(P,US-10

### N.M. Oil Cons. DiV-Dist. 2

1301 W. Grand Avenue

**BUREAU OF LAND MANAGEMENT** 

APPLICATION FOR PERMIT TO DRILL OR REENTER

UNITED STATES DEPARTMENT OF THE INTESIA, NM 88210 5. Lease Serial No.

1				
11	$C_{-}\Omega G$	240	2	

L	C-	0	6	84	0	2

6. If Indian, Allottee or Tribe Name

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

la. Type of Work: DRILL REENTER	<b>t</b>			7. If Unit or CA Agre	eement, Name and No.
	_	_		8. Lease Name and W	ell No.
1b. Type of Well: Oil Well Gas Well Other		Single Zone L Multip	ple Zone	Pinta 29 Federal #1	
2. Name of Operator				9 API Well No.	. 2300-
Mewbourne Oil Company - 14744					-33995
3a. Address	3b. Phone N	o. (include area code)		10. Field and Pool, or	• •
PO Box 5270 Hobbs, NM 88240	505-393-59	905		Santo Nino Bone S	
4. Location of Well (Report location clearly and in accordance with a	ny State requ	irements. *)		11. Sec., T., R., M., or	Blk. and Survey or Area
At surface 510' FSL & 1830' FEL Unit Letter O				•	
At proposed prod. zone Same	Secretary's Potash			Sec 29-T18S-R30E	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State
7 miles South of Loco Hills	· · · · · · · · · · · · · · · · · · ·			Eddy	NM
15. Distance from proposed* location to nearest	16. No. of	Acres in lease	17. Spacing	17. Spacing Unit dedicated to this well	
property or lease line, ft. (Also to nearest drig. unit line, if any) 510'	80		80		RECEIVED
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth		20. BLM/BIA Bond No. on file		FEB 0 2 2005
applied for, on this lease, ft.	7600'		NIMALEOS	Nationwida	فما والانتفاء التوادي
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	1	kimate date work will st		Nationwide  23. Estimated duration	OCO AHIES
3424' GL	ASAP		45		
	<u> </u>	chments Ca	often Co	ntrolled Water B:	e in
The following, completed in accordance with the requirements of Onshor	e Oil and Ga	s Order No.1, shall be att	tached to this	s form:	100-0-
1. Well plat certified by a registered surveyor.		4. Bond to cover th	e operations	unless covered by an	existing bond on file (see
2. A Drilling Plan.		Item 20 above).	•		
3. A Surface Use Plan (if the location is on National Forest System)	Lands, the	5. Operator certifica			and the second section of the lates.
SUPO shall be filed with the appropriate Forest Service Office).	-4	authorized office		rmation and/or plans a	s may be required by the
25. Signature A. A. A.	Nam	e (Printed/Typed)			Date
Friste glen	Krist	i Green			11/30/04
Title					
Hobbs Regulatory					
Approved by (Signature)	Nam	e (Printed/Typed)	1 20	NTON	JAN 2 8 2005
ACTIVISTATE DIRECTOR	Offic	NM S	TATE C	)FFICE	<u> </u>
Application approval does not warrant or certify that the applicant holds I operations thereon.  Conditions of approval, if any, are attached.	egal or equita			lease which would entitle VAL FOR 1	
Conditions of approval, it any, are attached.					

