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

MAR 18 2008
OCD-ARTESIA

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 X

Operator Reef Exploration, Inc. Telephone: (972) 437-6792 & (228) 216-7981 e-mail address jayd@reefoge.com & larslarson@bellsouth.net
Address 1901 N. Central Expressway, Suite #300, Richardson, Texas 75080
Facility or well name: State 2, #1 API #. 30-015-35678 U/L or Qtr/Qtr SW/NE Section 2 T 23 South; R 31 East
County: Eddy Latitude 32.335117 Longitude -103.745804 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, P.G. 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:

Signature Signed By Mike Bratcher Date: MAR 24 2008

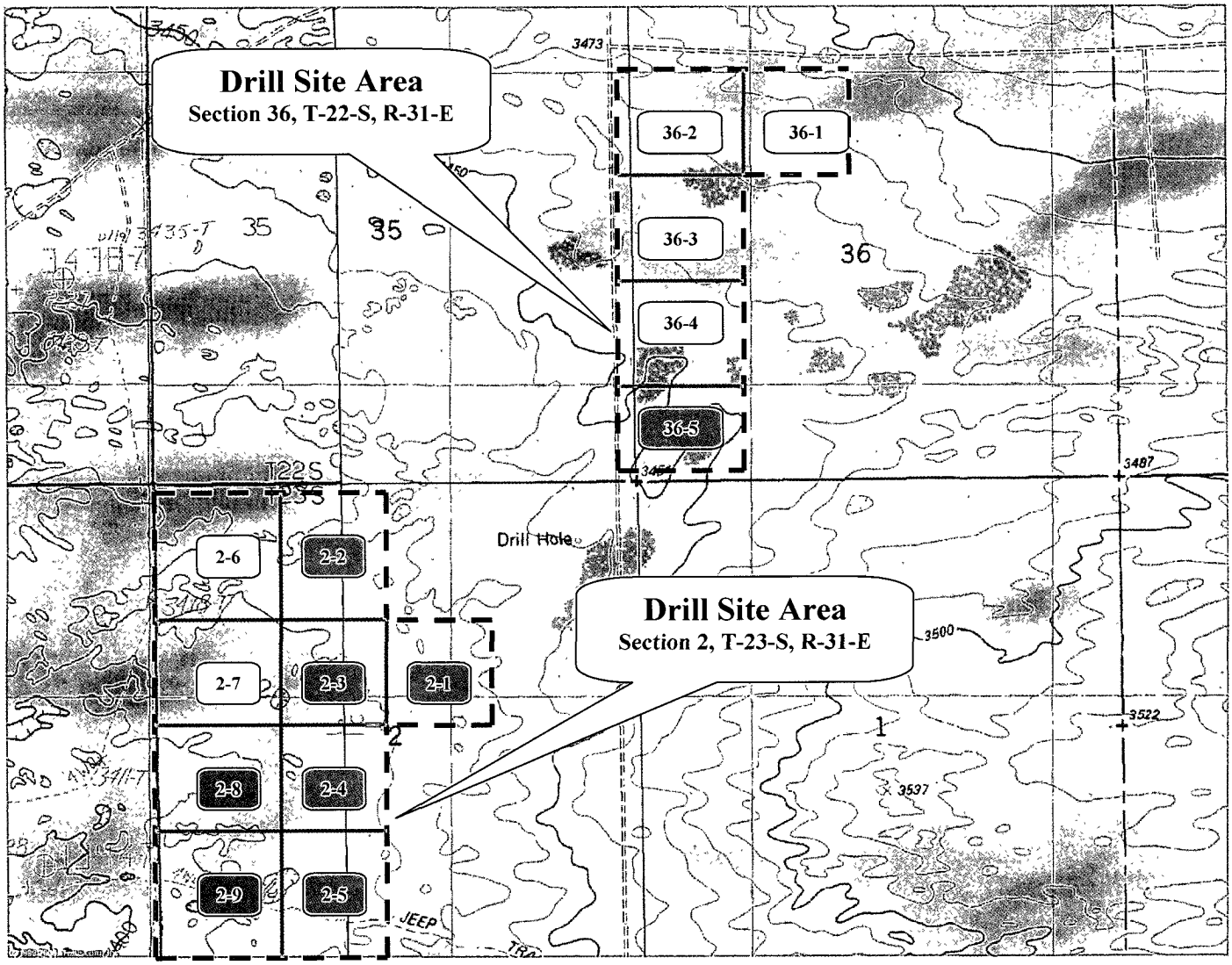
NOTIFY OCD 24 HOURS PRIOR to beginning closure and 24 HOURS PRIOR to obtaining samples. Samples are to be obtained from pit area and analyses provided to OCD prior to backfilling pit.

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

ENTERED



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.

