AP-27

STAGE 1 & 2 REPORTS

DATE:
June 8, 2001

RICE Operating

Junction Box E-15 Remediation Project

RECEIVED

JUN 0 8 2001

ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION



Whole Earth Environmental 19606 San Gabriel Houston, Tx. 77084 (800) 854-4358 www.wholeearthonline.com



Site Profile

Location

The spill area is located within Section 15, T22S, Range 37E southeast of Eunice, New Mexico on fee land owned by Messrs. Irvin Boyd and Robert Cueto. The primary land use is that of grazing cattle. Significant oilfield development is present within the area and several oil wells, storage tanks, flow lines and ancillary structures are present on both landholdings. A 7.5' map is enclosed within this section to define the location (Exhibits 1 & 2).

The topography is unremarkable. There are no surface streams or catchments within one mile of the site.

Spill Discovery & Notification

On March 29, 2000 a leak of produced brine water was discovered and verbally reported to the Hobbs office of the NMOCD. This notice was followed up the next day with a Form C-141 (Exhibit 3) describing the cause of the leak as due to a rusted sleeve.

Containment

Rice Operating Company immediately recovered approximately 300 barrels of fluid and began excavation and disposal of the contaminated soils. The initial excavation and disposal effort resulted in approximately 2,000 cubic yards of contaminated being transported to the Sundance Parabo Facility. With the initial excavation at approximately 15' bgl, the site was contoured to insure that any potential contaminate migration would be to the center of the site.

Testing

Protocol

Soil and water sampling was conducted in accordance with the site investigation plan: PR-61, enclosed as Exhibit 4.

Soil Testing

In an effort to determine the vertical and lateral extent of contaminant migration, Claiborne Harrison Corp. drilled a series of six boreholes on July 14, 2000. A site map describing the location of these test holes is provided as Exhibit 5. The test holes were sampled extensively to determine the chloride concentrations within the remaining plume. The results of these tests are contained within Exhibit 6.

Water Testing

On January 22, 2001, Clairborn Harrison Corporation drilled and completed two water monitoring wells. The location of these wells is described within the attached survey, Exhibit 7). WW-1 was completed satisfactorily and sampled on January 23 in accordance with WEQP-28 and WEQP-77. WW-2 was successfully drilled, however the tight formation did not allow a sufficient volume of fluid to be pumped from the well bore to obtain meaningful test results.

Whole Earth Environmental was notified of the test results of WW-1 on January 25th and immediately notified Messrs. Price and Williams of the NMOCD telephonically that day and provided written notification and copies of the test results and associated chain of custody the next day (Exhibits 8-12).

Whole Earth Environmental re-sampled MW-2 on February 27, 2001. Mr. Buddy Hand of the Hobbs office of the NMOCD witnessed the re-sampling. The results of these analyses are provided in Exhibits 13-15.

Based on the results of the first two monitor well test results, two additional monitor wells were drilled, cased, and developed in early May. The two new monitor wells were sampled on May 23, 2001. The test results indicate that an additional plume source may lie up-gradient from the E-15 junction box leak (Exhibits 19, 19A & 19B). Additional investigation will be conducted to determine the source of this plume.

Site Geology

The boring logs from the six test holes and two monitoring wells (Exhibits 16A-H), reveal a red, sandy topsoil extending to a depth of approximately 5' bgl underlain by tan calichi to approximately 30' bgl atop a 40' dense sand layer. A 3' layer of indurated sandstone lies immediately above an 18' red bed clay layer.

Hydrology

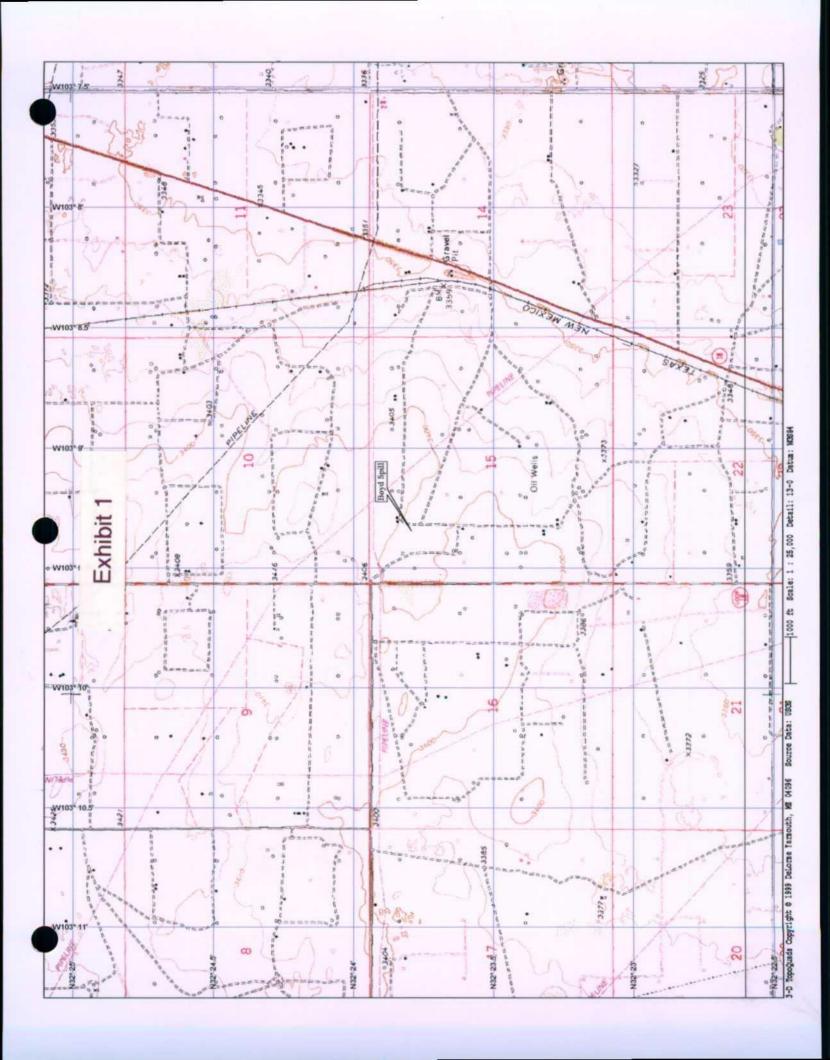
The U.S.G.S. survey maps (Exhibits 1 & 2) indicate a general decline in elevation to the southeast. The civil survey (Exhibit 7) shows the elevation of MW-1 to be 3,403.4' at the top of the cement pad. The distance to ground water from the top of the pad is 73.2'. The elevation of MW-2 is 3403.1' at the top of the cement. The distance to groundwater is 77'. The gradient between the two water depths is .00928 ft. / ft.

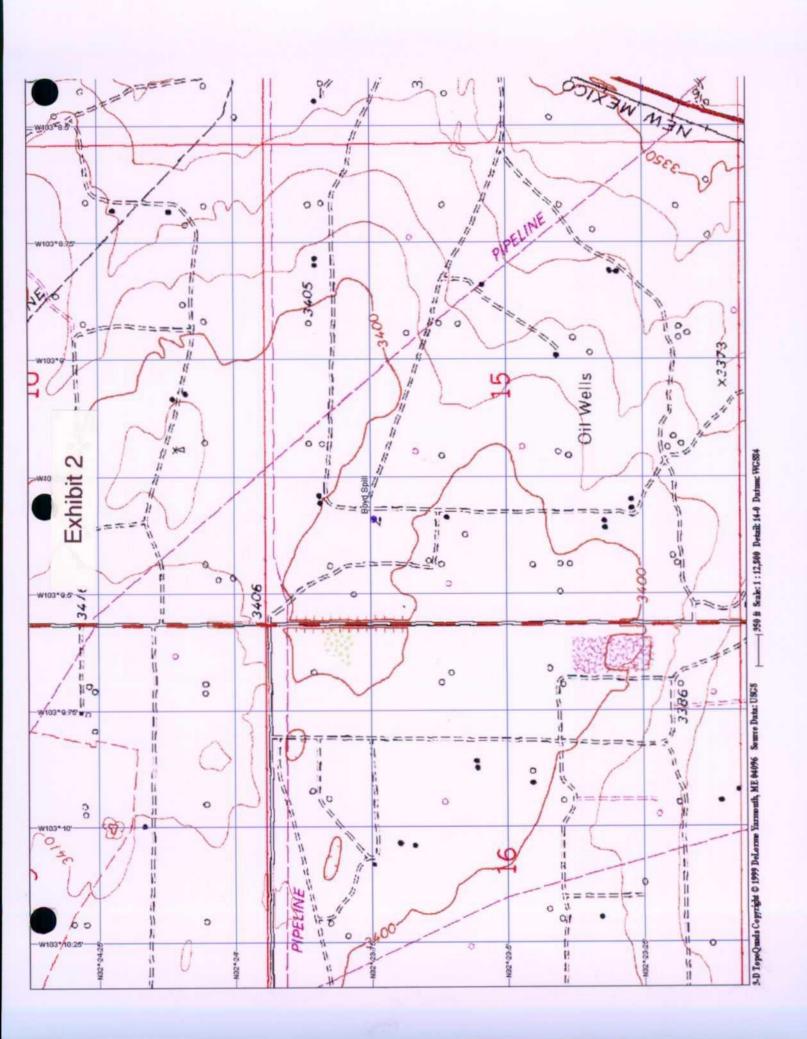


Exhibit Index

- 1. U.S.G.S. topographical map
- 2. U.S.G.S. topographical map
- 3. N.M.O.C.D. Form C-141
- 4. Site Investigation Plan PR-61
- 5. Bore hole location schematic
- 6. Bore hole chloride concentrations
- 7. Basin Survey showing locations of monitor wells
- 8. January 26th, 2001 notification letter to Wayne Price
- 9. January 26^{th} , 2001 notification letter to Chris Williams
- 10. Environmental Labs of Texas chain of custody document
- 11. Environmental Labs of Texas report of BTEX concentrations
- 12. Environmental Labs of Texas report of chloride concentrations
- 13. Environmental Labs of Texas chain of custody document
- 14. Environmental Labs of Texas report of BTEX concentrations
- 15. Environmental Labs of Texas report of chloride concentrations
- 16A. Well Report-Bore Hole # 1
- 16B. Well Report-Bore Hole # 2

- 16C. Well Report-Bore Hole #3
- 16D. Well Report-Bore Hole # 4
- 16E. Well Report-Bore Hole # 5
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- 16G. Well Report-Monitor Well # 1
- 16H. Well Report-Monitor Well # 2
- 16I. Boring Log Monitor Well # 3
- 16J. Boring Log Monitor Well # 4
- 17. Water well development procedure QP-28
- 18. Water well sampling procedure QP-76(A)
- 19. Chain of Custody document for MW 3& 4
- 19A. Environmental Labs of Texas report of chloride concentrations
- 19B. Environmental Labs of Texas report of BTEX concentrations





District I
P.O. Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505
OPERATOR'S MONTHLY PEPODT

Form C-141 Originated 2/13/97

Submit 2 copies to Appropriate District Office in accordance with Rule 116 on back side of form

Exhibit 3

Release Nouncation and Corrective Action

	OPERATOR	X Initial Repo	nt F	inal Report
Name Rice Operating Company	Contact John L. Mo			
Address 122 West Taylor Hobbs, NM 88240	Telephone No. 505-393-91	74		
Facility Name B.D. SWD	Facility Type PRODUCE	D WATER PIPEL	INE	
Surface Owner IRVIN BOYD & ROBERT CUETO IRVIN BOYD & ROBERT CUETO		Lease No.		
	TION OF RELEASE			
Unit Letter Section Township Range Feet from the E&D 15 T22S R37E	North/South line	Feet from the	East/West Line	County LEA
NAT	URE OF RELEASE			
Type of Release Production Water	Volume of Re UNKOW		Volume Recove 300BBLS	red
ce of Release ELINE	Date and Hou 1:00PM 3-	of Occurrence 29-00	Date and Hour of SAME	of Discovery
was Immediate Notice Given? X YES No Not Required	If YES, To W SLYVIA	hom?	**************************************	
By Whom? JOHN L. MOODY	Date and Hour 3:55 3-29-0			
Was a Watercourse Reached? ☐ Yes ※No	If YES, Volum	ne Impacting the Waterco	ourse.	
If a Watercourse was impacted, Describe Fully. (Attach Additional Sheets If No	ccessary)			
N/A				
Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sh STEEL DRESSER SLEEVE RUSTED OUT, TAKE DRESSE		REPLACE WITH J	OINT OF PVC P	IPE
Describe Area Affected and Cleanup Action Taken. (Attach Additional Sheets Area affected: 1512 SQUARE FEET IN UNIT LTR. "D". 10, OWNER IN UNIT LTR. "E" AND HE WANTS ALL IMPAC STARTED HAULING 3-30-00. WE WILL DO THE SAME F	450 SQUARE FEET IN TED SOIL DUG OUT	AND REPLACED	WITH CLEAN A	
I hereby certify that the information given above is true and complete to the best of m and/or file certain release notifications and perform corrective actions for releases with marked as "Final Report" does not relieve the operator of liability should their operationant human health or the environment. In addition, NMOCD acceptance of a C-141 report/or regulations.	nich may endanger public health ions have failed to adequately in	or the environment. The a vestigate and remediate co	ecceptance of a C-14 ntamination that pose a	I report by the NMOCD threat to ground water,
d Name: John L. Moody Jr. A. J. M. Angla de	Approved by	OIL CONSERVATIO	N DIVISION	and the second s
Title: Regulatory Compliance Coordinator	District Supervise Approval Date:	x:	Expiration I	Pate:
Date3-30-00 Phone: 505-393-9174	Conditions of An	mmil.		

Exhibit 4

PR-61

Site Investigation Plan Rice Operating Company Junction Box 15

1.0 Purpose

This plan is to be used to determine the vertical extent of contamination adjacent to Rice Operating Company's Junction Box E-15.

2.0 Scope

This plan is site specific for the Rice Operating investigation project.

