

DATE IN 9/17/09	SUSPENSE 10/17/09	ENGINEER WVS	LOGGED IN 9/22	TYPE SWP-1140-A	APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



PWVTJ092895709

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

*Waiting on Letter From DOE
 Canceled
 11/2/09*

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name _____	Signature _____	Title _____	Date _____
e-mail Address _____			

DATE IN <u>10-13-09</u>	SUSPENSE <u>10/29/09</u>	ENGINEER <u>Jones</u>	LOGGED IN <u>10-13-09</u>	TYPE <u>SWD</u>	APP NO. <u>PTG-W 0928656174</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



Reef

ADMINISTRATIVE APPLICATION CHECKLIST

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[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
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- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
 [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
 [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
 [B] ☒ Offset Operators, Leaseholders or Surface Owner
 [C] ☒ Application is One Which Requires Published Legal Notice
 [D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
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Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Jose L. Velez
 Print or Type Name

[Signature]
 Signature

Regulatory Analyst
 Title

10/2/09
 Date

Jose.V@reefogc.com
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance ☒ Disposal Storage
Application qualifies for administrative approval? Yes No
- II. OPERATOR: REEF EXPLORATION, L.P.
ADDRESS: 1901 N. CENTRAL EXPY. SUITE 300. RICHARDSON, TEXAS 75080
CONTACT PARTY: RON M. SENTZ PHONE: 972-437-6792
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes ☒ No
If yes, give the Division order number authorizing the project.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: JOSE LIONEL VEELZ TITLE: REGULATORY AFFAIRS

SIGNATURE: _____

DATE: 9/16/09

E-MAIL ADDRESS: JOSEV@REEFOGC.COM

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.

Please show the date and circumstances of the earlier submittal: original approved permit expired

8/26/2009, Administrative order SWD-1140

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Form C-108
Application for Authorization to Inject

Reef Exploration, L.P., Operator
State "2" #8
Section 2, T 23S, R 31E
Eddy County, New Mexico

- I) The purpose of the well is as a disposal well for area Delaware produced water
 - II) Operator: Reef Exploration, L.P.
1901 North Central Expressway, Suite 300
Richardson, Texas 75080
Contact: Ronald M. Sentz 972-437-6792
 - III) Well Data: See Attachments A,B, and C
 - IV) This is not an expansion of an existing project.
 - V) Map of wells and leases within 2 miles and ½ mile radius: (Attachment D).
 - VI) Data on wells within ½ mile area of review: See attachments E, E1, E2 and E3
 - VII)
 - 1. Proposed average daily injection volume: 4,000 BWPD
Proposed maximum daily injection volume: 10,000 BWPD
 - 2. This will be a closed loop system.
 - 3. Proposed average daily injection pressure: 1,000#
Proposed maximum daily injection pressure: 1,140#
- Halliburton e-mail confirming the cement integrity of the State "2" #3 (Attachment F)
- 4. The sources of injection water will be produced water from area Delaware wells that have been and that are scheduled to be drilled on the Barclay State, Barclay Federal and Medano State leases. (See list of source wells / Attachment G). A water analysis from nearby Delaware production (See Attachments H1, H2 and H3).
 - 5. Chlorides in all the source wells are expected to be similar to the attached water analysis (see Attachments H1, H2 and H3).

VIII) The proposed injection zone is the Bell Canyon and Cherry Canyon interval from 4600' to 5880'. The Bell Canyon and Cherry Canyon, which are part of the Delaware, are sandstones (containing siltstone and shale) of Permian age approximately 3800' thick found at a depth of 4450' to 8250'. Possible fresh drinking water zones overlie the proposed injection formation at depths to approximately 700'. No drinking water sources are found below the proposed injection zone.

IX) Projected Perforations:

- a. Bench 1) 5760' to 5770 and 5860' to 5880
- b. Bench 2) 5550' to 5580'
- c. Bench 3) 5150' to 5170'
- d. Bench 4) 4600' to 4620'

The proposed intervals will be acidized with 2,500 gallons of 15% acid and may be frac'd with up to 100,000# of sand per bench.

X) All well logs and test data available have been previously submitted to the NMOCD. Once the well is recompleted a copy of any additional logs run will be forwarded to the NMOCD.

XI) No fresh water wells were found within 1 mile of the proposed injection well.

XII) The applicant has examined geological and engineering data and finds there is no evidence of open faults or other hydrologic connection between the proposed injection zone and any underground source of drinking water.

XIII) Proof of Notice

- a. A copy of the C-108 application has been sent, with UPS Tracking, to the surface owner and offset operators of leases within ½ mile. (See list attached – Attachment I)
- b. A copy of the legal advertisement is attached with proof of publication in an Eddy County newspaper (Attachment J).

XIV) Certification: See signature on form C-108.

INJECTION WELL DATA SHEET

OPERATOR: REEF EXPLORATION, L.P.WELL NAME & NUMBER: STATE "2" #8WELL LOCATION: 1980' FSL & 660' FWL L 2 23S 31E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATA
Surface CasingHole Size: 17 1/4" Casing Size 13 3/8"Cemented with: 555 sx. or ft³Top of Cement: SURFACEMethod Determined: OBSERVATIONIntermediate CasingHole Size: 11" Casing Size 8 5/8"Cemented with: 1040 sx. or ft³Top of Cement: SURFACEMethod Determined: OBSERVATIONProduction CasingHole Size: 7 7/8" Casing Size: 5 1/2"Cemented with: 2 STAGE, 1200 sx. or ft³Top of Cement: 2320Method Determined: CBLTotal Depth: 8559'Injection Interval 5880
4600 feet To 5900' (PERFORATING)

(Perforated or Open Hole; indicate which)

**Reef Exploration, L.P.
State 2 #8
660' FSL & 1980' FWL
Section 2, T 23S, R 31E
Eddy County, New Mexico**

Attachment A

III. Well Data

Section A:

1. Lease Name: State 2 #8 (Barclay State)
Location: 1980' FSL & 660' FWL, Section 2, T 23S, R 31E, Eddy County, New Mexico

2. Casing and Cement:

Existing

<u>Casing Size</u>	<u>Setting Depth</u>	<u>Sks Cement</u>	<u>Hole Size</u>	<u>TOC</u>
13 3/8"	701'	555	17 1/4"	Circ. to surface
8 5/8"	4380'	1000	11"	Circ. To surface
5 1/2"	8510'	1200	7 7/8"	2320' by CBL

Proposed

<u>Casing Size</u>	<u>Setting Depth</u>	<u>Sks Cement</u>	<u>Hole Size</u>	<u>TOC</u>
13 3/8"	701'	555	17 1/4"	Circ. to surface
8 5/8"	4380'	1000	11"	Circ. To surface
5 1/2"	8510'	1200	7 7/8"	2320' by CBL

NOTE:

- It is proposed to plug and abandon existing Lower Delaware perforations from 7234' to 8183' with a Cast Iron Bridge Plug set at 6080' with 35' of cement on top of the CIBP.

3. Tubing: 3 1/2", 9.2#, J-55, Ultima Plastic Coated, set at 4500'
4. Packer: 2 7/8" x 5 1/2" @ 4506

**Reef Exploration, L.P.
State 2 #8
660' FSL & 1980' FWL
Section 2, T 23S, R 31E
Eddy County, New Mexico**

Attachment A

Section B:

- | | |
|-----------------------------------------|-----------------------------------------------|
| 1. Injection Formation: | Delaware Sand |
| Field or Pool Name: | Livingston Ridge (Delaware) |
| 2. Injection Interval: | Delaware Interval, 4600' to 5880', perforated |
| 3. Original purpose of well: | Drilled to test Lower Delaware Formation |
| 4. Other perforated intervals: | None |
| 5. Next Higher oil and gas zone: | None |
| Next lower oil and gas zone: | Bone Springs |

See current and proposed well bore schematics (Attachments B & C)

REEF EXPLORATION, LP.

State "2" #8

1980' FSL & 660' FWL

Sec 2, T23S, R31E

Livingston Ridge; Delaware, SE (96149)

Eddy County, New Mexico

Permanent Wellbore Data

Spud Date:	11/17/07	
Compl Date:	1/12/08	
KB Elev., Ft :	3429'	
GL Elev., Ft :	3411'	Set 40' of 20" conductor
KB	18'	
DF	3428'	17-1/4 " hole

Surface Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
13 3/8"	16	48.0	H-40	ST&C	701
Cement: 555 Sx. TOC: Surface (146 Sks)					
Date: 11/19/2007					

11" hole

8 5/8", 32#, J-55, ST&C

Top of Cement 5 1/2" 2320'

Intermediate Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
8 5/8"	102	32.0	J-55	LT&C	4380
Cement: 1,040 Sx. TOC: Surface Circ 157 sks					
Date: 11/24/2007					

Tubing :

3 1/2", FJ, set @ 4500'

Baker Packer @ 4506'

7 7/8" Hole

Bridge Plug @ 6080' with 35' of cement on top

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
5 1/2"	192	17.0	I-80	LT&C	8443
5 1/2"	3	17.0	I-80	LT&C	66.57
Total depth					8509.57

The 3 joints are flag joints (short for logging)

ID - 4.892" , drift - 4.767" , IYP - 7740# , JS - 338,000#

Capacity - .0232 bbls/ft

Cement: 500 Sx. TOC: DV tool

Cement: 700 Sx. TOC: 2320'

TD: 8510' PBTD: 8461' Date: 12/2/2007

Set Weight, Lb: 120,000#

Tank Battery:

Proposed

Data On This Completion

API #: 30-015-35749

Property Code:

OGRID #:

Drilling AFE #: 07DC018

Date: Activity

Reached TD on 11/29/07

11/29/07: Halliburton Services ran Spectral
Density, Dual Spaced Neutron Log
Dual Laterolog, Micro-Guard,
log from TD to 4576'

12/21/07: Halliburton ran an Radial Cement
Bond, CCL, GR Log
From: 8452' to 2570'

01/04/08 Halliburton Frac'd Lower
Brushy Canyon with 42,000 gals
SilverStem Basic (11)
100,000# 16/30 sand, w/Expdite
Avg Inj Rate 27.2 BPM,
Avg Pressure 551#, ISIP 1186#,
CIP 5 Min 420#, CIP 10 Min 420#,
CIP 15 Min 420#

01/04/08 Halliburton Frac'd Middle Brushy
Canyon with 21,375 gal Silverstem,
W/ 42,000# 16/30 sand w/Expdite,
Avg rate 15.5 BPM, avg press 1347#

01/04/08 Halliburton Frac'd Brushy Canyon
with 25,375 gals, SilverStim
49,000# 16/30 sand with Expdite,
Avg Inj Rate 14.7 BPM, Avg Press 614#

01/04/08 Halliburton Frac'd Brushy Canyon
with 14,250 gals, SilverStim
28,000 16/30 sand with Expdite,
Avg Inj Rate 9.9 BPM, Avg Press 825#

Proposed Injection Perforation Areas
Perf Delaware: 5760' to 5770' & 5860' to 5880',
5550' to 5580',
5150' to 5170'
4600' to 4620'

DV TOOL (6421')

Perf: Brushy Canyon (01/04/08)
7234' to 7242', 1 SPF

Perf: Brushy Canyon (01/04/08)
7381' to 7390, 7400' to 7405', 1 SPF

Perf: Middle Brushy Canyon (01/04/08)
7778' to 7784, 7792' to 7798', 1 SPF

Perf: Lower Brushy Canyon (12/27/07)
8004' to 8006', 8011' to 8018',
8023' to 8029', 8035' to 8039',
8047' to 8050', 8151' to 8157',
8163' to 8157', 8180' to 8183', 1 SPF

PBTD: 8461'

Attachment C

Prepared By: Ronald M. Sentz 03-17-08

REEF EXPLORATION, LP.					
State "2" #8					
1980' FSL & 660' FWL					
Sec 2, T23S, R31E					
Livingston Ridge; Delaware, SE (96149)					
Eddy County, New Mexico					
Permanent Wellbore Data			Data On This Completion		
Spud Date: 11/17/07			API #: 30-015-35749		
Compl Date: 1/12/08			Property Code:		
KB Elev., Ft : 3429'			OGRID #:		
GL Elev., Ft : 3411'			Drilling AFE #: 07DC018		
Set 40' of 20" conductor			Date: Activity		
KB 18'			Reached TD on 11/29/07		
DF 3428'			11/29/07: Halliburton Services ran Spectral		
17-1/4 " hole			Density, Dual Spaced Neutron Log		
Surface Casing			Dual Laterolog, Micro-Guard,		
Size No Jts Wt. Grade Jt Type Depth,Ft			log from TD to 4576'		
13 3/8" 16 48.0 H-40 ST&C 701			12/21/07: Halliburton ran an Radial Cement		
Cement: 555 Sx. TOC: Surface (146 Sks)			Bond, CCL, GR Log		
Date: 11/19/2007			From: 8452' to 2570'		
11" hole			01/04/08 Halliburton Frac'd Lower		
8 5/8", 32#, J-55, ST&C			Brushy Canyon with 42,000 gals		
Top of Cement 5 1/2" 2320'			SilverStem Basic (11)		
Intermediate Casing			100,000# 16/30 sand, w/Expdite		
Size No Jts Wt. Grade Jt Type Depth,Ft			Avg Inj Rate 27.2 BPM,		
8 5/8" 102 32.0 J-55 LT&C 4380			Avg Pressure 551#, ISIP 1186#,		
Cement: 1,040 Sx. TOC: Surface Circ 157 sks			CIP 5 Min 420#, CIP 10 Min 420#,		
Date: 11/24/2007			CIP 15 Min 420#		
Tubing :			01/04/08 Halliburton Frac'd Middle Brushy		
3 1/2", FJ, set @ 4500'			Canyon with 21,375 gal Silverstem,		
Baker Packer @ 4506'			W/ 42,000# 16/30 sand w/Expdite,		
7 7/8" Hole			Avg rate 15.5 BPM, avg press 1347#		
Bridge Plug @ 6080' with 35' of cement on top			01/04/08 Halliburton Frac'd Brushy Canyon		
DV TOOL (6421')			with 25,375 gals, SilverStim		
Perf: Brushy Canyon (01/04/08)			49,000# 16/30 sand with Expdite,		
7234' to 7242, 1 SPF			Avg Inj Rate 14.7 BPM, Avg Press 614#		
Perf: Brushy Canyon (01/04/08)			01/04/08 Halliburton Frac'd Brushy Canyon		
7381' to 7390, 7400' to 7405', 1 SPF			with 14,250 gals, SilverStim		
Perf: Middle Brushy Canyon (01/04/08)			28,000 16/30 sand with Expdite,		
7778' to 7784, 7792' to 7798', 1 SPF			Avg Inj Rate 9.9 BPM, Avg Press 825#		
Perf: Lower Brushy Canyon (12/27/07)			Proposed Injection Perforation Areas		
8004' to 8006', 8011' to 8018',			Perf Delaware: 5760' to 5770' & 5860' to 5880',		
8023' to 8029', 8035' to 8039',			5550' to 5580',		
8047' to 8050', 8151' to 8157',			5150' to 5170'		
8163' to 8157', 8180' to 8183', 1 SPF			4600' to 4620'		
PBTD: 8461'			The 3 joints are flag joints (short for logging)		
Set Weight, Lb: 120,000#			ID - 4.892", drift - 4.767", IYP - 7740# , JS - 338,000#		
Tank Battery:			Capacity - .0232 bbls/ft		
Cement: 500 Sx. TOC: DV tool			Cement: 700 Sx. TOC: 2320'		
TD: 8510' PBTD: 8461' Date: 12/2/2007			Attachment C		
Prepared By: Ronald M. Sentz 03-17-08					

(Attachment F)

Ronald Sentz

From: Jay Degen
Sent: Monday, March 31, 2008 3:15 PM
To: Ronald Sentz
Cc: Kellam Colquitt; Walt Dunagin; Lawrence J. Harrison, Jr; 'Lars Larson'
Subject: FW: Sate 2 No. 3 Cement Bond Log Analysis

From: Dennis Page [mailto:Dennis.Page@Halliburton.com]
Sent: Monday, March 31, 2008 2:56 PM
To: Jay Degen
Cc: Ronald Sentz
Subject: Sate 2 No. 3 Cement Bond Log Analysis

Jay,

We discussed the bond log integrity on the State 2 No. 3. After review, Doug Scott, Richard Kelley and I (all senior employees with Halliburton Energy Services) believe the cement bond log indicates 100% isolation between 4720' and 4920'. That would be the worst case scenario. Isolation will likely occur at 4720' to 4810'. Again, this is an expert opinion of Halliburton Energy Services. You will also receive a squeeze recommendation in the event the State of New Mexico requires that additional cement work be done to the well.

Please call me if you have any questions.

