil samples were screened at regular intervals for both hydrocarbons and chlorides. From the excavation, the bottom composite, the 4-wall composite, and the remediated backfill were collected for laboratory verification. Laboratory tests of the site showed negligible gasoline range organics (GRO) and diesel range organics (DRO). Chloride concentrations in the excavation registered 368 ppm in the bottom composite, 896 ppm in the 4-wall composite, and 223 ppm in the remediated backfill. The soil from the excavation was blended on site and backfilled into the excavation. The area was contoured to the surrounding landscape and seeded. A new watertight junction box was built in the sample place, and an identification plate was placed next to the box to identify the junction site for future environmental considerations. NMOCD was notified of potential groundwater impact on May 27, 2005 and a junction box disclosure report (Appendix A) was submitted to NMOCD with all the 2005 junction box closures and disclosures.

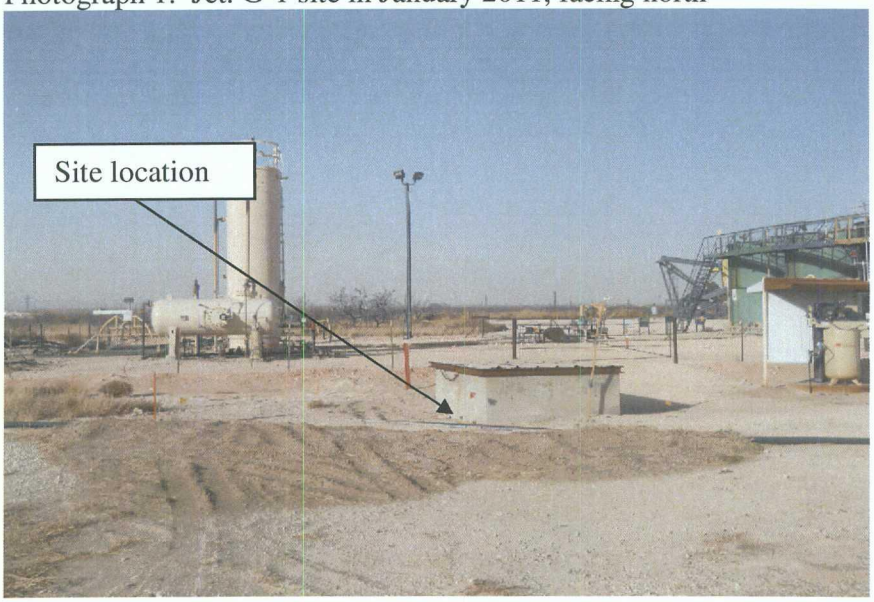
ICP Investigative Results

As part of the Investigation and Characterization Plan approved by NMOCD on December 22nd, 2010, two soil bores were advanced through the former junction box site to a depth of 25 ft bgs on December 20th, 2010 (Figure 2). ROC personnel field tested the soil for chlorides and screened in the field with a photo-ionization detector (PID). Representative samples from the bore were taken to a commercial laboratory for confirmation of chloride and hydrocarbon field numbers (Appendix B). Laboratory readings for SB-1 confirmed chloride concentrations decreased with depth from a concentration of 160 mg/kg at 5 ft bgs to a concentration of 32 mg/kg at 25 ft bgs. Laboratory readings for SB-2 confirmed chloride concentrations decrease with depth from 944 mg/kg at 10 ft bgs to 48 mg/kg at 25 ft bgs. Laboratory readings for GRO and DRO showed non-detect in both soil bores.

Recommendations

The two soil bores at the site showed low chloride readings and non-detect GRO or DRO. Based on the soil bore data, we conclude that this site is in compliance with the requirements of 19.15.29 NMAC such that soil at the site does not and will not endanger public health or the environment. This site is in the same location of the new watertight junction box, which is next to an active battery (see Photograph 1 below); therefore, no surface restoration is required. RECS would like to request termination of this regulatory file. There are no monitoring wells located at this site.

