

1R - 425-84

REPORTS

DATE:

3-25-10

1R425-84

**Vac Jct C-31 (2 boxes)
2009**

RECEIVED

SEP 15 2009

Environmental Bureau
Oil Conservation Division

DISCLOSURE

RECEIVED

RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT

APR - 6 2010

Environmental Bureau
Oil Conservation Division

BOX LOCATION							BOX DIMENSIONS - FEET		
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	Length	Width	Depth
Vacuum	Jct. C-31 (2 boxes)	C	31	17S	35E	Lea	Eliminated		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ Duke Energy _____ OTHER _____

Depth to Groundwater _____ 117 _____ feet NMOC SITE ASSESSMENT RANKING SCORE: _____ 0 _____

Date Started _____ 2/16/2009 _____ Date Completed _____ 6/8/2009 _____ OCD Witness: _____ no _____

Soil Excavated _____ 266.7 _____ cubic yards Excavation Length _____ 30 _____ Width _____ 20 _____ Depth _____ 12 _____ feet

Soil Disposed _____ 156 _____ cubic yards Offsite Facility _____ Sundance _____ Location _____ Eunice, NM _____

FINAL ANALYTICAL RESULTS: Sample Date _____ 5/5/2009, 5/6/2009, 5/11/2009, 6/2/2009 _____ 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 NMOC guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
4-WALL COMP.	<0.050	<0.050	0.363	1.48	205.0	69.1	1110	2,400
BOTTOM COMP.	<0.050	<0.050	<0.050	2.77	490.0	158	1590	944
BLENDED BACKFILL I					111.0	10.4	1130	1,200
BLENDED BACKFILL II					55.0	<10.0	312	400

General Description of Remedial Action: These junction boxes were addressed during the Vacuum SWD System Abandonment. After the former junction boxes were removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 30x20x12-ft deep excavation. Chloride field tests were performed on each sample and yielded elevated concentrations. Organic vapors were measured using a PID which yielded some elevated concentrations. The excavated soil was blended on site. Representative composite samples were collected from the blended excavated soil, bottom, and walls and sent to a commercial laboratory for analysis. Laboratory analysis of the representative samples confirmed elevated concentrations of chloride and DRO. The blended excavated soil was returned to the excavation up to 5 ft below ground surface (BGS) where a geosynthetic and plastic liner were installed. The remaining backfill was blended with clean, imported soil and used to backfill the excavation to ground surface and contoured to the surrounding area. On 6/8/2009, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. NMOC was notified of potential groundwater impact on 3/12/2010.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
vertical delineation trench at 5 ft west of the junction (source)	1'	570
	2'	840
	3'	504
	4'	346
	5'	359
	6'	360
	7'	258
	8'	231
	9'	227
	10'	266
	11'	303
	12'	331

ADDITIONAL EVALUATION IS LOW PRIORITY

enclosures: photos, lab results, PID (field) screenings, cross-section, BTEX study, chloride curve

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

SITE SUPERVISOR _____ Jordan Woodfin _____ SIGNATURE _____ COMPANY _____ RICE OPERATING COMPANY _____

REPORT ASSEMBLED BY _____ Katie Jones _____ INITIAL _____

PROJECT LEADER _____ Larry Bruce Baker Jr. _____ SIGNATURE _____ DATE _____ 3-25-10 _____

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

Vacuum Jct C-31

Unit C, Section 31, T17S, R35E



Site prior to excavation (east)

2/16/2009



Sampling source (south west)

2/16/2009



45X20 geosynthetic liner installed

5/28/2009



Seeding backfilled site (north)

6/8/2009



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

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: JORDAN WOODFIN
122 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 05/05/08
Reporting Date: 05/06/09
Project Number: NOT GIVEN
Project Name: VACUUM JCT C-31
Project Location: VACUUM JCT C-31

Analysis Date: 05/06/09
Sampling Date: 05/05/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl ⁻ (mg/kg)
H17369-1	5 PT BTM COMP	944
H17369-7	4 WALL COMP	2,400
Quality Control		490
True Value QC		500
% Recovery		98.0
Relative Percent Difference		2.0

METHOD: Standard Methods

4500-Cl⁻B

Note: Analyses performed on 1:4 w/v aqueous extracts.