Thanks,

D. Page
432-557-7191

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4/8/2008

Attachment G

WELLS THAT PRODUCED WATER WILL COME FROM FOR DISPOSAL

State "2" #1, 1980' FNL & 1980' FEL, Sec 2, T 23S, R 31E, Eddy County, New Mexico

State "2" #2, 660' FNL & 1980' FWL, Sec 2, T 23S, R 31E, Eddy County, New Mexico

State "2" #3, 1980' FNL & 1980' FWL, Sec 2, T 23S, R 31E, Eddy County, New Mexico

State "2" #4, 1980' FSL & 1980' FWL, Sec 2, T 23S, R 31E, Eddy County, New Mexico

State "2" #5, 660' FSL & 1980' FWL, Sec 2, T 23S, R 31E, Eddy County, New Mexico

State "2" #9, 660' FSL & 660' FWL, Sec 2, T 23S, R 31E, Eddy County, New Mexico

State "36" #5, 660' FSL & 660' F WL, Sec 36, T 22S, R 31E, Eddy County, New Mexico

Attachment-H1

HALLIBURTON

PERMAIN BASIN OPERATIONS LABORATORY
WATER ANALYSIS REPORT
HOBBS, NEW MEXICO

COMPANY Reef Exploration

REPORT W07-236
DATE December 17, 2007
DISTRICT Hobbs

SUBMITTED BY _____

WELL State 2 #5 DEPTH _____ FORMATION _____
COUNTY _____ FIELD _____ SOURCE _____

SAMPLE

Sample Temp.	<u>70</u>	°F	_____	°F	_____	°F	_____	°F
RESISTIVITY	<u>0.53</u>		_____		_____		_____	
SPECIFIC GR.	<u>1.162</u>		_____		_____		_____	
pH	<u>6025.00</u>		_____		_____		_____	
CALCIUM	<u>22,500</u>	mpl	_____	mpl	_____	mpl	_____	mpl
MAGNESIUM	<u>12,000</u>	mpl	_____	mpl	_____	mpl	_____	mpl
CHLORIDE	<u>149,008</u>	mpl	_____	mpl	_____	mpl	_____	mpl
SULFATES	<u>Light</u>	mpl	_____	mpl	_____	mpl	_____	mpl
BICARBONATES	<u>183</u>	mpl	_____	mpl	_____	mpl	_____	mpl
SOLUBLE IRON	<u>50</u>	mpl	_____	mpl	_____	mpl	_____	mpl
KCL	<u>Positive</u>		_____		_____		_____	
Sodium	_____	mpl	<u>0</u>	mpl	<u>0</u>	mpl	<u>0</u>	mpl
TDS	_____	mpl	<u>0</u>	mpl	<u>0</u>	mpl	<u>0</u>	mpl
OIL GRAVITY	<u>@</u>	°F	<u>@</u>	°F	<u>@</u>	°F	<u>@</u>	°F

REMARKS

MPL = Milligrams per liter

Resitivity measured in: Ohm/m2/m

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Co.

ANALYST: JH/JE

Attachment-H-2

HALLIBURTONPERMAIN BASIN OPERATIONS LABORATORY
WATER ANALYSIS REPORT
HOBBS, NEW MEXICOCOMPANY Reef Exploration

_____REPORT DATE W08-030
March 3, 2008
DISTRICT Artesia

SUBMITTED BY _____

WELL COUNTY	St. 2 Leases	DEPTH FIELD	FORMATION SOURCE
SAMPLE	#001	#3	#004
Sample Temp.	65 °F	65 °F	65 °F
RESISTIVITY	0.058	0.055	0.055
SPECIFIC GR.	1.137	1.148	1.148
pH	6.49	6.33	6.44
CALCIUM	25,000 mpl	21,500 mpl	23,000 mpl
MAGNESIUM	13,500 mpl	12,600 mpl	13,200 mpl
CHLORIDE	121,446 mpl	133,380 mpl	133,380 mpl
SULFATES	heavy mpl	heavy mpl	heavy mpl
BICARBONATES	153 mpl	140 mpl	171 mpl
SOLUBLE IRON	10 mpl	10 mpl	10 mpl
KCL	Negative	Negative	Negative
Sodium	mpl	mpl	mpl
TDS	mpl	mpl	mpl
OIL GRAVITY	@ °F	@ °F	@ °F

REMARKS

_____MPL = Milligrams per liter
Resitivity measured in: Ohm/m2/m

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ANALYST: MB/MA

Attachment- H-3

HALLIBURTONPERMAIN BASIN OPERATIONS LABORATORY
WATER ANALYSIS REPORT
HOBBS, NEW MEXICOCOMPANY Reef Exploration

_____REPORT DATE W08-031
March 3, 2008
DISTRICT Artesia

SUBMITTED BY _____

WELL St. 2 36 #005 DEPTH _____ FORMATION _____
COUNTY _____ FIELD _____ SOURCE _____

SAMPLE

Sample Temp.	<u>65</u>	°F	_____	°F	_____	°F	_____	°F
RESISTIVITY	<u>0.056</u>		_____		_____		_____	
SPECIFIC GR.	<u>1.146</u>		_____		_____		_____	
pH	<u>6.30</u>		_____		_____		_____	
CALCIUM	<u>22,500</u>	mpl	_____	mpl	_____	mpl	_____	mpl
MAGNESIUM	<u>15,000</u>	mpl	_____	mpl	_____	mpl	_____	mpl
CHLORIDE	<u>131,625</u>	mpl	_____	mpl	_____	mpl	_____	mpl
SULFATES	<u>heavy</u>	mpl	_____	mpl	_____	mpl	_____	mpl
BICARBONATES	<u>92</u>	mpl	_____	mpl	_____	mpl	_____	mpl
SOLUBLE IRON	<u>100</u>	mpl	_____	mpl	_____	mpl	_____	mpl
KCL	<u>Negative</u>		_____		_____		_____	
Sodium	_____	mpl	_____	mpl	_____	mpl	_____	mpl
TDS	_____	mpl	_____	mpl	_____	mpl	_____	mpl
OIL GRAVITY	<u>@</u>	°F	<u>@</u>	°F	<u>@</u>	°F	<u>@</u>	°F

REMARKS

MPL = Milligrams per liter

Resitivity measured in: Ohm/m2/m

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Co.

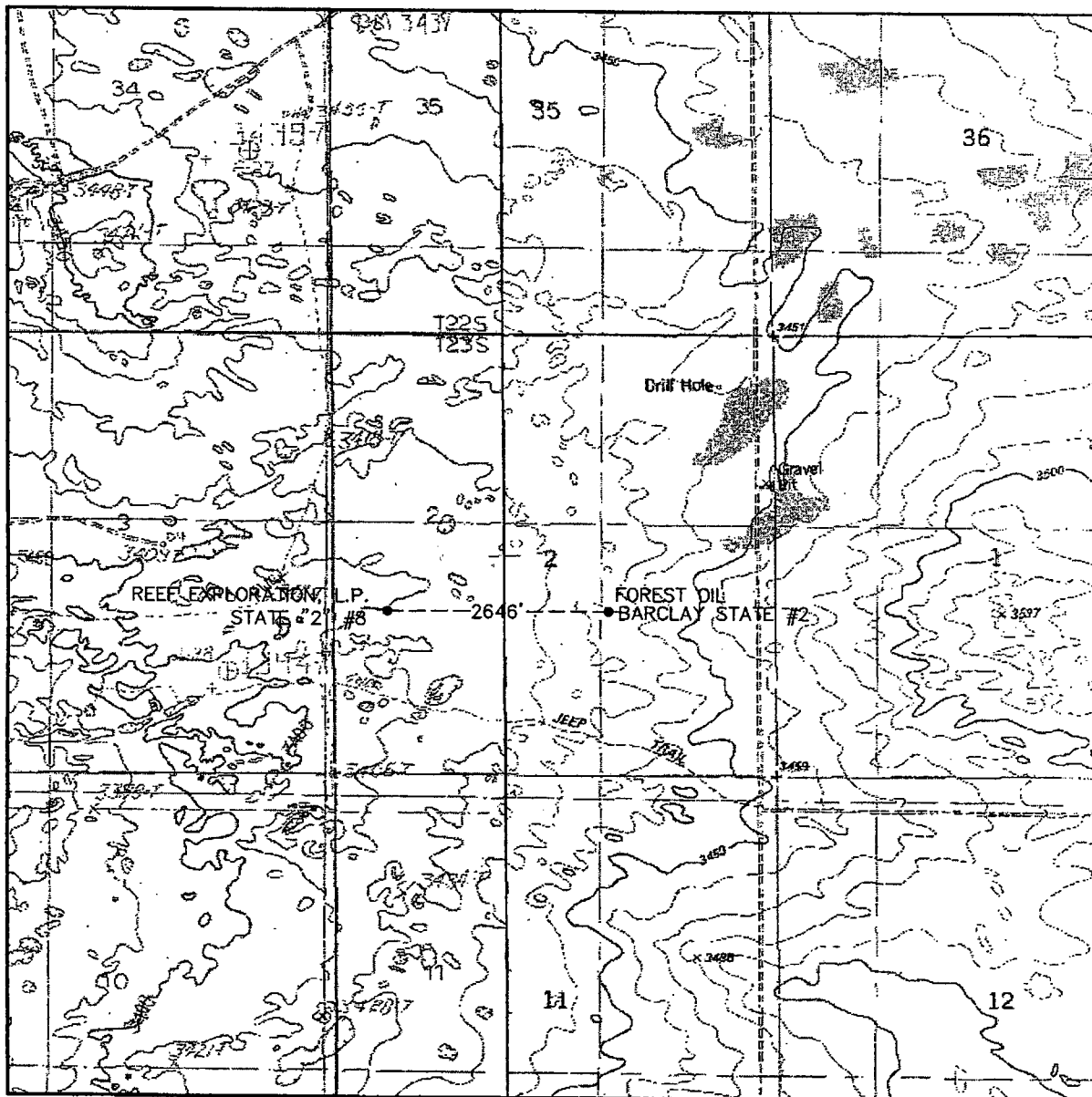
ANALYST: MB/MA

ATTACHMENT I

Attachment D

Map

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOS MEDANOS - 10'

SEC. 2 TWP. 23-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

OPERATOR REEF EXPLORATION, L.P.

LEASE STATE "2"

U.S.G.S. TOPOGRAPHIC MAP
LOS MEDANOS



110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

DOE WIPP SITE 0600

GLOW WORM ALX FEDER # 11

D SWD LOCATION

3 Yates Petroleum Corporation
NM-81953 Lease

Reef Exploration, L.P./Forest Oil Corporation 2
V-302-5 Lease

STATE 2-6
6

STATE 2 NO 2
2

BARCLAY STATE
9

STATE 2-7
7

STATE 2-3
3

STATE 2-1
1

STATE 2-8
8

STATE 2-4
4

BARCLAY STATE
2

GLOW WORM ALX FEDER
4

STATE 2 No. 9
9

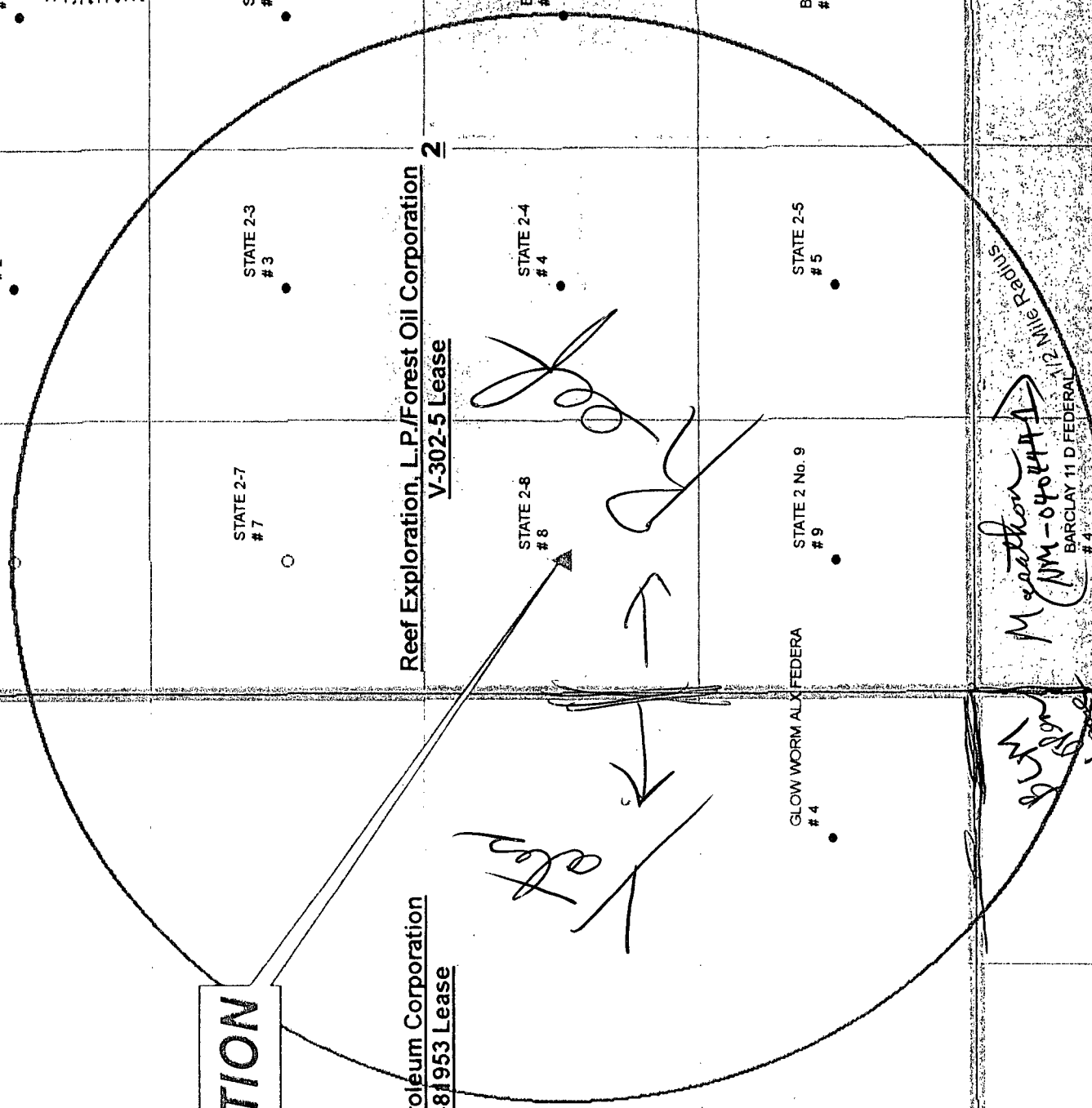
STATE 2-5
5

BARCLAY STATE
WD-4

Megathron NM-040441
1/2 Mile Radius

BARCLAY 11 D FEDERAL
4

BARCLAY 11 B FEDERAL
2



Reef Exploration, LP Injection into the Bell and Cherry Canyons near the WIPP Site.													
API	WELL_NAME	REF_EXPLORATION, L.P.	FTG_NS	NS_CD	FTG_EW	EW_CD	SDIV	Sec	Tsp	Rge	Dist	TVD_DEPTH	WLS_OGRID_CDE
3001535749	STATE 008	OK	1980 S		660 W		L		2 23S	31E	30-015-35749	0 A	246083
3001535748	STATE 007	NOT MILLION	1980 N		660 W		E		2 23S	31E	1,310	0 N	246083
3001531078	BARCLAY STATE 006A	" "	1980 S		1980 W		K		2 23S	31E	1,320	0 C	778
3001535676	STATE 2 004	OK	1980 S		1980 W		K		2 23S	31E	1,320	0 A	246083
3001535750	STATE 009	OK	660 S		660 W		M		2 23S	31E	1,320	0 A	246083
3001535675	STATE 2 003	OK	1980 N		1980 W		F		2 23S	31E	1,860	0 A	246083
3001535677	STATE 2 005	OK	660 S		1980 W		N		2 23S	31E	1,867	0 A	246083
3001524112	DUNES ST 001	NOT DRILLED	1980 S		1980 E		J		2 23S	31E	2,640	0 P	214263
3001529590	BARCLAY STATE 002	OK	1980 S		1980 E		J		2 23S	31E	2,640	8470 A	8041
3001530089	BARCLAY 11 D FEDERAL	DEVON ENERGY PRODUCTION COMPANY, LP	660 N		660 W		D		11 23S	31E	2,640	0 C	6137
Nearby Injection Wells													
3001529792	BARCLAY STATE 004	FOREST OIL CORPORATION	660 S		1980 E		O		2 23S	31E	2,952	8450 A	8041
3001505840	STATE AA-2 001	FOREST OIL CORPORATION	660 N		660 E		I		2 23S	31E	4,754	5800 A	8041
3001525410	BARCLAY 11 H FEDERAL 001	DEVON ENERGY PRODUCTION COMPANY, LP	2180 N		660 E		H		11 23S	31E	5,743	9104 A	6137

L was Flowing Safe Water when open Hole LOGGED
 SW-7477 7/20/98 4500-5850 not used
 CWT Top below DV = ? prefer From 638-
 See WBD

) L. Brady C.

