1R - 425-75

REPORTS

DATE:

11-13-09

1R425-7

Vacuum Jct C-7
2009

RECEIVED
APR - 6 2010
Environmental Bureau
Oil Conservation Division

CLOSURE

RECEIVED
APR - 6 2010
Environmental Bureau
Oil Conservation Division

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Vacuum	Jct. C-7	C	7	18S	35E	Lea	eliminated		

LAND TYPE: BLM ___ STATE X FEE LANDOWNER _____ OTHER _____

Depth to Groundwater 100 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 3/1/2006 Date Completed 2/9/2009 OCD Witness no

Soil Excavated 177.8 cubic yards Excavation Length 20 Width 20 Depth 12 feet

Soil Disposed 120 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS:

Sample Date 10/3/2006, 2/9/2009 **Sample Depth** 12 ft, 30 ft

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

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	PID = 0.0 (field)				28.5	974	64
BOTTOM COMP.	<0.005	<0.005	0.134	0.097	138	1370	<16
BACKFILL COMP.	PID = 0.0 (field)				13.2	960	64
SOIL BORE #1 @ 30'	PID = 1.9 (field)				<10	<10	16

General Description of Remedial Action: This junction box was addressed as part of the Vacuum SWD System abandonment. After the former junction box was removed an investigation was conducted using a backhoe to excavate the site to dimensions of 20x20x12-ft deep. Representative composite samples were collected and sent to a commercial laboratory for analysis of chloride, TPH, and BTEX. The laboratory confirmed low concentrations of chloride but slightly elevated concentrations of TPH. The excavated soil was blended on site with clean, imported soil. The blended backfill was then returned to the excavation to ground surface and contoured to the surrounding area. On 3/20/2006, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. To further investigate depth of TPH presence, a soil boring was initiated on 2/9/2009 at the former junction box location. The boring was advanced to a depth of 30 ft BGS while soil samples were collected every 5 ft and field tested for chlorides and organic vapors. The 30 ft sample was analyzed by a commercial laboratory for chloride and TPH which confirmed low concentrations of each. The entire borehole was plugged with bentonite to the ground surface.

enclosures: photos, lab results, PID (field) screenings, boring log, BTEX comparison study, chloride curve

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	329
bottom comp.	12'	421
SOIL BORING at the former junction (2/9/2009)	15'	148
	20'	122
	25'	87
	30'	117

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

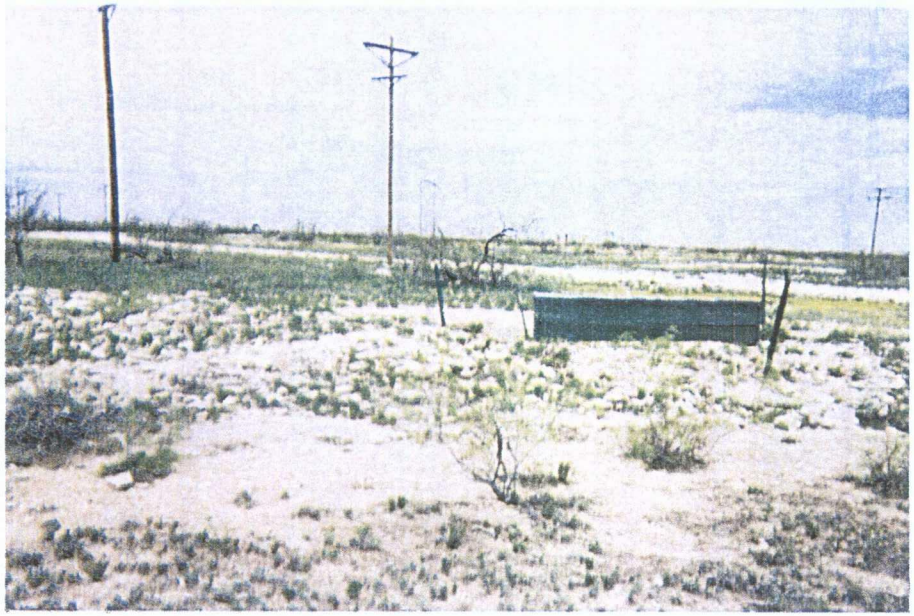
SITE SUPERVISOR Roy Rascon SIGNATURE not available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL K.J

