

1R - 425-82

REPORTS

DATE:

3-18-10

Vac Jet F-31
2009

1R425-82

RECEIVED

APR - 6 2009
Environmental Subject
Oil Conservation Division

DISCLOSURE

RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT

RECEIVED
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. F-31	F	31	17S	35E	Lea	eliminated		

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

Depth to Groundwater 106 feet NMOCD SITE ASSESSMENT RANKING SCORE: 30*

Date Started 2/17/2009 Date Completed 4/7/2009 OCD Witness no

Soil Excavated 66.7 cubic yards Excavation Length 10 Width 15 Depth 12 feet

Soil Disposed 72 cubic yards Offsite Facility Sundance and CRI Location Eunice and Hobbs, NM

FINAL ANALYTICAL RESULTS: Sample Date 3/10/2009, 3/11/2009, 3/24/2009 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	Chlorides mg/kg
4-WALL COMP.	<0.050	<0.050	0.111	1.14	116	1,960	1,620
BOTTOM COMP.	<0.050	<0.050	1.28	3.14	206	1,680	1,010
BLENDED BACKFILL	PID = 71 (field)				67.0	1,050	1,260
BLENDED BACKFILL II	PID = 41.8 (field)				<10.0	1,300	544

General Description of Remedial Action: This junction was addressed during the Vacuum SWD System Abandonment. After the former box was removed, an investigation was conducted at the former junction box site using a backhoe to collect soil samples at regular intervals creating a 10x25x12-ft excavation. Chloride field tests performed on each sample yielded concentrations that increased with depth. Organic vapors, measured using a PID, yielded some elevated concentrations. The excavated soil was blended on site and representative composite samples were collected from the excavation bottom, walls, and blended backfill. Laboratory analysis of the representative composite samples confirmed elevated concentrations of chloride and TPH. BTEX concentrations were below NMOCD guidelines. The blended backfill was further blended on site with clean, imported soil and a representative composite sample was analyzed by a commercial laboratory. The blended backfill was returned to the excavation to ground surface and contoured to the surrounding area. On 4/30/2009, the 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 of potential groundwater impact on 3/5/2010.

*A water well is located 834 ft south of the location.

ADDITIONAL EVALUATION IS HIGH PRIORITY

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

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	1,528
bottom comp.	12'	908
blended backfill	n/a	880
blended backfill II	n/a	695
background	6"	252
vertical delineation trench 15 ft West of the junction (source)	1'	425
	2'	290
	3'	478
	4'	508
	5'	651
	6'	1,986
	7'	3,227
	8'	3,796
	9'	5,032
	10'	4,018
	11'	3,749
	12'	3,087

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 3-18-10

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

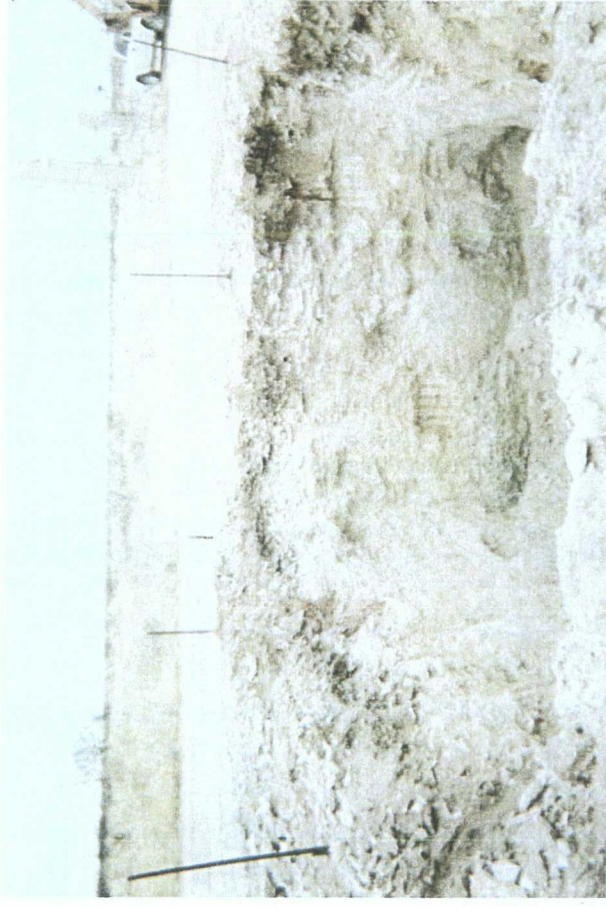
Vacuum Jct. F-31

Unit F, Section 31, T17S, R35E



collecting a soil sampling, facing west

2/18/2009



10x25x12-ft excavation, facing east

3/11/2009



backfilling the site, facing west

4/6/2009



seeding the backfilled site, facing west

4/30/2009



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: 03/11/09
Reporting Date: 03/16/09
Project Number: NOT GIVEN
Project Name: VACUUM JCT F-31
Project Location: VACUUM JCT F-31

Sampling Date: 03/10/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB/TR

COPY

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C ₆ -C ₁₀) (mg/kg)	(>C ₁₀ -C ₂₅) (mg/kg)	(mg/kg)

ANALYSIS DATE	03/13/09	03/13/09	03/11/09
H17048-1 5PT. BTM COMP.	206	1,680	1,010
Quality Control	478	529	500
True Value QC	500	500	500
% Recovery	95.6	106	100
Relative Percent Difference	6.5	10.9	<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.

Chemist

Date

H17048 TOL RICE

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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of 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

Receiving Date: 03/11/09
Reporting Date: 03/12/09
Project Number: NOT GIVEN
Project Name: VACCUM JCT-31
Project Location: VACCUM JCT-31

Sampling Date: 03/10/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: ZL

COPY

LAB NUMBER SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	03/11/09	03/11/09	03/11/09	03/11/09
H17048-1 5PT BTM COMP	<0.050	<0.050	1.28	3.14
H17048-2-6 COMPOSITE OF BTM GRAB PT. 1 - 5	<0.050	<0.050	1.71	3.70
Quality Control	0.049	0.049	0.048	0.144
True Value QC	0.050	0.050	0.050	0.150
% Recovery	98.0	98.0	96.0	96.0
Relative Percent Difference	3.4	4.1	5.6	6.0

METHOD: EPA SW-846 8021B

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

Chemist

Date

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 for damages, injury, or loss of any kind, including but not limited to consequential damages, 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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 10-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 100

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Vacuum	F-31	F	31	17s	35E

SAMPLE ID	PID	SAMPLE ID	PID
5pt Btar Comp.	292		
pt 1	342		
pt 2	296		
pt 3	133		
pt 4	275		
pt 5	432		

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

SIGNATURE:

Jordan W. Wolf

DATE:

3-10-09



ARDINAL 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

Receiving Date: 03/11/09
Reporting Date: 03/16/09
Project Number: NOT GIVEN
Project Name: VACUUM JCT F-31
Project Location: VACUUM JCT F-31

Sampling Date: 03/11/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB/TR

COPY

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

ANALYSIS DATE	03/13/09	03/13/09	03/12/09
H17050-1 4 WALL COMP.	116	1,960	1,620
H17050-6 BLENDED BACKFILL	67.0	1,050	1,260
Quality Control	478	529	500
True Value QC	500	500	500
% Recovery	95.6	106	100
Relative Percent Difference	6.5	10.9	<0.1

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

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

Chemist

Date

H17050 TCL RICE

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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of 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
FAX TO: (575) 397-1471

Receiving Date: 03/11/09
Reporting Date: 03/16/09
Project Number: NOT GIVEN
Project Name: VACCUM JCT F-31
Project Location: VACCUM JCT F-31

Sampling Date: 03/11/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: ZL

COPY

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
------------	-----------	--------------------	--------------------	-----------------------------	-----------------------------

ANALYSIS DATE		03/13/09	03/13/09	03/13/09	03/13/09
H17050-1	4 WALL COMP	<0.050	<0.050	0.111	1.14
H17050-2-5	COMPOSITE OF NORTH, SOUTH, EAST, & WEST WALLS	<0.050	<0.050	0.062	1.21
Quality Control		0.050	0.050	0.049	0.150
True Value QC		0.050	0.050	0.050	0.150
% Recovery		100	100	98	100
Relative Percent Difference		1.6	<1.0	<1.0	<1.0

METHOD: EPA SW-846 8021B

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

Chemist

Date

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 must be filed within one year of the date of receipt 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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

ARDINAL LABORATORIES

NAME: RICE OPERATING

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

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: 100

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Vacuum	F-31	F	31	175	35E

SAMPLE ID	PID	SAMPLE ID	PID
Wall Comp	212	Blended Backfill	71
E. Wall	290		
W. Wall	111		
N. Wall	120		
S. Wall	175		

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

SIGNATURE

Jordan W. Wolf

DATE: 3-11-09



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

Receiving Date: 03/24/09
Reporting Date: 03/26/09
Project Number: NOT GIVEN
Project Name: VACUUM JCT F-31
Project Location: VACUUM JCT F-31

Sampling Date: 03/24/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: AB/TR

