

1R - 426-107

**GENERAL
CORRESPONDENCE**

YEAR(S):
2007

RICE *Operating Company*

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

CERTIFIED MAIL

RETURN RECEIPT NO. 7005 1820 0001 6804 4936

February 25, 2008

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
BD jct. P-26-2, #1R0426-107
Unit P, Sec. 26, T21S, R37E

Mr. Price:

Rice Operating Company (ROC) notifies the Director of the New Mexico Oil Conservation Division (OCD), Environmental Bureau of groundwater impact at the above-referenced site in accordance with NM Rule 116. The remediation of this site may be subject to NM Rule 19 procedures.

The following work was performed in accordance with the OCD-approved (verbal 7/18/2007) Investigation and Characterization Plan (ICP) submitted by the consulting company, Trident Environmental (Trident), to investigate potential groundwater concerns at this junction box site near Eunice. A soil boring for vertical delineation of chloride and a 2-inch monitoring well were installed on October 30, 2007 under the supervision of Gilbert Van Deventer of Trident. Groundwater was encountered at approximately 47 feet. The well was developed and sampled pursuant to OCD guidelines by Arc Environmental (Arc) of Lovington. Laboratory analyses of two sampling events confirm the Water Quality Control Commission standards for chloride and Total Dissolved Solids are exceeded at the monitoring well. Arc will continue to sample the well on a quarterly basis. Trident will be evaluating this groundwater data for the submission of a Corrective Action Plan.

ROC is the service provider (agent) for the BD Salt Water Disposal System and has no ownership of any portion of the pipelines, wells, or facilities. The BD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. Environmental remediation projects of this magnitude require System Partner AFE approval and work begins as funds are received.

Please accept this notification for the above-referenced site. Should you have any questions or concerns regarding this site, please do not hesitate to contact me.

RICE OPERATING COMPANY

A handwritten signature in black ink that reads "Kristin Farris Pope". The signature is written in a cursive, flowing style.

Kristin Farris Pope
Project Scientist

enclosures: 2 water analyses, soil boring log, well log, 2 maps

cc: SC, Trident, file, Mr. Chris Williams
NMOCD, District 1 Office
1625 N. French Drive
Hobbs, NM 88240

SOIL BORING LITHOLOGIC LOG



BOREHOLE NO.: B-1

TOTAL DEPTH: 40 Feet

SITE ID: BD Jct. P-26-2

CLIENT: RICE Operating Company

CONTRACTOR: Harrison & Cooper, Inc.

COUNTY: Lea

DRILLING METHOD: Air Rotary

STATE: New Mexico

START DATE: 10/30/07

LOCATION: T21S-R37E-Sec 26-Unit P

COMPLETION DATE: 10/30/07

FIELD REP.: G. Van Deventer

COMMENTS: Boring located 8 feet west of former junction box (plate marker).

Photo at left shows drilling of B-1 (facing west) with marker plate in foreground.

	Sample			Chloride (ppm)	PID (ppm)	USCS	LITHOLOGIC DESCRIPTION: LITHOLOGY, COLOR, GRAIN SIZE, SORTING, ROUNDING, CONSOLIDATION, DISTINGUISHING FEATURES
	Depth	Time	Type				
3/8 Bentonite Hole Plug			Surface			BF	Compacted backfill material consisting of fine-grained silty sand with calcium carbonate in matrix, pale yellowish brown (10YR 6/2), loose, unconsolidated, dry.
	5					CL	Compacted clay layer, dusky red (5R 3/4).
	10					BF	Compacted backfill material consisting of fine-grained silty sand with calcium carbonate in matrix, pale yellowish brown (10YR 6/2), loose, unconsolidated, dry.
		1405	Split Spoon	209	0		
	15					SW/CAL	Fine-grained sand with calcium carbonate in matrix, pale yellowish brown (10YR 6/2), unconsolidated, dry.
		1408	Split Spoon	294	4		Fine-grained sand with calcium carbonate in matrix, pale yellowish brown (10YR 6/2), unconsolidated, dry.
	20						Fine-grained sand, grayish orange (5YR 7/4) with some very pale orange (10YR 8/2) calcium carbonate in matrix, moderately hard. Sand grains are medium-sorted, subrounded, unconsolidated, dry.
		1422	Split Spoon	2658	0		
	25					SM/CAL	Very fine-grained sand with calcium carbonate in matrix and intermittent hard (indurated) caliche, very pale orange (10YR 8/2). Sand grains are medium-sorted, subrounded, unconsolidated, dry. Sample submitted for laboratory analysis with results as follows: Chloride = 4670 mg/kg.
		1435	Split Spoon	5025	0		
	30						Very fine-grained sand with calcium carbonate in matrix and intermittent hard (indurated) caliche, very pale orange (10YR 8/2). Sand grains are medium-sorted, subrounded, unconsolidated, dry.
		1445	Split Spoon	2555	0		
	35						Very fine-grained sand with calcium carbonate in matrix and intermittent hard (indurated) caliche, very pale orange (10YR 8/2). Sand grains are medium-sorted, subrounded, unconsolidated, dry.
		1449	Split Spoon	2309	0		
	40	1505	Cuttings	2100			Very fine and fine-grained sand with calcium carbonate in matrix and intermittent hard (indurated) caliche, pale yellowish brown (10YR 6/2). Sand grains are medium-sorted, subrounded, unconsolidated, dry.
							Bottom of boring at 40 feet below ground surface.
	45						
	50						

5"

LITHOLOGIC LOG AND MONITORING WELL CONSTRUCTION DIAGRAM



MONITORING WELL NO.: MW-1

TOTAL DEPTH: 56 Feet

SITE NAME: BD Jct. P-26-2

CLIENT: RICE Operating Company

CONTRACTOR: Harrison & Cooper, Inc.

