1R - 426-231

REPORTS

DATE:

9-28-09

BD K-2 EOL
2009

1R426-231

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APR - 6 2010

Environmental Bureau
Oil Conservation Division

CLOSURE

RECEIVED

APP - 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
Blinebry-Drinkard (BD)	K-2 EOL	K	2	22S	36E	Lea	eliminated		

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

Depth to Groundwater 130 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 7/24/2009 Date Completed 8/7/2009 OCD Witness no

Soil Excavated 44.4 cubic yards Excavation Length 10 Width 10 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: **Sample Date** 7/30/2009 **Sample Depth** 12 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.	<0.050	<0.050	<0.050	<0.300	<10.0	1,370	48
BOTTOM COMP.	PID = 0.8 (field)				<10.0	11	48
BLENDED BACKFILL	PID = 88.0 (field)				<10.0	1,150	64

General Description of Remedial Action: This junction box was eliminated during the pipeline upgrade/replacement program. After the former junction box was removed an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 10x10x12-ft excavation. Each sample was field tested for chlorides and yielded low concentrations. Organic vapors were measured using a PID and yielded elevated concentrations. Representative composite samples were collected and analyzed by a commercial laboratory which yielded low concentrations of chloride, and TPH and BTEX concentrations that were below NMOCD guidelines. The excavated soil was blended on site and returned to the excavation to ground surface and contoured to the surrounding area. On 8/7/2009, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

enclosures: photos, lab results, PID (field) screening, BTEX comparison study, chloride curve

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	228
bottom comp.	12'	302
blended backfill	n/a	195
background	6"	204
vertical delineation trench at 5 ft west of the junction (source)	2'	211
	4'	150
	6'	270
	8'	291
	10'	238
	12'	144

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

SITE SUPERVISOR Jordan Woodfin SIGNATURE Jordan Woodfin COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 9-28-09

BD K-2 EOL

Unit K, Section 2, T22S, R36E

site prior to excavation, facing west 7/24/2009

collecting a soil sample, facing south 7/29/2009

final 10x10x12-ft excavation, facing north 7/30/2009

seeding backfilled site, facing southeast 8/7/2009

CARDINAL LABORATORIES

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

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

COPY

Receiving Date: 07/30/09
Reporting Date: 08/04/09
Project Number: NOT GIVEN
Project Name: BD JCT K-2 EOL
Project Location: BD JCT K-2 EOL

Sampling Date: 07/30/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
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		07/31/09	07/31/09	07/31/09
H17902-1	5 PT BTM. COMP.	<10.0	11.0	48
H17902-2	4 WALL COMP.	<10.0	1,370	48
H17902-3	BLENDED BACKFILL	<10.0	1,150	64
Quality Control		506	594	500
True Value QC		500	500	500
% Recovery		101	119	100
Relative Percent Difference		1.4	4.0	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl B
*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.
Not accredited for GRO/DRO and Chloride.

Chemist

8/5/09
Date

H17902 TCL RICE

CARDINAL LABORATORIES

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

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

COPY

Receiving Date: 07/30/09
Reporting Date: 08/03/09
Project Number: NOT GIVEN
Project Name: BD JCT K-2 EOL
Project Location: BD JCT K-2 EOL

Sampling Date: 07/30/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: ZL

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE		07/31/09	07/31/09	07/31/09	07/31/09
H17902-2	4WALL COMP	<0.050	<0.050	<0.050	<0.300
H17902-C	COMPOSITE OF NORTH, SOUTH, EAST & WEST WALLS	<0.050	<0.050	<0.050	<0.300
Quality Control		0.053	0.054	0.052	0.160
True Value QC		0.050	0.050	0.050	0.150
% Recovery		106	108	104	107
Relative Percent Difference		2.1	2.0	<1.0	1.3

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight.

Chemist

Date

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

COPY

		BILL TO	
Company Name:	RKF OPERATING	P.O. #:	
Project Manager:	JORDAN WOODFIN	Company:	
Address:	122 W TAYLOR	Attn:	
City: HOBBS	State: N/M Zip: 88240	Address:	
Phone #: 393-3174	Fax #:	City:	
Project #:	Project Owner:	State:	Zip:
Project Name:	BD JCT K-2 EOL	Phone #:	
Project Location:	BD Jct K-2 EOL	Fax #:	
Sampler Name:	JORDAN WOODFIN		

ANALYSIS REQUEST

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cl-	TPH 8015 m	Betex
H17902-1	Spt Btm Comp	C	1			X					X		7-30-09	12:30 p	X	X	
-2	4 Wall Comp	C	1			X					X		"	2:10 p	X	X	X
-3	Blended Backfill	C	1			X					X		"	3:15 p	X	X	
-4	North Wall	C	1			X					X		"	2:?0 p			
-5	South Wall	C	1			X					X		"	209 p			
-6	EAST WALL	C	1			X					X		"	150 p			
-7	West WALL	C	1			X					X		"	140 p			