3.0 Preliminary

Prior to any field operations, Whole Earth Environmental shall conduct the following activities:

3.1 Client Review

- 3.1.1 Whole Earth shall meet with cognizant personnel within Rice to review this protocol and make any requested modifications or alterations.
- 3.1.2 Changes to this protocol will be documented and submitted for final review by Client prior to the initiation of actual field work.

4.0 Safety

- 4.1 Prior to work on the site, Whole Earth shall obtain the location and phone numbers of the nearest emergency medical treatment facility. We will review all safety related issues with the appropriate Client personnel, sub-contractors and exchange phone numbers.
- 4.2 A tailgate safety meeting shall be held and documented each day. All sub-contractors must attend and sign the daily log-in sheet.
- 4.3 Anyone allowed on to location must be wearing sleeved shirts, steel toed boots, and long pants. Each vehicle must be equipped with two way communication capabilities.

4.4 Prior to any excavation, New Mexico One Call will be notified. The One Call notification number will be included within the closure report. If lines are discovered within the area to be excavated they shall be marked with pin flags on either side of the line at maximum five foot intervals.

5.0 Coring

5.1 A delineation hole will be cored at the southeast corner of the surface stain area. A log will be kept by the coring company outlining soil morphology.

6.0 Soil Sampling

6.1 Soil samples will be obtained in accordance with WEQP-77 at the ground surface and at each 10' depth interval.

7.0 Soil Analysis

7.1 The soil samples obtained under 6.1 of this plan will be transported to a laboratory and tested for the presence of DRO-GRO TPH, BTEX and chlorides.

8.0 Water Sampling

- 8.1 The coring rig will drill to a minimum depth of 15' below the upper interface layer of the water table.
- 8.2 The well will be left uncased but developed by pumping fluid from the well bore until a minimum turbidity is found but a minimum of twenty gallons of fluid from the well bore shall be drawn.
- 8.3 All bailed fluids shall be collected by the coring company and disposed of at an approved disposal facility.
- 8.4 The open well bore shall be protected to insure that no foreign matter may enter the bore while a water analysis is conducted.
- 8.5 A water sample shall be collected in accordance with WEQP-76 and transported to a laboratory for the analysis of BTEX and chlorides.

9.0 Investigation Report

9.1 Whole Earth will provide an investigation report containing the following minimum information:

- Photographs of the location of the test boring
- Photographs of the entire spill area
- Copies of this protocol and all testing procedures
- Independent laboratory analyses and associated chains of custody
- Driller's Log

Rice Operating
Test Boring Locations

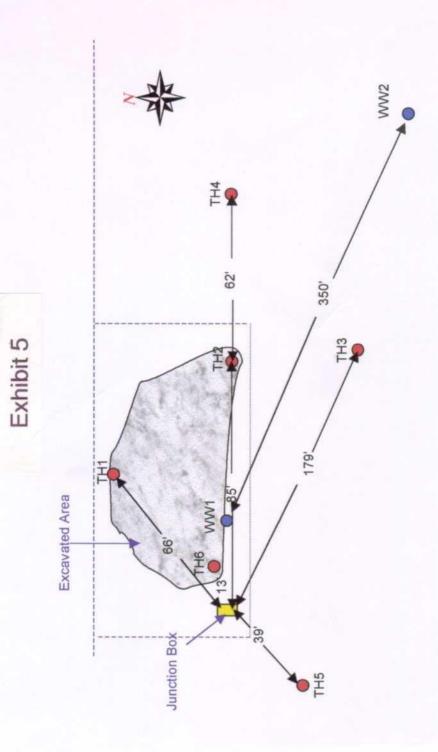


Exhibit 6

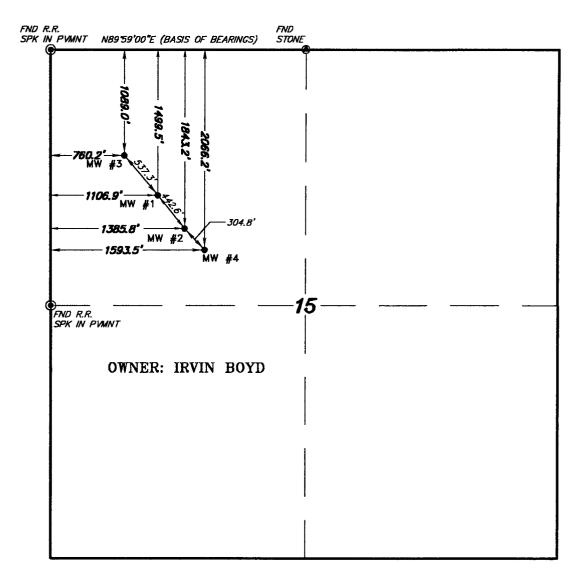


Rice Operating Company Junction Box E-15 Site Dileneation Sampling

Depth (Feet Below		Chlori	de Concen	tration in n	ng / kg	
Ground Level)	Bore #1	Bore # 2	Bore # 3	Bore # 4	Bore # 5	Bore # 6
5			200	1,800	800	2,000
10	3,100	2,900	100	1,300	700	2,000
15	3,700	3,000	50	1,500	1,000	1,900
20	2,900	2,100	50	900	500	1,700
25	2,100	1,500	50	300	400	
30		1,200	50	450	300	1,500
35	3,900	1,400	50	150	500	1,300
40	2,800	2,600	50	200	400	1,500
45	2,300	1,000	100	100	400	1,200
50	2,300	1,000	50	50	300	1,000
55	3,100	1,200	50	50	300	1,000
60	1,700	1,100	100	50	200	1,000
65		1,800				
70		1,600				

SECTION 15, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Exhibit 7



WELL	GRND ELEV.	PAD ELEV.	NORTHING	EASTING	LATITUDE	LONGITUDE
MW #1	<i>3398.3</i> °	3398.6'	N509436.578	E904771.875	N32°23'42.0"	W103*09'21.2**
MW #2	3398.4	3398.9*	N509096.706	E905055.281	N32°23′38.6″	W103'09'17.9"
MW #3	3397.6'	3397.8'	N509842.177	E904419.441	N32°23'46.1"	W103'09'25.2"
MW #4	3397.9*	3398.6	N508876.745	E905266.429	N32°23'36.4"	W103*09*15.5*

ALL COORDINATES ARE BASED ON NMSPCE (NAD83)

1000

HEREBY CERTIFY THAT THIS PLAT WAS PREPAREDS
FROM FIELD NOTES OF AN ACTUAL SURVEY AND
MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND
SURVEYS AS SPECIFIED BY THIS STATE:

7977

GARY L. JONES N.M. P.S.
TEXAS P.L.S.

100 603840 N.M. LINE
TEXAS P.L.S.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 1522 Drawn By: **K. GOAD**Date: 05-30-2001 Disk: KJG CD#3 - RC1522A.DWG

WHOLE EARTH ENVIROMENTAL, INC.

1000

REF: MONITOR WELLS BD SITE - Jct. Box E-15

MONITOR WELLS LOCATED IN

SECTION 15, TOWNSHIP 22 SOUTH, RANGE 37 EAST,

N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 05-29-2001

Sheet

of 1 Sheets

2000 FEET

Exhibit 8

January 26, 2001

Mr. Wayne Price NMOCD Office 1220 South St. Francis Dr. Sante Fe, New Mexico 88505

Re: Notice of Groundwater Impact: UL D&E, Sec 15, T22S, R37E BD SWD System Operated by Rice Operating System

Dear Mr. Price:

On January 22nd Whole Earth Environmental, Inc. witnessed the drilling and completion of two water monitoring wells situated adjacent to a spill area defined as UL D&E Sec 15, T22S, Range 37E, Junction Box E-15. A 7.5 minute map specifying the location is included within this transmittal.

On January 23rd Whole Earth Environmental, Inc. collected water samples from the two wells and transported them to Environmental Labs of Texas for the analysis of BTEX and chlorides. The enclosed analytical results indicate that the chloride concentrations within MW-1 exceed NMWQCC standards. The analytical results for MW-2 should not be considered reliable or accurate as we were unable to bail sufficient fluids from within the wellbore to develop the well.

These analytical results were received by Whole Earth Environmental, Inc. on the morning of January 25. Mr. Olson was notified of these results by e-mail that afternoon.

We are presently working to provide you and Chris Williams a Stage 2 Abatement Plan by March 31st, 2001.

Sincerely,

Mike Griffin President Whole Earth Environmental, Inc.

Cc: Carolyn Haynes / Rice Operating System

Enclosure:

7.5' map ELT Analysis Chain of Custody

Exhibit 9

January 26, 2001

Mr. Chris Williams NMOCD Hobbs Office 1625 North French Drive Hobbs, New Mexico 88240

Re: Notice of Groundwater Impact: UL D&E, Sec 15, T22S, R37E BD SWD System Operated by Rice Operating System

Dear Mr. Williams:

On January 22nd Whole Earth Environmental, Inc. witnessed the drilling and completion of two water monitoring wells situated adjacent to a spill area defined as UL D&E Sec 15, T22S, Range 37E, Junction Box E-15. A 7.5 minute map specifying the location is included within this transmittal.

On January 23rd Whole Earth Environmental, Inc. collected water samples from the two wells and transported them to Environmental Labs of Texas for the analysis of BTEX and chlorides. The enclosed analytical results indicate that the chloride concentrations within MW-1 exceed NMWQCC standards. The analytical results for MW-2 should not be considered reliable or accurate as we were unable to bail sufficient fluids from within the wellbore to develop the well.

These analytical results were received by Whole Earth Environmental, Inc. on the morning of January 25. You were notified of these results telephonically that afternoon. My efforts to reach you by e-mail at cwilliams@state.nm.us.ocd/ were unsuccessful.

We are presently working to provide you and Wayne Price a Stage 2 Abatement Plan by March 31st, 2001.

Sincerely.

Mike Griffin President Whole Earth Environmental, Inc.

Cc: Carolyn Haynes / Rice Operating System

Enclosure:

7.5' map ELT Analysis

Chain of Custody

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Project Name: JB-15 BTEX 8021B/5030 Analyze (conice Metala: As Ag Ba Cd Cr Pb Hg Se TOLP TPH 8015M GRO/DRO Project Loc: Project #: # 0 8001/2001 XT H9T 404.9 Jo-82+ 1.812 H9T Time TDS/CL/SAR/EC Other (specify): Matrix eppnis Date Water Fax No: (28) 646-8996 Other (Specify) Preservative °OSZH Exhibit 10 HOEN FONH eol No. of Containers 3:50 3:20 3.50 3:20 Time Sampled company Name Whole Santh Eurinan menta -23-01 Received by: 7 irol...Intal Lab of Texas, Inc. 77084 Date Sampled 19606 San Gabaiel Time 8.25 Time Phone: 915-563-1800 Fax: 915-563-1713 850 854-4358 61.PP.x 1-24-01 Date FIELD CODE City/State/Zip: Houston Company Address: Project Manager: Telephone No: Sampler Signature: Vest I-20 East , Texas 79763 Instructions: uished by:

ENVIRONMENTAL

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL

ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 281-646-8996

Sample Type: Water

Sample Condition: Intact/ Iced/ HCl/ -1 deg.

Project #: None Given Project Name: JB-15

Project Location: Eunice, N.M.

Exhibit 11

Sampling Date: 01/23/01 Receiving Date: 01/24/01

Analysis Date: 01/24/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
36787	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
36788	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001

108 %IA 103 105 107 104 %EA 93 92 95 96 97 <0.001 <0.001 <0.001 **BLANK** < 0.001 <0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

/ - 25-0/ Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. MIKE GRIFFIN

19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 281-646-8996

Sample Type: Water

Sample Condition: Intact/ Iced/ -1 deg. C

Project #: None Given Project Name: JB-15

Project Location: Eunice, N.M.

Exhibit 12

Sampling Date: 01/23/01 Receiving Date: 01/24/01

Analysis Date: 01/24/01

ELT#	FIELD CODE	Chloride mg/L
36787	MW-1	19675
36788	MW-2	780

QUALITY CONTROL TRUE VALUE % INSTRUMENT ACCURACY BLANK

METHODS: EPA 325.3

Raland K. Tuttle

1-25-01

Date

The Color of the C	nvironmental Lab of Texas, Inc. 12600 West 1210 East	Lab of Texa	S, 1	nc.	1266	0 Wes (915)	# F.21 563) West L-10 East (915) 563-1800	95		Odess, Texas 19763 FAX (915) 563-1713	617.1	- 8	9	Ę	,dot)ar A	980	CHAIN-OF-CUNTODY RECORD AND ANALYSIS REQUEST	NALY	25	COURS	E		
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ENVIRONMENTAL

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL, INC.

<0.001

ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084

FAX: 281-646-8996

<0.001

Sample Type: Water

Sample Condition: Intact/ Iced/ HCl/ 3.5 deg. (

FIELD CODE

MW-2

Project # . E-15

ELT#

37796

Project Name: None Given Project Location: Eunice, N.M. Exhibit 14

Sampling Date: 02/27/01 Receiving Date: 02/28/01

Analysis Date: 02/28/01

<0.001

96

91

< 0.001

m,p-XYLENE o-XYLENE **ETHYLBENZENE** TOLUENE mg/L mg/L mg/L mg/L

< 0.001

%IA 86 96 %EA 87 88 91 BLANK < 0.001 < 0.001 < 0.001

BENZENE

mg/L

< 0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

93

88

< 0.001

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL, INC.

ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 281-646-8996

.,,,,

Sample Type: Water

Sample Condition: Intact/ Iced/ 3.5 deg. C

Project #: E-15

Project Name: None Given Project Location: Eunice, N.M.

