

Robin Terrell  
Mewbourne Oil Company  
PO Box 5270  
Hobbs, New Mexico 88241

November 8, 2007

Mike Bratcher  
NMOCD District 2 Office  
1301 W. Grand  
Artesia, New Mexico 88210

OLD COPY

RE: Quahadah Ridge 5 Federal 002 - Final Pit Closure

**Quahadah Ridge 5 Federal 002**

API: 30-015-35171

Sec 5-T21S-R29E

3500' FSL 1980' FWL

Depth to Ground Water: 175'

Planned Analytical Testing: Chlorides

Site Ranking Score:

Primary Land Use: Ranching and Oil & Gas Production

Pursuant to Pit Rule 50 of the New Mexico Oil Conservation District of the State of New Mexico regulatory requirement for pit closure, please accept the following documentation for final closure of the drilling pit for the aforementioned location.

An Insitu burial trench was excavated and lined with 12mil liner. All drill cuttings were stiffened and transferred to the lined Insitu trench. Upon transferring all pit contents to the lined burial trench, field tests were performed on the soil within in the confines of the original drill pit. The field results of chloride delineation of the impacted material are as follows (a diagram has also been attached):

Q1 10' 6000mg/kg  
13' 4500mg/kg  
16' 4000mg/kg  
19' 2750mg/kg  
22' 1280mg/kg  
25' 820mg/kg  
27' 700mg/kg  
29' 500mg/kg  
32' 140mg/kg

Q2 10' 3000mg/kg  
13' 1550mg/kg  
16' 1240mg/kg  
19' 1000mg/kg  
22' 400mg/kg

Q3 10' 150mg/kg

JAN 10 2008

Q4 10' 200mg/kg

Q5 10' 9200mg/kg  
13' 6450mg/kg  
16' 1860mg/kg  
19' 530mg/kg  
22' 1300mg/kg

Accepted for record  
NMOCD

After field tests were performed, Mike Bratcher of the New Mexico Oil Conservation Division (NMOCD) was contacted. Approval for closure was granted with the following stipulation:

The impacted material in Sections Q1 and Q5 will need to be excavated and removed down to a depth of 20'. In addition, the impacted material in Section Q2 will need to be excavated to a depth of 13'. Section Q1 will be lined with a 20mil liner and the excavated material will be placed in the lined Section and capped with a 20mil cap.

Pursuant to NMOCD Pit Rule 50, a 20mil liner was placed on top of the Insitu trench to seal in the impacted soils and the stiffened drill cuttings. Section Q1 was lined and the aforementioned material placed inside. Section Q1 was then capped with a 20mil cap. The pit area was backfilled with clean native material, contoured to the surrounding terrain and reseeded with an approved seed mixture.

(14)

Soil samples were collected, prepared and packaged per EPA guidelines and forwarded to Trace Analysis in Lubbock, Texas for official analytical testing. Please find the official analytical results attached hereto.

Please review the attached documentation and contact me at 505-393-5905 with any questions or concerns.

Sincerely,

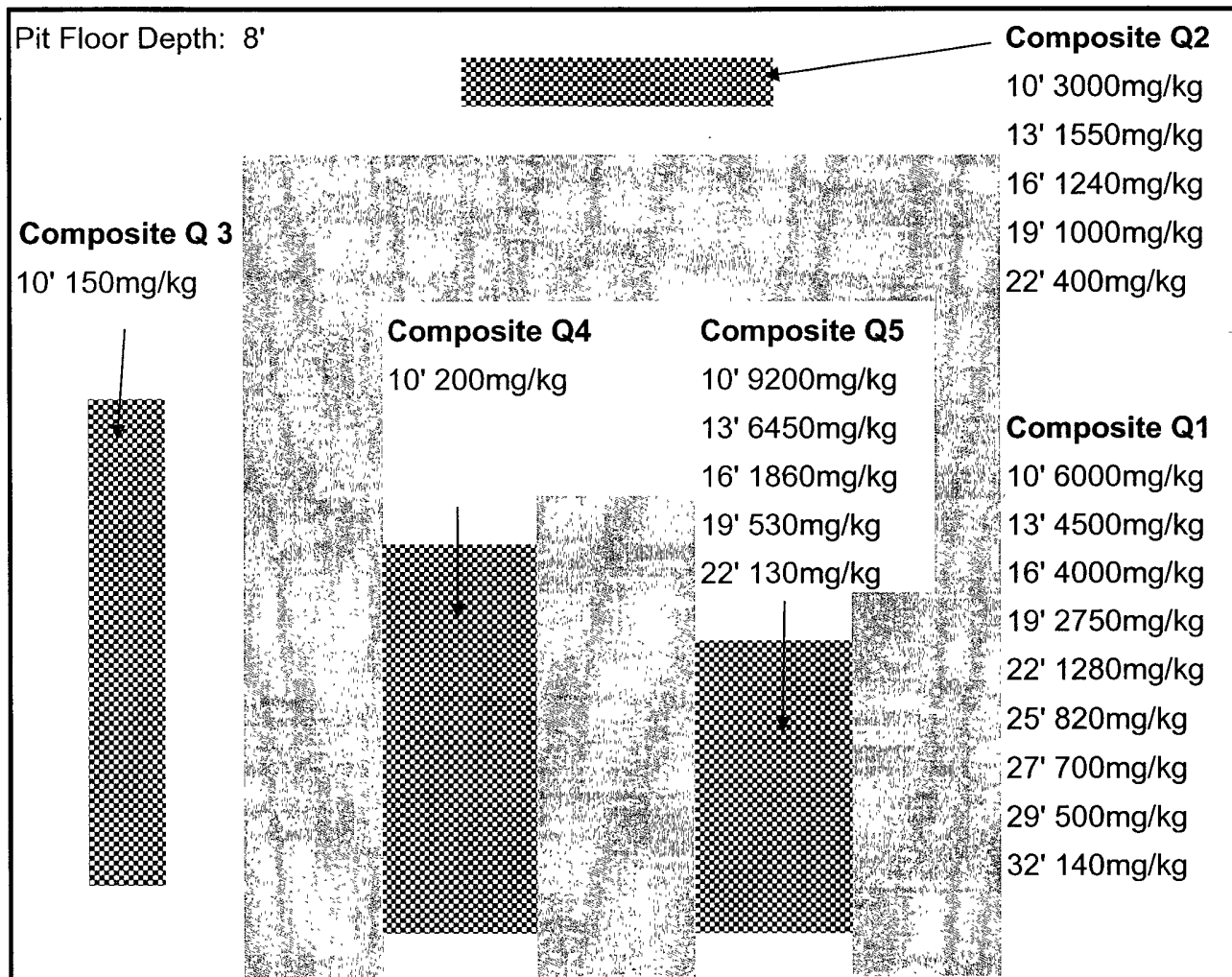
A handwritten signature in black ink, appearing to read 'Robin Terrell', with a stylized, cursive script.

