1R - 459

GENERAL CORRESPONDENCE

YEAR(S):
2007

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1. Article Addressed to:

Kristin Farris Pope
Rice Operating Company
122 West Taylor
Hobbs, NM 88240

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NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

CERTIFIED MAIL
RETURN RECEIPT NO: 3929 4432

March 26, 2007

Kristin Farris Pope
Rice Operating Company
122 West Taylor
Hobbs, New Mexico 88240

RE: REQUIREMENT TO SUBMIT ABATEMENT PLAN

Dear Ms. Pope:

The New Mexico Oil Conservation Division (OCD) has determined after reviewing your Notification of Groundwater Impact for each of the following six sites:

1) Rice EME Sarah Phillips EOL
Unit K, Section 33, T19S, R37E
Lea County, New Mexico
OCD Case #1R0427-17

2) Rice EME A-2
Unit A, Section 2, T20S, R36E
Lea County, New Mexico
OCD Case #1R0427-62

3) Rice EME Jct. A-2-1
Unit A, Section 2, T20S, R36E
Lea County, New Mexico
OCD Case #1R0427-177

4) Rice BD K-4
Unit K, Section 4, T18S, R38E
Lea County, New Mexico
OCD Case #1R0459

5) Rice EME C-16 (1)
Unit C, Section 16, T20S, R37E
Lea County, New Mexico
OCD Case #1R0476

6) Rice EME C-16 (2)
Unit C, Section 16, T20S, R37E
Lea County, New Mexico
OCD Case #1R0477

that the Rice Operating Company (ROC) must submit for each of the six sites a separate Stage 1 Abatement Plan in accordance with OCD Rule 19 (19.15.1.19 NMAC) to investigate the ground water contamination at each of these sites. The Stage 1 Abatement Plans must be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office and must meet of all the requirements specified in OCD Rule 19 (19.15.1.19 NMAC), including, but not limited to, the public notice and participation requirements specified in Rule 19G. The Stage 1 Abatement Plan is due sixty (60) days from the receipt by ROC of this written notice.

ROC's Stage 1 Abatement Plans must specifically meet all of the requirements specified in OCD Rule 19E.3, including, but not limited to, a site investigation work plan and monitoring program that will enable it to characterize the release using an appropriate number of isoconcentration maps and cross sections that depict the contamination that has been released from the sites and to provide the data necessary to select and design an effective abatement option. ROC may, if it chooses, concurrently submit a Stage 2 Abatement Plan that addresses appropriate proactive abatement options.

ROC should submit one paper copy and an electronic copy on CD for each of the Plans and for all future workplans and/or reports for each of the Plans. Please be sure to include the current corresponding OCD Case # on each of the respective Abatement Plans. An Abatement Plan # will be assigned as each of the Plans are submitted to the OCD. If you have any questions, please contact Edward J. Hansen of my staff at (505) 476-3489 or mailto:edwardj.hansen@state.nm.us.

Sincerely,

Wayne Price
Environmental Bureau Chief

WP:EJH:ejh

cc: Chris Williams, OCD Hobbs District Supervisor
Larry Johnson, OCD Hobbs

RICE Operating Company
122 West Taylor • Hobbs, New Mexico 88240
Phone: (505)393-9174 • Fax: (505) 397-1471

2007 JAN 16 AM 11 45

CERTIFIED MAIL
RETURN RECEIPT NO. 7005 3110 0000 2016 7678

January 12, 2007

Mr. Wayne Price
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: NOTIFICATION OF GROUNDWATER IMPACT
BD K-4 Release Site
Unit 'K', Sec. 4, T22S, R37E

Mr. Price:

Rice Operating Company (ROC) notifies the Director of the New Mexico Oil Conservation Division (OCD), Environmental Bureau of groundwater impact at the above-referenced site in accordance with NM Rule 116. The remediation of this site may be subject to NM Rule 19 procedures.

The K-4 junction box experienced an accidental discharge on February 20, 2004 due to the failure of a 4-inch PVC pipeline, releasing 1040 barrels of produced water (1000 bbls were recovered). A C-141 form (initial) was submitted to the Hobbs District 1 office on March 9, 2004. Initial assessments of soil impacts were conducted by ROC. ROC concluded that groundwater investigation was warranted. On August 17, 2004, ROC disclosed this site to OCD as potential groundwater impact and the site was placed on a prioritized list of similar sites.

ROC retained Highlander Environmental (Highlander) of Midland, Texas to address this site. On September 15, 2005 Highlander submitted an Investigation & Characterization Plan to OCD for additional delineation which was verbally approved on March 30, 2006. During October 2006, delineation soil borings and three 2-inch monitoring wells were installed at the site. Groundwater was encountered at approximately 83 feet below ground surface. After appropriate development, the wells were sampled pursuant to OCD

guidelines by a third party and Environmental Lab of Texas performed the analysis. Chloride concentrations exceed New Mexico Water Quality Control Commission standards in MW-1 nearest to the leak source. Hydrocarbon constituents (BTEX) were not detected. Highlander will present a remedy for this site in the submission of a Corrective Action Plan.

