

1R - 426-254

# REPORTS

DATE:

3-23-10

**BD M-34 Vent  
2009**

RECEIVED

APR - 8 2009

Environmental Bureau  
Oil Conservation Division

1 R426-254

**DISCLOSURE**

**RICE OPERATING COMPANY**  
JUNCTION BOX DISCLOSURE REPORT

RECEIVED

APP - 6 2010

BOX LOCATION							ENVIRONMENTAL BUREAU BOX DIMENSIONS - FEET		
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	Length	Width	Depth
Blinebry-Drinkard (BD)	M-34 Vent	M	34	21S	37E	Lea	12'	5'	5'
							eliminated		

LAND TYPE: BLM STATE FEE LANDOWNER Mark Owen OTHER

Depth to Groundwater 75 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 10/7/2008 Date Completed 11/5/2009 OCD Witness no

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

Soil Disposed 200 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 11/02/2009, 11/06/2009 Sample Depth 12 ft., 15 ft., 39 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.

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SB#1 @ 15'	2.5	<10.0	<10.0	1,040
SB#1 @ 39'	3.5	<10.0	<10.0	304
4-WALL COMP.	84.5	<10.0	839	1,650
BOTTOM COMP.	62.3	<10.0	921	2,100

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	1,315
bottom comp.	12'	1,584
Soil bore at former junction	15'	870
	18'	758
	21'	705
	24'	651
	27'	662
	30'	662
	33'	605
	36'	513
	39'	360

**General Description of Remedial Action:** This junction was addressed under the pipeline replacement/upgrade program. After the former box was removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 20x20x12-ft deep hole. Each sample was field tested for chlorides and organic vapors. Field chloride tests yielded elevated chloride concentrations that did not relent with depth. Representative composite samples were sent to a commercial laboratory for analysis. Then clean imported caliche was hauled in to backfill excavation to 5' bgs. Then a one foot clay layer was installed and compaction test performed. The remaining excavation was backfilled with clean imported blow sand and contoured to the surrounding area. On 11/06/2009, a soil bore was advanced to 39 ft. BGS, while soil samples were collected every 3 ft. and tested for chloride concentrations and organics. At 15 ft. and 39 ft. BGS, the soil samples were sent to a commercial laboratory for analysis. The soil bore was plugged with bentonite to ground surface. Once soil bore was complete contaminated soil was hauled to an NMOCD approved facility. On 11/24/2009, 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 on 3/22/2010 of potential groundwater impact.

**Additional evaluation is High Priority**

enclosure: photos, lab results, compaction results, PID (field) screenings, soil bore log, cross section, chloride graph

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

SITE SUPERVISOR Eric Garrison SIGNATURE not available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Larry Bruce Baker Jr. INITIAL LBB