Robin Terrell  
Production Engineer  
/sjt

Quahadah Ridge 5 Federal 002  
Field Results  
Floor 11/08/07

Lined  
Burial  
Trench

NORTH



Valley Energy Services, Inc.

PO Box 207  
Loving, NM 88256

# Invoice

Date	Invoice #
11/8/2007	655

Bill To
Mewbourne Oil Company Robin Terrell PO Box 5270 Hobbs, NM 88241

Terms	Rep
Due on receipt	SJT

Location
Quahada Ridge 5 Federal ...

Quantity	Item Code	Description	Price Each	Amount
6	Enviro Sampling	pulled infield samples for delineation, approval for closure was granted by Mike Bratcher of the NMOCD	70.00	420.00T
0.75	Enviro Reports		70.00	52.50T
0.5	Enviro misc	prepared, packaged and sent samples to Trace Analysis for delineation	70.00	35.00T
67	Mileage Charge		0.50	33.50T
		New Mexico Sales Tax	6.3125%	34.15
Thank you for your business.			<b>Total</b>	\$575.15

District I  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
June 1, 2004  
For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒  
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

OCT 10 2007  
OCD-ARTESIA

Operator: <u>Munbourne Oil Co.</u> Telephone: <u>(505) 393-5905</u> e-mail address: _____	
Address: <u>P.O. Box 5270 Hobbs NM 88241</u>	
Facility or well name: <u>Quehada Ridge 5 Fed #2</u> API #: <u>30-015-35171</u> U/L or Qtr/Qtr <u>F</u> Sec <u>5</u> T <u>215</u> R <u>29E</u>	
County: <u>Eddy</u> Latitude <u>N 32° 30' 38.4"</u> Longitude <u>W 104° 00' 50.2"</u> NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/>	
Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>	
<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume _____ bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more <u>150'</u> (0 points) <u>0</u>
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) No <u>0</u> (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more <u>0</u> (0 points)
Ranking Score (Total Points) <u>0</u>	

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility N/A. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface N/A ft. and attach sample results.

(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: <u>Refer to Attached pit Closure Plan</u>

