

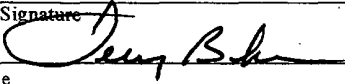
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-0144698	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Mewbourne Oil Company 14744		7. If Unit or CA Agreement, Name and No.	
3a. Address P.O. Box 5270 Hobbs, NM 88241		8. Lease Name and Well No. Colt "5" Federal # 1	
3b. Phone No. (include area code) (505) 393-5905		9. API Well No. 30-015-33151	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1650' FNL & 1650' FEL At proposed prod. zone Unit G DEC 28 2003 OCD-ARTESIA		10. Field and Pool, or Exploratory E. Burton Flat Morrow	
14. Distance in miles and direction from nearest town or post office* 18 miles NE Carlsbad		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 5; T20S; R29E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1650'		12. County or Parish Eddy	
16. No. of Acres in lease 326.13		13. State NM	
17. Spacing Unit dedicated to this well 326.13			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1024'		20. BLM/BIA Bond No. on file NM-1693, Nationwide	
19. Proposed Depth 11750		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3291' GL	
22. Approximate date work will start* December 20, 2003		23. Estimated duration 45 days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Terry Burke	Date 11-20-03
Title Drilling Foreman		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 22 DEC 2003
Title ACTING FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if 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)

Witness Surface Casing

1st Intermediate &
2nd Intermediate

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

CAPITAN CONTROLLED WATER BASIN

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name E. Burton Flat Morrow / ATOKA
Property Code	Property Name COLT "5" FEDERAL	Well Number 1
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3291'

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	5	20 S	29 E		1650	NORTH	1650	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 326.13	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>Diagram showing well locations and dimensions: - Gattuna Canyon "5" Federal #2: 1650' x 1650' area, 1480' vertical dimension, 3299.4' and 3291.8' horizontal dimensions, 3292.3' and 3285.5' vertical dimensions. - Gattuna Canyon "5" Federal #1: 660' x 920' area. - Coordinates: Lat.: N32°36'19.9", Long.: W104°05'38.2"</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Terry Burke</i> Signature Terry Burke Printed Name Drilling Foreman Title Nov 20, 2003 Date</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>GARY L. JONES NOVEMBER 6, 2003 Date Surveyed Signature & Seal of Professional Surveyor W.C.S. NO. 3764 Certificate No. Gary L. Jones 7977 BASIN SURVEYS</p>
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Drilling Program
Mewbourne Oil Company
Colt "5" Federal # 1
1650' FNL & 1650' FEL
Section 5 -T20S-R29E
Eddy County, New Mexico
Lease Number NMNM-0144698

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

Delaware	3,508'
Bone Spring	5,419'
Wolfcamp	9,100'
Strawn	10,300'
Atoka	10,800'
Morrow	11,250'
TD	11,750'

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

Water	Approximately 200'
Hydrocarbons	All zones below Wolfcamp

3. Pressure control equipment:

Two thousand psi working pressure annular BOP's will be installed on the 13-3/8" surface casing. Five thousand psi working pressure BOP's and two thousand psi working pressure Hydril will be installed on the 9-5/8" intermediate casing. Pressure tests with rig pump will be conducted prior to drilling out under all casing strings. A third party Safety Test Company will pressure test and record on chart the approved testing pressure of the BOP, Choke, Hydril, Kelly Cock Valves before we drill below the 9-5/8" casing.

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.

Drilling Program

Mewbourne Oil Company

Colt "5" Federal # 1

Page 2

4. Proposed casing and cementing program:

A. Casing Program:

<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>	
26"	20"	94#	X95	0- 300' 350'	WITNESS
17-1/2"	13-3/8"	54#	J55	0- 1200' 1350'	WITNESS
12-1/4"	9-5/8"	40#	N80/J55	0-3,000'	WITNESS
8-3/4"	5-1/2"	17#	P110/S95	0-11,750'	

Minimum casing design factors: Collapse 1.2, Burst 1.1, Tensile strength 2.0.

