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 ☐

MAR 18 2008
OCD-ARTESIA

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank X

Operator: Reef Exploration, Inc. Telephone (972) 437-6792 & (228) 216-7981 e-mail address: lavd@reefoge.com & larslarson@bellsouth.net

Address: 1901 N. Central Expressway, Suite #300, Richardson, Texas 75080

Facility or well name: State 2, #5 API # 30-015-35677 U/L or Qtr/Qtr SE/SW Section 2 T 23 South; R 31 East

County: Eddy Latitude 32.328007 Longitude -103.749893 NAD 1927 ☐ 1983 ☐

Surface Owner Federal ☐ State X Private ☐ Indian ☐

Pit	Below-grade tank	
Type: Drilling X Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined X Unlined ☐ Liner type Synthetic X Thickness 12 mil Clay ☐ Pit Volume 2,000 bbl (estimated)	Volume ____bbl Type of fluid. _____ Construction material. _____ Double-walled, with leak detection? Yes ☐ 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 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (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 No	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	0 Points

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 your are burying in place) onsite X 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 X 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. The attached schematic diagram illustrates the general orientation of drill pit relative to each drill pad, and where pit solids will be deep trenched buried. A Post-Closure Form C-144 will provide documentation regarding the remedial actions taken and the confirmation soil analytical results

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 X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: March 14, 2008

Printed Name/Title Lars Larson, Geologist 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

Approval:

Signature Signed By Mike Bratcher Date: MAR 24 2008

ENTERED

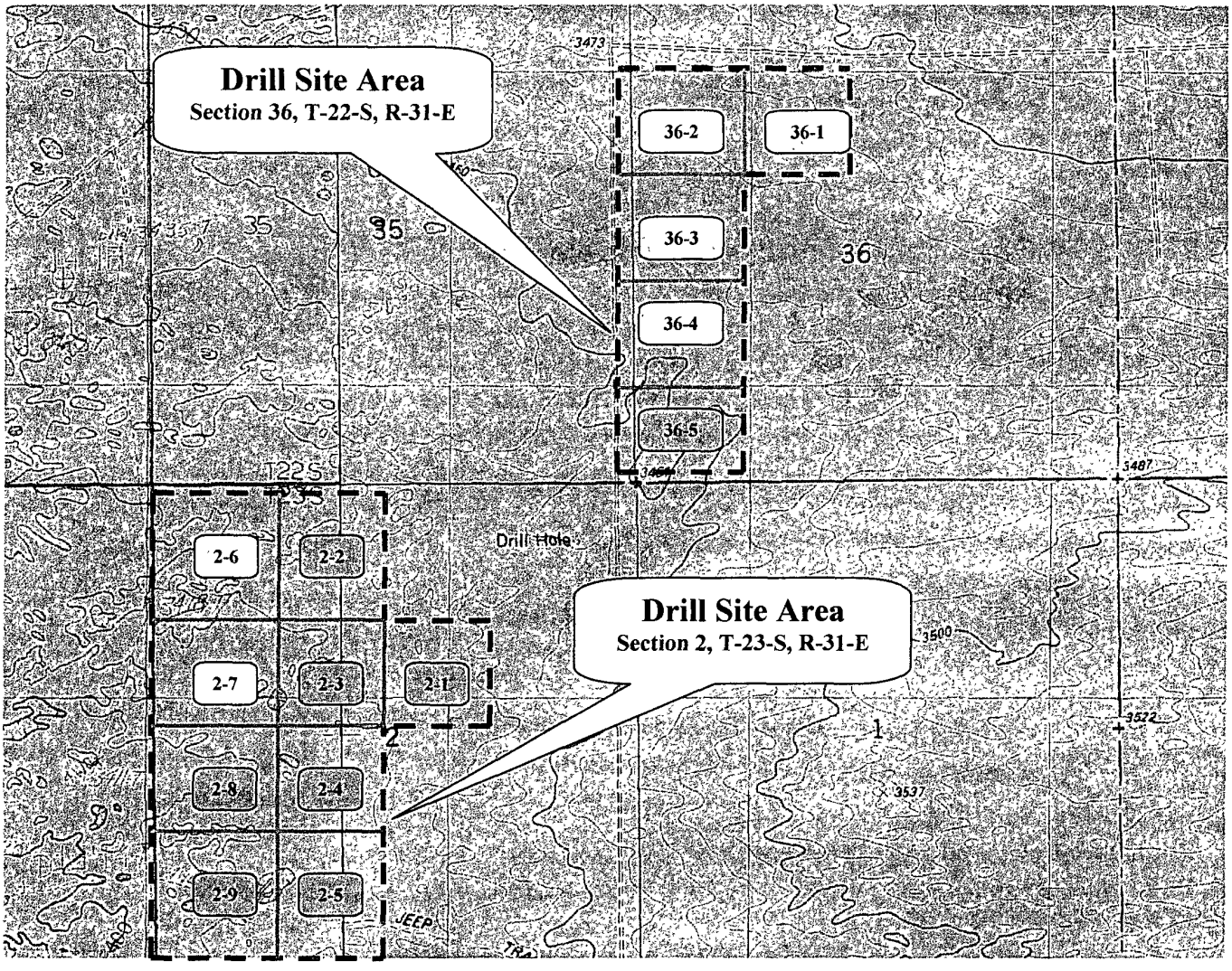
NOTIFY OCD 24 HOURS PRIOR to beginning closure and 24 HOURS PRIOR to obtaining samples. Samples are to be obtained from pit area and analyses provided to OCD prior to backfilling pit.