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 3-23-10

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



## BD M-34 Vent

Unit M, Section 34, T21S, R37E



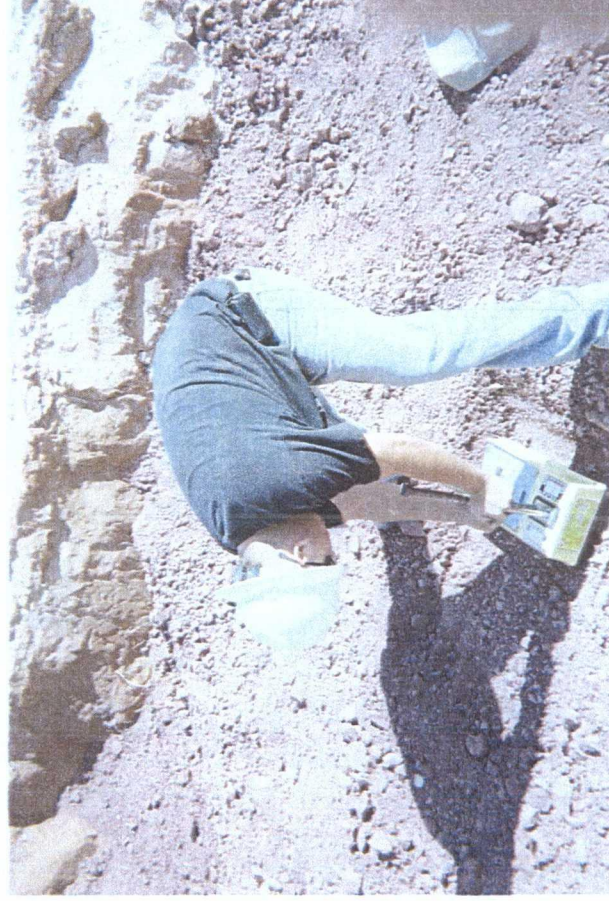
Former junction box

10/07/2008



Delineation trench being excavated

10/29/2009



Compaction test

11/05/2009



Backfilling site

11/05/2009



## BD M-34 Vent

Unit M, Section 34, T21S, R37E



Soil Bore # 1

11/06/2009



Plugging bore hole with bentonite

11/06/2009



Seeding site

11/24/2009



# ARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR  
RICE OPERATING COMPANY  
ATTN: BRUCE BAKER  
122 W. TAYLOR  
HOBBS, NM 88240

Receiving Date: 11/02/09  
Reporting Date: 11/03/09  
Project Number: NOT GIVEN  
Project Name: BD M-34 VENT  
Project Location: BD M-34 VENT

Sampling Date: 11/02/09  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: AE

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	CI* (mg/kg)
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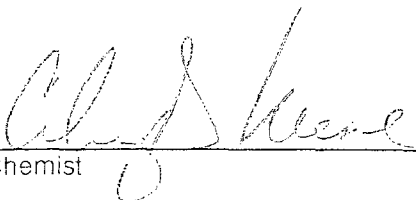
ANALYSIS DATE	11/03/09	11/03/09	11/03/09
H18628-1 5PT BTTM COMP @ 12'	<10.0	921	2,100
H18628-2 4 WALL COMP @ 20'x20'	<10.0	839	1,650
Quality Control	538	599	500
True Value QC	500	500	500
% Recovery	108	120	100
Relative Percent Difference	1.3	9.9	< 0.1

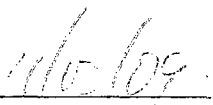
METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B

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

Reported on wet weight.

COPY

  
Chemist

  
Date

H18628 TCL RICE

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# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240

PHONE: (575) 393-9174 FAX: (575) 397-1471

## PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:


Model: PGM 7300

Serial No: 590-000183

Model: PGM 7300

Serial No: 590-000508

Model: PGM 7300

Serial No: 590-000504


Model: PGM 7600

Serial No: 110-023920

Model: PGM 7600

Serial No: 110-013744

Model: PGM 7600

Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 924908	EXPIRATION DATE: 7/29/12
FILL DATE: 7/30/09	METER READING ACCURACY: 100 ppm

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	M-34 Vent	M	34	21S	37E

SAMPLE ID	PID	SAMPLE ID	PID
5 point bottom composite at 12'	62.3		
4 Wall composite	84.5		

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

\* The person working this site is no longer employed by ROC but information was comprised from field notes.

Signature: *Larry Bruce Barker Sr.*

DATE: *2-16-10*





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

Receiving Date: 11/06/09  
Reporting Date: 11/11/09  
Project Owner: NOT GIVEN  
Project Name: BD M-34 VENT  
Project Location: BD M-34 VENT

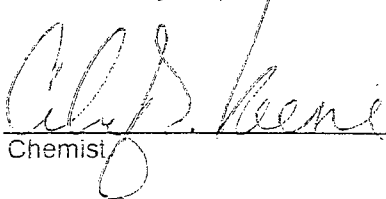
Sampling Date: 11/06/09  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: AB/HM


LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C <sub>6</sub> -C <sub>10</sub> )	(>C <sub>10</sub> -C <sub>28</sub> )	
		(mg/kg)	(mg/kg)	(mg/kg)

ANALYSIS DATE	11/10/09	11/10/09	11/10/09
H18679-1 SB#1 @ 15'	<10.0	<10.0	1,040
H18679-2 SB#1 @ 39'	<10.0	<10.0	304
Quality Control	448	508	500
True Value QC	500	500	500
% Recovery	89.6	102	100
Relative Percent Difference	0.5	1.5	< 0.1