B. Cementing Program

- i. Surface Casing: 350 sacks Class "C" light cement containing .25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200 sacks Class "C" cement containing 2% CaCl.
- i. Surface Casing: 600 sacks Class "C" light cement containing .25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200 sacks Class "C" cement containing 2% CaCl.
- ii. Intermediate Casing: 700 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack LCM-1. 200 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 and 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>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'- 300' 350'	FW spud mud	8.6-9.4	32-34	NA
300' - 1200' 1350'	BW spud mud	10.0	32-34	NA
1200'-3000'	FW spud mud	8.6-9.4	28-30	NA
3000'-8800'	Fresh water	8.8-9.2	28-30	NA
8,800'-11,750'	Cut brine water	9.2-10.0	32-42	8-12

(Note: Any Weight Above 8.6#/gallon would be to hold back Wolfcamp shale, rather than abnormal BHP.)

Drilling Program

Mewbourne Oil Company

Colt "5" Federal # 1

Page 3

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:	8.3 lbs/gal gradient or less

8. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 45 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

Colt "5" Federal # 1
1650' FNL & 1650' FEL
Section 5-T20S-R29E
Eddy County, New Mexico
Lease Number NMNM-0144698

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. **Directions to location: From Hobbs West on 62/180 approx 56 miles to MM 49. Turn right on Burton Flat Road. Go North and West staying on blacktop for 5 miles. Turn right on cacliche road (Magnum Booster Sign) go 3 miles staying on main cacliche road. Turn right on new lease road into new location.**

2. Proposed Access Road:

- A. The access to our new location will be from existing lease 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.
- C. Access to location has an existing grade to facilitate adequate drainage.

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. If the well is productive, restoration plans are as follows:

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Colt "5 " Federal # 1

Page 2

- i. The reserve pit will be back-filled after the contents of the pit are allowed to dry (within 10 months after the well is completed).
- ii. 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
- iii. All production vessels left on location will be painted to conform with BLM painting stipulations within 180 days of installation.

5. 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.

6. 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.

7. 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.

8. Ancillary Facilities

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

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Colt "5" Federal # 1

Page 3

9. 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 600' X 600' has been staked and flagged.
- D. An archaeological survey has been conducted on the proposed access road and location pad.

10. 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 per BLM guidelines. 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 with a mixture of native grasses as stipulated by the BLM.
- 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 treated as outlined above within the prescribed amount of time. Any additional caliche required for production facilities will be obtained from a source as described in Section 6.

11. Surface Ownership:

The surface is owned by: Bureau of Land Management

12. 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.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Colt "5" Federal # 1

Page 4

13. Operator's Representative:

A. Through APD approval and drilling operations:

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

B. Through completion and production operations:

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

14. 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: 11/19/03

Signature: 

