1R - 427-152

REPORTS

DATE:

7-19-12

10-15-13

RICE *Operating Company*
122 West Taylor • Hobbs, New Mexico 88240
Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 8906

July 19, 2012

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

RE: Termination Request
EME Citation Devonian Vent G-20 (1R427-152): UL/G, Sec. 20, T21S, R36E
RICE Operating Company – Eunice Monument Eumont (EME) SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work
In 2004, ROC initiated work on the former EME Citation Devonian Vent G-20 junction box. The site is located in UL G, Sec. 20, T21S, R36E and just outside the eastern fence line of an active production facility. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 174 +/- feet. The site was delineated using a backhoe to form a 10x4x12-ft deep excavation and soil samples were screened at regular intervals for both hydrocarbons and chlorides. Each sample was field titrated for chlorides and screened for TPH, resulting in low chloride concentrations. The 12 ft sample was sent to a commercial laboratory for analysis, resulting in a chloride concentration of 432 mg/kg, a gasoline range organics (GRO) concentration of 28.1 mg/kg, a diesel range organics (DRO) concentration of 2,570 mg/kg and BTEX concentrations below detectable limits throughout. The TPH concentration falls below the NMOCD guideline standard of 5,000 mg/kg. The excavation was backfilled with the excavated soil to ground surface and contoured to the surrounding area. On 9/24/2004, the site was seeded with a blend of native vegetation. Vegetation has rebounded at this site; vegetation will act as an evapo-transpiration barrier that will also inhibit the downward migration of chlorides and hydrocarbons. Plants capture water through their roots and so reduce the amount of water infiltrating below the root zone. A new watertight junction box was built 167 ft north of this site.

The junction box site location map, area map, final report, photodocumentation, laboratory analysis, chloride graph and current photodocumentation are attached.

Recommendations
Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,
RICE Operating Company

Hack Conder
Environmental Manager

enclosures

Site Maps

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

Geographical Location Map

RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC

RECS

EME
CITATION DEVONIAN
Vent G-20

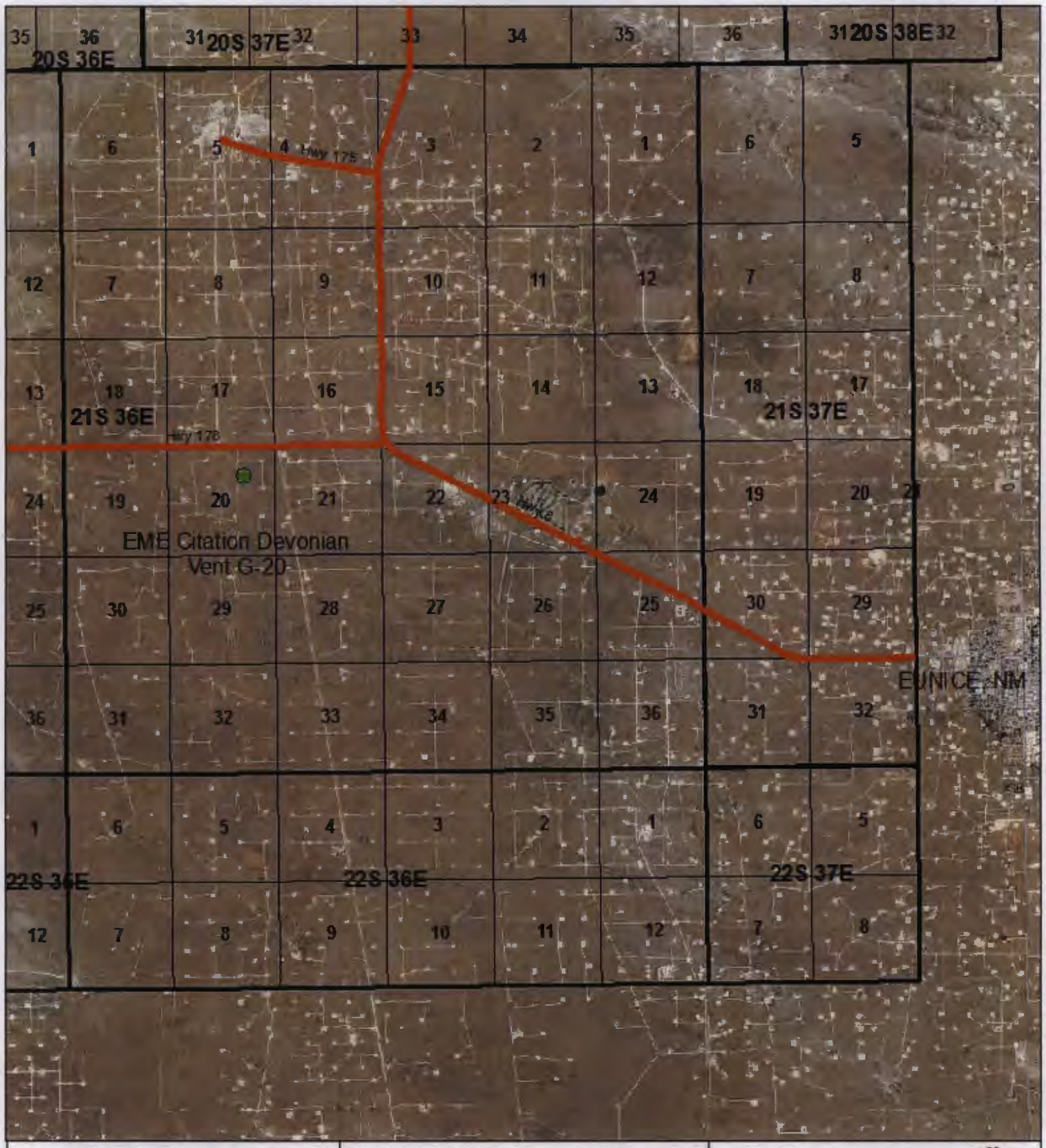
UL G SECTION 20
T-21-S R-36-E
LEA COUNTY, NM