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

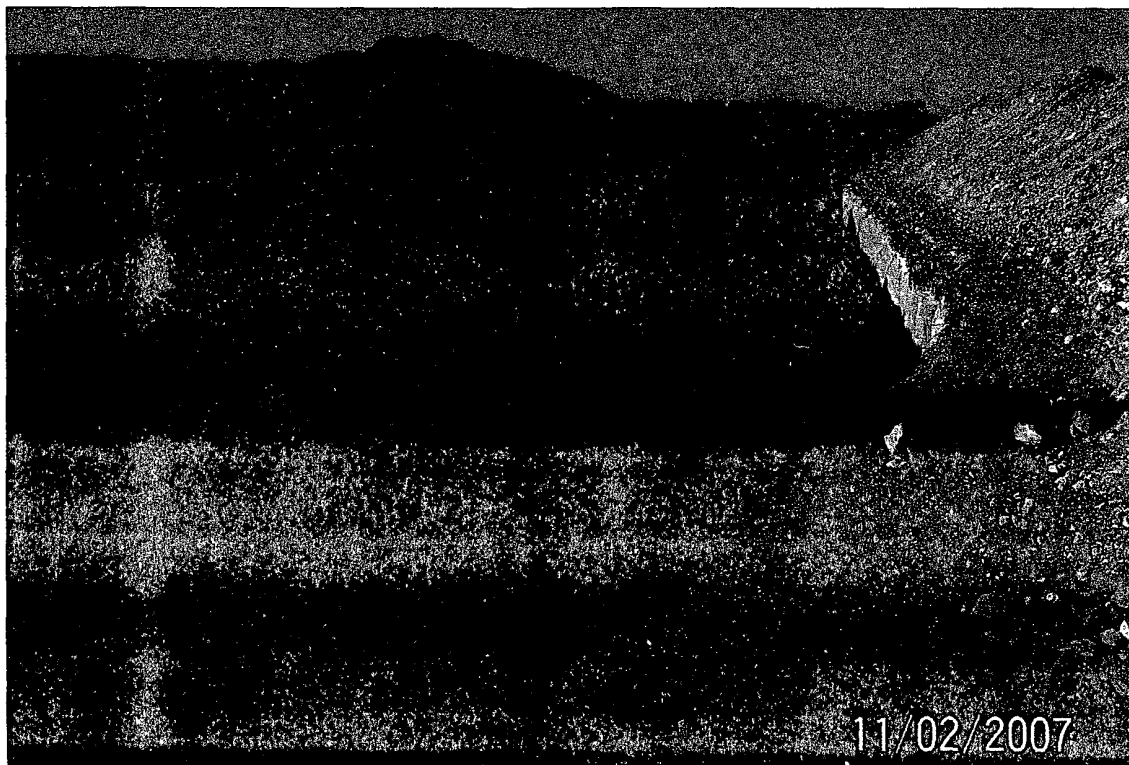
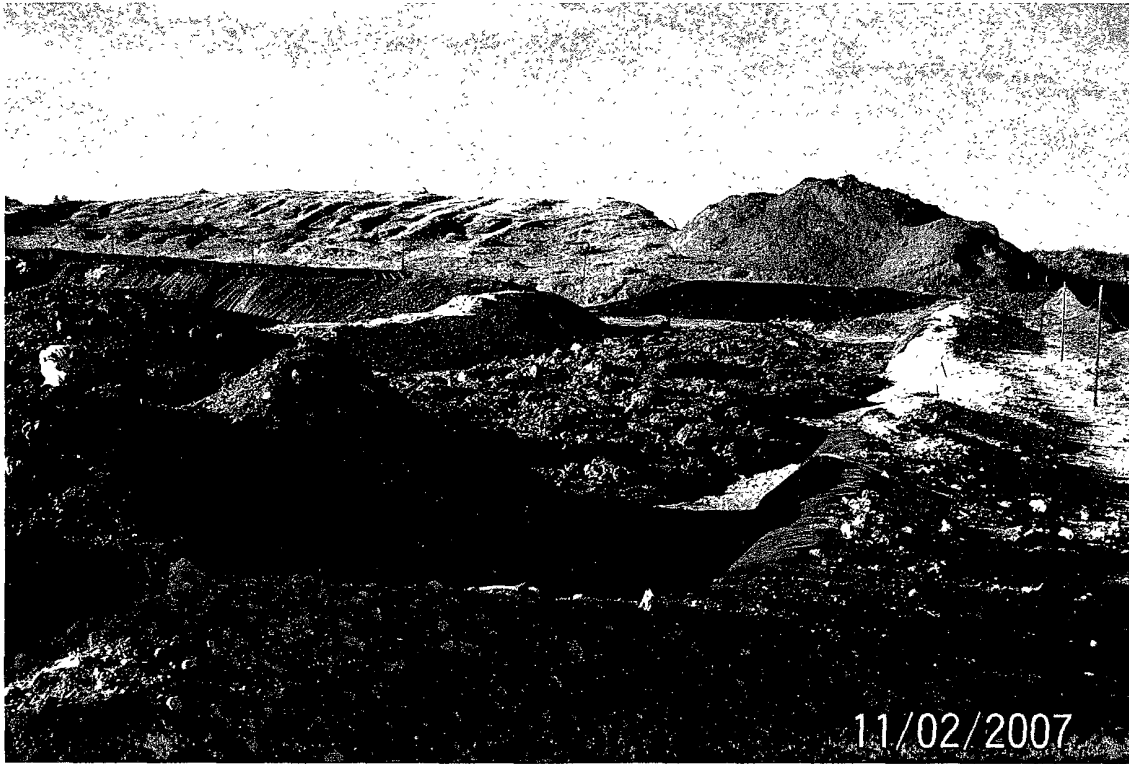
Date: 8/29/07  
Printed Name/Title: Dusty L. Wilson / Field Manager Signature: [Signature]  
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

