

1R - 426-162

## REPORTS

DATE:

4-1-08

BD F-23 Vent

1R426-162

**CLOSURE**

4-1-08

**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	NEW BOX DIMENSIONS - FEET		
Blinebry-Drinkard (BD)	F-23 vent (2 boxes)	F	23	21S	37E	Lea	Length	Width	Depth
							no box; junction eliminated		

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER Apache Corp. OTHER \_\_\_\_\_

Depth to Groundwater 50 feet NMOCD SITE ASSESSMENT RANKING SCORE: 30 \*

Date Started 1/30/2007 Date Completed 3/1/2007 NMOCD Witness no

Soil Excavated 278 cubic yards Excavation Length 25 Width 25 Depth 12 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date 2/8/2007 Sample Depth 12

5-point composite sample of bottom and 4-point composite sample of excavation sidewalls. TPH, BTEX, and chloride laboratory test results completed by using an approved laboratory 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	Chlorides mg/kg
4-WALL COMP.	PID = 6.0 (field reading)				<10.0	108	160
BOTTOM COMP.	<0.005	<0.005	0.024	0.036	<10.0	136	336
BACKFILL	PID = 42.6 (field reading)				<10.0	210	144

**CHLORIDE FIELD TESTS**

General Description of Remedial Action:

This site contained 2 adjacent junction

boxes that were eliminated as part of the pipeline replacement/upgrade program. After the  
boxes were removed, the site was delineated using a backhoe to collect soil samples at  
regular intervals to produce a 25 x 25 x 12-ft-deep excavation. Chloride field tests were  
performed on each sample and concentrations were generally low and exhibited a trend of  
decline with depth. Organic vapors were also measured using a PID and yielded low  
concentrations as well. Representative composite samples were collected for laboratory  
confirmation. The excavated soil was blended on site and returned to the excavation. The  
remaining excavation was backfilled with clean, imported soil. On 3/1/2007, the disturbed  
area was seeded with a blend of native vegetation and is expected to return to productive  
capacity at a normal rate. Remaining TPH concentrations will naturally attenuate and are  
not threatening to groundwater.

\* Several water wells are located within 1000 ft of this site.

enclosures: photos, lab results, PID field screenings, chloride graph, BTEX comparison table

LOCATION	DEPTH (ft)	ppm
15 ft WEST of former junction	4	1047
	5	436
	6	521
	7	502
	8	290
	9	397
	10	394
	11	472
	12	445
4-wall comp.	n/a	319
bottom comp.	12	496
backfill comp.	n/a	319

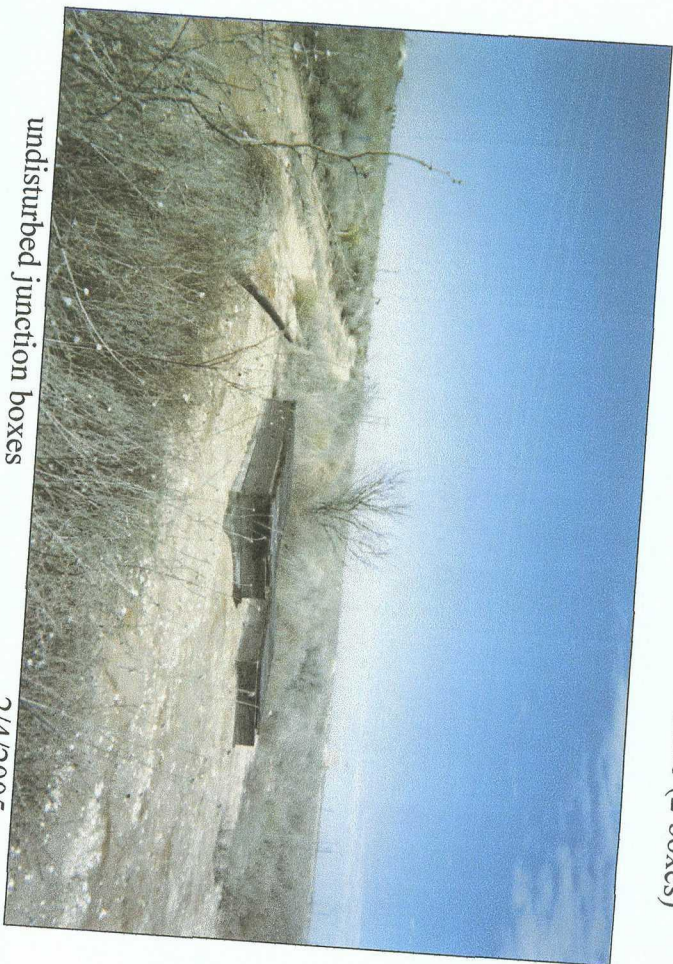
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY  
KNOWLEDGE AND BELIEF.