Photograph 1. Jct. G-1 site in January 2011, facing north



ROC appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

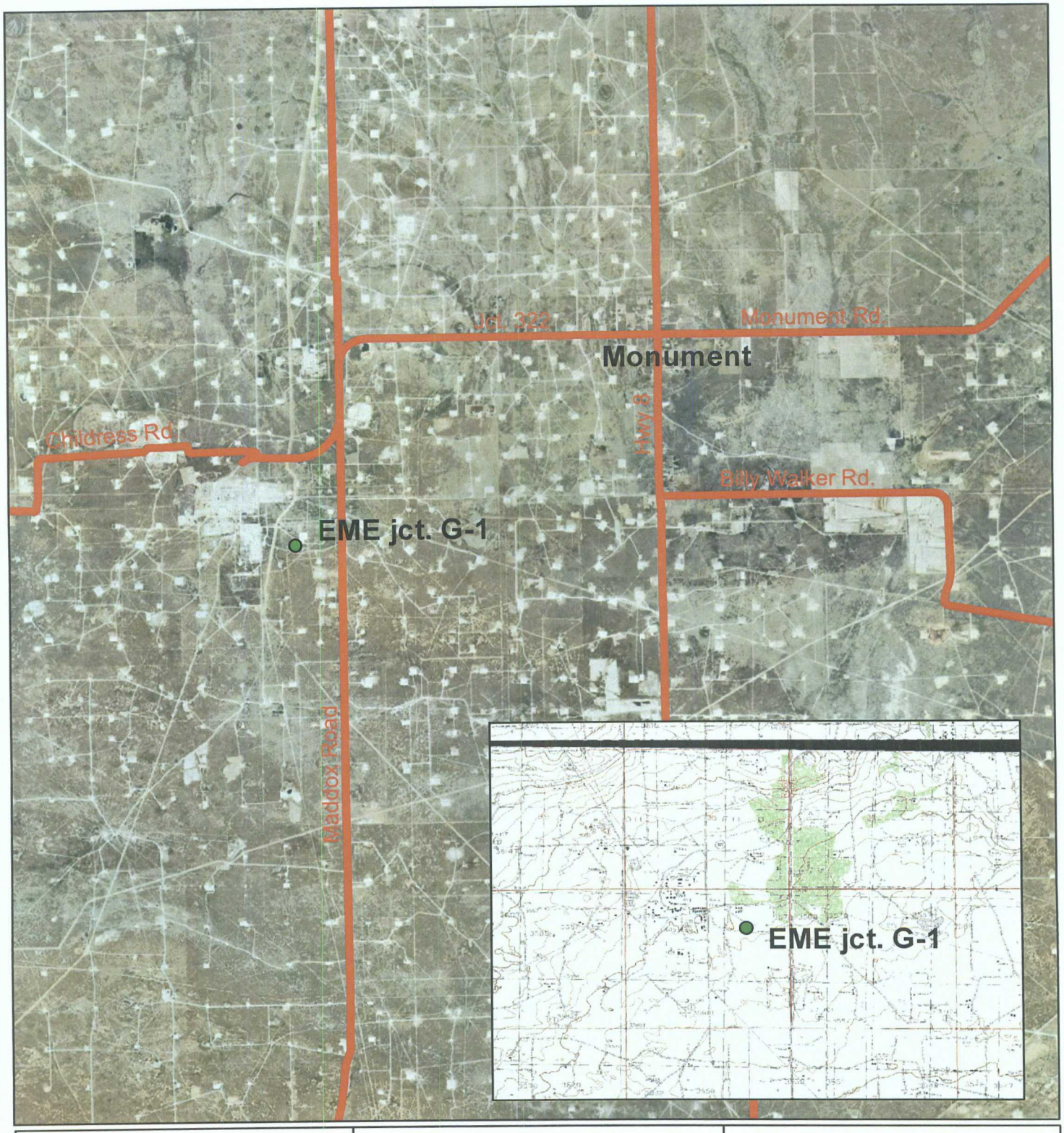
Attachments:

Figures – Site location map
Soil bore installation plat
Appendix A – Disclosure report form
Appendix B – Soil bore log and laboratory analysis