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

Mewbourne Oil Company
BOP Schematic for
12 1/4" Hole

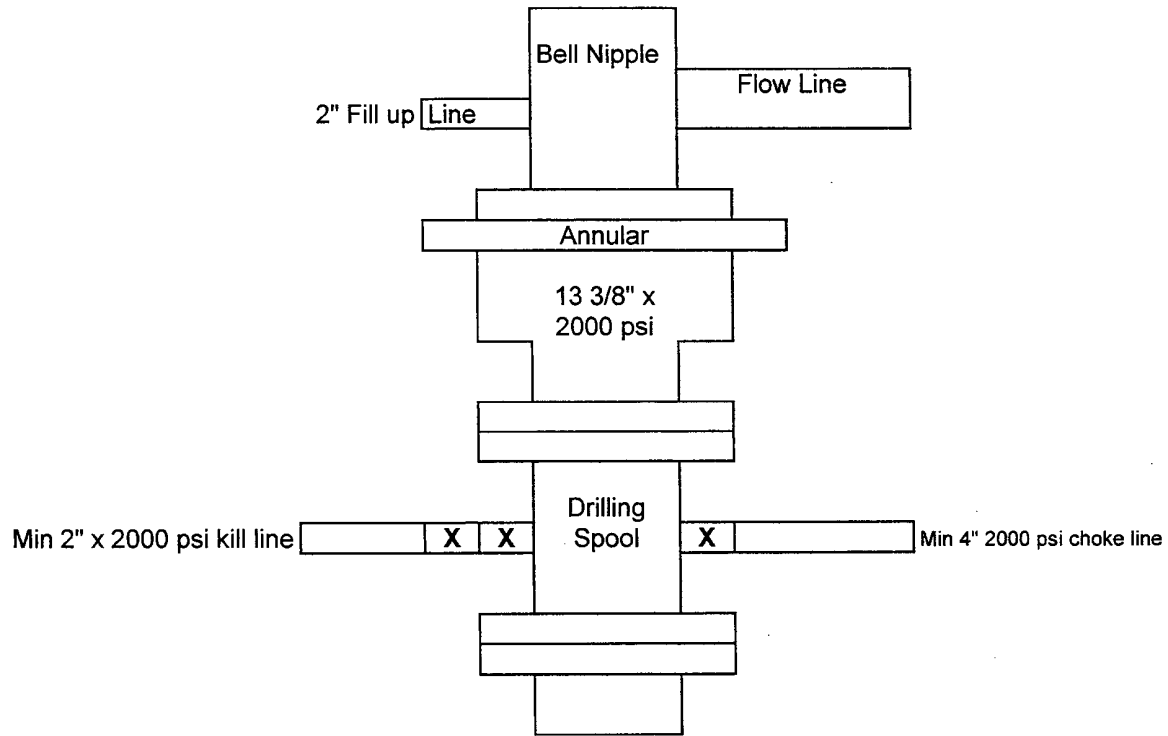


Exhibit #2

Colt "5" Federal # 1
1650' FNL & 1650' FEL
Sec.5; T20S; R29E
Eddy County, New Mexico

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

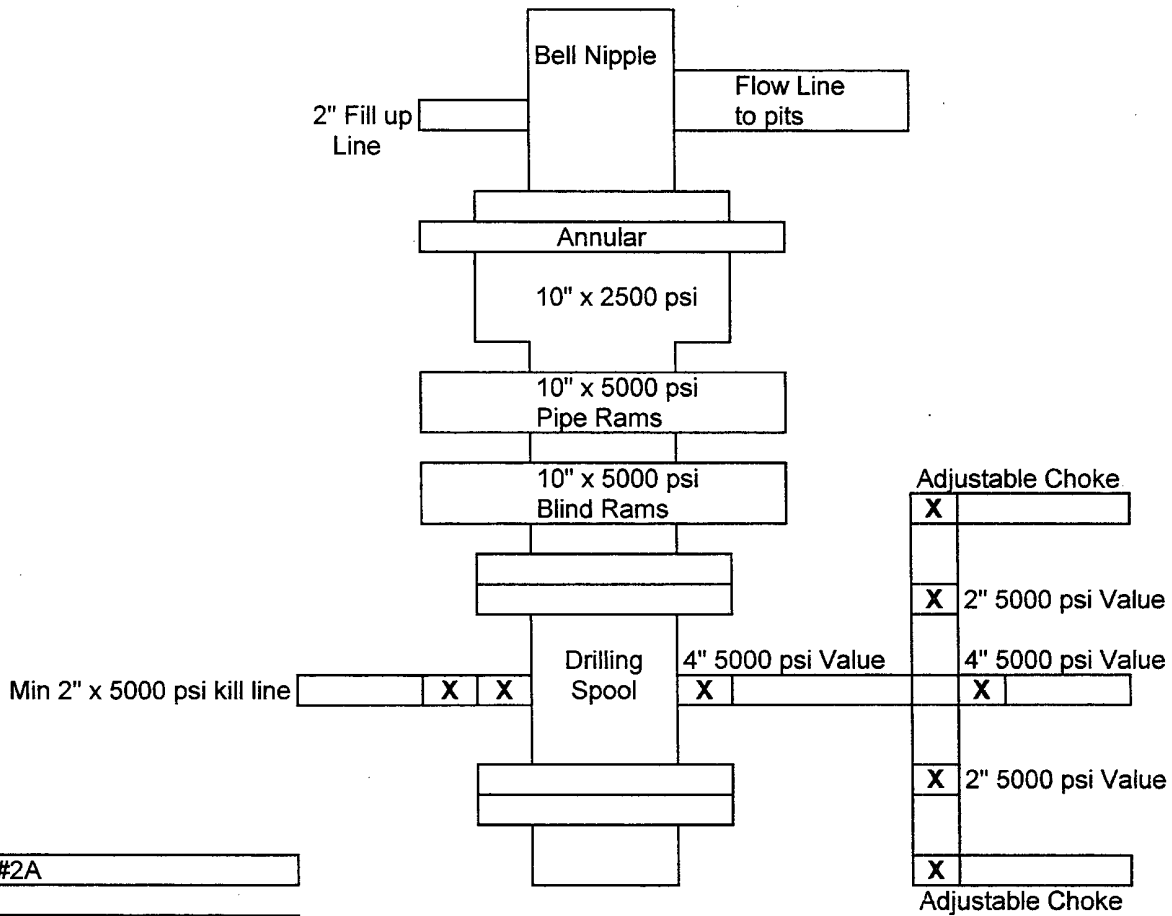


Exhibit #2A

Colt "5" Federal # 1
1650' FNL & 1650' FEL
Sec.5; T20S; R29E
Eddy County, New Mexico