SITE SUPERVISOR Noel Carmona SIGNATURE  COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE   
DATE 1/13/2008 TITLE Project Scientist



## BD F-23 vent (2 boxes)



undisturbed junction boxes

2/4/2005

## Unit F, Section 23, T21S, R37E



vertical delineation trench between boxes

1/30/2007



backfilling 25 x 25 x 12-ft excavation

2/28/2007



seeding clean soil spread on site

3/1/2007





PHONE (915) 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

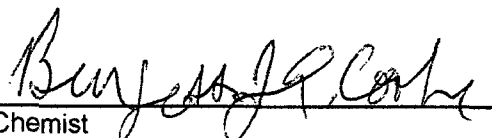
Receiving Date: 02/09/07  
Reporting Date: 02/14/07  
Project Number: NOT GIVEN  
Project Name: BD VENT F-23  
Project Location: NOT GIVEN

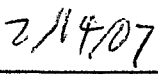
Sampling Date: 02/08/07  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC/HM

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)
		02/13/07	02/13/07	02/09/07
H12179-2	BTTM. FIELD COMP. @ 12'	<10.0	136	336
H12179-3	BACKFILL COMP.	<10.0	210	144
H12179-4	4 WALL COMP. 25'x25'	<10.0	108	160
	Quality Control	752	784	500
	True Value QC	800	800	500
	% Recovery	94.0	97.9	100
	Relative Percent Difference	7.0	0.5	1.0

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

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

  
Chemist

  
Date

H12179

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 client for 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 thirty (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.



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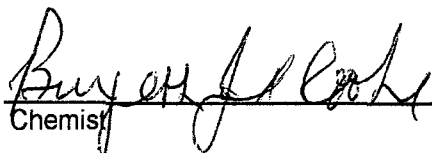
ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: ROY R. RASCON  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471

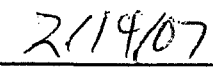
Receiving Date: 02/09/07  
Reporting Date: 02/14/07  
Project Number: NOT GIVEN  
Project Name: BD VENT F-23  
Project Location: NOT GIVEN

Sampling Date: 02/08/07  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		02/12/07	02/12/07	02/12/07	02/12/07
H12179-1	BTTM. #1 - #5 (COMP)	<0.005	0.027	0.326	0.546
H12179-2	BTTM. FIELD COMP. @ 12'	<0.005	<0.005	0.024	0.036
	Quality Control	0.103	0.101	0.103	0.298
	True Value QC	0.100	0.100	0.100	0.300
	% Recovery	103.0	101	103	99.5
	Relative Percent Difference	3.1	1.4	2.9	0.5

METHOD: EPA SW-846 8260

  
Chemist

  
Date

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# 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 1 of 1

Company Name: <u>Rice Operating Co.</u>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>Roy R. Resum</u>		Company:					
Address: <u>122 W. Taylor</u>		Attn:					
City: <u>Hobbs</u>		State: <u>N.M.</u>		Zip: <u>88240</u>			
Phone #: <u>505-393-9174</u>		Fax #: <u>505-397-1471</u>					
Project #: <u>B.D. Vail Feb 3</u>		Project Owner:					
Project Name:							
Project Location:							
Sampler Name: <u>Noel Carmona</u>		Fax #:					
FOR LAB USE ONLY		MATRIX		PRESERV.		SAMPLING	
		GROUNDWATER		ACID/BASE:		DATE	
		WASTEWATER		OTHER:		TIME	
		SLUDGE		ICE / COOL			
		OIL		OTHER:			
		SOIL					
		# CONTAINERS					
		(G) RAB OR (C) COMP.					
Lab I.D.	Sample I.D.						
H12179-1	Bttm. #1					2-8-07	10:15 AM
-1	Bttm. #2						
-1	Bttm. #3						
-1	Bttm. #4						
-1	Bttm. #5						
-2	Bttm. Field Camp @ 12'						
-3	Backfill Camp						
-4	Well Camp 25' x 25'						

RECEIVED  
FEB 16 2007  
RICE OPERATING  
HOBBS, NM

TPH 8015 m  
C1-  
BTX

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 causes whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 90 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, 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:	Date:	Time:	Received By:	Date:	Time:
<u>Noel Carmona</u>					
Relinquished By:	Date:	Time:	Received By: (Lab Staff)	Date:	Time:
	02-09-07	9:58	<u>Noel Carmona</u>		
Delivered By: (Circle One)			Sample Condition	Temp, °C	Intact?
Sampler - UPS - Bus - Other:					Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
			Checked By:		(Initials)

Phone Result: ☐ Yes ☐ No  
Fax Result: ☐ Yes ☐ No  
REMARKS: Bttm. #1-5 Comp. in lab & run BTX on composite only!