(Samples -4 through -7:) Composite in lab — Betex only

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: Jordan Woodfin — Date: 7-30-09 — Time: 4:26 — Received By: [signature]

Relinquished By: — Date: — Time: — Received By:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool ☐ Yes ☑ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) [initials]

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:
Email Results to.
BBAKER@ RICESWD.COM
" JPURVIS@ "
" JWOODFIN@ "

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

*on ice/cooling process had begun

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471

COPY

PID METER CALIBRATION & FIELD REPORT FORM

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 : 08-3425	EXPIRATION DATE: 8-29-09
FILL DATE: 2-24-08	METER READING ACCURACY: 100.1

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	K-2 EOL	1C	2	22 S	36 E

SAMPLE ID	PID	SAMPLE ID	PID
North Wall	113	pt 1	0.3
South Wall	1.3	pt 2	0
East Wall	41.2	pt 3	2.3
West Wall	130	pt 4	1.5
4 wall Comp.	108	pt 5	0
		5pt Btm Comp	0.3
Blended Backfill	88.0		

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

SIGNATURE: Robert Crosby DATE: 7-30-09

2009 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: BD
Site: K-2 EOL
Date: 7/30/2009
Sampler: Jordan Woodfin
Laboratory: Cardinal Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
4-WALL COMPOSITE from 10x10x12 ft	NORTH wall	113.0	<0.050	<0.050	<0.050	<0.300
	SOUTH wall	1.8				
	EAST wall	41.2				
	WEST wall	130.0				
			LAB COMPOSITE (mg/kg)			
			<0.050	<0.050	<0.050	<0.300

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.

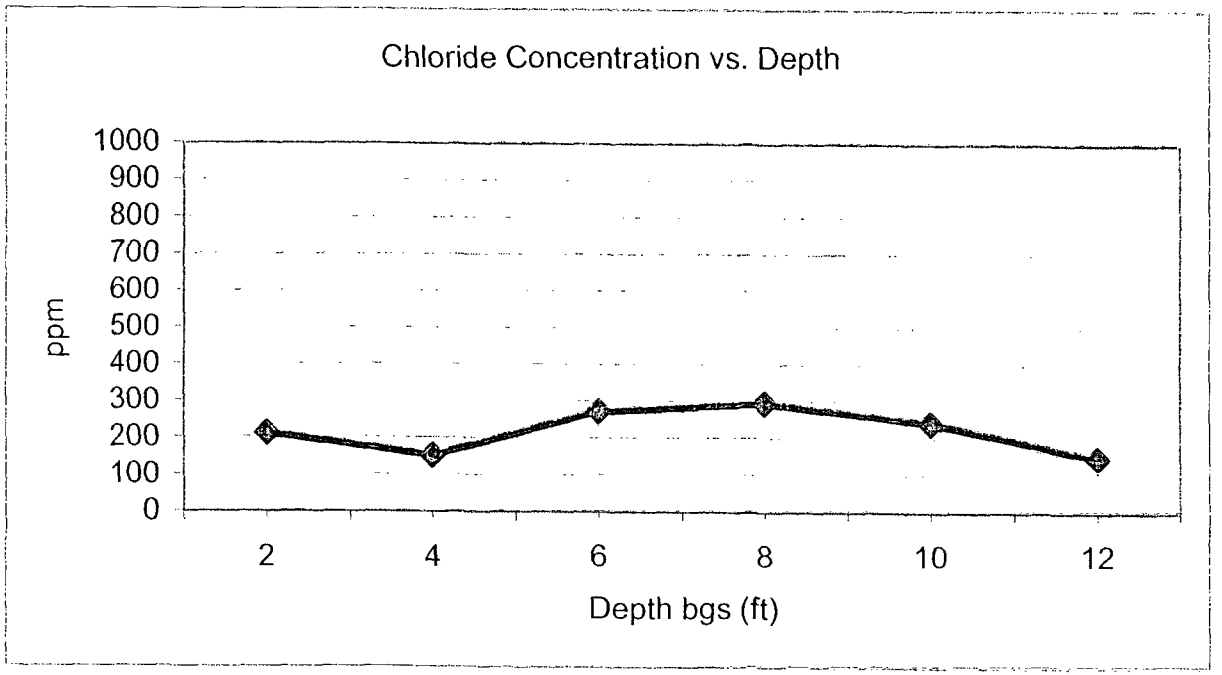
Revised Junction Box Upgrade Work Plan (July 16, 2003)

BD K-2 EOL

Unit 'K', Sec. 2, T22S, R36E

Backhoe samples at 5 ft west of the junction (source)

Depth bgs (ft)	[Cl⁻] ppm
2	211
4	150
6	270
8	291
10	238
12	144



Groundwater = 130 ft