ROC is the service provider (agent) for the BD Salt Water Disposal System and has no ownership of any portion of the pipelines, wells, or facilities. The BD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. Environmental remediation projects of this magnitude require System Partner AFE approval and work begins as funds are received.

Please accept this notification for the above-referenced site. Should you have any questions or concerns regarding this site, please do not hesitate to contact me.

RICE OPERATING COMPANY

Kristin Farris Pope

Kristin Farris Pope
Project Scientist

enclosures: water analyses, well logs, map

cc: SC, CDH, Highlander, file,

Mr. Chris Williams
NMOCD, District 1 Office
1625 N. French Drive
Hobbs, NM 88240

ENVIRONMENTAL LAB OF

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 K-4 Leak

Project Number: None Given

Location: T22S R37E Sec.4 K- Lea County, NM

Lab Order Number: 6K15005

Report Date: 12/01/06

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6K15005-01	Water	11/13/06 14:05	11-15-2006 08:10
Monitor Well #2	6K15005-02	Water	11/13/06 13:10	11-15-2006 08:10
Monitor Well #3	6K15005-03	Water	11/13/06 12:15	11-15-2006 08:10

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6K15005-01) Water									
Benzene	ND	0.00100	mg/L	1	EK61614	11/16/06	11/19/06	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		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.0 %*	*80-120*		"	"	"	"	
Monitor Well #2 (6K15005-02) Water									
Benzene	ND	0.00100	mg/L	1	EK61614	11/16/06	11/20/06	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		*119 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.2 %*	*80-120*		"	"	"	"	
Monitor Well #3 (6K15005-03) Water									
Benzene	ND	0.00100	mg/L	1	EK61614	11/16/06	11/17/06	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		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.5 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 (6K15005-01) Water									
Total Alkalinity	**186**	2.00	mg/L	1	EK61605	11/17/06	11/17/06	EPA 310.1M	
Chloride	**1040**	25.0	"	50	EK61507	11/15/06	11/15/06	EPA 300.0	
Total Dissolved Solids	**2120**	10.0	"	1	EK61611	11/15/06	11/16/06	EPA 160.1	
Sulfate	**152**	25.0	"	50	EK61507	11/15/06	11/15/06	EPA 300.0	
Monitor Well #2 (6K15005-02) Water									
Total Alkalinity	**230**	2.00	mg/L	1	EK61605	11/17/06	11/17/06	EPA 310.1M	
Chloride	**77.0**	5.00	"	10	EK61507	11/15/06	11/15/06	EPA 300.0	
Total Dissolved Solids	**542**	10.0	"	1	EK61611	11/15/06	11/16/06	EPA 160.1	
Sulfate	**85.0**	5.00	"	10	EK61507	11/15/06	11/15/06	EPA 300.0	
Monitor Well #3 (6K15005-03) Water									
Total Alkalinity	**202**	2.00	mg/L	1	EK61605	11/17/06	11/17/06	EPA 310.1M	
Chloride	**148**	5.00	"	10	EK61507	11/15/06	11/15/06	EPA 300.0	
Total Dissolved Solids	**622**	10.0	"	1	EK61611	11/15/06	11/16/06	EPA 160.1	
Sulfate	**97.6**	5.00	"	10	EK61507	11/15/06	11/15/06	EPA 300.0	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6K15005-01) Water									
Calcium	**368**	4.05	mg/L	50	EK61703	11/17/06	11/17/06	EPA 6010B	
Magnesium	**106**	1.80	"	"	"	"	"	"	
Potassium	**10.9**	0.600	"	10	"	"	"	"	
Sodium	**424**	2.15	"	50	"	"	"	"	
Monitor Well #2 (6K15005-02) Water									
Calcium	**55.3**	0.810	mg/L	10	EK61703	11/17/06	11/17/06	EPA 6010B	
Magnesium	**24.1**	0.360	"	"	"	"	"	"	
Potassium	**5.50**	0.600	"	"	"	"	"	"	
Sodium	**109**	2.15	"	50	"	"	"	"	
Monitor Well #3 (6K15005-03) Water									
Calcium	**65.5**	0.810	mg/L	10	EK61703	11/17/06	11/17/06	EPA 6010B	
Magnesium	**30.1**	0.360	"	"	"	"	"	"	
Potassium	**5.81**	0.600	"	"	"	"	"	"	
Sodium	**120**	2.15	"	50	"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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

