

District I  
1625 N. French Dr., Hobbs, NM 88240  
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 ☒

Operator: <u>Comarex Energy</u> Telephone: _____ e-mail address: _____		
Address: _____		
Facility or well name: <u>Laguna Deep Well #9</u> API #: <u>30-025-87686</u> U/L or Qtr/Qtr <u>5</u> Sec <u>35</u> T <u>19s</u> R <u>33e</u>		
County: <u>Lea Co.</u> Latitude <u>N 32° 36' 54.5</u> Longitude <u>102° 37' 55.8</u> NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/>		
Surface Owner: Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" 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 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: <u>50'</u>	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet <u>50 feet or more, but less than 100 feet</u> 100 feet or more	(20 points) (10 points) <u>10</u> (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes <u>No</u>	(20 points) (0 points) <u>0</u>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet <u>200 feet or more, but less than 1000 feet</u> <u>1000 feet or more</u>	(20 points) (10 points) (0 points) <u>0</u>
Ranking Score (Total Points)		<u>10</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: \_\_\_\_\_. (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 \_\_\_\_\_ ft. and attach sample results.

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

Additional Comments:
<u>See Attached work 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 <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	
Date: <u>10/25/2004</u>	Signature: <u>[Signature]</u>
Printed Name/Title: <u>Dorsey Rogers Dir, Supr</u>	
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: <u>L. Johnson - Engr/Engr</u>	Signature: <u>[Signature]</u>
10-26-06	

222324252627  
OCT 27 2004  
Received  
Hobbs  
OCD  
11234567

# New Mexico Environmental Services

## Hobbs, New Mexico

### *Reserve Pit Remediation*

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#### Surface Pit Closure Plan

##### Pit Parameters

Well site: Laguna Deep Unit #9

Legal Description: 1980' FSL & 1980' FEL

Section 35-19S-33E

Lea County, New Mexico

The reserve pit insitu on this leasehold is being permitted to close as per New Mexico OCD "Pit and Below Grad Tank Guidelines" dates November 1, 2004.

This pit was excavated and formed to the dimensions roughly 100 feet X 100 feet x 6 feet deep. A 12 mil membrane liner and pad was used to prevent leakage to the surface soils. A visual examination of the membrane liner indicates that the liner has maintained its integrity.

The well bore penetrated a salt/anhydrite section causing the drilling fluid to saturate to a concentration weight of >9.5 ppg.

After drilling and completion phase of this project, the water phase of the pit contents were pumped and hauled to an approved water injection facility. The remaining solids were mechanically pulled to the corners of the containment area to allow them to dry and leach out as much liquid phase as possible. Again these liquids we hauled to an approved water injection facility. It is estimated that the volume of solids remaining are to +/- 1480 yards. The burial cell is to be excavated and lined with a minimum 20 mil membrane that complies with ASTM Standard(s): D 5747, D 5199, D 5994, and D 4833. The cuttings will be loaded as to allow for >36" freeboard to ground level. After the cuttings are

loaded, the 20 mil liner will be folded over the top and sewn on. A 20 mil minimum thickness liner meeting the minimum requirements as outlined in ASTM Standard Methods: D-5747, D-5199, D-5994, D4833; will be used to cap and cover to an extended area that exceeds three feet in all directions from the edge of the burial cell. This cap will be constructed as to slope and allow for water runoff from burial cell.

A minimum of 36" of top soil will be used to cover the burial cell. This soil must be capable of supporting native plant growth. A seed mixture will be used as to conform to local BLM as well as New Mexico OCD requirements. The seeding and propagation of required native plants will be monitored as to insure that growth is re-established.

After the drilled solids are buried, the natural contour of the surrounding solids will be mechanically shaped as prevent erosion of the well site until vegetation is established. The caliches and soils will be pulled from the well site pad to allow for a 200 X 300 pad dimension for production use. The remaining materials will be used to maintain lease road and other drill sites.



# TRACEANALYSIS, INC.

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## Analytical and Quality Control Report

Dorsey Rogers  
Cimarex  
207 S Mesa  
Carlsbad, NM, 88220

Report Date: November 15, 2006

Work Order: 6111514



Project Location: Lea Co. NM  
Project Name: Laguna Deep #9  
Project Number: Laguna Deep #9

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
108890	Sample #1 N.E. Corner	soil	2006-11-14	08:00	2006-11-15
108891	#2 NW Corner	soil	2006-11-14	08:30	2006-11-15
108892	#3 Center	soil	2006-11-14	09:00	2006-11-15
108893	#4 SW Corner	soil	2006-11-14	09:30	2006-11-15
108894	#5 SE Corner	soil	2006-11-14	10:00	2006-11-15
108895	#6 Background	soil	2006-11-14	10:30	2006-11-15

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 5 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.



11-16-06 Verone OK to Close  
OCT 2006  
11/15/2006 WED 04:19 [TX/RX NO 6796] 004

Report Date: November 15, 2006  
Laguna Deep #9Work Order: 6111514  
Laguna Deep #9Page Number: 2 of 5  
Lea Co.NM

## Analytical Report

**Sample: 108890 - Sample #1 N.E. Corner**Analysis: Chloride (Titration)  
QC Batch: 31937  
Prep Batch: 27812Analytical Method: SM 4500-Cl B  
Date Analyzed: 2006-11-15  
Sample Preparation: 2006-11-15Prep Method: N/A  
Analyzed By: SM  
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		175	mg/Kg	25	2.00

**Sample: 108891 - #2 NW Corner**Analysis: Chloride (Titration)  
QC Batch: 31937  
Prep Batch: 27812Analytical Method: SM 4500-Cl B  
Date Analyzed: 2006-11-15  
Sample Preparation: 2006-11-15Prep Method: N/A  
Analyzed By: SM  
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		138	mg/Kg	25	2.00

**Sample: 108892 - #3 Center**Analysis: Chloride (Titration)  
QC Batch: 31937  
Prep Batch: 27812Analytical Method: SM 4500-Cl B  
Date Analyzed: 2006-11-15  
Sample Preparation: 2006-11-15Prep Method: N/A  
Analyzed By: SM  
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		129	mg/Kg	25	2.00

**Sample: 108893 - #4 SW Corner**Analysis: Chloride (Titration)  
QC Batch: 31937  
Prep Batch: 27812Analytical Method: SM 4500-Cl B  
Date Analyzed: 2006-11-15  
Sample Preparation: 2006-11-15Prep Method: N/A  
Analyzed By: SM  
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		120	mg/Kg	25	2.00

**Sample: 108894 - #5 SE Corner**Analysis: Chloride (Titration)  
QC Batch: 31937  
Prep Batch: 27812Analytical Method: SM 4500-Cl B  
Date Analyzed: 2006-11-15  
Sample Preparation: 2006-11-15Prep Method: N/A  
Analyzed By: SM  
Prepared By: SM

Report Date: November 15, 2006  
Laguna Deep #9

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Laguna Deep #9

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Lea Co.NM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		148	mg/Kg	25	2.00

**Sample: 108895 - #6 Background**

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 31937      Date Analyzed: 2006-11-15      Analyzed By: SM  
Prep Batch: 27812      Sample Preparation: 2006-11-15      Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<2.00	mg/Kg	1	2.00

**Method Blank (1)      QC Batch: 31937**

QC Batch: 31937      Date Analyzed: 2006-11-15      Analyzed By: SM  
Prep Batch: 27812      QC Preparation: 2006-11-15      Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

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

QC Batch: 31937      Date Analyzed: 2006-11-15      Analyzed By: SM  
Prep Batch: 27812      QC Preparation: 2006-11-15      Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	92.3	mg/Kg	1	100	<0.500	92	85 - 115

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	RPD Limit
Chloride	98.6	mg/Kg	1	100	<0.500	99	85 - 115	7	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: 108895**

QC Batch: 31937      Date Analyzed: 2006-11-15      Analyzed By: SM  
Prep Batch: 27812      QC Preparation: 2006-11-15      Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	89.6	mg/Kg	1	100	<0.500	90	70 - 130

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

Report Date: November 15, 2006  
Laguna Deep #9

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Lea Co.NM

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	93.1	mg/Kg	1	100	<0.500	93	70 - 130	4	20

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

#### Standard (ICV-1)

QC Batch: 31937

Date Analyzed: 2006-11-15

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	107	107	85 - 115	2006-11-15

#### Standard (CCV-1)

QC Batch: 31937

Date Analyzed: 2006-11-15

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	92.7	93	85 - 115	2006-11-15

Report Date: November 15, 2006  
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Lea Co. NM

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LAB Order ID # 4111514

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Company Name: New Mexico Environmental Serv. Phone #: 505-441-0403  
Address: (Street, City, Zip) P.O. Box 310 Hobbs N.M. 88241 Fax #: 505-392-3085  
Contact Person: Chris Busby E-mail: chris@nmes.com  
Invoice to: Conarex Energy  
Project #: Logan Deep #9 Project Name: Lea Co. NM

## ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		DATE	TIME	Turn Around Time if different from standard	Hold
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE				
108920	Sample #1 N.E. Corner	1	400	X								X		11/14	8:00am		
91	#2 N.W. Corner	1		X								X			8:30		
92	#3 Center	1		X								X			9:00		
93	#4 S.W. corner	1		X								X			9:30		
94	#5 S.E. Corner	1		X								X			10:00		
95	#6 Background	1		X								X			10:30		

MTBE 8021B / 802 / 8260B / 824	BTX 8021B / 802 / 8260B / 824	TPH 418.1 / TX1005 / TX1005 EXH(C35)	TPH 8016 GRO / DRO / TVHC	PAH 8270C / 82E	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8280B / 824	GC/MS Semi. Vol. 8270C / 825	PCB's 8082 / 805	Pesticides 8081A / 808	BOD, TSS, pH	Moisture Content	
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Relinquished by: Chris Busby Date: 11/15/06 Time: 7:00am  
Received by: Kevin D. Paul Date: 11/15/06 Time: 7:00am  
Relinquished by: Kevin D. Paul Date: 11/15/06 Time: 10:00am  
Received by: Kevin D. Paul Date: 11/15/06 Time: 10:00am  
Relinquished by: Kevin D. Paul Date: 11/15/06 Time: 10:00am  
Received at Laboratory by: Kevin D. Paul Date: 11-15-06 Time: 10:00am

LAB USE ONLY  
Intact: Q.N.  
Headspace: Q.N.  
Temp: PC  
Log in Return: SA

REMARKS:  
☐ Dry Weight Basis Required  
☐ TRRP Report Required  
☐ Check if Special Reporting Limits Are Needed

Submission of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.