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

APPROVAL SUBJECT TO general requirements and SPECIAL STIPULATIONS ATTACHED

1154-5166

RICT I N. French Dr., Hobbs, NM 88240 DISTRICT II

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

Pool Name

State Lease - 4 Copies Fee Lease - 3 Copies

811 South First, Artesia, NM 88210 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

2040 South Pacheco, Santa Fe, NM 87505

API Number

DISTRICT IV

#### OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87504-2088

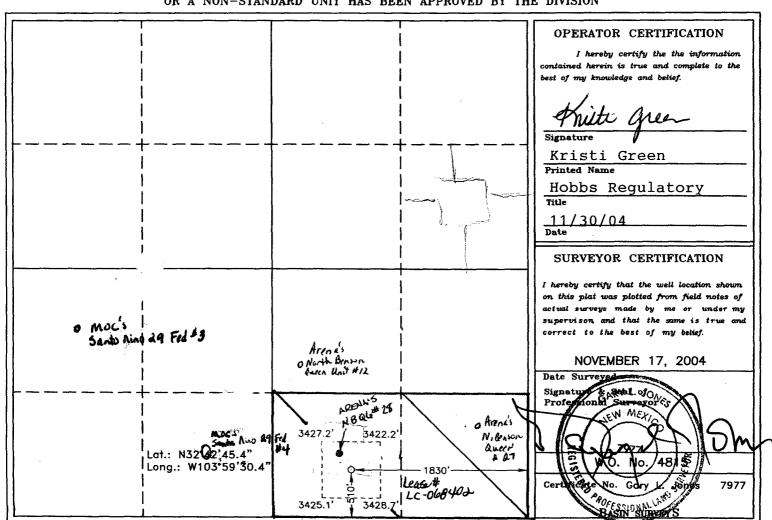
☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code

Ari Mumber		•	1 OO1 COUE	1	7 001 1144110					
Bone Spring										
Property Code			Property Name						Well Number	
				PINTA "29" FEDERAL				1		
OGRID No	·		Operator Name						Elevation	
14744			MEWBOURNE OIL COMPANY						3424'	
					Surface Loca	ation				
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
0	29	18 S	30 E		510	SOUTH	1830	EAST	EDDY	
			Bottom	Hole Loca	ation If Diffe	rent 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 o	or Infill Co	nsolidation	Code Ord	er No.					
80			<del> </del>							
NO ALLO	WABLE V	WILL BE AS	SSIGNED '	TO THIS C	COMPLETION U	INTIL ALL INTER	RESTS HAVE B	EEN CONSOLIDA	ATED	

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



### **Drilling Program Mewbourne Oil Company**

Pinta 29 Federal #1 510' FSL & 1830' FEL Sec 29-T18S-R30E Eddy County, New Mexico

#### 1. The estimated top of geological markers are as follows:

Bone Spring 7200'

#### 2. Estimated depths of anticipated fresh water, oil, or gas:

Water

Approximately 200'

Hydrocarbons

All zones below Yates.

#### 3. Pressure control equipment:

A 2000 psi working pressure annular BOP will be installed on the 13-3/8" surface casing. A 3000 psi WP Double Ram BOP and a 1500 psi WP Annular will be installed after running 8 5/8" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated daily to insure mechanical integrity and the inspection will be recorded on the daily drilling report. Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use.

#### 4. Proposed casing and cementing program:

#### A. Casing Program:

Hole Size	Casing	Wt/Ft.	<u>Grade</u>	<u>Depth</u>
17 1/2"	13 3/8"	48#	H40	0-400'
12 1/4"	8 5/8"	32#	J55	0-2000'
7 7/8"	5 1/2"	17#	N80	0-7600'

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.

#### **Drilling Program** Mewbourne Oil Company

Pinta 29 Federal #1 Page 2

B. Cementing Program

Surface Casing: 300 sacks Class "C" light cement containing ½ #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.

- Intermediate Casing: 500 sacks 35:65 pozmix cement containing 6% gel, ii. 5 lbs/sack gilsonite. 400 sacks Class "C" cement containing 2% CaCl.
- iii. Production Casing: 600 sacks Class "H" cement containing fluid loss additive, friction reducer additive, compressive strength enhancer, and NaCl. Shallower productive zones may be protected by utilizing a multiple stage cementing tool in the production casing below potentially productive zones and cementing with a light cement slurry.

\*Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.