N
W E
S

0 1,000 2,000
Feet

Drawing date: 7/17/13
Drafted by: T. Grieco

Site Location Map



RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC

RECS

EME CITATION DEVONIAN VENT G-20

UL G SECTION 20
T-21-S R-36-E
LEA COUNTY, NM

N
W E
S

0 1 2 Miles

Drawing date: 7/17/13
Drafted by: T. Grieco

Junction Box Report

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	Citation Devonian Vent G-20	G	20	21S	36E	Lea	moved 167 ft North		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Dasco Land Company OTHER _____

Depth to Groundwater 174 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 7/28/2004 Date Completed 8/12/2004 OCD Witness No

Soil Excavated 18 cubic yards Excavation Length 10 Width 4 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: **Sample Date** 8/2/2004 **Sample Depth** 12 ft

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX, and chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
GRAB @ 12 ft	<0.005	<0.005	<0.005	<0.015	28.1	2570	432

General Description of Remedial Action: This vent was located just outside the eastern fence line of an active production facility. The box was removed and delineated using a backhoe to make a trench at the site of the old junction. Samples were collected every foot to 12 ft BGS and field-tested for chloride and screened using a PID. Mild hydrocarbon odors were detected in all samples. Chloride concentrations were relatively low and given the depth to groundwater, no further excavation was warranted. The 12 ft sample was analyzed at a laboratory and NMOCD TPH and BTEX guidelines were met. The hole was backfilled with the excavated soil. The disturbed surface was seeded on 9/24/2004 with a blend of native vegetation and will be monitored for growth.

enclosures: chloride graph, photos, lab results

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
vertical	5	113
at junction	6	141
	7	175
	8	144
	9	256
	10	281
	11	337
	12	458

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

SITE SUPERVISOR Joe Gatts SIGNATURE Joe Gatts COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Farris Pope

DATE 9/27/2004 TITLE Project Scientist

EME Citation Devonian vent G-20

unit 'G', Sec. 20, T21S, R36E

undisturbed junction box 7/23/2003

old junction site; lumber removed 7/23/2003

new plumbing in new box location 167 ft north 6/23/2004

completed new watertight junction box 167 ft north 7/9/2004

backfilling delineation excavation at old box site 8/12/2004

excavation backfilled and graded 8/12/2004

seeding disturbed surface 9/24/2004

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: ROY RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 08/02/04
Reporting Date: 08/04/04
Project Number: NOT GIVEN
Project Name: EME
Project Location: CITATION DEVONIAN-EME

Sampling Date: 08/02/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		08/03/04	08/03/04	08/02/04
H8967-1	SOURCE @ 12' BGS	28.1	2570	432
Quality Control		759	801	1000
True Value QC		800	800	1000
% Recovery		94.9	100	100
Relative Percent Difference		5.0	1.8	1.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analysis performed on a 1:4 w:v aqueous extract.