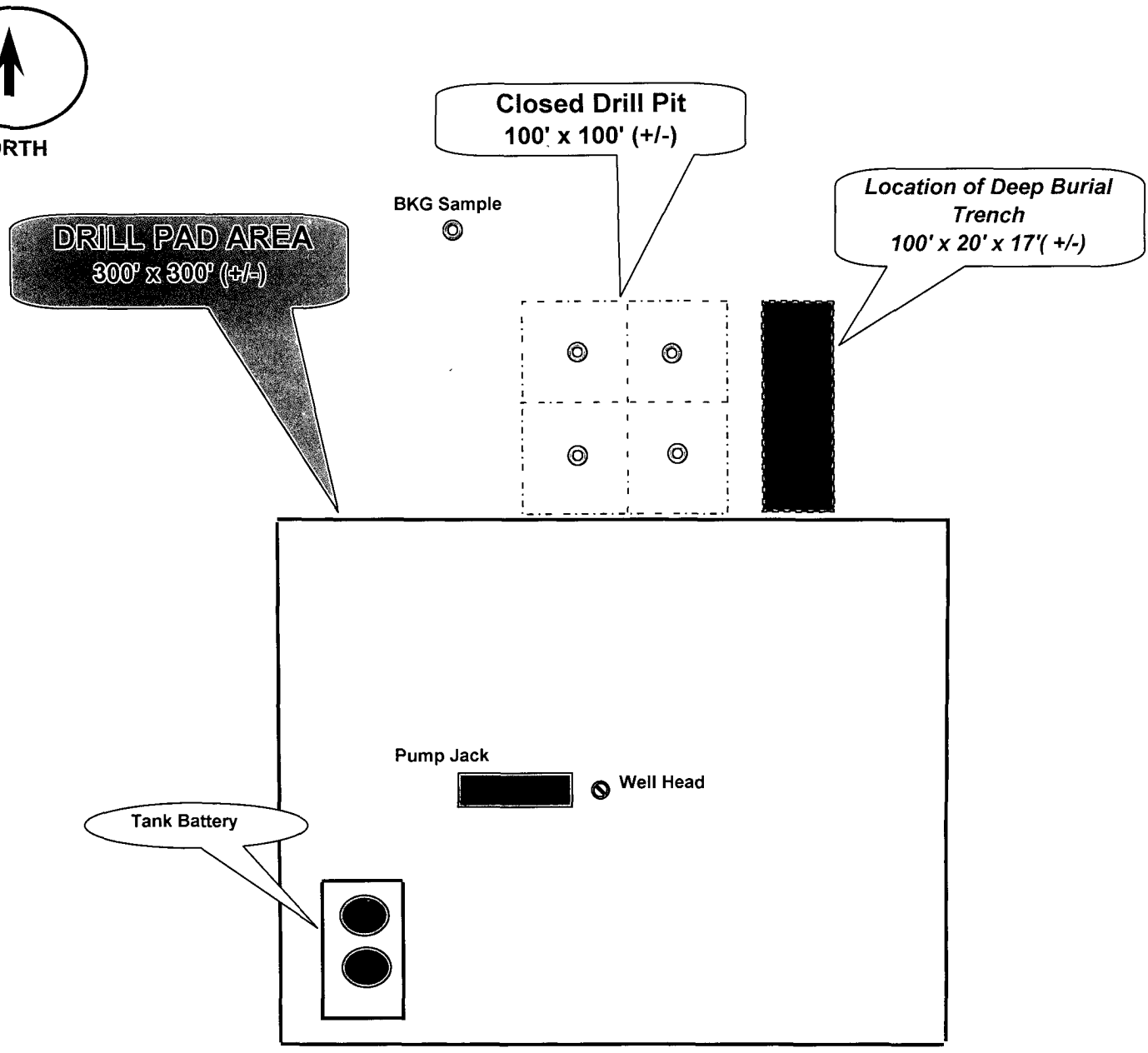
Reef Exploration, L.P.

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 Sample Locations.

REEF EXPLORATION, L.P.

Schematic Drawing of the State #2-1 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 #2-1

- 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 April 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.
- In late April 2008, 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 #2-1 – Field Chloride Test Results (concentrations expressed in ppm).

SE1/4	8'	3000cl	12'	-50cl
NE1/4	8'	2100cl	12'	-50cl
NW1/4	8'	4500cl	12'	-50cl
SW1/4	8'	3400cl	12'	-50cl
BG	6"	-50cl		

- Mike Bratcher of the NM-OCD was contacted on 5/7/08 @ 2:30 pm. Mr. Bratcher asked that NMES remove an additional 2' of material across the pit bottom and place into deep burial trench and backfill the pit. 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

Analytical and Quality Control Report

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

Report Date: May 13, 2008

Work Order: 8050820

Project Location: Sec. 2 T213S R31E SW/NE, Eddy Co., NM
Project Name: Reef State 2 Well #001
Project Number: API 30-015-35678

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
159243	Sample #001 SE 1/4 8'	soil	2008-05-07	09:00	2008-05-08
159244	Sample #002 NE 1/4 8'	soil	2008-05-07	09:08	2008-05-08
159245	Sample #003 NW 1/4 8'	soil	2008-05-07	09:15	2008-05-08
159246	Sample #004 SW 1/4 8'	soil	2008-05-07	09:24	2008-05-08
159247	Sample #005 BG	soil	2008-05-07	09:36	2008-05-08
159248	Sample #006 SE 1/4 12'	soil	2008-05-07	10:15	2008-05-08
159249	Sample #007 NE 1/4 12'	soil	2008-05-07	10:36	2008-05-08
159250	Sample #008 NW 1/4 12'	soil	2008-05-07	10:50	2008-05-08
159251	Sample #009 SW 1/4 12'	soil	2008-05-07	11:15	2008-05-08

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.

