

AP – 71

STAGE 1
ABATEMENT PLAN

DATE:
3-23-07

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MAR 26 2007
Environmental Bureau
Oil Conservation Division

AP-71
Stage 1 Abatement
Plan

3-23-07

ARCADIS U.S., Inc.
1004 North Big Spring Street
Suite 300
Midland
Texas 79701
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www.arcadis-us.com

Sent Certified Mail Return Receipt No. 7002 2410 0001 5812 9855

Mr. Ed Hansen
New Mexico Energy, Minerals & natural Resources Department
1220 S. ST. Francis Drive
Santa Fe, New Mexico 87505

ENVIRONMENTAL

Subject:
BD H-35 Emergency Overflow Pit, NMOCD Case No. IR0216
Stage 1 Abatement Plan Proposal

Date:
March 23, 2007

Dear Mr. Hansen,

Contact:
Sharon Hall

Respectfully submitted on behalf of Rice Operating Company (ROC) is a Stage 1 Abatement Plan Proposal for the BD H-35 Emergency Overflow Pit (NMOCD Case No. IR0216). If you have any questions or need additional information please call Kristin Pope (ROC) at (505) 393-9174 or me at (432) 687-5400.

Phone:
432 687-5400

Sincerely,

Email:
shall@arcadis-us.com
Our ref:
MT000846.0001

ARCADIS U.S., Inc.

Sharon E. Hall

Sharon E. Hall
Site Evaluation Department Manager

Copies:
Chris Williams, NMOCD Hobbs
Kristin Pope, ROC

NOTICE OF PUBLICATION

**State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division**

Notice is hereby given that pursuant to New Mexico Oil Conservation Division Regulations, the following Stage 1 Abatement Plan Proposal has been submitted to the Director of the Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

Rice Operating Company, Carolyn Doran Haynes, Engineering Manager, Telephone (505) 393-9174, 122 West Taylor, Hobbs, New Mexico 88240, has submitted a Stage 1 Abatement Plan Revision Proposal for the former emergency overflow pit at the H-35 facility of the Blinebry-Drinkard Salt water Disposal System located in Section 35, Township 22 south, Range 37 east, Lea County, New Mexico, near the town of Eunice, New Mexico. Soil impacts at the site are chlorides. Groundwater samples exhibit elevated chloride concentrations. The Stage 1 Abatement Plan Proposal presents the following site soil and groundwater investigation activities: Perform a one-mile water well inventory, further delineation of the vertical and lateral extent of soil impact, and investigation of groundwater impacts.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The Stage 1 Abatement Plan Revision Proposal may be viewed at the above address or at the Oil Conservation Division District Office, 1625 N. French Drive, Hobbs, New Mexico 88240, Telephone (505) 393-6161 between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed Stage 1 Abatement Plan, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which written comments may be submitted to him.

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MAR 26 2007
Environmental Bureau
Oil Conservation Division

Sharon E. Hall
Site Evaluation Department Manager

BD H-35 Emergency Overflow Pit
NMOC Case No. IRO216
Stage I Abatement Plan Proposal
Rice Operating Company Hobbs, New
Mexico

Prepared for:
Rice Operating Company

Prepared by:
ARCADIS G&M, Inc.
1004 N. Big Spring Street
Suite 300
Midland,
Texas 79701
Tel 432.687.5400
Fax 432.687.5401

Our Ref.:
MT000846.0001.00001

Date:
March 23, 2007

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1. Executive Summary

The subject site is a former emergency overflow pit at the H-35 facility of the Blinebry-Drinkard Salt Water Disposal System operated by Rice Operating Company (ROC). The site is located in Section 35, Township 22 south, Range 37 east, Lea County, New Mexico near the city of Eunice (Figure 1).

Groundwater impact was identified during the delineation of the emergency overflow pit. Delineation activities were conducted in accordance with the NMOCD-approved work plan for this site. On December 21, 2005 a 2-inch monitoring well (MW-1) was installed near the southwest corner of the pit (Figure 2). A water level was recorded at 43.83 feet below measuring point. The monitor well has been sampled quarterly since installation.

The vadose zone exhibits elevated concentrations of chlorides. Groundwater samples exhibit elevated chloride and total dissolved solids (TDS) concentration. Hydrocarbon constituents including benzene, toluene, ethylbenzene and xylenes (BTEX) were not detected.

2. Chronology of Events

Two trenches adjacent to the pit on the south side and three trenches adjacent to the pit on the east side were excavated to a depth of 12 to 14 feet below ground surface (bgs). Soil samples were collected and analyzed in the field for chlorides.

A Form C-103 was completed for this site on April 2, 2004 and submitted to the NMOCD. The notice to delineate and close the emergency overflow via soil borings in accordance with the NMOCD-approved "Generic Closure Plan for Permitted Emergency Overflow Pits" (revised 2/23/2000) was given a NMOCD Site Assessment Score of 20.

Further delineation activities were performed on June 1, 2004. Two boreholes were drilled to a depth of 40 and 45 feet bgs respectively.

An investigation work plan proposing the drilling of a monitor well was submitted to NMOCD on August 9, 2004 and approved by NMOCD on November 9, 2005. Pursuant to the NMOCD approved workplan a 2-inch monitoring well (MW-1) was installed near the southwest corner of the pit on December 21, 2005.

ROC notified the NMOCD of groundwater impact on January 16, 2006. The well is sampled quarterly in accordance with NMOCD guidelines.

3. Background

The site location is the H-35 SWD facility terminal for the BD SWD system and emergency overflow pit. The pit is no longer in use. In February 2004, five trenches were excavated to a depth of 12 to 14 feet below ground surface (bgs). Two were located adjacent to the pit on the south side and three located adjacent to the pit on the east side. Soil samples were collected and analyzed in the field for chlorides using field adapted Method 9253. Photo-ionization detector (PID) readings were relatively low.

Delineation activities were performed on June 1, 2004. Two boreholes were drilled (in the southwest and northeast corner of the pit) to a depth of 40 and 45 feet bgs respectively. Moisture was encountered at a depth of approximately 42 feet bgs.

Soil samples were collected and analyzed in the field for chlorides using field adapted Method 9253. Three borehole soil samples were submitted for laboratory analysis for chlorides using standard method 4500 Cl⁻B. Two soil samples were submitted for analysis for gasoline range organics (GRO) and diesel range organics (DRO) using USEPA Method SW-846 8015 M. DRO and GRO were not detected.

A 2-inch monitoring well (MW-1) was installed near the southwest corner of the pit on December 21, 2005. A water level was recorded at 43.83 feet below measuring point. The monitor well has been sampled quarterly since installation. Chloride and TDS concentrations exceed New Mexico Water Quality Control Commission (WQCC) concentrations. BTEX was not detected in any of the groundwater samples.

4. Geology and Hydrogeology

4.1 Regional and Local Geology

The subject site lies in southern Lea County in the Pecos valley section of the Great Plains physiographic province. The site lays within the Eunice Plain, which is bounded by the South Plain to the south, the Rattlesnake Ridge to the east, the High Plains to the northeast, the Laguna Valley and Gramma Ridge Area to the northwest, the San Simon Ridge and San Simon Sale to the west and the Antelope Ridge Area to the southwest. An estimated 80% of southern Lea County is covered by sand. Shin oak, bear grass and

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NMOCD Case No. IRO216
Stage 1 Abatement Plan
Rice Operating Company
Hobbs, New Mexico

burr grass dominate the areas of sand cover. Elsewhere, the vegetation is grama grass, burr grass and mesquite.

4.2 Regional and Local Hydrogeology

The Ogallala Formation is the principal source of groundwater in the subject area. Depth to groundwater in Lea County ranges from approximately 12 to approximately 300 feet bgs. The Ogallala consists of predominantly coarse fluvial conglomerate and sandstone and fine-grained Eolian siltstone and clay. Where present in the subject area, the Ogallala unconformably overlies Triassic redbeds. The regional groundwater gradient is to the east/southeast. The local groundwater gradient is very flat and to the southwest. Depth to groundwater at the subject site is approximately 44 feet bgs. Subsurface geology in the subject area consists of approximately 15 to 20 feet of loose, fine-grained, calcareous sand underlain by fine to medium-grained sand.

5. Subsurface Soils

Soil samples collected from trenches in February 2004 and analyzed in the field using field adapted Method 9253 for chlorides indicated elevated chloride concentrations in the vadose zone. Photo-ionization detector (PID) readings were relatively low.

To further delineate the depth of impact two boreholes were drilled on June 1, 2004. The boreholes were located southwest and northeast corner of the pit to a depth of 40 and 45 feet bgs respectively. Moisture was encountered at a depth of approximately 42 feet bgs.

Soil samples were collected and analyzed in the field for chlorides using field adapted Method 9253. Chloride concentrations exhibited decreasing concentrations below 20 to 25 feet bgs. PID readings were relatively low. Field analytical results and PID readings are shown in Table 1.

Three borehole soil samples were submitted for laboratory analysis for chlorides using standard method 4500Cl⁻B. Two soil samples were submitted for analysis for gasoline range organics (GRO) and diesel range organics (DRO) using USEPA Method SW-846 8015 M. DRO and GRO was not detected. Laboratory analytical results are shown in Table 2.

6. Groundwater Quality

A 2-inch monitoring well (MW-1) was installed near the southwest corner of the pit on December 21, 2005. A water level was recorded at 43.83 feet below measuring point. The monitor well has been sampled quarterly since installation. Chloride and TDS concentrations exceed WQCC standards. BTEX was not detected in any of the groundwater samples. Groundwater analytical results are shown in Table 3.

6.1 Hydrocarbons in Groundwater

No free-phase hydrocarbons have been detected in groundwater. The monitor well MW-1 is analyzed for BTEX during each quarterly sampling event and no BTEX has been detected in the groundwater samples.