Exhibit 15

Sampling Date: 02/27/01 Receiving Date: 02/28/01

Analysis Date: 03/01/01

ELT# FIELD CODE Chloride mg/L

37796 MW-2 886

QUALITY CONTROL 5052
TRUE VALUE 5000
% INSTRUMENT ACCURACY 101
BLANK <10

METHODS: EPA SW 846-9253

P-0- -14-5

Raland K. Tuttle

<u>3-01-0</u> /

Exhibit 16A

end onginal	copy by ce	rtified mail	to: IDLK,	<u> </u>					Texas Da	partment of	Licensing &	į
ATTENTION (OWNER: C	Confidentiality	•		Sta	te of Te	(as		£	Regulation O Box 121		
phvaege nous of Well Owner	's copy (pir	16)			VACET	L REP	OPT			יבי אספיים: שבונים, TX 78		
O, 110.1 011.10.	0 00p) (r	.,			AAEr	T VEL	<u> </u>			512-463-78		
						VAL TON	las		lobbs	NN	88	240
1) OWNER	Ric	e Operat		AI	DORESS 12	W. Tay	or RFD)	F	(City)	(5ta)		(lp)
•		(N	iame)			(3000)	UI KEU)		(0.3)		•	
2) ADDRE	SS OF WE	LL'S LOCAT	ION:				Long.			Lat.		
-,		CE O ECON.		n Hwy.	207	Eunice	•	NM	88231	GRID #		
County	_Lea_			, RFD or ot		(City)		(Ştete)	(Zip)			
			•						☐ Domestic	1 5)	
3) TYPE OF W	ORK (Che	ck):	4) Propo s ed	USE (Chec	k): 🛛 Monitor	EUAROUL	nental So	a Boung		1	•	
8 New Well	□ p	eepening	☐ Industrial	☐ Irrigation	n 🗆 Injection	O Public Si	upply 🗆	De-watering	☐ Teshve#	1		
☐ Reconditio	mine 58 D	naging 1	II Public Sumble	well wate t	lbatimdus enek	o the TNRC	C7	□ Yes	□ No			
		499"4						THOD (CM	ecki: Dirive	n		
6) WELL LO	3:	⊢		METER OF		— i	Rotary	☐ Mud R	-	. 1		
Date Onlling:		L	Dla., (in.)	From (ft.								
Started	7/14/0	00 1	6	Surface	65	☐ Air	Hammer	☐ Cable	Tool Dette	•		
-	714 4	/00				□ Oth	er					_
Completed _	.,,,,					┪				1		Ŋ
				<u></u>							☐ Straig	hi Mai
From (ft)	To (ft)	Des	cription and col	or or tormati	on material	5) Bore	hole Con	apletion (Cf	neck): 🛚 🗀 Open	HOIR	th Sumit	III AAGN
		SB	-1			טם	nderream	ed D (Gravel Packed C	Other		
0	5		nd - Red			II II CO	avel Pack	ed give inter	val from	ft t	0	ft
									WELL SCREEN			
5	30		<u>liche - Tan</u>			CASIN	G, BLANT	TPIPE, AND	WELL SCREEN		(6.)	
30	65	Sa	nd - Red/E	rown		_	New	Steel, Plas	shc, elc	Setti	ng (ft.)	Gage
						Dia_	or	Perf., Slott	ed, etc	ì		Casting
						(in.)	Used	Screen Mi	g if commercial	From	To	Screen
										1		
								 				
							 	 		 	 	ļ
							↓	 		 	 	
							<u> </u>	<u> </u>		<u>. </u>	ــــــــــــــــــــــــــــــــــــــ	<u>. </u>
						9) CE	MENTING	DATA				
	(Use rev	rerse side of	Well Cwner's co	py, if neces	sary)	Cemer	nted from	ft	. to ft_	No. of	sacks used	
13)	Well ob	gged within 4	A hours			_	site from		to 65 ft.	No. of	sacka used	13
					Sacks used:		msc 110-11					
Casing left in	n well.	Cement/ben	tonile placed in	well:	SHEKS USEU.	-		China				
From (R)	To (ft)	From (fi) <u>Y</u>	o (fi)		Metho	d used	Chips				· · · · · · · · · · · · · · · · · · ·
1 1			l l			Cemer	nted by	Harris	on & Coope	r, inc.		
						Distan	ce to sept	ic system fie	ald lines or other o	oncer trated	contaminat	iont
14) TYPE P	LIMP:	L							ve distance			
1 . ,	-							COMPLETE				
			e 🗆 Cylinder			1.0, 3						
□ Other: _						1	☐ Spec	cifled Surfac	e Slab Installed			
Depth to pu	mp bowis. t	ylınder, jet, e	1C ,	R.			☐ Spec	cified Steel S	Sleeve Installed			
15) WELL	TESTS:	···········				7	O Pitte	ss Adapter l	Jeed			
Type test	□ Pump	□ Baı	ier 🗆 je	ned []	Estimated	1		•	ative Procedure U	sed		
, 150, 1291	1 1111/11					441 10	ATER LE					
Yield.	gpm w	In	ft, drawdow	n after		PIE 11) A	MIER LE	YEL				
16) WATE	RQUALITY	•				- -	mic level	N/A	ft. below fand si	urface	Date 7/1	4/00
Did you so	windia ses	ofrain any ete	ata which care	ined underi	able constituent				• •		Date	
CON YOU KIND	erneith best	•				- A	rtesian Fic	<u> </u>	dbw'			
□ Yes	NO NO	If yes, subm	nit "REPORT O	F UNDESIR	ABLE WATER"	12) P	ACKERS		Туре		Depth	
Type of wal	er Fres	h	Denth	of strata N	VA.							
17 POLITICAL MAIL				v								
Was chemi	cel analyse	made?	☐ Yes	Ø N	0							
to complete	tems 1 thr	าม 16 will (e \$ป	iil in the log(s) b	under my di eing returns	rect supervision) of for completion	and resubn	भारत्थः,		nents hersin are ti		ect Lunders	stand that faile
COMPANY	NAME C	laiborne	Harrison			WELL	. DRILLEF	R'S LICENS!	ENO. WD-12	271		
1	7000 0	-m c.	(Type o	Print)		1L.E.	L			TV	7	0407
ADDRESS _	1202 6	23 +Λ_	(D)	```		Lubb	DCK	(City)		(State)		9407 (Zip)
		V)Hth	(Stroot or RF				_	(Cu)		(342)		1-441
(Signed)		NA A V	(1 man, and 18/m)	Onlieri		(Signe	d)		(Renizieron	Oritlor Trains	e)	
L			(Licenned Well	C 1121					The second second second			

Exhibit 16B

end original	copy by c	ertified ma		ξ, P.U.					_	Техав De	partment of L		
ATTENTION Privilege Noti	OWNER:	Confidentiali rsa side	ry .			State	of Tex	28			Regulation P.D. Box 121		
Of Meli Owne	r's copy (p	ink)					REP				ustin, TX 787		
		•			VI	<i>-</i>					512-463-788		
			etCo			1221	W Tay	or	1	Hobbs	NM	88	240
1) OWNER	R RI	ce Open	ating Co.		ADDRESS .	122	(Street	r RFD)		(City)	(State) (Zip)
			(Name)				100-201			• •	l si		
2) ADDRI	ESS OF W	ELL'S LOCA						Long.			-		
County	Lea		3 S.	on Hwy	. 207		Eunice		NM	88231	_ GRID#		
County				et, RFD or s			(City)	_	(State)	(Zip)			
3) TYPE OF W	MODK ICh	rekt-	4) PROPOSE	USE (Che	ck): D Mc	online 🗷	Environn	ental Soi	a Boring	O Domestic	5)	
	·		T todustrin	l C teriosti	on 🗆 Inlec	ction D	Public Su	poly D	De-waterin	g 🗆 Testvell			
2 New Well		Deepening							☐ Yes	Ito	l		
O Reconditio	HING 33 1	Plugging	II Public Supp	y wen, were	piens suom	atten to a							
6) WELL LO	G:		DI	AMETER O			4 '		ETHOD (Ch	-	•		
Date Drilling			Dia (in.)	From (<u> </u>	(ft.)	ı	totary		,			
Started	7/14/	00	6	Surfac	· 7	70	□Air∤	lammer	□ Cable	Tool D Jette	×		
	714			7			☐ Othe	ır					
Completed _	1,,,-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		+			1						N
			scription and co	1	ion material		-			heck): U Open	Mala	☐ Straigi	n Mail
From (ft.)	To (ft.)		escription and Co	MOI OF YORK	CONT PROCESSES		1 th Bouel	hom Con				_	.,
		S	B-2					derream		Gravel Packed [
0	5	S	and - Red				If Gra	vel Pack	ed give inte	rval from	ft. to		<u>n</u>
5	30	Ċ	aliche - Ta	n			CASING	. BLAN	(PIPE, ANI	WELL SCREEN	DATA:		
30	70		and - Red/						1		- 1	o (n)	
30			and Hour	5101111			1	New	Steel. Pla				Gage
							Dia.	or	Perf., Slot		F	To	Casting Screen
		,					(in.)	Used	Screen M	fg., if commercial	From	-10	SCIECTI
									<u> </u>				
					_				<u> </u>				
											. 1		l
 							1						1
-							91 CEA	ENTING	DATA				****
ļ 	Tilse re	verse side o	I Well Cwners	opy. If nece	ssarvi		4 ' '			t. 10 ft.	No of	acks used	
L												lacks used	
13)	Well p	ugged within	48 hours				Reuton	te rrom		1. to ft.	NO. 01.	OC. S DZEG	
Casing left i	n well.	Cemenyb	entonite placed i	n well:	Sacks	used:	4						
From (ft)	To (ft)	From	(11)	Ta (A)			Method	used	Chips				
					1		Cemen	ted by	<u>Harris</u>	оп & Сооре	r, inc.		
		1					Distant	a to sept	tc system fi	eld lines or other o	oncentrated	contaminaj	onft
14) TYPE	PUMP:						− 4	-		ove distance			
1		D 6 +	G G #1000						COMPLEY				
ŀ		⊔ Submersi	ble Cylinde	at .			}	_					
Other.							1			ce Slab Installed			
		cylinder, jet.	etc.	Ħ.			7	□ Spec	cified Steet	Sleeve Installed			
15) WELL	TESTS:						1	O Pille	ss Adapter	Used			
Type test:	D Pum	р □В	ailer O J	etted (☐ Estimated	l	1	□ App	roved Altern	ative Procedura L	Ised		
1			a decida	- after		hi	11) W	ATER LE	VEL				
Yield:	gpm v		ft. urawgo	MI BIGG			<u> </u>						
16) WATE	R QUALIT	Y;					St	atic tevel	N/A_	_ fi. below land s	urface	Date <u>7/1</u>	4/00
Did you kno	owingly pe	retrate any a	ilrala which con	ained under	urable const	ituents?	Ar	tesian Fig)W	gpm.		Date	
O Yes	50 No	il ves sui	omit "REPORT (OF UNDES!	RABLE WAT	ER.	12) 8	CKERS		Туре		Depth	
Type of wat				of strata _			12,5	-UNERS	·	· Ibe			
1													
Was chem			☐ Yes		No			b and all	M	wests baroin sen t	un and entre	ra Lundon	ited that back
to complete	n i annea th e ilems 1 ti	is well (or thi fru 18 will re:	e well was driller sult in the log(s)	a under my t being return	Hed for comb	rision) ar retion ar	nd resubm	i(13) ir And Hi	ni nie 2(9 16	ments herein are t	JOS SING CUITS	et i gracit	Marting Color (C)
COMPANY	NAME_C	laiborne	Harrison	or Prim)			WELL	ORILLEF	R'S LICENS	END. WD-1	271	<u>.</u>	
ADDRESS	7202 6	6 <u>*</u> St.	(ACAL) I	u. c.44)			Lubbo	ck			TX	7	9407
TOURLESS .		TAK	(St eet of F	(FD)					(CHY)		(State)		(Z·P)
(Signed)		(7,7,		I Chamber			(Signed)		/Beatures	On for rainer		
L		·	(Licensied We	TACHEL)						Company (Co	THE PERSON		