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

\*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

  
Chemist

  
Date

H18679 TCL RICE

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**ARDINAL LABORATORIES**

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

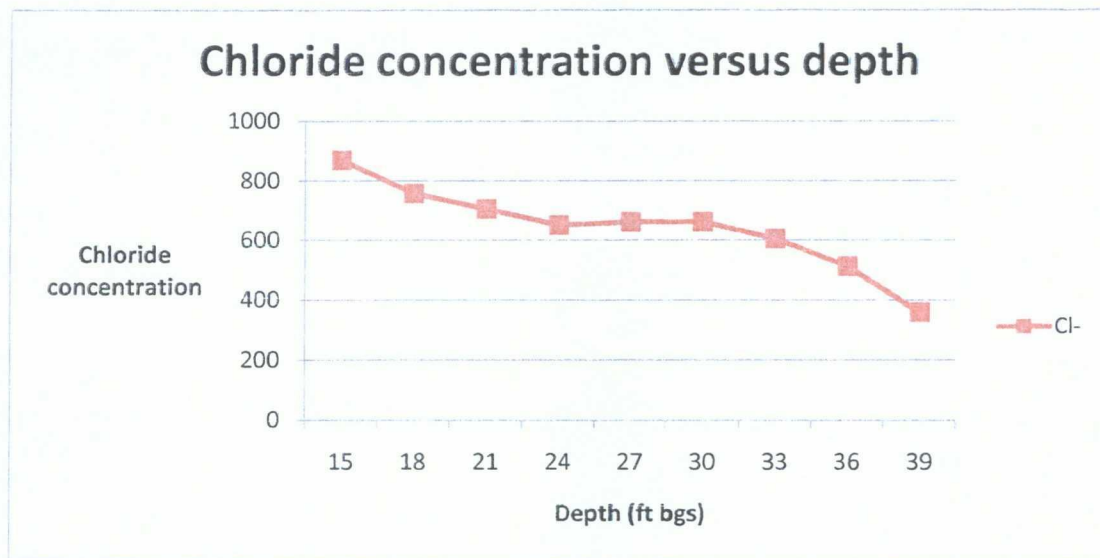
† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

NEED SAMPLES BACK, PLEASE

<b>Logger:</b>	Lara Weinheimer	<p>BD M-34 vent</p> <p>0 5 10 20 Feet</p>				
<b>Driller:</b>	Harrison & Cooper, Inc. Drilling					
<b>Consultant:</b>	N/A - ROC junction box upgrade plan					
<b>Drilling Method:</b>	Air rotary					
<b>Start Date:</b>	11/6/2009					
<b>End Date:</b>	11/6/2009					
<b>Comments:</b> Split spoon sampling from 15 - 21 ft. All other were from air rotary cuttings. Located at the center of the frmr jct. box. Drafted by: Lara Weinheimer TD = 39 ft GW = 75 ft			<b>Project Name:</b> BD M-34 vent <b>Well ID:</b> SB #1			
			<b>Location:</b> UL/M sec. 34 T21S R37E <b>Lat:</b> 32°25'42.341"N <b>Long:</b> 103°9'16.348" W		<b>County:</b> Lea <b>State:</b> NM	
Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
				12 - 15 ft		
				VERY FINE TO FINE SAND; CALICHE		
15	870	CI-1040	2.5	light brown, dry, no odor		
		GRO <10.0		15 - 18 ft		
		DRO <10.0		VERY FINE TO FINE SAND; SANDSTONE & CALICHE		
18	758		4.4	light brown, slightly moist, no odor		
				18 - 27 ft		
				VERY FINE TO FINE SAND; CONSOL. ROCK		
				light brown, slightly moist, no odor		
21	705		3.5			
24	651		1.6			
				27 - 33 ft		
				VERY FINE TO FINE SAND		
				light brown, dry, no odor		
27	662		3.9			
30	662		4.1			
33	605		4.1			

bentonite seal

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
36	513		3.4	33 - 39 ft VERY FINE TO FINE SAND orangey brown, slightly moist, no odor		
39	360	Cl- 304	3.5			
		GRO <10.0				
		DRO <10.0				





# RICE OPERATING COMPANY

122 West Taylor ~ Hobbs, NM 88240

PHONE: (575) 393-9174 FAX: (575) 397-1471

## PID METER CALIBRATION & FIELD REPORT FORM

CK  
MODEL  
NO.