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 11-13-09

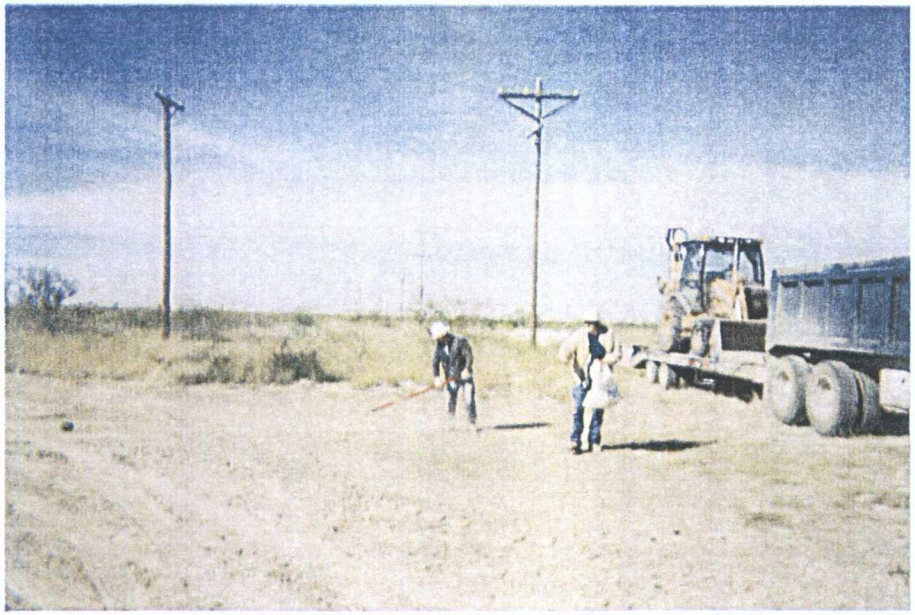
Vacuum Jct. C-7

Unit C, Section 7, T18S, R35E

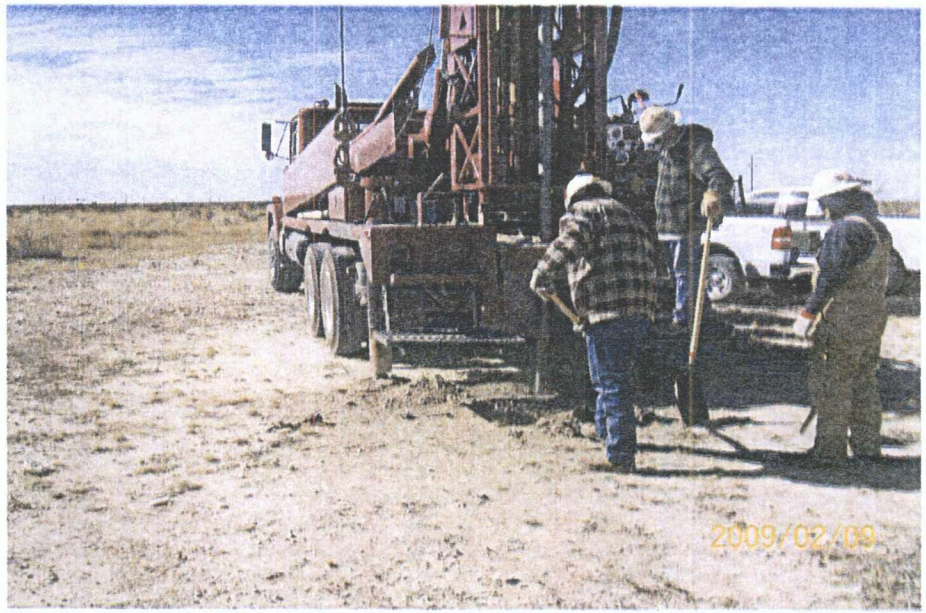


former junction box site 4/18/2002

excavating the former junction box site 10/4/2006



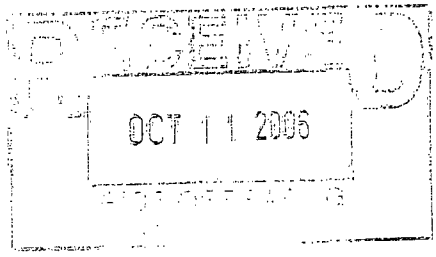
seeding backfilled site 11/6/2006



soil boring the former junction box site 2/9/2009

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: ROY R. RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/05/06
Reporting Date: 10/09/06
Project Number: NOT GIVEN
Project Name: VACUUM JCT. C-7
Project Location: NOT GIVEN

Sampling Date: 10/03/06 & 10/04/06
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
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		10/08/06	10/08/06	10/09/06
H11619-2	BTTM FIELD COMP. @ 12'	138	1370	<16
H11619-3	BACKFILL COMP.	13.2	960	64
H11619-4	4 WALL COMP. 20'x20'	28.5	974	64
Quality Control		769	784	490
True Value QC		800	800	500
% Recovery		96.1	98.0	98.0
Relative Percent Difference		2.4	1.2	2.0

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

Chemist

Date

H11619A

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: ROY R. RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/05/06
Reporting Date: 10/09/06
Project Number: NOT GIVEN
Project Name: VACUUM JCT. C-7
Project Location: NOT GIVEN

Sampling Date: 10/03/06
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NO. SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE	10/06/06	10/06/06	10/06/06	10/06/06
H11619-1 COMPOSITE, BTTM #1-#5	<0.005	<0.005	0.500	0.360
H11619-2 BTTM FIELD COMP. @ 12'	<0.005	<0.005	0.134	0.097
