1R - 425-1

REPORTS

DATE:

SEPT 6, 2006

RICE *Operating Company*

2006 SEP 11 PM 12 07

122 West Taylor • Hobbs, New Mexico 88240
Phone: (505)393-9174 • Fax: (505) 397-1471

CERTIFIED MAIL
RETURN RECEIPT NO. 7005 1820 0001 6802 2460

September 6, 2006

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

RE: NOTIFICATION OF GROUNDWATER IMPACT
VACUUM SWD SYSTEM, E-2 junction box
UNIT 'E', SEC. 2, T18S, R35E
OCD CASE #1R425-01

(No AP)

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to notify the New Mexico Oil Conservation Division (OCD) Environmental Bureau Chief of groundwater impact in accordance with NM Rule 116. The remediation of this site may fall under NM Rule 19 procedures. Survey delays and laboratory concerns have resulted in the delay of this submission.

The following work was performed in accordance with the OCD-approved Investigation and Characterization Plan (ICP) submitted by the consultant, L. Peter Galusky, Jr., P.E., to investigate potential groundwater impact at this junction box site in the abandoned Vacuum SWD System. Four delineation soil bores and three 2-inch monitoring well installations were conducted June 20-21, 2006 under the supervision of Galusky. Groundwater was encountered at approximately 60 feet. These wells were developed and sampled pursuant to OCD guidelines by Arc Environmental (Arc) of Lovington. Laboratory analysis of the groundwater samples confirmed the Water Quality Control Commission (WQCC) standards for chloride and Total Dissolved Solids are exceeded at MW-1. Arc will continue to sample the wells on a quarterly basis. Following evaluation of this data, OCD may expect a Corrective Action Plan submitted by Galusky by September 30, 2006.

Please accept this notification for the referenced site. Should you have any questions or concerns regarding this site or submission, please do not hesitate to contact me at the number listed above or Galusky at 877-534-9001.

ROC is the service provider (agent) for the Vacuum Salt Water Disposal System and has no ownership of any portion of pipeline, well, or facility. The Vacuum SWD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. In 2004, the Vacuum System Partners approved the discontinuance of the SWD System. Efforts are moving toward abandonment.

