District I . State of New Mexico Form C-101 1525 N. Frenck Dr., Hobbs, NM 88240 **Energy Minerals and Natural Resources** May 27, 2004 District II 40 1301 W. Grand Avenue, Artesia, NM 88210 Month Submit to appropriate District Office Oil Conservation Division District III 9 2007 1000 Rio Brazos Road, Aztec, NM 87 OCD ARTESIA, 1220 South St. Francis Dr. AMENDED REPORT District IV Santa Fe, NM 87505 1220 S. St. Francis Dr., Santa Fe, NN APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address OGRID Number REEF EXPLORATION, L.P. 508 WEST WALL, SUITE 700 246083 API Numl MIDLAND, TX 79701 30 - 015 -Property Name STATE "2" Property Code 001 36570 9 Proposed Pool 1 10 Proposed Pool 2 LIVINGSTON RIDGE; DELAWARE, SE (96) Surface Location Lot Idn Feet from the North/South line East/West line UL or lot no. Section Townshin Range Feet from the County EDDY 1980 NORTH G 238 31E 1980 EAST ⁸ Proposed Bottom Hole Location If Different From Surface Lot Idn Feet from the North/South line East/West line UL or lot no Township Range Feet from the Section County 1980 23S 31E NORTH 1980 EAST **EDDY** G 2

B

Additional Well Information Cable/Rotary 11 Work Type Code Well Type Code Lease Type Code 15 Ground Level Elevation 3430 Formation Spud Date Multiple Proposed Depth Contractor 8700 DELAWARE 06/15/07 Distance from nearest fresh water well Depth to Groundwater Distance from nearest surface water 1000' or more 1000' or more Liner. Synthetic 🔯 12 mils thick Clay 🗍 Pit Volume: 2000 Drilling Method: Pit: Closed-Loop System Fresh Water Brine Diesel/Oil-based Gas/Air

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 ½"	13 3/8"	48# H-40	900'	835	SURFACE
12 1/4"	8 5/8"	32# K-55	4500'	1270	SURFACÉ
7 7/8"	5 1/2"	17# L-80	8700'	750	· 4500'
					,
22 Describe the propos	ed program. If this applica	ation is to DEEPEN or PLUG B	ACK give the data on the	present productive zone and r	proposed new productive

zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

DRL SAN ANDRES WELL TO ± 8700'. CIRC CMT TO SURF ON 8 5/8" CSG. TEST ALL SIGNIFICANT SHOWS & EVALUATE W/ADEQUATE LOGGING PROGRAM. ABANDONMENT, IF NECESSARY, WILL BE PREFORMED IN ACCORDANCE W/PRUDENT PRACTICES AND REGULATORY REQUIREMENTS. A DOUBLE RAM SERIES 900 BOP AND CHOKE MANIFOLD WILL BE USED FROM THE 8 5/8" CSG POINT TO TD. AFTER LOGGING AND EVALUATION AT TD, THE DECISION WILL BE MADE AS TO WHETHER OR NOT TO RUN PRODUCTION CSG. PRODUCTION CSG WILL BE 5 1/2" AND WILL BE RUN AT TD. COMPLETION WILL BE FROM PERF'S IN 5 1/2" CSG IN THE DELAWARE FORMATION.

		1			
23 l hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ∑, a general permit ☐, or		OIL CONSERVATION DIVISION			
an (attached) alternative OCD-appro	oved plan 🔲.	Approved by:			
Signature: They He	ard .	BRYAN G. ARRANT			
Printed name. GAYE HEARD		Title: DISTRICT II GEOLOGIST			
Title: AGENT		Approval Date: JUN 2 0 2007 Expiration Date: UN 2 0 2008			
E-mail Address. oilreportsinc@oilrepo	ortsinc.com				
Date. 05/10/07	Phone: 505-393-2727	Conditions of Approval Attached			

يوسواف فياتس STRICT_I. 1625 N. French Dr., Hobbs, NM 88240

DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe. NM 87505 State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 220 South St. Frances Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

Month - Year MAY 1 6 2007 OCD - ARTESIA, NM

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name			
	39380	Livingston Ridge; Delaware, S	SE		
Property Code	Prop	Property Name			
	ST	STATE "2"			
OGRID No.	Oper	ator Name	Elevation		
	REEF EXPL	ORATION, L.P.	3430'		