Quality Control	0.104	0.099	0.102	0.300
True Value QC	0.100	0.100	0.100	0.300
% Recovery	104.0	98.9	102	100.0
Relative Percent Difference	0.7	<0.1	1.3	3.9

METHOD: EPA SW-846 8260

Chemist

Date

CARDINAL LABORATORIES, INC.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page____ of ____

Company Name:	Rice Operating Co.
Project Manager:	Roy R. Rayson
Address:	122 W. Taylor
City:	Hobbs State: N.M. Zip: 88240
Phone #:	393-9174 Fax #: 397-1471
Project #:	HFBO Vacuum, Del. Co. Project Owner:
Project Name:	
Project Location:	
Sampler Name:	J. Bill Cannon

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

COPY

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	SAMPLING TIME	TPH 8015M	Cl-	BTEX
111615-1	Btm of #1	G	1			✓					✓		10-3-06	9:30 AM			
	Btm of #2	G	1			✓					✓		10-3-06	9:30 AM			
	Btm of #3	G	1			✓					✓		10-3-06	9:30 AM			
	Btm of #4	G	1			✓					✓		10-3-06	9:30 AM			
	Btm of #5	G	1			✓					✓		10-3-06	9:30 AM			
111615-2	Btm of all Comp @ 12'	C	1			✓					✓		10-3-06	9:30 AM	✓	✓	✓
-3	Backfill Comp.	C	1			✓					✓		10-4-06	12:50 PM	✓	✓	
-4	4 wall Comp. 20'x20'	C	1			✓					✓		10-4-06	12:40 PM	✓	✓	

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: J. Bill Cannon	Date: 10-5-06 Time: 5:00 p.m.	Received By:	
Relinquished By:	Date: Time:	Received By: (Lab Staff) Burke Hoff & Rob	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Temp, °C: 6oC; Intact? ☒ Yes ☐ No	Checked By: (Initials)	

Phone Result: ☐ Yes ☐ No
Fax Result: ☐ Yes ☐ No

REMARKS: Btm of all 1-5 composite in lab & run BTEX

† Cardinal cannot accept verbal changes. Please fax written changes to (325) 673-7020.