RICE OPERATING COMPANY

Kristin Farris Pope

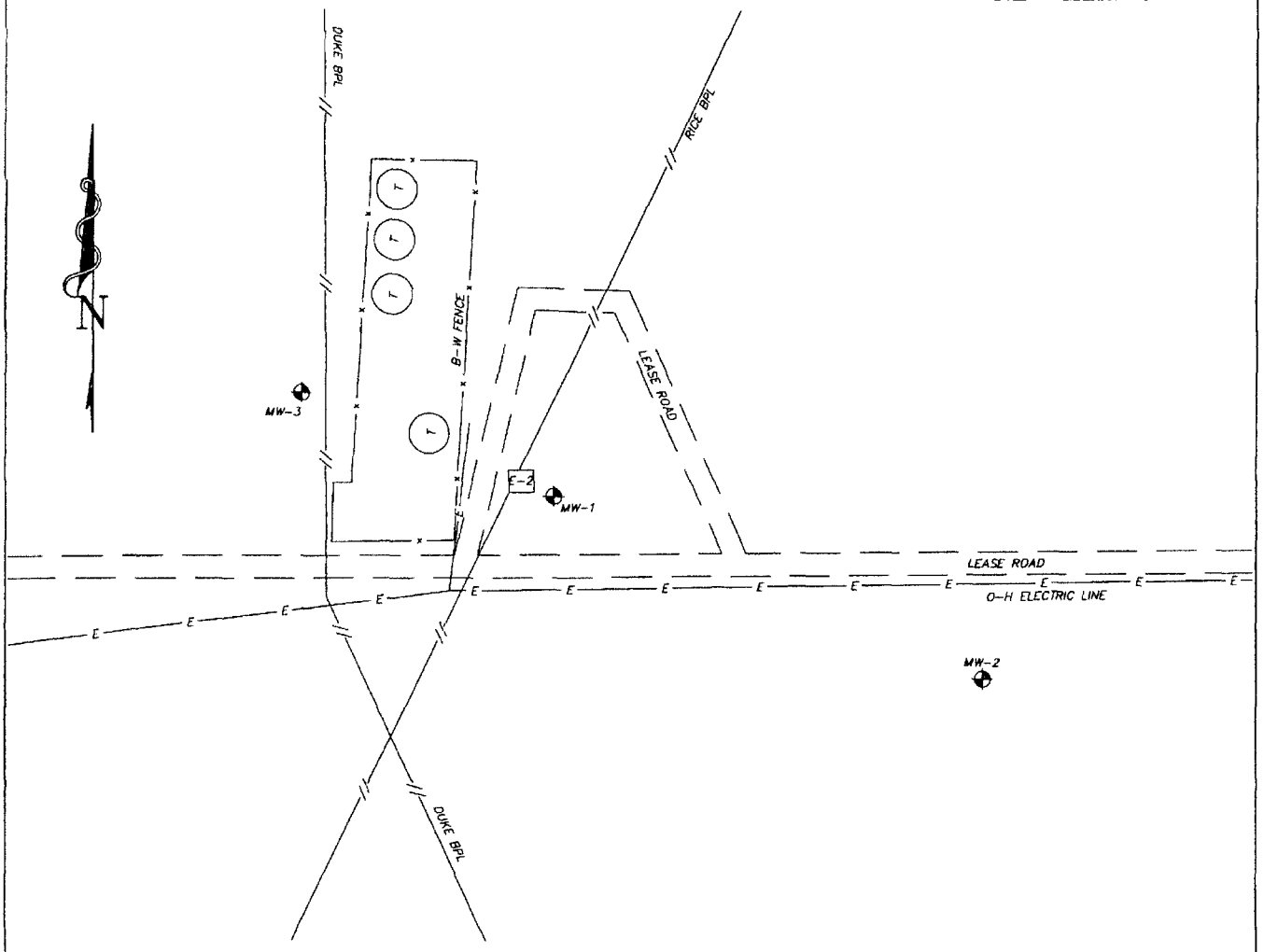
Kristin Farris Pope
Project Scientist

cc: LBG, CDH, Galusky, Marathon Oil, file,

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

enclosures: water analyses, well logs, survey maps

SECTION 2, TOWNSHIP 18 SOUTH, RANGE 35 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



NOTE:
ELEVATIONS ARE ON BLACK MARK
ON NORTH SIDE OF PVC CASING.

NEW MEXICO STATE PLANE COORDINATES (NAD83)

WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV. PVC	ELEV. GRND
MW-1	648062.589	816986.248	N 32°46'42.0"	W 103°26'11.3"	3908.98'	3906.14'
MW-2	647947.949	817257.747	N 32°46'40.9"	W 103°26'08.1"	3907.40'	3904.95'
MW-3	648127.645	816827.611	N 32°46'42.7"	W 103°26'13.1"	3909.68'	3907.04'

100 0 100 200 FEET

SCALE: 1" = 100'

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY, AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES N.M. P.S. No. 7977
TEXAS P.L.S. No. 5074

GARY L. JONES 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

BASIN SURVEYS P.O. BOX 1786 HOBBS, NEW MEXICO

RICE OPERATING COMPANY

REF: VAC. JCT E-2

MONITOR WELLS LOCATED IN
SECTION 2, TOWNSHIP 18 SOUTH, RANGE 35 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

W.O. Number: 6904	Drawn By: J. M. SMALL		
Date: 08-05-2006	Disk: JMS 6904MW	Survey Date: 08-01-2006	Sheet 1 of 1 Sheets

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: KRISTIN FARRIS POPE
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 06/29/06
Reporting Date: 06/30/06
Project Number: NOT GIVEN
Project Name: VACUUM JUNCTION E-2
Project Location: LEA COUNTY, NM