OLD

Reef Exploration, LP Injection into the Bell and Cherry										
API	WELL_NAME	PROPERTY	QCD	LAND_TYPE	WELL_TYPE	NBR	ACRES	SPUD_DATE	COMPL_STATU	
3001535749	36 STATE 008		36538 I	S	O	1	40		Unknown	
3001535748	36 STATE 007		36538 E	S	O	1	40		Unknown	
3001531078	BARCLAY STATE 006A		29382 K	S	G				Unknown	
3001535676	STATE 2 004		36570 K	S	O	1	40		Unknown	
3001535750	36 STATE 009		36538 M	S	O	1	40		Unknown	
3001535675	STATE 2 003		36570 F	S	O	1	40		Unknown	
3001535677	STATE 2 005		36570 N	S	O	1	40		Unknown	
3001524112	DUNES ST 001		30041 J	S	O				Plugged	
3001529590	BARCLAY STATE 002		32711 J	S	O	1	40	05-Aug-97	Active	
3001530089	BARCLAY 11 D FEDERAL 004		22889 D	F	O				Unknown	
Nearby Injection Wells										
3001529792	BARCLAY STATE 004		32711 O	S	S	2	80	07-Sep-97	Active	
3001505840	STATE AA-2 001		32712 A	S	S	1	40	22-May-97	Active	
3001525419	BARCLAY 11 H FEDERAL 001		13218 H	F	S	2	80	28-Jun-03	Active	

0279

CMD :
OG5SEC2

ONGARD
VIEW LAND BY ULSTR

08/26/08 16:50:44
OGOWVJ -TPKW
PAGE NO: 7

Sec : 2 Twp : 23S Rng : 31E Cnty1 : WIP
Cnty2 : Eddy Cnty3 :

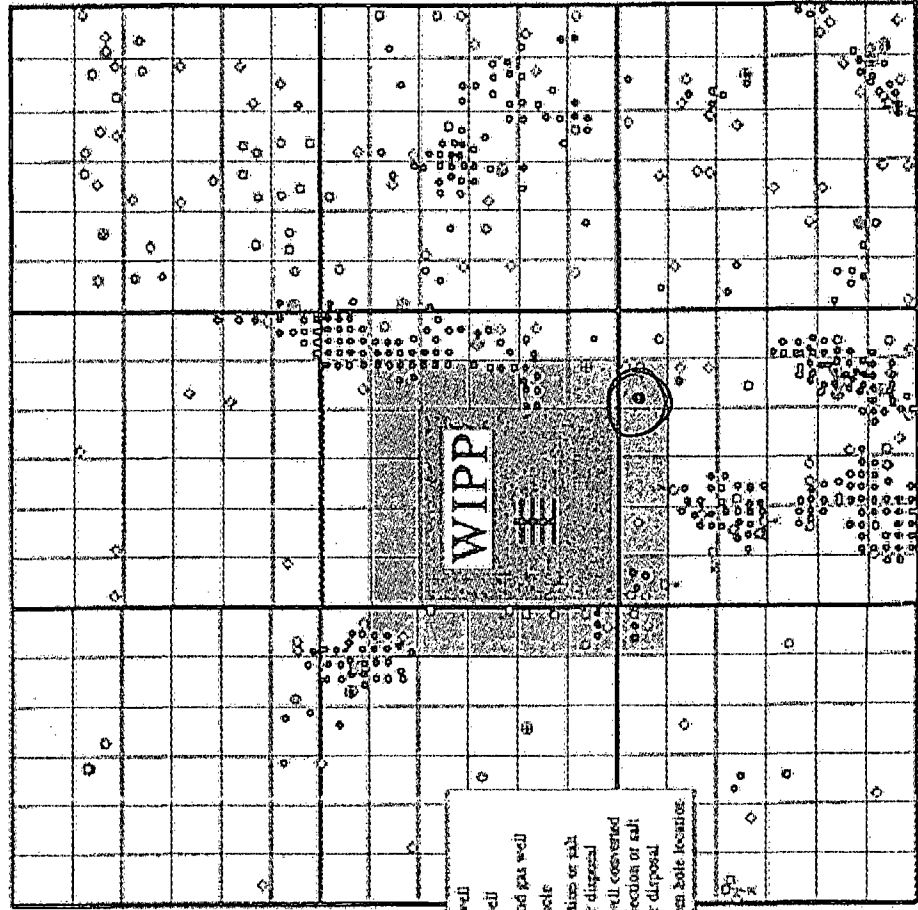
U Lot/ Qtr	SRF SUB	ACTIVE	Bene	REMARKS
L Trct Qtr	ACREAGE	OWNER	LEASE #	(may show restrictions codes)
J	NW4SE4	40.00 ST ST R2	6739 0000	WIP
			R2 6740 0000	
			V0 0302 0005	
K	NE4SW4	40.00 ST ST GM	1701 0000 CS	WIP
			MP 0024 0003	
			V0 0302 0005	
L	NW4SW4	40.00 ST ST GM	1701 0000 CS	POT WIP
			MP 0024 0003	
			V0 0302 0005	
M	SW4SW4	40.00 ST ST GM	1701 0000 CS	POT WIP
			MP 0024 0003	

PF01 HELP	PF02 PREV	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

1993

Wells Surrounding WIPP, 1993

Source: EBC



- Gas well
- Oil well
- Oil and gas well
- ⊗ Dry hole
- ⊙ Injection or salt water disposal
- ⊙ Oil well converted to injection or salt water disposal
- * Bottom hole location

Reef Exploration Wells (in 1/2 Mile Radius)

State "2" #3

Sections Producing

Perf:	Brushy Canyon (10/17/2007)
8172'-8178', 8198'-8204', 1 JSPF w/ 120 Degree Phasing	
10/26/07	Hallburton Frac Brushy Canyon
27,800 Gals SilverStim LT Basic R(11) w/ 49,000# 16/30 Mesh Ottawa Sand Coated w/ Expedite Lite, Max PSI: 5225, Avg PSI: 1883, Avg Rate: 15.6, Max Rate: 17.51, ISIP: 4793, 5 MIN: 4884, 10 MIN: 4801, 15 MIN: 4777	

Perf:	Brushy Canyon (10/30/2007)
8021'-8034', 2 JSPF w/ 120 Degree Phasing	
12/6/07	Hallburton Frac Brushy Canyon
25,400 gals SilverStim LT Basic (11) w/ 45,500# 16/30 Mesh Ottawa Sand coated w/ Expedite Lite, Max PSI: 1384, Avg PSI: 498, Max Rate: 18.5, Avg Rate: 13.4, ISIP: 965, 5 MIN: 552, 10 MIN: 512, 15 MIN: 487	

State "2" #4

Sections Producing

Perf:	Lower Brushy Canyon (11/09/2007)
8162'-8166', 8180'-8184', 8192'-8200', 8210'-8214', 8220'-8224', 1 JSPF	
11/17/07	Hallburton Frac'd Lower Brushy Cany.
27,800 gals Silverstim LT R(11) w/ 22,120# 16/30 sand w/ expedite & 26,880# 20/40 sand w/ expedite lite Max PSI: 1024, Avg PSI: 558, Max Rate: 16.5, Avg Rate: 15.2, ISIP: 747, 5 min 536, 10 min 456, 15 min 398, LTR 1,011 gals	

Perf:	Lower Brushy Canyon (11/17/2007)
8007'-8010', 8088'-8092', 8110'-8114', 1 JSPF	
11/17/07	Hallburton Frac'd Lower Brushy Cany.
25,400 gals Silverstim LT basic R(11) w/ 45,500# 16/30 Mesh Ottawa sand coated w/ expedite lite, Max PSI: 889, AVG PSI: 577, Max Rate: 15.7, AVG Rate: 15.0, ISIP: 526, 5 MIN 393, 10 MIN 366, 15 MIN 355	

Perf:	Middle Brushy Canyon (02/05/2008)
7570' - 7580', 1 JSPF	
2/8/08	Hallburton Frac'd Middle Brushy Cany.
18,500 gals Silverstim LT R(13) w/ 13,500# Arizona sand coated w/ Expedite lite, Max PSI: 4171, Avg PSI: 1620, Max Rate: 16.46, Avg Rate: 9.79, ISIP: 4156, 5 min 3280, 10 min 3306, 15 min 3341, LTR 29,416 gals	

State "2" #4 Continued

Sections Producing

Perf:	Upper Brushy Canyon (02/09/2008)
6970' to 6980', 7074' to 7080', 1 SPF	
2/9/08	Hallburton Frac'd Upper Brushy Cany.
23,900 gals Silverstim LT R(13) w/ 50,000# of 16/30 Arizona sand coated with Expedite lite, Max PSI: 994, Avg PSI: 505, Max Rate: 27.4, Avg Rate: 20.7, ISIP: 477, 5 min 396, 10 min 362, 15 min 351, LTR 39,852 gals	

Continued

Reef Exploration Wells (in 1/2 Mile Radius)

State "2" #5

Sections Producing

Perf:	Lower Brushy Canyon (12/07/2007)
8150' - 8155', 8179' - 8184', 8204' - 8208',	8219' -
8224', 8229' - 8232' w/ 1 JSPP	
12/21/07	Halliburton Frac
27,300 gals SilverStim LT Basic R(11) w/ 49,000# 16/30	
Ottawa Sand coated w/ Expedite Lite. Avg PSI: 2,047,	
Mas PSI: 3,076, Avg Rate: 14.1, Max Rate: 28.3, ISIP:	
914, 5 Min: 763, 10 Min: 680, 15 Min: 607, LTR: 948 BLW	

Perf:	Lower Brushy Canyon (12/21/2007)
8024'-8028', 8034'-8036', 8044'-8055', 8050'-8055' 1 JSPP	
12/21/07	Halliburton Frac Upper Delaware Zone
25,400 gals SilverStim LT Basic R(11) w/ 45,500# 16/30	
Mesh Ottawa Sand coated w/ Expedite Lite, Avg PSI:	
1007, Max PSI: 1486, Avg Rate: 14.5 BPM, Max Rate:	
27.3, ISIP: 940, 5 Min: 852, 10 Min: 829, 15 Min: 815,	
LTR: 997	

State "2" #8

Sections to be abandoned

Perf:	Lower Brushy Canyon (12/27/07)
8004' to 8006', 8011' to 8018',	
8023' to 8029', 8035' to 8039',	
8047' to 8050', 8151' to 8157',	
8163' to 8157', 8180' to 8183', 1 SPF	
01/04/08	Halliburton Frac'd Lower
Brushy Canyon with 42,000 gals	
SilverStem Basic (11)	
100,000# 16/30 sand, w/Expilte	
Avg Inj Rate 27.2 BPM,	
Avg Pressure 551#, ISIP 1186#,	
CIP 5 Min 420#, CIP 10 Min 420#,	
CIP 15 Min 420#	

Perf:	Brushy Canyon (01/04/08)
7234' to 7242, 1 SPF	
01/04/08	Halliburton Frac'd Brushy Canyon
with 14,250 gals, SilverStim	
28,000 16/30 sand with Expilte,	
Avg Inj Rate 9.9 BPM, Avg Press 825#	

Perf:	Brushy Canyon (01/04/08)
7381' to 7390, 7400' to 7405', 1 SPF	
01/04/08	Halliburton Frac'd Brushy Canyon
with 25,375 gals, SilverStim	
49,000# 16/30 sand with Expilte,	
Avg Inj Rate 14.7 BPM, Avg Press 614#	

Perf:	Middle Brushy Canyon (01/04/08)
7778' to 7784, 7792' to 7798', 1 SPF	
01/04/08	Halliburton Frac'd Middle Brushy
Canyon with 21,375 gal Silverstem,	
w/ 42,000# 16/30 sand w/Expilte,	
Avg rate 15.5 BPM, avg press 1347#	

State "2" #9

Sections Producing

Perf:	Lower Brushy Canyon (01/07/08)
8139' to 8144', 8151' to 8157',	
8162' to 8167', 8171' to 8176',	
8181' to 8186', 8202' to 8206', 1 SPF	
09/11/07	Halliburton Frac'd Lower
Brushy Canyon with 42,2000 gals	
SilverStem Basic (11)	
100,000# 16/30 sand, w/Expilte	
Avg Inj Rate 30 BPM,	
Avg Pressure 928#, ISIP 687#,	
CIP 5 Min 638#, CIP 10 Min 607#,	
CIP 15 Min 607#	

Perf:	Lower Brushy Canyon (01/24/08)
8007' to 8013', 8020' to 8026',	
8032' to 8036', 8044' to 8058', 1 SPF	
01/24/08	Halliburton Frac'd Lower Brushy
Canyon with 33,375 gals, SilverStim	
45,000 16/30 sand with Expilte,	
Avg Inj Rate 30 BPM, Avg Press 961#	

Perf:	Middle Brushy Canyon (01/31/08)
7568' to 7577', 7588' to 7592', 1 SPF	
02/01/08	Halliburton Frac'd Middle Brushy
Canyon with 25,375 gal Silverstem,	
w/ 49,000# 16/30 sand w/Expilte,	
Avg rate 16 BPM, avg press 771#	

REEF EXPLORATION, LP.

State "2" #3

1980' FNL & 1980' FWL

F-S2-T23S-R31E

Livingston Ridge; Delaware, SE

Eddy County, New Mexico

Permanent Wellbore Data

Spud Date:		9/6/07		Weatherford 912 Unit	
Compl Date:		11/5/07			
KB Elev., Ft :		3439.0			
GL Elev., Ft :		3421.0		Set 40' of 20' conductor	
KB	18	RKB to BH	19.5	BH	3419.5
DF Elev., Ft :		3438		17.50 " hole	
Surface Casing					
Size	No Jts	Wt.	Grade	Jt Type	Depth,Ft
13 3/8"	17	48#	H-40	STC	715
Cement: 555		Sx.		TOC: Surface (150 sacks)	
Date: 9/27/2007					

11" hole

8 5/8", 32#, J-55, LT&C

Production Csg. TOC @ 3776.00'

Intermediate Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth,Ft
8 5/8"	103	32#	J-55	LT&C	4410
Cement: 1,500 Sx.			TOC: Surface		290
Date:					10/30/2007

Tubing :

(265) joints 2 7/8", 8 rd
(1) TAC w/ 15 points
(6) joints 2 7/8" tubing
(1) Seating Nipple
(1) 4' Perforated sub
(1) Mud joint
(1) 2 7/8" Bulplug

7 7/8" hole

Seating Nipple @ ' 8117

EOT: @ 8153' with bull plug

3/6/2008 : Ran insert pump and rods

Qty	Length	Depth	Description
Polish rod			
1	8	8	1x8' Sub
1	6	14	2x6' Sub
3	75	89	1" Sucker Rods
98	2450	2539	7/8" Sucker Rods
130	3250	5789	3/4" Sucker Rods
92	2300	8089	1" Sucker Rods
1	25	8114	1" Sucker Rod with on/off tool
	25	8139	1.75 RHBC 20-5-4 Pump
		8139	to Seating Nipple
12' Gas anchor			

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
5 1/2"	194	17#	I-80	LT&C	8430.01
5 1/2"	3	17#	I-80	LT&C	66.47
Total depth					8496.48

There are 3 flag joints (short for logging)

ID - 4.892", drift - 4.767", IYP - 7740#, JS - 356,000#

Capacity - .0232 bbls/ft

Cement: 400 Sx. TOC: DV Tool

Cement: 610 Sx. TOC: 3776

TD: 8,500 PBTD: 8439.7 Date: 9/18/2007

Set Weight, Lb: 120,000#

Tank Battery:

Data On This Completion

API #:	30-015-35675
Property Code:	36570 Pool Number: 39380
OGRID #:	246083
Drilling AFE #:	07DC008
Date:	Activity

Reached TD on: 9/18/2007

10/8/07 Haliburton services ran Spectral
Density, Dual Spaced Neutron Log
Dual Laterolog, Micro-Guard,
Log from TD' to 4300'

10/17/07 Ran Radial Cement Bond Log,
CCL, GR Log from TD' to 3680'

12/6/07 Haliburton Frac Brushy Canyon

25,400 gals SilverStim LT Basic (11) w/ 45,500#,
16/30 Mesh Ottawa Sand coated w/ Expedite Lite,
Max PSI: 1384, Avg PSI: 498, Max Rate: 18.5, Avg
Rate: 13.4, ISIP: 965, 5 MIN: 552, 10 MIN: 512, 15
MIN: 487

10/26/07 Haliburton Frac Brushy Canyon

27,800 Gals SilverStim LT Basic R(11) w/ 49,000#,
16/30 Mesh Ottawa Sand Coated w/ Expedite Lite,
Max PSI: 5225, Avg PSI: 1883, Avg Rate: 15.6,
Max Rate: 17.51, ISIP: 4793, 5 MIN: 4884, 10 MIN:
4801, 15 MIN: 4777

DV Tool set @ 6366.00'

Tubing anchor catcher @ 7920'

Perf: Brushy Canyon (10/30/2007)

8021'-8034', 2 JSPF w/ 120 Degree Phasing

Perf: Brushy Canyon (10/17/2007)

8172'-8178', 8198'-8204', 1 JSPF w/ 120 Degree
Phasing

PBTD ' 8440

Prepared by: JLV (03/20/2008)

TD: = '8500

Attachment E

REEF EXPLORATION, LP.