7. Stage 1 Abatement Plan

7.1 Water Well Inventory

A one-mile water well inventory will be performed. The water well inventory will include a review of water well records listed on the New Mexico State Engineer Office and United States Geological websites and windmills indicated on applicable USGS topographic maps. It will also include a visual search for water wells.

7.2 Delineation of Soil Impacts

Six soil borings (SB3-SB8) will be installed at locations adjacent to the former pit (Figure 3). Soil samples will be collected at five-foot intervals screened in the field using a PID and field tested for chlorides using field adapted Method 9253. Soil lithology and the presence of any observed staining or odor will be recorded. The boring will be advanced to a minimum depth of 20 feet bgs. If field chloride concentrations are less than 250 mg/kg the soil boring will be terminated at a depth of 20 feet BGS. If chloride concentrations are greater than 250 mg/kg the soil boring will be advanced to a depth where chloride concentrations decline to below 250 mg/kg or to groundwater, whichever depth is shallower.

7.3 Identify if Groundwater is impacted

Two 2- inch monitor wells will be installed at the site (Figure 3). The monitor wells will be constructed of Schedule 40 PVC blank and the well screen will consist of

Schedule 40 PVC with 0.020 inch slots. 15 feet of well screen will be installed, 5 feet above the groundwater table and 10 foot below.

7.4 Groundwater Monitoring

After development of the monitor well a groundwater sample will be collected from each of the monitoring wells and submitted for laboratory analysis for chlorides, TDS, total alkalinity, sulfate and BTEX. Based on the laboratory analytical results the sampling program may be modified to not include BTEX as it is not anticipated that BTEX will be detected.

7.5 Reporting

A Final Investigation report detailing investigation activities and results will be submitted to the OCD.

8. Quality Assurance/Quality Control

Samples will be collected and analyzed in accordance with accepted practices and USEPA methods.

For collection of groundwater samples, conductivity, pH and temperature will be measured until three successive readings show stabilization.

Purge water and decontamination water will be collected, contained and transported to an ROC disposal well for disposal.

All samples, both soil and groundwater, will be immediately placed on ice and maintained at 4° C until received by the laboratory.

8.1 Decontamination Procedures

Non-disposable equipment will be decontaminated using the following procedures:

- Wash with Alconox® detergent and potable water solution;
- Rinse with potable water;
- Rinse with distilled water; and
- Allow to air dry.

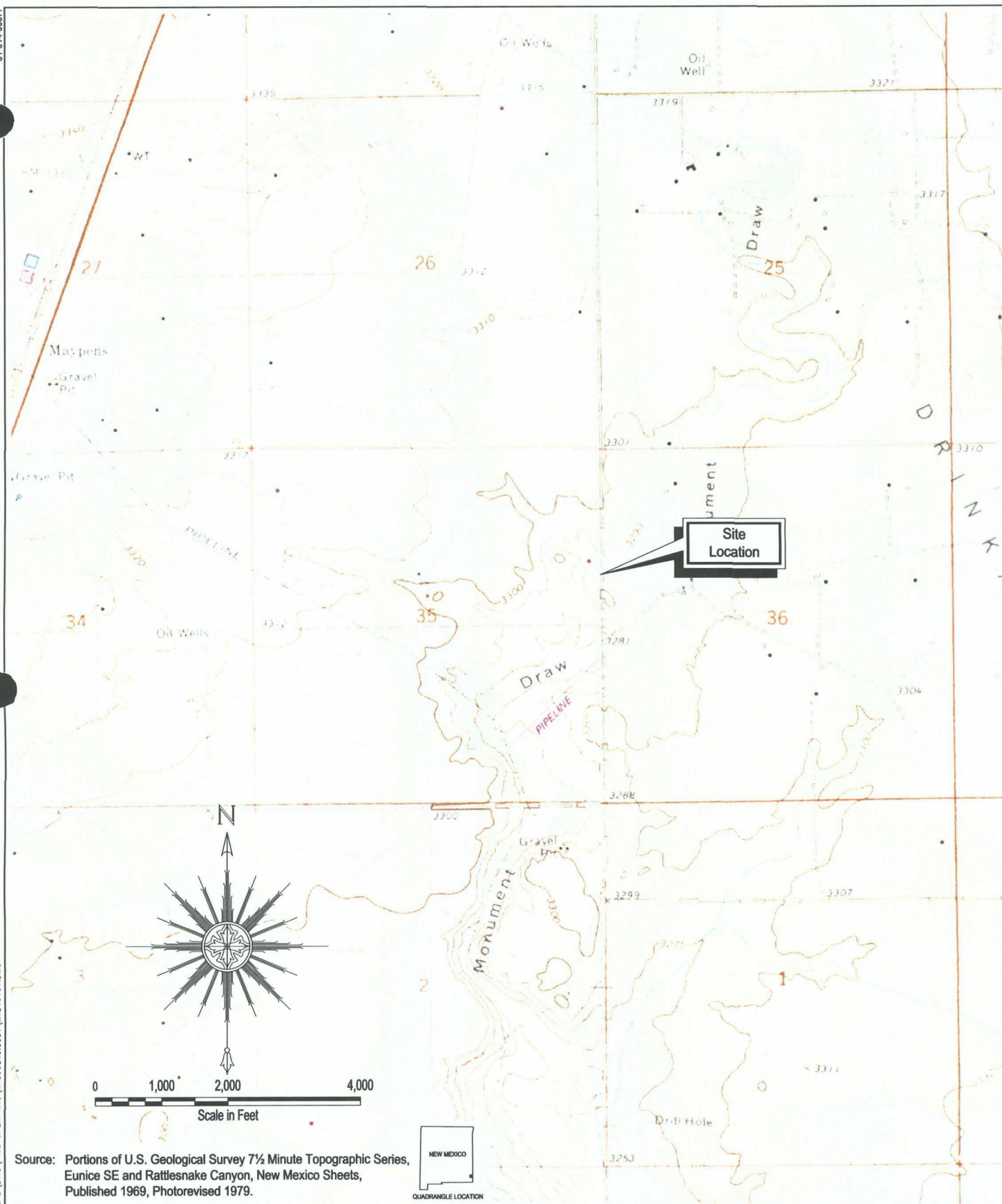
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BD H-35 Emergency
Overflow Pit
NMOCD Case No. IRO216
Stage 1 Abatement Plan
Rice Operating Company
Hobbs, New Mexico

It is anticipated that groundwater samples will be collected with disposable equipment (disposable bailers) and will, therefore do not require decontamination.

9. Proposed Schedule of Activities

Public Notice notices will be posted in newspapers and surface owners will be sent notice letters following approval by NMOCD that this plan is administratively complete. NMOCD will be sent proof of public notice and a request for approval to proceed with field activities. We anticipate completing field activities within 45 days of the Public Notice period. Please note that ROC will need to obtain access for drilling from the landowner and that this may delay the start of investigation activities. A final investigation report detailing the results of the investigation will be submitted to NMOCD.



Source: Portions of U.S. Geological Survey 7½ Minute Topographic Series, Eunice SE and Rattlesnake Canyon, New Mexico Sheets, Published 1969, Photorevised 1979.



Area Manager
A. Schmidt

Project Manager
S. Hall

Task Manager
S. Hall

Technical Review
S. Tischer



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Midland, TX 79701-3383
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Rice Operating Company
Blinebry Drinkard (BD) SWD System – H-35 Emergency Overflow Pit