#### 5. **Mud Program:**

<u>Interval</u>	Type System	Weight	Viscosity	Fluid Loss
0'-400'	FW spud mud	8.6-9.4	32-34	NA
400'-2000'	Brine water	10.0-10.2	28-30	NA
2000'-TD	Cut brine water	8.8-9.0	28-30	NA

#### 6. **Evaluation Program:**

Samples:

10' samples from intermediate casing to TD

Logging:

Compensated density and dual laterlog from intermediate casing

to TD

Coring:

As needed for evaluation

Drill Stem Tests:

As needed for evaluation

#### 7. **Downhole Conditions**

Zones of abnormal pressure:

None anticipated

Zones of lost circulation:

Anticipated in surface and intermediate holes

Maximum bottom hole temperature: 180 degree F

Maximum bottom hole pressure:

8.6 lbs/gal gradient or less

# Drilling Program Mewbourne Oil Company Pinta 29 Federal #1 Page 3

#### 8. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 20 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

### MULTI-POINT SURFACE USE AND OPERATIONS PLAN MEWBOURNE OIL COMPANY

Pinta 29 Federal #1 510' FSL & 1830' FEL Sec 29-T18S-R30E Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, Covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved, and the procedures to be followed in restoring the surface so that a complete appraisal can be made of the environmental impact associated with the proposed operations.

#### 1. Existing Roads:

- A. Exhibit #3 is a road map showing the location of the proposed well. Exhibit #3A is a topographic map showing the location of the proposed well and access road. Existing roads are highlighted in red and proposed roads are highlighted in yellow.
- B. From Carlsbad: East on US 62/180 approx 15 miles. Turn left (north) on NM 360 and continue North & NW 11.6 miles. Turn right (north) on Eddy Co 251 ((Duval Shaft Rd) and continue north 2.3 miles. Turn left (east) 1.5 miles to location on left.

#### 2. Proposed Access Road:

- A No new lease road will be needed.
- B. The access to the location will be limited to 16' in width and will adequately drain runoff and control erosion as presently constructed.

#### 3. Location of Existing Wells:

There are producing wells within the immediate vicinity of the well site. Exhibit #4 shows the proposed well and existing wells within a one mile radius.

#### 4. Location of Existing and/or Proposed Facilities:

- A. There are no production facilities on this lease at the present time.
- B. In the event that the well is productive, production facilities will be located on the well pad.
- C. All production vessels left on location will be painted to conform with BLM painting stipulations within 180 days of installation.

### Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

Pinta 29 Federal #1 510' FSL & 1830' FEL Sec 29-T18S-R30E Eddy County, New Mexico

#### 1. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

- A. The hazards and characteristics of hydrogen sulfide gas.
- B. The proper use of personal protective equipment and life support systems.
- C. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
- D. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- A. The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- C. The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

#### 2. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the intermediate casing.

#### A. Well Control Equipment

- 1. Flare line with automatic igniter or continuous ignition source.
- 2. Choke manifold with minimum of one adjustable choke.
- 3. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- 4. Auxiliary equipment including rotating head and annular type blowout preventer.

#### Protective Equipment for Essential Personnel

Thirty minute self contained work unit located at briefing area as indicated on well site diagram.

#### B. <u>Hydrogen Sulfide Protection and Monitoring Equipment</u>

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 ppm.

#### C. <u>Visual Warning Systems</u>

- 1. Wind direction indicators as indicated on the well site diagram.
- 2. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

#### 3. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

#### 4. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

#### 5. Communications

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and tool pushers are either two way radios or cellular phones.

#### 6. Well Testing

Drill stem testing is not an anticipated requirement for evaluation of this well. A drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