Chemist

Date

H17369 RICE



CCP

Sampling Date: 05/05/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB

[illegible]

ANALYSIS DATE	05/08/09	05/08/09
H17369-1 5PT BTM COMP	158	1,590
H17369-7 4 WALL COMP	69.1	1,110
Quality Control	567	529
True Value QC	500	500
% Recovery	113	106
Relative Percent Difference	1.9	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Date _____

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

Receiving Date: 05/05/09
Reporting Date: 05/11/09
Project Number: NOT GIVEN
Project Name: VACCUM JCT C-31
Project Location: VACCUM JCT C-31

Sampling Date: 05/05/09
Sample Type: SOIL
Sample Condition: COOL & 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	05/10/09	05/10/09	05/10/09	05/10/09
H17369-1 5FT BTM COMP	<0.050	<0.050	<0.050	2.77
H17369-C COMPOSITE OF BTM PT. #1 THRU #3	<0.050	<0.050	0.383	2.10
H17369-7 4 WALL COMP	<0.050	<0.050	0.363	1.48
Quality Control	0.053	0.053	0.048	0.152
True Value QC	0.050	0.050	0.050	0.150
% Recovery	106	106	96.0	101
Relative Percent Difference	7.5	12.0	11.1	9.2

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,
AND TOTAL XYLENES.

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

[illegible]

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

Receiving Date: 05/05/09
Reporting Date: 05/11/09
Project Number: NOT GIVEN
Project Name: VACCUM JCT C-31
Project Location: VACCUM JCT C-31

Sampling Date: 05/05/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: ZL

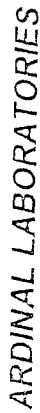
LAB NUMBER	SAMPLE ID	BENZENE	TOLUENE	ETHYL	TOTAL
		(mg/kg)	(mg/kg)	BENZENE	XYLENES
				(mg/kg)	(mg/kg)
ANALYSIS DATE		05/11/09	05/11/09	05/11/09	05/11/09
H17368-C	COMPOSITE OF NORTH, SOUTH, EAST, AND WEST WALLS	<0.050	<0.050	0.379	1.48
Quality Control		0.053	0.053	0.048	0.152
True Value QC		0.050	0.050	0.050	0.150
% Recovery		106	106	96.0	101
Relative Percent Difference		7.5	12.0	11.1	9.2

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,
AND TOTAL XYLENES.

Chemist

Date



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		P.O. #:		ANALYSIS REQUEST	
Project Manager: Jordan Woodfin		Company:			
Address: 122 W. TAYLOR		Attn:			
City: HOUSTON		Address:			
Phone #: 281-2174		City:			
Fax #: 281-2174		State:			
Project #:		Phone #:			
Project Name: Green Jet C-31		Fax #:			
Project Location: Green Jet C-31					
Sampler Name: DEAN WOODFIN					
Lab I.D.	Sample I.D.				
11113101	North Wall				
11113102	South Wall				
11113103	East Wall				
11113104	West Wall				

Matrix		PRESERV		SAMPLING	
GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	DATE
X					5-5-09 3:00 P
X					5-5-09 3:37 P
X					5-5-09 3:40 P
X					5-5-09 2:44 P

Matrix		PRESERV		SAMPLING	
GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	DATE
X					5-5-09 3:00 P
X					5-5-09 3:37 P
X					5-5-09 3:40 P
X					5-5-09 2:44 P

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Relinquished By:		Received By:	
Date:	Time:	Date:	Time:
5-5-09	1:42	5-5-09	1:42