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

FINAL CLOSURE REPORT

Accepted for record
NMOCD

SEP 23 2008



2-2 - Drilled locations with pits closed and sites restored under approved Form C-144's.

2-6 - Permitted locations, but "not" drilled. Pits closed and sites restored under approved Form C-103's.

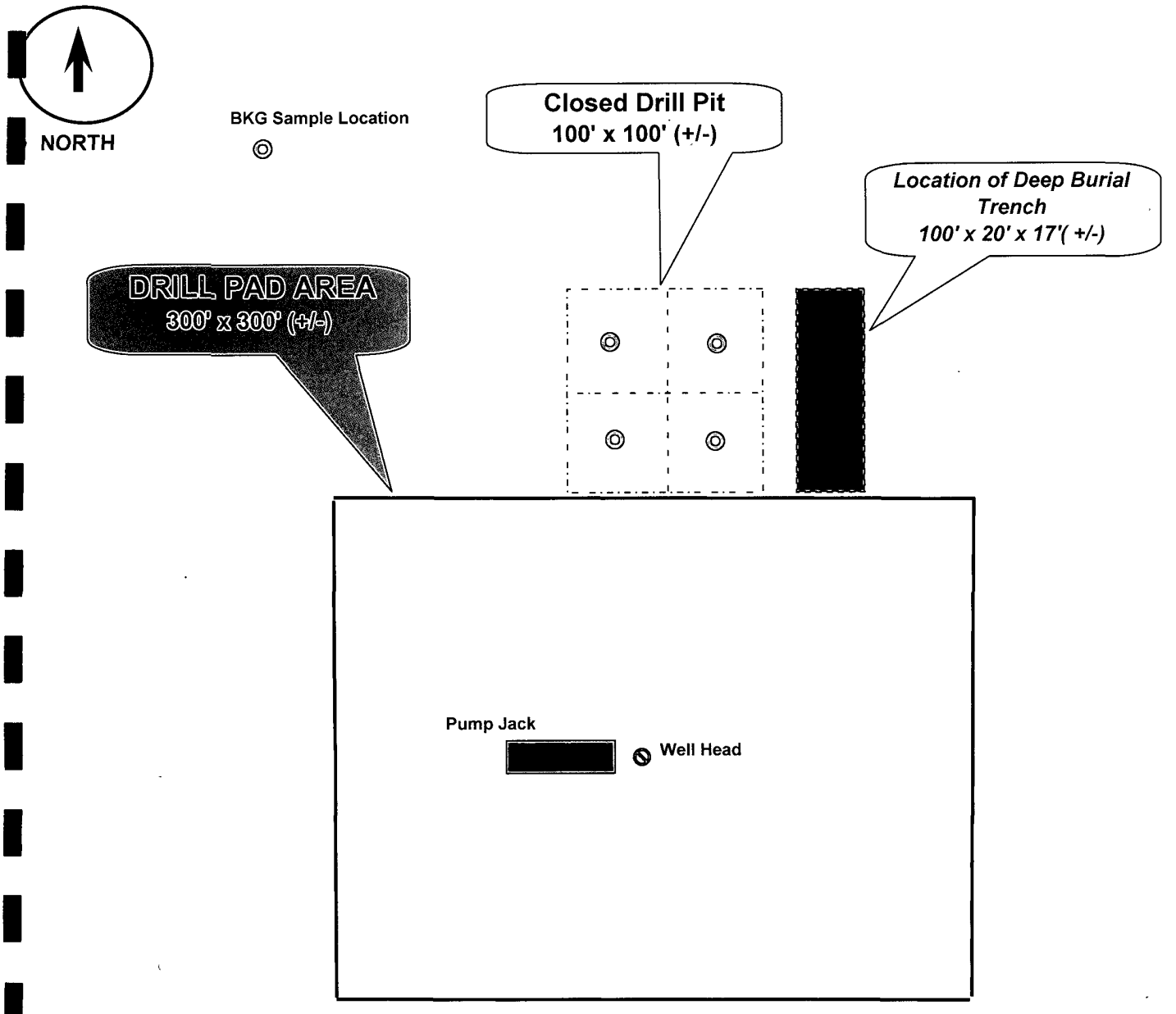
Reef Exploration, L.P.

Drill Site Location Map

U.S.G.S. 7.5- Topographic Quadrangle Map

Bootleg Ridge, New Mexico

CAC Project # 15340.07



Note: Drawing is not to scale.

◎ Pit Bottom Samples

REEF EXPLORATION, L.P.

Schematic Drawing of the State #2-5 Location
Section 2 T-23-S, R-31-E
Eddy County, New Mexico

State of New Mexico

Energy, Minerals and Natural Resources – Oil Conservation Division

Drilling Pit Closure Narratives for the Sand Dunes, New Mexico Project
"Addendum to Approved Form C-144 – Reef Exploration, L.P."
Eddy County, New Mexico

Drill Site Location - State #2-5

- Form C-144 Drill Pit Closure Approval - March 24, 2008. Subsequent activities included the dewatering of these pits and the appropriate management and disposal of the liquid waste.
- In mid June 2008, after NM One-Call had been alerted of the proposed drill pit closure operations, New Mexico Environmental Services (NMES), on behalf of Reef Exploration, LP (Reef) began mobilizing equipment and materials to this site to begin drill pit closure.
- Shortly thereafter, NMES began excavation of the deep burial trench at this location and the stabilization of the pit solid material. The attached site schematic diagram illustrates the location of the deep burial trench and pit in relation to the overall well pad.
- The deep burial trench was excavated to dimensions that were approximately 100-feet long, by 20 to 25-feet wide, by roughly 15-20-feet deep.
- Once the drill pit solids had been appropriately stabilized and the burial trench was lined with a 20-mil HDPD liner, the pit solids materials were transferred to the deep burial trench. This process continued until all of the pit solids and few feet of the native soils underlying the drill pit had been excavated.
- Once the drill pit had been appropriately cleaned out, confirmation samples were collected from the pit bottom to document the total chloride concentrations. Field testing of the native material underlying the drill pit were as follows:

STATE #2-5 – Field Chloride Test Results (concentrations expressed in ppm).