#### 7. General Requirements

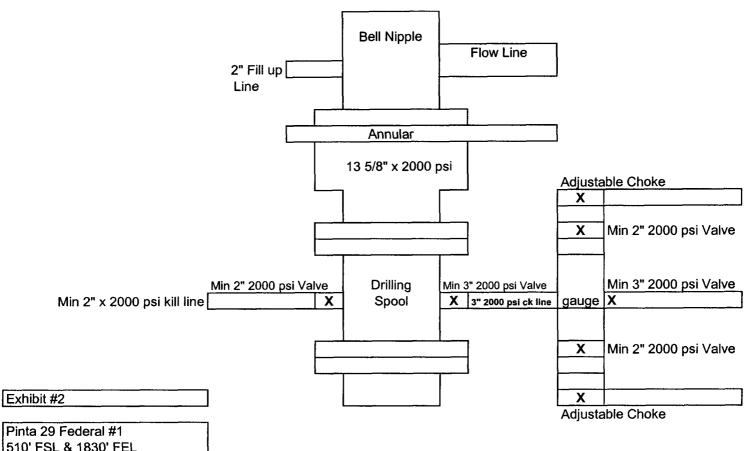
MOC has researched this area and no high concentrations of H2S was found. MOC will have on location and working all H2S safety equipment before Yates formation.

### Notes Regarding Blowout Preventer Mewbourne Oil Company

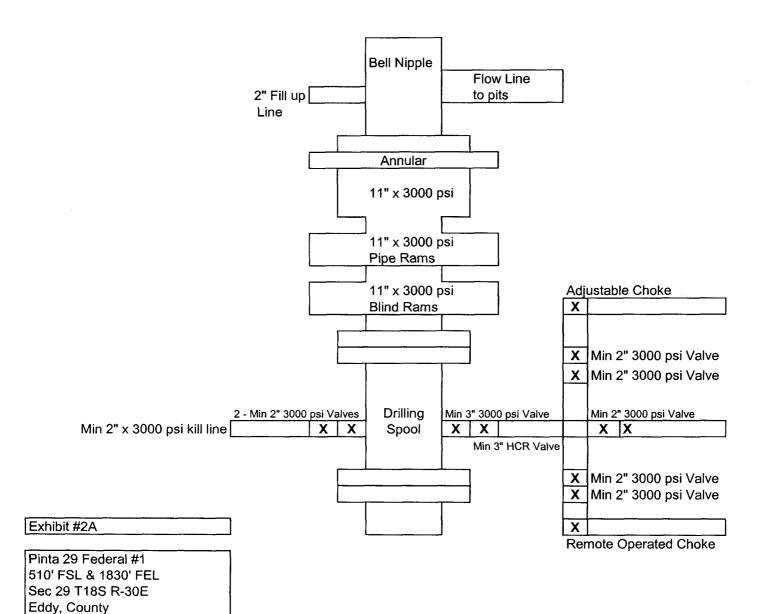
Pinta 29 Federal #1 510' FSL & 1830' FEL Sec 29-T18S-R30E Eddy County, New Mexico

- 1. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
- 2. Blowout preventer and all fittings must be in good condition with a minimum 3000 psi working pressure.
- 3. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 3000 psi working pressure.
- 4. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- 5. A kelly cock shall be installed on the kelly at all times.
- 6. Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

#### Mewbourne Oil Company BOP Scematic for 12 1/4" Hole



Pinta 29 Federal #1 510' FSL & 1830' FEL Sec 29 T18S R-30E Eddy, County New Mexico



New Mexico

## Exhibit #4 Status of Wells in Immediate Vicinity Mewbourne Oil Company

Pinta 29 Federal #1 510' FSL & 1830' FEL Sec 29-T18S-R30E

Eddy County, New Mexico

#### Section 29-T18S-R30E

Operator:

Mewbourne Oil Company

Well Name:

Santa Nino 29 Federal #3

Unit letter:

L

Status:

Producing

Field:

**Bone Spring** 

Operator:

Mewbourne Oil Company

Well Name:

Santa Nino 29 Federal #4

Unit letter:

N

Status:

Producing

Field:

**Bone Spring** 

Operator:

Arena Resources, Inc

Well Name:

North Benson Queen Unit #27

W CII I Vallic.

Unit letter: P

Status:

Well is TA

Field:

Benson North Queen Grayburg

Operator:

Arena Resources, Inc

Well Name:

North Benson Queen Unit #12

Unit letter:

J

Status:

Well is TA

Field:

Benson North Queen Grayburg

Rig Location Schematic