COUNTY: Lea

DRILLING METHOD: Air Rotary

STATE: New Mexico

START DATE: 10/30/07

LOCATION: T21S-R37E-Sec 26 - Unit P

COMPLETION DATE: 10/30/07

FIELD REP.: G. Van Deventer

COMMENTS: Located approximately 15 feet southeast of former junction box (plate marker).

Photo at left shows MW-1 drilling activities (facing southeast). Orange pin flagging identifies active brine water lines and marker plate is shown in foreground.

		Sample		Chloride	PID	USCS	LITHOLOGIC DESCRIPTION:
		Depth	Time	Type	(ppm)	(ppm)	LITHOLOGY, COLOR, GRAIN SIZE, SORTING, ROUNDING, CONSOLIDATION, DISTINGUISHING FEATURES
Cement	3/8" Bentonite Hole Plug			Surface			SW
		5					Fine-grained dune sand, light brown (5YR 6/4), well sorted, well-rounded, unconsolidated, dry.
Cement	3/8" Bentonite Hole Plug		1540	Split Spoon	516	0	SM/CAL
		10	1542	Split Spoon	359	0	Fine-and medium-grained sand, pale yellowish brown (10YR 6/2) and grayish orange (10YR 7/4), moderately well-sorted, subrounded, unconsolidated, dry.
20/40 Brady Silica Sand Pack	2" Sched 40 PVC Blank Casing		1543	Split Spoon	564	0	SW
		15					Fine-and medium-grained sand, pale yellowish brown (10YR 6/2) and grayish orange (10YR 7/4), moderately well-sorted, subrounded, unconsolidated, dry. Sample submitted for laboratory analysis with results as follows: Chloride = 162 mg/kg.
20/40 Brady Silica Sand Pack	2" Diameter Screen with 0.010" Slots		1545	Split Spoon	457	0	SW
		20					Fine-and medium-grained sand, pale yellowish brown (10YR 6/2) and grayish orange (10YR 7/4), moderately well-sorted, subrounded, unconsolidated, dry.
		25	1602	Cuttings	344		Fine and medium-grained sand with slight calcium carbonate in matrix, light brown (5YR 6/4), moderately well-sorted, subrounded, dry.
		30	1604	Cuttings	285		SW/CAL
		35	1606	Cuttings	285		SM/CAL
		40	1608	Cuttings	353		Fine-grained sand with calcium carbonate in matrix and intermittent hard (indurated) caliche, very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately well-sorted, subrounded, dry.
		45	1610	Cuttings	979		SW
		50	1615	Cuttings	470		Fine-and medium-grained sand, light brown (5YR 6/4), moderately well-sorted, subrounded, slightly moist.
		55	1620	Cuttings	605		Fine-and medium-grained sand, light brown (5YR 6/4), moderately well-sorted, subrounded, slightly moist.
		60	1625	Cuttings	41		Fine-and medium-grained sand, pale yellowish brown (10YR 6/2), well-sorted, sub to well-rounded, moist.
		65					Fine-and med-grained sand, pale yellowish brown (10YR 6/2), well-sorted, sub to well-rounded, moist. Bottom of boring at 60 ft below ground surface.



Pointler 32°26'30.23" N 103°08'11.10" W elev 3379 ft Streaming 100%

18

176

209

Hwy 18

Google



Point P-20-1 Vent
B-1
MX-1

Point P-20-1
B-1
MX-1

Google

Copyright 2007 TeleAtlas
Image © 2007 DigitalGlobe
Altitude 11111 feet

200 ft

Point P-20-1 Vent
B-1
MX-1

Eye Alt 690 ft



PHONE (575) 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: (575) 397-1471

Receiving Date: 01/15/08
Reporting Date: 01/22/08
Project Number: NOT GIVEN
Project Name: BD P-26-2
Project Location: T21S R37E SEC26 P~LEA COUNTY, NM

Sampling Date: 01/14/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: HM/KS