Chemist

8/4/04
Date

H8967A.XLS

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: ROY RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 08/02/04
Reporting Date: 08/03/04
Project Number: NOT GIVEN
Project Name: EME
Project Location: CITATION DEVONIAN-EME

Sampling Date: 08/02/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE	08/02/04	08/02/04	08/02/04	08/02/04
H8967-1 SOURCE @ 12' BGS	<0.005	<0.005	<0.005	<0.015
Quality Control	0.086	0.101	0.091	0.273
True Value QC	0.100	0.100	0.100	0.300
% Recovery	86.4	101	91.1	91.0
Relative Percent Difference	7.3	3.0	0.5	2.7

METHOD: EPA SW-846 8260

Chemist

8/3/04
Date

H8967B.XLS

CARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

Page____ of____

Company Name:	Rice Operating	BILL TO	PO #:
Project Manager:	Roy Rascon	Company:	
Address:	122 W. Taylor	Attn:	
City:	Hobbs State: NM Zip: 88240	Address:	
Phone #:	393-9174	City:	
Fax #:		State:	Zip:
Project #:	Project Owner:	Phone #:	
Project Name:	EME	Fax #:	
Project Location:	Citation Devonian - EME		

FOR LAB USE ONLY				MATRIX							PRES.			SAMPLING		ANALYSIS REQUEST												
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID:	ICE / COOL	OTHER :	DATE	TIME	TPH 8015	Cl.	BTEX											
H8967-1	Source at 12' bgs	1				x							8/2/04	9:00	x	x	x											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date:	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
	Time:		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date: 8/2/04	Received By: (Lab Staff) Amy Hill	REMARKS:
	Time: 4:10		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No	CHECKED BY: (Initials)