Relinquished By:		Received By:	
Date:	Time:	Date:	Time:
5-5-09	1:42	5-5-09	1:42

Delivered By: (Circle One)		Checked By:	
Sampler - UPS	Bus - Other:	Sample Condition	Initials
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cool - Intact	JDW
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	

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

COPI

Receiving Date: 05/11/09
Reporting Date: 05/12/09
Project Number: NOT GIVEN
Project Name: VACUUM JCT C-31
Project Location: VACUUM JCT C-31

Sampling Date: 05/11/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB/HM

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

ANALYSIS DATE	05/12/09	05/12/09	05/12/09
H17403-1 BLENDED BACKFILL	10.4	1,130	1,200
Quality Control	518	436	500
True Value QC	500	500	500
% Recovery	104	87.2	100
Relative Percent Difference	1.2	1.0	< 0.1

METHODS: TPH GRO & DRO: EPA SW-843 8015 M; CI: Std. Methods 4500-CIB

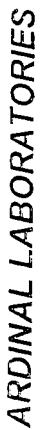
*Analysis performed on a 1:4 w/v aqueous extract.

Chemist

Date

H17403 TOL 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: 08-3425	EXPIRATION DATE: 8-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 98.6

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Vac	C-31	C	31	17	35

SAMPLE ID	PID	SAMPLE ID	PID
pt 1	250	North	94
pt 2	22.5	South	414
pt 3	575	EAST	97
pt 4	75	WEST	203
pt 5	55	4 Wall Comp	205
5pt Bln Comp	490		
		Blended Backfill	111

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

SIGNATURE:

Jordan Wood

DATE:

5-5-09



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

Receiving Date: 06/02/09
Reporting Date: 06/05/09
Project Number: NOT GIVEN
Project Name: VACUUM JCT C-31
Project Location: VACUUM JCT C-31

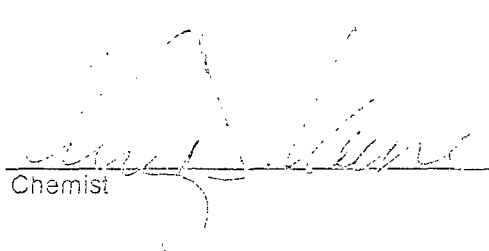
Sampling Date: 06/02/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER SAMPLE ID	GRO	DRO	Cl*
	(C ₅ -C ₁₀)	(>C ₁₀ -C ₂₈)	
	(mg/kg)	(mg/kg)	(mg/kg)

ANALYSIS DATE	06/04/09	06/04/09	06/03/09
H17539-1 BLENDED BACKFILL II	<10.0	312	400
Quality Control	486	453	490
True Value QC	500	500	500
% Recovery	97.2	90.6	98.0
Relative Percent Difference	2.5	0.6	2.0

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

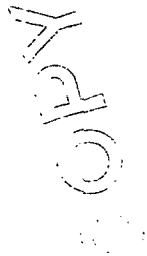
*Analysis performed on a 1:4 w/v aqueous extract. Reported on wet weight.


Chemist


Date

H17539 TCL RICE

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(575) 393-2326 Fax (575) 393-2476

Sampler Relinquished: <i>T. Davis</i>		Date: <i>6-2-09</i>		Received By: <i>Andy - Robert</i>		Phone Result: <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____	
Relinquished By:		Time: <i>1:45</i>		Received By:		Fax Result: <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #: _____	
Delivered By: (Circle One)		Date:		Temp:		REMARKS: <i>Email Results to: BB4perfectrice.sugl.com T.PURVIS@RICE.SUGL.COM JUVODFIN@RICESUGL.COM</i>	
Sampler - UPS - Bus - Other:		Sample Condition Cool, Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials) <i>APB</i>			

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

PID METER CALIBRATION & FIELD REPORT FORM

Serial No: 590-000504

Serial No: 110-013676

LOT NO: 083425	EXPIRATION DATE: 8-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 100

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Vacuum	C-31	C	31	17 S	35 E

[illegible]