SE1/4	8'	600cl		
NE1/4	8'	-50cl		
NW1/4	8'	2500cl	12'	150cl
SW1/4	8'	2200cl	12'	350cl

- Mike Bratcher of the NM-OCD was contacted on 7/9/08 @ 1:30 pm. Mr. Bratcher advised NMES to place a 20 mil. HPDE liner over the entire western half of the drill pit bottom, then cover and backfill. The official laboratory analytical report sheets for soil samples obtained from the drill pit bottom are included herewith.
- The liner in the deep burial trench was then welded (sewn) and sealed. Approximately 4-feet backfill material was then placed on top of the trench. The whole area was shaped and leveled for adequate drainage. In late August 2008, this burial trench and drill pit area was tilled and seeded to re-establish natural grass and vegetative cover.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

NELAP Certifications

Lubbock T104704219-08-TX El Paso T104704221-08-TX Midland T104704392-08-TX

Analytical and Quality Control Report

Dusty Wilson
New Mexico Environmental
P.O. Box 310
Hobbs, NM, 88241

Report Date: July 17, 2008

Work Order: 8071033

Project Location: SE/SW T23S, R31E Sec. 2
Project Name: Reef, State 2 #005
Project Number: API 30-015-35677

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
166348	#001 SE 1/4 8'	soil	2008-07-09	09:05	2008-07-10
166349	#002 NE 1/4 8'	soil	2008-07-09	09:15	2008-07-10
166350	#003 NW 1/4 8'	soil	2008-07-09	09:25	2008-07-10
166351	#004 SW 1/4 8'	soil	2008-07-09	09:40	2008-07-10
166352	#005 NW 1/4 12'	soil	2008-07-09	10:00	2008-07-10
166353	#006 SW 1/4 12'	soil	2008-07-09	10:20	2008-07-10
166354	#007 BG 50' S of SE	soil	2008-07-09	10:30	2008-07-10

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.

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 Reef, State 2 #005 were received by TraceAnalysis, Inc. on 2008-07-10 and assigned to work order 8071033. Samples for work order 8071033 were received intact at a temperature of 3.4 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 8071033 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: 166348 - #001 SE 1/4 8'

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2410**	mg/Kg	100	3.25

Sample: 166349 - #002 NE 1/4 8'

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<325	mg/Kg	100	3.25

Sample: 166350 - #003 NW 1/4 8'

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4620**	mg/Kg	100	3.25

Sample: 166351 - #004 SW 1/4 8'

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3570**	mg/Kg	100	3.25

Sample: 166352 - #005 NW 1/4 12'

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<325	mg/Kg	100	3.25

Sample: 166353 - #006 SW 1/4 12'

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**811**	mg/Kg	100	3.25

Sample: 166354 - #007 BG 50' S of SE

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	Sample Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<32.5	mg/Kg	10	3.25

Method Blank (1) QC Batch: 50439

QC Batch:	50439	Date Analyzed:	2008-07-16	Analyzed By:	SS
Prep Batch:	43292	QC Preparation:	2008-07-16	Prepared By:	SS

Parameter	Flag	MDL Result	Units	RL
Chloride		<1.80	mg/Kg	3.25

Laboratory Control Spike (LCS-1)

QC Batch: 50439 | Date Analyzed: 2008-07-16 | Analyzed By: SS
Prep Batch: 43292 | QC Preparation: 2008-07-16 | Prepared By: SS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	102	mg/Kg	1	100	<1.80	102	96.8 - 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	<1.80	101	96.8 - 103	1	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: 167025

QC Batch: 50439 | Date Analyzed: 2008-07-16 | Analyzed By: SS
Prep Batch: 43292 | QC Preparation: 2008-07-16 | Prepared By: SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	600	mg/Kg	10	500	<18.0	120	76.4 - 123