Site Location Map

Lea County, New Mexico

Project Number
MT000846.0001

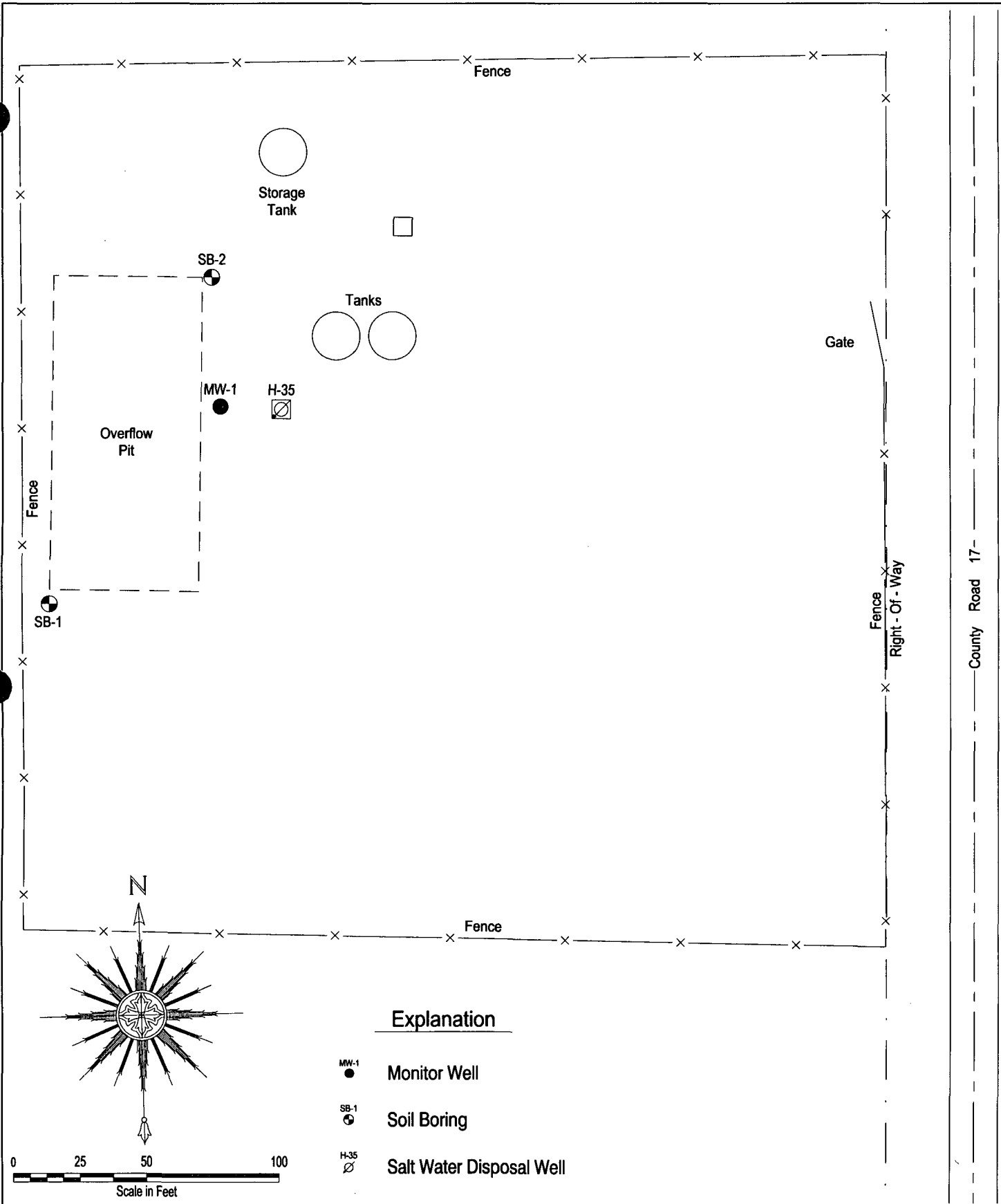
Drawing Date
26 December 2006

Figure




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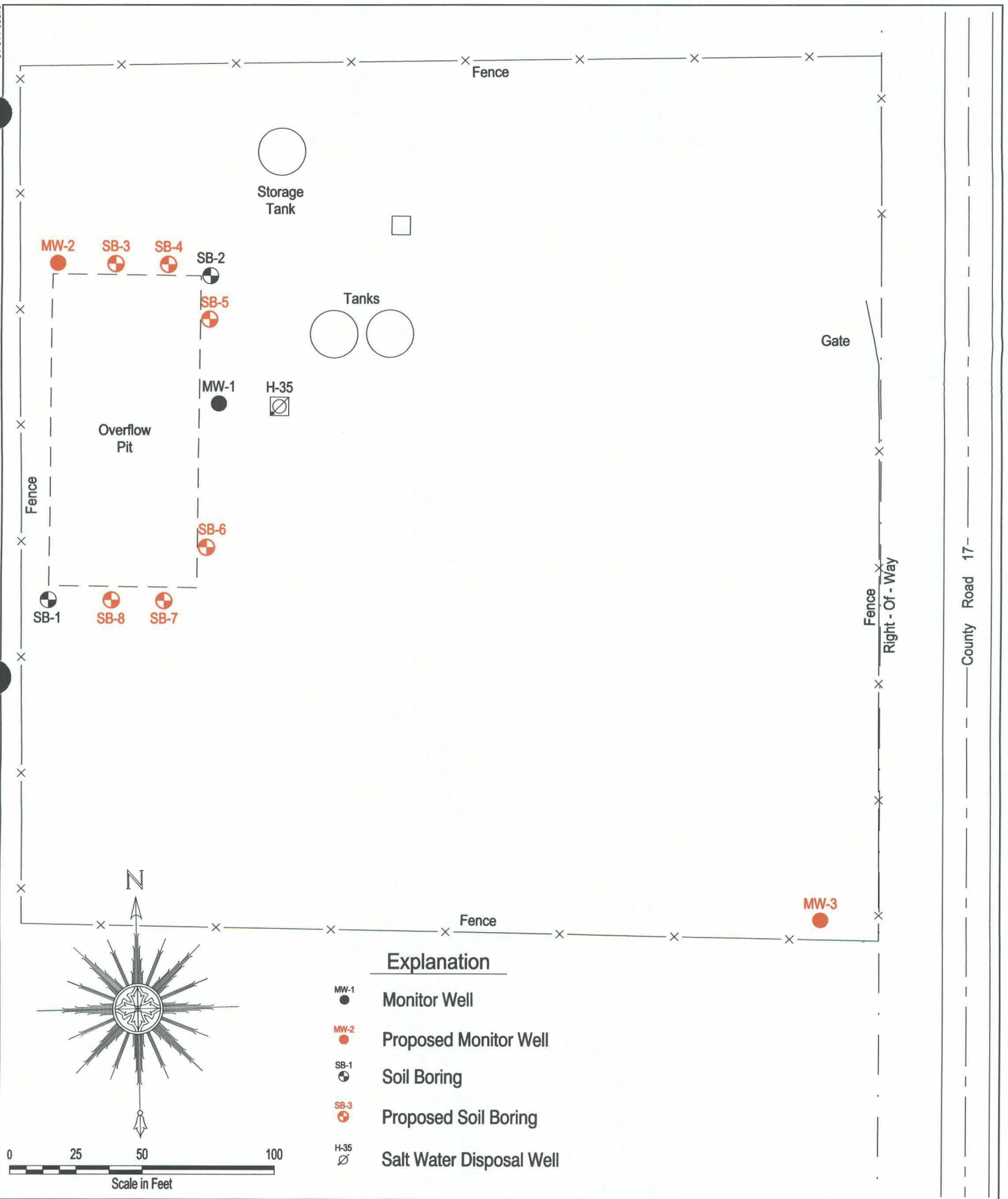
3/22/07 18:04 HCLARD G:\AUTOCAD\DWG\RICE OPERATING\MT000846.000\1\MTB45102.DWG



Explanation

-  Monitor Well
-  Soil Boring
-  Salt Water Disposal Well

<p>Area Manager A. Schmidt</p> <p>Project Manager S. Hall</p> <p>Task Manager S. Hall</p> <p>Technical Review S. Tischer</p>	<p> ARCADIS</p> <p>1004 North Big Spring Street Suite 300 Midland, TX 79701-3383 Tel: 432-687-5400 Fax: 432-687-5401 www.arcadis-us.com</p>	<p>Rice Operating Company Blinberry Drinkard (BD) SWD System – H-35 Emergency Overflow Pit</p> <p>Monitor Well and Soil Boring Locations</p> <p>Lea County, New Mexico</p>	<p>Project Number MT000846.0001</p> <p>Drawing Date 26 December 2006</p> <p>Figure 2</p>
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Explanation

- MW-1 ● Monitor Well
- MW-2 ● Proposed Monitor Well
- SB-1 ● Soil Boring
- SB-3 ● Proposed Soil Boring
- H-35 □ Salt Water Disposal Well

Area Manager	A. Schmidt
Project Manager	S. Hall
Task Manager	S. Hall
Technical Review	S. Tischer



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Rice Operating Company
Blinberry Drinkard (BD) SWD System – H-35 Emergency Overflow Pit

Proposed Monitor Well and Soil Boring Locations

Lea County, New Mexico

Project Number	MT000846.0001
Drawing Date	26 December 2006
Figure	3

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Table 1-Soil Field Analytical Results

Sample ID and Depth	PID Reading	Field Chloride (mg/kg)
Borehole 1 (SW) 1'	2	2,091
Borehole 1 (SW) 2'	1.1	1,957
Borehole 1 (SW) 3'	1.3	1,910
Borehole 1 (SW) 4'	1.2	2,129
Borehole 1 (SW) 10'	1.5	1,624
Borehole 1 (SW) 15'	2.3	3,155
Borehole 1 (SW) 20'	2.3	8,914
Borehole 1 (SW) 25'	2.4	3,799
Borehole 1 (SW) 30'	8.1	2,100
Borehole 1 (SW) 35'	1.3	2,233
Borehole 1 (SW) 40'	3.2	517
Borehole 2 (NE) 1'	8.8	1,211
Borehole 2 (NE) 5'	1.5	2,926
Borehole 2 (NE) 10'	2.5	1,611
Borehole 2 (NE) 15'	6.5	2,772
Borehole 2 (NE) 25'	3.0	5,334
Borehole 2 (NE) 30'	5.4	3,078
Borehole 2 (NE) 35'	1.0	2,562
Borehole 2 (NE) 40'	2	1,091

NA= Not Analyzed

Table 2-Soil Laboratory Analytical Results

Sample ID and Depth	GRO	DRO	Chlorides
Borehole 1 (SW) 35'bgs	NA	NA	2,559
Borehole 1 (SW) 40' bgs	<10.0	<10.0	976
Borehole 2 (NE) 40' bgs	<10.0	<10.0	1,260

NA= Not analyzed

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Table 3
Groundwater Analytical Results

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
1	43.64	57.2	8.8	30	1/4/2006	1880	4290	<0.001	<0.001	<0.001	<0.001	383
1	43.79	57.2	8.7	30	4/24/2006	2360	5380	<0.001	<0.001	<0.001	<0.001	405
1	43.92	57.2	8.6	35	7/19/2006	3040	8170	<0.001	<0.001	<0.001	<0.001	580
1	43.83	57.2	8.7	30	10/11/2006	2880	7460	<0.001	<0.001	<0.001	<0.001	561

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Appendix A

Monitor Well Boring Lithology Log



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WELL LOG

WELL NO.

MW-1

1004 N. Big Spring St. Suite 300, Midland, TX 79701-3383

Tel: 432/687-5400 Fax: 432/687-5401

Page 1 of 1

PROJECT NUMBER: MT000846.0001

CLIENT NAME: Rice Operating Company

PROJECT NAME: BD H-35

SITE LOCATION:

Lea County, New Mexico

DRILLING CO: White Drilling Co.

DRILLING METHOD: Rotary/Air

SAMPLE METHOD: Shovel

DATE BEGUN: 12/21/05

DATE COMPLETED: 12/21/05

DRILLER: R. Allen

ELEVATION (SURF.):

LOGGER: R. Lang

ELEVATION (T.O.C.):

FILE NAME: MW-1.dat

UNIQUE NUMBER: 31-014-00781

STATIC WATER LEVEL:

MEAS. PT.: T.O.C.