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	2	23 S	31 E		1980	NORTH	1980	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres Joint or Infill Consolidation Code Order No.									
40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

		,
	1980,	OPERATOR CERTIFICAT I hereby certify the the information contained herein is true the best of my knowledge and belief, and that this organizate working interest or unleased mineral interestin the land inclu- bottom hole location or has a right to drill this well at this loc a contract with an owner of such a mineral or working i voluntary pooling agreement or a computiory pooling order here the division
	3428.9' 3430.9' 1980' 1980' Existing Pad Area	Signature Date Gaye Heard Printed Name SURVEYOR CERTIFICAT
	Plane Coordinate X = 681,417.9 Y = 486,146.2 Geodetic Coordinate Lat. 32'20'06.59" N Long. 103'44'45.46" W (NAD '27)	I hereby certify that the well located on this plat was plotted from field actual surveys made by me or a supervison and that the same is correct to the best of my belief April 26, 2007
NOTE: 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface, values.		W.O. Num. 2007. P.S. Certificate No. MACON McDONALD

NOI

and complete to on either owns a dung the proposed ation pursuant to interest, or to a etofore entered by

10/07

NOI

n shown notes of under my true and

> uni. THU LVÁ

Surveyor

PSTRICALI --1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Frances Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

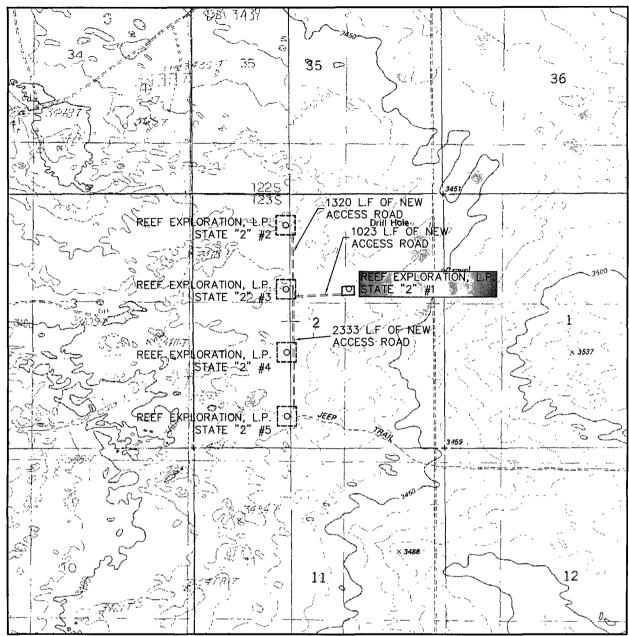
☐ AMENDED REPORT

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

API	Number	-	<u></u>	Pool Code		Pool Name			
Property	Code				Property Nam STATE ".		Well Number		
OGRID N	o.		Operator Name REEF EXPLORATION, L.P.				Elevation 3430'		
					Surface Loc	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	2	23 S	31 E		1980	NORTH	1980	EAST	EDDY
		<u> </u>	Bottom	Hole Loc	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint of	r Infill Co	nsolidation	Code Or	der No.				
NO ALLOWA	BLE WILI					TIL ALL INTEREST		CONSOLIDATE	D OR A

		<u> </u>
		OPERATOR CERTIFICATION
-		I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a
		working interest or unleased mineral interestin the land including the proposed bottom hate location or has a right to drill this well at this location pursuant to
		a contract with an owner of such a mineral or working interest, or to a
	-0	voluntary pooling agreement or a compulsory pooling order heretofore entered by the division
	,086	
	Ţ	
		Signature Date
		11
	3428.9' 3430.9'	Printed Name
	1980'——	
ļ.	3429.2' / 3430.5'	
	_Existing	
	Pad Area	SURVEYOR CERTIFICATION
		I hereby certify that the well location shown on this plat was plotted from field notes of
	Plane Coordinate	actual surveys made by me or under my
	X = 681,417.9 Y = 486,146.2	supervison and that the same is true and correct to the best of my belief
	<u>Geodetic Coordinate</u> Lat. 32°20'06.59″N	correct to the dest of my denter
	Long. 103°44'45.46" W	
	(NAD '27)	April 26, 2007
		Date of Survey William Actions Will
		Signature & Seal of Professional Surveyor
NOTE:		I William S
Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico		WO N 2007 0544
Coordinate System", New Mexico East Zone, North		W.O. Num. 2007-0511
American Datum of 1927. Distances shown hereon are mean horizontal surface values.		Certificate No. MACON McDONALD 12185
L	ļ	