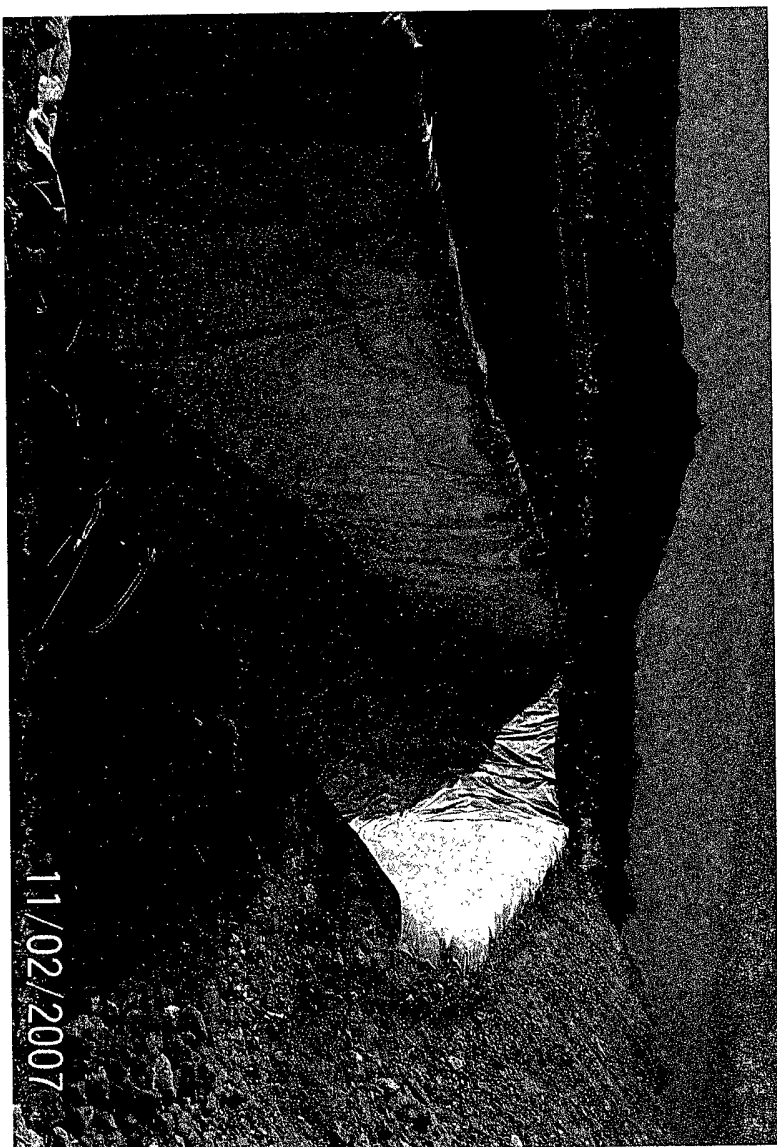
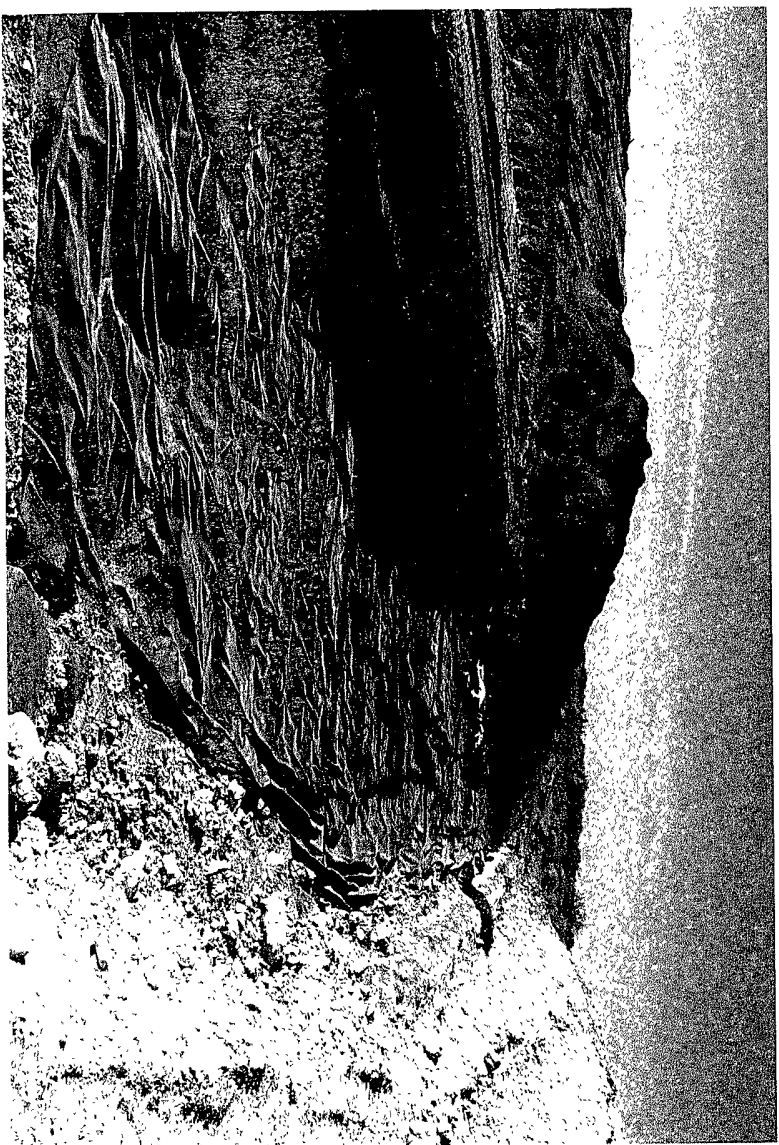
Approval: \_\_\_\_\_  
Printed Name/Title: \_\_\_\_\_ Signature: Mike [Signature] Date: OCT 10 2007