Exhibit 16C

end original	copy by c	ertified ma		LR. P.O.						Texas	Department (8
ATTENTION Privilege Not	OWNER: 4	,onhdentiai 3e side	чу			State	of Tex	(25			Regulati P.O Box 1		
of Wati Owne						WELL	REP	ORT			AUSUA, TX	78711	
											512-483-7		0040
1) OWNER	Ric	e Oper	ating Co		ADDRES	s 122	W. Tay	lor	1	lobbs			8240 (Zip)
i) Designi	·		(Name)				(Street	or RFD)		(City)	(31	ate)	(L .D)
2) ADDRI	ESS OF WI	LL'S LOCA	ATION:					Long.			_		
_,	Lea			S. on Hwy	. 207		Eunice	·	NM	88231	GRID	*	
County				Street, RFD or			(City)		(State)	(Zlp)			
3) TYPE OF W	VORK (Che	ck):	4) PROPO	SED USE (Ch	eck): 🖸	Monitor 8	Environn	nental Sof	Boring	Domestic Domestic	· ·	5)	
New Wel	•	eepening	☐ Indu	itnal C krige	tion 🗆 I	Injection 🗆	Public St	ipply 🗆	De-watering	B Testwell	1		
D Recondition				ipply well, wen					D Yes	□ No			
6) WELL LO		500		DIAMETER C			7) DRI	LLING ME	THOD (Ch	eck): 🗀 Dr	nevi		
Date Drilling:			Dia. (in			To (ft.)	28 Air i	Rotary	☐ Mud F	Rotary D Bo	reo		
Sterted		00	6	Surfa	се	60	□ Air	Hammer	☐ Cable	st Ci loot:	tieo	!	
Completed							DOW	er				I	
Completed _		100			_		1						Ň
From (ft.)	To (ft.)	D	ecription an	d color of form	ation mate	erial	A) Bore	hole Com	notation (C	heck): 🗆 Op	en Hole	☐ Strai	ght Wall
i rom (ru)	(16./						4	nderream	_	Gravel Packed			
			B-3						ea give inte			10	Pt.
0	5	*	and - Re							WELL SCREI			
5	30		aliche -				CASIN	3, BLANE	PIPE, AN	O WELL SCREE	- 1	iting (ft.)	1
30	60		and - Ke	d/Brown			╣	New	Steet, Pip		30	10104 (40)	Gage
							Dia.	or	Perf., Slot	ted, elc fg., if commerci	M From	То	Casting Screen
							(in.)	Used	SUCES M	Ig., a Continue Ca	1	1 "	1
							 	-	 			-	
							+	 	 			+	
 _							+-	ļ	 			+	
							B) CE	MENTING	DATA				
 	(Use re	verse side d	of Well Cwns	r's copy, if nec	essary)		⊸ 1 '			t to !	. No	of sacks use	ď
13)	Well of	ugged withle	48 hours							t. to <u>60</u> f		of sacks use	
Casing left		T-	entonite plac	ad in well:	Sac	cks used:	-				•	• ••	
From (ft)		From		To (ft)			Method	i need	Chips		<u> </u>		
		1.000	<u> </u>		+			nted by		on & Coop	er, Inc.		
				<u>"</u>	1				_	eld lines or cthe			tionft
14) TYPE	PUMP:	.			·					ove distance			
□ Turbine	ا بعد 🕽	Submersi	ble 🗆 Cyli	nder			1		COMPLETI				
D Other.		••••					1	□ Spec	cified Surfac	e Stab Installed			
1 -		ylinder, jet	etc.,	n			1	☐ Spec	afied Steel :	Sleeve Installed			
15) WELL							7	O Pitle	ss Adapter	Used			
Type test	O Pumo	ΩE	iglier I	Jened	□ Estima	ated	ł	Q Appr	oved Altern	ative Procedure	Used		
Yield:	gpm w	ith	A draw	down after			(5 11) W	ATER LE	VEL				
	R QUALITY		71. UIST				7		NI/A			Date 71	14/00
1			- خدیدی محمده	madaine de cest	- ماهسان			alic leve!	N/A	ft. below land		•	1-1/00
1	-•.	-		contained unde			A	tesian Flo	<u> </u>	(Jpn	n.	Date	
☐ Yes	M No	•	omit "REPOF	T OF UNDES	RABLE V	VATER"	12) P	ACKERS:	:	Тур	е	Dept	<u> </u>
Type of war	er? Fres	h	D	epin of strata	N/A		<u> </u>		,				
Was them	ical analysi	made?	D Y	es B	No				····				
TTES GIRE		1100C1	٠٠		.10								
I centify tha	it i drilled thi	s well (or th	e well was d	illed under my	quecy ent	pervision) a	nd that eac	h and all	of the state	ments herein ar	e true and co	rrect Lunde	tiel rent bharar
to complete	e Hems 1 th	ru 16 Will re	sun in the log	(a) being retui	med for co	ompletion a	nd resubm	uttai.					
COMBAN	YNAME C	lalbom	e Harriso	en e			(AIE)	DREIFE	S.C. I ICEMA	ENO. WD-	1271		
1			(7	ype or Print)			AACIT	. wrevalled	. a riorida	L.10, ,,,,,,			
ADDRESS	7202 6	St. St.		PCA:			Lubbo	ock_	(0): 1		TX		79407
.0:		$\mathcal{O}\mathcal{W}$	(SI-88)	or RFD				м.	(City)		(State	5;	(Znp)
(Signed)		V	(Lesmont)	Well Driver			(Signer	37		(Reginar	ed Order Tran	ret)	

Please attach electric log, chemical analysis, and other pertinent information, if available.

Exhibit 16D

end origina	l copy by c	ertified ma	ito: TDLR	P.C					Texas Der	arment of		
ATTENTION	NOWNER:	Confidentiali	9		St	ate of Te	K28		•	Regulation O. Box 121		1
of Well Own	ner's copy (p	nk)				LL REP				ustin, TX 75		
		ŗ			TVL	CL IXLI	U (1)			12-463-78		
			C - C-		orno 41	22 W. Tay	dor	H	obbs	NN	88	240
1) OWN	ER RIC		ating Co.	ADD	RESS	(Street	or RFD)		(City)	(State	9) (2	Zip)
			(Namo)			(20.00.				1 10		
2) ADDI	RESS OF W	ELL'S LOC	ATION:				Long.					
Coup	ty Lea		3 S. c	on Hwy. 20)7	Eunic	<u>e</u>	NM	88231	GRID#		
000	",		(Stree	k, RFD or othe	1)	(City)		(State)	(Zip)			
2.205.05	WORK (Che	metal:	4) PROPOSED	(SF (Check)	☐ Monite	r 8 Environ	menus So	il Boring	□ Domestic	- 5)	
			[] Industrial	□ Imigation	□ injection	D Public S	upply D	De watering	□ Testwell	1		
Mow We		Poinagee						□ Yes	D No			
☐ Recondit	lioning & F	Pricent	If Public Supply						ch). Drive			1
6) WELL L	OG:			METER OF H				ETHOD (Che		1		
Date Oriffing	9'		Dia (in.)	From (ft.)	To (ft.)		Rolary	□ Mud Ro	_	1		ļ
Started	7/14/	00	6	Surface	60	_ Ar	Hammer	C) Cable	Tool 🗆 Jetter	' }		
Completed	7/14	/00			T	□ O#	er			—1		_
Competer							_					N
From (ft.)	To (ft.)	De	scription and col	or of formation	material	0) Dom	hale Car	notation (Ch	ock): Cl Open	Hole	☐ Straigt	ni wali
From (rt.)	10 (11)										-	
		S	B-4				Inderream	••	kravel Packed 🖸			
0	5	S	and - Red			If Gr	avel Pack	ed give inter-	al from	<u> </u>	<u> </u>	<u>ft</u>
5	30	C	aliche - Tar	7		CASIN	G, BLAN	K PIPE, AND	WELL SCREEN	DATA:		
30	60	S	and - Red/E	rown				Steel, Plast	i- ale	Settin	ng (fl.)	Gage
						Dia.	New	Perf., Slots				Casting
						(in.)	Used	,	., if commercial	From	To	Screen
						(F1)	1	1				
<u></u>						-	 	 		 		
<u> </u>							╂	 		 	 	
						— —	↓					
<u></u>							<u> </u>	<u> </u>		<u>i</u>	<u> </u>	<u> </u>
						9) CE	MENTING	DATA				
	(Use re	verse side d	I Well Cwner's co	opy, if necessa	7)	Ceme	nted from	ft.	to ft.	No. of	sacks used	
13) D	Well ph	agged within	48 hours			Bento	non) ete	_ O_ n.	to 60 ft.	No of	sacks used	12
Casing lef	in well	Cement/b	entonite placed in	wall:	Sacks use	d:			 -			
From (fl)	1	From		D (ff)		- Matha	d used	Chips				_
710111 (11)	1.01.0	1	1 1				nied by		n & Cooper	inc		
\vdash	 						-		d lines or other co		Contaminati	ion fi
101 700	Distant.	<u></u>					•	-		AICC: NAICC	CC- 1600 100	··
14) TYPE			_			1			ve distance			
☐ Turbine	e ClJet (□ Submersi	ble 🗆 Cylinder			ב נטו		COMPLETIO				
☐ Other.					·		☐ Spec	cified Surface	Slab Installed			
	oump bowls,	cylinder, jet,	etc.,	nn			☐ Spec	cified Steet S	leeva Installed			
15) WEL	L TESTS:						C) Pitte	ss Adapter U	sed			
Type test:	D Pum	0 6	ailer 🗆 Jei	med 🗆 E	slimated		□ Appr	roved Alterna	rive Procedure U	sed		
Yleid:	42 6 4	de	B. etermination			nrs 11) V	VATER LE	VEL				
	gpm w		n. drawdow			- '"3						
16) WAI	ER QUALITY	r:				s	tatic level	NIA	ft. below land su	rtace	Date 7/14	4/00
Did you k	nowingly per	etrate any s	trate which conta	aned undesirat	ile constitue	MS7 A	ntesian Flo)w/	gpm,		Date	
□ Yes	E No	If wes sur	mit REPORT DI	F UNDESIRAB	LE WATER	12) 6	ACKERS		Туре		Depth	
1						12) ¥	MONENS	<u> </u>	.,,,,=		Осри	
Type of w	ster? Fres	<u> </u>	Depth	of strate N/	<u> </u>	-						
Was cher	mical analysi	s made?	☐ Yes	⊠ No								
									·			
I centify th	at I drilled the	s well for the	e well was drilled	under my direc	t Eupervision	n) and that ea	ch and at	of the statem	ents herein are tr	e and corre	ect. Lunders	tand that faltur
to comple	He trems 1 th	ru 16 will re	tuit in the log(s) b	eing returned t	or completic	n and reaubn	oittal.					
1	_									74		
COMPAN	IY NAME_C	ialborne	Harrison (Toron	- Referit		WELI	. DRILLER	S.2 FICEMSE	NO. WD-12	/1		
	7202 6	Sth C+	(Type of	rant)		Lubb	nek			TX	7	9407
ADDRESS	1202 0	5.*	(Sireal or RF	(D)		LUUU		(City)		(State)		(Zp)
(Signed)		9 KTV~		-		(Signo	d)					
			(Licensed Well I	Order)					(Recistered)	Inter Traine	1	

Please sitsch electric log, chemical analysis, and other portnent information, if available

Exhibit 16E

end origina	copy by	certified ma	il to: TDLR.	P.C					Tayne De	partment of	1 remaion l	
ATTENTION	OWNER:	Confidentiali			64-4-	Ta			1 9X35 DE	Regulatio		•
Privilege No						of Te			1	P.O. Box 12		
of Well Own	era coby (p	K(1) ()			WELL	. REP	ORT		A	Lustin, TX 78		
										512-483-78		
1) OWNE	R Ri	ce Opera	iting Co.	ADDI	RESS 122	W. Tay			lobbs	NA NA		3240
., • . –			(Name)			(Speel	or RFD)	_	(City)	(Stat	le) i	(Zip)
2) ADDR	res of W	ELL'S LOCA	ATION:				Long.			Lat.		
-•	_			n Hwy. 20	7	Eunic		NM	88231	GRID#		
Count	y Lea			RFD or other)		(Clb/)		(State)	(Zlp)		~	
							. 10				5)	
3) TYPE OF 1			4) PROPOSED						□ Domestic]]	-,	
S New Well		Deepening		☐ Imigation						1		
☐ Recondition	oning 🗷 f	lugging	If Public Supply	well, wert plan	s submitted to t	he TNRC	C7	□ Yes	□ No			
6) WELL LO	G:		DIA	METER OF HO	LE	7) DRI	LLING MI	ETHOD (Ch	eck): 🗆 Drive	an		
Date Onling		ĺ	Dia (m)	From (fL)	To (ft.)	⊠ Air	Rotary	□ Mud R	otary D Bore	o		
•		ron l	6	Surface	80	Air	Hammer	□ Cable	Tool D Jette	a		
Started						□ Oth		_ 0_0.0		•		
Completed	//19	HOO			<u> </u>	1 400						Ŋ
			L		<u> </u>							N
From (ft.)	To (ft)	0e	scription and colo	r of formation n	nateriel	8) Bore	hole Con	npletion (Ch	eck): 🗆 Open	Mole	☐ Straig	ht Wall
		51	3-5			1 04	nderream	ed D 8	Gravel Packed C	Other		
0	5		and - Red			• •		ed give Inter			0	ft.
						+						
5	30		aliche - Tan			CASIN	G, BLAN	PIPE, ANU	WELL SCREEN	7		
30	60	5	and - Red/B	rown			New	Sheet, Plas	tic, etc	Setter	ng (fl.)	Gage
						Dia.	or	Parf., Slott	od, elc]]	Casing
						(in.)	Used	Screen Mf	. If commercial	From	To	Screen
										I		
											I	
												
					· ····································	 		1		 	 	
						O' CEA	MENTING	DATA		 _	·	<u> </u>
	(USB fB	verse side of	Well Cwner's cop	W d necessary		-i'				No of		
13) 🖸				7: 7	<i></i>				to ft.			
		18ged within				Benton	ite from	*	to <u>60</u> ft.	NO DI	sacks used	
Casing left		Cemenube	ntonite placed in v	welf.	Sacks used:	4					· · · · · · · · · · · · · · · · · · ·	
From (R)	(ft) aT	From	n) To	(R)		Melhod		Chips				
		L				Cemen	ted by	Harriso	n & Coope	, inc.		
						Distant	za to septi	c system fiel	d lines or other or	beistracen	conterninal	ionft.
14) TYPE	PUMP:					Method	of verific	ation of abov	re distance			
O Turbine	□ Jet □	J Submersib	le Cylinder			10) 30	RFACE (COMPLETIC	N			
□ Other:							□ Snor	ified Stuffers	Slab Installed			
		cylinder, jet, e		R.		1						
15) WELL		parter, jet, t		п.		4	•		leeve installed			
1		- .	_	_		1	_	is Adapter U				
Type test.	□ Pump	; C Ba	mot D relia	⇒o □ Est	imated	<u></u>			live Procedure U	sed		
Yield:	gpm w	lin	ft urawdown	after		11) W	ATER LE	VEL				
16) WATE	RQUALITY	:		, , , , , , , , , , , , , , , , , , , 		1	يم رها سائد	N/A	& below land as	-4	Date 7/1	4/00
Diet was kar	work ses	Atrata anu ch	rata which contain	ad tradacionhia	. nameth andr 7	1	etic level		, it. below land su			4100
1						An	tesian Flo	w	gpm.		Date	
☐ Yes	R No	if yes, subr	nit 'REPORT OF	UNDESTRABLE	E WATER"	12) P/	CKERS:		Туре		Depth	
Type of wat	en Fres	h	Depth of	Strate N/A					_			
["												······································
Was chemi	ical analysis	made?	□ Yes	SE NO		-			· · · · · · · · · · · · · · · · · · ·			
						ــــــــــــــــــــــــــــــــــــــ			·			
to complete	t i drilled this	s well (or the	well was drilled u k in the log(s) be	nder my direct t	supervision) and	that esc	h and all c	of the statem	ents herein are tru	e and corre	ct. I unders	tand Inal failu
S Gample	, ac., a	0 10 WD 1030	ar at aire abidish pre-	and resonance the	CONTINUEDON SER	A LESCONS	ties.					
COMPANY	NAME C	laiborne	Harrison			WELL	DBNICO	'S LICENSE	NO. WD-12	71		
j.			(Type or F	(ויעד		AACTT	PARTEK	☆ たいたいかと	NU. 140-12			
ADDRESS .	7202 66	s" St				Lubbo	<u>ck</u>			TX	79	9407
1		MATTA.	(Street or RFD)				(Chy)		(Stele)		(Z)p)
(Signed)		130 100	(Limens of large of			(Signed	·		APR - 1-4	CIL -		
			(Licensed Well Dr.	THE RESERVE TO THE RE					(Recurred L	rillor Trainse)	1	