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

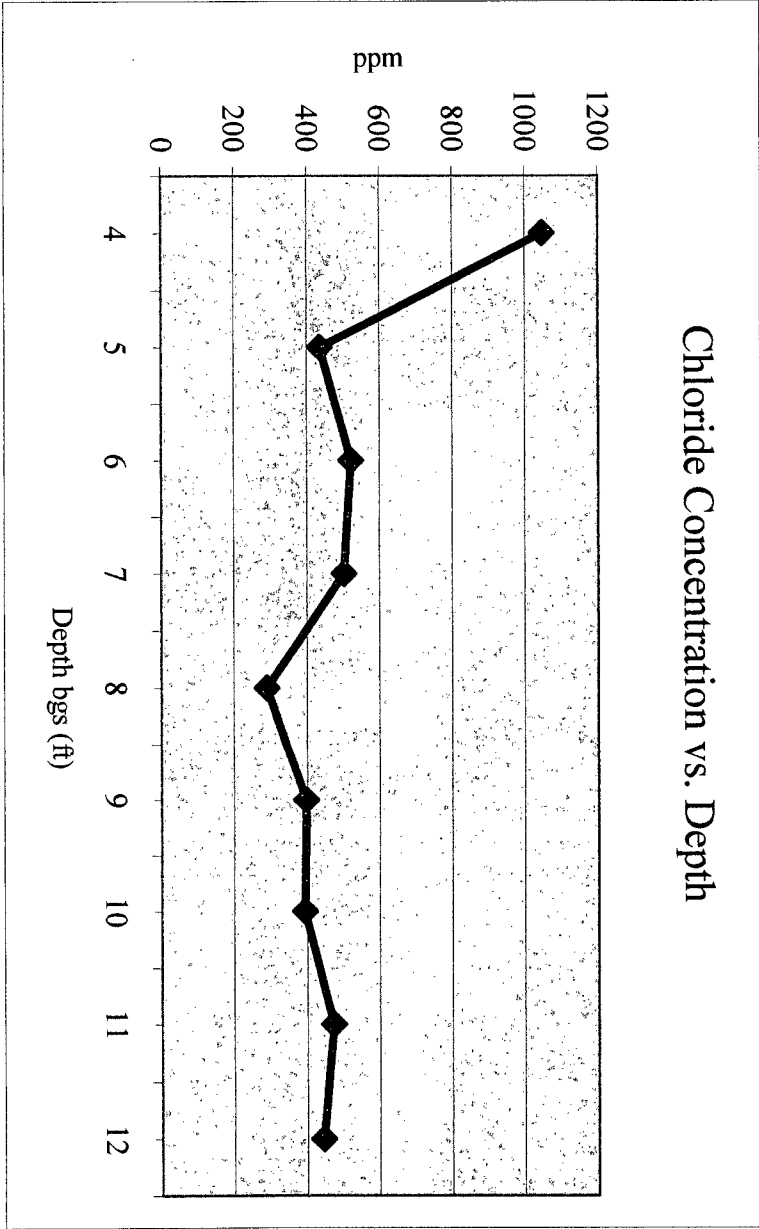
**BD F-23 vent (2 boxes)**

unit F', Sec. 23, T21S, R37E

15 ft WEST of former junction

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
4	1047
5	436
6	521
7	502
8	290
9	397
10	394
11	472
12	445

Groundwater = 50 ft





# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240  
 PHONE: (505) 393-9174 FAX: (505) 397-1471  
 PID METER CALIBRATION & FIELD REPORT FORM

CK.	<input type="checkbox"/>	MODEL: PGM 761S	SERIAL NO: 104412
MODEL	<input checked="" type="checkbox"/>	MODEL: PGM 7600	SERIAL NO: 110-013744
NO.	<input type="checkbox"/>	MODEL: PGM 7600	SERIAL NO: 110-12383
	<input type="checkbox"/>	MODEL: PGM 7600	SERIAL NO: 110-012920

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 05-2992	EXPIRATION DATE: 5-28-07
FILL DATE: 11-28-05	METER READING ACCURACY: 100.0

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	Vent F-23	F	23	21S	37E

SAMPLE ID	PID	SAMPLE ID	PID
4 WALL COMP	6		
BOTTOM 5PT COMP @ 12'BGS	1.9		
2	1.6		
3	256		
4	5.6		
5	5.6		
BOTTOM 5PT COMP @ 12'BGS	122		
BLENDED BACKFILL	42.6		

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

SIGNATURE:



DATE: 2-8-07

# 2007 BTEX Study

# Revised Junction Box Upgrade Plan (2003)

System: BD Date: 2/8/2007 Laboratory: Cardinal  
 Site: F-23 vent (2 boxes) Sampler: Noel Carmona Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
bottom composite at 12 ft BGS	5 sample points	122	<0.005	<0.005	0.024	0.036
			LAB COMPOSITE (mg/kg)			
excavation dimesions 25 x 25 x 12 ft			<0.005	0.027	0.326	0.546

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)