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	602	mg/Kg	10	500	<18.0	120	76.4 - 123	0	20

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

Standard (ICV-1)

QC Batch: 50439 | Date Analyzed: 2008-07-16 | Analyzed By: SS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2008-07-16

Standard (CCV-1)

QC Batch: 50439 | Date Analyzed: 2008-07-16 | Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2008-07-16

LAB order ID # 8071033 Page ___ of ___

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, 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) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd West Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: New Mexico Environmental Services
Phone #: (575) 342-8584
Address: (Street, City, Zip) PO Box 310 Hobbs NM 88240
Fax #: (575) 342-3085
Contact Person: Dusty Wilson (575) 631-8154
E-mail: dustytrails73@hotmail.com
Invoice to: (If different from above) Same
Project #: APF 30-015-35677
Project Name: Reef, State 2 #005
Project Location (including state): SE/SW T23S R31E Sec 2
Sampler Signature: Kevin Reed

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
166348	S #001 SE 1/4 8'	1	4oz		X							X		7/1/08	9:05
349	S #002 NE 1/4 8'	1	4oz		X							X		7/1/08	9:15
350	S #003 NW 1/4 8'	1	4oz		X							X		7/1/08	9:25
351	S #004 SW 1/4 8'	1	4oz		X							X		7/1/08	9:40
352	S #005 NW 1/4 12'	1	4oz		X							X		7/1/08	10:00
353	S #006 SW 1/4 12	1	4oz		X							X		7/1/08	10:20
354	S #007 BG 50's of SE	1	4oz		X							X		7/1/08	10:30

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	CL	Turn Around Time if different from standard	Hold
																	X		
																	X		
																	X		
																	X		
																	X		
																	X		
																	X		

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Kevin Reed	NMES	7/1/08	1:00					
				Brenda Ward	Trac Lubbock	7/1/08	1:00	3.4°

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS:

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

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

Carrier # Carmen

COVINGTON AND ASSOCIATES CORP.
1636 Popps Ferry Road, Suite M-5
Biloxi, MS 39532

PHONE 228-396-0486
FAX 228-396-0487
E-MAIL: larslarson@bellsouth.net

September 16, 2008

Mr. Mike Bratcher, Staff Geologist
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division – District 2
1301 West Grand Avenue
Artesia, New Mexico 88210

SEP 16 2008
OCD-ARTESIA

Re: Final Pit Closure Reports
Reef Exploration, L.P. – Sand Dunes Drilling Project
Section 2, T-23-S, R-31-E and Section 36, T-22-S, R-31-E
Eddy County, New Mexico
CAC Project No. 15340.07

Dear Mike;

Enclosed please find closure information for the eight (8) drill pits that Reef Exploration, LP (Reef) has closed by the deep trench burial method in southeast Eddy County, New Mexico. The attached topographic map of the area illustrates the locations of these drill pits. Each of the drill pit closure packets in this submittal includes the following information:

1. **Form C-144's** – photocopies of the approved Form C-114's for each drilling location.
2. **Site Schematic Drawings** – these schematic drawings illustrates the locations of each drill pit and deep burial trench relative to the drill pad, as well as the locations of the confirmatory soil samples.
3. **Pit Closure Narrative** – a brief explanation of the remedial actions that took place in association with each location drill pit, the field analytical testing that was conducted, and backfilling and site restoration completed.
4. **Laboratory Analytical Data** –the laboratory analytical report sheets for the confirmation samples collected within each drill pit are also included.

We appreciate your assistance throughout this drill pit closure process. Once you have reviewed this information, please contact me if you have any questions.

Very truly yours,
Covington and Associates Corporation

Lars Larson, P.G.
Senior Geologist

Cc; Mr. Walt Dunagin Reef Exploration, L.P.
Mr. Jay Degan Reef Exploration, L.P.

DELIVERY:
1636 Popps Ferry Road, Suite M-5
Biloxi, MS 39532