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

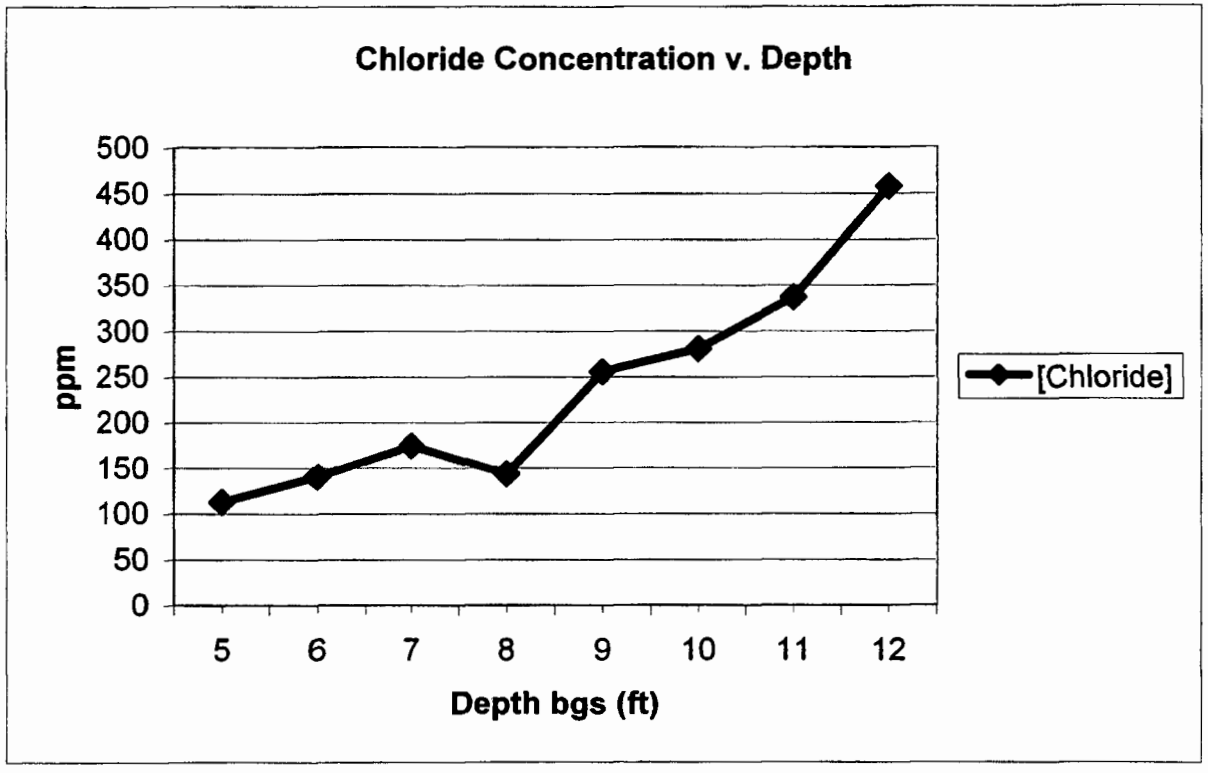
EME Citation Devonian vent G-20

unit 'G', Sec. 20, T21S, R36E

Vertical Delineation at Source

Depth bgs (ft)	[Cl⁻] ppm
5	113
6	141
7	175
8	144
9	256
10	281
11	337
12	458

Groundwater = 174 ft



Current Photodocumentation

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

EME Citation Devonian Vent G-20

UL/G, Section 20, T21S, R36E

Facing Southwest 5/10/2013

Facing west 5/10/2013

RICE *Operating Company*
122 West Taylor • Hobbs, New Mexico 88240
Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 8975

October 15, 2013

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

RE: Additional Information and Termination Request
EME Citation Devonian Vent G-20 (1R427-152): UL/G, Sec. 20, T21S, R36E
RICE Operating Company – Eunice Monument Eumont (EME) SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work
In 2004, ROC initiated work on the former EME Citation Devonian Vent G-20 junction box. The site is located in UL G, Sec. 20, T21S, R36E and just outside the eastern fence line of an active production facility. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 174 +/- feet. The site was delineated using a backhoe to form a 10x4x12-ft deep excavation and soil samples were screened at regular intervals for both hydrocarbons and chlorides. Each sample was field titrated for chlorides and screened for TPH, resulting in low chloride concentrations. The 12 ft sample was sent to a commercial laboratory for analysis, resulting in a chloride concentration of 432 mg/kg, a gasoline range organics (GRO) concentration of 28.1 mg/kg, a diesel range organics (DRO) concentration of 2,570 mg/kg and BTEX concentrations below detectable limits throughout. The TPH concentration falls below the NMOCD guideline standard of 5,000 mg/kg. The excavation was backfilled with the excavated soil to ground surface and contoured to the surrounding area. On 9/24/2004, the site was seeded with a blend of native vegetation. A new watertight junction box was built 167 ft north of this site.

A Termination Request was submitted to NMOCD on July 19, 2013. NMOCD requested further delineation of the site on August 26, 2013.

Further investigation
To further investigate the depth of chloride presence, a soil bore was initiated on August 22, 2013 at 7.5 ft northwest of the former junction box site. The boring was advanced to a depth of 25 ft below ground surface (bgs) with soil samples collected every 5 ft. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in low concentrations. The 15 ft, 20 ft and 25 ft samples were sent to a commercial laboratory for analysis. The 15 ft samples resulted in a chloride concentration below detectable limits, a GRO concentration of 131 mg/kg and a DRO concentration of 4,540 mg/kg. The sample was also analyzed for BTEX, resulting in concentrations of 0.417 mg/kg for ethyl benzene, 1.57 mg/kg for total xylenes of 1.57 mg/kg and concentrations of benzene and toluene below detectable limits. The 20 ft sample resulted in a chloride concentration of 32 mg/kg, a DRO concentration of 3,150 mg/kg and a GRO concentration below detectable limits. The sample was also analyzed for BTEX resulting in a total xylenes concentration of 0.769 mg/kg and concentrations of benzene, toluene and ethyl benzene below detectable limits. The 25 ft sample resulted in a chloride concentration of 128 mg/kg, a DRO concentration of 50 mg/kg and a GRO concentration below detectable limits. The entire bore hole was plugged with bentonite to ground surface.

Vegetation has rebounded at this site; vegetation will act as an evapo-transpiration barrier that will also inhibit the downward migration of chlorides and hydrocarbons. Plants capture water through their roots and so reduce the amount of water infiltrating below the root zone.

The junction box site location map, area map, soil bore plat, log, laboratory analysis and current documentation are attached.

Recommendations
Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-2967 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,
RICE Operating Company