Project: BD K-4 Leak
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 EK61614 - EPA 5030C (GC)										
Blank (EK61614-BLK1)				Prepared: 11/16/06 Analyzed: 11/17/06						
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	*47.8*		*ug/l*	*40.0*		*120*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.5*		"	*40.0*		*101*	*80-120*			
LCS (EK61614-BS1)				Prepared: 11/16/06 Analyzed: 11/17/06						
Benzene	0.0594	0.00100	mg/L	0.0500		119	80-120			
Toluene	0.0562	0.00100	"	0.0500		112	80-120			
Ethylbenzene	0.0458	0.00100	"	0.0500		91.6	80-120			
Xylene (p/m)	0.0949	0.00100	"	0.100		94.9	80-120			
Xylene (o)	0.0499	0.00100	"	0.0500		99.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*46.1*		*ug/l*	*40.0*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.2*		"	*40.0*		*110*	*80-120*			
Calibration Check (EK61614-CCV1)				Prepared: 11/16/06 Analyzed: 11/20/06						
Benzene	54.7		ug/l	50.0		109	80-120			
Toluene	48.5		"	50.0		97.0	80-120			
Ethylbenzene	42.1		"	50.0		84.2	80-120			
Xylene (p/m)	83.0		"	100		83.0	80-120			
Xylene (o)	43.3		"	50.0		86.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.4*		"	*40.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*37.0*		"	*40.0*		*92.5*	*80-120*			
Matrix Spike (EK61614-MS1)	**Source: 6K13007-01**			Prepared: 11/16/06 Analyzed: 11/17/06						
Benzene	0.0551	0.00100	mg/L	0.0500		110	80-120			
Toluene	0.0498	0.00100	"	0.0500		99.6	80-120			
Ethylbenzene	0.0401	0.00100	"	0.0500		80.2	80-120			
Xylene (p/m)	0.0844	0.00100	"	0.100		84.4	80-120			
Xylene (o)	0.0442	0.00100	"	0.0500		88.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.1*		*ug/l*	*40.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.4*		"	*40.0*		*106*	*80-120*			

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

Project: BD K-4 Leak
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 EK61614 - EPA 5030C (GC)										
Matrix Spike Dup (EK61614-MSD1)		**Source: 6K13007-01**		Prepared: 11/16/06 Analyzed: 11/17/06						
Benzene	0.0580	0.00100	mg/L	0.0500		116	80-120	5.31	20	
Toluene	0.0550	0.00100	"	0.0500		110	80-120	9.92	20	
Ethylbenzene	0.0421	0.00100	"	0.0500		84.2	80-120	4.87	20	
Xylene (p/m)	0.0909	0.00100	"	0.100		90.9	80-120	7.42	20	
Xylene (o)	0.0455	0.00100	"	0.0500		91.0	80-120	2.90	20	
Surrogate: a,a,a-Trifluorotoluene	*46.3*		*ug/l*	*40.0*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.0*		*"*	*40.0*		*105*	*80-120*			

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

Project: BD K-4 Leak
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 EK61507 - General Preparation (WetChem)										
Blank (EK61507-BLK1)				Prepared & Analyzed: 11/15/06						
Sulfate	0.579	0.500	mg/L							B
Chloride	ND	0.500	"							
LCS (EK61507-BS1)				Prepared & Analyzed: 11/15/06						
Sulfate	10.9	0.500	mg/L	10.0		109	80-120			
Chloride	11.1	0.500	"	10.0		111	80-120			
Calibration Check (EK61507-CCV1)				Prepared & Analyzed: 11/15/06						
Chloride	10.7		mg/L	10.0		107	80-120			
Sulfate	12.0		"	10.0		120	80-120			
Duplicate (EK61507-DUP1)	**Source: 6K15004-01**			Prepared & Analyzed: 11/15/06						
Sulfate	79.9	5.00	mg/L		79.8			0.125	20	
Chloride	232	5.00	"		234			0.858	20	
Duplicate (EK61507-DUP2)	**Source: 6K15006-07**			Prepared & Analyzed: 11/15/06						
Sulfate	78.2	5.00	mg/L		78.1			0.128	20	
Chloride	37.9	5.00	"		43.7			14.2	20	
Matrix Spike (EK61507-MS1)	**Source: 6K15004-01**			Prepared & Analyzed: 11/15/06						
Chloride	345	5.00	mg/L	100	234	111	80-120			
Sulfate	175	5.00	"	100	79.8	95.2	80-120			
Matrix Spike (EK61507-MS2)	**Source: 6K15006-07**			Prepared & Analyzed: 11/15/06						
Chloride	142	5.00	mg/L	100	43.7	98.3	80-120			
Sulfate	175	5.00	"	100	78.1	96.9	80-120			

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

Project: BD K-4 Leak
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 EK61605 - General Preparation (WetChem)										
Blank (EK61605-BLK1)				Prepared & Analyzed: 11/17/06						
Total Alkalinity	ND	2.00	mg/L							
Blank (EK61605-BLK2)				Prepared & Analyzed: 11/17/06						
Total Alkalinity	ND	2.00	mg/L							
LCS (EK61605-BS1)				Prepared & Analyzed: 11/17/06						
Bicarbonate Alkalinity	172		mg/L	200		86.0	85-115			
LCS (EK61605-BS2)				Prepared & Analyzed: 11/17/06						
Bicarbonate Alkalinity	172		mg/L	200		86.0	85-115			
Hydroxide Alkalinity	0.00	0.100	"				85-115			
Duplicate (EK61605-DUP1)	**Source: 6K15001-01**			Prepared & Analyzed: 11/17/06						
Total Alkalinity	238	2.00	mg/L		238			0.00	20	
Carbonate Alkalinity	0.00	0.100	"		0.00				20	
Bicarbonate Alkalinity	0.00	2.00	"		0.00				20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	
Duplicate (EK61605-DUP2)	**Source: 6K16005-01**			Prepared & Analyzed: 11/17/06						
Total Alkalinity	296	2.00	mg/L		300			1.34	20	
Carbonate Alkalinity	0.00	0.100	"		0.00				20	
Bicarbonate Alkalinity	0.00	2.00	"		300				20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	
Reference (EK61605-SRM1)				Prepared & Analyzed: 11/17/06						
Total Alkalinity	238		mg/L	250		95.2	90-110			
Reference (EK61605-SRM2)				Prepared & Analyzed: 11/17/06						
Total Alkalinity	238		mg/L	250		95.2	90-110			