State "2" #4

1980' FSL & 1980' FWL

S2-T23S-R31E

Livingston Ridge; Delaware, South

Eddy County, New Mexico

Permanent Wellbore Data

Spud Date:	10/12/07	Weatherford	Unit
Compl Date:	11/26/07		
KB Elev., Ft:	3432.0		
GL Elev., Ft:	3414.0	Set 40' of	20' conductor

KB	18	RKB to BH	21.5	BH	3410.5
DF Elev., Ft:	3431		17.50 "	hole	

Surface Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
13 3/8"	16	48#	H-40	STC	700
Cement:	555	Sx.	TOC:	Surface (143 sacks)	

Date: 10/13/2007

11" hole

8 5/8", 32#, J-55, LT&C

Production Csg. TOC @ 5760.00'

Intermediate Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
8 5/8"	102	32#	J-55	LT&C	4399

Cement: 1,125 Sx. TOC Surface Circ 241 sx

Date: 10/18/2007

Tubing :

(215) joints 2 7/8", J-55, 8 rnd

(1) Anchor Catcher

(6) joints 2 7/8" tubing

(1) Seating Nipple

(1) Perforated sub

(1) Mud joint

7 7/8" hole

Seating Nipple @ ' 6870

EOT: @ 6901' with bull plug

2/14/2008 : Ran insert pump and rods

Qty	Length	Depth	Description
??	??		Polish rod
1	4	4	1" x 4' Pony Rod
1	8	12	1" x 8' Pony Rod
74	1850	1862	1" Sucker Rods
84	2100	3962	7/8" Sucker Rods
110	2750	6712	3/4" Sucker Rods
2	50	6762	1" Sucker Rods
1	25	6787	1" Sucker Rod with on/off tool
1	25	6812	1.75 RWBC 20-5-4 Pump
		6812	to Seating Nipple

12' Gas anchor

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
5 1/2"	189	17#	I-80	LT&C	8401.78
5 1/2"	3	17#	I-80	LT&C	66.22
Total depth					8468

There are 3 flag joints (short for logging)

ID - 4.892", drift - 4.767", IYP - 7740#, JS - 338,000#

Capacity - .0232 bbls/ft

Cement: 425 Sx. TOC: DV Tool

Cement: 550 Sx. TOC: 0

TD: 8,468 PBTD: 8420 Date: 10/25/2007

Set Weight, Lb: 120,000#

Tank Battery:

Data On This Completion

API #: 30-015-35676

Property Code: 36570

OGRID #: 246083

Drilling AFE #: 07DC009

Date: Activity

Reached TD on: 10/25/2007

10/26/07 Haliburton services ran Spectral
Density, Dual Spaced Neutron Log
Dual Laterolog, Micro-Guard,
Log from TD' to 4377'

11/8/07 Ran Radial Cement Bond Log,
CCL, GR Log from 8424' to 5400'

2/9/08 Haliburton Frac'd Upper Brushy Cany.

23,900 gals Silverstim LT R(13) w/ 50,000# of
16/30 Arizona sand coated with Expedite lite, Max
PSI: 994, Avg PSI: 505, Max Rate: 27.4, Avg Rate:
20.7, ISIP: 477, 5 min 396, 10 min 362, 15 min 351,
LTR 39,852 gals

2/8/07 Haliburton Frac'd Middle Brushy Cany.

18,500 gals Silverstim LT R(13) w/ 13,500#
Arizona sand coated w/ Expedite lite, Max PSI:
4171, Avg PSI: 1620, Max Rate: 16.46, Avg Rate:
9.79, ISIP: 4156, 5 min 3280, 10 min 3306, 15 min
3341, LTR 29,416 gals

11/17/07 Haliburton Frac'd Lower Brushy Cany.

25,400 gals Silverstim LT basic R(11) w/ 45,500#
16/30 Mesh Ottawa sand coated w/ expedite lite,
Max PSI: 889, AVGA PSI: 577, Max Rate: 15.7, Avg
Rate: 15.0, ISIP: 526, 5 MIN 393, 10 MIN 366, 15
MIN 355

11/17/07 Haliburton Frac'd Lower Brushy Cany.

27,800 gals Silverstim LT R(11) w/ 22,120#, 16/30
sand w/ expedite & 26,880# 20/40 sand w/
expedite lite Max PSI: 1024, Avg PSI: 558, Max
Rate: 16.5, Avg Rate: 15.2, ISIP: 747, 5 min 536,
10 min 456, 15 min 398, LTR 1,011 gals

DV Tool set @ 6460.00'

Tubing anchor catcher @ 6684'

Perf: Upper Brushy Canyon (02/09/2007)

6970' to 6980', 7074' to 7080', 1 SPF

Perf: Middle Brushy Canyon (02/05/2007)

7570' - 7580', 1 JSPF

Perf: Lower Brushy Canyon (11/17/2007)

8007'-8010', 8088'-8092', 8110'-8114', 1 JSPF

Perf: Lower Brushy Canyon (11/09/2007)

8162'-8166', 8180'-8184', 8192'-8200', 8210'-8214',
8220'-8224', 1 JSPF

TD: = '8420

Set 5 1/2" csg at 8464'

Prepared by: JLV

Attachment E-1

PBTD ' 8468

REEF EXPLORATION, LP.

State "2" #5

660' FSL & 1980' FWL

N-S2-T23S-R31E

Livingston Ridge; Delaware, SE

Eddy County, New Mexico

Permanent Wellbore Data

Spud Date:	10/31/07	Weatherford 912 Unit
Compl Date:	11/26/07	
KB Elev., Ft:	3434.0	
GL Elev., Ft:	3416.0	Set 40' of 20' conductor
KB	18	RKB to BH 20.5 BH 3413.5
DF Elev., Ft:	3433	17.50 " hole

Surface Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
13 3/8"	16	48#	H-40	STC	700

Cement: 555 Sx. TOC: Surface (169 sacks)
Date: 11/2/2007

11" hole

8 5/8", 32#, J-55, LT&C

Production Csg. TOC @ 3093.00'

Intermediate Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
8 5/8"	100	32#	J-55	LT&C	4300

Cement: 1,100 Sx. TOC: Surface 210
Date: 11/7/2007

Tubing :

(254) joints 2 7/8", J-55, 8 rd
(1) 5 1/2" x 2 7/8" TAC
(6) joints 2 7/8" tubing
(1) Seating Nipple
(1) 4' Perforated sub
(1) Mud joint
(1) 2 7/8" Bulplug

7 7/8" hole

Seating Nipple @ ' 8123

EOT: @ 8232' with bull plug

2/14/2008 : Ran insert pump and rods

Qty	Length	Depth	Description
			Polish rod
		0	1" x 4' Pony Rod
		0	1" x 8' Pony Rod
91	2275	2275	1" Sucker Rods
98	2450	4725	7/8" Sucker Rods
131	3275	8000	3/4" Sucker Rods
4	100	8100	1" Sucker Rods
1	25	8125	1" Sucker Rod with on/off tool
		8125	1.75 RHBC 20-5-4 Pump
		8125	to Seating Nipple
			12' Gas anchor

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
5 1/2"	191	17#	I-80	LT&C	8483.78
5 1/2"	3	17#	I-80	LT&C	66.8
			Total depth		8550.58

There are 3 flag joints (short for logging)

ID - 4.892", drift - 4.767", IYP - 7740#, JS - 356,000#

Capacity - .0232 bbls/ft

Cement: 550 Sx. TOC: DV Tool

Cement: 650 Sx. TOC: 3093

TD: 8,550 PBTD: 8501 Date: 11/14/2007

Set Weight, Lb: 120,000#

Tank Battery:

Data On This Completion

API #: 30-015-35677
Property Code: 36570 Pool Number: 96149
OGRID #: 246083
Drilling AFE #: 07DC010
Date: Activity

Reached TD on: 11/14/2007

11/13/07 Haliburton services ran Spectral
Density, Dual Spaced Neutron Log
Dual Laterolog, Micro-Guard,
Log from TD' to 4300'

12/5/07 Ran Radial Cement Bond Log,
CCL, GR Log from 8474' to 3000'

12/21/07 Haliburton Frac Upper Delaware Zone

25,400 gals SilverStim LT Basic R(11) w/ 45,500#
16/30 Mesh Ottawa Sand coated w/ Expedite Lite,
Avg PSI: 1007, Max PSI: 1486, Avg Rate: 14.5
BPM, Max Rate: 27.3, ISIP: 940, 5 Min: 852, 10
Min: 829, 15 Min: 815, LTR: 997

12/21/07 Haliburton Frac

27,800 gals SilverStim LT Basic R(11) w/ 49,000#,
16/30 Ottawa Sand coated w/ Expedite Lite. Avg
PSI: 2,047, Mas PSI: 3,076, Avg Rate: 14.1, Max
Rate: 28.3, ISIP: 914, 5 Min: 763, 10 Min: 680, 15
Min: 607, LTR: 948 BLW

DV Tool set @ 6374.00'
Tubing anchor catcher @ 7933'

Perf: Lower Brushy Canyon (12/21/2007)
8024'-8028', 8034'-8036', 8044'-8055', 8050'-8055'
1 JSPF

Perf: Lower Brushy Canyon (12/07/2007)
8150' - 8155', 8179' - 8184', 8204' - 8208', 8219'
8224', 8229' - 8232' w/ 1 JSPF

TD: = '8550

Attachment E-2

PBTD ' 8501

Prepared by: JLV (03/13/2008)

REEF EXPLORATION, LP.

State "2" #9

660' FSL & 660' FWL

Sec 2, T23S, R31E

Livingston Ridge; Delaware, SE (96149)

Eddy County, New Mexico

Permanent Wellbore Data

Spud Date:	12/4/07	Weatherford 912 Unit
Compl Date:	2/11/08	
KB Elev., Ft :	3426'	
GL Elev., Ft :	3407'	Set 40' of 20" conductor
	19'	
DF	3425'	17-1/4" hole

Surface Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
13 3/8"	16	48.0	H-40	ST&C	705
Cement:	555 Sx.		TOC:	Surface (225 Sks)	
			Date:	12/5/2007	

11" hole

8 5/8", 32#, J-55, ST&C

Top of Cement 5 1/2" 2320'

Intermediate Casing

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
8 5/8"	102	32.0	J-55	LT&C	4370
Cement:	1,125 Sx.		TOC:	Surface Circ 318 sks	
			Date:	12/11/2007	

Tubing :

- (236) joints 2 7/8", J-55, EUE, 8 Rd
 (1) 2 7/8" X 5 1/2" Anchor catcher
 (18) Joints 2 7/8" tubing
 (1) Seating Nipple
 (1) 2 7/8" X 4' Perforate Pup Jt
 (1) joint 2 7/8" Mud Anchor
 8194' Bottom of tubing

7 7/8" hole

Seating Nipple @ 8160'

02/08/08: Ran insert pump and rods

	14.00'	1 1/4" x 22' polish rod
(1)	6.00'	1" x 6' Pony Rod
(1)	8.00'	1" x 8' Pony Rod
(95)	2375.00'	1" Sucker rods
(94)	2350.00'	7/8" sucker RodsS
(130)	3250.00'	3/4" Sucker Rods
(3)	75.00'	1" Sucker rods
(1)	25.00'	1" Sucker rod w/ on/off tool
	16.00'	2" x 1.75" x 32' RHBC pump with on/off tool
	8160.00'	to Seating Nipple
	12'	gas anchor

**** may be error in rod or tubing count

Size	No Jts	Wt.	Grade	Jt Type	Depth, Ft
5 1/2"	188	17.0	I-80	LT&C	8355.43
5 1/2"	3	17.0	I-80	LT&C	66.57
			Total depth		8422

The 3 joints are flag joints (short for logging)

ID - 4.892", drift - 4.767", IYP - 7740#, JS - 338,000#

Capacity - .0232 bbls/ft

Cement: 500 Sx. TOC: DV tool

Cement: 700 Sx. TOC: 2320'

ID: 8422' PBTD: 8371' Date: 12/15/2007

Set Weight, Lb: 120,000#

Tank Battery:

Data On This Completion

API #: 30-015-35750

Property Code:

OGRID #:

Drilling AFE #: 07DC019

Date: Activity

Reached TD on 12/15/07

12/15/07: Halliburton Services ran Spectral
 Density, Dual Spaced Neutron Log
 Dual Laterolog, Micro-Guard,
 log from TD to 4354'

01/04/08: Halliburton ran an Radial Cement
 Bond, CCL, GR Log
 From: 8298' to 2100'

09/11/07 Halliburton Frac'd Lower
 Brushy Canyon with 42,2000 gals
 SilverStem Basic (11)
 100,000# 16/30 sand, w/Expilite
 Avg Inj Rate 30 BPM,
 Avg Pressure 929#, ISIP 687#,
 CIP 5 Min 638#, CIP 10 Min 607#,
 CIP 15 Min 607#

01/24/08 Halliburton Frac'd Lower Brushy
 Canyon with 33,375 gals, SilverStim
 45,000 16/30 sand with Expilite,
 Avg Inj Rate 30 BPM, Avg Press 961#

02/01/08 Halliburton Frac'd Middle Brushy
 Canyon with 25,375 gal Silverstem,
 W/ 49,000# 16/30 sand w/Expilite,
 Avg rate 16 BPM, avg press 771#

DV TOOL (6420')

Tubing anchor catcher @ 7562'

Perf: Middle Brushy Canyon (01/31/08)
 7568' to 7577', 7588' to 7592', 1 SPF

Perf: Lower Brushy Canyon (01/24/08)
 8007' to 8013', 8020' to 8026',
 8032' to 8036', 8044' to 8058', 1 SPF

Perf: Lower Brushy Canyon (01/07/08)
 8139' to 8144', 8151' to 8157',
 8162' to 8167', 8171' to 8176',
 8181' to 8186', 8202' to 8206', 1 SPF

PBTD: 8371'

Landed casing at 8407'

EOT: 8194' with bull plug

Prepared By: Ronald M. Sentz 03-10-08

Attachment-E3

ATTACHMENT J

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Kathy McCarroll, being first duly sworn,
on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

September 15 2009

That the cost of publication is **\$61.08** and that payment thereof has been made and will be assessed as court costs.

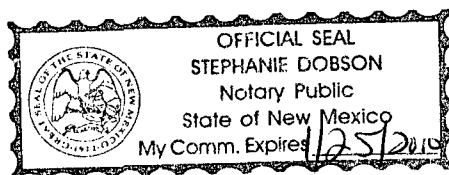
Kathy McCarroll

Subscribed and sworn to before me this

15th day of September, 2009
Stephanie Dobson

My commission Expires on 1/25/2010

Notary Public



September 15, 2009

Legal Notice

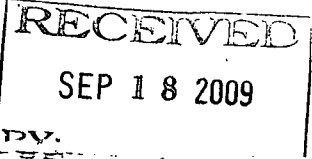
Notice of Application
for Fluid Injection
Well Permit

Reef Exploration,
L.P., 1901 North Cen-
tral Expressway,
Suite 300, Richard-
son, Texas 75080-3610,
Jose L. Velez, phone
number 972-437-6792,
has applied to the
New Mexico Oil Con-
servation Division for
Authorization to in-
ject.

The applicant propos-
es to inject salt water
into the Delaware
Formation, State "2"
#8 well. The pro-
posed injection well
is located 1980' from
the South line and
660' from the West
line of Section 2, T-23-
S, R-31-E, N.M.P.M.,
Eddy County, New
Mexico. Fluid will be
injected in the State
"2" well #8 in the sub-
surface depth inter-
val from 4450 feet to
8250 feet. The pur-
pose of the well is as
a disposal well for
area Delaware pro-
duced water. The
proposed average
daily injection vol-
ume is 4000 barrels of
water per day with a
proposed average
daily injection pres-
sure of 1000#.

Requests for a public
hearing from persons
who can show that
they are adversely
affected, or requests
for further informa-
tion concerning any
aspect of the applica-
tion should be sub-

mitted in writing
within fifteen days of
publication, to the
New Mexico Oil Con-
servation Division,
1220 South St. Fran-
cisco Dr., Santa Fe,
New Mexico 87505.





Tuesday, September 01, 2009

BP America Production Company
P.O. Box 4587
Houston, Texas
77210-4587

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you as an offset operator. A copy of the application is attached. As an offset operator you have the option to object in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

A handwritten signature in black ink, appearing to be "J. Velez", written in a cursive style.