LAB NUMBER SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity (mgCaCO ₃ /L)
ANALYSIS DATE:	01/21/08	01/21/08	01/21/08	01/21/08	01/16/08	01/16/08
H14087-1 MONITOR WELL #1	3,245	163	113	69.5	16,110	344
Quality Control	NR	49.2	52.4	2.93	1,433	NR
True Value QC	NR	50.0	50.0	3.00	1,413	NR
% Recovery	NR	98.5	105	97.8	101	NR
Relative Percent Difference	NR	< 0.1	3.0	8.5	1.4	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	01/16/08	01/17/08	01/16/08	01/16/08	01/16/08	01/18/08
H14087-1 MONITOR WELL #1	5,100	469	0	420	7.33	9,453
Quality Control	500	26.8	NR	1000	7.04	NR
True Value QC	500	25.0	NR	1000	7.00	NR
% Recovery	100	107	NR	100	100	NR
Relative Percent Difference	2.0	2.0	NR	< 0.1	0.3	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Kristin Farris-Pope
Chemist

01/22/08
Date

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ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR ST.
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 01/15/08
Reporting Date: 01/16/08
Project Number: NOT GIVEN
Project Name: BD P-26-2
Project Location: T21S-R37E-SEC26 P ~ LEA CO., NM

Sampling Date: 01/14/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		01/15/08	01/15/08	01/15/08	01/15/08
H14087-1	MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
Quality Control		0.097	0.087	0.093	0.270
True Value QC		0.100	0.100	0.100	0.300
% Recovery		96.5	87.4	92.9	89.9
Relative Percent Difference		6.2	5.8	5.2	5.0

METHOD: EPA SW-846 8021B

Chemist

Date

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:

RICE Operating Company

BILL TO Company:

RICE Operating Company

PO#

Project Manager:

Kristin Farris-Pope, Project Scientist

Address:

122 W Taylor Street ~ Hobbs, New Mexico 88240

(Street, City, Zip)

Address: (Street, City, Zip)

122 W Taylor Street ~ Hobbs, New Mexico 88240

Phone#:

(575) 393-9174

Fax#:

(575) 397-1471

Phone #:

(575) 393-9174

Fax #:

(575) 397-1471

Project #:

Project Name:
BD P-26-2

Project Location:

T21S R37E Sec26 P ~ Lea County New Mexico

Sampler Signature:

Rozanne Johnson (505) 631-9310
rozanne@valornet.com

LAB #
(LAB USE ONLY)

FIELD CODE

114087-1 Monitor Well #1

G

3

X

WATER

SOIL

AIR

SLUDGE

2

HCL (2 40ml VOA)

HNO₃

NaHSO₄

H₂SO₄

1

ICE (1-1Liter HDPE)

NONE

1-14

13:50

DATE (2008)

TIME

MTBE 8021B/602

X

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)

X

Anions (Cl, SO₄, CO₃, HCO₃)

X

Total Dissolved Solids

X

Chlorides

Relinquished by:

Date: Time:

Received by:

Date: Time:

Received By: (Laboratory Staff)

Date: Time:

REMARKS:

Phone Results

Yes

No

Fax Results

Yes

No

Additional Fax Number:

Delivered By: (Circle One)

Sample Condition

Cool

Intact

CHECKED BY:

(Initials)

UPS - Bus - Other:

Yes

No

Yes

No

Yes

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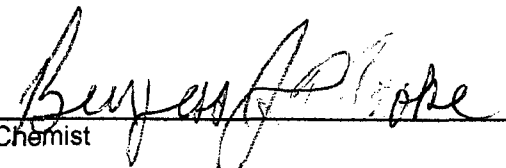
ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR DTREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 11/15/07
Reporting Date: 11/16/07
Project Number: NOT GIVEN
Project Name: BD P-26-2
Project Location: T22S R37E SEC26 P ~ LEA COUNTY, NM

Sampling Date: 11/12/07
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		11/15/07	11/15/07	11/15/07	11/15/07
H13716-1	MONITOR WELL #1	<0.002	<0.002	<0.002	<0.006
Quality Control		0.101	0.096	0.099	0.298
True Value QC		0.100	0.100	0.100	0.300
% Recovery		101	95.9	98.6	99.2
Relative Percent Difference		8.6	2.9	2.3	2.4

METHOD: EPA SW-846 8260


Chemist

11/16/07
Date

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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 11/15/07
Reporting Date: 11/26/07
Project Number: NOT GIVEN
Project Name: BD P-26-2
Project Location: T22S R37E SEC26 P~LEA COUNTY, NM

Sampling Date: 11/12/07
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 (uS/cm)	T-Alkalinity (mgCaCO ₃ /L)
ANALYSIS DATE:		11/21/07	11/21/07	11/21/07	11/21/07	11/20/07	11/20/07
H13716-1	MONITOR WELL #1	2,481	459	266	64.9	15,150	228
Quality Control		NR	49.2	51.6	2.95	1,409	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	98.5	103	98.3	99.7	NR
Relative Percent Difference		NR	< 0.1	1.5	5.0	0.4	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	11/20/07	11/21/07	11/20/07	11/20/07	11/20/07	11/19/07
H13716-1	5,000	430	0	278	7.34	9,415
Quality Control	500	22.8	NR	988	7.06	NR
True Value QC	500	25.0	NR	1000	7.00	NR
% Recovery	100	91.1	NR	98.8	101	NR
Relative Percent Difference	< 0.1	6.3	NR	1.2	0.1	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Kristin Pope
Chemist

11/26/07
Date

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