RICE OPERATING COMPANY

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

VOC FIELD TEST REPORT FORM

PID METER READING & CALIBRATION

CK. MODEL NO.	☐	MODEL: PGM 761S	SERIAL NO: 104412
	☐	MODEL: PGM 761S	SERIAL NO: 104490
	☐	MODEL: PGM 7600	SERIAL NO: 110-12383

LOT NO: [illegible]
FILL DATE: [illegible]
ACCURACY: +/- 2%

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE
EXP. DATE: [illegible]
METER READING ACCURACY: 100.0

COPY

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
Vacuum	Jct. 2-7	C	7	18	35

SAMPLE [illegible]	PID Results	Sample [illegible]	PID Results
1	[illegible]	7	[illegible]
2	[illegible]	8	[illegible]
3	[illegible]	9	[illegible]
4	[illegible]	10	[illegible]
5	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
[illegible]			
[illegible]			
[illegible]			

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

SIGNATURE: [illegible] DATE: [illegible]

RICE OPERATING COMPANY

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

VOC FIELD TEST REPORT FORM

PID METER READING & CALIBRATION

CK.	☐	MODEL: PGM 761S	SERIAL NO: 104412
MODEL	☑	MODEL: PGM 761S	SERIAL NO: 104490
NO.	☐	MODEL: PGM 7600	SERIAL NO: 110-12383

LOT NO: [illegible]
FILL DATE: [illegible]
ACCURACY: +/- 2%

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE
EXP. DATE: [illegible]
METER READING ACCURACY: [illegible]

COPY

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
[illegible]	[illegible]	C	7	12	35

SAMPLE [illegible]	PID Results	Sample [illegible]	PID Results
1	[illegible]	1	[illegible]
2	[illegible]	2	[illegible]
3	[illegible]	-	[illegible]
4	[illegible]	[illegible]	[illegible]
5	[illegible]	-	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

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

SIGNATURE: [illegible] DATE: [illegible]

2009 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: Vacuum
Site: Jct. C-7

Date: 10/3/2006
Sampler: Roy Rascon

Laboratory: Cardinal Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
bottom composite at 12 ft BGS	1	884	<0.005	<0.005	0.134	0.097
	2	414				
	3	649				
	4	939				
	5	489				
			LAB COMPOSITE (mg/kg)			
			<0.005	<0.005	0.500	0.360

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)

Logger:	Tony Grieco	Client:	Well ID:
Driller:	Harrison & Cooper, Inc. Drilling	RICE Operating Company	
Drilling Method:	Air rotary	Project Name:	
Start Date:	2-9-09	Vacuum jct. C-7	
End Date:	2-9-09	Location:	SB - 1
Comments: Located: center of former junction box site TD = 30 ft GW = 100 ft		Vacuum SWD System unit 'C' Sec.7 T18S, R35E Lea County, NM	

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction
			10 - 30 ft VERY FINE TO FINE SAND dry		bentonite seal
15	148	105.1			
20	122	46.5			
25	87	4.4			
30	117	1.9			
DRO GRO	<10, <10				
Lab Cl-	16				

CARDINAL LABORATORIES

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

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

COPY

Receiving Date: 02/10/09
Reporting Date: 02/27/09**
Project Owner: NOT GIVEN
Project Name: VACUUM C-7
Project Location: NOT GIVEN

Sampling Date: 02/09/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ZL
Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		02/10/09	02/10/09	02/10/09
H16865-1	SB #1 @ 30'	<10.0	<10.0	16
Quality Control		549	562	500
True Value QC		500	500	500
% Recovery		110	112	100
Relative Percent Difference		3.0	7.1	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB

*Analysis performed on a 1:4 w:v aqueous extract.