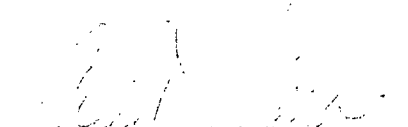
COPY

LAB NUMBER	SAMPLE ID	GRO	DRO	Cl*
		(C ₆ -C ₁₀)	(>C ₁₀ -C ₂₃)	
		(mg/kg)	(mg/kg)	(mg/kg)

ANALYSIS DATE	03/25/09	03/25/09	03/25/09
H17114-1 BLENDED BACKFILL	<10.0	1,300	544
Quality Control	402	440	500
True Value QC	500	500	500
% Recovery	80.4	88.0	100
Relative Percent Difference	3.2	18.2	<0.1

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

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


Chemist


Date


H17114 TOL RICE

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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

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

PID METER CALIBRATION & FIELD REPORT FORM



Serial No: 590-000504

Serial No: 110-013676

LOT NO: 08-3425	EXPIRATION DATE: 10-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 99.9

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

[illegible]

SIGNATURE

DATE: 3-24-89

2009 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: Vacuum
Site: Jct. F-31

Date: 3/10/2009
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 10 ft x 15 ft	North Wall	120	<0.050	<0.050	0.111	1.14
	South Wall	175				
	East Wall	290				
	West Wall	111				
			LAB COMPOSITE (mg/kg)			
			<0.050	<0.050	0.062	1.21

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. F-31

Date: 3/10/2009
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	342	<0.050	<0.050	1.28	3.14
	2	296				
	3	133				
	4	275				
	5	432				
			LAB COMPOSITE (mg/kg)			
			<0.050	<0.050	1.71	3.70

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

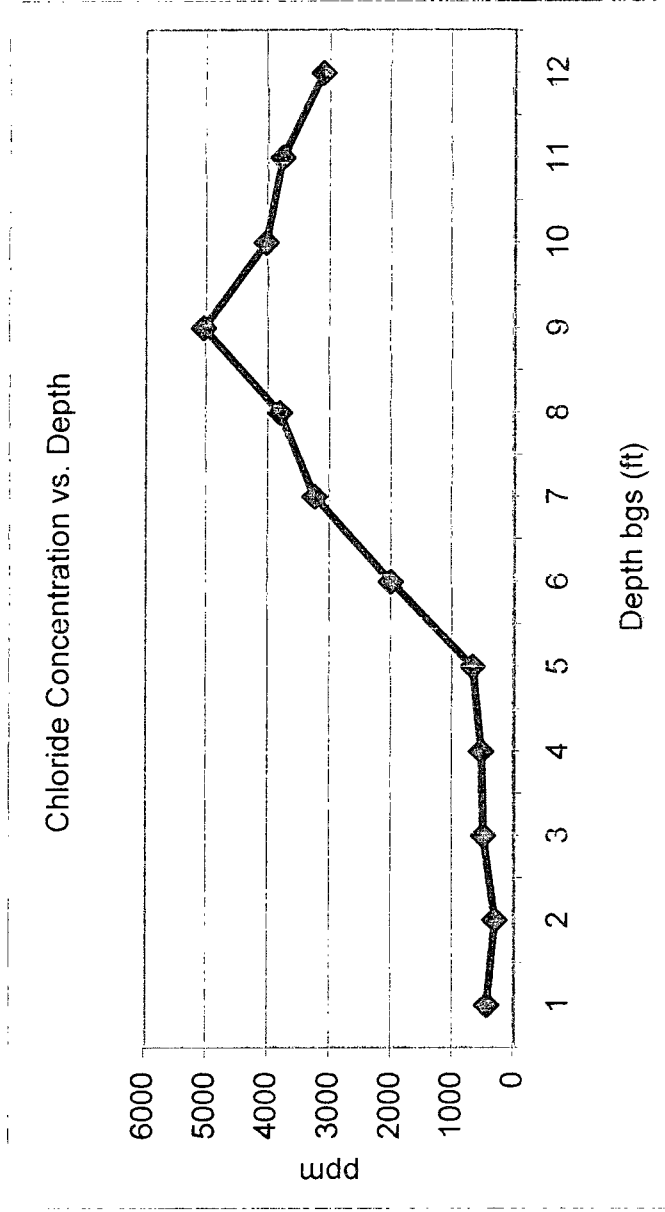
RICE Operating Company

Vacuum Jct. F-31

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

Backhoe samples at 20 ft West of the junction (source)

Depth bgs (ft)	[Cl ⁻] ppm
1	425
2	290
3	478
4	508
5	651
6	1986
7	3227
8	3796
9	5032
10	4018
11	3749
12	3087



Groundwater = 106 ft