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 EK61611 - Filtration Preparation										
Blank (EK61611-BLK1)				Prepared: 11/15/06 Analyzed: 11/16/06						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EK61611-DUP1)	**Source: 6K15001-01**			Prepared: 11/15/06 Analyzed: 11/16/06						
Total Dissolved Solids	14000	10.0	mg/L		13200			5.88	5	QR-03
Duplicate (EK61611-DUP2)	**Source: 6K15005-03**			Prepared: 11/15/06 Analyzed: 11/16/06						
Total Dissolved Solids	586	10.0	mg/L		622			5.96	5	QR-03

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 EK61703 - 6010B/No Digestion										
Blank (EK61703-BLK1)				Prepared & Analyzed: 11/17/06						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EK61703-CCV1)				Prepared & Analyzed: 11/17/06						
Calcium	2.17		mg/L	2.00		108	85-115			
Magnesium	2.21		"	2.00		110	85-115			
Potassium	1.74		"	2.00		87.0	85-115			
Sodium	1.88		"	2.00		94.0	85-115			
Duplicate (EK61703-DUP1)		**Source: 6K15001-01**		Prepared & Analyzed: 11/17/06						
Calcium	1300	40.5	mg/L		1340			3.03	20	
Magnesium	461	3.60	"		461			0.00	20	
Potassium	55.7	0.600	"		53.2			4.59	20	
Sodium	2890	21.5	"		3100			7.01	20	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: BD K-4 Leak	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
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: 12/1/2006

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.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Kristin Farris Pope kpope@riceswd.com

Project Name: BD K-4 Leak

Company Name: RICE Operating Company

Project #:

Company Address: 122 W. Taylor Street

Project Loc: T22S R37E Sec4 K ~ Lea County New Mexico

City/State/Zip: Hobbs, New Mexico 88240

PO #:

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

(lab use only)
ORDER #: 6K1-005

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT [Pre-Scheduled] 24, 48, 72 hrs	Standard TAT
-01	Monitor Well #1			11/13/2006	14:05		3	X		2				1			GW				X	X					X			X				X
-02	Monitor Well #2			11/13/2006	13:10		3	X		2				1			GW				X	X					X			X				X
-03	Monitor Well #3			11/13/2006	12:15		3	X		2				1			GW				X	X					X			X				X

Special Instructions:
Please email to : kpope@riceswd.com mfranks@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	11/14/06	20:00	James Johnson	11/14/06	20:01
Relinquished by: James Johnson	11/15/06	8:10	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				11/15/06	8:10

Laboratory Comments:

Sample Containers intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

ient: Rice Op.

ate/ Time: 11/15/06 8:10

ab ID # : 60K15005

tials: CK

Sample Receipt Checklist

				Client Initials
Temperature of container/ cooler?	Yes	No	0.5 °C	
Shipping container in good condition?	Yes	No		
Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
Chain of Custody present?	Yes	No		
Sample instructions complete of Chain of Custody?	Yes	No		
Chain of Custody signed when relinquished/ received?	Yes	No		
Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
Container label(s) legible and intact?	Yes	No	Not Applicable	
0 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
1 Containers supplied by ELOT?	Yes	No		
2 Samples in proper container/ bottle?	Yes	No	See Below	
3 Samples properly preserved?	Yes	No	See Below	
4 Sample bottles intact?	Yes	No		
5 Preservations documented on Chain of Custody?	Yes	No		
6 Containers documented on Chain of Custody?	Yes	No		
7 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
8 All samples received within sufficient hold time?	Yes	No	See Below	
9 Subcontract of sample(s)?	Yes	No	Not Applicable	
0 VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

ntact: _____ Contacted by: _____ Date/ Time: _____

garding: _____

_____

rrective Action Taken:

_____

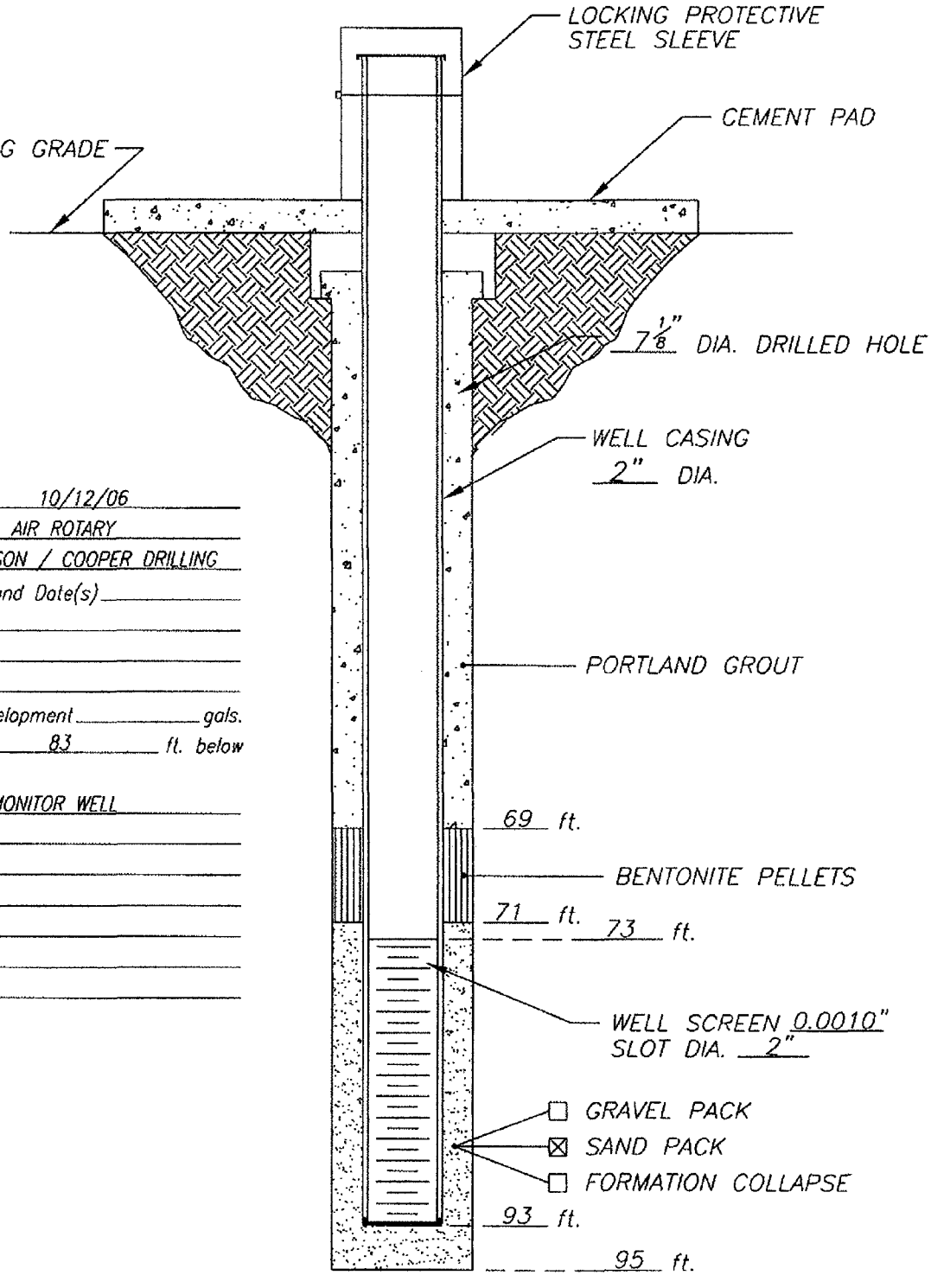
_____

_____

ck 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

WELL CONSTRUCTION LOG



Installation Date(s) 10/12/06
Drilling Method AIR ROTARY
Drilling Contractor HARRISON / COOPER DRILLING
Development Technique(s) and Date(s) _____

Water Removed During Development _____ gals.
Static Depth to Water 83 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks _____

DATE: 11/9/06 *Highlander Environmental*	CLIENT: *RICE OPERATING* PROJECT: *BD-K-4* LOCATION: *LEA COUNTY, NEW MEXICO*	WELL NO. MW-1

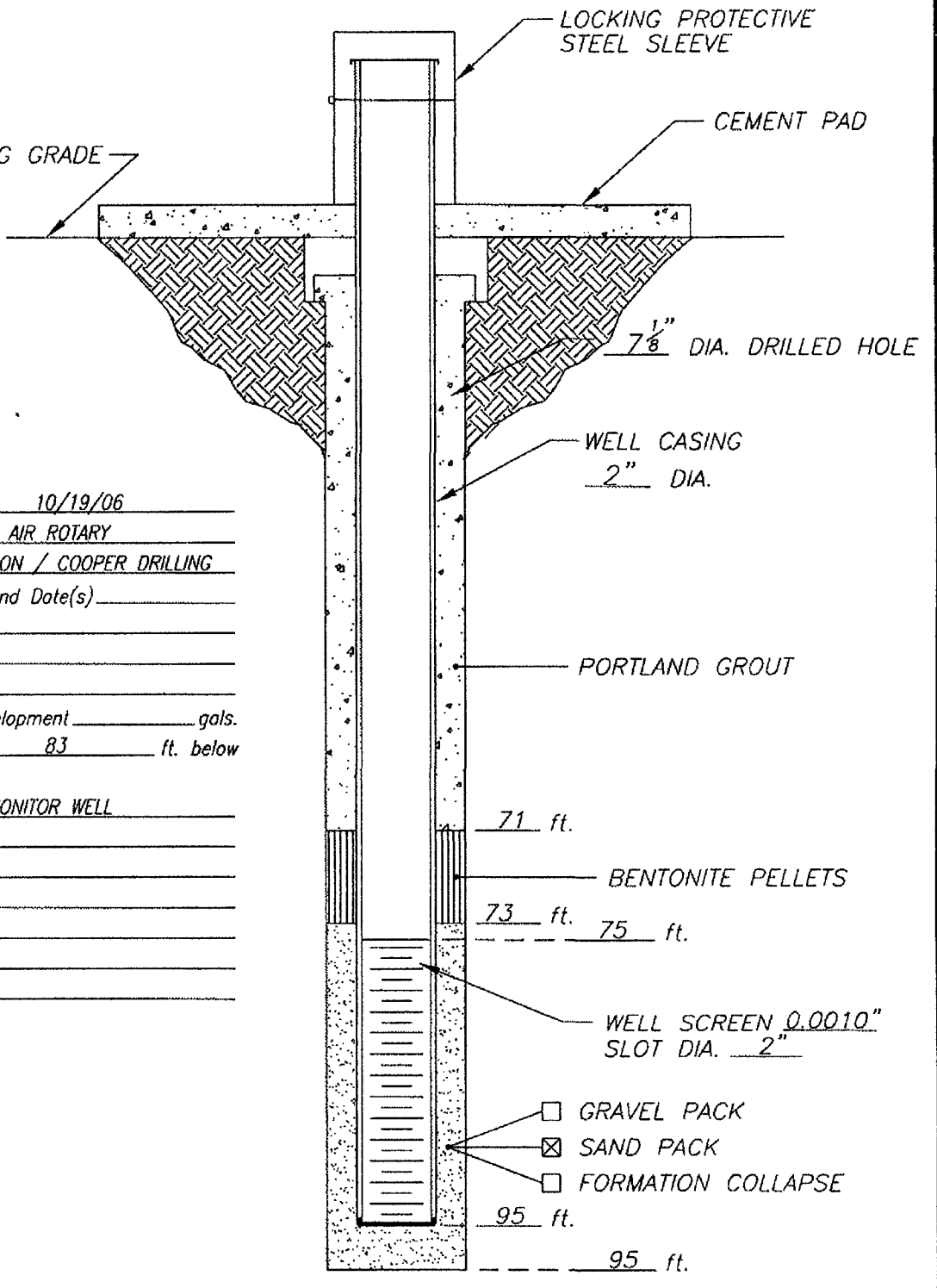
SAMPLE LOG

Boring/Well: MW-1
Project Number: 2306
Client: Rice Engineering
Site Location: BD - K-4
Location: Lea County, New Mexico
Total Depth 95
Date Installed: 10/12/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
8-10	0	--	Tan fine grain sand
18-20	0	--	Buff fine grain sandy limestone
28-30	0	--	Tan buff fine grain calcareous sand
38-40	0	--	Tan fine grain sand
48-50	0	--	Tan fine grain sand
58-60	0	--	Tan fine grain sand
68-70	0	--	Tan fine grain sand
78-80	0	--	Tan fine grain sand
83-85	0	430	Tan fine grain sand (wet)
93-95	0	459	Tan fine grain sand (wet)

Boring completed at 95 feet bgs Groundwater encountered at 83 feet

WELL CONSTRUCTION LOG



Installation Date(s) 10/19/06
Drilling Method AIR ROTARY
Drilling Contractor HARRISON / COOPER DRILLING
Development Technique(s) and Date(s) _____

Water Removed During Development _____ gals.
Static Depth to Water 83 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks _____

DATE: 11/9/06	CLIENT: RICE OPERATING	WELL NO.
Highlander Environmental	PROJECT: BD-K-4	MW-2
	LOCATION: LEA COUNTY, NEW MEXICO	

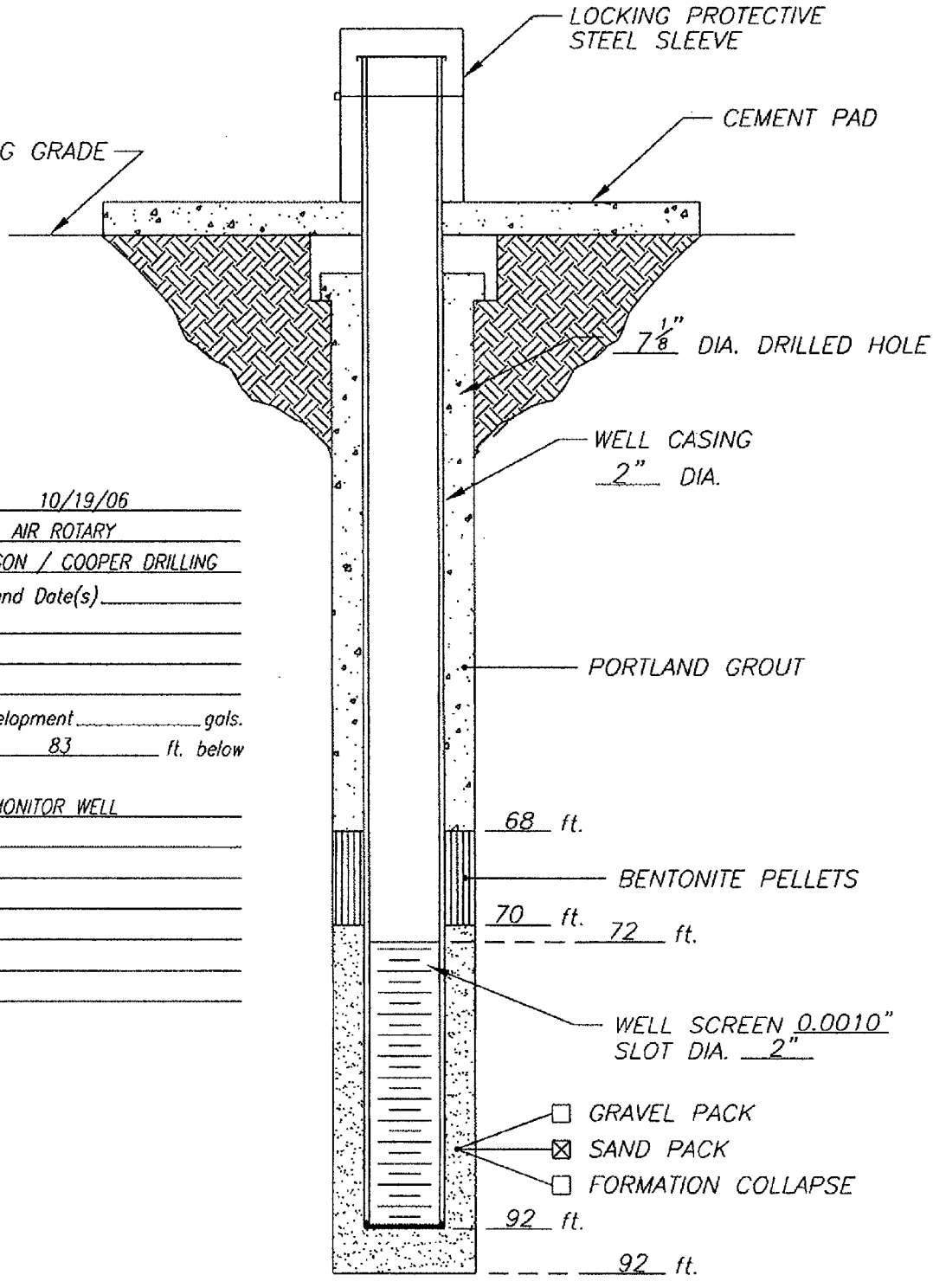
SAMPLE LOG

Boring/Well: MW-2
Project Number: 2306
Client: Rice Engineering
Site Location: BD - K-4
Location: Lea County, New Mexico
Total Depth 95
Date Installed: 10/19/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
3-5	0	88	Brown fine grain sandy clay of high plasticity
8-10	1	114	Tan brown fine grain calcareous sand
13-15	1	87	Tan brown fine grain calcareous sand
18-20	1	57	Buff tan fine grain calcareous sand
23-25	1	84	Tan fine grain calcareous sand
28-30	4	86	Tan fine grain calcareous sand
33-35	4	115	Tan fine grain calcareous sand
38-40	3	86	Tan fine grain calcareous sand
43-45	4	60	Tan fine grain sand
48-50	2	55	Tan fine grain sand
53-55	3	56	Tan fine grain sand
58-60	3	59	Tan fine grain sand
63-65	4	59	Tan fine grain sand
68-70	3	29	Tan buff fine grain calcareous sand
73-75	4	28	Tan fine grain sand
78-80	4	45	Tan fine grain sand
83-85	0	--	Tan fine grain sand (wet)
88-90	0	--	Tan fine grain sand (wet)
93-95	0	--	Tan fine grain sand (wet)

Boring completed at 95 feet bgs Groundwater encountered at 83 feet

WELL CONSTRUCTION LOG



Installation Date(s) 10/19/06
Drilling Method AIR ROTARY
Drilling Contractor HARRISON / COOPER DRILLING
Development Technique(s) and Date(s) _____

Water Removed During Development _____ gals.
Static Depth to Water 83 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks _____

DATE: 11/9/06 *Highlander Environmental*	CLIENT: *RICE OPERATING* PROJECT: *BD-K-4* LOCATION: *LEA COUNTY, NEW MEXICO*	WELL NO. MW-3

SAMPLE LOG

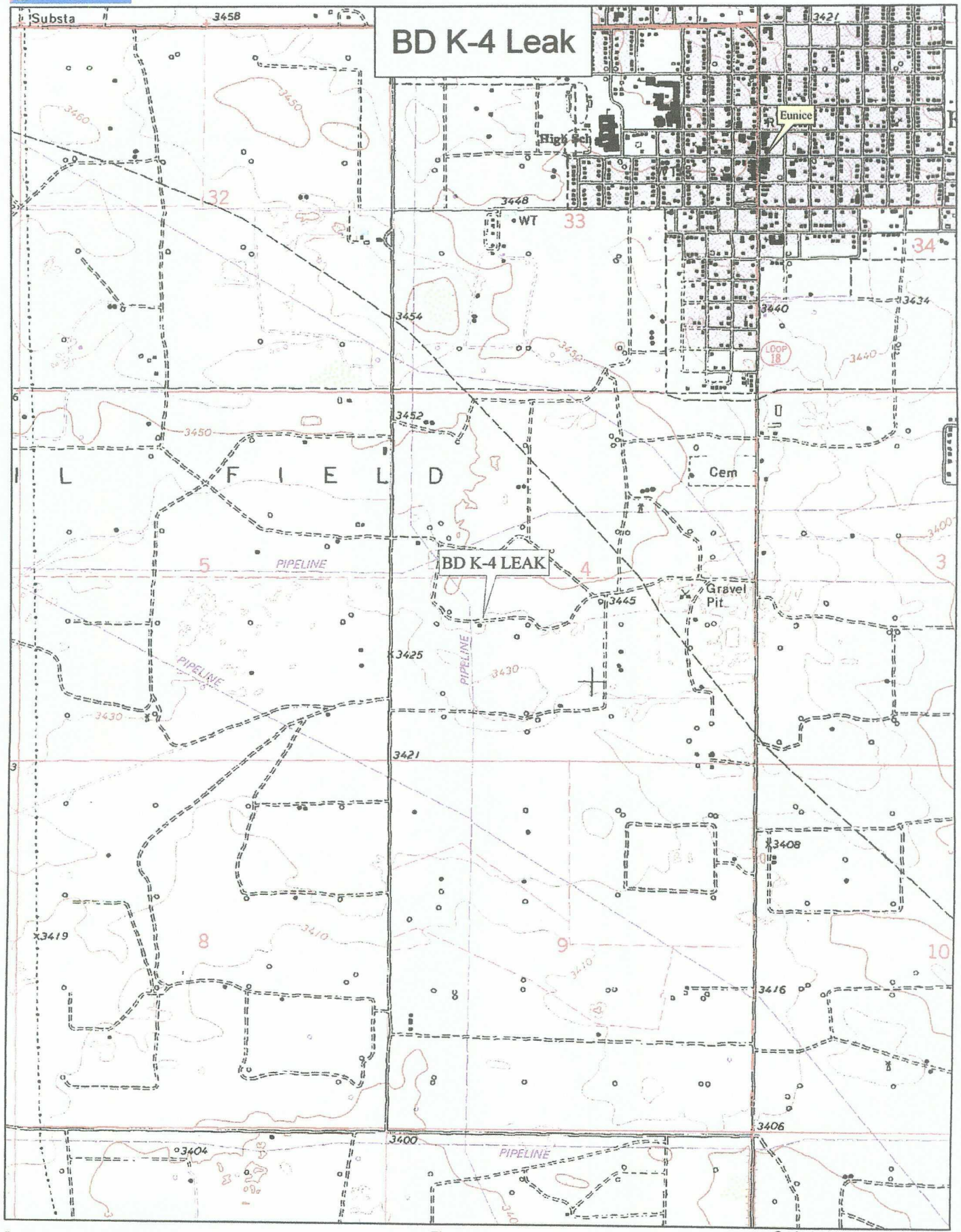
Boring/Well: MW-3
Project Number: 2306
Client: Rice Engineering
Site Location: BD - K-4
Location: Lea County, New Mexico
Total Depth 92
Date Installed: 10/19/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
3-5	1	55	Brown fine grain clayey sand
8-10	0	55	Buff fine grain sandy limestone
13-15	1	55	Buff fine grain sandy limestone
18-20	1	115	Buff fine grain sandy limestone
23-25	0	111	Buff fine grain sandy limestone
28-30	0	114	Buff tan fine grain calcareous sand
33-35	0	55	Buff tan fine grain calcareous sand
38-40	0	87	Buff tan fine grain calcareous sand
43-45	0	59	Tan fine grain calcareous sand
48-50	0	59	Tan fine grain calcareous sand
53-55	0	58	Tan fine grain calcareous sand
58-60	0	56	Tan fine grain calcareous sand
63-65	1	54	Tan fine grain calcareous sand
68-70	5	55	Tan fine grain calcareous sand
73-75	0	55	Tan fine grain calcareous sand
78-80	0	60	Tan fine grain calcareous sand
83-85	2	--	Tan fine grain sand (wet)
88-90	0	--	Tan fine grain sand (wet)

Boring completed at 92 feet bgs Groundwater encountered at 83 feet

DeLORME

Topo USA® 5.0



TN
MN (7.9°E)

Scale 1 : 22,400

0 600 1200 1800 2400 3000 ft
0 200 400 600 800 1000 m

1" = 1,866.7 ft

Data Zoom 13-2