Jose L. Velez
Regulatory Affairs

Enclosures

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Monday, September 21, 2009

BP America Production Company
P.O. Box 4587
Houston, Texas
77210-4587

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

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Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 SEP 21, 2009 ACT WT LTR #PK 1
SERVICE 2DA BILL WT LTR
TRACKING# 1ZE754080249537150 ALL CURRENCY USD
RETURN NO.: REEF SWD
REF 2:STATE 2#8 INJECTION PERMIT APPLIC.

HANDLING CHARGE 0.00		FRT: SHP	
SHIPMENT NR RATE CHARGES:		SVC 6.41 USD	
DV 0.00	COD 0.00	RS	0.00
DC 0.00	DGD 0.00		
AH 0.00	PR 0.00	ROD	0.00
TOT NR CHG 6.41		NR+HANDLING	6.41
TOT PUB CHG 10.18		PUB+HANDLING	10.18

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefoac.com



Tuesday, September 01, 2009

Devon Energy Production Company, LP
20 Broadway, Suite 1500
Oklahoma City, OK
73102-8260

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

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Regards,

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Jose L. Velez
Regulatory Affairs

Enclosures

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Monday, September 21, 2009

Devon Energy Production Company, LP
20 Broadway, Suite 1500
Oklahoma City, OK
73102-8260

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S; R-31-E, N.M.P.M., Eddy
County, New Mexico**

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Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 SEP 21, 2009 ACT WT LTR #PK 1
SERVICE ZDA BILL WT LTR
TRACKING# 1ZE754080247144962 ALL CURRENCY USD
RETURN NO.: REEF OFFICE
REF 2:STATE 2#8 INJECTION PERMIT APPLIC.

HANDLING CHARGE 0.00	FRT: SHP
SHIPMENT NR RATE CHARGES:	SVC 6.41 USD
DV 0.00	COD 0.00 RS 0.00
DC 0.00	DGD 0.00
AH 0.00	PR 0.00 ROD 0.00
TOT NR CHG 6.41	NR+HANDLING 6.41
TOT PUB CHG 10.18	PUB+HANDLING 10.18

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefoac.com



Tuesday, September 01, 2009

Forest Oil Corporation
707 17th Street, Suite 3600
Denver, Colorado
80202

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

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Jose L. Velez
Regulatory Affairs

Enclosures

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Monday, September 21, 2009

Forest Oil Corporation
707 17th Street, Suite 3600
Denver, Colorado
80202

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

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Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 SEP 21, 2009 ACT WT LTR #PK 1
SERVICE 2DA BILL WT LTR
TRACKING# 1ZE754080248032974 ALL CURRENCY USD
RETURN NO.: REEF OFFICE
REF 2:STATE 2#8 INJECTION PERMIT APPLIC.

HANDLING CHARGE 0.00	FRT: SHP
SHIPMENT NR RATE CHARGES:	SVC 7.34 USD
DV 0.00	COD 0.00 RS 0.00
DC 0.00	DGD 0.00
AH 0.00	PR 0.00 ROD 0.00
TOT NR CHG 7.34	NR+HANDLING 7.34
TOT PUB CHG 11.66	PUB+HANDLING 11.66

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Tuesday, September 01, 2009

Forest Oil Corporation
1600 Broadway, Suite 2200
Denver, CO 80202

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

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Jose L. Velez
Regulatory Affairs

Enclosures

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Monday, September 21, 2009

Forest Oil Corporation
1600 Broadway, Suite 2200
Denver, CO 80202

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

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Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 SEP 21, 2009 ACT WT LTR #PK 1
SERVICE 2DA BILL WT LTR
TRACKING# 1ZE754080249885186 ALL CURRENCY USD
RETURN NO.: REEF OFFICE
REF 2: STATE 2#8 INJECTION PERMIT APPLIC.
HANDLING CHARGE 0.00 FRT: SHP
SHIPMENT NR RATE CHARGES: SVC 7.34 USD
DV 0.00 COD 0.00 RS 0.00
DC 0.00 DGD 0.00
AH 0.00 PR 0.00 ROD 0.00
TOT NR CHG 7.34 NR+HANDLING 7.34
TOT PUB CHG 11.66 PUB+HANDLING 11.66

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Tuesday, September 01, 2009

Samson Resources Company
Samson Plaza
Two West Second Street
Tulsa, OK 74103

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you as an offset operator. A copy of the application is attached. As an offset operator you have the option to object in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

A handwritten signature in black ink, appearing to be "Jose L. Velez", written in a cursive style.

Jose L. Velez
Regulatory Affairs

Enclosures

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Monday, September 21, 2009

Samson Resources Company
Samson Plaza
Two West Second Street
Tulsa, OK 74103

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you as an offset operator. A copy of the application is attached. As an offset operator you have the option to object in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 SEP 21, 2009 ACT WT LTR #PK 1
SERVICE 2DA BILL WT LTR
TRACKING# 1ZE754080249665593 ALL CURRENCY USD
RETURN NO.: REEF OFFICE
REF 2: STATE 2#8 INJECTION PERMIT APPLIC.

HANDLING CHARGE 0.00 FRT: SHP
SHIPMENT NR RATE CHARGES: SVC 6.41 USD
DV 0.00 COD 0.00 RS 0.00
DC 0.00 DGD 0.00
AH 0.00 PR 0.00 ROD 0.00
TOT NR CHG 6.41 NR+HANDLING 6.41
TOT PUB CHG 10.18 PUB+HANDLING 10.18

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefnac.com



Monday, September 21, 2009

BP America Production Company
P.O. Box 4587
Houston, Texas
77210-4587

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you as an offset operator. A copy of the application is attached. As an offset operator you have the option to object in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefoac.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 SEP 21, 2009 ACT WT LTR #PK 1
SERVICE 2DA BILL WT LTR
TRACKING# 1ZE754080249537150 ALL CURRENCY USD
RETURN NO.: REEF SWD
REF 2:STATE 2#8 INJECTION PERMIT APPLIC.

HANDLING CHARGE 0.00 FRT: SHP
SHIPMENT NR RATE CHARGES: SVC 6.41 USD
DV 0.00 COD 0.00 RS 0.00
DC 0.00 DGD 0.00
AH 0.00 PR 0.00 ROD 0.00
TOT NR CHG 6.41 NR+HANDLING 6.41
TOT PUB CHG 10.18 PUB+HANDLING 10.18

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefoac.com



Friday, October 09, 2009

Anne deLain W. Clark
NM Radioactive Waste Consultation Task Force
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Dear Mrs. Clark,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you per NMOC requirements. A copy of the application is attached. You have the option to object to the proposed injection permit application in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

7007 2560 0000 4665 0354

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Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.02

Postmark
8 Here
2009

Sent To	Anne deLain W. Clark
Street, Apt. No., or PO Box No.	1220 South Francis Drive
City, State, ZIP+4	Santa Fe, NM 87505

PS Form 3800, August 2006 See Reverse for Instructions

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Friday, October 09, 2009

Mosaic Potash Carlsbad, Inc.
1361 Potash Mines Rd.
Carlsbad, New Mexico 88220

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you per NMOC requirements. A copy of the application is attached. You have the option to object to the proposed injection permit application in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

7007 2560 0000 4665 0361

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Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.02

Postmark: OCT 8 2009

Sent To	
Mosaic Potash Carlsbad, Inc.	
Street, Apt. No., or PO Box No. 1361 Potash mines Rd.	
City, State, ZIP+4 [®] carlsbad, NM 88220	

PS Form 3800, August 2005 See Reverse for Instructions

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Friday, October 09, 2009

Marathon Oil Co.
2350 W Marland St
P.O. Box 2490
Hobbs NM 88240

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you as an offset operator. A copy of the application is attached. As an offset operator you have the option to object in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

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Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.02

Postmark
HOBBS
8
2009

Sent To	Marathon oil co.
Street, Apt. No., or PO Box No.	P.O. Box 2490, 2350 W. Marland
City, State, ZIP+4	Hobbs, NM 88240

PS Form 3800, August 2005 See Reverse for Instructions

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Friday, October 09, 2009

Yates Petroleum Corporation
105 South 4th Street
Artesia, New Mexico 88210

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you as an offset operator. A copy of the application is attached. As an offset operator you have the option to object in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$8.02

7007 2560 0000 4665 0378

PS Form 3800, August 2006 See Reverse for Instructions

Postmark: OCT 9 2009

Sent To: Yates Petroleum Corp
Street, Apt. No.,
or PO Box No. 105 South 4th Str.
City, State, ZIP+4 Artesia, NM 88210

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Friday, October 09, 2009

New Mexico State Land Office
P.O. Box 1148
Santa Fe, NM 87504-1148

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you per NMOCD requirements. A copy of the application is attached. You have the option to object to the proposed injection permit application in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

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Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.02

2007 2560 0000 4665 0330

Sent To: New Mexico State Land Office
Street, Apt. No.,
or PO Box No. P.O. Box 1148
City, State, ZIP+4[®] Santa Fe, NM 87504-1148

PS Form 3800, August 2006 See Reverse for Instructions

Postmark: OCT 8 2009

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Friday, October 09, 2009

Department of Energy
Carlsbad Field Office
Attn: David Moody
4021 National Park Highway
Carlsbad, New Mexico 88221

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Dear Mr. Moody,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you per NMOCD requirements. A copy of the application is attached. You have the option to object to the proposed injection permit application in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

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Return Receipt Fee (Endorsement Required)	2.34
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.02
Sent To David Moody - Dept. of Energy Street, Apt. No., or PO Box No. 4021 National Park Highway City, State, ZIP+4 Carlsbad, NM 88221	

7007 2560 0000 4665 0316

PS Form 3800, August 2006 See Reverse for Instructions

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

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(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com



Friday, October 09, 2009

Bureau of Land Management
620 E. Green St.
Carlsbad, New Mexico 88220

Re: **Application for Authorization to Inject
State "2" #8
1980' FSL & 660' FWL of Section 2,
T-23-S, R-31-E, N.M.P.M., Eddy
County, New Mexico**

Gentlemen,

Reef Exploration, L.P. is applying to the New Mexico Oil Conservation Division for a permit to inject fluid into a reservoir productive of oil and gas. This letter is to provide notification to you per NMOCD requirements. A copy of the application is attached. You have the option to object to the proposed injection permit application in writing to the New Mexico Oil Conservation Division.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogc.com.

Regards,

Jose L. Velez
Regulatory Affairs

Enclosures

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.02

7007 2560 0000 4665 0309


Postmark
OCT 8
2009
SPR

Sent To	
BUREAU OF LAND MANAGEMENT	
Street, Apt. No., or PO Box No. 620 E. Green St.	
City, State, ZIP+4 CARLSBAD, NM 88220	

PS Form 3800, August 2006 See Reverse for Instructions

REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.

1901 N Central Expy, Ste 300 • Richardson, TX 75080
(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogc.com

 This message was sent with high importance.

Jones, William V., EMNRD

From: Jose L. Velez [Josev@reefogc.com] **Sent:** Fri 10/2/2009 9:38 AM
To: Warnell, Terry G, EMNRD; Jose L. Velez; Ronald Sentz
Cc: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD; Clark, Anne, EMNRD; Reeves, Jacqueta, EMNRD; Wesley_Ingram@blm.gov; Jones, William V., EMNRD
Subject: RE: SWD Application from Reef Exploration, LP: State 2 #8 30-015-35749
Attachments:

Hello Terry,

Thanks for your assistance this morning. Per our conversation, you will provide me with the address of Anne Clark at the New Mexico WIPP Site and for Marathon Oil. As soon as I get those I will forward a formal notice with a complete copy of the application to each of the requested parties.

I will email you scanned copies of the submittals with UPS tracking numbers as well as mail copies to your office.

Regards,

Jose L. Velez

Regulatory Affairs

Reef Exploration, L.P.

josev@reefogc.com

972-437-6792

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Thursday, October 01, 2009 12:06 PM
To: Jose L. Velez
Cc: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD; Clark, Anne, EMNRD; Reeves, Jacqueta, EMNRD; Wesley_Ingram@blm.gov; Warnell, Terry G, EMNRD
Subject: SWD Application from Reef Exploration, LP: State 2 #8 30-015-35749

Hello Mr. Velez:

This application by Reef for renewal of an expired SWD permit into the Delaware is about 3300 feet from the 16 sq mile WIPP project and also in or near the defined Potash area. You have applied for renewal without sending formal notice to the same group of affected parties as was required in the original submittal a couple of years ago.

Please let me know why Halliburton was asked to review the cement bond in the interval from 4720 to 4920. Is this a thief zone?

Please send formal notice of this application (a complete copy of the submittal) to:

- a. the nearest Potash leaseholder
- b. The DOE manager of the WIPP site
- c. The New Mexico Manager of the WIPP site: Anne Clark (at this address)
- d. The BLM in Carlsbad
- e. The State Land Office in Santa Fe as the surface owner
- f. To Marathon Oil and
- g. To Yates Petroleum – please ask Yates for a waiver (they protested your previous application, so we want to be sure they are OK with this on.)

Please note, the OCD requires injection intervals to be bounded on the bottom within 200 feet with a valid plug and on the top within 100 feet with an injection packer. Your application said in one point that the injection packer would be set at 4406 which would be too high.

Send a signed form "Administrative Application Checklist" available on the OCD web site under "forms".

Please send the cement treatment reports from the service company for both the 8-5/8 inch and the 5-1/2 inch casings. (if you can locate them)

Send a wellbore diagram showing all casing and cement on the Dunes State #1 30-015-24112

Please estimate what injection rates and injection volumes you will need to put into this well.

Why didn't Reef get this well started injecting after the last permit was granted?

Thank you in advance for addressing this, please note: I will be out for the next 2 weeks, so address questions to Terry Warnell:

<http://www.emnrd.state.nm.us/OCD/engineergeology.htm>

Regards,

William V. Jones PE

New Mexico Oil Conservation Division

1220 South St. Francis

Santa Fe, NM 87505

505-476-3448



Thursday, October 08, 2009

William V. Jones PE
State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: **Injection Permit Application
State 2 Well No. 8
API #30-015-35749**

William,

Please find below and attached to this letter responses to your email dated Thursday, October 01, 2009 (copy also attached).

- a. Reef asked Halliburton to evaluate the Bond Log to confirm that we had a good cement job throughout the production string. The particular interval listed on the e-mail was to verify that the frac in the Bell Canyon interval Reef intends to perforate would stay in the zone. We have no concern with it being a thief zone.
- b. Formal notice has been sent to the following parties:
 - a. Mosaic Potash Carlsbad, Inc.
 - b. David Moody, Department of Energy
 - c. Anne deLain W. Clark, WIPP Site Manager
 - d. Carlsbad BLM
 - e. New Mexico State Land Office
 - f. Marathon Oil
 - g. Yates Petroleum
- c. The application has been modified to include a plug at 6080', which is 200' below the injection interval. The packer setting depth has also been modified and will be set at 4506'.
- d. A signed "Administrative Application Checklist" has been provided
- e. Copies of the cement treatment reports provide by Halliburton have been attached per your request
- f. The Dunes State #1 (API #30-015-24112) was never drilled. Copies of NMOCD records have been attached.

**REEF OIL & GAS PARTNERS, L.P.
REEF EXPLORATION, L.P.**

1901 N Central Expy, Ste 300 • Richardson, TX 75080
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Toll Free: (877) 915-7333 • www.reefoggc.com

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g. The proposed injection rates and injection volumes will be, as outlined in Section VII of the application:

- a. Proposed average daily injection volumes: 4,000 BWPD
- b. Proposed maximum daily injection volume: 10,000 BWPD
- c. Proposed average daily injection pressure: 1,000#
- d. Proposed maximum daily injection pressure: 1,140#

h. Reef did not undergo conversion of the State 2 #8 well last year as a result of poor economics given the plunge in oil prices. However, with prices stabilizing at current levels the economics are present. We anticipate conversion as soon as possible once the injection permit has been approved.

If you need any other information or have questions, please contact me directly at 972-437-6792 or by email at josev@reefogg.com.

Regards,

A handwritten signature in black ink, appearing to read "Jose L. Velez", is written over a horizontal line.

Jose L. Velez
Regulatory Affairs

Enclosures

E75408 OCT 5, 2009 ACT WT LTR #PK 1
SERVICE 1DA BILL WT LTR
TRACKING# 1ZE754080148540846 ALL CURRENCY USD
RETURN NO.: REEF OFFICE
REF 2: STATE 2 #8 INJ PERMIT

HANDLING CHARGE 0.00 FRT: SHP
SHIPMENT NR RATE CHARGES: SVC 13.00 USD
DV 0.00 COD 0.00 RS 0.00
DC 0.00 DGD 0.00
AH 0.00 PR 0.00 ROD 0.00
TOT NR CHG 13.00 NR+HANDLING 13.00
TOT PUB CHG 21.66 PUB+HANDLING 21.66

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REEF EXPLORATION, L.P.