NOTIFY OCD 24 HOURS PRIOR to beginning closure and 24 HOURS PRIOR to obtaining samples. Samples are to be obtained from pit area and analyses submitted to OCD prior to back-filling.

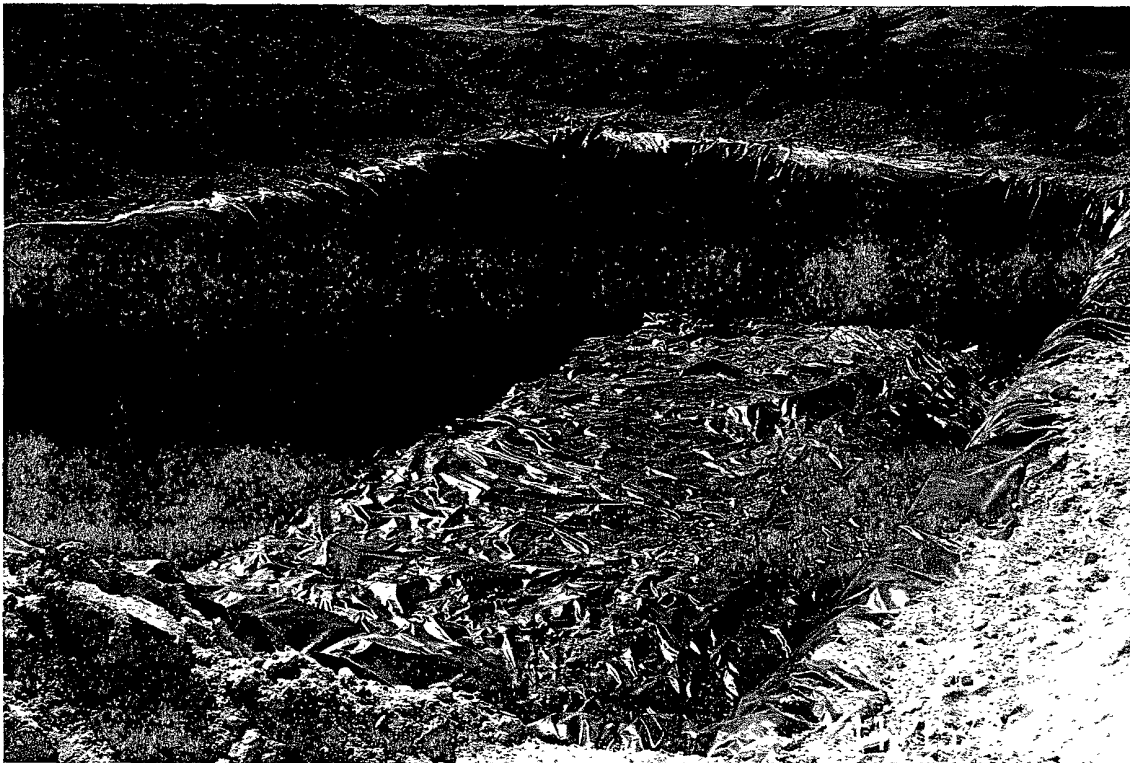
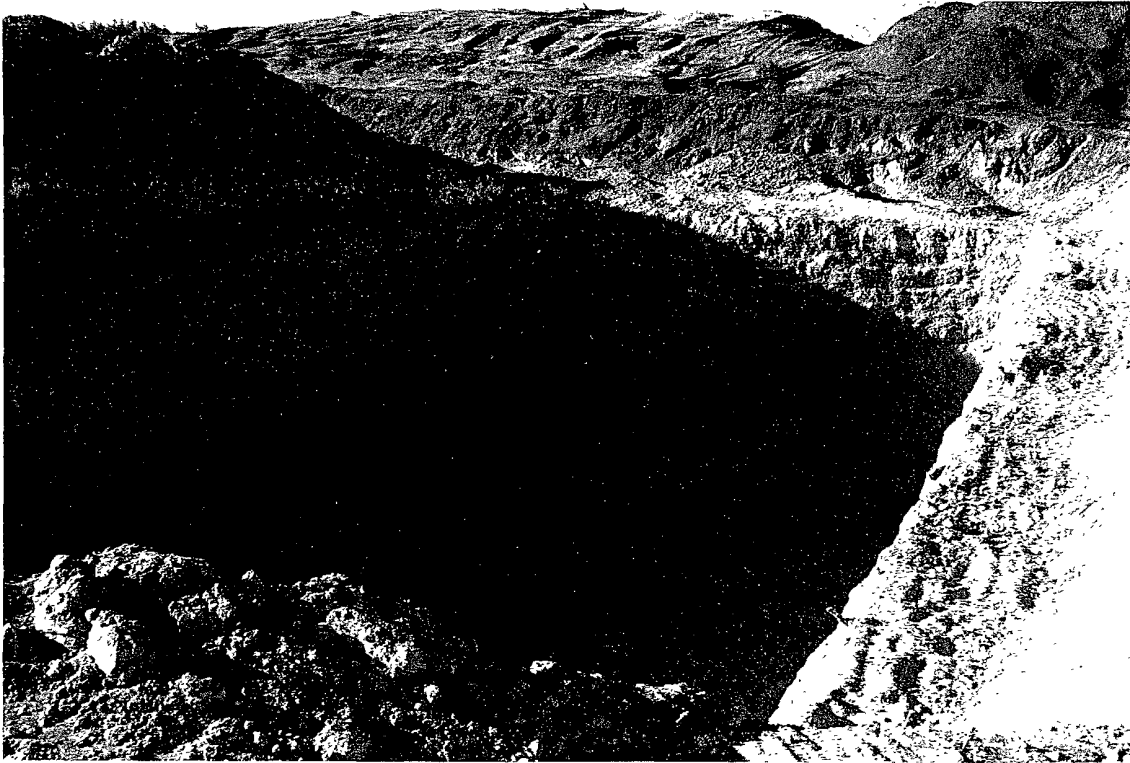
- If burial trench is to be constructed in pit area, samples are to be obtained and analyses submitted to OCD PRIOR to lining trench.