L Flores

Laura Flores
Environmental Project Assistant Manager

Enclosures

Site Maps

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

Site Location Map

RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC

RECS

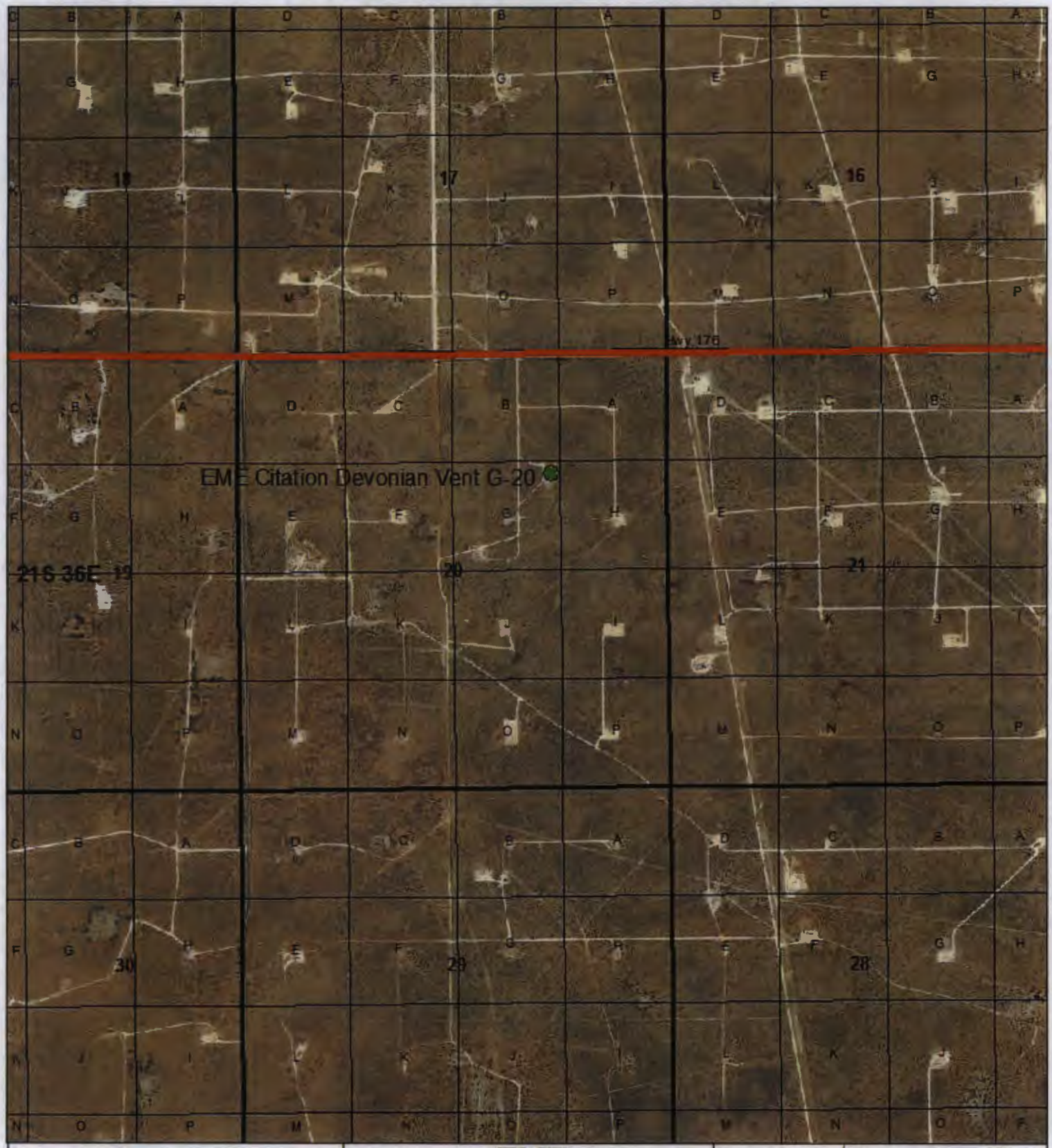
EME
CITATION DEVONIAN
VENT G-20
UL G SECTION 20
T-21-S R-36-E
LEA COUNTY, NM

N W E S

0 1 2 Miles

Drawing date: 7/17/13
Drafted by: T. Grieco

Geographical Location Map



RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC

EME
CITATION DEVONIAN
Vent G-20

UL G SECTION 20
T-21-S R-36-E
LEA COUNTY, NM

N W E S

0 1,000 2,000
Feet

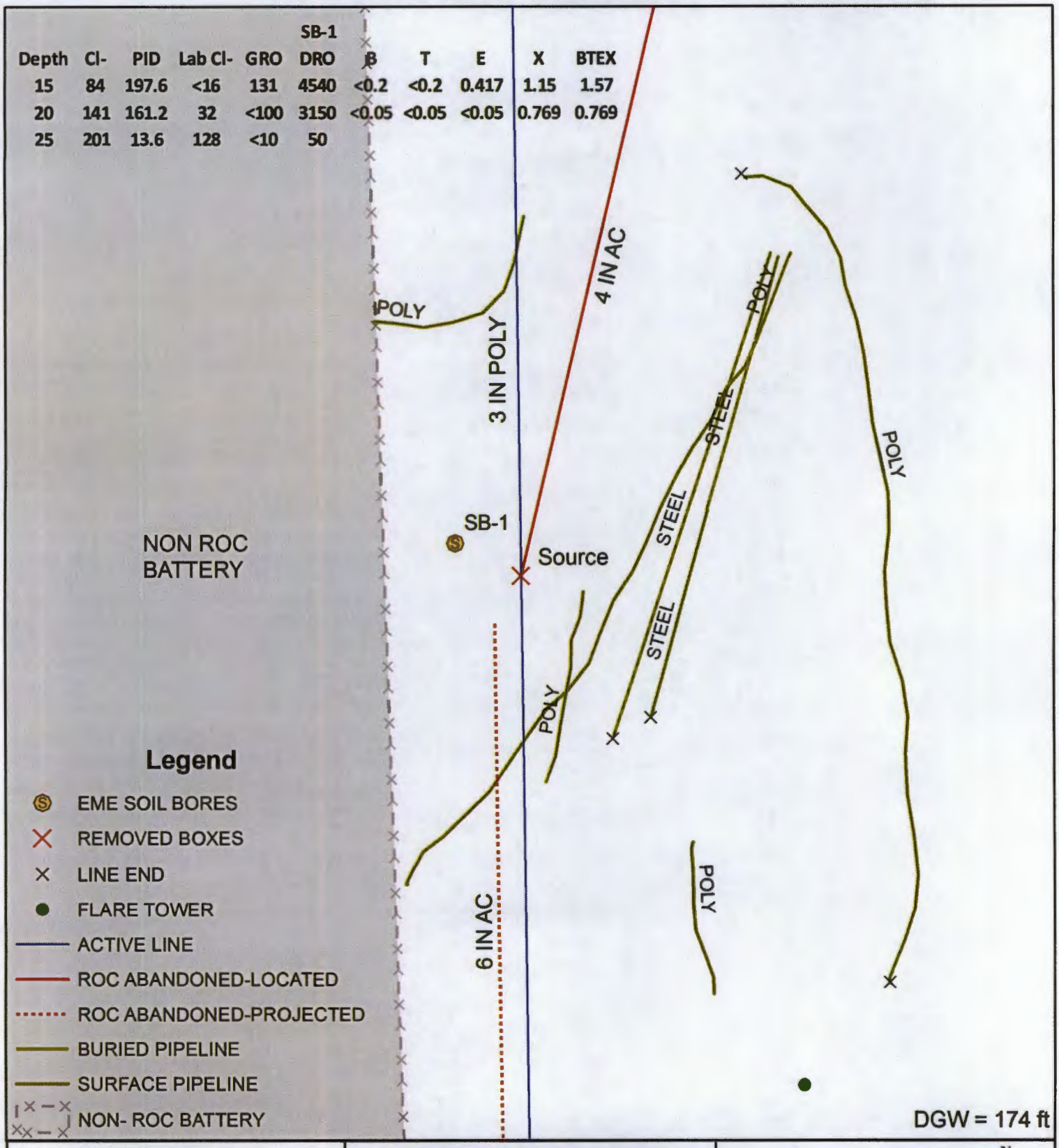
Drawing date: 7/17/13
Drafted by: T. Grieco

Soil Bore Installation Documentation

RICE *Operating Company* (ROC)
419 West Cain Hobbs, NM 88240
Phone: (575) 393-2967 Fax: (575) 393-0293

Soil Bore Installation

Depth	Cl-	PID	Lab Cl-	GRO	SB-1 DRO	B	T	E	X	BTEX
15	84	197.6	<16	131	4540	<0.2	<0.2	0.417	1.15	1.57
20	141	161.2	32	<100	3150	<0.05	<0.05	<0.05	0.769	0.769
25	201	13.6	128	<10	50					



Legend

- EME SOIL BORES
- REMOVED BOXES
- LINE END
- FLARE TOWER
- ACTIVE LINE
- ROC ABANDONED-LOCATED
- ROC ABANDONED-PROJECTED
- BURIED PIPELINE
- SURFACE PIPELINE
- NON- ROC BATTERY

RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC — RECS

EME CITATION DEVONIAN G-20 EOL

UL G SECTION 20
T-21-S R-36-E
LEA COUNTY, NM

N W E S

0 10 20 Feet

GPS date: 9/30/13 TG
Drawing date: 9/5/13
Drafted by: L. Weinheimer