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(972) 437-6792 • Fax: (972) 994-0369
Toll Free: (877) 915-7333 • www.reefogg.com

Jose L. Velez

From: Jones, William V., EMNRD [William.V.Jones@state.nm.us]
Sent: Thursday, October 01, 2009 12:06 PM
To: Jose L. Velez
Cc: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD; Clark, Anne, EMNRD; Reeves, Jacqueta, EMNRD; Wesley_Ingram@blm.gov; Warnell, Terry G, EMNRD
Subject: SWD Application from Reef Exploration, LP: State 2 #8 30-015-35749

Hello Mr. Velez:

This application by Reef for renewal of an expired SWD permit into the Delaware is about 3300 feet from the 16 sq mile WIPP project and also in or near the defined Potash area. You have applied for renewal without sending formal notice to the same group of affected parties as was required in the original submittal a couple of years ago.

- a. Please let me know why Halliburton was asked to review the cement bond in the interval from 4720 to 4920. Is this a thief zone?
- b. Please send formal notice of this application (a complete copy of the submittal) to:
 - a. the nearest Potash leaseholder
 - b. The DOE manager of the WIPP site
 - c. The New Mexico Manager of the WIPP site: Anne Clark (at this address)
 - d. The BLM in Carlsbad
 - e. The State Land Office in Santa Fe as the surface owner
 - f. To Marathon Oil and
 - g. To Yates Petroleum – please ask Yates for a waiver (they protested your previous application, so we want to be sure they are OK with this on.)
- c. Please note, the OCD requires injection intervals to be bounded on the bottom within 200 feet with a valid plug and on the top within 100 feet with an injection packer. Your application said in one point that the injection packer would be set at 4406 which would be too high.
- d. Send a signed form “Administrative Application Checklist” available on the OCD web site under “forms”.
- e. Please send the cement treatment reports from the service company for both the 8-5/8 inch and the 5-1/2 inch casings. (if you can locate them)
- f. Send a wellbore diagram showing all casing and cement on the Dunes State #1 30-015-24112
- g. Please estimate what injection rates and injection volumes you will need to put into this well.
- h. Why didn't Reef get this well started injecting after the last permit was granted?

Thank you in advance for addressing this, please note: I will be out for the next 2 weeks, so address questions to Terry Warnell:

<http://www.emnrd.state.nm.us/OCD/engineergeology.htm>

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

The Road to Excellence Starts with Safety					
Sold To #: 304971		Ship To #: 2613045		Primary Sales Order #: 5498493	
Customer: REEF EXPLORATION, INC. EBUS			Job Purpose: Cement Surface Casing		
Well Name: STATE 2			Well #: 8		API/UWI #:
Field:	City: LOVING		County/Parish: Eddy		State/Prov: New Mexico
Customer Rep: PRUITT, ROGER Office:432-425-4939, Mobile:432-289-3213 ORLANDO					
Ordered By: PRUITT, ROGER Office:432-425-4939, Mobile:432-289-3213 ORLANDO					
Contractor: PATTERSON;					
Rig/Platform Name/Num: 512					Location: Land
Sales Person: PAGE, DENNIS			Status: Job Scheduled		
PPE, Safety Huddles, JSA's, HOC & Near Miss Reporting, BBP Observations					
Distance/Mileage(1 way) Srvc:		50.0 miles		Distance/Mileage(1 way) Mtls: 50.0 miles	
Call Taken By:		DAVID RODRIGUEZ		Call Taken Date/Time:	
Call Out Crew Date/Time:				Rqstd On Location Date/Time: 18-Nov-2007 23:00 MST	
				Rqstd Job Start Date/Time: 18-Nov-2007 23:59 MST	
HSE Information					
H2S Present:		Unknown		CO2 Present: Unknown	
Drive Safely, Lights On for Safety, Wear Seat Belts, Observe all HES / Customer Safety Policies.					
Directions: FROM 62/180 HIGH WAY GO 35.2 MILES TO CAMBELL RD (C29) GO SOUTH ON CAMBELL FOR 16 MILES TO RIG SIGN. TURN RIGHT FOR .3 MILES TURN RIGHT TO RIG.					
Remarks					
General: WILL TRUCK LEAD, TAIL CEMENT TO LOCATION WHEN JOB CALLS IN!!!!					
MARIO DELIVERED FE AND CIRCULATING IRON 11/17					
11/18/07 PER BILLY GIDEON, PLEASE LOAD AND HOLD ALL CEMENT (KW)					
Tie on Connection: Take Quick Latch Head if Possible!					
Surface Equipment (Generic): NEED MAKE SURE TAKE 13 3/8 RUBBER PLUG					
Materials: COMPANYMAN REQUESTED THAT YOU PICK UP ALL TRASH BEFORE LEAVING LOCATION. IF YOU HAVE WATER ON PUMP TRUCK AFTER YOU ARE DONE WITH JOB MAKE SURE YOU GO TO ONE OF REEF LOCATIONS THAT HAS A PIT AND YOU DRAIN PUMP WATER THERE.					
HSE Information: Remember.....Dont find out about safety by Accident!!! Identify & communicate all hazards on location. Look out for our new employees!					
Job Procedures					
Pump 20 bbl H2O Spacer Ahead, Pump Lead Cement, Pump Tail Cement, Shut down & drop plug! Start Displacement H2O, Bump Plug! DO NOT OVER DISPLACE PLUG!					
Pumping Equipment (Generic)					
Description	Qty	Comments	Description	Qty	Comments
75-TC4 W/ADC	1		PICK UP TRUCK	1	
BULK TRUCKS	2				
Surface Equipment (Generic)					
Description	Qty	Comments	Description	Qty	Comments
PLUG CONTAINER	1	13 3/8 QUICK LATCH	SWAGE	2	8rd

Job Info / Well Data											
Job Depth (MD) ft	Job Depth (TVD) ft	Max Pressure psig	Well Fluid Type		Well Fluid Weight lbm/gal	Displacement Fluid		Displ Fluid Weight lbm/gal			
900.0	900.0		Brine		9.0						
BHST degF	Source		BHCT degF	Source		Log Temp degF	Time Since Circ Stopped				
85											
Job Tubulars/Tools											
Description	Size in	Weight lbm/ft	ID in	Thread	Grade	Top MD ft	Btm MD ft	Top TVD ft	Btm TVD ft	Shoe Jnt ft	% Excess
Surface Casing	13.375	54.5	12.615			0.0	900.0			40.0	0
17-1/2" Hole			17.5			0.0	900.0				0
Tie on Connection											
Size: 13 3/8 in		Thread: 8 RD (LT&C)			Type: Casing			Cross Over Required: No			
Materials											
Stage/Plug #: 1											
Fluid #	Fluid Name	Package/SBM/Material Name			Rqstd Del Qty	UOM	Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk
1	HL Premium Plus	HALLIBURTON LIGHT PREMIUM PLUS - SBM (14241)			255	sacks	12.6	1.92	10.49		
10.491 Gal		FRESH WATER Mix-On-Fly to Slurry									
1 %		CALCIUM CHLORIDE - HI TEST PELLET (100005053) Pre-Mix Dry									
0.125 lbm		POLY-E-FLAKE (101216940) Pre-Mix Dry									
Fluid #	Fluid Name	Package/SBM/Material Name			Rqstd Del Qty	UOM	Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk
2	Premium Plus	Premium Plus			300	sacks	14.8	1.33	6.33		
94 lbm		CMT - PREMIUM PLUS - CLASS C REG OR TYPE III, BULK (100012205) Pre-Mix Dry									
6.328 Gal		FRESH WATER Mix-On-Fly to Slurry									
1 %		CALCIUM CHLORIDE - HI TEST PELLET (100005053) Pre-Mix Dry									
Sales/Rental/3 rd Party											
SAP #	Description				Qty	Qty uom	Supplier		Comments/ Tech ID #		
101235693	PLUG,CMTG,TOP,13 3/8,HWE,11.79 MIN/12.72				1	EA					
2	MILEAGE FOR DELIVERY OF IRON				100	MI					
86954	ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON				100	MI					
45	FILLUP IRON CHARGE				1	EA					

Price Book 9/1/2007

Date:Sold

To # :

SUMMIT Version: 7.20.130

Price Permian Basin

Book/Cntct

#:

Prpsl #:

Sales Order # :

7.20.130

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<i>The Road to Excellence Starts with Safety</i>			
Sold To #: 304971	Ship To #: 2613045	Primary Sales Order #: 5498493	
Customer: REEF EXPLORATION, INC. EBUS		Job Purpose: Cement Surface Casing	
Well Name: STATE 2	Well #: 8	API/UWI #:	
Field:	City: LOVING	County/Parish: Eddy	State/Prov: New Mexico
Customer Rep: PRUITT, ROGER Office: 432-425-4939 , Mobile: 432-289-3213 ORLANDO			
Ordered By: PRUITT, ROGER Office: 432-425-4939 , Mobile: 432-289-3213 ORLANDO			
Contractor: PATTERSON;			
Rig/Platform Name/Num: 512			Location: Land
Sales Person: PAGE, DENNIS			Status: Job Scheduled

Job Totals							
Total Job Weight (Blended):	52253	lbm	26.13	tons	Total Job Volume (Blended):	590	ft3

Stage/Plug #: 1				Fluid #: :1				
Blend/Slurry Name: HALLIBURTON LIGHT PREMIUM PLUS - SBM (14241)				Display Name: HL Premium Plus				
Quantity:		255 sacks	Blend Volume:		286 ft3	Blend Weight:		23771 lbm
Final Qty Confirmed By:			Date/Time:			Loader:		
SBM/SAP #	Material		Conc:	UOM	Qty	UOM	Grind	Lab Specified Lot #
100012205	CMT - PREMIUM PLUS - CLASS C REG OR TYPE III, BULK Pre-Mix Dry		61.1	lbm	15580.5	lbm		
100003690	POZMIX A (BULK) FLYASH (100003690) Pre-Mix Dry		25.9	lbm	6604.5	lbm		
100003682	BENTONITE, BULK (100003682) Pre-Mix Dry		6	%	1331.1	lbm		
	FRESH WATER Mix-On-Fly to Slurry		10.491	Gal	2675.21	Gal		
100005053	CALCIUM CHLORIDE - HI TEST PELLET (100005053) Pre-Mix Dry		1	%	222.84	lbm		
101216940	POLY-E-FLAKE (101216940) Pre-Mix Dry		0.125	lbm	31.88	lbm		

Stage/Plug #: 1				Fluid #: :2			
Blend/Slurry Name: Premium Plus				Display Name: Premium Plus			
Quantity:	300 sacks	Blend Volume:	304 ft3	Blend Weight:	28482 lbm		
Final Qty Confirmed By:		Date/Time:		Loader:			
SBM/SAP #	Material	Conc.	UOM	Qty	UOM	Grind	Lab Specified Lot #
100012205	CMT - PREMIUM PLUS - CLASS C REG OR TYPE III, BULK Pre-Mix Dry	94	lbm	28200.0	lbm		
	FRESH WATER Mix-On-Fly to Slurry	6.328	Gal	1898.4	Gal		
100005053	CALCIUM CHLORIDE - HI TEST PELLET (100005053) Pre-Mix Dry	1	%	282.0	lbm		

The Road to Excellence Starts with Safety			
Sold To #: 304971	Ship To #: 2613045	Primary Sales Order #: 5498493	
Customer: REEF EXPLORATION, INC. EBUS		Job Purpose: Cement Surface Casing	
Well Name: STATE 2		Well #: 8	API/UWI #:
Field:	City: LOVING	County/Parish: Eddy	State/Prov: New Mexico
Customer Rep: PRUITT, ROGER Office:432-425-4939, Mobile:432-289-3213 ORLANDO			
Ordered By: PRUITT, ROGER Office:432-425-4939, Mobile:432-289-3213 ORLANDO			
Contractor: PATTERSON;			
Rig/Platform Name/Num: 512			Location: Land
Sales Person: PAGE, DENNIS			Status: Job Scheduled

Equipment					
SAP #	Description	Qty	Qty uom	Supplier	Comments/ Tech ID #
101235693	PLUG,CMTG,TOP,13 3/8,HWE,11.79 MIN/12.72	1	EA		
2	MILEAGE FOR DELIVERY OF IRON	100	MI		
86954	ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	100	MI		
45	FILLUP IRON CHARGE	1	EA		

The Road to Excellence Starts with Safety					
Sold To #: 304971		Ship To #: 2613045		Primary Sales Order #: 5512771	
Customer: REEF EXPLORATION, INC. EBUS			Job Purpose: Cement Multiple Stages		
Well Name: STATE 2			Well #: 8		API/UWI #:
Field:	City: LOVING		County/Parish: Eddy		State/Prov: New Mexico
Customer Rep: Pruitt, Roger Office:432-425-4939 , Mobile:Orlando Lozano432-288-3213					
Ordered By: Pruitt, Roger Office:432-425-4939 , Mobile:Orlando Lozano432-288-3213					
Contractor: PATTERSON;					
Rig/Platform Name/Num: 512					Location: Land
Sales Person: PAGE, DENNIS			Status: Active		
PPE, Safety Huddles, JSA's, HOC & Near Miss Reporting, BBP Observations					
Distance/Mileage(1 way) Srvc:		50.0 miles		Distance/Mileage(1 way) Mtls: 50.0 miles	
Call Taken By:		BILLY GIDEON		Call Taken Date/Time:	
Call Out Crew Date/Time:		01-Dec-2007 22:00 MST		Rqstd On Location Date/Time: 02-Dec-2007 03:00 MST	
				Rqstd Job Start Date/Time: 02-Dec-2007 04:00 MST	
HSE Information					
H2S Present:		Unknown		CO2 Present: Unknown	
Drive Safely. Lights On for Safety. Wear Seat Belts. Observe all HES/ Customer Safety Policies.					
<p>Directions:</p> <p>FROM 62/180 HIGH WAY GO 35.2 MILES TO CAMPBELL RD (C29) GO SOUTH ON CAMPBELL FOR 16 MILES TO RIG SIGN. TURN RIGHT FOR .3 MILES TURN RIGHT FOR .2 MILE, TURN LEFT AT RIG SIGN TO RIG.</p>					
Remarks					
<p>General: FINAL VOLUMES WILL BE BASED OFF OF E-LOGS, WILL CALL TO SPOT AND LOAD CEMENT.</p> <p>11/29/07 PER BILLY DELIVER THE FE,SWAGE, SINGLE/DOUBLE ASAP TODA</p> <p>LOAD FIRST STAGE CEMENT IN TIERS 2 & 3 AND SECOND STAGE LEAD IN TIER #1. ASAP PER B. GIDEON</p> <p>12/01/2007</p> <p>AS PER BILLY GIDEON NEED TO HAVE TRUCKS ON LOCATION BY 0300 MST READY FOR JOB TIME AT 0400 MST 12/02/2007</p>					
Job Info/Well Data: 11/29/07 MARIO SAUCEDO WILL DELIVER FE,DOUBLE/SINGLE AND SWAGE THIS AM (KW)					
Materials: Remember.....Dont find out about safety by Accident!!! Identify & communicate all hazards on location. Look out for our new employees!					
HSE Information: Remember.....Dont find out about safety by Accident!!! Identify & communicate all hazards on location. Look out for our new employees!					
Job Procedures					
<p>10 bbl H2O Spacer ahead, 1000 Gal. Superflush 102, 10 bbl Spacer behind, Mix Cement, Shut down & drop plug & wash pumps & lines to the pit! Start displacement H2O to DV Tool. Then finish displacement with mud, Bump Plug & Check Float. Drop Bomb & open DV tool & circulate cement off top of tool before switching over to the rig to circulate the remainder of the 4 HRS. Start 2nd Stage.10 bbl H2O Spacer ahead, 1000 Gal. Superflush 102, 10 bbl Spacer behind, Mix Lead Cement, Mix Tail Cement, Shut down & drop plug & wash pumps & lines to the pit! Start displacement H2O Bump Plug & close DV Tool.</p>					
Pumping Equipment (Generic)					
Description	Qty	Comments	Description	Qty	Comments
75-TC4 W/ADC	1		FIELD STORAGE BIN	1	
BULK TRUCKS	2		PICK UP TRUCK	2	

Pumping Equipment (Generic)											
Description	Qty	Comments	Description	Qty	Comments						
BOOSTER PUMP	1		TRANSPORTS	1							
STAND-BY UNIT	1										

Surface Equipment (Generic)					
Description	Qty	Comments	Description	Qty	Comments
PLUG CONTAINER	1		SWAGE	2	

Job Info / Well Data						
Job Depth (MD) ft	Job Depth (TVD) ft	Max Pressure psig	Well Fluid Type	Well Fluid Weight lbm/gal	Displacement Fluid	Displ Fluid Weight lbm/gal
8577.6	8577.6		Water Based Mud	9.8	Fresh Water	8.33
BHST degF	Source	BHCT degF	Source	Log Temp degF	Time Since Circ Stopped	
140	Calculated using customer formula					