**Revised Report.

Chemist

02/27/09
Date

H16865 TOL RICE

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	**BILL TO**
Project Manager: HACK CONDER	P.O. #:
Address: 122 W TAYLOR	Company:
City: HOBBS State: NM Zip: 88240	Attn:
Phone #: 3939174 Fax #: 3971471	Address:
Project #: Project Owner:	City:
Project Name: VACUUM C-7	State: Zip:
Project Location:	Phone #:
Sampler Name: TONY GRECO	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	CHLORIDE	TPH 8015M																
H16866-1	SB#1 30'	G	1			✓					✓		2/9/09	11:03	✓	✓																

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:	Date:	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time:	2/10/09 7:49 Am	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: email results
	Time:		lwainheimer@ricestd.com hconder@ricestd.com jpurvis@ricestd.com

Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	

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

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

COPY

Check Model Number:

✓	Model: PGM 7300	Serial No: 590-000183		Model: PGM 7600	Serial No: 110-023920
	Model: PGM 7300	Serial No: 590-000508		Model: PGM 7600	Serial No: 110-013744
	Model: PGM 7300	Serial No: 590-000504		Model: PGM 7600	Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 600-0002-620	EXPIRATION DATE: 9/11/09
FILL DATE:	METER READING ACCURACY: 100

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	C-7	C	7	18 S	35 E

SOIL BORE #1 32° 42.082' N 103° 29.933' W

SAMPLE ID	PID	SAMPLE ID	PID
15'	105.1		
20'	46.5		
25'	4.4		
30'	1.9		

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

SIGNATUE: [signature]

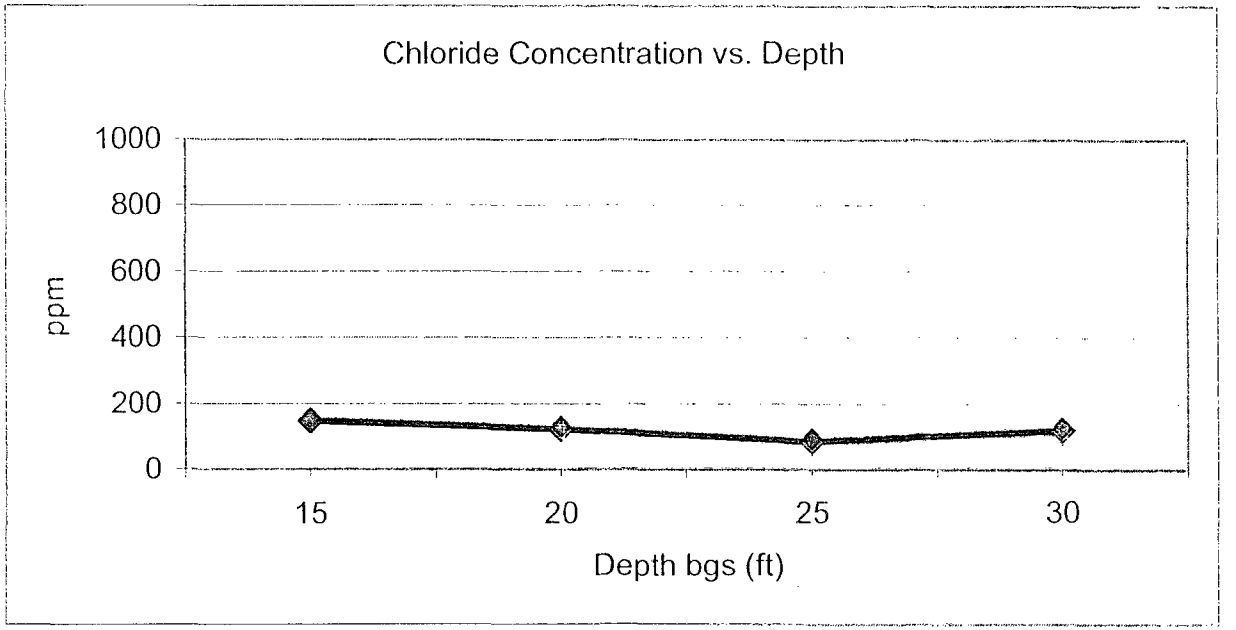
DATE: 2/9/09

Vacuum Jct. C-7

Unit 'C', Sec. 7, T18S, R35E

SOIL BORING samples at the junction (source)

Depth bgs (ft)	[Cl⁻] ppm
15	148
20	122
25	84
30	117



Groundwater = 100 ft