DATE:

HOLE SIZE(S): 7 7/8"

TOTAL DEPTH: -55.0'

SURFACE COMPLETION: 8" Locking Steel Sleeve, 3'x3'x6" Conc. Slab

TYPES

DEPTHS

GROUT TYPE: Portland Cement

-20.0' to Surface

SEAL TYPE: Bentonite Chips

-32.0' to -20.0'

SCREEN PACK: 8/16 Sand

-55.0' to -32.0'

CASING TYPE: 4" Diameter Sch. 40 PVC Blank

-34.0' to Surface

—

—

WELL SCREEN: 4" Diameter Sch. 40 PVC, 0.020" slots

-54.0' to -34.0'

PLUG BACK: Bentonite Chips

-54.0'

DEPTH	SAMPLED	SAMPLING METHOD	ANALYZED	MOISTURE	RECOVERY	OVM READING	CHLORIDES (ppm)	LITHOLOGY	DESCRIPTION	WELL INSTALLATION
0										
-5		Shovel				0.000			SAND 10YR 8/3 very pale brown, medium to fine grained, subangular to subrounded, poorly sorted, moist.	
-10		Shovel				0.000	111			
-15		Shovel				0.000	125			
-20		Shovel				0.000	184		SANDSTONE 10YR 8/2 very pale brown, medium grained, subangular to well rounded, weakly cemented, well sorted, dry, CALICHE nodules.	
-25		Shovel				0.000	685			
-30		Shovel				0.000	1,549		SANDSTONE 10R 6/6 light red, fine grained, angular, well sorted, soft, dry.	
-35		Shovel				0.000	1,214		SANDSTONE 2.5Y 8/3 pale yellow, fine grained, subangular to subrounded, well sorted, soft, dry.	
-40		Shovel				0.000	2,415		SANDSTONE 10R 6/6 light red, fine to medium grained, well rounded to subrounded, well sorted, soft to argillaceous, moist.	
-45		Shovel				0.000	1,372		Note: Well became wet at -45'; water level measured -41'. Some SAND interbeds 2.5Y 8/3 pale yellow, fine grained, subangular to subrounded, well sorted.	
-50		Shovel				0.000	363			
-55		Shovel								

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Appendix B

Soil Boring Lithology Logs

Atkins Engineering Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156				LOG OF BORING Test Hole #1 (Page 1 of 1)			
Rice Operating Co. 122 W. Taylor Hobbs, NM 88240				Date : 06-01-04 Drill Start : 0600 Drill End : 1130 Boring Location: :		Site Location : BD H-35 SWD/SW : Overflow Pit Auger Type : Hollow Stem Logged By : Mort Bates	
Contact: Job: RICEOPR.DRL04							

Depth in Feet	GRAPHIC	USCS	Samples	DESCRIPTION	Lab No.	Well: TH-1
0		GC		Clayey Gravel w/ Caliche, Firm, Tan, Dry		Hydrated Bentonite
5				Clayey Gravel, Firm, Tan, Dry		
10		GC		Clayey Gravel, Firm, Tan, Dry		Drill Cuttings Backfill
15				Clayey Gravel w/ Caliche, Firm, Tan, Dry		
20		GM		Silty Gravel w/ Sand, Loose, Tan, Wet		Hydrated Bentonite
25						
30						
35						
40						
Total Depth 40'						
45						

Atkins Engineering Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156				LOG OF BORING Test Hole #2 (Page 1 of 1)			
Rice Operating Co. 122 W. Taylor Hobbs, NM 88240				Date : 06-01-04 Drill Start : 1145 Drill End : 1400 Boring Location: :		Site Location : BD H-35 SWD N/E : Overflow Pit Auger Type : Hollow Stem Logged By : Mort Bates	
Contact: Job: RICEOPR.DRL.04							

Depth in Feet	GRAPHIC	USCS	Samples	DESCRIPTION	Lab No.	
0		SC		Caliche, Firm, Tan, Dry		<div style="border: 1px solid black; padding: 2px;"> Hydrated Bentonite </div> <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> Drill Cuttings Backfill </div> <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> Hydrated Bentonite </div>
5						
10				Clayey Sand, Loose, Tan, Dry		
15						
20						
25				Silty Gravels w/ Sand & Caliche, Firm, Tan, Dry		
30						
35						
40				Clayey Sand, Loose, Red, Wet		
45						
Total Depth 45'						

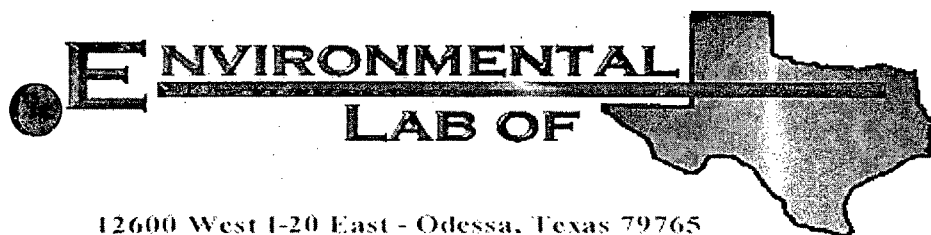
06-15-2004 C:\MTECH46\RICE1\H2.bor



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Appendix C

2006 Laboratory Analytical Results



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD H-35 SWD

Project Number: None Given

Location: Lea County

Lab Order Number: 6A05002

Report Date: 01/13/06

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6A05002-01	Water	01/04/06 09:45	01/04/06 17:00

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6A05002-01) Water									
Benzene	ND	0.00100	mg/L	1	EA60408	01/05/06	01/09/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		92.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.2 %	80-120		"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6A05002-01) Water									
Total Alkalinity	110	2.00	mg/L	1	EA61216	01/12/06	01/12/06	EPA 310.1M	
Chloride	1880	25.0	"	50	EA61009	01/10/06	01/10/06	EPA 300.0	
Total Dissolved Solids	4290	5.00	"	1	EA60605	01/05/06	01/06/06	EPA 160.1	
Sulfate	383	25.0	"	50	EA61009	01/10/06	01/10/06	EPA 300.0	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6A05002-01) Water									
Calcium	444	1.00	mg/L	100	EA60609	01/06/06	01/06/06	EPA 6010B	
Magnesium	247	0.100	"	"	"	"	"	"	
Potassium	28.7	0.500	"	10	"	"	"	"	
Sodium	584	1.00	"	100	"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EA60408 - EPA 5030C (GC)

Blank (EA60408-BLK1)

Prepared: 01/04/06 Analyzed: 01/09/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	34.9		ug/l	40.0		87.2	80-120			
Surrogate: 4-Bromofluorobenzene	36.2		"	40.0		90.5	80-120			

LCS (EA60408-BS1)

Prepared: 01/04/06 Analyzed: 01/09/06

Benzene	0.0528	0.00100	mg/L	0.0500		106	80-120			
Toluene	0.0586	0.00100	"	0.0500		117	80-120			
Ethylbenzene	0.0586	0.00100	"	0.0500		117	80-120			
Xylene (p/m)	0.119	0.00100	"	0.100		119	80-120			
Xylene (o)	0.0591	0.00100	"	0.0500		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.3		ug/l	40.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	38.0		"	40.0		95.0	80-120			

Calibration Check (EA60408-CCV1)

Prepared: 01/04/06 Analyzed: 01/09/06

Benzene	54.1		ug/l	50.0		108	80-120			
Toluene	59.8		"	50.0		120	80-120			
Ethylbenzene	59.5		"	50.0		119	80-120			
Xylene (p/m)	120		"	100		120	80-120			
Xylene (o)	57.0		"	50.0		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.2		"	40.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	36.6		"	40.0		91.5	80-120			

Matrix Spike (EA60408-MS1)

Source: 6A05002-01

Prepared: 01/04/06 Analyzed: 01/09/06

Benzene	0.0516	0.00100	mg/L	0.0500	ND	103	80-120			
Toluene	0.0572	0.00100	"	0.0500	ND	114	80-120			
Ethylbenzene	0.0587	0.00100	"	0.0500	ND	117	80-120			
Xylene (p/m)	0.119	0.00100	"	0.100	ND	119	80-120			
Xylene (o)	0.0588	0.00100	"	0.0500	ND	118	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.9		ug/l	40.0		99.8	80-120			
Surrogate: 4-Bromofluorobenzene	41.4		"	40.0		104	80-120			

Environmental Lab of Texas

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Page 5 of 10

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EA60408 - EPA 5030C (GC)

Matrix Spike Dup (EA60408-MSD1)

Source: 6A05002-01

Prepared: 01/04/06 Analyzed: 01/09/06

Benzene	0.0525	0.00100	mg/L	0.0500	ND	105	80-120	1.92	20	
Toluene	0.0575	0.00100	"	0.0500	ND	115	80-120	0.873	20	
Ethylbenzene	0.0573	0.00100	"	0.0500	ND	115	80-120	1.72	20	
Xylene (p/m)	0.119	0.00100	"	0.100	ND	119	80-120	0.00	20	
Xylene (o)	0.0590	0.00100	"	0.0500	ND	118	80-120	0.00	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	39.6		ug/l	40.0		99.0	80-120			
Surrogate: 4-Bromofluorobenzene	36.8		"	40.0		92.0	80-120			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA60605 - General Preparation (WetChem)										
Blank (EA60605-BLK1)					Prepared: 01/05/06 Analyzed: 01/06/06					
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EA60605-DUP1)					Source: 6A05002-01 Prepared: 01/05/06 Analyzed: 01/06/06					
Total Dissolved Solids	4130	5.00	mg/L		4290			3.80	5	
Batch EA61009 - General Preparation (WetChem)										
Blank (EA61009-BLK1)					Prepared & Analyzed: 01/10/06					
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
LCS (EA61009-BS1)					Prepared & Analyzed: 01/10/06					
Sulfate	9.33		mg/L	10.0		93.3	80-120			
Chloride	11.3		"	10.0		113	80-120			
Calibration Check (EA61009-CCV1)					Prepared & Analyzed: 01/10/06					
Sulfate	9.50		mg/L	10.0		95.0	80-120			
Chloride	8.61		"	10.0		86.1	80-120			
Duplicate (EA61009-DUP1)					Source: 6A06009-06 Prepared & Analyzed: 01/10/06					
Sulfate	552	10.0	mg/L		511			7.71	20	
Chloride	398	10.0	"		394			1.01	20	
Batch EA61216 - General Preparation (WetChem)										
Blank (EA61216-BLK1)					Prepared & Analyzed: 01/12/06					
Total Alkalinity	ND	2.00	mg/L							