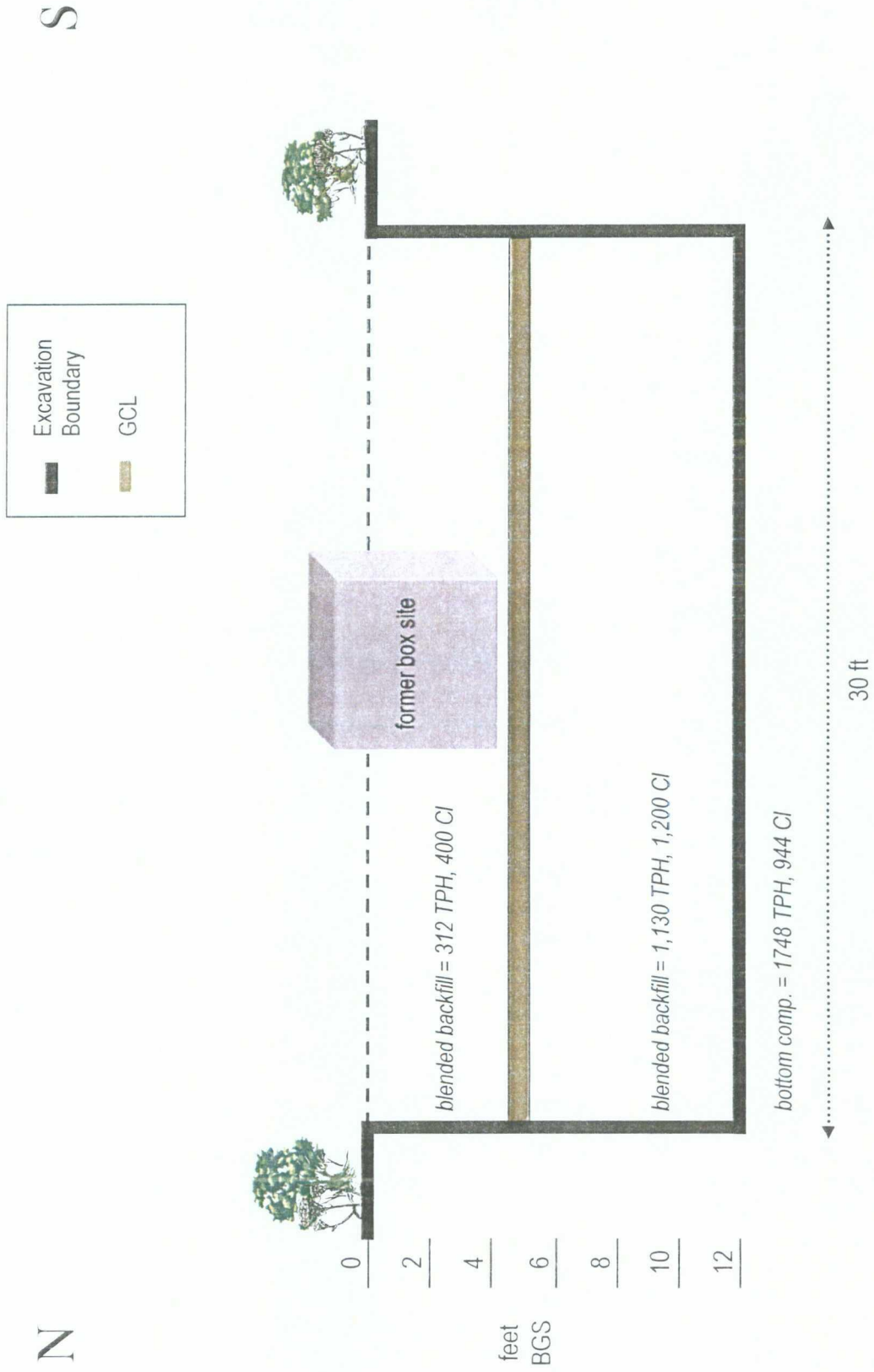
SIGNATURE _____

Jordan Wolff

DATE: 1-2-09

Vacuum Jct C-31
Unit 'C', Sec. 31, T17S, R35E

Excavation Cross-Section



2009 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: Vacuum
Site: Jct. C-31