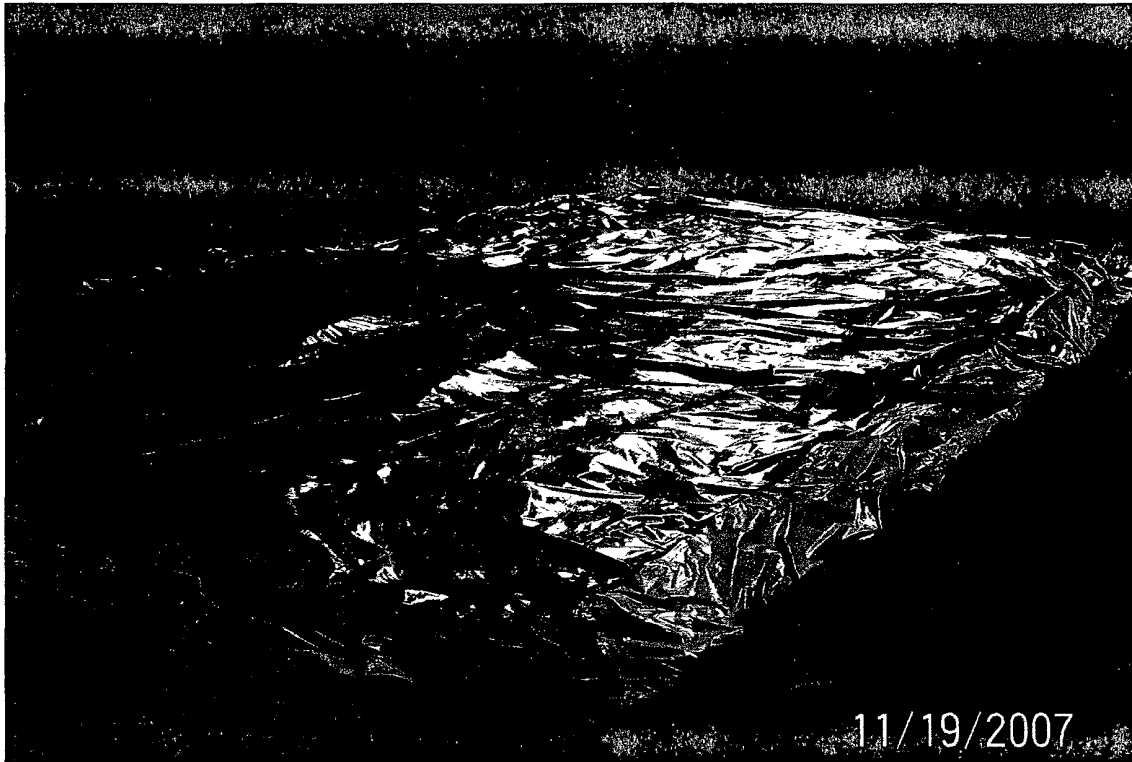












11/19/2007



# TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9  
200 East Sunset Road, Suite E  
5002 Basin Street, Suite A1  
8808 Camp Bowie Blvd West, Suite 180

