

1R - 425-47

# REPORTS

DATE:

8-8-08

2-2  
21

# Vacuum Oxy Phillips 'K' EOL

1R425-68  
47

RECEIVED  
MAR 25 1968  
Environmental Bureau  
Oil Conservation Division

# Disclosure

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

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Vacuum	Oxy Phillips 'K' EOL	H	27	17S	35E	Lea	eliminated		

LAND TYPE: BLM \_\_\_\_\_ STATE X FEE LANDOWNER \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater 75 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 7/26/2005 Date Completed 4/20/2006 OCD Witness no

Soil Excavated 533 cubic yards Excavation Length 30 Width 40 Depth 12 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date 9/20/2005 Sample Depth 12 ft

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

**CHLORIDE FIELD TESTS**

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
4-WALL COMP.	0.0	<10.0	<10.0	851
BOTTOM COMP.	0.0	<10.0	<10.0	1910
BACKFILL	0.0	<10.0	<10.0	1060

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	803
bottom comp.	12'	2078
backfill comp.	n/a	746
vertical delineation trench at former junction (source)	3'	233
	4'	422
	5'	430
	6'	469
	7'	448
	8'	479
	9'	664
	10'	559
	11'	872
	12'	1539

**General Description of Remedial Action:** This junction box was eliminated during the pipeline/upgrade program. After the box was removed, an investigation was conducted using a backhoe to collect samples at regular intervals producing a 10x10x12-ft-deep hole. Chloride field tests were performed on each sample, which yielded elevated levels that did not relent with depth. Organic vapors were measured using a PID, which yielded low concentrations. Representative composite samples were sent to a commercial laboratory for analysis of chloride and TPH. The site was then excavated to a 30x40x12-ft-deep hole collecting soil samples at regular intervals. Chloride field tests yielded elevated levels of chloride that did not relent with depth. Organic vapors were measured using a PID, which yielded low concentrations. The excavated soil was blended

on-site and returned to the excavation up to 6 ft below ground surface. At 6-5 ft BGS, a 1-ft-thick clay barrier was installed. The remaining fill was used to backfill the excavation to ground surface. An identification plate was placed on the surface at the former junction site to mark the presence of the clay below. Imported, clean top soil was used as a top cap and to contour to the surrounding area. On 4/24/2006, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. NMOCD was notified of potential groundwater impact on 8/7/2008.

**ADDITIONAL EVALUATION IS MEDIUM PRIORITY**

enclosures: photos, cross-section, lab results, PID screening, clay test, chloride curve

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

SITE SUPERVISOR Roy Rascon SIGNATURE not available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 8-8-08

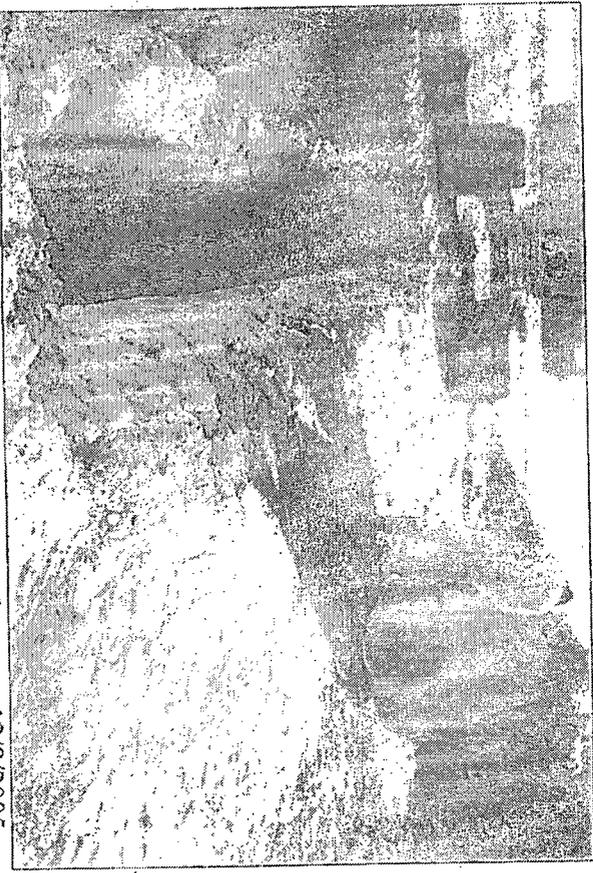
\*This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.