Job Tubulars/Tools											
Description	Size in	Weight lbm/ft	ID in	Thread	Grade	Top MD ft	Btm MD ft	Top TVD ft	Btm TVD ft	Shoe Jnt ft	% Excess
Intermediate Casing	8.625	32.	7.921			0.0	4,500.0			40.0	
Multiple Stage Cementer						6,418.0	6,418.0				
7-7/8" Hole			7.875			4,500.0	8,468.0				
Production Casing	5.5	17.	4.892			0.0	8,474.0			47.4	

Tie on Connection									
Size: 5 1/2 in	Thread: 8 RD (LT&C)	Type: Casing	Cross Over Required: No						
Materials									
Stage/Plug #: 1									
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk
1	Fresh Water		10.00	bbl	8.33				
2	PUMP 1000 GALLONS SUPER FLUSH 102	SUPER FLUSH 102 - SBM (12200)	1,000.00	Gal	9.4				
3	Fresh Water		10.00	bbl	8.33				
4	1st Stage Cement	POZ PREMIUM 50/50 - SBM (12302)	500	sacks	14.4	1.29	5.95		
	0.6 %	HALAD(R)-9, 50 LB (100001617) Pre-Mix Dry							
	3 lbm	POTASSIUM CHLORIDE 7% (100001585) Pre-Mix Dry							
	0.4 %	SUPER CBL, 50 LB PAIL (100003668) Pre-Mix Dry							
	0.2 %	HR-7 (100005055) Pre-Mix Dry							
	5.948 Gal	FRESH WATER Mix-On-Fly to Slurry							

Sold To #: 304971

Ship To #: 2613045

Lab Project #:

Sales Order #: 5512771

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Stage/Plug #: 2									
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk
1	SUPER FLUSH 102	SUPER FLUSH 102 - SBM (12200)	1,000.00	Gal	9.4				
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk
2	2ND STAGE LEAD	HALLIBURTON LIGHT PREMIUM - SBM (12311)	200	sacks	12.7	1.94	10.62		
0.6 %		HALAD(R)-9, 50 LB (100001617) Pre-Mix Dry							
3 lbm		POTASSIUM CHLORIDE 7% (100001585) Pre-Mix Dry							
0.125 lbm		POLY-E-FLAKE (101216940) Pre-Mix Dry							
10.616 Gal		FRESH WATER Mix-On-Fly to Slurry							
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk
3	2ND STAGE TAIL CEMENT	POZ PREMIUM 50/50 - SBM (12302)	500	sacks	14.4	1.31	5.93		
5.927 Gal		FRESH WATER Mix-On-Fly to Slurry							
5 lbm		SALT, BULK (100003695) Pre-Mix Dry							
0.4 %		HALAD(R)-9, 50 LB (100001617) Pre-Mix Dry							
0.4 %		CFR-3, W/O DEFOAMER, 50 LB SK (100003653) Pre-Mix Dry							
Packaged Materials									
SAP #	Material		Qty	UOM	Comments				
13451	FLO-CHEK A , BULK		665.98	Gal					
Sales/Rental/3 rd Party									
SAP #	Description		Qty	Qty uom	Supplier	Comments/ Tech ID #			
45	CIRCULATING IRON RENTAL		1	EA					
Personnel									
Employee No.	Employee Name	Employee No.	Employee Name		Employee No.	Employee Name			
393392	CABALLERO, DANIEL								

Sold To #: 304971

Ship To #: 2613045

Lab Project #:

Sales Order #: 5512771

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The Road to Excellence Starts with Safety			
Sold To #: 304971	Ship To #: 2613045	Primary Sales Order #: 5508357	
Customer: REEF EXPLORATION, INC. EBUS		Job Purpose: Cement Intermediate Casing	
Well Name: STATE 2	Well #: 8	API/UWI #:	
Field:	City: LOVING	County/Parish: Eddy	State/Prov: New Mexico
Customer Rep: Pruitt, Roger Office:432-425-4939 , Mobile:Orlando Lozano432-288-3213			
Ordered By: Pruitt, Roger Office:432-425-4939 , Mobile:Orlando Lozano432-288-3213			
Contractor: PATTERSON;			
Rig/Platform Name/Num: 512			Location: Land
Sales Person: PAGE, DENNIS		Status: Job Scheduled	
PPE, Safety Huddles, JSA's, HOC & Near Miss Reporting, BBP Observations			
Distance/Mileage(1 way) Srvc:	50.0 miles	Distance/Mileage(1 way) Mtls:	50.0 miles
Call Taken By:	BILLY GIDEON	Call Taken Date/Time:	
Call Out Crew Date/Time:		Rqstd On Location Date/Time:	24-Nov-2007 03:00 MST
		Rqstd Job Start Date/Time:	24-Nov-2007 04:00 MST
HSE Information			
H2S Present:	Unknown	CO2 Present:	Unknown
Drive Safely, Lights On for Safety, Wear Seat Belts, Observe all HES/ Customer Safety Policies.			
Directions: FRON 62/180 HIGH WAY GO 35.2 MILES TO CAMBELL RD (C29) GO SOUTH ON CAMBELL FOR 16 MILES TO RIG SIGN. TURN RIGHT FOR .3 MILES TURN RIGHT FOR .2 MILE, TURN LEFT AT RIG SIGN TO RIG.			
Remarks			
General: Final cement volumes will be based off of a fluid caliper! SET OUT AND DELIVER fe 11/21/07 AFTER 1200 SPOT AND LOAD BIN WITH 600 LEAD AND 300 TAIL, DO NOT TAKE TRUCKS OUT TO SPOT UNTIL AFTER 1200 HOURS ON 11/21. bin MUST BE SPOTTED AND LOADED 11/21 AFTER 1200 HRS. DO NOT BOOST OUT PUMP TRUCKS ON GROUND OR NEXT LOCATION FOLLOWING JOB COMPLETION. REVISED PER BILLY GIDEON NEED TO LOAD 500 LEAD 300 TAIL AS PER B.GIDEON 11/23 @ 0935 NEED TO LOAD AND HOLD REMAINING CEMENT. JOB SHOULD BE UP LATER. NEED TO BE ON LOCATION AT 0300 MST PER BILLY GIDEON JOB TIME WILL BE AT 0400 MST 11/24/2007			
Materials: COMPANY REQUESTED THAT YOU PICK UP ALL TRASH BEFORE LEAVING LOCATION.			
HSE Information: Remember.....Dont find out about safety by Accident!!! Identify & communicate all hazards on location. Look out for our new employees!			
Job Procedures			
Pump 20 bbl H2O Spacer Ahead, Pump Lead Cement, Pump Tail Cement, Shut down & drop plug! Start Displacement H2O, Bump Plug! DO NOT OVER DISPLACE PLUG!			

Pumping Equipment (Generic)												
Description	Qty	Comments	Description	Qty	Comments							
75-TC4 W/ADC	1		FIELD STORAGE BIN	1								
BULK TRUCKS	3											
Surface Equipment (Generic)												
Description	Qty	Comments	Description	Qty	Comments							
PLUG CONTAINER	1		SWAGE	2								
Job Info / Well Data												
Job Depth (MD) ft	Job Depth (TVD) ft	Max Pressure psig	Well Fluid Type		Well Fluid Weight lbm/gal	Displacement Fluid		Displ Fluid Weight lbm/gal				
4500.0	4500.0		Water Based Mud		8.33	Fresh Water		8.33				
BHST degF	Source		BHCT degF	Source		Log Temp degF	Time Since Circ Stopped					
112	Calculated using customer formula											
Job Tubulars/Tools												
Description	Size in	Weight lbm/ft	ID in	Thread	Grade	Top MD ft	Btm MD ft	Top TVD ft	Btm TVD ft	Shoe Jnt ft	% Excess	
Surface Casing	13.375	54.5	12.615			0.0	900.0			40.0		
Intermediate Casing	8.625	32.	7.921			0.0	4,500.0			40.0		
11" Hole			11.			900.0	4,500.0					
Tie on Connection												
Size: 8 5/8 in		Thread: 8 RD			Type: Casing			Cross Over Required: No				
Materials												
Stage/Plug #: 1												
Fluid #	Fluid Name	Package/SBM/Material Name			Rqstd Del Qty	UOM	Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk	
1	INTERFILL C	INTERFILL C - SBM (14210)			740	sacks	11.9	2.47	14.3			
14.297 Gal		FRESH WATER Mix-On-Fly to Slurry										
Fluid #	Fluid Name	Package/SBM/Material Name			Rqstd Del Qty	UOM	Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Fluid+Liq AddGal/sk	
2	Premium Plus	Premium Plus			300	sacks	14.8	1.32	6.32			
94 lbm		CMT - PREMIUM PLUS - CLASS C REG OR TYPE III, BULK (100012205) Pre-Mix Dry										
6.315 Gal		FRESH WATER Mix-On-Fly to Slurry										
Sales/Rental/3 rd Party												
SAP #	Description				Qty	Qty uom	Supplier		Comments/ Tech ID #			
101227839	PLUG,CMTG,TOP,8 5/8,HWE,7.20 MIN/8.09 MA				1	EA						
45	CIRCULATING IRON CHARGE				1	EA						

Sold To #: 304971

Ship To #: 2613045

Lab Project #:

Sales Order #: 5508357

SUMMIT Version: 7.20.130

Tuesday, October 06, 2009 09:28:00

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Halliburton Cement Report

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (505) 392-0717 Fax: (505) 392-0750

TOA:

Customer: Reef Exploration	Depth: 900 ft	Test Date: 16-Nov-07
Well St. 2 #8	BHST: 80 degrees	Requested By: David Rodriguez
County/Stat Eddy, NM	BHCT: 80 degrees	Stage Number: 1
District: Hobbs	Job Type: Surface	Slurry: Tail
Blend: Pilot Test	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

Premium Plus

Mixed with the following additives:

1 % CaCl₂

Consistency Information

Time	Temp	Press	Consistency
2:46	80 degs	600 psi	70 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	80 degs	650 psi	Crush
24	hours	80 degs	1200 psi	Crush
48	hours	80 degs	1650 psi	Crush

Water Amt: **6.52 gals/sk**

Density: **14.8 ppg**

Yield: **1.35 ft³/sk**

Fluid Properties

Temp	Fluid Loss	Free H ₂ O	Settling	300	200	100	6	3	PV	YP	N'	K'
80 degs	677 cc's	0.0%		57	46	29	19	10	33	25.6	0.62	0.013

Comments

Signed:

Notice: This report is the property of Halliburton Energy Services, a division of Halliburton Company, and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the expressed written approval of Halliburton; it may however be used in the course of regular business operations by any person or concern receiving such report from Halliburton. This report is for information purposes only and the content is limited to the sample described. Halliburton makes no warranties, expressed or implied as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage regardless of cause, including any act or omission of Halliburton, resulting from the use hereof. Note: Cement Company will be considered to be our main supplier unless other information is given.

Halliburton Cement Report

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (505) 392-0717 Fax: (505) 392-0750

TOA:

Customer: Reef Exploration	Depth: 900 ft	Test Date: 16-Nov-07
Well St. 2 #8	BHST: 80 degrees	Requested By: David Rodriguez
County/Stat Eddy, NM	BHCT: 80 degrees	Stage Number: 1
District: Hobbs	Job Type: Surface	Slurry: Lead
Blend: Pilot Ref	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

Premium Plus HLC

Mixed with the following additives:

1	%	CaCl2
0.125	lb/sk	Pol E Flake

Consistency Information

Time	Temp	Press	Consistency
6:05	80 degs	600 psi	70 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	80 degs	50 psi	Crush
24	hours	80 degs	160 psi	Crush
48	hours	80 degs	210 psi	Crush

Water Amt: **10.78 gals/sk**

Density: **12.6 ppg**

Yield: **1.94 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3	PV	YP	N'	K'
80 degs	673 cc's	0.0%		53	46	35	21	15	21	34.1	0.38	0.056

Comments

Signed:

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Halliburton Cement Report

C07- 554-02-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 6650 ft	Test Date: 29-Nov-07
Well Name: St. 2 #8	BHST: 127 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 97 degrees	Stage Number: 2
District: Hobbs	Job Type: Production	Slurry: Tail
Blend: Plant Blend	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

50/50 Premium/Poz

Mixed with the following additives:

5	lb/sk	Salt
0.4	%	Halad-9
0.4	%	CFR-3

Consistency Information

Time	Temp	Press	Consistency
3:15	97 degs	3900 psi	70 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
------	------	------	----------	--------

Water Amt: **6.18 gals/sk**

Density: **14.4 ppg**

Yield: **1.33 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
97 degs	160 cc's	0.0%		55	42	35	20	7

Comments

Signed:

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Halliburton Cement Report

C07- 554-01-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 6650 ft	Test Date: 29-Nov-07
Well Name: St. 2 #8	BHST: 127 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 97 degrees	Stage Number: 2
District: Hobbs	Job Type: Production	Slurry: Lead
Blend: Plant Blend	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

Premium HLC

Mixed with the following additives:

3	lb/sk	KCL
0.6	%	Halad-9
0.125	lb/sk	Pol E Flake

Consistency Information

Time	Temp	Press	Consistency
4:00	97 degs	3900 psi	5 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
------	------	------	----------	--------

Water Amt: **10.53 gals/sk**

Density: **12.7 ppg**

Yield: **1.93 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
97 degs	306 cc's	0.0%		41	33	27	12	8

Comments

Signed:

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Halliburton Cement Report

C07- 553-01-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 8570 ft	Test Date: 29-Nov-07
Well Name: St. 2 #8	BHST: 139 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 104 degrees	Stage Number: 1
District: Hobbs	Job Type: Production	Slurry: Lead
Blend: Plant Blend	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

50/50 Premium/Poz

Mixed with the following additives:

0.4	%	Super CBL
0.6	%	Halad-9
3	lb/sk	KCL
0.2	%	HR-7

Consistency Information

Time	Temp	Press	Consistency
4:07	104 degs	4700 psi	30 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
------	------	------	----------	--------

Water Amt: **5.87 gals/sk**

Density: **14.4 ppg**

Yield: **1.29 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
104 degs	220 cc's	0.0%		66	50	31	8	4

Comments

Signed:

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Halliburton Cement Report

C07- 545-02-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 6650 ft	Test Date: 25-Nov-07
Well Name: State 2 #8	BHST: 127 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 97 degrees	Stage Number: 2
District: Hobbs	Job Type: Production	Slurry: Tail
Blend: Pilot Test	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

50/50 Premium/Poz

Mixed with the following additives:

5	lb/sk	Salt
0.4	%	Halad-9
0.4	%	CFR-3

Consistency Information

Time	Temp	Press	Consistency
3:17	97 degs	3900 psi	58 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	127 degs	580 psi	Crush
24	hours	127 degs	950 psi	Crush
48	hours	127 degs	1385 psi	Crush

Water Amt: **6.17 gals/sk**

Density: **14.4 ppg**

Yield: **1.33 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
97 degs	291 cc's	0.0%		63	47	30	8	4

Comments

Signed:

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Halliburton Cement Report

C07- 545-01-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 6650 ft	Test Date: 25-Nov-07
Well Name: State 2 #8	BHST: 127 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 97 degrees	Stage Number: 2
District: Hobbs	Job Type: Production	Slurry: Lead
Blend: Pilot Test	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

Premium HLC

Mixed with the following additives:

3	lb/sk	KCL
0.6	%	Halad-9
0.125	lb/sk	Pol E Flake

Consistency Information

Time	Temp	Press	Consistency
3:12	97 degs	3900 psi	40 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	127 degs	100 psi	Crush
24	hours	127 degs	220 psi	Crush
48	hours	127 degs	375 psi	Crush

Water Amt: **10.53 gals/sk**

Density: **12.7 ppg**

Yield: **1.93 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
97 degs	331 cc's	0.0%		42	33	26	11	6

Comments

Signed:

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Halliburton Cement Report

C07- 541-01-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 8570 ft	Test Date: 21-Nov-07
Well Name: St. 2 #8	BHST: 139 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 104 degrees	Stage Number: 1
District: Hobbs	Job Type: Production	Slurry: Lead
Blend: Pilot Test	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

50/50 Premium/Poz

Mixed with the following additives:

0.4	%	Super CBL
3	lb/sk	KCL
0.6	%	Halad-9
0.2	%	HR-7

Consistency Information

Time	Temp	Press	Consistency
4:30	104 degs	5100 psi	20 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	139 degs	610 psi	Crush
24	hours	139 degs	1100 psi	Crush
48	hours	139 degs	1510 psi	Crush

Water Amt: **5.87 gals/sk**

Density: **14.4 ppg**

Yield: **1.29 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
104 degs	242 cc's	0.0%		69	51	32	7	4

Comments: Fluid properties and compressives were done without Super CBL.