Date: 5/5/2009
Sampler: Jordan Woodfin

Laboratory: Cardinal
Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
4-wall composite at 30 ft x 20 ft	North Wall	94	<0.050	<0.050	0.363	1.48
	South Wall	414				
	East Wall	97				
	West Wall	203				
				LAB COMPOSITE (mg/kg)		
			<0.050	<0.050	0.379	1.48

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)

2009 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: Vacuum
Site: Jct. C-31

Date: 5/5/2009
Sampler: Jordan Woodfin

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	250	<0.050	<0.050	<0.050	2.77
	2	22.5				
	3	575				
	4	75				
	5	55				
			LAB COMPOSITE (mg/kg)			
			<0.050	<0.050	0.383	2.10

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)

CHLORIDE CONCENTRATION CURVE

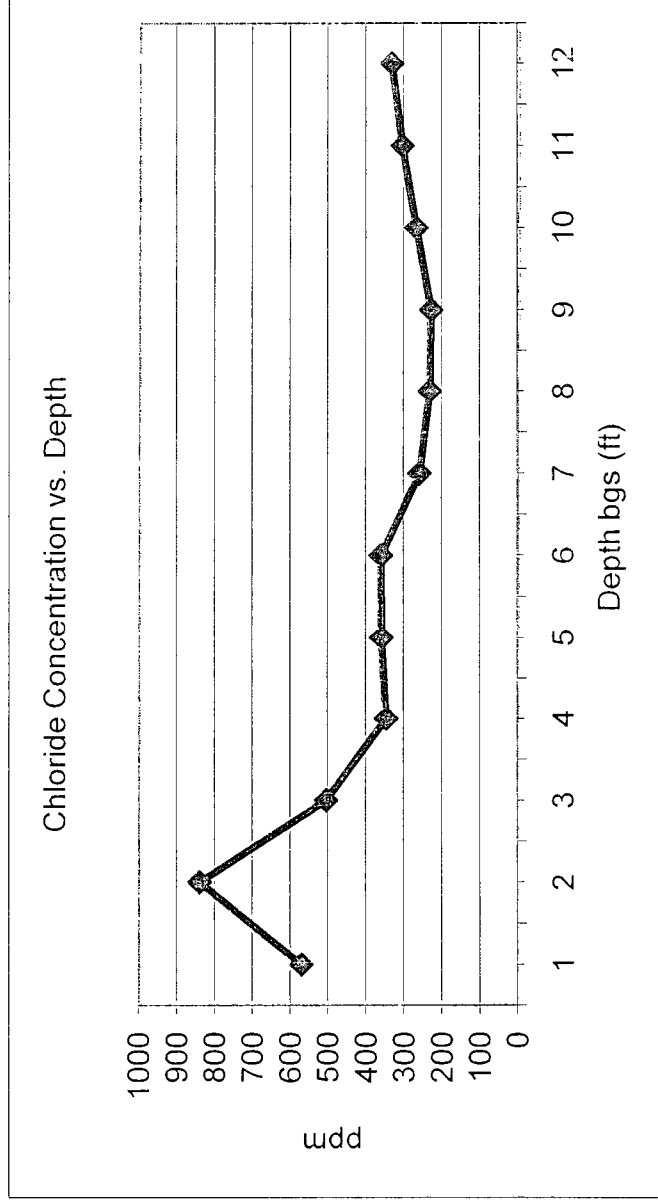
RICE Operating Company

Vacuum Jct C-31

Unit 'C', Sec. 31, T17S, R35E

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

Depth bgs (ft)	[C] ppm
1	570
2	840
3	504
4	346
5	359
6	360
7	258
8	231
9	227
10	266
11	303
12	331



Groundwater = 117 ft