Lubbock, Texas 79424 800•378•1296  
El Paso, Texas 79922 888•588•3443  
Midland, Texas 79703  
Ft Worth, Texas 76116  
E-Mail lab@traceanalysis.com

806•794•1296 FAX 806•794•1298  
915•585•3443 FAX 915•585•4944  
432•689•6301 FAX 432•689•6313  
817•201•5260 FAX 817•560•4336

**Bill To:** Mewbourne Oil Company  
P. O. Box 5270  
Hobbs, NM 88220

**Attn:** Robin Terrell

**Invoice No. 26448**



**Lab Location:** Lubbock  
**Invoice Date:** 2007-11-21  
**Payment Due:** 2007-12-21

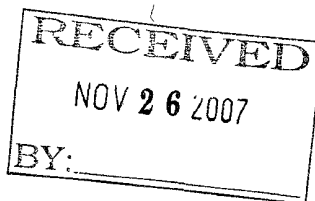
**Work Order:** 7111101  
**Project Location:** Sec 5-T21S-R20E Eddy County, NM  
**Project Name:** Quahada Ridge 5 Fed 2  
**Project Number:** API 30-015-35171

Item	Quantity	Matrix	Description	Price	Sub Total
Chloride/48Hr RUSH	5	soil	142543 - 142547	\$29.75	\$148.75

*Payment Terms: Net-30*

**Total \$148.75**

Dr. Blair Leftwich, Director





6701 Aberdeen Avenue, Suite 9  
200 East Sunset Road, Suite E  
5002 Basin Street, Suite A1  
8808 Camp Bowie Blvd West, Suite 180

Lubbock, Texas 79424  
El Paso, Texas 79922  
Midland, Texas 79703  
Ft Worth, Texas 76116  
E-Mail lab@traceanalysis.com

800•378•1296  
888•588•3443  
806•794•1296  
915•585•3443  
432•689•6301  
817•201•5260  
FAX 806•794•1298  
FAX 915•585•4944  
FAX 432•689•6313  
FAX 817•560•4336

## Analytical and Quality Control Report

Robin Terrell  
Mewbourne Oil Company  
P O. Box 5270  
Hobbs, NM, 88220

Report Date: November 20, 2007

Work Order: 7111101



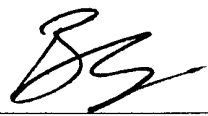
Project Location: Sec 5-T21S-R29E Eddy County, NM  
Project Name: Quahada Ridge 5 Fed 2  
Project Number: API 30-015-35171

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
142543	Q1 32'	soil	2007-11-08	15:45	2007-11-10
142544	Q2 22'	soil	2007-11-08	15:30	2007-11-10
142545	Q3 10'	soil	2007-11-08	13:30	2007-11-10
142546	Q4 10'	soil	2007-11-08	14:00	2007-11-10
142547	Q5 22'	soil	2007-11-08	16:15	2007-11-10

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

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

  
Dr Blair Leftwich, Director

### Standard Flags

B - The sample contains less than ten times the concentration found in the method blank

## Case Narrative

Samples for project Quahada Ridge 5 Fed 2 were received by TraceAnalysis, Inc. on 2007-11-10 and assigned to work order 7111101. Samples for work order 7111101 were received intact at a temperature of 22.0 deg.C

Samples were analyzed for the following tests using their respective methods.

Test	Method
Chloride (Titration)	SM 4500-Cl B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7111101 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

## Analytical Report

### Sample: 142543 - Q1 32'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	43225	Date Analyzed:	2007-11-19	Analyzed By:	ER
Prep Batch:	37295	Sample Preparation:	2007-11-19	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

### Sample: 142544 - Q2 22'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	43225	Date Analyzed:	2007-11-19	Analyzed By:	ER
Prep Batch:	37295	Sample Preparation:	2007-11-19	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		818	mg/Kg	10	5.00

### Sample: 142545 - Q3 10'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	43226	Date Analyzed:	2007-11-19	Analyzed By:	ER
Prep Batch:	37296	Sample Preparation:	2007-11-19	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		114	mg/Kg	10	5.00

### Sample: 142546 - Q4 10'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	43226	Date Analyzed:	2007-11-19	Analyzed By:	ER
Prep Batch:	37296	Sample Preparation:	2007-11-19	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		284	mg/Kg	10	5.00

### Sample: 142547 - Q5 22'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	43226	Date Analyzed:	2007-11-19	Analyzed By:	ER
Prep Batch:	37296	Sample Preparation:	2007-11-19	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

**Method Blank (1)** QC Batch 43225

QC Batch: 43225 Date Analyzed: 2007-11-19 Analyzed By: ER  
Prep Batch: 37295 QC Preparation: 2007-11-19 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<3.25	mg/Kg	5