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA61216 - General Preparation (WetChem)										
LCS (EA61216-BS1)				Prepared & Analyzed: 01/12/06						
Bicarbonate Alkalinity	198	2.00	mg/L	200		99.0	85-115			
Duplicate (EA61216-DUP1)				Source: 6A05002-01		Prepared & Analyzed: 01/12/06				
Total Alkalinity	109	2.00	mg/L		110			0.913	20	
Reference (EA61216-SRM1)				Prepared & Analyzed: 01/12/06						
Total Alkalinity	96.0		mg/L	100		96.0	90-110			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EA60609 - 6010B/No Digestion

Blank (EA60609-BLK1)

Prepared & Analyzed: 01/06/06

Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							

Calibration Check (EA60609-CCV1)

Prepared & Analyzed: 01/06/06

Calcium	2.06		mg/L	2.00		103	85-115			
Magnesium	2.05		"	2.00		102	85-115			
Potassium	1.87		"	2.00		93.5	85-115			
Sodium	1.84		"	2.00		92.0	85-115			

Duplicate (EA60609-DUP1)

Source: SL30002-01

Prepared & Analyzed: 01/06/06

Calcium	32.6	0.100	mg/L		33.8			3.61	20	
Magnesium	18.0	0.0100	"		18.6			3.28	20	
Potassium	4.45	0.500	"		4.58			2.88	20	
Sodium	34.8	0.100	"		34.1			2.03	20	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
01/13/06 12:33

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

1/13/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

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If you have received this material in error, please notify us immediately at 432-563-1800.



Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: BD H-35 SWD

Project #:

Project Loc: Lea County

張

fax No: (505) 397-1471

1

1

[illegible]

PLEASE Email RESULTS TO: kpriceswd@valornet.com & mfranks@priceswd.com

Sample Containers Intact?

Sample Containers intact?
Labels on container?

Labels on container? ☒ Y

Custody Seal: C0116948

RECEIVED

1

Time

Received by:

ed by:

Date	Time
------	------

Time

Refringished by

13

Time

Received by

Classified by ELO73

Date	Time
------	------

Time .

Laboratory Comments:

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Sent: Rice Operating

Date/Time: 01-04-06 @ 1700

Order #: 6A05002

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	-2-0 C	not frozen
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
Custody Seals intact on sample bottles?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
Chain of custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Container labels legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	

Other observations:

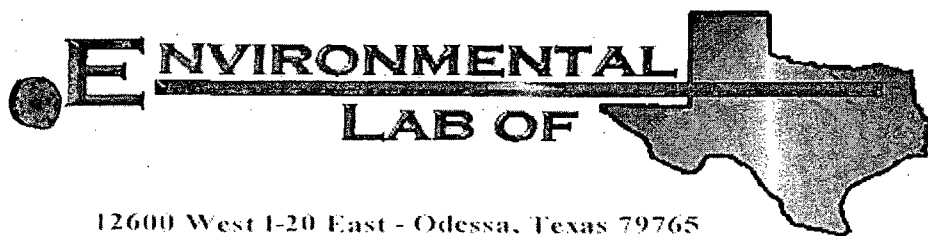
Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:





12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD H-35 SWD

Project Number: None Given

Location: Lea County

Lab Order Number: 6D27009

Report Date: 05/04/06

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6D27009-01	Water	04/24/06 13:00	04/27/06 10:30

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6D27009-01) Water									
Benzene	ND	0.00100	mg/L	1	ED62807	04/28/06	04/30/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		100 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	80-120		"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6D27009-01) Water									
Total Alkalinity	110	2.00	mg/L	1	EE60301	05/03/06	05/03/06	EPA 310.1M	
Chloride	2360	25.0	"	50	EE60116	05/01/06	05/01/06	EPA 300.0	
Total Dissolved Solids	5380	5.00	"	1	EE60115	04/27/06	04/28/06	EPA 160.1	
Sulfate	405	25.0	"	50	EE60116	05/01/06	05/01/06	EPA 300.0	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6D27009-01) Water									
Calcium	628	2.00	mg/L	200	ED62719	04/27/06	04/27/06	EPA 6010B	
Magnesium	268	0.0500	"	50	"	"	"	"	
Potassium	29.0	0.500	"	10	"	"	"	"	
Sodium	806	2.00	"	200	"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch ED62807 - EPA 5030C (GC)

Blank (ED62807-BLK1)

Prepared: 04/28/06 Analyzed: 04/30/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	42.7		ug/l	40.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	42.2		"	40.0		106	80-120			

LCS (ED62807-BS1)

Prepared: 04/28/06 Analyzed: 04/30/06

Benzene	0.0599	0.00100	mg/L	0.0500		120	80-120			
Toluene	0.0580	0.00100	"	0.0500		116	80-120			
Ethylbenzene	0.0551	0.00100	"	0.0500		110	80-120			
Xylene (p/m)	0.120	0.00100	"	0.100		120	80-120			
Xylene (o)	0.0596	0.00100	"	0.0500		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.0		ug/l	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	42.2		"	40.0		106	80-120			

Calibration Check (ED62807-CCV1)

Prepared: 04/28/06 Analyzed: 05/01/06

Benzene	55.0		ug/l	50.0		110	80-120			
Toluene	53.0		"	50.0		106	80-120			
Ethylbenzene	55.9		"	50.0		112	80-120			
Xylene (p/m)	110		"	100		110	80-120			
Xylene (o)	55.9		"	50.0		112	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.0		"	40.0		97.5	80-120			
Surrogate: 4-Bromofluorobenzene	39.1		"	40.0		97.8	80-120			

Matrix Spike (ED62807-MS1)

Source: 6D27008-01

Prepared: 04/28/06 Analyzed: 05/01/06

Benzene	0.0576	0.00100	mg/L	0.0500	ND	115	80-120			
Toluene	0.0568	0.00100	"	0.0500	ND	114	80-120			
Ethylbenzene	0.0587	0.00100	"	0.0500	ND	117	80-120			
Xylene (p/m)	0.120	0.00100	"	0.100	ND	120	80-120			
Xylene (o)	0.0600	0.00100	"	0.0500	ND	120	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.7		ug/l	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	47.5		"	40.0		119	80-120			

Environmental Lab of Texas

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Page 5 of 10

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch ED62807 - EPA 5030C (GC)

Matrix Spike Dup (ED62807-MSD1)

Source: 6D27008-01

Prepared: 04/28/06 Analyzed: 05/01/06

Benzene	0.0597	0.00100	mg/L	0.0500	ND	119	80-120	3.42	20	
Toluene	0.0579	0.00100	"	0.0500	ND	116	80-120	1.74	20	
Ethylbenzene	0.0585	0.00100	"	0.0500	ND	117	80-120	0.00	20	
Xylene (p/m)	0.120	0.00100	"	0.100	ND	120	80-120	0.00	20	
Xylene (o)	0.0598	0.00100	"	0.0500	ND	120	80-120	0.00	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	43.5		ug/l	40.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	46.4		"	40.0		116	80-120			

Environmental Lab of Texas

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Page 6 of 10

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EE60115 - General Preparation (WetChem)

Blank (EE60115-BLK1)

Prepared: 04/27/06 Analyzed: 04/28/06

Total Dissolved Solids ND 5.00 mg/L

Duplicate (EE60115-DUP1)

Source: 6D27015-01

Prepared: 04/27/06 Analyzed: 04/28/06

Total Dissolved Solids 3020 5.00 mg/L 3040 0.660 5

Batch EE60116 - General Preparation (WetChem)

Blank (EE60116-BLK1)

Prepared & Analyzed: 05/01/06

Chloride ND 0.500 mg/L

Sulfate ND 0.500 "

LCS (EE60116-BS1)

Prepared & Analyzed: 05/01/06

Sulfate 9.47 0.500 mg/L 10.0 94.7 80-120

Chloride 9.71 0.500 " 10.0 97.1 80-120

Calibration Check (EE60116-CCV1)

Prepared & Analyzed: 05/01/06

Chloride 9.86 mg/L 10.0 98.6 80-120

Sulfate 8.11 " 10.0 81.1 80-120

Duplicate (EE60116-DUP1)

Source: 6D27008-01

Prepared & Analyzed: 05/01/06

Sulfate 80.0 2.50 mg/L 79.2 1.01 20

Chloride 49.3 2.50 " 49.0 0.610 20

Batch EE60301 - General Preparation (WetChem)

Blank (EE60301-BLK1)

Prepared & Analyzed: 05/03/06

Total Alkalinity ND 2.00 mg/L

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE60301 - General Preparation (WetChem)										
LCS (EE60301-BS1)				Prepared & Analyzed: 05/03/06						
Bicarbonate Alkalinity	214		mg/L	200		107	85-115			
Duplicate (EE60301-DUP1)				Source: 6D26006-01		Prepared & Analyzed: 05/03/06				
Total Alkalinity	29.0	2.00	mg/L		28.0			3.51	20	
Reference (EE60301-SRM1)				Prepared & Analyzed: 05/03/06						
Total Alkalinity	96.0		mg/L	100		96.0	90-110			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
05/04/06 14:10