Analytical Report

Sample: 159243 - Sample #001 SE 1/4 8'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		3170		mg/Kg	50	3.25

Sample: 159244 - Sample #002 NE 1/4 8'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		1700		mg/Kg	50	3.25

Sample: 159245 - Sample #003 NW 1/4 8'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		2010		mg/Kg	50	3.25

Sample: 159246 - Sample #004 SW 1/4 8'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		2470		mg/Kg	50	3.25

Sample: 159247 - Sample #005 BG

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		121		mg/Kg	10	3.25

Sample: 159248 - Sample #006 SE 1/4 12'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		115		mg/Kg	10	3.25

Sample: 159249 - Sample #007 NE 1/4 12'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		113		mg/Kg	10	3.25

Sample: 159250 - Sample #008 NW 1/4 12'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		117		mg/Kg	10	3.25

Sample: 159251 - Sample #009 SW 1/4 12'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	48313	Date Analyzed:	2008-05-13	Analyzed By:	RD
Prep Batch:	41549	Sample Preparation:	2008-05-12	Prepared By:	RD

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		117		mg/Kg	10	3.25

Method Blank (1) QC Batch: 48313

QC Batch: 48313 | Date Analyzed: 2008-05-13 | Analyzed By: RD
Prep Batch: 41549 | QC Preparation: 2008-05-12 | Prepared By: RD

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

Laboratory Control Spike (LCS-1)

QC Batch: 48313 | Date Analyzed: 2008-05-13 | Analyzed By: RD
Prep Batch: 41549 | QC Preparation: 2008-05-12 | Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<1.80	101	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	100	mg/Kg	1	100	<1.80	100	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: 159252

QC Batch: 48313 | Date Analyzed: 2008-05-13 | Analyzed By: RD
Prep Batch: 41549 | QC Preparation: 2008-05-12 | Prepared By: RD

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	[1]	2600	mg/Kg	10	500	3777.78	-234	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	[2]	1850	mg/Kg	10	500	3777.78	-384	76.4 - 123	34	20

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

Standard (ICV-1)

QC Batch: 48313 | Date Analyzed: 2008-05-13 | Analyzed By: RD

[1] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[2] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

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	2008-05-13

Standard (CCV-1)

QC Batch: 48313 Date Analyzed: 2008-05-13 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2008-05-13

LAB Order ID # 805820 Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 8, 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

6015 Harris Pkwy., Suite 110, Ft. Worth, Texas 76132, Tel (817) 201-5260

Company Name: New Mexico Environmental Services Phone #: (575) 392-9575

Address: (Street, City, Zip) P.O. Box 310 Hobbs NM 88242 Fax #: (575) 392-3085

Contact Person: Dusty Wilson (575) 631-8154 E-mail: dustytrails73@hotmail.com

Invoice to: (If different from above) Same

Project #: 30-015-35678 Project Name: Reef State 2 Well #001

Project Location (including state): Sec 2 T23S R31E SW/NE Eddy Co NM Sampler Signature: Dusty Wilson

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
39243	Sample #001 SE 1/4 8'	1	4oz		X							X		5/7/08	9:00 am
244	Sample #002 NE 1/4 8'				X							X			9:01 am
245	Sample #003 NW 1/4 8'				X							X			9:15 am
246	Sample #004 SW 1/4 8'				X							X			9:24 am
247	Sample #005 BG				X							X			9:36 am
248	Sample #006 SE 1/4 12'				X							X			10:15 am
249	Sample #007 NE 1/4 12'				X							X			10:36 am
250	Sample #008 NW 1/4 12'				X							X			10:50 am
251	Sample #009 SW 1/4 12'				X							X			11:15 am

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 / 200.7	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				48 hrs	Turn Around Time if different from Standard	Hold
																X				X		
																X				X		
																X				X		
																X				X		
																X				X		
																X				X		
																X				X		
																X				X		
																X				X		

Relinquished by: Date: 5/9/08 Time: 9:30 AM Received by: Date: 5-8-08 Time: 9:50 am.

Relinquished by: Date: Time: Received by: Date: Time:

Relinquished by: Date: 5-8-08 Time: 12:10 Received at Laboratory by: Brenda Ward Date: 5/8/08 Time: 12:10 pm

LAB USE ONLY

Intact (Y) N

Headspace Y / (N)

Temp 4

Log-In-Review

REMARKS:

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

Carrier # Caprock

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

ORIGINAL COPY

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.