Exhibit 16F

Send orlgina	copy by	certified ma		P.O. Box								
ATTENTION			Ry		مان مستون معام	- at Ta			Texas De	partment of Oissugan		<u>s</u>
Privilege No of Well Own						te of Te				P.D Box 12	157	
0, 1,2,1	- V P) (I				WEL	L REP	ORI			Lustin, TX 71		
	~				400	100 T-	100	· · ·		512-463-76		9240
1) OWNE	R N	ice Uper	ating Co. (Name)	ADE	RESS 122		or RFD)	710	Obbs (City)	N) (Sta		B240
			(Manie)			(3080	•		(Cny)	,		(CIP)
,		ELL'S LOC					Long.			Lat.		
Count	y Lea			n Hwy. 20		Eunic	0	NM_	88231	GRID#		
		_	(Stree	, RFD or othe	r)	(City)		(State)	(ZIp)			
3)TYPEOF	WORK (Ch	eck);	4) PROPOSED	USE (Check):	D Monitor	Environ	mental So	il Boring (3 Domestic	_ (:	5)	
Mew Well		Deepening	U industrial	☐ Irrigation	D Injection	Public S	upply 🛭	De-watering	☐ Testwell			
☐ Reconditu	oning 2	Plugging	If Public Supply	well, were pla	ns submitted to	the TNRC	C?	□ Yes	□ No	- 1		
6) WELL LO				METER OF H				ETHOD (Chec	KI: D Drive	יח		
Date Oriting			Dia (in.)	From (fl.)	To (ff.)	-1	Rotery	☐ Mud Rol				
_	7/14	mn	6	Surface	60	⊣	_	Cable To		1		
Started	-14			SUIDO	- 00	4		C CEDIG (oor 13 Jeuse	` }		
Completed .	7/14	4/00					er					
			L		1	1						N N
From (it.)	To (ft.)	De	scription and colo	r of formation	material	8) Bors	hole Con	plation (Che	ck): 🗀 Open	Hole	☐ Sineug	nt Wali
		S	B-6			┥	nderream		ovel Packed C	Other		
0	5		and - Red			-			from			
5	30		sliche - Tan			_			VELL SCREEN			····
30	60		and - Red/B			CASRE	J, DLJUEN	FIFE, AND	PELL GUREER	1	- (2.)	
-			aliu - Neuro	OWII			New	Steel, Plastic	, etc	Serur	10 (N.)	Gage
<u> </u>						Dis.	or	Perf., Slotted			1	Casting
						(41.)	Used	Screen Mig.	if commercial	From	То	Screen
												I
						1						
						9) CE	MENTING	DATA		·		
	(Use re	verse side of	Well Cwner's cop	y, if necessar	V)	⊣ `			fl.	No of	sacks used	
13)	Wetl of	ugged within	48 hours									
Casing left			ntonile placed in v		Sacks used:	7	INC. II CHAI		n.	MQ. DI I	sacks used	
						┥		China				
From (ft)	10 (H)	From (10	(10)		Melhod		Chips	3.0			
 						Cemen	sed by	Harmson	& Cooper	, inc.		
1		<u></u>		l		Distance	ze to septic	c system field i	lines or other oc	ncertrated	contaminati	ionft.
14) TYPE P								ation of above				
☐ Turbine	let D	3 Suomersib	le C) Cylinder			10) St	RFACE C	OMPLETION				
D Other						1	C Speci	ified Surface S	lab Inslatted			
Depth to put	me bowle, i	cylinder, jet, t	etc.,	ft.		1	O Speci	ified Steel Slee	ve Installed			
15) WELL						7		s Adapter Use				
Type lesi:	D Pump	. □ Ba	iller 🗆 Jette	6 DF*	imaled	1			e Procedure Us	and .		
Yield:	apm w				-	141 101	ATER LEV		- · · · · · · · · · · · · · · · · · · ·			
			ft. drawdown	ener	^	73 \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	LEV					
16) WATER		•					ntic level	N/A	t below land su	rface l	Date 7/14	4/00
Did you kno	wingly pen	etrate any su	ata which contain	ed undesirebi	constituenta?	Art	esian Flov		ΩPM.		Date	
D Yes	8 No	If yes, subr	na REPORT OF	UNDESIRABL	E WATER"		CKERS:			· · · · · ·		
Type of water	m Free					14,70	TIENO:		Туре		Depth	
ype or wate	. r <u>. 163</u>	<u>''</u>	Depth of	strata N/A		-						
Was chemic	cal analysis	made?	O Yes	2 No		<u> </u>						
certify that	I drilled this items 1 thr	well (or the tu 16 will resu	well was drilled un if in the log(s) bei	der m. draw	supervision) ar completion ar	nd that each	n and all o	f me statemen	ts nerein are tru	e and corre	ct lunders	land that failur
		laihar	Unseles-									
CUMPANY	NAME_	alborne	Harrison (Type or P	rina		WELL	DRILLER"	S LICENSE N	o. WD-12	71	······································	
ADDRESS	7202 66	i ^m St	t-share a			Lubbo	ck			TX	70	3407
	1	$\sqrt{\Lambda}$	(Surem or RFD)				<u></u>	(City)		(State)		(ZID)
(Signed)	-C	110				(Signed)				(t)		
			IL Kensed Well Dri	(ar)		/ Originate)			(Registered D	Iller Trainer!		

Please exact electric log, chamical energies, and other perment information, if evalleble

Exhibit 16G

end origina	al copy by	enified ma	il to: TDLR,	P.O.					Tayes Dor	arment of I	icensing &		
ATTENTION	OWNER:	Confidentiali			State	of Te	rac	Taxas Department of Licansing & Regulation					
Privilege No	atice on rave ner's copy (p	rse side								O. Box 121			
of vveil Own	IBY S CODY IP	······································			WELL	. KEP	OKI			ustin, TX 787 512 -463-78 8			
							•	Hobi		NM		240	
1) OWN	ER Ri	ce Oper	ating Co.	ADI	DRESS 122	W. Tay		HOU	(City)	(State		Zip)	
-			(Name)			(Speek	or RFD)		(City)		,, ,-		
2) ADD	RESS OF W	ELL'S LOCA	ATION:				Long.			Lat.			
-,	ty Lea	-22 (-)		n Hwy. 2	07	Eunic	•	NM 88	1231	GRID #			
Conn	·			, RFD or othe		(City)		(State)	Zip)				
	mony (Ch		•		: Monitor D	Environ	nentel Soi	Boring D	omestic	5)		
•	WORK (Ch		4) PROPUSED	S		Dable C		De-watering D	Tesweli	}			
E New We	a) L1	Deepening							No	- 1			
☐ Recondit	lloning Cill	Plugging	If Public Supply	well, were pla	ns submitted to i								
6) WELL L	OG:		DIA	METER OF H	OLE	4		ETHOD (Chack):	13 Drive				
Date Drilling	9:		Dia., (in.)	From (ft.)	To (ft.)	Ø Air	Rotery	☐ Mud Rotary	CI Borec	, ,			
Started	1/22	101	5	Surface	99	DAI	Hemmer	Cable Tool	🗆 Jette	١ ١			
_	4101				·	II Om	er			Ţ			
Completed		<u> </u>			+	1						Ŋ	
			<u> </u>			├					0.000		
From (ft.)	To (ft)	De	ecription and cok	or or ronmation	material	(a) Bore	hale Con	rpletion (Check):			☐ Straigt		
		M	W-1] D u	nderream	ed 🖺 Grave	Packed D	Other	5/30 Filt	er Sand	
0	5	S	and - Red			II Gn	vel Pack	ed give interval fro	um <u>6</u>	0 11. 10	99	<u> </u>	
5	30		aliche - Tan			CASIN	G. BLANK	PIPE, AND WEL	L SCREEN	DATA:			
30	78		and - Red/B			1				Settin	g (ft.)		
78	81		andstone -			1	New	Stuel. Plastic, et				Gage	
81	97			1 2011		Dia.	OF	Perf., Slotted, et		From	То	Casting Screen	
			lay - Red	J. Ton		(m)	Used	PVC Solid	DiminorCar	0	65	SCIECT	
97	99		layey Grave	H - Ian		2	N			65	85	0.010	
						2	N	PVC Slotte	<u>:0</u>	69	05	0.010	
						1		<u> </u>				<u> </u>	
						1						<u> </u>	
	-			- 1		9) CEMENTING DATA Comented from 0 ft. to 3 ft. No. of sacks used 5							
	(Use re	verse side o	I Well Cwner's co	py, if necessa	(ער								
13) 🛈	Well pl	ugged within	46 hou's			Benton	ite from	3 1.10	60 ft.	No. of s	acks used	14	
Casing left		T	ntonité placed in	undil .	Sacks used:	1							
From (ft)						Method	furne	Slurry					
riusii (ii)	1000	From	10)	· (m)		-1		Harrison 8	Cooper	Inc			
	 	 				Cemer	•					0	
	<u> </u>	ــــــــــــــــــــــــــــــــــــــ				-1		c system field line		ncertrated o	contamination of the state of t	ont	
14) TYPE	PUMP:							ation of above dis	lance				
☐ Turbine	; □ jet :	O Submersit	pie 🗆 Cylinder			10) \$(IRFACE (COMPLETION					
□ Other						Specified Surface Stab Installed							
Depth to p	ump bowls,	Cylinder, jet.	elc.	ft.		☐ Specified Steel Steeve Installed							
15) WELI	. TESTS:					O Pitiess Adapter Used							
Type test	□ Pum	р 🗆 В	ailer 🗆 Jet	and De	stimated	Approved Alternative Procedure Used							
1	•					441 14	ATER LE						
Yreld.	Bbu A		ft_drawdowr	after	nr	러 ''' "							
15) WATI	ER QUALIT	Y:				S	atic level	78 ft. b	elow land su	rface I	Date 1/2:	2/01	
Did you k	nowingly per	netrate any s	trata which contai	ned undesirat	le constituents?	A	nesian Flo	w	gpm		Date		
₩ Yes □ No If yes, submit REPORT OF UNDESIRABLE WATER							ACKERS:				Depth		
		•				1217	CN2mu		Туре		oepin		
Type of w	aten Fres	111	Depth o	d strete 78									
Was cher	nical analysi	& made?	C) Yes	⊠ No		<u> </u>							
centy in	ex I dolled th	ent 10) ilgw ei	well was drilled :	ander my direc	supervision) an	d that eac	th and all	of the statements	herein are tru	e and corre	ct. I unders	and that failu	
to comple	te items 1 th	ru 16 will res	ult in the log(a) be	eing returned i	for completion an	d resubm	wi.						
	<u>~</u>	laiha	Marrissa					:	MIN 40	74			
COMPAN	Y NAME	MINOLUG	Harrison Type or	Prot)		WELL	DRILLER	'S LICENSE NO.	WU-72	<u> </u>			
ADDRESS	7202 6	6th St	, rype or			Lubbo	vc.k			TX	70	9407	
Unnue 32	<u> </u>	7/	(Street or RF)))				(CRy)		(State)		(Z :p)	
(Signed)	$p_{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline$	ath		-		(Signet	D					-	
		V ~ _	(Liran-jed Well D	olitar)		, 5.4			(Requiporad	nier (sinee)			

Please strach electric log, chemical analysis, and other partinent information, if available

Exhibit 16H

end original	copy by c	ertified ma	N to: TDLR,	P.O.				Texas De	parument of	Licensing &				
ATTENTION	OWNER:	Confidential	fty		Stat	te of Te	kas		Regulation	7				
Privilege No.	aca an revel er's copy (bi	rja skoa NK)			L REP			9.0. Box 121 Justin, TX 78						
		•			LIVER	OIL		512-483-78						
	- D:	0-0-	ating Co.	ADDF	EEC 122	W, Tay	lor	Hobbs	NA		240			
1) DWNE	R KH	e Oper	(Name)				or RFD)	(Chy)	(Stat	e) (Zip)			
			. ,				Long.		Lai.					
_,	ESS OF WI	EL'S LOC		n Hwy. 20	7	Eunic		NM 88231	GRID#					
Count	y <u>Lea</u>			RFD or other)		(City)		(State) (Zip)						
			4) PHOPOSED				nental Soi	Boring Domestic	5	i)				
3) TYPE OF	_		T TOPOSED	O terentina	I levection	Danie S	ioniv D	De-watering D Testwell	1					
New Well		eepening						□ Yes □ No						
O Reconditi	oning U.P	lugging	If Public Supply					THOD (Check): Drive	<u></u>					
6) WELL LO				METER OF HO		_	lling me Rolaty	☐ Mud Rotary ☐ Bore	1					
Date Drilling			Dia (ln.)	From (ft.)	To (fl.)		•		_					
Staned			5	Surface	99	⊣ `	Hammer	ra Cittina LOOI Detres	١					
Completed	1/22	<i>y</i> 01				_ □ οտ	Bf				Ń			
					<u> </u>	—								
From (ft)	To (ft.)	De	escription and cold	er of formation r	naterial	B) Bore	hole Con	ipletion (Check): 💆 Open		🗆 Ştraig				
		N	W-2			ں ۵	nderream	ed 29 Gravel Packed C	Other					
0	5		and - Red			If Gr	avel Pack	ed give interval from 7	0 n, t	<u>. 99</u>	11			
5	30	C	aliche - Tan			CABIN	G, BLANK	PIPE, AND WELL SCREEN	DATA:					
30	78	S	and - Red/B	rown			New	Steet, Plastic, etc	1	ng (%)	Gage			
78	79	S	andstone -	Tan		Dia	Dr	Perf , Slotted, etc	1	ł	Casting			
79	97	C	lay - Red			(in.)	Used	Screen Mfg., if commercial	From	To	Screen			
97	99	C	layey Grave	I - Tan		2	N	PVC Solid	0	76				
						2	N	PVC Slotted	76	97	0.010			
										l	l			
						B) CE	B) CEMENTING DATA Cemented from 0 ft. to 3 ft No. of sacks used 5 Bentonite from 3 ft. to 70 ft. No. of sacks used 11							
	(Use re	verse side o	Well Cwner's co	py, if necessary	1)	Cemer								
13)	Well pl	agged within	1 48 hou's			Bentor								
Casing left	in well.	Cement/b	entonile placed in	well.	Sacks used.	_]								
From (ft)	To (ft)	From	(ft) To	(ft)		Metho	d used	Slurry						
						Cemer	nted by	Harrison & Cooper	<u>r, inc.</u>					
						Distan	ce to sept	c system field lines or other or	oncervaled	contaminat	ionf			
14) TYPE	PUMP:					Metho	d of verific	ation of above distance						
O Turbine	g 🗆 jet 🛭	3 Submers	ibte 🗆 Cylinder			10) 9	URFACE	COMPLETION	-					
□ Other						i	Specified Surface State Installed							
		cylinder, jel	etc.,	ft.			☐ Specified Steel Sleeve Installed							
15) WELL	TESTS:					7	☐ Pitless Adapter Used							
Type lest:	🗆 Pumj	a ⊐ E	lailer 🗀 Jet	ted C Es	limated	1	☐ Appr	oved Alternative Procedure U	sed					
Yield.	Qpm w	ith	ft drawdown	after		111 W	ATER LE	VEL						
	ER QUALITY						alic level	N/A It below land su	Asco	Dale 1/2	2/01			
1			trata which contai	ned undesirable	constituents	_	anc level testan Flo	-		Date	· · · · · · · · · · · · · · · · · · ·			
Did you knowingly penetrate any strate which contained undesirable constituents? O Yes & No. If yes, submit "REPORT OF UNDESIRABLE WATER"										Depth				
1	_	•				12) P	ACKERS:	Туре		Dabn				
Type of wa	ker? Fres	n	Depth o	f strata N/A		-								
Was chem	ncal analysii	made?	☐ Yes	Ø No		-								
I certify the	at I drilled the	s well (or th	e well was drifted t	ander my direct	supervision)	and that ear	ch and all	of the statements herein are tr	ue and com	ect. I unders	sland that fai			
io complet			out in the 108(9) Of	y 140011120 10	- conspanies		r: 41367 4							
COMPAN	Y NAME C	<u>laib</u> orne	Harrison			_ WELL	DRILLER	rs LICENSE NO. WD-12	71					
1	7200 0	nth or	(Type or	Print)			_				0.407			
ADDRESS	7202 6	SL	(Street or RFI)1		Lubbe)ÇK	(Cfly)	TX (Sinte)		9407 (Zip)			
(Signed)		MIT	No.	-		(Signe	41							
139.40)		WV	(Licenyard We)) D	(iller)		(a.A.a	-,	(Req):jered	Driller Triange	2)				

Please attach electric log, chemical analysis, and other pertinent information, it available.

Exhibit 16I

Atkins Engineering Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156					ates, Inc.	LO	G OF BO	RING F	Rice O	perati	ng MW-3
2	904	W. 2	nd S	t., Ros	swell, NM 88202-3156			•			(Page 1 of 2)
	Whole Earth Environmental 19606 San Gabriel Houston, TX 77084 Contact: Mike Griffin Job#: EUNICEG.MWD.01					Date : 05-08 & 05-09-01 Site Loc Drill Start : a.m. Drill End : 12:00 Auger T Boring Location : 3½ mi SE of Eunice & ½ mi ELogged			уре	: SE Eunice, NM : Sec. 15, T22S, R37E : Hollow Stem : Mort Bates	
-		J	00#:	EUNI	CEG.MVVD.01			l	T		
Der ir Fe	١	GRAPHIC	nscs	Samples	DES	CRIPTION		Lab	PID ppm-v	Well: M	W-3 − 4" × 4" × 5' Well Cover
	0 +	-7551			Sand, reddish tan, loose,	dry				[- -	Concrete Cap
	5 1		SP		Sand w/ caliche, tan, loos						
	10 ;										
 	15 ;		SM								
2	20 1				Silty sand w/ caliche, redo	dish tan loose dry					
2	25 -				only calle in called pro-	,,,,					— Grout
	30 / / / / /		SM								─2" PVC casing
	35 -				Caliche, tan, hard, dry						
	10 - 15 -				Canone, tan, natu, ury						
	io -				Sand w/ caliche, tan, firm	, dry					
5	.5		SM								

Atkins Engineering Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice Operating MW-3

(Page 2 of 2)

Whole Earth Environmental 19606 San Gabriel

Houston, TX 77084

Date Drill Start : 05-08 & 05-09-01

Site Location

: SE Eunice, NM

: a.m. : 12:00

Auger Type

: Sec. 15, T22S, R37E : Hollow Stem

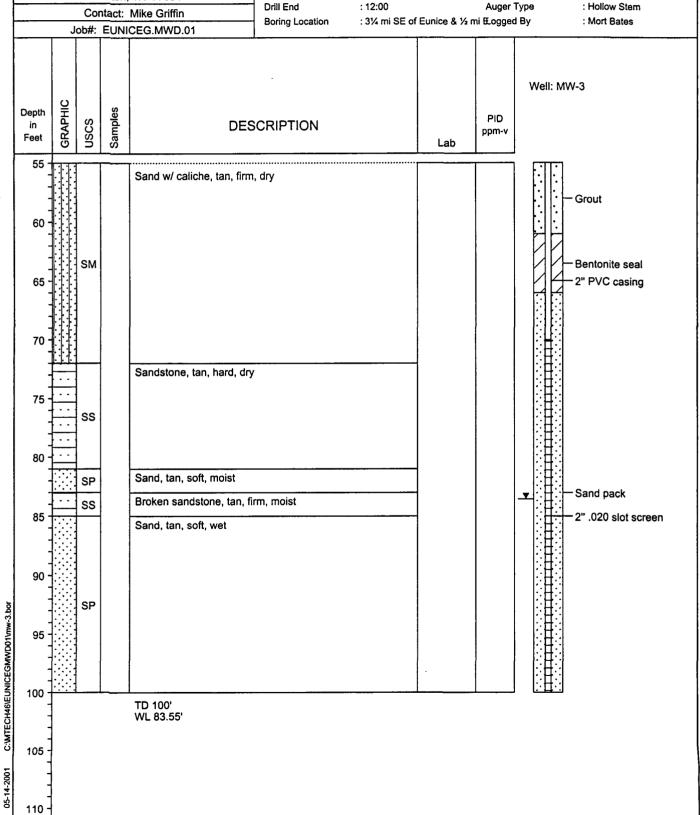


Exhibit 16J

Atkins Engineering Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156					LO	G OF BO	RING I	Rice C)per	ati	ing MW-4 (Page 1 of 2)
Whole Earth Environmental 19606 San Gabriel Houston, TX 77084 Contact: Mike Griffin					Date : 05-11-01 Drill Start/End : 0900/1500 Boring Location : 3 mi. S. Eu : 1/4 mi. Eas		500 Eunice & Auger Ty				: SE Eunice, NM : Sec. 15, T22S, R37E : Hollow Stem : Mort Bates
	J	ob#:	EUNI	CEG.MWD.01			<u> </u>	. Mort bates			
Depth in Feet	GRAPHIC	nscs	Samples	DES	SCRIPTION		Lab	PID ppm-v	We	ell: M	W-4 − 4" x 4" x 5' Well Cover
0 -		SP		Sand, red, loose, dry			-		T.	<u> </u>	Concrete Cap
- - 5 -		SM		Sand w/ caliche, tan, loos	se, dry						
10 -				Caliche, tan, hard, dry			i				
15 - -						į					
20 -											
- 25 - - -											— Grout
30 -		SM		Sand w/ caliche, yellow, I	oose, dry						─2" PVC casing
35 - -		SP		Sand, tan, loose, dry							
40				Sand, tan, loose, dry							
45 <u>-</u>		SP									
50 -		SP		Sand, reddish tan, loose,	dry						
55 -			***								

Atkins Engineering Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice Operating MW-4

(Page 2 of 2)

Whole Earth Environmental 19606 San Gabriel Houston, TX 77084

Date Drill Start/End : 05-11-01 : 0900/1500 Site Location

: SE Eunice, NM

Boring Location

: 3 mi. S. Eunice & : 1/4 mi. East

Auger Type Logged By : Sec. 15, T22S, R37E : Hollow Stem : Mort Bates

Contact: Mike Griffin

Job#: EUNICEG.MWD.01

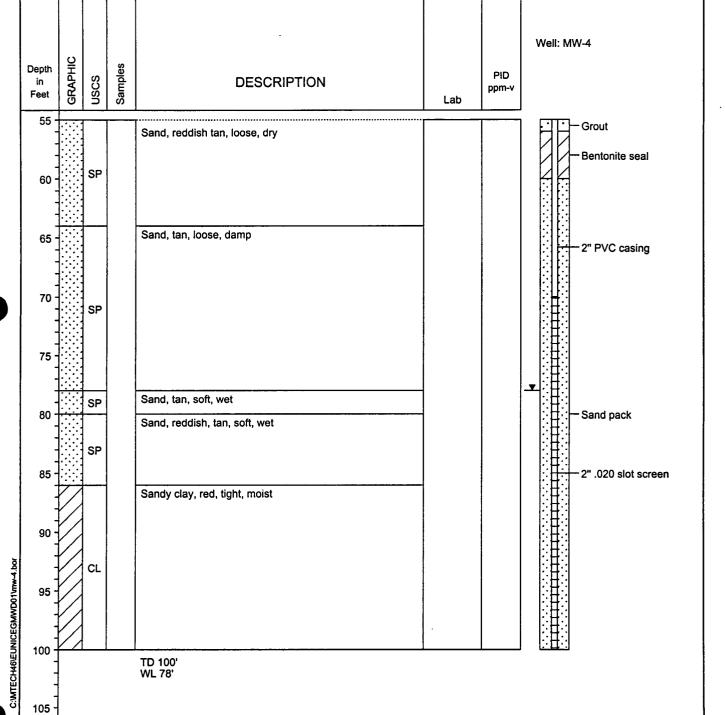




Exhibit 17

QP-28

WHOLE EARTH ENVIRONMENTAL QUALITY PROCEDURE

Pro	Procedure for Developing Cased Water Monitoring Wells												
Completed By:	Approved By:	Effective Date:	/	/									

1.0 Purpose

This procedure outlines the methods to be employed to develop cased monitoring wells.

2.0 Scope

This procedure shall be used for developed, cased water monitoring wells. It is not to be used for standing water samples such as ponds or streams.

3.0 Preliminary

- 3.1 Prior to development, the static water level and height of the water column within the well casing will be measured with the use of an electric D.C. probe or a steel engineer's tape and water sensitive paste.
- 3.2 All measurements will be recorded within a field log notebook and subsequently reported within the driller's boring log report.
- 3.3 All equipment used to measure the static water level will be decontaminated after each use by means of Alconox, a phosphate free laboratory detergent, and water to reduce the possibility of cross-contamination. The volume of water in each well casing will be calculated.

4.0 Purging

- 4.1 Wells will be purged by removing a minimum of three well casing volumes by using a 2" decontaminated submersible pump or dedicated one liter Teflon bailer.
- 4.2 If a submersible is used the pump will be decontaminated prior to use by scrubbing the outside surface of tubing and wiring with an Alconox-water mixture, pumping an Alconox-water mixture through the pump, and a final flush with fresh water.

5.0 Water Disposal

5.1 All purge and decontamination water will be temporarily stored within a 60 gallon portable tank and then pumped into a permanent storage tank to be later disposed of in an appropriate manner.

6.0 Records

QP-28

6.1 Whole Earth will record the amount of water removed from the well during development procedures. The purge volume will be reported to the appropriate regulatory authority when filing the closure report.



Exhibit 18

QP-76 (Rev. A)

WHOLE EARTH ENVIRONMENTAL QUALITY PROCEDURE

Procedure for Obtaining Water Samples (Cased Wells) Using One Liter Bailer

Completed By:

Approved By:

Effective Date:

1.0 Purpose

This procedure outlines the methods to be employed in obtaining water samples from cased monitoring wells.

2.0 Scope

This procedure shall be used for developed, cased water monitoring wells. It is not to be used for standing water samples such as ponds or streams.

3.0 Preliminary

- 3.1 Obtain sterile sampling containers from the testing laboratory designated to conduct analyses of the water. The shipment should include a Certificate of Compliance from the manufacturer of the collection bottle or vial and a Serial Number for the lot of containers. Retain this Certificate for future documentation purposes.
- 3.2 The following table shall be used to select the appropriate sampling container, preservative method and holding times for the various elements and compounds to be analyzed.

Compound to be Analyzed	Sample Container Size	Sample Container Description	Cap Requirements	Preservative	Maximum Hold Time
BTEX	40 ml.	VOA Container	Teflon Lined	HCI	7 days
TPH	1 liter	clear glass	Teflon Lined	HCI	28 days
PAH	1 liter	clear glass	Teflon Lined	Ice	7 days
Cation / Anion	1 liter	clear glass	Teflon Lined	None	48 Hrs.
Metals	1 liter	HD polyethylene	Any Plastic	Ice / HNO ₃	28 Days
TDS	300 ml.	clear glass	Any Plastic	Ice	7 Days

4.0 Chain of Custody

- 4.1 Prepare a Sample Plan. The plan will list the well identification and the individual tests to be performed at that location. The sampler will check the list against the available inventory of appropriate sample collection bottles to insure against shortage.
- 4.2 Transfer the data to the Laboratory Chain of Custody Form. Complete all sections of the form except those that relate to the time of delivery of the samples to the laboratory.
- 4.3 Pre-label the sample collection jars. Include all requested information except time of collection. (Use a fine point Sharpie to insure that the ink remains on the label). Affix the labels to the jars.

5.0 Bailing Procedure

- 5.1 Identify the well from the site schematics. Place pre-labeled jar(s) next to the well. Remove the bolts from the well cover and place the cover with the bolts nearby. Remove the plastic cap from the well bore by first lifting the metal lever and then unscrewing the entire assembly.
- 5.2 The well may be equipped with an individual 1 liter bailing tube. If so, use the tube to bail a volume of water from the well bore equal to 10 liters for each 5' of well bore in the water table. (This assumes a 2" dia. well bore).
- 5.3 Take care to insure that the bailing device and string do not become cross-contaminated. A clean pair of rubber gloves should be used when handling either the retrieval string or bailer. The retrieval string should not be allowed to come into contact with the ground.

6.0 Sampling Procedure

- 6.1 Once the well has been bailed in accordance with 5.2 of this procedure, a sample may be decanted into the appropriate sample collection jar directly from the bailer. The collection jar should be filled to the brim. Once the jar is sealed, turn the jar over to detect any bubbles that may be present. Add additional water to remove all bubbles from the sample container.
- 6.2 Note the time of collection on the sample collection jar with a fine Sharpie.

- 6.3 Place the sample directly on ice for transport to the laboratory. The preceding table shows the maximum hold times between collection and testing for the various analyses.
- 6.4 Complete the Chain of Custody form to include the collection times for each sample. Deliver all samples to the laboratory.

7.0 Documentation

- 7.1 The testing laboratory shall provide the following minimum information:
 - A. Client, Project and sample name.
 - B. Signed copy of the original Chain of Custody Form including data on the time the sample was received by the lab.
 - C. Results of the requested analyses
 - D. Test Methods employed
 - E. Quality Control methods and results

CHAIN DE CUSTODY BECODD AND ANALYSIS BEDLIEST	Project Name: $\{-1\}^{\mathcal{L}}$	Project#:	Project Loc: (San ce, A/M)	PO #:		Analyze For	TCIP		е еволово 2X1000е Ръв 1 ЕС И).	Metals: As A Volatiles Semivolatiles BTEX 8021								Dale Time	Date This 5-24-01 (500
nc.	Exhibit 19	46×			Fax No:			Preservative	ppled e1sonia	Date Sam Time San H.SO, HOOR HOOR HOOR	5-23 3:45 11 (1	\	v 21.30 11	1 1 / 1					Received by ELOT
ental Lab of Texas, I	Odessa, Texas 79763 Fax: 915-563-1713 Project Manager: 7/	Company Name 1, Jacob Conth Fund	Salen's	City/State/Zip: Hauston TK. TYORU	Telephone No: 80. 854 - 4358	Sample Signature.				LAB#tisb (see only)	HOWIE MU. 3	*	Horizo M.WY	7			Special Instructions:	Relinquished by: Same Resinguished by: Same Same Resinguished by: Same Same Resinguished by: Same Same Resinguished by: Sam	Time

TAT bisbrist

ENVIRONMENTAL LAB OF

Exhibit 19A

INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 281-646-8996

Sample Type: Water

Sample Condition: Intact/Iced/ 1.5 deg C

Project #: None Given Project Name: E-15

Project Location: Eunice, N.M.

Sampling Date: 05/23/01 Receiving Date: 05/24/01 Analysis Date: 05/29/01

_, _ ,,	rie: D. CODE	Chloride mg/L
ELT#	FIELD CODE	
40425	MW-3	1312
40426	MW-4	674

OUALITY CONTROL	5140
	5000
TRUE VALUE	103
% INSTRUMENT ACCURACY	
BIANK	<10

Methods: EPA SW 846-9253

Raland K. Tuttle

<u>5-29-0/</u> Date

ENVIRONMENTAL Exhibit 19B

"Don't Treat Your Soll Like Dirt!"

WHOLE EARTH ENVIRONMENTAL INC.

ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 281-646-8996

Sample Type: Water

Sample Condition: Intact/ Iced/ HCI/ 1.5 deg. C

Project #: None Given Project Name: E-15

Project Location: Eunice, N.M.

Sampling Date: 05/23/01 Receiving Date: 05/24/01

Analysis Date: 05/24/01

ELT#	FIELD CODE	BENZENE mg/l.	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	
40425	MW-3	<0.001	<0.001	<0.001	<0.001	<0.001	
40426	MW-4	<0.001	<0.001	<0.001	<0.001	<0.001	

QUALITY CONTROL	0.094	0.093	0.096	0.191	0.099
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	94	93	96	96	99
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SPIKE	0.096	0.094	0.098	0.193	0.100
SPIKE DUP	0.088	0.088	0.091	0.178	0.093
% EXTRACTION ACCURACY	96	94	98	96	100
BLANK	< 0.001	<0.001	< 0.001	< 0.001	< 0.001
BBD	9	6	7	8	7

METHODS: EPA SW 846-8021B ,5030



Abatement Plan

Current Site Status

The site has been fenced with four-strand barbed wire perimeter and contoured to direct any storm water run-off to the excavated area. An open excavation having the approximate dimensions of 60' X 60' X 15' remains at the center of the site. The corroded connection leading to the spill event has been repaired.

Extensive soil borings and surface testing have been employed to determine the vertical and lateral extent of soil contamination. Additional investigations included the drilling, casing development and testing of four monitor wells. The enclosed plat map (Exhibit 7) provides an accurate, surveyed location for each such monitor well.

Abatement Options (Soil)

The site has no significant hydrocarbon contamination. The sole criteria contaminant is chlorides. The American Petroleum Association guideline, "Remediation of Salt-Affected Soils at Oil and Gas Production Facilities", (publication no. 4663, dated October 1997), lists eight potential remediation alternatives and provides a decision tree to arrive at the option most appropriate to an individual site. The following is a brief discussion of each of these options.

Natural Remediation

Under this scenario, the site would slowly revert to background concentrations through simple dilution. In some cases, halophytic (salt tolerant) plants such as rye grass may be sown at the surface to promote the movement of salt into a biotic system. The plants will eventually be harvested, grazed or allowed to simply die out and blow away resulting over time in slightly lower soil salt concentrations through the process of dilution.

This option is deemed inappropriate due to several factors. Testing has shown that the contaminant plume extends up to 70' below ground surface. Natural attenuation relies primarily on rainfall as the driver to move the salt from the various lenses. A comparison of the precipitation / pan evaporation tables enclosed as Exhibits 19 & 20 shows the area to have a negative 88" per year precipitation / evaporation ratio. Natural attenuation of this site will result in a slow but constant capillary migration of the salts both to the ground surface and the water table.

In-Situ Chemical Amendments

Under this scenario, the soils would be treated with either a solid amendment such as gypsum or liquid amendments such as calcium nitrate or potassium sulfate. The process works on the basis of ion exchange in which the electrical bond between the sodium chloride molecule and the soil platelets is broken, allowing the release of the salt into solution.

The process requires significant amounts of water. Exhibit 21 calculates the amount of calcium nitrate and water needed to achieve a target electrical conductivity (EC) result of <9mmhos/cm to be 390 barrels in solution with 1,470 barrels of water. Using a minimum 3:1 flush ratio, this method will require the injection, collection and disposal of a minimum of 7,440 barrels of brine water from a depth of 75' BGS.

Land Spreading

This treatment method requires that the soils be spread evenly over an area large enough to decrease the contaminant concentration to an acceptable level. We estimate that the site contains approximately 12-15,000 cubic yards of contaminated soils having an average chloride concentration of 1,200 ppm. Assuming an acceptance standard of 250 ppm, it will be necessary to dilute the soils at a 4.8:1 to achieve acceptance standards. This will require the addition of between 58,000–72,000 cubic yards of dilution material. Spread over a six-inch lift, the resulting spread zone will be between 87-127 acres.

This option will necessarily require excavation to a depth of 75' BGS and that replacement soils be obtained to refill the excavation.

Road Spreading

The New Mexico OCD generally does not allow salt contaminated soils to be used as road spread material. Assuming only 12,000 cubic yards of contaminated soils to be involved and further assuming the standard width of a lease road to be 40', it would require a length of almost three miles of distance to spread the soils to an average depth of 6".

This option will necessarily require excavation to a depth of 75' BGS and that replacement soils be obtained to refill the excavation.

Disposal in Landfill

This option is simply to excavate the contaminant plume and transport it to a commercial facility for disposal. Some of the contaminated materials may be mixed and diluted with replacement soils before being re-deposited within the excavation.

The main disadvantage to this method is the cost-estimated to be at least \$25.00 per excavated cubic yard. Nothing will be done to remediate the contamination, it will simply be moved somewhere else.

In-Situ Soil Washing

This method was generally described in the Chemical Amendments section of this report. A variant of this method is to erect a tile and drain system in which the area is constantly flooded with fresh water later sent to disposal.

Ex-Situ Soil Washing

Soil washing requires that the plume be excavated and transported to a mobile treatment plant. The soil will then be crushed and subjected to a series of chemical treatments, rinses and drying stations.

Again, the main disadvantage is cost. Due to its' high porosity, calichi is exceedingly difficult to wash.

Encapsulation

There are two main variants to this method. The first is to mix water and a binding agent such as fly ash, lye or cement into the contaminant plume to produce a non-leachable amalgam. This amalgam would be left in place. The second is to construct an impermeable outside barrier such as clay or plastic to prevent contaminant migration.

Our protocol is based upon yet another variant of this technique. Using a risk based corrective action (RBCA) approach to the project, we propose to excavate and encapsulate the bulk of the contaminant plume within an impermeable, high-density polyethylene liner. A similar top liner will be installed and overlapped with the lower liner at a minimum depth of 5' BGS. A secondary clay liner will be installed below the polyethylene liner to insure a near zero vertical infiltration rate.

The liners serve as a vertical transmissivity barrier to the percolation of rainwater through the vadose zone. With no vertical driver, the portion of the plume lying beneath the liner will tend to remain hydrologically inactive. VADSAT modeling (Exhibits 22 & 23) indicates that the remaining plume will not pose a future threat to the environment. The detailed closure protocol, PR-62 is enclosed as Exhibit 24.

Abatement Option (Water)

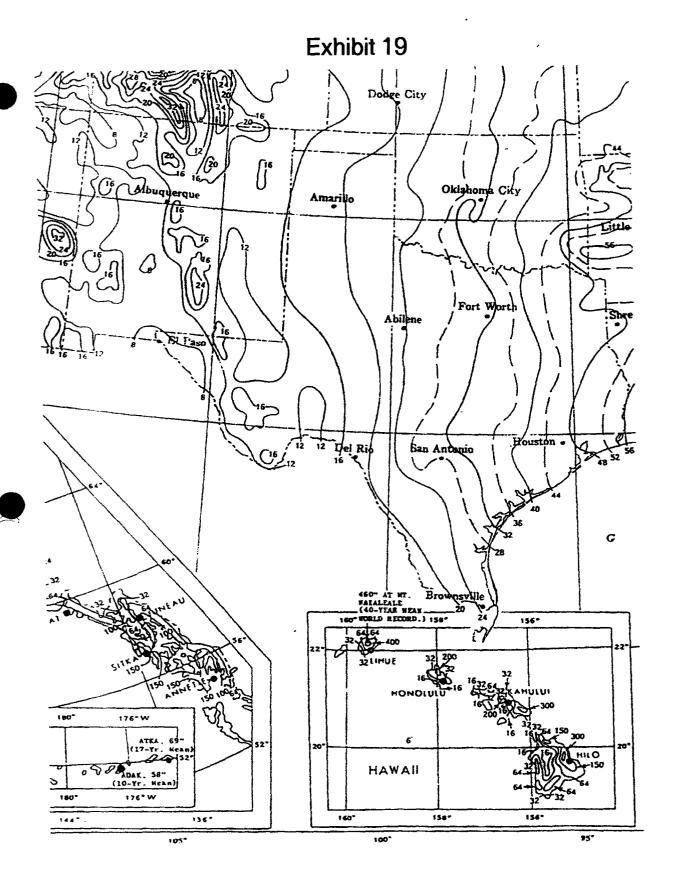
The contaminant plume lies immediately adjacent to a water disposal line managed by Rice Operating Company. A windmill, temporary storage tank and ancillary equipment will be erected at the present site of MW-1. The waters underlying the site will be

pumped out and transported through existing lines to SWDW-N18. NMOCD Salt Water Disposal Order Form D-184 is included as Exhibit 25. The recovery well will be tested for chloride concentrations each quarter and will remain in service until such concentrations meet NMWQCC standards for a period of four consecutive quarters.



Abatement Plan Exhibit Index

- 19. Central Southwest USA Normal Annual Total Precipitation Map
- 20. Western USA Mean Annual Class A Pan Evaporation Map
- 21. Loading Calculations Worksheet
- 22. NaCl Migration Model Data
- 23. VADSAT Concentration vs. Time Probability Model
- 24. PR-62 Spill Remediation Protocol
- 25. NMOCD Salt Water Disposal Order Form SWD-184



Central Southwest USA Normal Annual Total Precipitation Map

Exhibit 20

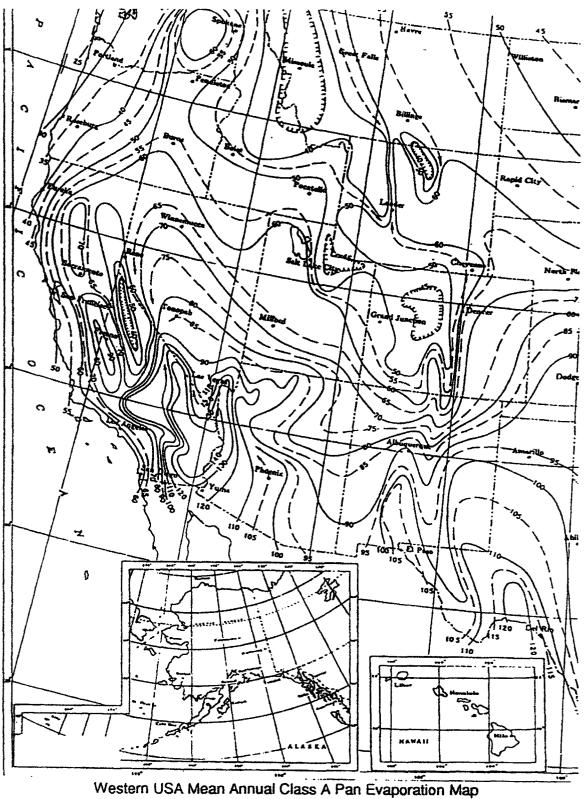


Exhibit 21



Rice Operating Company J.B. E-15

Loading Calculations Worksheet

Contamination Zone Dimensions	E-16
Length	90
Length Width	60
Depth	75
Depth Yd ³	15,000
Surface Acres	0.1240
Sq. Ft.	

Analytical Data	E-15
% Moisture Soil Sample	
Solids pH (7.9)	
Solids Electrical Conductivity (E.C.)(38.3)	38.3
Solids Cation Exchange Capacity (C.E.C.)(20.1)	20.1
Solids Exchangeable Sodium Percentage (E.S.P.)(28.6)	28.6
Sodium Adsorption Ratio (41.4)	5

Optional Values	E-16
Background E.C. (1)	1
Target E.C. (8)	9
Target S.A.R. (<12)	12
Sample Solids TPH%	0
Background TPH% (.1)	0.1
Disking Depth, (*) (6)	6
Max. Spread Depth (") (1)	6

Limiting Parameters (L.P.)	E-16
Contaminant Concentration in Soil	0.00000
Background Concentration	0.00000
Target Concentration	0.00000

Wet / Dry Volume Calculations	E-16
Wet Yd ³ Solids	15,000
Dry Yd ³ Solids	14,286

Dilution Option Calculations	E-15
Additional Soils Required E.C. (Yd³)	52,321
Additional Soils Required L.P. (Yd³)	N/A
Acres Required for Spreading	64.8
Yd ³ to be Landspread	66,586

Gypsum Loading Calculations	E-15	Tons
Lbs. Gypsum Required	50,230	#REF!
Lbs. Sulfur Required	8,860	#REF!
Acres Required for Spreading	18.5950	
Barrels of water Required	#N/A	

CaNO ³ Loading Calculations	E-15
Barrels Calcium Nitrate @ 13,500 meq / L	390.0
Bbls. of Water Required	1,470
No. of Applications Required	N/A

Recommended Fertilizer Amendments	E-16
Lbs. of Nitrogen	N/A
Lbs. of Phosporus	N/A
Lbs. of Potassium	N/A
!!!OR!!!	E-16
Lbs. Ammonium Sulfate	N/A
Lbs. Concentrated Super Phosphate	N/A
Lbs. Muriate of Potash	N/A

My day the the m = m = m = m = m = 60 sm s

On XI who 60 m 60 sm s

YE 365 day 254 cm 12 med - day
2.9 cm/yr = .00026 ft/day

Exhibit 22

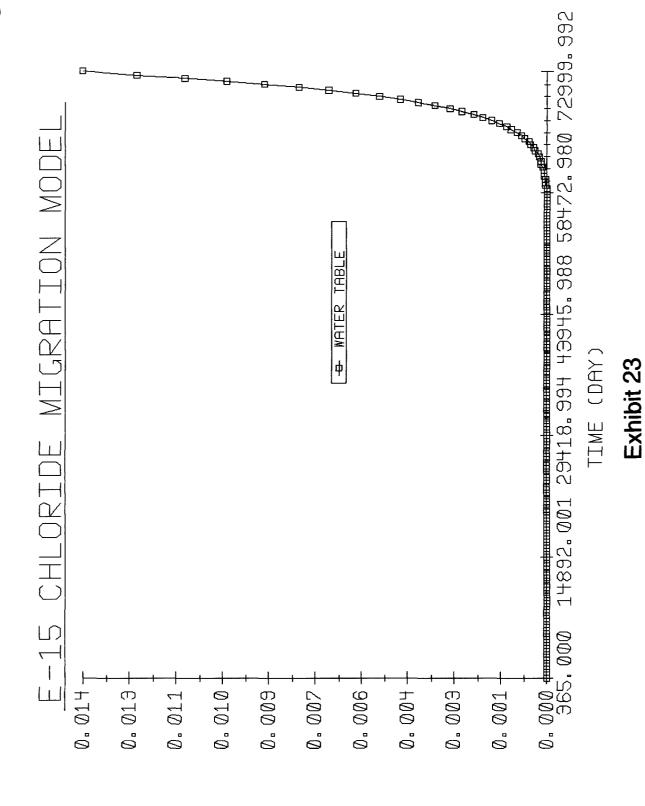


Modeling Data Entry Rice Operating Co. Junction Box E-15 NaCl Migration Model

Control Data	Entry	U/M
Deterministic	Yes	
Final Time	73,000	Days
Time Interval	365	Days
Monte Carlo	No	
Low Permeability Layer Below Contamination	No	
Source Data		
Waste Zone Thickness		meters
Waste Zone Area		sq. meters
Ratio of Length to Width	00:00.0	
Soil Thickness Above Waste Zone		meter
Initial Total Concentration in Waste	2,600	ppm
NaCl Unsaturated Zone	Yes	
Soil Database	Clay	
Hydraulic Conductivity	0.00011	meters/day
Hydrological Database	Bedded Sedimentary	
Hydrological Database Unsaturated Zone Thickness		
	8 Clay	meter
Unsaturated Zone Thickness	8 Clay	meter
Unsaturated Zone Thickness Soil Database	8 Clay 1,09 0.011	meter (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n	8 Clay 1,09 0.011	meter (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content	8 Clay 1,09 0.011	meter (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity	8 Clay 1,09 0.011	meter (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity Saturated Zone Aquifer Porosity	8 Clay 1,09 0.011 0	meter (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity Saturated Zone	8 Clay 1,09 0.011 0	meter (Default) Internally (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity Saturated Zone Aquifer Porosity Longitudinal Dispersivity Ratio of Long. / Trans. Dispersivities	0.2 0.2	meter (Default) Internally (Default)
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity Saturated Zone Aquifer Porosity Longitudinal Dispersivity	0.2 0.01 0.01 0.01 0.2	meter (Default) Internally (Default) Internally
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity Saturated Zone Aquifer Porosity Longitudinal Dispersivity Ratio of Long. / Trans. Dispersivities Ratio of Trans. / Vert. Dispersivities	0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 87 Bedded Sedimentary	meter (Default) Internally (Default) Internally
Unsaturated Zone Thickness Soil Database van Genuchten n Residual Water Content Unsaturated Zone Dispersivity Saturated Zone Aquifer Porosity Longitudinal Dispersivity Ratio of Long. / Trans. Dispersivities Ratio of Trans. / Vert. Dispersivities Hydrological Database	0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 87 Bedded Sedimentary	meter (Default) Internally (Default) Internally meters

0.00001 ft. / day

Net Infiltration Rate



Spill Remediation Protocol Rice Operating Co. Junction Box E-15

1.0 Purpose

This protocol is provide a detailed outline of the steps to be employed in the remediation and final closure of a spill area adjacent to Rice Operating Co. Junction Box E-15.

2.0 Scope

This protocol is site specific.

3.0 Preliminary

Prior to any field operations, Whole Earth Environmental shall conduct the following activities:

3.1 Client Review

- 3.1.1 Whole Earth shall meet with cognizant personnel within Rice Operating Co. (ROC) to review this protocol and make any requested modifications or alterations prior to submittal to the State of New Mexico Oil Conservation Division.
- 3.1.2 Changes to this protocol will be documented and submitted for final review by ROC prior to submittal to the Oil Conservation Division.

3.2 Oil Conservation Division Review

3.2.1 Upon client approval, this protocol and associated modeling results will be submitted to the New Mexico Oil Conservation Division for review and comment. Recommended changes will be reviewed by the client prior to implementation.

3.2.2 Any recommended changes effecting costs will require a revised quotation to be issued to the client for approval prior to the commencement of any on-site remediation activity.

4.0 Safety

- 4.1 Prior to work on the site, Whole Earth shall obtain the location and phone numbers of the nearest emergency medical treatment facility. We will review all safety related issues with the appropriate ROC personnel, sub-contractors and exchange phone numbers.
- 4.2 A tailgate safety meeting shall be held and documented each day. All sub-contractors must attend and sign the daily log-in sheet.
- 4.3 Anyone allowed on to location must be wearing sleeved shirts, steel toed boots, and long pants. Each vehicle must be equipped with two way communication capabilities.
- 4.4 Prior to any excavation, the area shall be surveyed with a line finder. If lines are discovered within the area to be excavated they shall be marked with pin flags on either side of the line at maximum five foot intervals.

5.0 Excavation & Remediation

- 5.1 The site shall be excavated to a minimum depth of 35' BGS. All materials will be deposited immediately adjacent to the excavation.
- 5.2 Each of the four side-walls and bottom will be will be tested on a minimum five point composite basis for the presence and concentrations of TPH, BTEX and chlorides. The Hobbs office of the NMOCD will be alerted a minimum of twenty-four hours in advance of any sampling event. Soil samples will be collected in accordance with WEQP-77 and transported to a lab for analysis.
- 5.3 The sidewalls of the site shall meet the following criteria contaminant concentrations:

Benzene:

10 ppm

BTEX:

50 ppm

TPH:

100 ppm

Chlorides:

250 ppm

5.4 The bottom of the excavation must meet the benzene, BTEX, and TPH requirements specified in 5.3 and have a maximum chloride concentration of 2,000 ppm.

6.0 Clay Liner

Upon reaching a minimum depth of 35'BGS and achieving the closure standards specified within 5.4, a clay liner will be installed and compacted to a minimum depth of 12". The liner will meet or exceed 95% of a Proctor Test ASTM D-698 with a permeability (hydraulic conductivity) equal to or less than $1X10^{-7}$ cm/sec for containment / isolation of impact.

7.0 Lower Polyethylene Liner

Upon installation of the clay liner, a 20 mil polyethylene liner will be constructed to cover the contour of the excavation up to surface level. The previously excavated soils will be re-deposited within the liner to a depth no less than 5' BGL.

8.0 Upper Liner

A 20 mil high density polyethylene top liner will be installed above the excavated area and overlapped with the lower liner to prevent surface drainage into to the containment area. The surface will be covered with a minimum of 5' of fresh topsoil and contoured to match the surrounding elevations.

9.0 Recovery & Monitoring Wells

9.1 At the completion of the surface remediation portion of the project, a recovery well will be installed at the location of the existing MW-1. The recovery well will be a minimum 4" diameter and drilled at least 10' into the water table. A windmill will be erected over the well and all pumped fluids diverted to disposal well N-18.

9.2 Delineation wells will be drilled down gradient of the plume to determine the lateral extent of contamination.

10. Monitoring

10.1 The recovery well and each monitoring well will be sampled on quarterly basis for the presence and concentrations of chlorides. Final site closure will occur after the recovery well and all monitoring wells meet NMWQCC standards for a period of four consecutive quarters.

11.0 Documentation & Reporting

- 11.1 At the conclusion of the pit remediation project, Whole Earth will prepare a closure report to include the following information:
 - A plat map of the location showing the exact location of the pit, the dimensions prior to excavation and the actual excavated dimensions.
 - Photographs of the site prior to excavation, at the point of maximum excavation, liner installation details, and after final closure
 - Design and construction details of the drawdown and monitoring wells.
 - Design and construction details of the windmill and ancillary piping.
 - Laboratory analytical results of the sidewalls and bottom of the excavation
 - MSDS of the polyethylene liners
 - Proctor and density tests of the clay liner.

THE APPLICATION O. AGUA, INC. FOR A SALT WATER DISPOSAL WELL.

EXHIBIT 25

1/1/8

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 701 (C) Agua, Inc. made application to the New Mexico Oil Conservation Commission on June 13, 1977 for permission to complete for salt water disposal its Blinebry-Drinkard SWD System Well No. 18 located in Unit N of Section 18, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico.

The Secretary-Director finds:

- 1. That application has been duly filed under the provisions of Rule 701 (C) of the Commission Rules and Regulations;
- 2. That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
- 3. That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.
- 4. That no objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Agua, Inc. is hereby authorized to complete its Blinebry-Drinkard SWD System Well No. 18 located in Unit N of Section 18, Township 22 South, Range 37 East, NMPM, Les County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres formation at approximately 4000 feet to approximately 5000 feet through 5½ inch plastic lined tubing set in an oil column extending from approximately 4000 feet to the surface.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing or tubing;

That injection pressures shall be limited to 800 pounds per square inch asmeasured at the surface.

That the operator shall notify the supervisor of the Commission's Hobbs District Office before injection is commenced through said well.

That the operator shall immediately notify the supervisor of the Commission's Hobbs District Office of the failure of the tubing or casing in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

PROVIDED FURTHER:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seen necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Commission may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operation in accordance with Rule 704 and 1120 of the Commission Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 13th day of July, 1977.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JOE D. RAMEY Secretary-Director

SEAL

RICE Operating Company

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

June 5, 2001

Mr. Robert Cueto P. O. Box 56 Eunice, NM 88231

Dear Mr. Cueto:

Enclosed please find the results of the groundwater analysis for the new monitor well and updated copies of the information submitted to the NMOCD for the accidental discharge site Jct. E-15 of the Blinebry Drinkard SWD System. Rice Operating Company (ROC) has submitted Stage I and Stage II, developed by Whole Earth Environmental, Inc. to the NMOCD for remediation plans at this site.

As events develop, you will be informed of progress. ROC appreciates your patience in the remediation at this site. If you have any observations, questions or concerns, please do not hesitate to call me at the above phone number.

Thank you,

RICE OPERATING COMPANY

Carolyn Doran Haynes

Operations Engineer

Enclosures

cc: LBG, Whole Earth, NMOCD, file

Carolyn Dran Haynes

RICE Operating Company

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

June 5, 2001

Mr. Irvin Boyd P. O. Box 121 Eunice, NM 88231

Dear Mr. Boyd:

Enclosed please find the results of the groundwater analysis for the new monitor well and updated copies of the information submitted to the NMOCD for the accidental discharge site Jct. E-15 of the Blinebry Drinkard SWD System. Rice Operating Company (ROC) has submitted Stage I and Stage II, developed by Whole Earth Environmental, Inc. to the NMOCD for remediation plans at this site.

As events develop, you will be informed of progress. ROC appreciates your patience in the remediation at this site. If you have any observations, questions or concerns, please do not hesitate to call me at the above phone number.

Thank you,

RICE OPERATING COMPANY

Carolyn Doran Haynes Operations Engineer

Enclosures

cc: LBG, Whole Earth, NMOCD, file

acolyn Donan Haynes