# Vacuum Oxy 'K' EOL

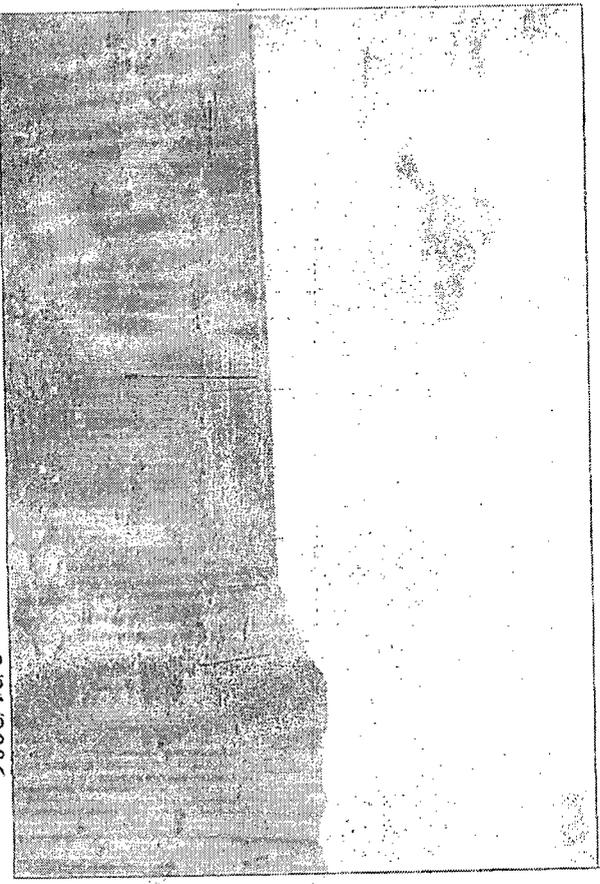
Unit H, Section 27, T17S, R35E



former junction box site in foreground 7/12/2005



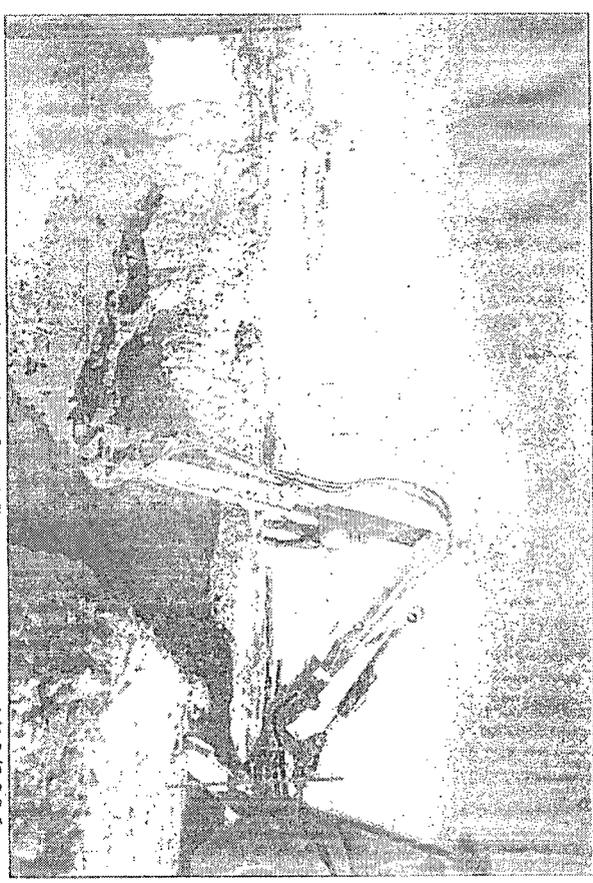
collecting soil samples from delineation trench 12/8/2005