Figures

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Site Map



RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC
RECS

EME jct. G-1

Legals: UL/G sec. 1
T20S R36E

Case #: 1R427-176

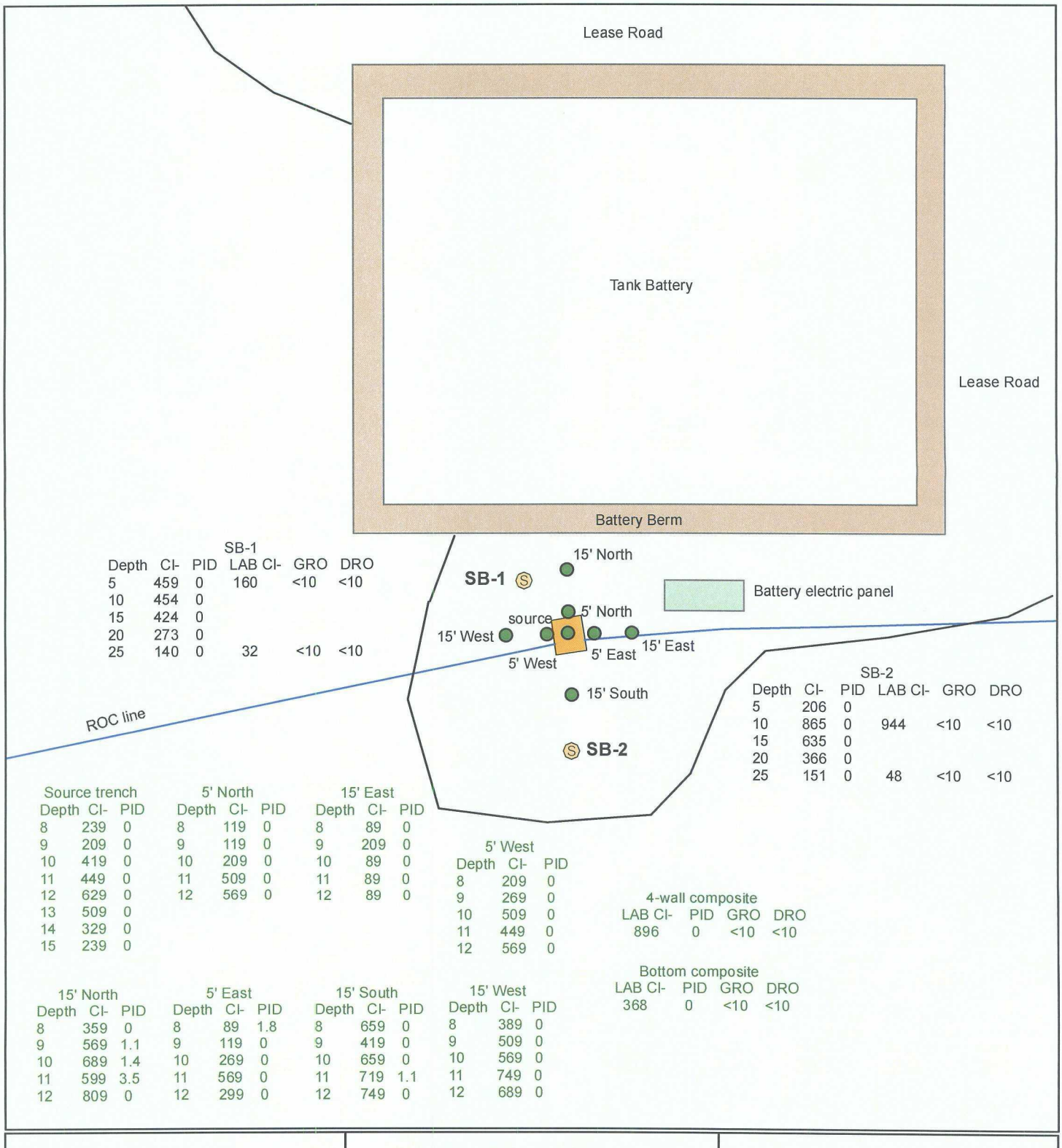
Figure 1

N
W E
S

0 2,125 4,250 8,500
Feet

Drawing date: 2-18-11
Drafted by: L. Weinheimer

Soil bore and Backhoe information



SB-1

Depth	Cl-	PID	LAB Cl-	GRO	DRO
5	459	0	160	<10	<10
10	454	0			
15	424	0			
20	273	0			
25	140	0	32	<10	<10

SB-2

Depth	Cl-	PID	LAB Cl-	GRO	DRO
5	206	0			
10	865	0	944	<10	<10
15	635	0			
20	366	0			
25	151	0	48	<10	<10

Source trench

Depth	Cl-	PID
8	239	0
9	209	0
10	419	0
11	449	0
12	629	0
13	509	0
14	329	0
15	239	0

5' North

Depth	Cl-	PID
8	119	0
9	119	0
10	209	0
11	509	0
12	569	0

15' East

Depth	Cl-	PID
8	89	0
9	209	0
10	89	0
11	89	0
12	89	0

5' West

Depth	Cl-	PID
8	209	0
9	269	0
10	509	0
11	449	0
12	569	0

4-wall composite

LAB Cl-	PID	GRO	DRO
896	0	<10	<10

Bottom composite

LAB Cl-	PID	GRO	DRO
368	0	<10	<10

15' North

Depth	Cl-	PID
8	359	0
9	569	1.1
10	689	1.4
11	599	3.5
12	809	0

5' East

Depth	Cl-	PID
8	89	1.8
9	119	0
10	269	0
11	569	0
12	299	0

15' South

Depth	Cl-	PID
8	659	0
9	419	0
10	659	0
11	719	1.1
12	749	0

15' West

Depth	Cl-	PID
8	389	0
9	509	0
10	569	0
11	749	0
12	689	0

RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC

EME jct. G-1

Legals: UL/G sec.1
T20S R36E

Case #: 1R427-176

Figure 2

N W E S

0 15 30 60 Feet

Drawing date:1-3-10
Drafted by: L. Weinheimer

Appendix A

Junction Box Disclosure Report

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

RICE OPERATING COMPANY
JUNCTION BOX **DISCLOSURE*** REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	B-1-2	B	1	20S	36E	Lea	6	5	5

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Charlcie Byrd OTHER _____

Depth to Groundwater 40 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 6/22/2004 Date Completed 6/25/2004 OCD Witness No

Soil Excavated 400 cubic yards Excavation Length 30 Width 30 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS:

Sample Dates 6/24/2004 7/15/2004 **Sample Depth** 12 ft

Procure 5-point composite sample of bottom and 4-point composite sample of excavation sidewalls. TPH and chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	0.0	<10.0	<10.0	896
BOTTOM COMP.	0.0	<10.0	<10.0	368
REMED. BACKFILL	XXX	<10.0	<10.0	223

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
15 ft NORTH of junction	8	359
	9	569
	10	689
	11	599
	12	809
15 ft SOUTH of junction	8	659
	9	419
	10	659
	11	719
	12	749
4-wall comp.	12	689
bottom comp.	12	209
remed. backfill	n/a	389

General Description of Remedial Action: This junction box was located just south of the fence of an active production facility. The pipeline was replaced and the site was delineated using a backhoe while PID screenings and chloride field tests were conducted at regular intervals on grab soil samples. PID readings were low throughout the 30 x 30 x 12 ft deep excavation and composite lab samples confirmed non-detect (<10.0 ppm) TPH concentrations that meet NMOCD guidelines. Chloride concentrations did not exhibit significant declines at this site. The excavated soil was blended on site and then backfilled into the excavation and contoured to the surrounding surface. The disturbed surface was seeded with a blend of native vegetation and is expected to return to productive capacity at a normal rate. A new watertight junction box has been built over this junction. An identification plate has been placed next to the box to identify the junction site for future environmental considerations. NMOCD has been notified of potential groundwater impact at this site.

ADDITIONAL EVALUATION IS *HIGH* PRIORITY

enclosures: chloride graph, photos, lab results, PID field screenings

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SITE SUPERVISOR Rob Elam SIGNATURE not available COMPANY Curt's Environmental--Odessa, TX

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Farris Pope

DATE 5/27/2005 TITLE Project Scientist

This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.

EME jct. B-1-2

unit 'B', sec. 1, T20S, R36E

undisturbed junction box 4/13/2004

box removed; old plumbing 5/4/2004

new plumbing at junction 5/4/2004

junction box removed 6/25/2004

30 x 30 x 12-ft excavation with pipe supports 6/25/2004

floor of new box at backfilled site 7/12/2004

seeding disturbed surface; new junction box in foreground
10/15/2004

disclosure plate at junction box 10/19/2004

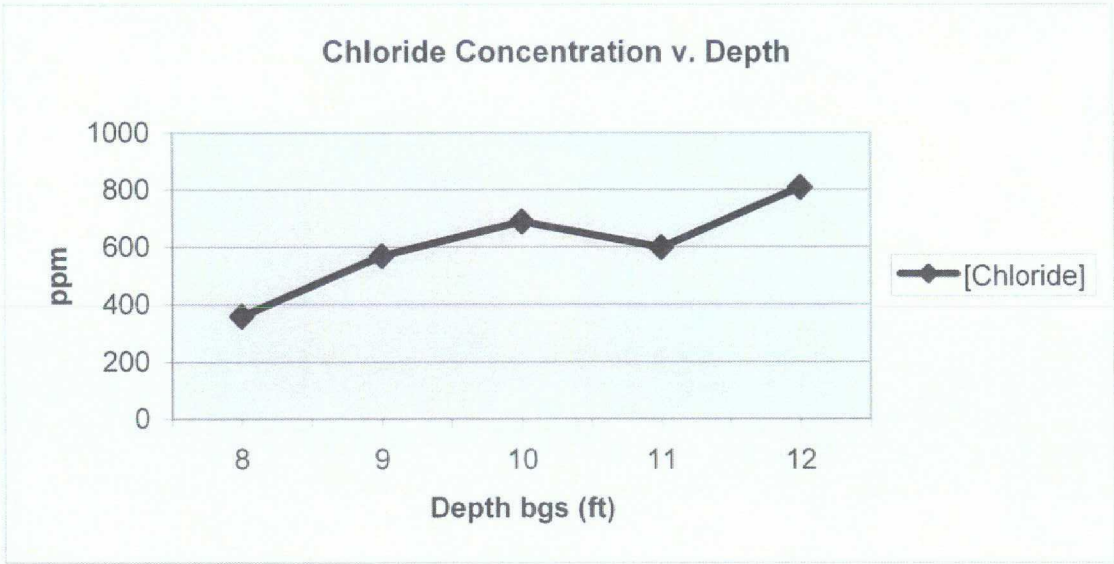
EME jct. B-1-2

unit 'B', Sec. 1, T20S, R36E

Vertical Delineation at Source

Depth bgs (ft)	[Cl⁻] ppm
8	359
9	569
10	689
11	599
12	809

Groundwater = 40 ft



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 CO.
ATTN: ROB ELAM
122 W.TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 06/24/04
Reporting Date: 06/25/04
Project Number: B1-2
Project Name: EME B1-2
Project Location: NOT GIVEN

Sampling Date: 06/24/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		06/24/04	06/24/04	06/25/04
H8853-1	12' BOTTOM COMPOSITE	<10.0	<10.0	368
H8853-2	WALL COMPOSITE	<10.0	<10.0	896
Quality Control		770	816	1000
True Value QC		800	800	1000
% Recovery		96.2	102	100
Relative Percent Difference		0.9	3.4	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

6/25/04
Date

H8853.XLS

CARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

Page____ of____

Company Name:	Rice	BILL TO	
Project Manager:	Rob E/Am	P.O. #:	
Address:	122 W. Taylor	Company:	
City:	Hobbs	State: NM Zip:	Attn:
Phone #:	393-9174	Fax #: 397-1471	Address:
Project #:	BI-2	Project Owner:	City:
Project Name:	EME BI-2		State: Zip:
Project Location:			Phone #:
Sampler Name:	Rob E/Am		Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	TPH 8015M	BTEX						
H8853-1	12" Bottom Composite		1			✓					✓		6-24-04	3:35	✓	✓						
-2	Wall "		1			✓					✓		" "	3:30	✓	✓						

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 4-27-04	Received By:	Phone Result: ☐ Yes ☐ No
Rob Elam	Time: 4:20		Fax Result: ☐ Yes ☐ No
			REMARKS:
Relinquished By:	Date:	Received By: (Lab Staff)	
	Time:		

Delivered By: (Circle One)	Sample Condition		Checked By: (Initials)
Sampler - UPS - Bus - Other:	Temp. °C	Intact? ☑ Yes ☐ No	

† Cardinal cannot accept verbal changes. Please fax written changes to (915) 673-7020.

ENVIRONMENTAL LAB OF
12600 West I-20 East - Odessa, Texas 79765

COPY

Analytical Report

Prepared for:
Roy Rascon
Rice Operating Co.
122 W. Taylor
Hobbs, NM 88240

Project: Jct. B-1-2
Project Number: None Given
Location: EME

Lab Order Number: 4G16018

Report Date: 07/22/04

Rice Operating Co.	Project: Jct B-1-2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-2 Backfill	4G16018-01	Soil	07/15/04 14:15	07/16/04 16:20

12600 West I-20 East - Odessa, Texas 79765 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: Jct. B-1-2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-2 Backfill (4G16018-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41910	07/20/04	07/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.2 %*	*70-130*	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		*79.0 %*	*70-130*	"	"	"	"	"	

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

Rice Operating Co.	Project: Jct. B-1-2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-2 Backfill (4G16018-01) Soil									
Chloride	223	20.0	mg/kg Wet	2	EG42015	07/19/04	07/20/04	SW 846 9253	
% Solids	98.0		%	1	EG42001	07/19/04	07/19/04	% calculation	

12600 West I-20 East - Odessa, Texas 79765 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: Jet B-1 2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

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 EG41910 - Solvent Extraction (GC)										
Blank (EG41910-BLK1)			Prepared & Analyzed: 07/20/04							
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	45.7		*mg/kg*	*50.0*		*91.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	41.1		"	*50.0*		*82.2*	*70-130*			
Blank (EG41910-BLK2)			Prepared: 07/20/04 Analyzed: 07/21/04							
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	43.0		*mg/kg*	*50.0*		*86.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	36.4		"	*50.0*		*72.8*	*70-130*			
LCS (EG41910-BS1)			Prepared & Analyzed: 07/20/04							
Gasoline Range Organics C6-C12	451	10.0	mg/kg wet	500		90.2	75-125			
Diesel Range Organics >C12-C35	486	10.0	"	500		97.2	75-125			
Total Hydrocarbon C6-C35	937	10.0	"	1000		93.7	75-125			
Surrogate: 1-Chlorooctane	49.5		*mg/kg*	*50.0*		*99.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	37.7		"	*50.0*		*75.4*	*70-130*			
LCS (EG41910-BS2)			Prepared: 07/20/04 Analyzed: 07/21/04							
Gasoline Range Organics C6-C12	454	10.0	mg/kg wet	500		90.8	75-125			
Diesel Range Organics >C12-C35	482	10.0	"	500		96.4	75-125			
Total Hydrocarbon C6-C35	936	10.0	"	1000		93.6	75-125			
Surrogate: 1-Chlorooctane	49.4		*mg/kg*	*50.0*		*98.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	37.9		"	*50.0*		*75.8*	*70-130*			
Calibration Check (EG41910-CCV1)			Prepared & Analyzed: 07/20/04							
Gasoline Range Organics C6-C12	424		mg/kg	500		84.8	80-120			
Diesel Range Organics >C12-C35	438		"	500		87.6	80-120			
Total Hydrocarbon C6-C35	862		"	1000		86.2	80-120			
Surrogate: 1-Chlorooctane	55.8		"	*50.0*		*112*	*70-130*			
Surrogate: 1-Chlorooctadecane	38.2		"	*50.0*		*76.4*	*70-130*			

12600 West I-20 East - Odessa, Texas 79765 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: Jct. B-1-2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

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 EG41910 - Solvent Extraction (GC)										
Calibration Check (EG41910-CCV2)				Prepared: 07/20/04 Analyzed: 07/21/04						
Gasoline Range Organics C6-C12	412		mg/kg	500		82.4	80-120			
Diesel Range Organics >C12-C35	454		"	500		90.8	80-120			
Total Hydrocarbon C6-C35	866		"	1000		86.6	80-120			
Surrogate: 1-Chlorooctane	*55.2*		"	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.3*		"	*50.0*		*80.6*	*70-130*			
Matrix Spike (EG41910-MS1)		Source: 4G16016-23		Prepared & Analyzed: 07/20/04						
Gasoline Range Organics C6-C12	448	10.0	mg/kg dry	521	ND	86.0	75-125			
Diesel Range Organics >C12-C35	469	10.0	"	521	ND	90.0	75-125			
Total Hydrocarbon C6-C35	917	10.0	"	1040	ND	88.2	75-125			
Surrogate: 1-Chlorooctane	*56.0*		*mg/kg*	*50.0*		*112*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.9*		"	*50.0*		*73.8*	*70-130*			
Matrix Spike (EG41910-MS2)		Source: 4G16021-05		Prepared: 07/20/04 Analyzed: 07/21/04						
Gasoline Range Organics C6-C12	433	10.0	mg/kg dry	515	ND	84.1	75-125			
Diesel Range Organics >C12-C35	513	10.0	"	515	8.10	98.0	75-125			
Total Hydrocarbon C6-C35	946	10.0	"	1030	ND	91.8	75-125			
Surrogate: 1-Chlorooctane	*53.7*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.2*		"	*50.0*		*82.4*	*70-130*			
Matrix Spike Dup (EG41910-MSD1)		Source: 4G16016-23		Prepared: 07/20/04 Analyzed: 07/22/04						
Gasoline Range Organics C6-C12	456	10.0	mg/kg dry	521	ND	87.5	75-125	1.77	20	
Diesel Range Organics >C12-C35	487	10.0	"	521	ND	93.5	75-125	3.77	20	
Total Hydrocarbon C6-C35	943	10.0	"	1040	ND	90.7	75-125	2.80	20	
Surrogate: 1-Chlorooctane	*51.0*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.9*		"	*50.0*		*83.8*	*70-130*			
Matrix Spike Dup (EG41910-MSD2)		Source: 4G16021-05		Prepared: 07/20/04 Analyzed: 07/21/04						
Gasoline Range Organics C6-C12	446	10.0	mg/kg dry	515	ND	86.6	75-125	2.96	20	
Diesel Range Organics >C12-C35	471	10.0	"	515	8.10	89.9	75-125	8.54	20	
Total Hydrocarbon C6-C35	917	10.0	"	1030	ND	89.0	75-125	3.11	20	
Surrogate: 1-Chlorooctane	*54.6*		*mg/kg*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.4*		"	*50.0*		*74.8*	*70-130*			

Rice Operating Co.	Project: Jct. B-1-2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

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 EG42001 - General Preparation (Prep)										
Blank (EG42001-BLK1)				Prepared & Analyzed: 07/19/04						
% Solids	100		%							
Duplicate (EG42001-DUP1)		Source: 4G16015-03		Prepared & Analyzed: 07/19/04						
% Solids	89.0		%		89.0			0.00	20	
Batch EG42015 - Water Extraction										
Blank (EG42015-BLK1)				Prepared: 07/19/04 Analyzed: 07/20/04						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EG42015-MS1)		Source: 4G16016-22		Prepared: 07/19/04 Analyzed: 07/20/04						
Chloride	532	20.0	mg/kg Wet	500	21.3	102	80-120			
Matrix Spike Dup (EG42015-MSD1)		Source: 4G16016-22		Prepared: 07/19/04 Analyzed: 07/20/04						
Chloride	521	20.0	mg/kg Wet	500	21.3	99.9	80-120	2.09	20	
Reference (EG42015-SRM1)				Prepared: 07/19/04 Analyzed: 07/20/04						
Chloride	5000		mg/kg	5000		100	80-120			

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

Rice Operating Co.	Project: Jct. B-1-2	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Roy Rascon	07/22/04 10:58

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: Celey D. Keene Date: 07/22/04

Raland K. Tuttle, QA Officer
Celey D. Keene, Lab Director, Org. Tech Director
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sara Molina, Chemist
Sandra Biezugbe, Lab Tech

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Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Roy Rascon
Company Name: RICE Operating
Company Address: 122 W. Taylor
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 393-9174 Fax No: (505) 397-1471
Sampler Signature: Rob Elam

Project Name: jct. B-1-2
Project #:
Project Loc: ~~Batt~~ EME
PO #: 785

4G16018

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TCLP: TDS / SAR / EC	TCLP: TPH 418.1	TCLP: TPH TX 1005/1006	TOTAL: TPH 8015M GRO/DRO	TOTAL: Metals Ag As Ba Cd Cr Pb Hg Se	TOTAL: Volatiles	TOTAL: Semivolatiles	TOTAL: BTEX 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT
-01	B-1-2 Backfill	7-15-04	2:15	1	✓									✓		✓			✓						

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments: Ice 4.0°C

Relinquished by:	Date	Time	Received by:	Date	Time
Rob Elam	7-15-04	4:55		7/16/04	11:00
	Date	Time	Received by ELOT:	Date	Time
	7/16/04	16:20		7-16-04	1620

Jul 22 04 04:07p

COPY

RICE OPERATING COMPANY

122 WEST TAYLOR
HOBBS, NEW MEXICO 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471

VOC FIELD TEST REPORT FORM

MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S
CALIBRATION GAS
GAS COMPOSITION: ISOBUTYLENE
AIR
LOT NO: 03-2475
EXP. DATE: 10-19-05
METER READING
ACCURACY: 100.1

SERIAL NO: ~~104412~~ 104550
100 PPM
BALANCE
FILL DATE: 4-19-04
ACCURACY: ± 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EME	B1-2	B	1	20-S	36 E

SAMPLE		PID RESULT	SAMPLE	PID RESULT
West	8'	0	West Wall Comp	0
	9'	0	East " "	0
	10'	0	South " "	0
	11'	0	North " "	0
	12'	0	Bottom "	0
Source	13'	0	Wall "	0
	14'	0		
	15'	0		

I certify that I have calibrated the above instrument in accordance to the manufacture operation manual

R. Elam
Signature

6-24-04
Date

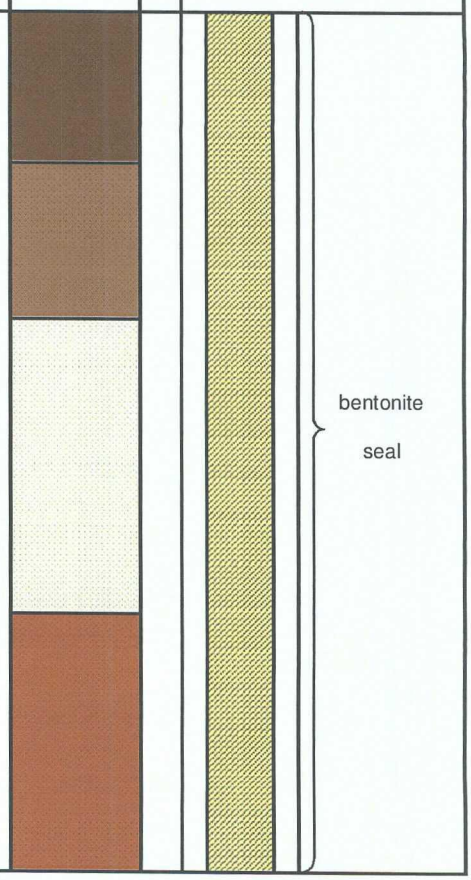
Appendix B

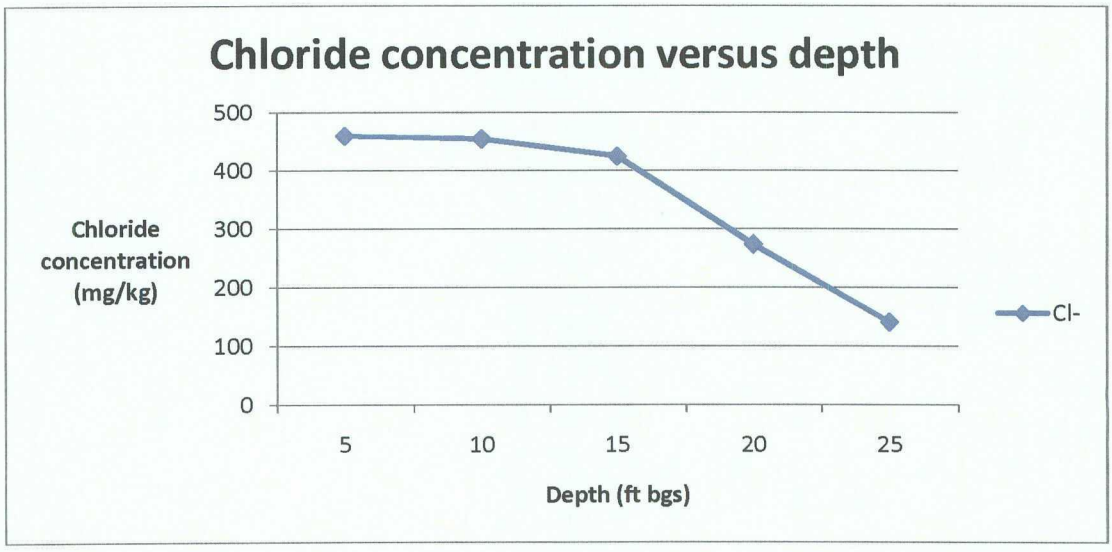
ICP soil bore installations

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Logger:	Jordan Woodfin	SB-1	RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		
Drilling Method:	Air rotary	20S 36E	**Project Name:** EME jct. G-1 **Well ID:** SB-1
Start Date:	12/20/2010	SB-2	**Project Consultant:** RECS
End Date:	12/20/2010		
Comments: Located 17 ft north of the former junction box site.			**Location:** UL/G sec. 1 T20S R36E
DRAFTED BY: L. Weinheimer			**Lat:** 32°36'20.757"N **Long:** 103°18'13.63"W **County**: Lea **State**: NM
TD = 25 ft		GW = 32 ft	

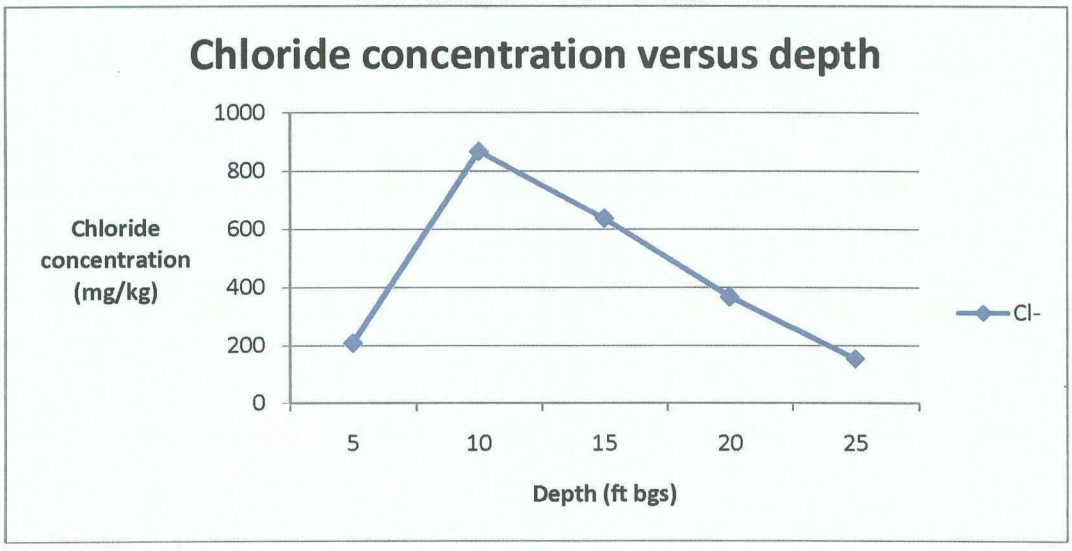
Depth (feet)	chloride field tests	LAB	PID	Description
				Brown fine silty sand with caliche fragments
5 ft	459	Cl- 160	0.0	
		GRO <10		Light brown to tan medium sand with silt and small caliche fragmetns
		DRO <10		
10 ft	454		0.0	
				Tan very fine silty sand with small caliche fragments
15 ft	424		0.0	
				Tan very fine silty sand with small caliche fragments
20 ft	273		0.0	
				Red very fine silty sand
25 ft	140	Cl- 32	0.0	
		GRO <10		
		DRO <10		




Chloride concentration versus depth
Chloride concentration (mg/kg)
500
400
300
200
100
0
5
10
15
20
25
Depth (ft bgs)
Cl-

Logger:	Jordan Woodfin	SB-1	RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC — RECS
Driller:	Harrison & Cooper, Inc.		
Drilling Method:	Air rotary	20S 36E	**Project Name:** EME jct. G-1 **Well ID:** SB-2
Start Date:	12/20/2010	SB-2	
End Date:	12/20/2010		**Project Consultant:** RECS
Comments: Located 28 ft south of the former junction box site.			**Location:** UL/G sec. 1 T20S R36E
DRAFTED BY: L. Weinheimer			**Lat:** 32°36'20.345"N **County**: Lea
TD = 25 ft		GW = 32 ft	**Long:** 103°18'13.493"W **State**: NM

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
				Tan very fine sand		
5 ft	206		0.0			
				Brown fine sand with clay mixture (well consolidated)		
10 ft	865	Cl- 944	0.0			
		GRO <10		Light brown to tan silty very fine sand		bentonite seal
		DRO <10				
15 ft	635		0.0			
20 ft	366		0.0			
				Red very fine silty sand		
25 ft	151	Cl- 48	0.0			
		GRO <10				
		DRO <10				


Chloride concentration versus depth
Chloride concentration (mg/kg)
1000
800
600
400
200
0
5
10
15
20
25
Depth (ft bgs)
Cl-

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 31, 2010

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME JCT G-1

Enclosed are the results of analyses for samples received by the laboratory on 12/21/10 8:10.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene
Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	12/21/2010	Sampling Date:	12/20/2010
Reported:	12/31/2010	Sampling Type:	Soil
Project Name:	EME JCT G-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB #1 @ 5' (H021574-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	12/22/2010	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/28/2010	ND	157	78.7	200	3.95	
DRO >C10-C28	<10.0	10.0	12/28/2010	ND	151	75.4	200	6.64	

Surrogate: 1-Chlorooctane	*125 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*139 %*	*70-130*

Sample ID: SB #1 @ 25' (H021574-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/22/2010	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/28/2010	ND	157	78.7	200	3.95	
DRO >C10-C28	<10.0	10.0	12/28/2010	ND	151	75.4	200	6.64	

Surrogate: 1-Chlorooctane	*117 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*127 %*	*70-130*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	12/21/2010	Sampling Date:	12/20/2010
Reported:	12/31/2010	Sampling Type:	Soil
Project Name:	EME JCT G-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB #2 @ 10' (H021574-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**944**	16.0	12/22/2010	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/28/2010	ND	157	78.7	200	3.95	
DRO >C10-C28	<10.0	10.0	12/28/2010	ND	151	75.4	200	6.64	

Surrogate: 1-Chlorooctane	*119 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*128 %*	*70-130*

Sample ID: SB #2 @ 25' (H021574-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	12/22/2010	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: ab** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/25/2010	ND	182	91.0	200	2.97	
DRO >C10-C28	<10.0	10.0	12/25/2010	ND	245	122	200	3.28	

Surrogate: 1-Chlorooctane	*123 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*136 %*	*70-130*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Rice Operating Company	**BILL TO**
Project Manager: Hack Conder	P.O. #:
Address: 122 West Taylor	Company:
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: 575-393-9174 Fax #: 575-397-1471	Address:
Project #: Project Owner:	City:
Project Name: EME JCT G-1	State: Zip:
Project Location: EME JCT G-1	Phone #:
Sampler Name: Jordan Woodfin	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TPH 8015 M Extended Thru C40
H21574-1	SB # 1 @ 5'		1			✓					✓		12/20/10	09:00	✓	✓				
2	SB # 1 @ 25'		1			✓					✓		12/20/10	09:30	✓	✓				
3	SB # 2 @ 10'		1			✓					✓		12/20/10	09:45	✓	✓				
4	SB # 2 @ 25'		1			✓					✓		12/20/10	10:15	✓	✓				

PLEASE NOTE: *Liability and Damages.* Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Jordan Woodfin	Date: 12/21/10 Time: 2:30	Received By:	
Relinquished By:	Date: 8:10 Time: 8:10	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☑ No Add'l Phone #:
Fax Result: ☐ Yes ☑ No Add'l Fax #:
REMARKS:

email results

Hconder@riceswd.com; jwoodfin@riceswd.com;
Lweinheimer@riceswd.com kjones@riceswd.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

NEED SAMPLES BACK, PLEASE

EME jct. G-1

Soil bore installation

Drilling the soil bores

Plugging the soil bore in total with bentonite

Completed soil bore