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch ED62719 - 6010B/No Digestion									
Blank (ED62719-BLK1)									
Prepared & Analyzed: 04/27/06									
Calcium	ND	0.0100	mg/L						
Magnesium	ND	0.00100	"						
Potassium	ND	0.0500	"						
Sodium	ND	0.0100	"						
Calibration Check (ED62719-CCV1)									
Prepared & Analyzed: 04/27/06									
Calcium	2.08		mg/L			85-115			
Magnesium	2.16		"			85-115			
Potassium	1.94		"			85-115			
Sodium	1.96		"			85-115			
Duplicate (ED62719-DUP1)									
Source: 6D26006-01 Prepared & Analyzed: 04/27/06									
Calcium	0.0366	0.0100	mg/L		0.0367		0.273	20	
Magnesium	ND	0.00100	"		ND			20	
Potassium	0.275	0.0500	"		0.275		0.00	20	
Sodium	13.0	0.100	"		12.1		7.17	20	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD H-35 SWD
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471
Reported:
05/04/06 14:10

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By: _____

Raland K Tuttle

Date: _____

5/4/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Rice Op.
 Date/Time: 4/27/00 10:30
 Lot #: 6027009
 Labels: OK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	<u>20</u>	C
Cooling container/cooler in good condition?	<u>Yes</u>	No		
Body Seals intact on shipping container/cooler?	<u>Yes</u>	No	Not present	
Body Seals intact on sample bottles?	<u>Yes</u>	No	Not present	
Chain of custody present?	<u>Yes</u>	No		
Sample Instructions complete on Chain of Custody?	<u>Yes</u>	No		
Chain of Custody signed when relinquished and received?	<u>Yes</u>	No		
Chain of custody agrees with sample label(s)	<u>Yes</u>	No		
Container labels legible and intact?	<u>Yes</u>	No		
Sample Matrix and properties same as on chain of custody?	<u>Yes</u>	No		
Samples in proper container/bottle?	<u>Yes</u>	No		
Samples properly preserved?	<u>Yes</u>	No		
Sample bottles intact?	<u>Yes</u>	No		
Observations documented on Chain of Custody?	<u>Yes</u>	No		
Containers documented on Chain of Custody?	<u>Yes</u>	No		
Sufficient sample amount for indicated test?	<u>Yes</u>	No		
Samples received within sufficient hold time?	<u>Yes</u>	No		
Samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

Other observations:

Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____
 Regarding: _____

Corrective Action Taken:





6701 Aberdeen Avenue, Suite 9
155 McCutcheon, Suite H

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79932 888•588•3443
E-Mail lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Kristen Farris-Pope
Rice Operating Company
122 W Taylor Street
Hobbs, NM, 88240

Report Date: August 17, 2006

Work Order: 6072146



Project Location: Lea County, New Mexico
Project Name: BD H-35 SWD
Project Number: BD H-35 SWD

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
96143	Monitor Well #1	water	2006-07-19	14:20	2006-07-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 96143 - Monitor Well #1

Analysis: Alkalinity
QC Batch: 28340
Prep Batch: 24777

Analytical Method: SM 2320B
Date Analyzed: 2006-07-26
Sample Preparation: 2006-07-25

Prep Method: N/A
Analyzed By: LJ
Prepared By: LJ

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		108	mg/L as CaCo3	1	4.00
Total Alkalinity		108	mg/L as CaCo3	1	4.00

Sample: 96143 - Monitor Well #1

Analysis: BTEX
QC Batch: 28277
Prep Batch: 24759

Analytical Method: S 8021B
Date Analyzed: 2006-07-24
Sample Preparation: 2006-07-24

Prep Method: S 5030B
Analyzed By: MT
Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0951	mg/L	1	0.100	95	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)	1	0.0546	mg/L	1	0.100	55	70.6 - 129.2

Sample: 96143 - Monitor Well #1

Analysis: Cations
QC Batch: 28357
Prep Batch: 24749

Analytical Method: S 6010B
Date Analyzed: 2006-07-26
Sample Preparation: 2006-07-24

Prep Method: S 3005A
Analyzed By: TP
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		698	mg/L	10	0.500
Dissolved Potassium		45.3	mg/L	1	1.00
Dissolved Magnesium		371	mg/L	10	1.00
Dissolved Sodium		719	mg/L	10	1.00

Sample: 96143 - Monitor Well #1

Analysis: Ion Chromatography
QC Batch: 28783
Prep Batch: 25169

Analytical Method: E 300.0
Date Analyzed: 2006-08-02
Sample Preparation: 2006-08-02

Prep Method: N/A
Analyzed By: WB
Prepared By: WB

¹ BFB surrogate recovery outside normal limits. ICV/CCV and TFT surrogate recovery show the method to be in control.

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3040	mg/L	100	0.500
Sulfate		580	mg/L	100	0.500

Sample: 96143 - Monitor Well #1

Analysis: TDS	Analytical Method: SM 2540C	Prep Method: N/A
QC Batch: 28620	Date Analyzed: 2006-08-03	Analyzed By: SM
Prep Batch: 24979	Sample Preparation: 2009-08-01	Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		8170	mg/L	10	10.00

Method Blank (1) QC Batch: 28277

QC Batch: 28277	Date Analyzed: 2006-07-24	Analyzed By: MT
Prep Batch: 24759	QC Preparation: 2006-07-24	Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000255	mg/L	0.001
Toluene		<0.000210	mg/L	0.001
Ethylbenzene		<0.000317	mg/L	0.001
Xylene		<0.000603	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0949	mg/L	1	0.100	95	76.1 - 117
4-Bromofluorobenzene (4-BFB)		0.0633	mg/L	1	0.100	63	58.5 - 118

Method Blank (1) QC Batch: 28340

QC Batch: 28340	Date Analyzed: 2006-07-26	Analyzed By: LJ
Prep Batch: 24777	QC Preparation: 2006-07-25	Prepared By: LJ

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 28357

QC Batch: 28357	Date Analyzed: 2006-07-26	Analyzed By: TP
Prep Batch: 24749	QC Preparation: 2006-07-24	Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		0.132	mg/L	0.5
Dissolved Potassium		1.08	mg/L	1
Dissolved Magnesium		<0.704	mg/L	1
Dissolved Sodium		0.836	mg/L	1

Method Blank (1) QC Batch: 28620

QC Batch: 28620
Prep Batch: 24979

Date Analyzed: 2006-08-03
QC Preparation: 2006-08-01

Analyzed By: SM
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.000	mg/L	10

Method Blank (1) QC Batch: 28783

QC Batch: 28783
Prep Batch: 25169

Date Analyzed: 2006-08-02
QC Preparation: 2006-08-02

Analyzed By: WB
Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride	2	<0.0181	mg/L	0.5
Sulfate		<0.0485	mg/L	0.5

Duplicates (1)

QC Batch: 28340
Prep Batch: 24777

Date Analyzed: 2006-07-26
QC Preparation: 2006-07-25

Analyzed By: LJ
Prepared By: LJ

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	110	108	mg/L as CaCo3	1	2	12.6
Total Alkalinity	110	108	mg/L as CaCo3	1	2	11.5

Duplicates (1)

QC Batch: 28620
Prep Batch: 24979

Date Analyzed: 2006-08-03
QC Preparation: 2006-08-01

Analyzed By: SM
Prepared By: SM

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	160.0	180.0	mg/L	10	12	17.2

²Not entered

Laboratory Control Spike (LCS-1)

QC Batch: 28277
Prep Batch: 24759

Date Analyzed: 2006-07-24
QC Preparation: 2006-07-24

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.109	mg/L	1	0.100	<0.000255	109	82.2 - 119
Toluene	0.108	mg/L	1	0.100	<0.000210	108	81.2 - 119
Ethylbenzene	0.109	mg/L	1	0.100	<0.000317	109	80 - 122
Xylcne	0.322	mg/L	1	0.300	<0.000603	107	81.3 - 122

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.104	mg/L	1	0.100	<0.000255	109	82.2 - 119	5	20
Toluene	0.103	mg/L	1	0.100	<0.000210	108	81.2 - 119	5	20
Ethylbenzene	0.101	mg/L	1	0.100	<0.000317	109	80 - 122	8	20
Xylene	0.306	mg/L	1	0.300	<0.000603	107	81.3 - 122	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.101	0.101	mg/L	1	0.100	101	101	81.8 - 114
4-Bromofluorobenzene (4-BFB)	0.112	0.111	mg/L	1	0.100	112	111	72.7 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 28357
Prep Batch: 24749

Date Analyzed: 2006-07-26
QC Preparation: 2006-07-24

Analyzed By: TP
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Calcium	51.7	mg/L	1	50.0	<0.0950	103	85 - 115
Dissolved Potassium	50.8	mg/L	1	50.0	<0.377	102	85 - 113
Dissolved Magnesium	51.5	mg/L	1	50.0	<0.704	103	85 - 113
Dissolved Sodium	50.5	mg/L	1	50.0	<0.261	101	85 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Calcium	51.7	mg/L	1	50.0	<0.0950	103	85 - 115	0	20
Dissolved Potassium	49.3	mg/L	1	50.0	<0.377	102	85 - 113	3	20
Dissolved Magnesium	49.8	mg/L	1	50.0	<0.704	103	85 - 113	3	20
Dissolved Sodium	48.6	mg/L	1	50.0	<0.261	101	85 - 111	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 28783
Prep Batch: 25169

Date Analyzed: 2006-08-02
QC Preparation: 2006-08-02

Analyzed By: WB
Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	<0.0181	mg/L	1	12.5	<0.0181		90 - 110
Sulfate	13.0	mg/L	1	12.5	<0.0485	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	0.00	mg/L	1	12.5	<0.0181		90 - 110		20
Sulfate	13.2	mg/L	1	12.5	<0.0485	104	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 96149

QC Batch: 28277
Prep Batch: 24759

Date Analyzed: 2006-07-24
QC Preparation: 2006-07-24

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.107	mg/L	1	0.100	<0.000255	107	70.9 - 126
Toluene	0.105	mg/L	1	0.100	<0.000210	105	70.8 - 125
Ethylbenzene	0.106	mg/L	1	0.100	<0.000317	106	74.8 - 125
Xylene	0.311	mg/L	1	0.300	<0.000603	104	75.7 - 126

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	³ NA	mg/L	1	0.100	<0.000255	0	70.9 - 126	200	20
Toluene	⁴ NA	mg/L	1	0.100	<0.000210	0	70.8 - 125	200	20
Ethylbenzene	⁵ NA	mg/L	1	0.100	<0.000317	0	74.8 - 125	200	20
Xylene	⁶ NA	mg/L	1	0.300	<0.000603	0	75.7 - 126	200	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	⁷ 0.101	NA	mg/L	1	0.1	101	0	73.6 - 121
4-Bromofluorobenzene (4-BFB)	⁸ 0.110	NA	mg/L	1	0.1	110	0	81.8 - 114

Matrix Spike (MS-1) Spiked Sample: 96142

QC Batch: 28357
Prep Batch: 24749

Date Analyzed: 2006-07-26
QC Preparation: 2006-07-24

Analyzed By: TP
Prepared By: TS

³RPD is out of range because a matrix spike duplicate was not prepared.