Sampling Date: 06/27/06
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC

LAB NUMBE	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		06/29/09	06/29/06	06/29/06	06/29/06
H11297-1	MONITOR WELL #1	<0.002	<0.002	<0.002	<0.006
H11297-2	MONITOR WELL #2	<0.002	<0.002	<0.002	<0.006
H11297-3	MONITOR WELL #3	<0.002	<0.002	<0.002	<0.006
Quality Control		0.091	0.098	0.092	0.300
True Value QC		0.100	0.100	0.100	0.300
% Recovery		90.7	98.1	92	100
Relative Percent Difference		9.8	1.7	5.9	1.9

METHOD: EPA SW-846 8260

Chemist

6-30-06
Date

H11297B

CARDINAL LABORATORIES

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

Receiving Date: 06/29/06
Reporting Date: 07/05/06
Project Number: NOT GIVEN
Project Name: VACUUM JUNCTION E-2
Project Location: LEA COUNTY, NM

Sampling Date: 06/27/06
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: HM/AB

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (μS/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		07/03/06	07/03/06	07/03/06	07/05/06	07/03/06	07/03/06
H11297-1	MONITOR WELL #1	542	257	19	6.27	4020	200
H11297-2	MONITOR WELL #2	48	64	19	2.44	631	240
H11297-3	MONITOR WELL #3	45	80	10	2.08	538	200
Quality Control		NR	48.0	48.6	1.75	1414	NR
True Value QC		NR	50.0	50.0	2.00	1413	NR
% Recovery		NR	96	97	87	100	NR
Relative Percent Difference		NR	0.0	0.0	2.0	1.0	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:		07/03/06	07/05/06	07/03/06	07/03/06	07/03/06	07/03/06
H11297-1	MONITOR WELL #1	1164	64.1	0	244	7.36	2829
H11297-2	MONITOR WELL #2	28	63.8	0	293	7.68	367
H11297-3	MONITOR WELL #3	28	98.4	0	244	7.72	326
Quality Control		990	24.4	NR	976	7.01	NR
True Value QC		1000	25.0	NR	1000	7.00	NR
% Recovery		99	97.5	NR	98	100	NR
Relative Percent Difference		1.0	8.4	NR	0.0	0.01	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

07-05-06
Date

H11297

Cardinal Laboratories, Inc.

101 East Marland, Hobbs, NM 88240 ~ (505)393-2326 FAX (505)393-2476

CHAIN OF CUSTODY AND ANALYSIS REQUEST

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

Email: rozanne@valornet.com

Project Name: Vacuum Junction E-2

Project Location: Lea County

Bill To: RICE Operating Company

PO Number

FOR LAB USE ONLY		Sampling				Preservative							Matrix				Analysis Request														
																	TCLP:															
																	TOTAL:														X
LAB ID	Sampe ID	Date Sampled	Time Sampled	(G)rab or (C)omposite	No. of Containers	Ice	HNO_3	HCl (2) 40 ml glass vials	NaOH	H_2SO_4	None (1) 1 Liter HDPE	Other (Specify)	Water	Sludge	Soil	Other (specify):	TPH: 418.1 8015M 1005 1008	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	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					
H11297 - 1	Monitor Well #1	6/27/2006	11:00	G	3	X		2			1		X					X	X					X			X				
- 2	Monitor Well #2	6/27/2006	9:30	G	3	X		2			1		X					X	X					X			X				
-3	Monitor Well #3	6/27/2006	8:00	G	3	X		2			1		X					X	X					X			X				

Special Instructions:

PLEASE Email RESULTS TO: kpope@riceswd.com ~ mfranks@riceswd.com

~ rozanne@valornet.com

Delivered By: Sampler - UPS - Bus - Other:

Custody Seals: Containers / Cooler (Y) N (Y) N

Labels on container? (Y) N

Temperature Upon Receipt:

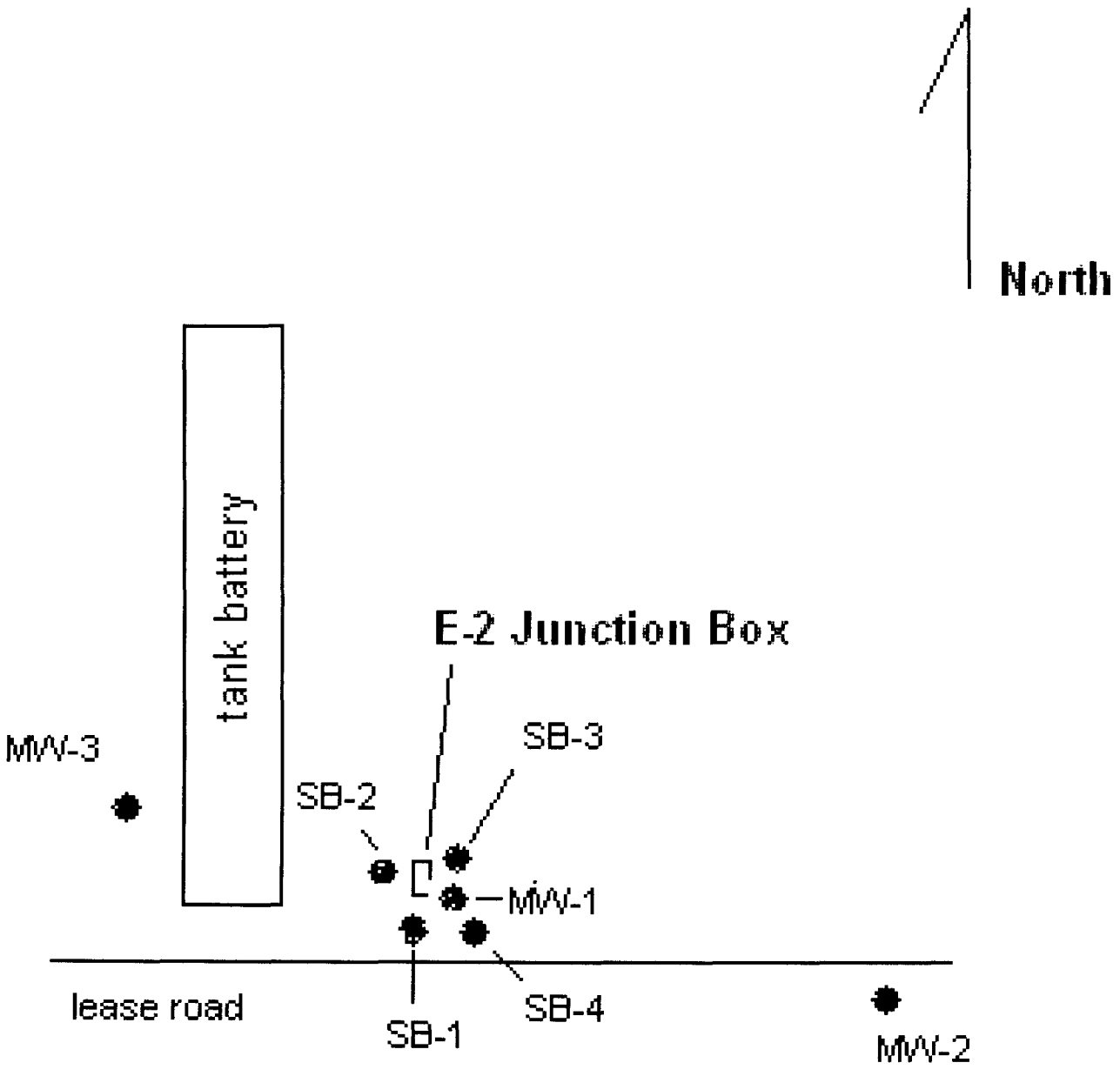
Phone Results: Y (N)

Fax Results: Y (N)

Laboratory Comments:

Relinquished By: Rozanne Johnson	Date 6/29/06	Time 2:25	Received by:	Date	Time
Relinquished by:	Date 06/29/06	Time 8:25	Received by Lab Staff:	Date 06/28/06	Time 8:25