LOCATION VERIFICATION MAP



2000

BOOTLEG RIDGE

CONTOUR INTERVAL: BOOTLEG RIDGE - 10'

SEC. 2	TWP. 23-S RGE. 31-E
SURVEY	N.M.P.M.
COUNTY	
DESCRIPTIO	N 1980' FNL & 1980' FEL
ELEVATION	3430'
OPERATOR	REEF EXPLORATION, L.P.
LEASE	STATE "2"
	POGRAPHIC MAP



WEST

COMPANY

110 W. LOUISIANA, STE. 110

MIDLAND TEXAS, 79701

687-0865 - (432) 687-0868 FAX

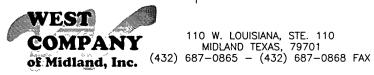
VICINITY MAP

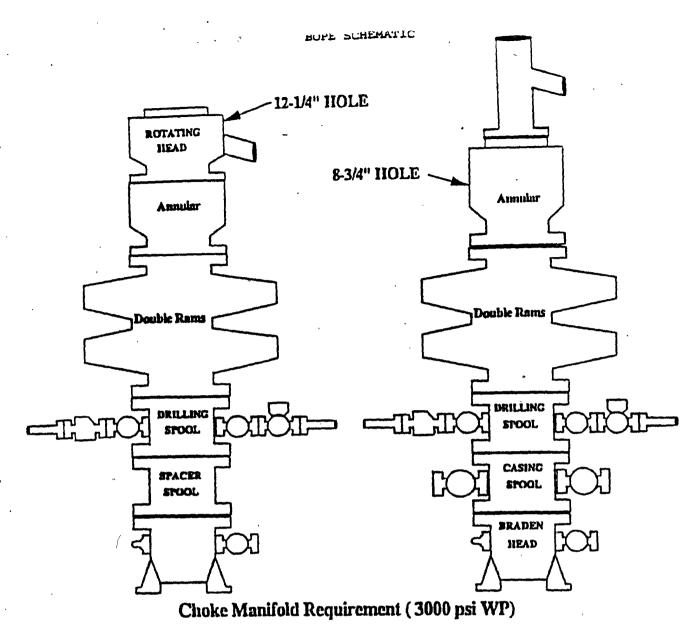


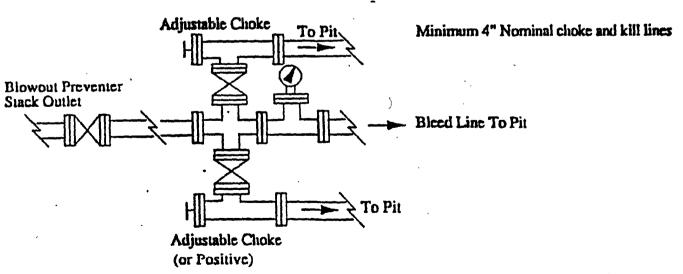
SCALE: 1" = 5 MILES

SEC. 2 1	MP. <u>23-S</u> RGE. <u>31-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION	1980' FNL & 1980' FEL
ELEVATION	3430'
OPERATOR I	REEF EXPLORATION, L.P.
I FASE	STATE "2"











NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

May 21, 2007 U.S. Department of Energy P.O. Box 3090 Carlsbad, NM 88221-3090

Attn: Harold Johnson-NEPA Compliance Manager

Dear Harold or To Whom It May Concern

RE: Reef Exploration, L.P., application to drill the State "2" #1 well:

Surface location to be in Unit G, of Section 2, Township 23 South, Range 31 East,

Legal location being: 1980' FNL & 1980' FEL

Eddy County, New Mexico, NMPM.

An application to drill (APD) for the above noted well is enclosed for your review. The State "2" # 1 lies within 1 mile of the WIPP withdraw area. Per terms of the Joint Powers Agreement between the Energy Mineral and Natural Resources Department, the DOE and other agencies, this application is provided so that you may have the opportunity to develop and submit and comments thereon. The OCD is expected to approve this permit by June 25, 2007 unless an objection is received in writing.