⁴RPD is out of range because a matrix spike duplicate was not prepared.

⁵RPD is out of range because a matrix spike duplicate was not prepared.

⁶RPD is out of range because a matrix spike duplicate was not prepared.

⁷RPD is out of range because a matrix spike duplicate was not prepared.

⁸RPD is out of range because a matrix spike duplicate was not prepared.

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Calcium	⁹ 884	mg/L	1	50.0	863	42	68.4 - 138
Dissolved Potassium	110	mg/L	1	50.0	67.3	85	82 - 129
Dissolved Magnesium	496	mg/L	1	50.0	438	116	61.2 - 135
Dissolved Sodium	¹⁰ 2200	mg/L	1	50.0	2180	40	81.8 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Calcium	¹¹ 884	mg/L	1	50.0	863	42	68.4 - 138	0	20
Dissolved Potassium	111	mg/L	1	50.0	67.3	87	82 - 129	1	20
Dissolved Magnesium	491	mg/L	1	50.0	438	106	61.2 - 135	1	20
Dissolved Sodium	¹² 2200	mg/L	1	50.0	2180	40	81.8 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 97690

QC Batch: 28783
Prep Batch: 25169

Date Analyzed: 2006-08-02
QC Preparation: 2006-08-02

Analyzed By: WB
Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	<0.0181	mg/L	1	12.5	<0.0181		25.4 - 171
Sulfate	420	mg/L	10	12.5	307	90	0 - 677

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	0.00	mg/L	1	12.5	<0.0181		25.4 - 171		20
Sulfate	421	mg/L	10	12.5	307	91	0 - 677	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 28277

Date Analyzed: 2006-07-24

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.104	104	85 - 115	2006-07-24
Toluene		mg/L	0.100	0.104	104	85 - 115	2006-07-24
Ethylbenzene		mg/L	0.100	0.104	104	85 - 115	2006-07-24
Xylene		mg/L	0.300	0.314	105	85 - 115	2006-07-24

⁹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁰Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹¹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹²Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (CCV-1)

QC Batch: 28277

Date Analyzed: 2006-07-24

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.107	107	85 - 115	2006-07-24
Toluene		mg/L	0.100	0.105	105	85 - 115	2006-07-24
Ethylbenzene		mg/L	0.100	0.106	106	85 - 115	2006-07-24
Xylene		mg/L	0.300	0.311	104	85 - 115	2006-07-24

Standard (ICV-1)

QC Batch: 28340

Date Analyzed: 2006-07-26

Analyzed By: LJ

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2006-07-26

Standard (CCV-1)

QC Batch: 28340

Date Analyzed: 2006-07-26

Analyzed By: LJ

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2006-07-26

Standard (ICV-1)

QC Batch: 28357

Date Analyzed: 2006-07-26

Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	50.7	101	90 - 110	2006-07-26
Dissolved Potassium		mg/L	50.0	52.0	104	90 - 110	2006-07-26
Dissolved Magnesium		mg/L	50.0	49.6	99	90 - 110	2006-07-26
Dissolved Sodium		mg/L	50.0	50.9	102	90 - 110	2006-07-26

Standard (CCV-1)

QC Batch: 28357

Date Analyzed: 2006-07-26

Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	48.7	97	90 - 110	2006-07-26
Dissolved Potassium		mg/L	50.0	47.4	95	90 - 110	2006-07-26
Dissolved Magnesium		mg/L	50.0	47.2	94	90 - 110	2006-07-26

continued...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	50.0	47.3	95	90 - 110	2006-07-26

Standard (ICV-1)

QC Batch: 28620

Date Analyzed: 2006-08-03

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1001	100	90 - 110	2006-08-03

Standard (CCV-1)

QC Batch: 28620

Date Analyzed: 2006-08-03

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1022	102	90 - 110	2006-08-03

Standard (ICV-1)

QC Batch: 28783

Date Analyzed: 2006-08-02

Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0181		90 - 110	2006-08-02
Sulfate		mg/L	12.5	12.4	99	90 - 110	2006-08-02

Standard (CCV-1)

QC Batch: 28783

Date Analyzed: 2006-08-02

Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0181		90 - 110	2006-08-02
Sulfate		mg/L	12.5	12.7	102	90 - 110	2006-08-02

TraceAnalysis, Inc. 6011 Aberdeen Ave, Ste 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1295		135 McCulloch Way, Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443																																																										
Company Name: RICE Operating Company Address: (Street, City, Zip) 122 W Taylor Street - Hobbs, New Mexico 88240 Contact Person: Kristin Farris - Pope, Project Scientist Invoice to: (If different from above) Project #: None Given Project Name: BD H-35 SWD Project Location: Lea County - New Mexico Sample Signatory: Suzanne Johnson (505) 631-9310 Email: suzanne@valornet.com		Phone #: (505) 393-9174 Fax #: (505) 397-1471 Email: kpope@riceswd.com																																																										
LAB # (LAB USE ONLY) 4043	FIELD CODE Monitor Well #1 Monitor Well #1	# CONTAINERS 2 1	Volume/Amount 40 ml 1L	MATRIX WATER SOIL AIR SLUDGE	PRESERVATIVE METHOD HCL HNO ₃ NaHSO ₄ H ₂ SO ₄ ICE NONE	DATE 2006 7-19 7-19	TIME 14:20 14:20	ANALYSIS REQUEST (Circle of Specify Method No.) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>TPH 418.1/TX1005 / TX1005 Extended (C35)</td> <td>PAH 8270C</td> <td>Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7</td> <td>TCLP Metals Ag As Ba Cd Cr Pb Se Hg</td> <td>TCLP Volatiles</td> <td>TCLP Semi Volatiles</td> <td>TCLP Pesticides</td> <td>RCI</td> <td>GC/MS Vol. 8260B/624</td> <td>GC/MS Semi. Vol. 8270C/625</td> <td>PCBs 8082/608</td> <td>Pesticides 8081A/608</td> <td>BOD, TSS, pH</td> <td>Moisture Content</td> <td>Cations (Ca, Mg, Na, K)</td> <td>Anions (Cl, SSSSO₄, CO₃, HCO₃)</td> <td>Total Dissolved Solids</td> <td>Turn Around Time if different from standard</td> <td>Hold</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>														TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCBs 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SSSSO ₄ , CO ₃ , HCO ₃)	Total Dissolved Solids	Turn Around Time if different from standard	Hold																				
								TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCBs 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SSSSO ₄ , CO ₃ , HCO ₃)	Total Dissolved Solids	Turn Around Time if different from standard	Hold																																		
LAB USE ONLY Intact: <input checked="" type="checkbox"/> Y/N Headspace: <input checked="" type="checkbox"/> Y/N Temp: <input checked="" type="checkbox"/> °C Log-in Review: <input checked="" type="checkbox"/> Y/N Carrier #: BUA-FAL169017159								REMARKS: Received by: _____ Date: _____ Time: _____ Relinquished by: _____ Date: 7-20-06 8:00 Relinquished by: _____ Date: _____ Time: _____ Relinquished by: _____ Date: _____ Time: _____ Received at Laboratory by: _____ Date: 7-21-06 11:05																																																				

DATE: 8/16/2006

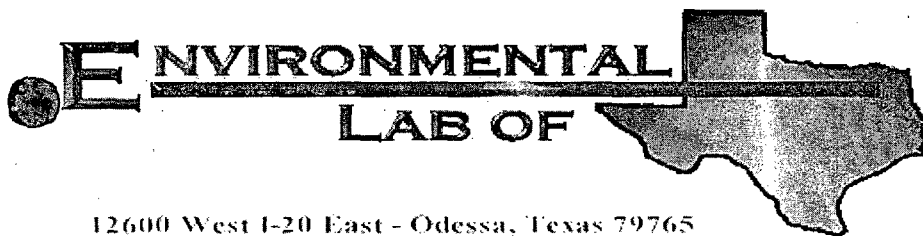
Sample #	Calcium		Magnesium		Sodium		Potassium		Alkalinity		Sulfate	Chloride	Nitrate	Fluoride	TDS	EC
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	µMHOs/cm
96143	698	371	719	45.3	108	580	3040								8170	

Sample #	Calcium		Magnesium		Sodium		Potassium		Alkalinity		Sulfate	Chloride	Nitrate	Fluoride	Total		Percentage Error
	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	in meq/L	Cations	Anions	Total	
96143	34.83	30.53	31.28	1.16	2.16	12.08	86.76							97.80	99.89	2.22	

	EC/Cation		EC/Anion		range	0	to	0	TDS/EC		TDS/Cat		TDS/Anion	
									TDS/EC	TDS/Cat	TDS/Anion			
96143											0.84	0.82		

needs to be 0.55-0.77





12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD SWD H-35

Project Number: None Given

Location: T22S-R37E-Sec35K, Lea Co., NM

Lab Order Number: 6J12015

Report Date: 10/24/06

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6J12015-01	Water	10/11/06 11:45	10-12-2006 16:00