Signed:

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Halliburton Cement Report

C07- 535-02-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 4500 ft	Test Date: 18-Nov-07
Well Name: St. 2 #8	BHST: 114 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 93 degrees	Stage Number: 1
District: Hobbs	Job Type: Intermediate	Slurry: Tail
Blend: Pilot Test	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

Premium Plus

Mixed with the following additives:

Consistency Information

Time	Temp	Press	Consistency
2:40	93 degs	2300 psi	70 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	114 degs	1029 psi	UCA
24	hours	114 degs	1390 psi	UCA
48	hours	114 degs	1977 psi	UCA

Water Amt: **6.50 gals/sk**

Density: **14.8 ppg**

Yield: **1.34 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
93 degs	1265 cc's	0.6%		56	38	29	20	12

Comments

Signed:

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Halliburton Cement Report

C07- 535-01-00-07

Permian Basin Area Laboratory

5801 Lovington Highway, Hobbs, New Mexico Phone: (575) 392-0717 Fax: (575) 392-0750

TOA:

Customer: Reef Exploration	Depth: 4500 ft	Test Date: 18-Nov-07
Well Name: St. 2 #8	BHST: 114 degrees	Requested By: Billy Gideon
County/State: Eddy, NM	BHCT: 93 degrees	Stage Number: 1
District: Hobbs	Job Type: Intermediate	Slurry: Lead
Blend: Pilot Test	Base Cement: Cemex	Water: Location Water

Slurry Information

Cement:

Premium Plus Interfill

Mixed with the following additives:

0.125 lb/sk Pol E Flake

Consistency Information

Time	Temp	Press	Consistency
3:00	93 degs	2300 psi	37 BCU

Compressive Strengths

Time	Unit	Temp	Strength	Method
12	hours	114 degs	121 psi	UCA
24	hours	114 degs	167 psi	UCA
48	hours	114 degs	248 psi	UCA

Water Amt: **14.52 gals/sk**

Density: **11.9 ppg**

Yield: **2.49 ft3/sk**

Fluid Properties

Temp	Fluid Loss	Free H2O	Settling	300	200	100	6	3
93 degs	450 cc's	0.0%		50	41	32	27	19

Comments

Signed:

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Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

AUG 17 1991

U. C. D.

WELL API NO. 38-015-24112
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. V-302
7. Lease Name or Unit Agreement Name DUNES STATE
8. Well No. 1
9. Pool name or Wildcat MORROW WILDCAT
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3532 EST.

SUNDY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	2. Name of Operator Mobil Producing Tx. & N.M. Inc.*
3. Address of Operator *Mobil Exploration & Producing U.S. Inc., as Agent for Mobil Producing TX. & N.M. Inc., P. O. Box 633, Midland, TX 79702	4. Well Location Unit Letter J : 1980 Feet From The SOUTH Line and 1980 Feet From The EAST Line Section 2 Township 23S Range 31E NMPM EDDY County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3532 EST.	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input checked="" type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

SAID WELL WAS NEVER DRILLED. RATHOLE ONLY APPROXIMATELY 100 FEET DEEP. CSG W/30 INCHES OD PIPE & CAPPED WITH 30 INCHES WELDED ON AT GROUND LEVEL.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE J. W. Dixon TITLE Engineering Technician DATE 8/5/91
TYPE OR PRINT NAME J. W. DIXON TELEPHONE NO. (915) 688-2452

(This space for State Use)

APPROVED BY For Record Only TITLE DATE
CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	1
FILE	1
U.S.G.S.	2
LAND OFFICE	1
OPERATOR	1

NEW MEXICO OIL CONSERVATION COMMISSION

RECEIVED

30-015-24112
Form C-101
Revised 1-1-65

MAR 10 1982

O. C. D.
ARTESIA, OFFICE

5A. Indicate Type of Lease

STATE ☒ FEE ☐

5. State Oil & Gas Lease No.

V-302

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Unit Agreement Name
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		8. Farm or Lease Name Dunes State
2. Name of Operator The Superior Oil Company		9. Well No. 1
3. Address of Operator P.O. Box 3901, Midland, Texas 79702		10. Field and Pool, or Willcat Morrow Wildcat
4. Location of Well UNIT LETTER J LOCATED 1980 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE OF SEC. 2 TWP. 23S RGE. 31E NMDM		12. County Eddy
19. Proposed Depth 16,000		19A. Formation Morrow
20. Rotary or C.T. Rotary		21. Approx. Date Work will start March 20, 1982
21. Elevations (Show whether DF, RT, etc.) 3532' est.		21A. Kind & Status Plug. Bond Blanket
21B. Drilling Contractor Wilbros		

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
Rat Hole	30"	310#	40'	Redi Mix	Surface
26"	16"	65#	630'	1500	Surface
14 3/4"	10 3/4"	45.5#	4640'	5500	Surface
* 9 1/2"	7 5/8"	33.7#	12,590	2000	4,000'
6 1/2"	5"	18#	15,500 (TD)	500	12,000'

See me to be located

APR 10 1982
APR 10 1982
3-17-82

180
PERMIT TO DRILL
9-15-82
UNLESS DRILLING UNDERWAY

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW TIME ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed G. E. Tate Title Production Superintendent Date 3/9/82

G. E. Tate (This space for State Use)

APPROVED BY Title DATE MAR 16 1982

CONDITIONS OF APPROVAL, IF ANY: * minimum hole size

N. MEXICO OIL CONSERVATION COMMISS.
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator The Superior Oil Company			Lease Dunes State		Well No. 1
Unit Letter J	Section 2	Township 23 South	Range 31 East	County Eddy	
Actual Footage Location of Well: 1980 feet from the south line and 1980 feet from the east line					
Strand Level Elev. 3432.7'	Producing Formation Washakie	Pool Wildcat	Dedicated Acreage: 320 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

G. E. Tate
Name
G. E. Tate
Position
Production Superintendent
Company
The Superior Oil Company
Date
3-10-82

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

3-9-82

Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No. *JOHN W. WEST 676*
PATRICK A. ROMERO 6668
Ronald J. Eidson 3239

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Wednesday, July 23, 2008 1:48 PM
To: 'ronald@reefexploration.com'
Cc: Ezeanyim, Richard, EMNRD; William F Carr (wcarr@hollandhart.com); Warnell, Terry G, EMNRD
Subject: SWD application on behalf of Reef Exploration, LP: State 2 Well No. 8 API No. 30-015-35749 Unit L of Section 2, T23S, R31E

Hello Ronald:

The OCD just received a protest to this proposal to inject from Yates Petroleum Corporation. Mary Kay Brasuel in Midland with Reef Exploration was copied on this protest letter. If you don't receive a copy, please ask her or ask Yates to send you one. The review process here in the engineering bureau is NOT complete and the outcome of this application is still undecided.

However, since a protest has been received, the OCD cannot continue to process this application administratively - so your application will be cancelled from our database.

You have the option of negotiating with Yates. If successful, ask Yates to send a retraction letter and let us know, formally in writing if you want the application review to resume.

You also have the option of asking your attorney to immediately set this application to hearing. The administrative correspondence from the engineering bureau will be included in the case file. Please let Bill Carr and myself know who your attorney will be.

Regards,

William V. Jones PE
 New Mexico Oil Conservation Division
 1220 South St. Francis
 Santa Fe, NM 87505
 505-476-3448

*Protest
 Cancelled
 TODAY*

(OLD)

From: Jones, William V., EMNRD
Sent: Thursday, July 10, 2008 9:30 AM
To: 'ronald@reefexploration.com'
Cc: Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD; Clark, Anne, EMNRD; Chavez, Carl J, EMNRD; Brooks, David K., EMNRD
Subject: RE: SWD application on behalf of Reef Exploration, LP: State 2 Well No. 8 API No. 30-015-35749 Unit L of Section 2, T23S, R31E, Eddy County

Ron:

We talked last week and I still have not received anything from you concerning the questions below.

Looked at this again today and talked to our Division Director - and have additional requests:

- 1) Would you please formally notify the DOE manager of the WIPP site with a complete copy of your application and send proof of notice to me?
- 2) Please look at the OCD ONLINE Imaging Site and make sure the CBL run on the 5-1/2 inch casing is there - if not, please send a copy of the entire log to Paul Kautz in Hobbs to Scan into our files.
- 3) Send the cementing treatment report from the service company that cemented the 8-5/8 inch casing - should show all details on this cement, volumes, pressures, type, etc.
- 4) Why do you need this injection well? Will it be injecting only your produced fluid from surrounding wells? Or is this meant to be a commercial disposal facility? The concern would be imposing additional pore pressure into formations near the WIPP Site. Injection pressures from any permit here would likely be limited.

7/23/2008

Jones, William V., EMNRD

From: Jones, William V., EMNRD

Sent: Tuesday, June 03, 2008 12:06 PM

To: 'ronald@reefexploration.com'

Cc: Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD; Clark, Anne, EMNRD

Subject: SWD application on behalf of Reef Exploration, LP: State 2 Well No. 8 API No. 30-015-35749 Unit L of Section 2, T23S, R31E, Eddy County

*Richard Talked
To Tom
6/25/08, removed
of 1/5.*

Hello Ronald:

We have the following requests:

- 1) I can't very well read the detail on your AOR map. Please send a more detailed 1/2 mile Area of Review map showing all lands within this 1/2 mile and all existing wells that were drilled to at least 4600 feet. ✓
- 2) Your wellbore diagrams are very detailed on the offset wells, but I don't see the "status" of each well or the locations of existing perforations. Please send this info anyway you would like. ✓
- 3) NOTICE: (Please read Rule 701B(2))
From your existing map, it appears that Yates and the BLM should also be noticed. ✓
Also, since this is very near the Potash Area as defined in R-111-P, please send proof of notice to the nearest Potash leaseholder. ✓
How close is this to the WIPP site? *3360 Feet*
Your notice in the newspaper seems to say the entire Delaware may be used for injection - was that intentional? ✓
- 4) The Division will require the well to be plugged back to within 200 feet of the lowermost injection perforation AND the injection packer must be set within 100 feet of the top perforation - your Post Conversion Wellbore Diagram should reflect this. It should also show the injection perforations. Please be advised, any injection permit will be "formation" specific AND "depth" specific - so any additional perforations Reef would add above or below the permitted injection interval will require a new injection application. ✓
- 5) Questions for your geologist:
Has there been no production in this upper Delaware interval in this area? How was it evaluated for hydrocarbons? ✓
Please coordinate with the OCD Artesia District geologist and pick formation tops (including members in the Delaware) from the Rustler down to the Bone Spring. e
- 6) Fresh Water: What is the depths to fresh water here? (Fresh meaning anything less than 10,000 TDS) Send a current water analysis from the nearest well or windmill if not more than a mile away. ✓

Thank You for answering these questions and sending proof of additional notices. The Division must wait 15 days after the last notice is provided prior to possibly releasing this permit. If protests arrive before the permit is issued (even if after 15 days), the processing will stop.

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

(O L D)

Mailed 6/20/08

6/3/2008

Jones, William V., EMNRD

From: Zappe, Steve, NMENV
Sent: Thursday, July 10, 2008 2:39 PM
To: Jones, William V., EMNRD
Cc: Chavez, Carl J, EMNRD; Clark, Anne, EMNRD
Subject: RE: WIPP Setbacks

MARK Fasmie
Called THEM

Hi -

There is no oil/gas drilling allowed within the 16 square mile land withdrawal area (LWA). DOE evaluates all potential drilling activities within a one-mile buffer surrounding the LWA to determine any adverse impact on their activities. I'm not sure who DOE's contact is, and I'm on vacation right now so I don't have access to that information. You might call their public information officer at 800-336-WIPP and ask. Here's their web page:
<http://www.wipp.energy.gov/>

Steve

From: Jones, William V., EMNRD
Sent: Thu 7/10/2008 8:48 AM
To: Zappe, Steve, NMENV
Cc: Chavez, Carl J, EMNRD; Clark, Anne, EMNRD
Subject: WIPP Setbacks

Hello Steve Zappe:

I was referred to you by Carl Chavez. He mentioned you may have knowledge of setback requirements for oil and gas operations near the WIPP site. Specifically I am evaluating an oil field waste water injection well (into the Delaware formation) near the WIPP site.

Appreciate any knowledge you have.

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

(50)

From: Chavez, Carl J, EMNRD
Sent: Tuesday, June 10, 2008 12:44 PM
To: Jones, William V., EMNRD
Subject: WIPP Maps

Will:

Try the link below the WIPP power points. Thx.

WIPP
<D:\Word\CarlC\HWB\WIPP\Maps\Presentations>

Let me know if you can't access the power points.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.

7/11/2008

Jones, William V., EMNRD

From: Ronald Sentz [ronald@reefogc.com]
Sent: Thursday, July 10, 2008 9:55 AM
To: Jones, William V., EMNRD
Subject: RE: SWD application on behalf of Reef Exploration, LP: State 2 Well No. 8 API No. 30-015-35749 Unit L of Section 2, T23S, R31E, Eddy County

I'll will work on this also; thanks for your help.

Ronald M. Sentz

Reef Exploration, L.P.
1901 N. Central Expressway
Suite 300
Richardson, Texas 75080

Production Manager

Off: 972-437-6792 x3037
Cell: 214-850-8741
E-Mail: ronald@reefexploration.com

(OLD)

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Thursday, July 10, 2008 10:29 AM
To: Ronald Sentz
Cc: Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD; Clark, Anne, EMNRD; Chavez, Carl J, EMNRD; Brooks, David K., EMNRD
Subject: RE: SWD application on behalf of Reef Exploration, LP: State 2 Well No. 8 API No. 30-015-35749 Unit L of Section 2, T23S, R31E, Eddy County

Ron:
We talked last week and I still have not received anything from you concerning the questions below.

Looked at this again today and talked to our Division Director - and have additional requests:

- 1) Would you please formally notify the DOE manager of the WIPP site with a complete copy of your application and send proof of notice to me? *330 offset + waiver or cert. Receipt!!*
- 2) Please look at the OCD ONLINE Imaging Site and make sure the CBL run on the 5-1/2 inch casing is there - if not, please send a copy of the entire log to Paul Kautz in Hobbs to Scan into our files.
- 3) Send the cementing treatment report from the service company that cemented the 8-5/8 inch casing - should show all details on this cement, volumes, pressures, type, etc.
- 4) Why do you need this injection well? Will it be injecting only your produced fluid from surrounding wells? Or is this meant to be a commercial disposal facility? The concern would be imposing additional pore pressure into formations near the WIPP Site. Injection pressures from any permit here would likely be limited.

We will be also looking at any State or DOE imposed buffer zone around the WIPP.

Also, this permit may need to be processed through an examiner hearing - but that has not been decided yet.

Thanks Again
William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

7/10/2008

Case _____ R- _____ SWD 1140-A WEX _____ PMX _____ IPI _____ Permit Date 11/24/09 UIC Qtr (0/N/D)

Wells 1 Well Name: State 2 #8

API Num: (30-) 015-35749 Spud Date: 11/17/07 New/Old: N UIC primacy March 7, 1982

Footages 660FWL/1980BSL Unit L Sec 2 Tsp 23S Rge 31E County Bddy

Operator: Keef Exploratory LP. Contact Jose L. Velaz

OGRID: 246083 RULE 5.9 Compliance (Wells) 1/19 (Finan Assur) _____

Operator Address: 1901 N. Central Expressway SUITE 300 Richardson, TX 75080

Current Status of Well: Inactive

Planned Tubing Size/Depth:

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing <input checked="" type="checkbox"/> Surface	1 7/8 B3/8	701	555	CIRC
Existing <input checked="" type="checkbox"/> Intermediate	1 1/8 5/8	4380	1000	CIRC
Existing <input checked="" type="checkbox"/> Long String	7 1/8 5 1/2	8510	1200	CIRC CBL

DV Tool ~~Liner~~ ~~Open Hole~~ ~~Total Depth~~

Well File Reviewed

Diagrams: Before Conversion After Conversion Elogs in Imaging File:

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)			
Injection..... Interval TOP:	4600	Ball	
Injection..... Interval BOTTOM:	5880	Cherry	
Below (Name and Top)			

920 PSI Max. WHIP

~~Open Hole (Y/N)~~

~~Deviated Hole?~~

Sensitive Areas: Capitan Reef Cliff House Salt Depths
.... Potash Area (R-111-P) Potash Lessee Noticed? 7

Fresh Water: Depths: _____ Wells _____ Analysis? _____ Affirmative Statement _____

Disposal Fluid Sources: _____ **Analysis?** _____

Disposal Interval Production Potential/Testing/Analysis Analysis: _____

Notice: Newspaper(Y/N) ✓ Surface Owner SLO Mineral Owner(s)

RULE 26.7(A) Affected Parties: Sonoma Forest Land BP

Area of Review: Adequate Map (Y/N) ✓ and Well List (Y/N) ~~No~~ Yes

Active Wells 5 Num Repairs 0 Producing in Injection Interval in AOR NO

..P&A Wells 1 Num Repairs 0 All Wellbore Diagrams Included? No

Questions to be Answered: 2 (out of 4) OK weds

Questions to be Answered: ~~State~~
 nature of also, SLO, DOE, WIPP, BLM, Monarch
 Set C&P @ 6000
 Lower PKB to 100' above Surf.

Required Work on This Well: Sent Signed Admin Check Request Sent Reply:

AOR Repairs Needed: Request Sent Reply:

Request Sent Reply: