

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED Submit to appropriate District Office
JUL - 3 2006 ☐ AMENDED REPORT

OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Mewbourne Oil Company Po Box 5270 Hobbs, NM 88240		² OGRID Number 14744
³ Property Code 35090	⁴ Property Name Forty Niner Ridge Unit	⁵ API Number 30 - 015-35033
⁶ Well No. 102		⁷ Proposed Pool 1 Forty Niner Ridge; Morrow
⁸ Proposed Pool 2		

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	16	23S	30E		1980	N	2310	E	Eddy

⁸ Proposed 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

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3140'
¹⁶ Multiple No	¹⁷ Proposed Depth 14600	¹⁸ Formation Morrow	¹⁹ Contractor TBA	²⁰ Spud Date ASAP
Depth to Groundwater 50' or more but less than 100 No = 0 pts		Distance from nearest fresh water well Less than 1000 from all other wtr sources 0 pts		Distance from nearest surface water 1000' or more 0 pts
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 24000 bbls Drilling Method: Production				
Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48#	450'	400	Surface
12 1/4"	9 5/8"	40#	3500'	1000	Surface
8 3/4"	7"	26#	11000	1500	Surface Tie Back
6 1/8"	5" or 4 1/2"	18#	14900'	500	Tie Back

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

BOP Program: 13 3/8" 2k Hydril (see Exhibit #2) from surface casing to intermediate TD. Schaffer LWS or equivalent (Double-Ram Hydraulic) 11" 5000# with Hydril. (See Exhibit #2A) from surface casing to total depth. Rotating head, PVT, flow monitors and mud gas Separator from the Wolfcamp to TD.

Mud Program:

0' to 450' Fresh Water, spud mud, lime for PH and LCM as needed for seepage.
450' to 3500' Brine Water, lime for PH and LCM as needed for seepage.
3500' to 11000' Fresh Water, cut brine, lime for PH and LCM as needed for seepage.
11000' to TD Cut brine. Caustic for PH, Starch for WL control and LCM as needed for seepage

²³ I 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 an (attached) alternative OCD-approved plan ☐.

Printed name: Kristi Green

Title: Hobbs Production

E-mail Address:

Date: 06/29/06

Phone:

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARRANT

Title:

DISTRICT II GEOLOGIST

Approval Date: AUG 01 2006

Expiration Date: AUG 01 2007

Conditions of Appro:

NOTIFY OCD TO WITNESS
* ALL CASING STRINGS

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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 76800	Under Fifty Niner Ridge	Pool Name Morrow
Property Code	Property Name FORTY-NINER RIDGE UNIT		Well Number 102
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY		Elevation 3140'

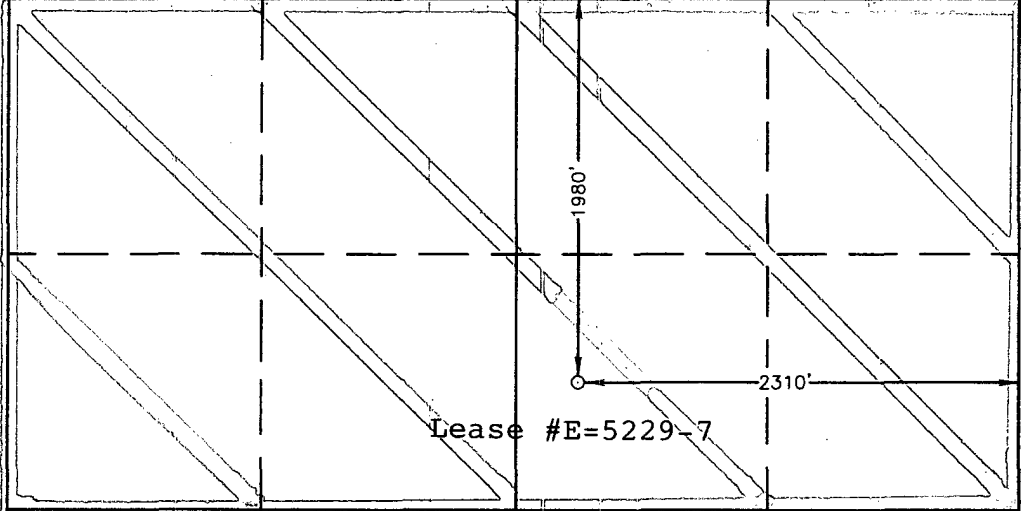
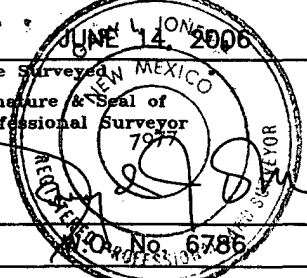
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	16	23 S	30 E		1980	NORTH	2310	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 320	Joint or Infill	Consolidation Code	Order No.						

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

 <p>Lat.: N32°18'24.5" Long.: W103°53'04.7" N.: 475621.619 E.: 638630.318 (NAD-27)</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that 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 interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Kristi Green</i> 06/29/06 Signature Date</p> <p>Kristi Green Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p></p> <p>Date Surveyed Signature & Seal of Professional Surveyor</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Forty Niner Ridge Unit #102

1980' FNL & 2310' FEL

Section 16-T23S-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. Existing roads are highlighted in black and proposed roads are highlighted in yellow. Exhibit #3A is a topographic map showing the location of the proposed well and access roads. Existing roads are highlighted in black and proposed roads are highlighted in yellow.
- B. **Directions to location: East from Carlsbad on US 62/180 17.3 miles to NM 31 (Potash Ash Rd). Turn right (south) on NM31 and continue south 15 miles to NM128 (Jal Hwy). Turn left (east) and continue east 7.3 miles. Turn right (south) on Eddy Co 795 (Mobley Rd) and continue south 0.6 miles to "Y". Turn right (SW) and continue SW 1.5 miles. Turn left (east) into new location.**

2. Proposed Access Road:

- A. Will need approx 150' of new road.
- 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 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.

4. Location and Type of Water Supply

The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and/or hauled to the location by transport trucks over existing and proposed roads as indicated in Exhibit #3.

5. Source of Construction Materials

All material required for construction of the drill pad and access roads will be obtained from private, state, or federal pits. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.

6. Methods of Handling Waste Disposal:

- A. Drill cuttings not retained for evaluation purposed will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit prior to closure.
- C. Water produced during operations will be disposed of in the reserve pit.
- D. If any liquid hydrocarbons are produced during operations, those liquids will be stored in suitable tanks until sold.
- E. Current regulations regarding the proper disposal of human waste will be followed.
- F. All trash, junk, and other waste materials will be stored in proper containers to prevent dispersal and will be removed to an appropriate facility within one week of cessation of drilling and completion activities.

7. Ancillary Facilities

There are no ancillary facilities within the immediate vicinity of the proposed well site.

8. Well Site Layout

- A. A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad, pits, and location of major rig components are shown.
- B. The reserve pit will be lined with a high quality plastic sheeting to prevent migration of fluids.
- C. The pad dimension of 400' X 250' has been staked and flagged.

9. Plans for Restoration of Surface

- A. Upon cessation of the proposed operations, if the well is abandoned, the location and road will be ripped and re-seeded. The reserve pit area, after allowing to dry will be leveled. The entire location will be restored to the original contour as much as reasonable possible. All trash, garbage, and pit lining will be hauled to appropriate disposal to assure the location is aesthetically pleasing as reasonable possible. All restoration work will be completed within 180 days of cessation of activities.
- B. The disturbed area will be restored by re-seeding during the proper growing season.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. The reserve pit will be fenced on the fourth side after the drilling rig is removed to prevent the endangerment of livestock. The fence will remain in place until the pit area has been leveled and restored.
- D. Upon cessation of the proposed operations, if the well is not abandoned, the reserve pit area will be restored as per OCD guidelines. Any additional caliche required for production facilities will be obtained from a source as described in Section 6.
- E. Within 90 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location will be cleaned of all trash and junk to assure the well site is left as aesthetically pleasing as reasonably possible.

10. Surface Ownership:

The surface is owned by: State of New Mexico

11. Other Information:

- A. Topography: Refer to the archaeological report for a detailed description of flora, fauna, soil characteristics, dwellings, and historical or cultural sites.
- B. The primary use of the surface at the location is for grazing of livestock.

12. Operator's Representative:

- A. Through APD approval, drilling, completion and production operations:

N.M. Young, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
505-393-5905

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mewbourne Oil Company, its contractors and subcontractors, in accordance with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 06/29/06 Signature: 

N.M. Young, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
(505) 393-5905

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company
Forty Niner Ridge Unit #102
1980' FNL & 2310' FEL
Section 16-T23S-R30E
Eddy County, New Mexico

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H₂S were found. MOC will have on location and working all H₂S safety equipment before the Delaware formation @ 3350' for purposes of safety and insurance requirements.

2. 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:

1. The hazards and characteristics of hydrogen sulfide gas.
2. The proper use of personal protective equipment and life support systems.
3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
4. The proper techniques for first aid and rescue operations.

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

- 1 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.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

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

3. 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.

1. Well Control Equipment
 - A. Flare line with automatic igniter or continuous ignition source.
 - B. Choke manifold with minimum of one adjustable choke.
 - C. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
 - D. Auxiliary equipment including rotating head and annular type blowout preventer.
2. Protective Equipment for Essential Personnel

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

3. Hydrogen Sulfide Protection and Monitoring Equipment

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.

4. Visual Warning Systems

A. Wind direction indicators as indicated on the wellsite diagram.

B. 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.

4. **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.

5. **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.

6. **Communications**

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

7. **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.

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Forty Niner Ridge Unit #102

1980' FNL & 2310' FEL

Section 16-T23S-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 5000 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 5000 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 Schematic for
12 1/4" Hole

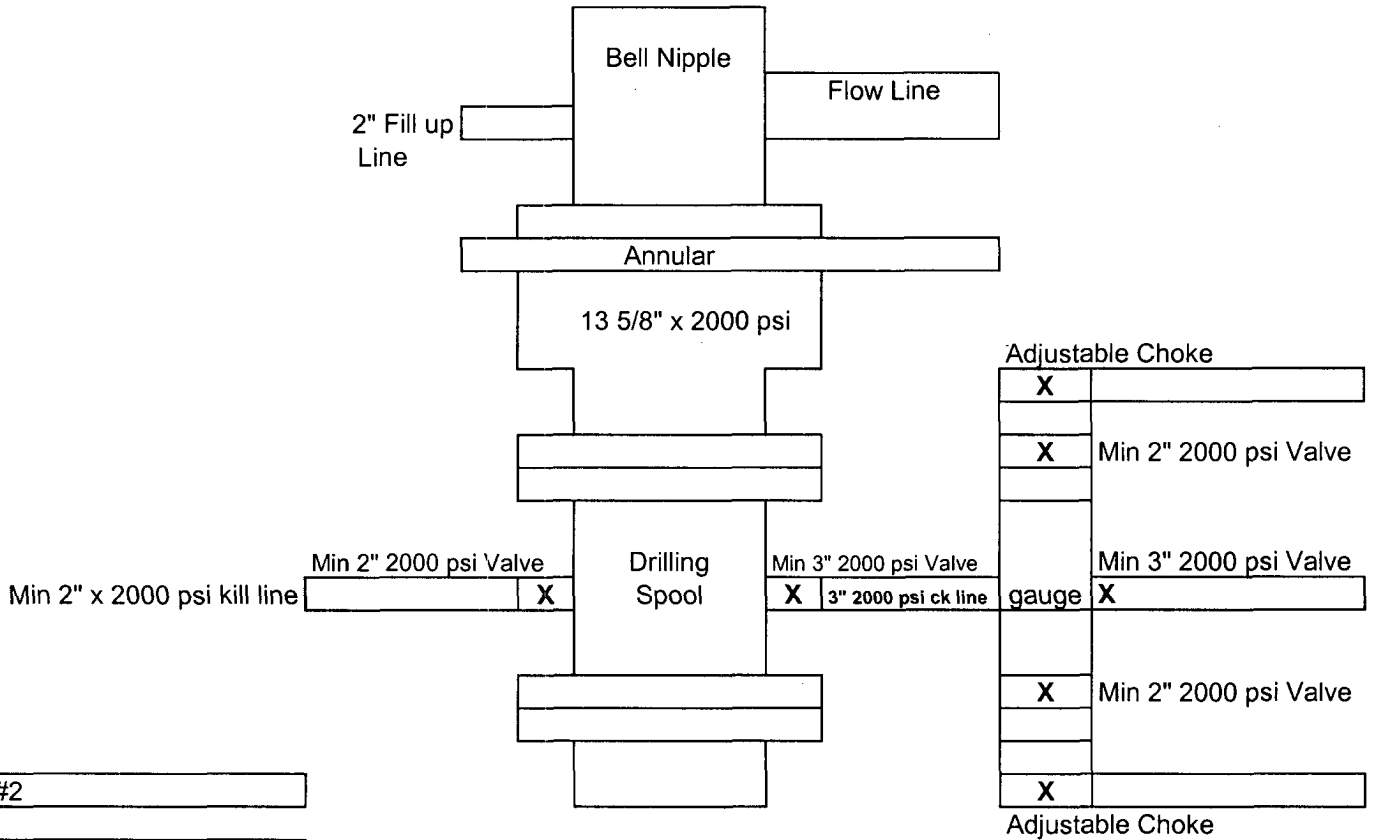


Exhibit #2

Forty Niner Ridge Unit #102
1980' FNL & 2310' FEL
Sec 16-T23S-R30E
Eddy, County
New Mexico

Mewbourne Oil Company
BOP Scematic for
8 3/4" or 7 7/8" Hole

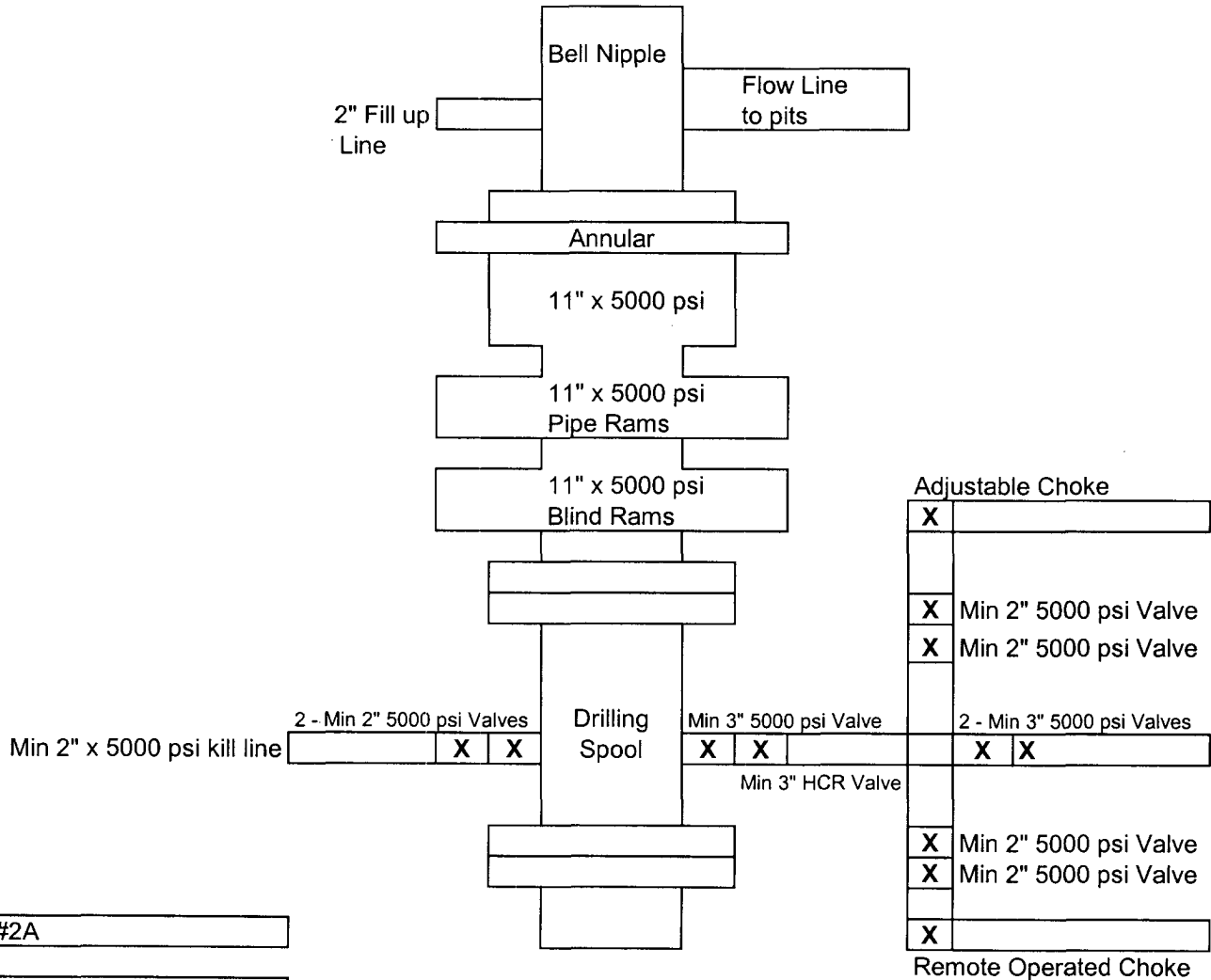


Exhibit #2A

Forty Niner Ridge Unit #102
1980' FNL & 2310' FEL
Sec 16-T23S-R30E
Eddy, County
New Mexico

SECTION 16, TOWNSHIP 23 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

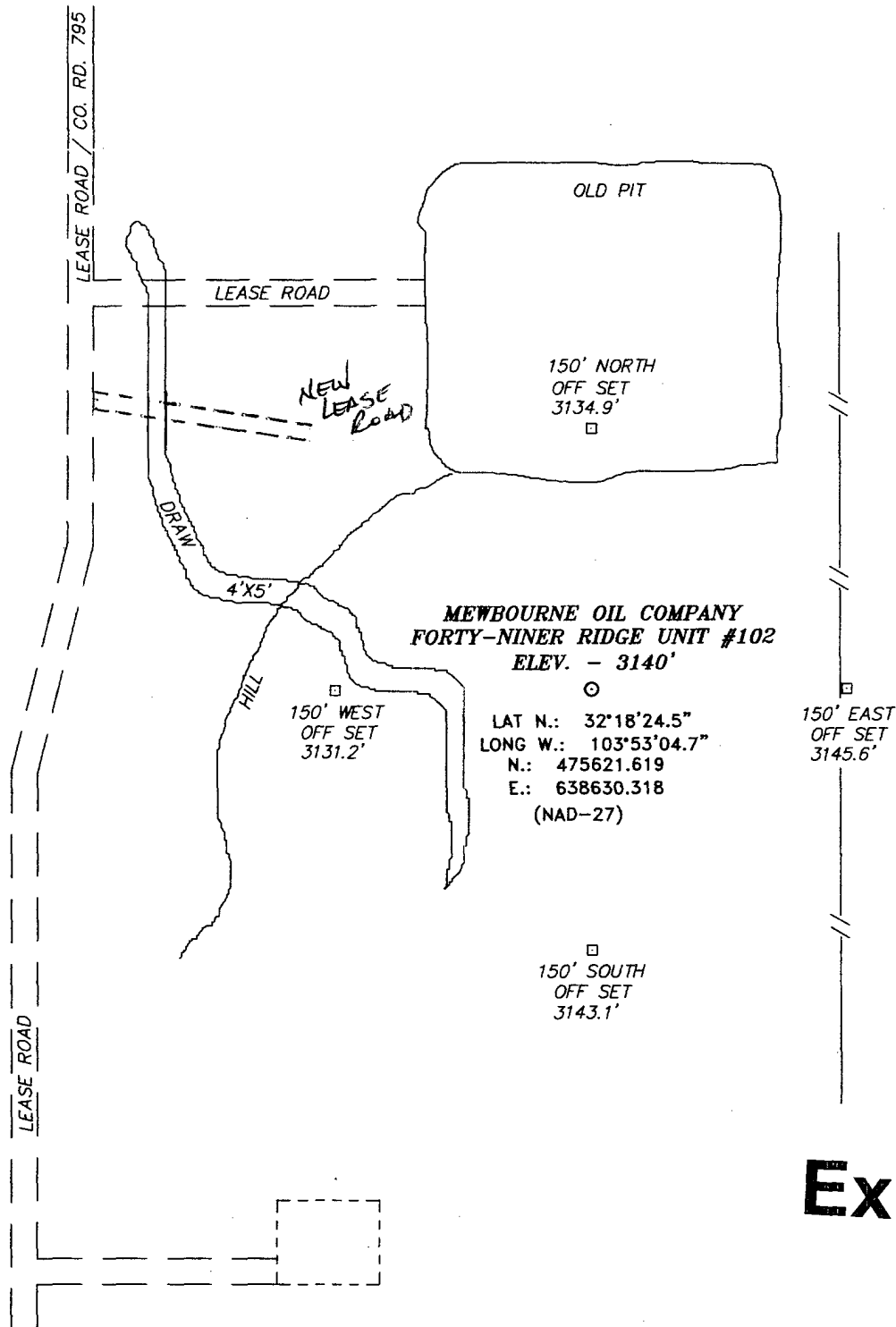
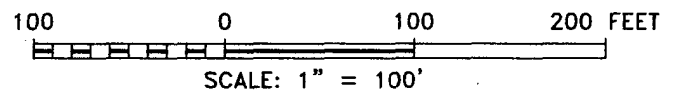


Exhibit 3A

DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 795 (MOBLEY RANCH), GO SOUTHWEST ON C.R. 795 FOR 1.8 MILE TO THE END OF CO. RD 795 WHERE TURNS IN TO LEASE ROAD SOUTH; ON LEASE ROAD PROCEED SOUTH 0.2 MILE TO LEASE ROAD; THENCE EAST FOR 0.1 MILE TO OLD PAD AND PROPOSED LEASE ROAD.



BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 6786 Drawn By: J. M. SMALL

Date: 06-15-2006 Disk: JMS 6786W

MEWBOURNE OIL COMPANY

REF: FORTY-NINER RIDGE UNIT #102 / WELL PAD TOPO

THE FORTY-NINER RIDGE UNIT #102 LOCATED 1980'

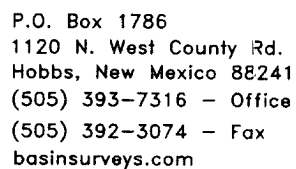
FROM THE NORTH LINE AND 2310' FROM THE EAST LINE OF
SECTION 16, TOWNSHIP 23 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 06-14-2006 Sheet 1 of 1 Sheets



FORTY-NINER RIDGE UNIT #102
 Located 1980 FNL and 2310' FEL
 Section 16, Township 23 South, Range 30 East,
 N.M.P.M., EDDY County, New Mexico.



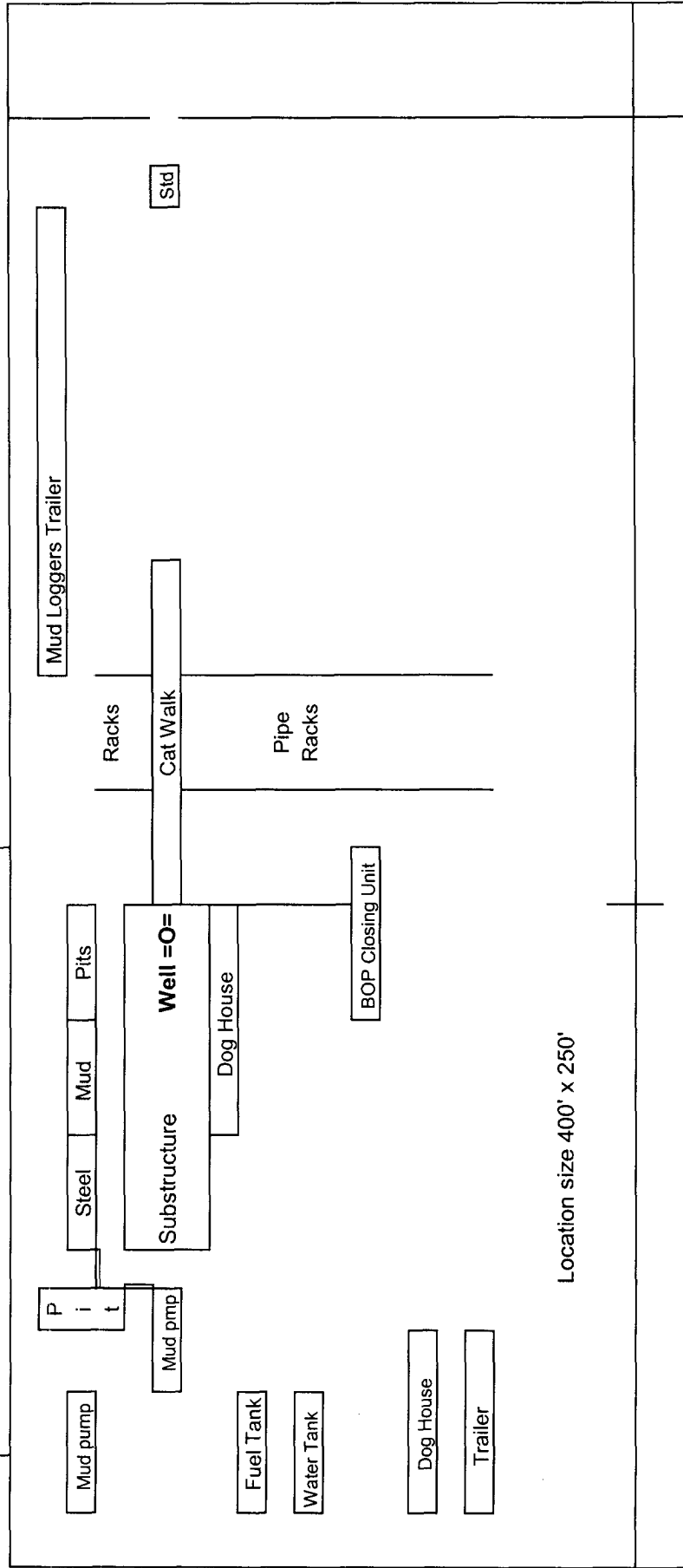
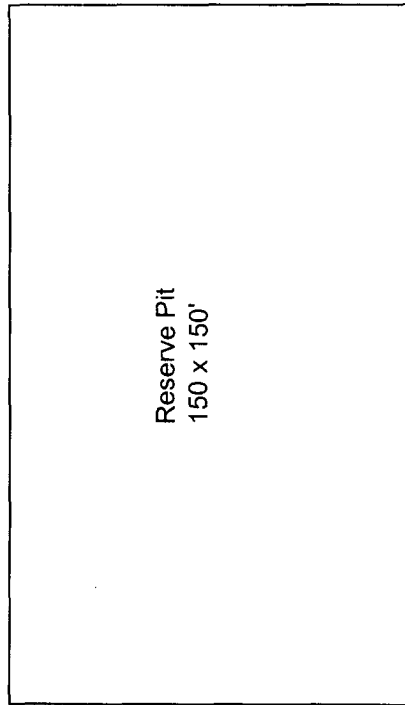
Date: 06-15-2006

MEWBOURNE
OIL CO.

Mewbourne Oil Company

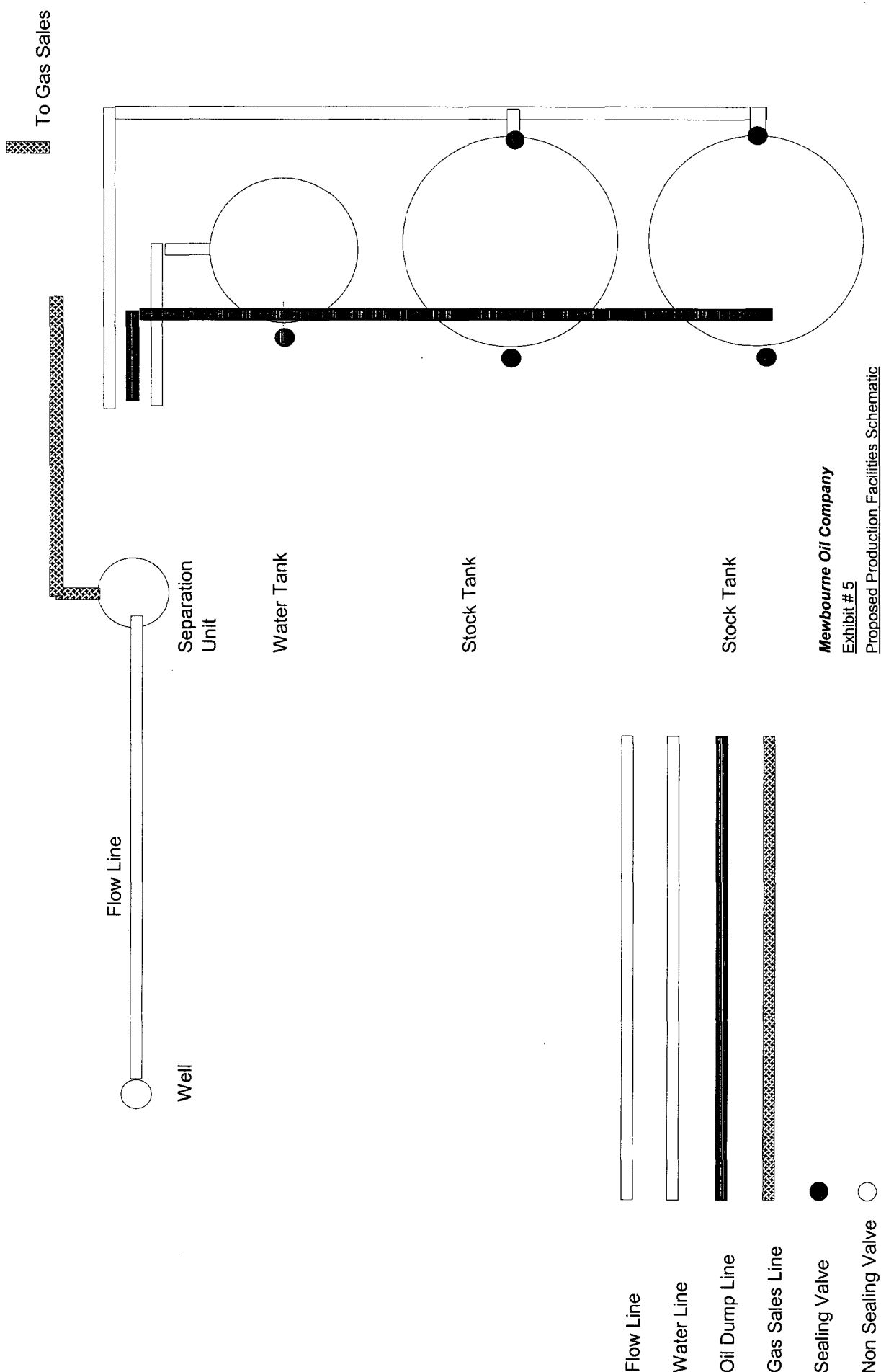
Exhibit #4

Well Name
Forty Niner Ridge Unit #102
Footages
1980' FNL & 2310' FEL
STR
Sec 16-T23S-R30E
County
Eddy, County
State
New Mexico



Rig Location Schematic

Proposed Production Facilities Schematic



Mewbourne Oil Company
Exhibit # 5
Proposed Production Facilities Schematic

Forty Niner Ridge Unit #102
1980' FNL & 2310' FEL
Sec 16-T23S-R30E
Eddy, County
New Mexico



Mosaic Potash Carlsbad Inc.
PO Box 71
1361 Potash Mines Road
Carlsbad, NM 88220
www.mosaicco.com

Tel 505-857-2571
Fax 505-857-0588

July 7, 2006

Mr. Steven J. Smith
Senior Landman
Mewbourne Oil Company
500 W. Texas, Suite 1020
Midland, Texas 79701

(432) 685-4170 FAX

Dear Steve:

Forty Niner Ridge Unit #102 → We are in receipt of your letter dated 6/22/2006 concerning permitting a well in Section 16, T-23-S, R-30-E. Mosaic Potash Carlsbad Inc. does have potash leases to the North and to the East of this section.

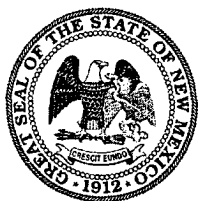
The Morrow test at 1980' FNL & 2310' FEL is just within 1/2 mile of our LMR and just on the edge of the enclave as drawn by the BLM. This location only slightly further impacts potash beyond what has already been compromised by previous drilling in the area (Forty Niner Ridge Unit #1). Therefore Mosaic does not object to this location for this gas test well.

As more information becomes available, our estimates of the extent of potash resources in any given area may change. Therefore, please consider this "no objection" to this location to be valid for one year only. If you are still considering this well location at a date later than one year from today, notify us again at that time so we can make the decision on information current at that time. Do not consider a "no objection offered" or an "objection offered" decision to be permanent.

Sincerely,

Dan Morehouse
Mine Engineering Superintendent

cc: Don Purvis David Waugh



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

July 14, 2006

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

RECEIVED

JUL 19 2006

OLD ARTESIA

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR: Mewbourne Oil Company
LEASE NAME: Forty Niner Ridge Unit # 102
LOCATION: SEC. 16, TOWNSHIP 23 SOUTH, RANGE 30 EAST,
1980' FNL & 2310' FEL
EDDY COUNTY, NM, NMPM

PROPOSED DEPTH: 14900'

Dear Joe 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.

Sincerely,

Bryan G. Arrant
PES, District II Artesia NMOCD

In LMR

Yes ☐

No ☒

In Buffer Zone

Yes ☒

No ☐

w/in 1/2 buffer

Comments:

Jim 2pm 7/14/06

Signature:

Date:

7/14/06



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

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

July 14, 2006
Bureau of Land Management
620 East Greene St.
Carlsbad, NM 88220-7292
Attn: Mr. Craig Cranston or To Whom It May Concern

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR: Mewbourne Oil Company
LEASE NAME: Forty Niner Ridge Unit # 102
LOCATION: SEC. 16, TOWNSHIP 23 SOUTH, RANGE 30 EAST,
1980' FNL & 2310' FEL
EDDY COUNTY, NM, NMPM

RECEIVED
JUL 26 2006
OCC-ARTESIA

PROPOSED DEPTH: 14900'

Dear Craig 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.

Sincerely,

Bryan G. Arrant
PES, District II Artesia NMOCD

In LMR	Yes _____	No <input checked="" type="checkbox"/> _____
In Buffer Zone	Yes <input checked="" type="checkbox"/> _____	No _____

Comments:

In 1/2 Mile Buffer Zone Of Mosaic Potash Co.
N120S 390' WEST To Bz Out Of LMR 1/2 Mile Buffer

Signature: Craig Cranston **Date:** 7-24-06