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6J12015-01) Water									
Benzene	ND	0.00100	mg/L	1	EJ61407	10/14/06	10/16/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		87.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.5 %	80-120		"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6J12015-01) Water									
Total Alkalinity	138	2.00	mg/L	1	EJ61311	10/13/06	10/13/06	EPA 310.1M	
Chloride	2880	100	"	200	EJ61403	10/19/06	10/19/06	EPA 300.0	
Total Dissolved Solids	7460	10.0	"	1	EJ61404	10/14/06	10/15/06	EPA 160.1	
Sulfate	561	100	"	200	EJ61403	10/19/06	10/19/06	EPA 300.0	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6J12015-01) Water									
Calcium	619	20.2	mg/L	250	EJ61604	10/13/06	10/16/06	EPA 6010B	
Magnesium	384	9.00	"	"	"	"	"	"	
Potassium	25.4	3.00	"	50	"	"	"	"	
Sodium	711	10.8	"	250	"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EJ61407 - EPA 5030C (GC)

Blank (EJ61407-BLK1)

Prepared: 10/14/06 Analyzed: 10/15/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	33.5		ug/l	40.0		83.8	80-120			
Surrogate: 4-Bromofluorobenzene	35.0		"	40.0		87.5	80-120			

LCS (EJ61407-BS1)

Prepared: 10/14/06 Analyzed: 10/15/06

Benzene	0.0451	0.00100	mg/L	0.0500		90.2	80-120			
Toluene	0.0430	0.00100	"	0.0500		86.0	80-120			
Ethylbenzene	0.0513	0.00100	"	0.0500		103	80-120			
Xylene (p/m)	0.0929	0.00100	"	0.100		92.9	80-120			
Xylene (o)	0.0423	0.00100	"	0.0500		84.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.4		ug/l	40.0		86.0	80-120			
Surrogate: 4-Bromofluorobenzene	43.8		"	40.0		110	80-120			

Calibration Check (EJ61407-CCV1)

Prepared: 10/14/06 Analyzed: 10/17/06

Benzene	49.9		ug/l	50.0		99.8	80-120			
Toluene	43.1		"	50.0		86.2	80-120			
Ethylbenzene	42.0		"	50.0		84.0	80-120			
Xylene (p/m)	83.7		"	100		83.7	80-120			
Xylene (o)	41.2		"	50.0		82.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.1		"	40.0		90.2	80-120			
Surrogate: 4-Bromofluorobenzene	34.3		"	40.0		85.8	80-120			

Matrix Spike (EJ61407-MS1)

Source: 6J12015-01

Prepared: 10/14/06 Analyzed: 10/17/06

Benzene	0.0501	0.00100	mg/L	0.0500	ND	100	80-120			
Toluene	0.0440	0.00100	"	0.0500	ND	88.0	80-120			
Ethylbenzene	0.0416	0.00100	"	0.0500	ND	83.2	80-120			
Xylene (p/m)	0.0914	0.00100	"	0.100	ND	91.4	80-120			
Xylene (o)	0.0427	0.00100	"	0.0500	ND	85.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.5		ug/l	40.0		88.8	80-120			
Surrogate: 4-Bromofluorobenzene	40.2		"	40.0		100	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 5 of 10

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch EJ61407 - EPA 5030C (GC)

Matrix Spike Dup (EJ61407-MSD1)

Source: 6J12015-01

Prepared: 10/14/06 Analyzed: 10/17/06

Benzene	0.0502	0.00100	mg/L	0.0500	ND	100	80-120	0.00	20	
Toluene	0.0442	0.00100	"	0.0500	ND	88.4	80-120	0.454	20	
Ethylbenzene	0.0412	0.00100	"	0.0500	ND	82.4	80-120	0.966	20	
Xylene (p/m)	0.0913	0.00100	"	0.100	ND	91.3	80-120	0.109	20	
Xylene (o)	0.0437	0.00100	"	0.0500	ND	87.4	80-120	2.31	20	
Surrogate: a,a,a-Trifluorotoluene	35.4		ug/l	40.0		88.5	80-120			
Surrogate: 4-Bromofluorobenzene	41.0		"	40.0		102	80-120			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61311 - General Preparation (WetChem)									
Blank (EJ61311-BLK1)				Prepared & Analyzed: 10/13/06					
Total Alkalinity	ND	2.00	mg/L						
Carbonate Alkalinity	ND	0.100	"						
Bicarbonate Alkalinity	ND	2.00	"						
Hydroxide Alkalinity	ND	0.100	"						
LCS (EJ61311-BS1)				Prepared: 10/13/06 Analyzed: 10/20/06					
Bicarbonate Alkalinity	196	2.00	mg/L	200		98.0	85-115		
Duplicate (EJ61311-DUP1)				Source: 6J12011-01		Prepared & Analyzed: 10/13/06			
Total Alkalinity	238	2.00	mg/L		242		1.67	20	
Reference (EJ61311-SRM1)				Prepared & Analyzed: 10/13/06					
Total Alkalinity	250		mg/L	250		100	90-110		
Batch EJ61403 - General Preparation (WetChem)									
Blank (EJ61403-BLK1)				Prepared & Analyzed: 10/19/06					
Chloride	ND	0.500	mg/L						
Sulfate	ND	0.500	"						
LCS (EJ61403-BS1)				Prepared & Analyzed: 10/19/06					
Sulfate	9.55	0.500	mg/L	10.0		95.5	80-120		
Chloride	9.62	0.500	"	10.0		96.2	80-120		
Calibration Check (EJ61403-CCV1)				Prepared & Analyzed: 10/19/06					
Sulfate	10.1		mg/L	10.0		101	80-120		
Chloride	10.5		"	10.0		105	80-120		

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61403 - General Preparation (WetChem)										
Duplicate (EJ61403-DUP1)		Source: 6J12011-01		Prepared & Analyzed: 10/19/06						
Sulfate	291	25.0	mg/L		308			5.68	20	
Chloride	1430	25.0	"		1430			0.00	20	
Duplicate (EJ61403-DUP2)		Source: 6J12016-02		Prepared & Analyzed: 10/19/06						
Sulfate	236	12.5	mg/L		237			0.423	20	
Chloride	690	12.5	"		692			0.289	20	
Matrix Spike (EJ61403-MS1)		Source: 6J12011-01		Prepared & Analyzed: 10/19/06						
Chloride	2040	25.0	mg/L	500	1430	122	80-120			S-07
Sulfate	781	25.0	"	500	308	94.6	80-120			
Matrix Spike (EJ61403-MS2)		Source: 6J12016-02		Prepared & Analyzed: 10/19/06						
Sulfate	476	12.5	mg/L	250	237	95.6	80-120			
Chloride	979	12.5	"	250	692	115	80-120			
Batch EJ61404 - Filtration Preparation										
Blank (EJ61404-BLK1)		Prepared: 10/14/06 Analyzed: 10/15/06								
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EJ61404-DUP1)		Source: 6J12011-01		Prepared: 10/14/06 Analyzed: 10/15/06						
Total Dissolved Solids	3380	10.0	mg/L		3260			3.61	5	
Duplicate (EJ61404-DUP2)		Source: 6J12016-02		Prepared: 10/14/06 Analyzed: 10/15/06						
Total Dissolved Solids	1850	10.0	mg/L		1900			2.67	5	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch EJ61604 - 6010B/No Digestion

Blank (EJ61604-BLK1)

Prepared: 10/13/06 Analyzed: 10/16/06

Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							

Calibration Check (EJ61604-CCV1)

Prepared: 10/13/06 Analyzed: 10/16/06

Calcium	1.99		mg/L	2.00		99.5	85-115			
Magnesium	2.20		"	2.00		110	85-115			
Potassium	1.94		"	2.00		97.0	85-115			
Sodium	1.79		"	2.00		89.5	85-115			

Duplicate (EJ61604-DUP1)

Source: 6J12001-04

Prepared: 10/13/06 Analyzed: 10/16/06

Calcium	0.426	0.0810	mg/L		0.427			0.234	20	
Magnesium	0.432	0.0360	"		0.422			2.34	20	
Potassium	0.596	0.0600	"		0.582			2.38	20	
Sodium	0.890	0.0430	"		0.866			2.73	20	

Environmental Lab of Texas

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Page 9 of 10

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD SWD H-35
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Notes and Definitions

S-07 Recovery outside Laboratory historical or method prescribed limits.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

10/24/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

12600 West 120 East
Odessa, Texas 79766
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farries Pope kpope@priceswd.com

Project Name:

BD SWD System H-35

Company Name **RICE Operating Company**

Project Number:

Company Address: 122 W. Taylor Street

Project Loc:

T22S-R37E-Sec35K, Lea County NM

City/State/Zip: Hobbs, New Mexico 88240

FO Number:

Telephone No: (505) 393-9174

Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505) 631-9310

Email: rozanne@valor.net.com

[illegible]

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Cont: Rice Op.
Date/ Time: 10/12/06 4:00
Lab ID #: 6512015
Initials: AK

Sample Receipt Checklist

				Client Initials	
#1	Temperature of container/ cooler?	Yes	No	<u>2.0</u>	° C
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELDT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

- Check all that Apply:
- ☐ See attached e-mail/ fax
 - ☐ Client understands and would like to proceed with analysis
 - ☐ Cooling process had begun shortly after sampling event

BD H-35 Monitor Well Sampling Results

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
1	43.64	57.2	8.8	30	1/4/2006	1880	4290	<0.001	<0.001	<0.001	<0.001	383
1	43.79	57.2	8.7	30	4/24/2006	2360	5380	<0.001	<0.001	<0.001	<0.001	405
1	43.92	57.2	8.6	35	7/19/2006							
1	43.83	57.2	8.7	30	10/11/2006	2880	7460	<0.001	<0.001	<0.001	<0.001	561