E-2 Approximate Monitor Well and Soil Boring Locations



Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **MW-1**
Date: 6/20/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.
Monitor well screened interval : top 50 ft below ground surface
bottom 70 "

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description	Well Schematic
0					tan caliche	solid pipe
5	499		0.0		"	"
10	1763		0.0		"	"
15	2099	2335	0.0		"	"
20	744		0.0		"	"
25	1054		0.0		light brown sand	"
30	419		0.0		"	"
35	452		0.0		" (thin sandstone layer at 36 ft)	"
40	364		0.0		" (with many fine gravels)	"
45	487		0.0		" "	"
50	281		0.0		" "	screen
55	184		0.0		" "	"
60	87		0.0		brown sand	"
65	113		0.0			"
70	146	112	0.0			

Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **MW-2**
Date: 6/21/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.
Monitor well screened interval : top 50 ft below ground surface
bottom 70 "

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description	Well Schematic
0					brown fine gravelly loam	solid pipe
5					light gray caliche	"
10	118		0.0		"	"
15					"	"
20	110		0.0		"	"
25					"	"
30	121		0.0		brown sand	"
35					"	"
40	56		0.0		" (thin sandstone layer at 45 ft)	"
45					"	"
50	60		0.0		fine tan sand	screen
55					"	"
60	57		0.0		brown sand	"
65					"	"
70	58	<16	0.0			

Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **MW-3**
Date: 6/21/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.
Monitor well screened interval : top 50 ft below ground surface
bottom 70 "

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description	Well Schematic
0					brown fine gravelly loam	solid pipe
5					light gray caliche	"
10	88		0.0		"	"
15					"	"
20	57		0.0		"	"
25					"	"
30	29		0.0		brown sand	"
35					" (thin sandstone layer at 40 ft)	"
40	28		0.0		"	"
45					"	"
50	57	32	0.0		fine tan sand	screen
55					" "	"
60	29		0.0		brown sand	"
65					"	"
70	29		0.0			

Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **SB-1**
Location: approx. 10 ft southwest of jct box
Date: 6/20/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description
0					light tan caliche
5	207		0.0		
10	113		0.0		
15	185		0.0		light brown sand
20	143		0.0		"
25	2645		0.0		"
30	3682		0.0		"
35	3729		0.0		"
40	2674		0.0		hard tan sandstone
45	2196		0.0		brown sand
50	1111	1344	0.0		"

Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **SB-2**
Location: approx. 10 ft northwest of junction box
Date: 6/21/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description
0					light tan caliche
5	714		0.0		"
10	501		0.0		"
15	601		0.0		light brown sand
20	479		0.0		"
25	571		0.0		"
30	356		0.0		"
35	520		0.0		"
40	442		0.0		"
45	442		0.0		
50	474	560	0.0		

Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **SB-3**
Location: approx. 30 ft northeast of former junction box
Date: 6/21/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description
0					light tan caliche
5	209		0.0		"
10	174		0.0		"
15	121		0.0		"
20	90		0.0		light tan sand
25	117		0.0		"
30	90		0.0		"
35	86		0.0		hard tan sandstone
40	122	64	0.0		"

Soil Boring Log
RICE Operating Company
Vacuum SWD System
E-2 junction box

Identification: **SB-4**
Location: approx. 30 ft southeast of former junction box
Date: 6/21/2006
Driller: Ken Cooper (Harrison and Cooper, Inc.)
Drill method: Air Rotary
Logged by: L. Peter Galusky, Jr.

Depth (ft)	Field Chloride Test (ppm)	Lab Chloride Test (ppm)	Field OVM test (ppm)	Lab BTEX test (ppm)	Cutting Description
0					light tan caliche
5	239		0.0		"
10	828		0.0		"
15	899		0.0		"
20	169		0.0		"
25	983		0.0		"
30	1338		0.0		hard tan sandstone
35	2435		0.0		"
40	1061		0.0		"
45	1083		0.0		light brown sand
50	589		0.0		
55	389		0.0		
60	140	224	0.0		

Rice Operating Company
Vacuum SWD System
E-2 junction box