Please call if you have any questions or concerns regarding this matter.

Respectfully yours,

Bryan G. Arrant NMOCD's District II Geologist Artesia, New Mexico 505-748-1283 ext. 103

Encl:

CC:

New Mexico Energy Minerals and Natural Resources Department, Anne Clark

-Coordinator of the N.M. Radioactive Waste Consultation Task Force. New Mexico State Land Office & Minerals Division, Joe Mraz-Geologist

Reef Exploration, L.P., Gaye Heard, Agent

Well file

J. W. MULLOY ASSOCIATES, INC.

Engineering & Consulting 508 West Wall, Suite 700 Midland, Texas 79701 Phone: (432) 687-0323 Fax. (432) 686-7224

JOHNNY MULLOY President

May 25, 2007

Mosaic Potash Carlsbad, Inc. P.O. Box 71 Carlsbad, NM 88220

RE: Waivers

Attention: Mr. Dan Morehouse

Dear Sir:

As a representative of Reef Exploration, L.P. it is respectfully requested that waivers that would allow the drilling for Hydrocarbons in designated Potash areas be granted for the following:

SW/4 of NE/4 Sec 2, T-23-S, R-31-E Sec 2, T-23-S, R-31-E E/2 of W/2

The well designation and exact location are as follows:

State "2" Well #1 1980 FNL & 1980 FEL

660 FNL & 1980 FWL #2

#3 1980 FNL & 1980 FWL

1980 FSL & 1980 FWL #4

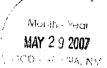
660 FSL & 1980 FWL #5

Thank you for you corporation relating to these waivers.

Yours Very Truly,

J. W. MULLOY ASSOCIATES, INC.

Engineering & Consulting 508 West Wall, Suite 700 Midland, Texas 79701 Phone (432) 687-0323 Fax: (432) 686-7224



JOHNNY MULLOY

President

May 25, 2007

State of New Mexico
Oil Conservation Division
1310 W. Grand Avenue
Artesia, New Mexico 88210

RE: H₂S Contingency Plan Sec 1,2 & 12, T-23-S, R-31-E Sec 36 T-22-S, R-31-E Eddy County, New Mexico

Attention: Mr. Bryan Arrant

As a representative of Reef Exploration, L.P. (Ogrid # 246083) research has been conducted to determine if H₂S will be encountered while drilling the following wells:

State "2" Well #1 1980 FNL & 1980 FEL

#2 660 FNL & 1980 FWL

#3 1980 FNL & 1980 FWL

#4 1980 FSL & 1980 FWL

#5 660 FSL & 1980 FWL

It was determined that no H₂S would be encountered and therefore a contingency plan is not needed. This letter is being sent to you to satisfy the conditions of approval of the above requested permits.

If additional data is required, please contact the undersigned at 432-687-0323.

Yours Very Truly,

1W Mullov

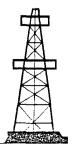
J. W. MULLOY ASSOCIATES, INC.

Engineering & Consulting

D.v.	Date	
and all objections to the drilling of the wells Exploration, L.P.	listed above that will be op	erated by Reef
•	•	, ,
1, Dan Morehouse as representative for Mosa	aic Potash Carishad. Inc he	reby waive any

Бу	
Signed:	

Cc: Bryan Arrant





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

May 23, 2007 New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87504-1148 Attn: Mr. Joe Mraz or To Whom It May Concern

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR:

Reef Exploration, L.P.

LEASE NAME:

State "2" # 1

LOCATION:

Sincerely,

SEC. 2, TOWNSHIP 23 SOUTH, RANGE 31 EAST

1980'FNL & 1980' FEL

EDDY COUNTY, NM, NMPM

PROPOSED DEPTH: 8700'

Dear Mr. Joe Mraz or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.

Thank you for your assistance.

Bryan G. Arrant			
District II Geologist,	Artesia NMOCD		~ n
In LMR	Yes	No_ <u>`</u> ×	J.R. MRAZ 5-23-07 3PM
In Buffer Zone	Yes	No_ <u>×</u>	$3p_{m}$
Comments:			,
Signature:	Dome Coul	7	Date: 5/23/07