final 40 x 30 x 12-ft excavation 3/31/2006



40 x 30 x 12-ft excavation



compacting clay barrier at 6-5 ft BGS

4/13/2006



close-up of surface marker at former junction site

4/20/2006



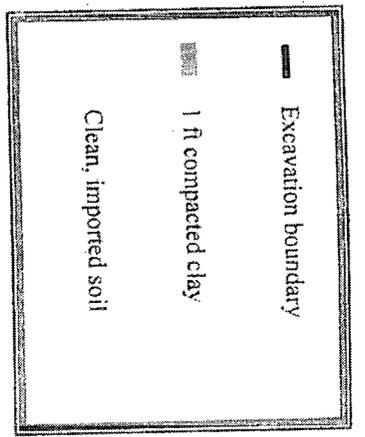
seeding backfilled area

4/24/2006

# Vacuum Oxy 'K' EOL

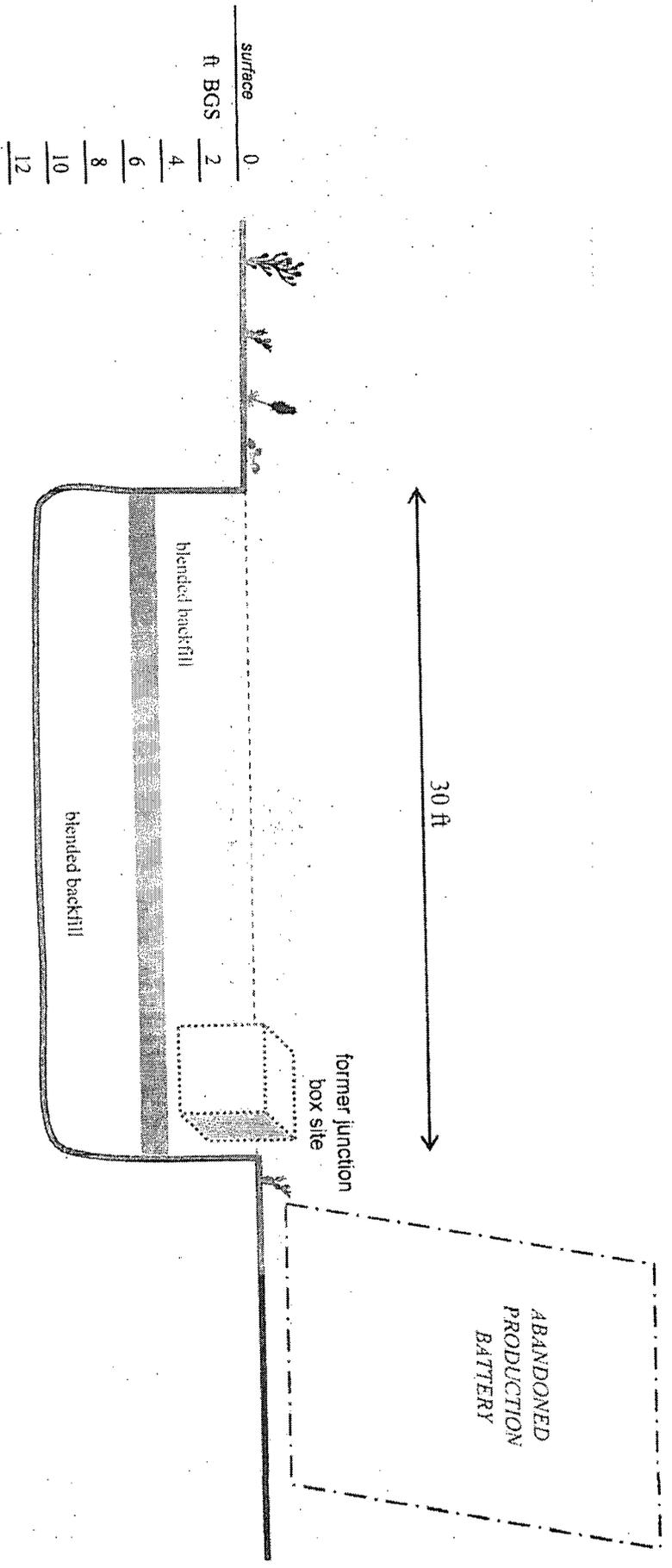
40 x 30 x 12-ft-deep

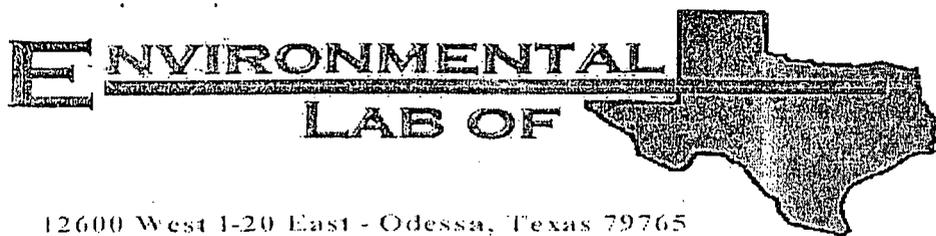
Excavation Cross-Section



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12600 West 1-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

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

COPY

Project: Vacuum Oxy Phillips K-EOL

Project Number: None Given

Location: None Given

Lab Order Number: 5122002

Report Date: 09/26/05

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

Project: Vacuum Oxy Phillips K-EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
09/26/05 16:58

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Blended Backfill	5122002-01	Soil	09/20/05 12:15	09/22/05 08:00
5 PT Bottom@ 12'	5122002-02	Soil	09/20/05 11:33	09/22/05 08:00
10'X10' 4 Wall Comp.	5122002-03	Soil	09/20/05 12:00	09/22/05 08:00

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

Project: Vacuum Oxy Phillips K-EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
09/26/05 16:58

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Blended Backfill (5122002-01) Soil</b>									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E152304	09/23/05	09/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		73.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		92.6 %	70-130		"	"	"	"	
<b>5 PT Bottom@ 12' (5122002-02) Soil</b>									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E152304	09/23/05	09/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		88.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		94.4 %	70-130		"	"	"	"	
<b>10'X10' 4 Wall Comp. (5122002-03) Soil</b>									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E152304	09/23/05	09/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		90.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		94.0 %	70-130		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Blended Backfill (5122002-01) Soil</b>									
Chloride	1060	20.0	mg/kg	40	E152305	09/22/05	09/23/05	EPA 300.0	
% Moisture	7.7	0.1	%	1	E152301	09/22/05	09/23/05	% calculation	
<b>5 P'T Bottom@ 12' (5122002-02) Soil</b>									
Chloride	1910	25.0	mg/kg	50	E152305	09/22/05	09/23/05	EPA 300.0	
% Moisture	7.8	0.1	%	1	E152301	09/22/05	09/23/05	% calculation	
<b>10'X10' 4 Wall Comp. (5122002-03) Soil</b>									
Chloride	851	10.0	mg/kg	20	E152305	09/22/05	09/23/05	EPA 300.0	
% Moisture	5.7	0.1	%	1	E152301	09/22/05	09/23/05	% calculation	

COPY

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

Project: Vacuum Oxy Phillips K-EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
09/26/05 16:58

**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
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**Batch E152304 - Solvent Extraction (GC)**

**Blank (E152304-BLK1)**

Prepared & Analyzed: 09/23/05

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	44.0		mg/kg	50.0		88.0	70-130			
Surrogate: 1-Chlorooctadecane	37.7		"	50.0		75.4	70-130			

**LCS (E152304-BS1)**

Prepared & Analyzed: 09/23/05

Gasoline Range Organics C6-C12	404	10.0	mg/kg wet	500		80.8	75-125			
Diesel Range Organics >C12-C35	489	10.0	"	500		97.8	75-125			
Total Hydrocarbon C6-C35	893	10.0	"	1000		89.3	75-125			
Surrogate: 1-Chlorooctane	44.8		mg/kg	50.0		89.6	70-130			
Surrogate: 1-Chlorooctadecane	48.3		"	50.0		96.6	70-130			

**Calibration Check (E152304-CCV1)**

Prepared: 09/23/05 Analyzed: 09/24/05

Gasoline Range Organics C6-C12	413		mg/kg	500		82.6	80-120			
Diesel Range Organics >C12-C35	443		"	500		88.6	80-120			
Total Hydrocarbon C6-C35	856		"	1000		85.6	80-120			
Surrogate: 1-Chlorooctane	45.3		"	50.0		90.6	0-200			
Surrogate: 1-Chlorooctadecane	44.1		"	50.0		88.2	0-200			

**Matrix Spike (E152304-MS1)**

Source: 5122001-01

Prepared: 09/23/05 Analyzed: 09/24/05

Gasoline Range Organics C6-C12	457	10.0	mg/kg dry	522	ND	87.5	75-125			
Diesel Range Organics >C12-C35	494	10.0	"	522	ND	94.6	75-125			
Total Hydrocarbon C6-C35	951	10.0	"	1040	ND	91.4	75-125			
Surrogate: 1-Chlorooctane	55.3		mg/kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	51.8		"	50.0		104	70-130			

**Matrix Spike Dup (E152304-MSD1)**

Source: 5122001-01

Prepared: 09/23/05 Analyzed: 09/24/05

Gasoline Range Organics C6-C12	463	10.0	mg/kg dry	522	ND	88.7	75-125	1.30	20	
Diesel Range Organics >C12-C35	500	10.0	"	522	ND	95.8	75-125	1.21	20	
Total Hydrocarbon C6-C35	963	10.0	"	1040	ND	92.6	75-125	1.25	20	
Surrogate: 1-Chlorooctane	54.9		mg/kg	50.0		110	70-130			
Surrogate: 1-Chlorooctadecane	50.3		"	50.0		101	70-130			

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**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
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**Batch EI52301 - General Preparation (Prep)**

<b>Blank (EI52301-BLK1)</b>				Prepared: 09/22/05 Analyzed: 09/23/05						
% Solids	100		%							
<b>Duplicate (EI52301-DUP1)</b>				Source: 5121013-01 Prepared: 09/22/05 Analyzed: 09/23/05						
% Solids	86.5		%		86.1			0.464	20	
<b>Duplicate (EI52301-DUP2)</b>				Source: 5122008-07 Prepared: 09/22/05 Analyzed: 09/23/05						
% Solids	99.4		%		98.9			0.504	20	
<b>Duplicate (EI52301-DUP3)</b>				Source: 5122019-03 Prepared: 09/22/05 Analyzed: 09/23/05						
% Solids	97.6		%		97.8			0.205	20	
<b>Duplicate (EI52301-DUP4)</b>				Source: 5122021-18 Prepared: 09/22/05 Analyzed: 09/23/05						
% Solids	90.8		%		90.6			0.221	20	

**Batch EI52305 - Water Extraction**

<b>Blank (EI52305-BLK1)</b>				Prepared: 09/22/05 Analyzed: 09/23/05						
Chloride	ND	0.500	mg/kg							
<b>LCS (EI52305-BS1)</b>				Prepared: 09/22/05 Analyzed: 09/23/05						
Chloride	9.07		mg/L	10.0		90.7	80-120			
<b>Calibration Check (EI52305-CCV1)</b>				Prepared: 09/22/05 Analyzed: 09/23/05						
Chloride	9.29		mg/L	10.0		92.9	80-120			
<b>Duplicate (EI52305-DUP1)</b>				Source: 5121013-01 Prepared: 09/22/05 Analyzed: 09/23/05						
Chloride	90.7	0.500	mg/kg		91.3			0.659	20	

COPY

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

Project: Vacuum Oxy Phillips K-EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
09/26/05 16:58

### 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

COPY

Report Approved By: Raland K Tuttle Date: 9-26-05

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.



Environmental Lab of Texas  
Variance / Corrective Action Report – Sample Log-In

Client: Rice Op.

Date/Time: 9/22/05 8:00

Order #: 5E22002

Initials: CR

COT

Sample Receipt Checklist

	Yes	No	
Temperature of container/cooler?			-1.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

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Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

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Corrective Action Taken:

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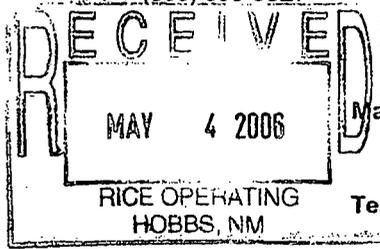




LABORATORY TEST REPORT  
**PETTIGREW & ASSOCIATES, P.A.**  
 1110 N. GRIMES  
 HOBBS, NM 88240  
 (505) 393-9827



DEBRA P. HICKS, P.E./L.S.I.  
 WILLIAM M. HICKS, III, P.E./P.S.