✓

MODEL: PGM 7300

SERIAL NO: 590-000183

MODEL: PGM 7300

SERIAL NO: 590-000504

MODEL: PGM 7600

SERIAL NO: 110-12383

MODEL: PGM 7600

SERIAL NO: 110-02920

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 924908	EXPIRATION DATE: 7-29-2012
FILL DATE: 7-30-09	METER READING ACCURACY: 99.9

ACCURACY: +/- 2%

SYSTEM	SITE	UNIT	SECTION	TOWNSHIP	RANGE
BD	M-34 vent	M	34	T21S	R 37E

SAMPLE ID: soil bore #1

DEPTH	PID
15'	2.5
18'	4.4
21'	3.5
24'	1.6
27'	3.9

DEPTH	PID

DEPTH	PID

DEPTH	PID

DEPTH	PID
30'	4.1
33'	4.1
36'	3.4
39'	3.5

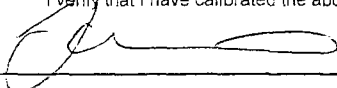
DEPTH	PID

DEPTH	PID

DEPTH	PID

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

Signature



Date

11-6-09

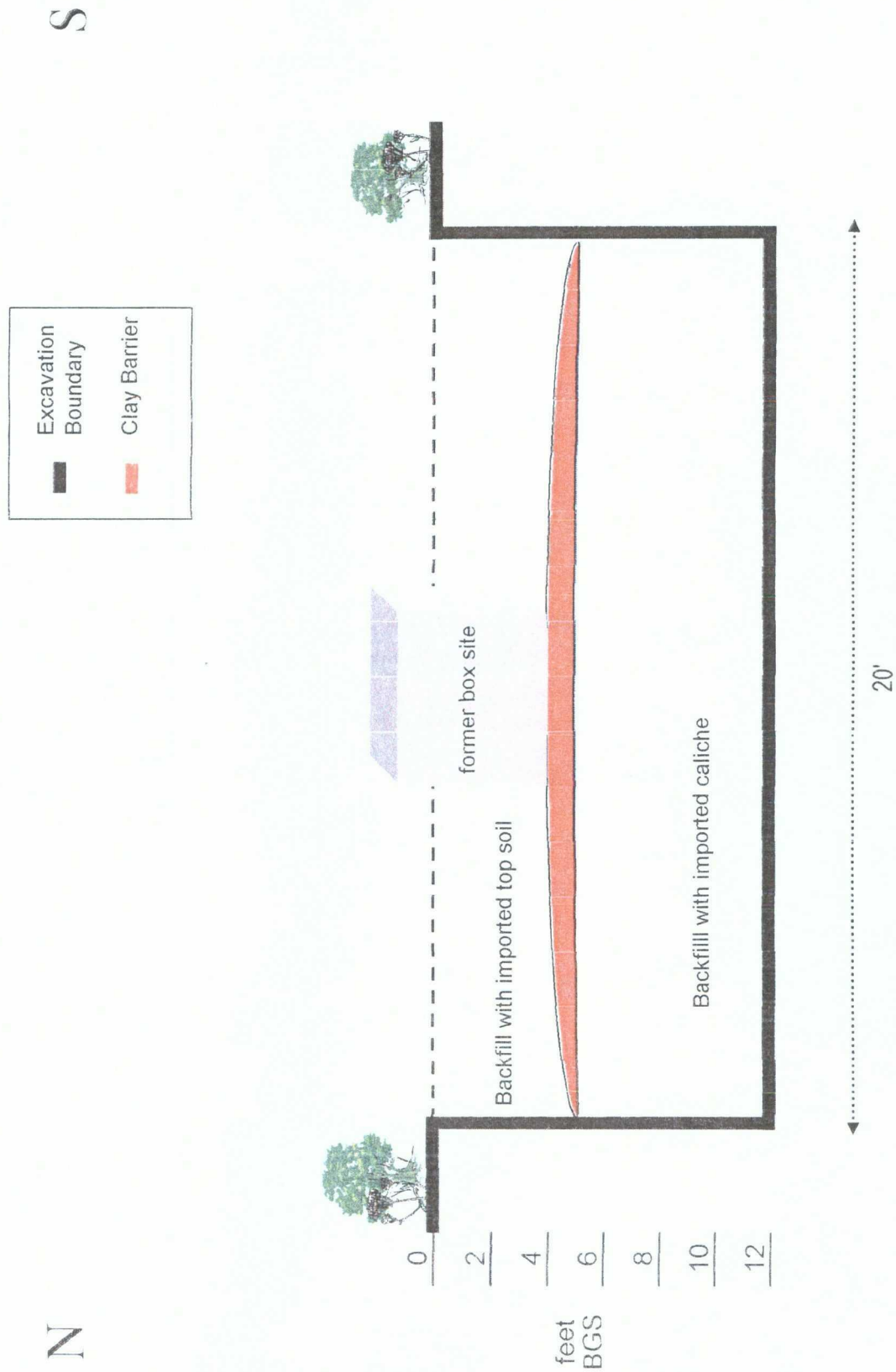
SITE MAP

N ↑

COPY

BD M-34 Vent  
Unit 'M', Sec. 34, T21S, R37E

# Excavation Cross-Section





\*Corrected Copy 11/19/09  
LABORATORY TEST REPORT  
**PETTIGREW & ASSOCIATES, P.A.**  
1110 N. GRIMES  
HOBBS, NM 88240  
(575) 393-9827



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

To: Rice Operating Company  
Attn: Bruce  
122 W. Taylor  
Hobbs, NM 88240

Material: Wallach Red Clay

Test Method: ASTM: D 2922

Project: BD Junction 25  
EOL 21-37  
Project No. 2009.1260

Date of Test: November 5, 2009

Depth: See Below

Depth of Probe: 6"

Test No.	Location	*Dry Density	% Moisture	Depth
		% Max		
*SG 5	BD M-34 Vent	89.5	17.1	4' Below Surface

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DEC 09 2009

RICE OPERATING  
HOBBS, NM

COPY

\*89.5 = 90.0 Per Rice Operating Representative

Control Density: 100.7  
ASTM: D 698

Optimum Moisture: 20.7%

Required Compaction: 90% - 95%

Densometer ID: 5572

PETTIGREW & ASSOCIATES

Lab No.: 09 7103-7104

Copies To: Rice Operating

BY: Erica M. Hart

BY: Cjs P.E.

# CHLORIDE CONCENTRATION CURVE

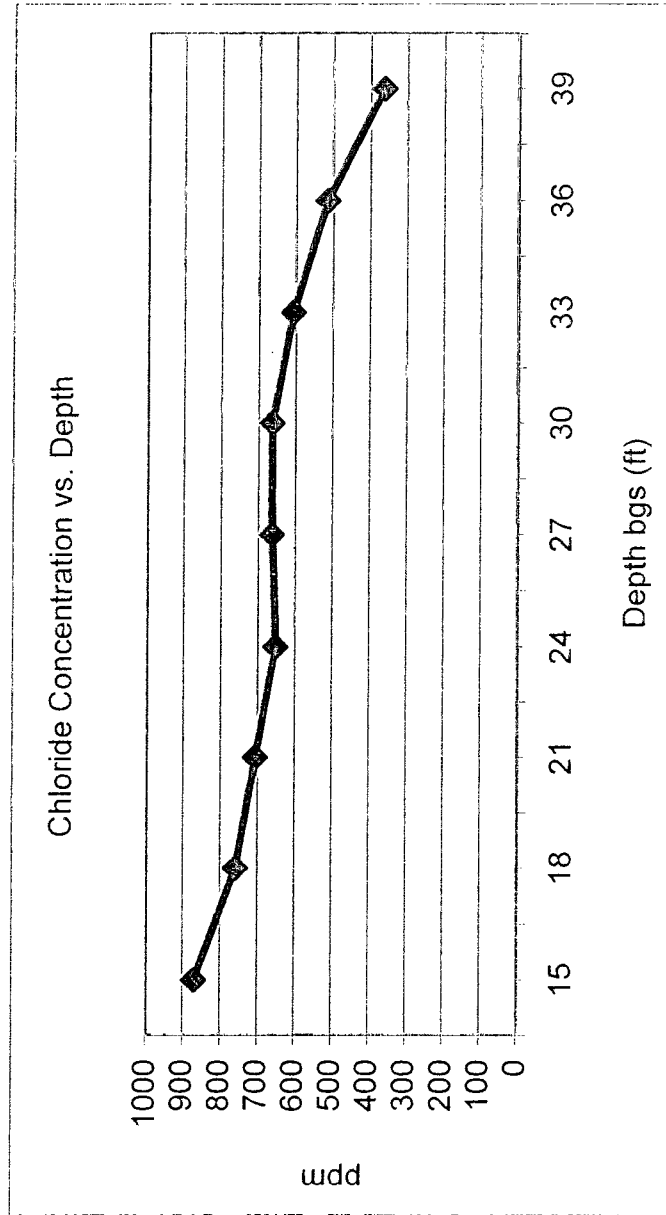
RICE Operating Company

## BD M-34 Vent

Unit 'M', Sec. 34, T21S, R37E

Soil bore at former junction

Depth bgs (ft)	[Cl] ppm
15	870
18	758
21	705
24	651
27	662
30	662
33	605
36	513
39	360



Groundwater = 75 ft.