Notes Regarding Blowout Preventer

Mewbourne Oil Company

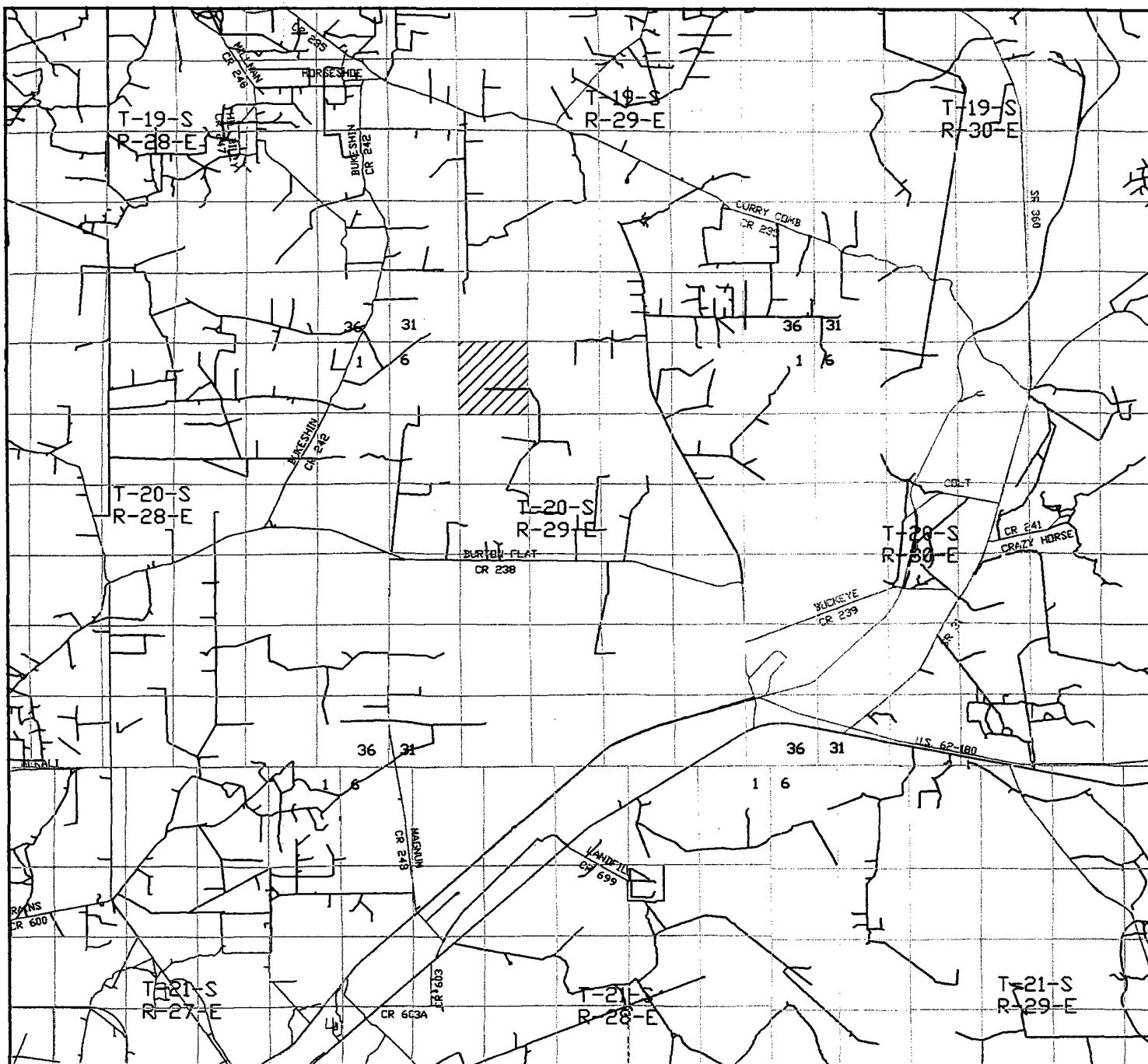
Colt "5" Federal # 1

1650' FNL & 1650' FEL

Section 5- T20S-R29E

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 2000 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 2000 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.



COLT "5" FEDERAL #1
 Located 1650' FNL and 1650' FEL
 Section 5, Township 20 South, Range 29 East,
 N.M.P.M., Eddy County; New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 3764AA - KJG #7

Survey Date: 11-06-2003

Scale: 1" = 2 MILES

Date: 11-07-2003

MEWBOURNE
OIL CO.

Exhibit #4
Status of Wells in Immediate Vicinity
Mewbourne Oil Company
Colt "5" Federal # 1
1650' FNL & 1650' FEL
Section 5 T-20S R-29E
Eddy County, New Mexico
Lease Number NMNM-0144698

Section 5 T-20S R-29E

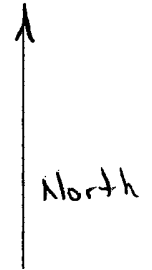
Operator: Mewbourne Oil Company
Well Name: Gatuna Canyon "5" Federal # 1
Unit letter: M
Status: Producing
Field: E. Burton Flats Morrow / Atoka

Operator: Mewbourne Oil Company
Well Name: Gatuna Canyon "5" Federal # 2
Unit letter: ~~A~~ F
Status: Producing
Field: E. Burton Flats Morrow

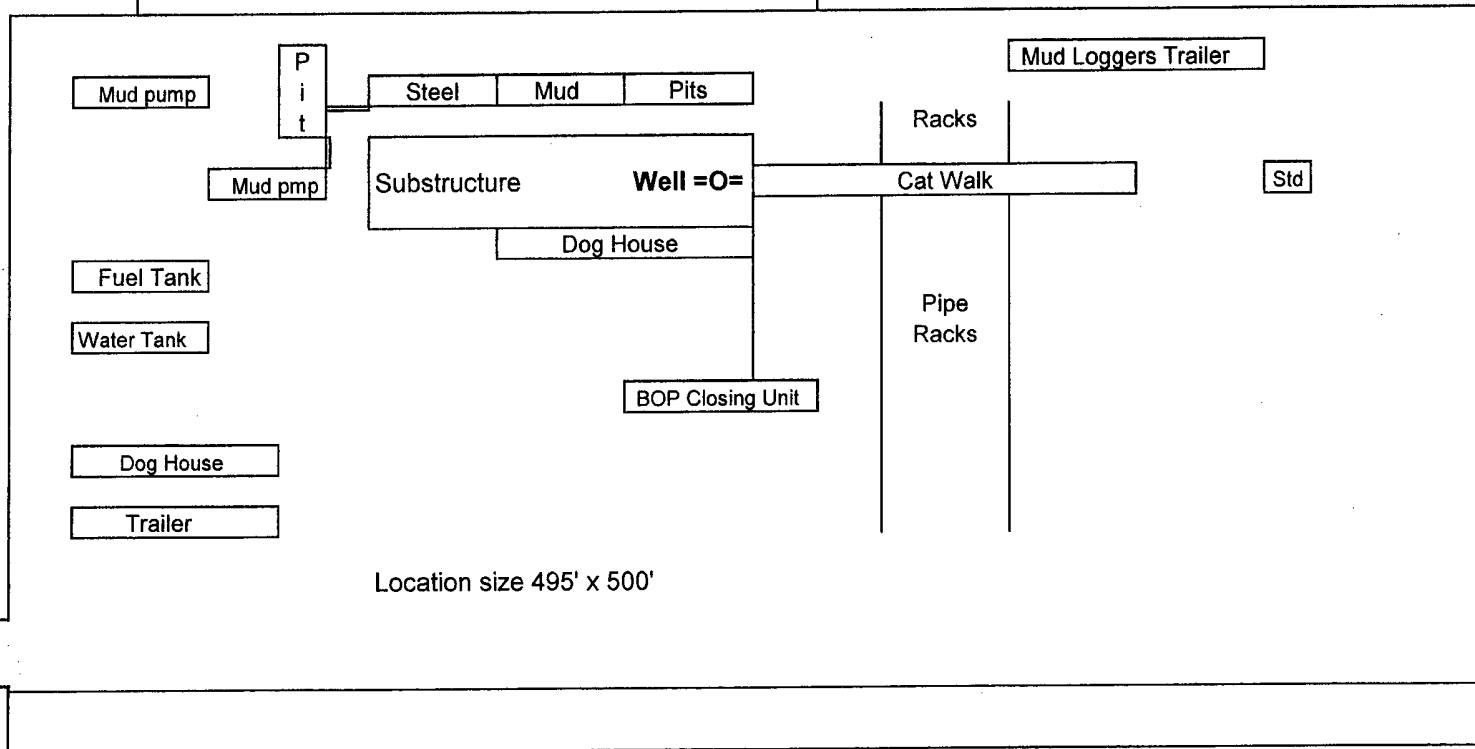
Mewbourne Oil Company

Exhibit # 5

Well Name Colt "5" Federal # 1
Footages 1650' FNL & 1650' FEL
STR Sec.5; T20S; R29E
County Eddy County
State New Mexico

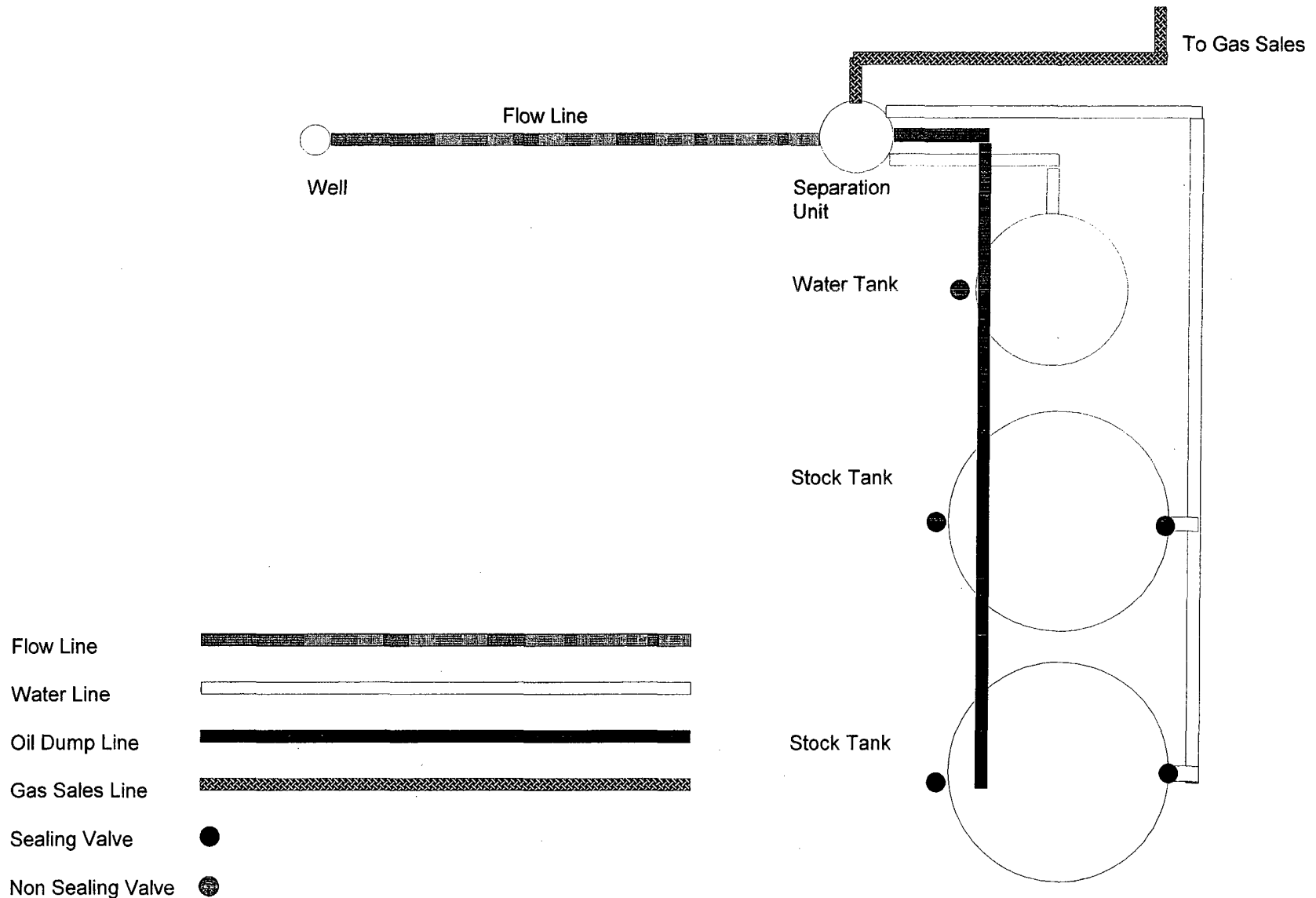


Reserve Pit
150 x 150'



Rig Location Schematic

Proposed Production Facilities Schematic



Mewbourne Oil Company

Exhibit # 6

Proposed Production Facilities Schematic

Colt "5" Federal # 1

Sec. 5; T20S; R29E

1650' FNL & 1650' FEL

Eddy County, NM

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Colt "5" Federal # 1

1650' FNL & 1650' FEL

Section 5 -T20S-R29E

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:

- 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.

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.

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.

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 toolpushers 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 and Delaware formations.

**United States Department of the Interior
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287**

Statement Accepting Responsibility for Operations

Operator Name: Mewbourne Oil Company
Street or Box: P.O. Box 5570
City, State: Hobbs, New Mexico
Zip Code: 88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number: Lease Number NMNM-0144698

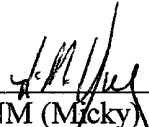
Legal Description of Land: Section 5, T20S, R29E, Eddy County, New Mexico. Location
1650' FNL & 1650' FEL of Section 5.

Formation (if applicable):

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: _____


Name: NM (Micky) Young
Title: District Manager
Date: November, 2003