To: Rice Operating  
 Attn: Carolyn Haynes  
 122 W. Taylor  
 Hobbs, NM 88240

Material: Red Clay

Project: Oxy Phillips KEOL  
 Project No. 2006.1005

Test Method: ASTM: D 2922

Date of Test: April 13, 2006

Depth: 5' Below Finished Subgrade

Depth of Probe: 10"

Test No.	Location	Dry Density % Maximum	% Moisture	Depth
SG-1	Pit - 40 x 35 15' N. & 10' W. of the SE Corner	97.1	23.8	

**COPY**

Control Density: 98.7  
 ASTM: D 698

Optimum Moisture: 23.0

Required Compaction: 95%

Lab No.: 06 2580

PETTIGREW & ASSOCIATES

Copies To: Rice

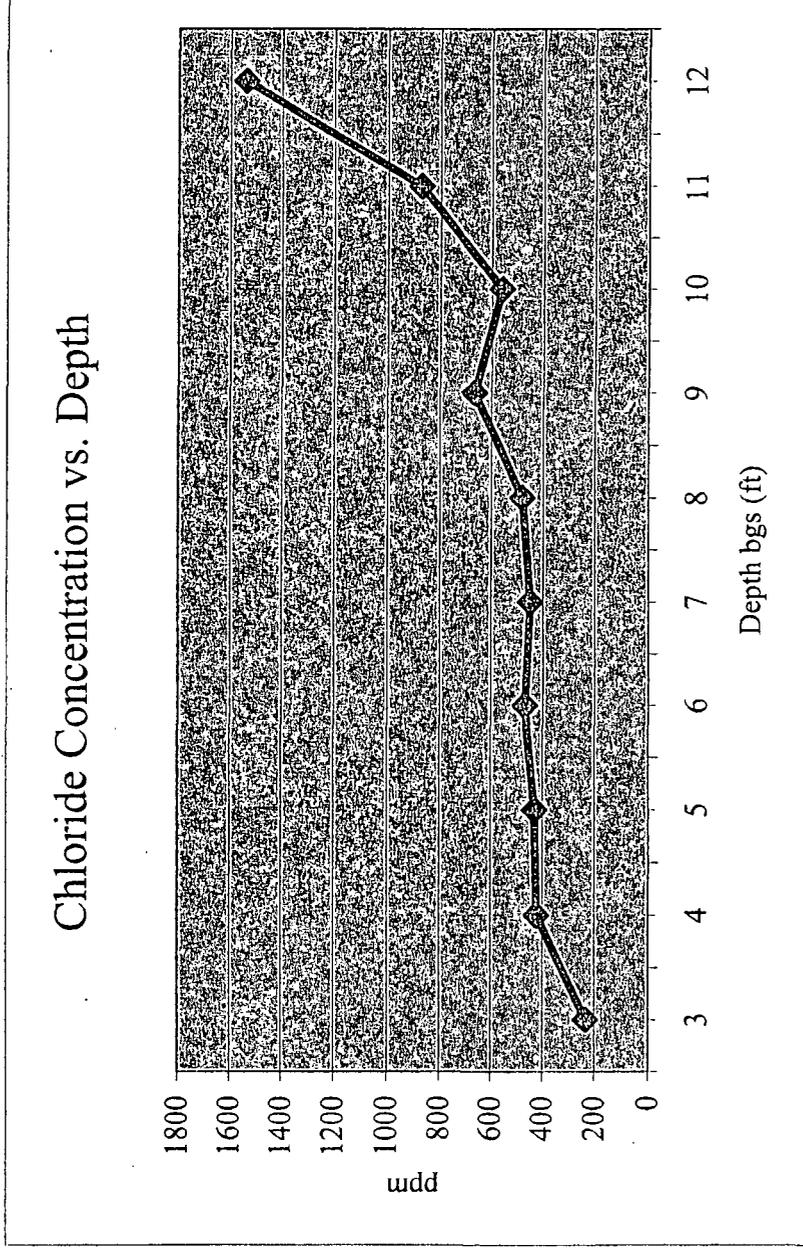
BY: \_\_\_\_\_ P.E.

# Vacuum Oxy Phillips 'K' EOL

unit 'H', Sec. 27, T17S, R35E

*Backhoe samples at former junction*

Depth bgs (ft)	Cl (ppm)
3	233
4	422
5	430
6	469
7	448
8	479
9	664
10	559
11	872
12	1539



Groundwater = 75 ft