**Method Blank (1)** QC Batch 43226

QC Batch: 43226 Date Analyzed: 2007-11-19 Analyzed By: ER  
Prep Batch: 37296 QC Preparation: 2007-11-19 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<3.25	mg/Kg	5

**Laboratory Control Spike (LCS-1)**

QC Batch: 43225 Date Analyzed: 2007-11-19 Analyzed By: ER  
Prep Batch: 37295 QC Preparation: 2007-11-19 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<3.25	101	96.1 - 103

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit	RPD Limit
Chloride	101	mg/Kg	1	100	<3.25	101	96.1 - 103	0 20

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

**Laboratory Control Spike (LCS-1)**

QC Batch: 43226 Date Analyzed: 2007-11-19 Analyzed By: ER  
Prep Batch: 37296 QC Preparation: 2007-11-19 Prepared By: ER

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
Chloride	101	mg/Kg	1	100	<3.25	101	96.1 - 103



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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<3.25	101	96.1 - 103	0	20

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

**Matrix Spike (MS-1)** Spiked Sample: 143074

QC Batch: 43225  
Prep Batch: 37295

Date Analyzed: 2007-11-19  
QC Preparation: 2007-11-19

Analyzed By: ER  
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	716	mg/Kg	10	500	270	89	80 - 120

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	744	mg/Kg	10	500	270	95	80 - 120	4	20

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

**Matrix Spike (MS-1)** Spiked Sample: 142552

QC Batch: 43226  
Prep Batch: 37296

Date Analyzed: 2007-11-19  
QC Preparation: 2007-11-19

Analyzed By: ER  
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	526	mg/Kg	10	500	54	94	80 - 120

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Chloride	498	mg/Kg	10	500	54	89	80 - 120	6	20

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

**Standard (ICV-1)**

QC Batch: 43225

Date Analyzed: 2007-11-19

Analyzed By: ER

Param	Flag	Units	ICVs True Conc	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2007-11-19

**Standard (CCV-1)**

QC Batch: 43225

Date Analyzed: 2007-11-19

Analyzed By: ER

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-11-19

**Standard (ICV-1)**

QC Batch 43226

Date Analyzed 2007-11-19

Analyzed By ER

Param	Flag	Units	ICVs True Conc	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2007-11-19

**Standard (CCV-1)**

QC Batch 43226

Date Analyzed 2007-11-19

Analyzed By ER

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-11-19

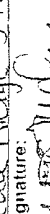
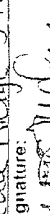
# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9  
Lubbock, Texas 79424  
Tel (806) 744-1296  
Fax (806) 794-1298  
1 (800) 378-1296

5002 Basin Street, Suite A1  
Midland, Texas 79703  
Tel (432) 689-6301  
Fax (432) 689-6313

200 East Sunset Rd., Suite E  
El Paso, Texas 79922  
Tel (915) 595-3443  
Fax (915) 585-4944  
1 (888) 588-3443

<b>Company Name:</b> Newburn Oil Co <b>Address:</b> PO Box 5570 Hobbs, NM 88240 <b>Contact Person:</b> Robin Terrell <b>Phone #:</b> <b>Fax #:</b> <b>E-mail:</b> Robin.Terrell@newburnoilco.com		<b>Project Name:</b> Buchada Ridge 5 Fed 2 <b>Project Location (including state):</b> Soc 5-215-RDGE Eddy City, NM <b>Project #:</b> API 3D 015-3571 <b>Sample Location (including state):</b> Soc 5-215-RDGE Eddy City, NM <b>Sampler Signature:</b> 		<b>Project Name:</b> Buchada Ridge 5 Fed 2 <b>Project Location (including state):</b> Soc 5-215-RDGE Eddy City, NM <b>Project #:</b> API 3D 015-3571 <b>Sample Location (including state):</b> Soc 5-215-RDGE Eddy City, NM <b>Sampler Signature:</b> 	
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LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX			PRESERVATIVE METHOD						SAMPLING		REMARKS	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE		TIME
192543	Q1-32'	1		X										11807	1545	Turn Around Time if different from standard Moisture Content BOD TSS pH Pesticides 3081A / 608 PCB's 3082 / 608 GC/MS Semi Vol 8270C / 825 GC/MS Vol 8260B / 624 RCI TCLP Pesticides TCLP Semi Volatiles TCLP Volatiles TCLP Metals Ag As Ba Cd Cr Pb Se Hg Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007 PAH 8270C / 625 TPH 8015 GRO / DRO / TVHC TPH 4181 / TX1005 / TX1005 EX(C35) BTEX 8021B / 602 / 8260B / 624 MTBE 3021B / 602 / 8260B / 624
544	Q2-22'	1		X										11807	1530	
545	Q3-10'	1		X										11807	1530	
546	Q4-10'	1		X										11807	1400	
547	Q5-22'	1		X										11807	1615	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:
Shelly Puckner VES		11/9/07	1440	UPS		11/9/07	1440	
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:
				Katy Vande Trec		11-10	9:25	A.T.
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:

