

612

UNITED STATES **OCD-ARTESIA**
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ATS-07-380
FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

HIGH CAVEKARST

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No.	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. 35802	
2. Name of Operator Mewbourne Oil Company - 14744		9. API Well No. 30-015-35648	
3a. Address PO Box 5270 Hobbs, NM 88240		10. Field and Pool, or Exploratory NW Corral Canyon Delaware	
3b. Phone No. (include area code) 505-393-5905		11. Sec., T., R., M., or Blk. and Survey or Area Sec 35-T24S-R29E	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 189' FSL & 2582' FWL, Unit N At proposed prod. zone 2310' FSL & 2310' FWL, Unit K		12. County or Parish Eddy	
14. Distance in miles and direction from nearest town or post office* 6 miles SE of Malaga, NM		13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330' @ pay zone	16. No. of Acres in lease 320	17. Spacing Unit dedicated to this well 80	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 732'	19. Proposed Depth 7620' MD 5295' TVD	20. BLM/BIA Bond No. on file NM1693, Nationwide	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3071' GL	22. Approximate date work will start* ASAP	23. Estimated duration 30	

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 <i>Kristi Green</i>	Name (Printed/Typed) Kristi Green	Date 03/26/07
Title Hobbs Regulatory		
Approved by <i>S. Carter</i>	Name (Printed/Typed)	Date
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	MAY 31 2007

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.

APPROVAL FOR TWO YEARS

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)

NSL-

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

CARLSBAD CONTROLLED WATER BASIN

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

**If earthen pits are used in
association with the drilling of thi
well, an OCD pit permit must be
obtained prior to pit construction.**

DISTRICT 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 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 46464	Pool Name NW Corral Canyon Delaware
Property Code	Property Name WOOD DRAW "35" FEDERAL	Well Number 5
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3071'

Surface Location

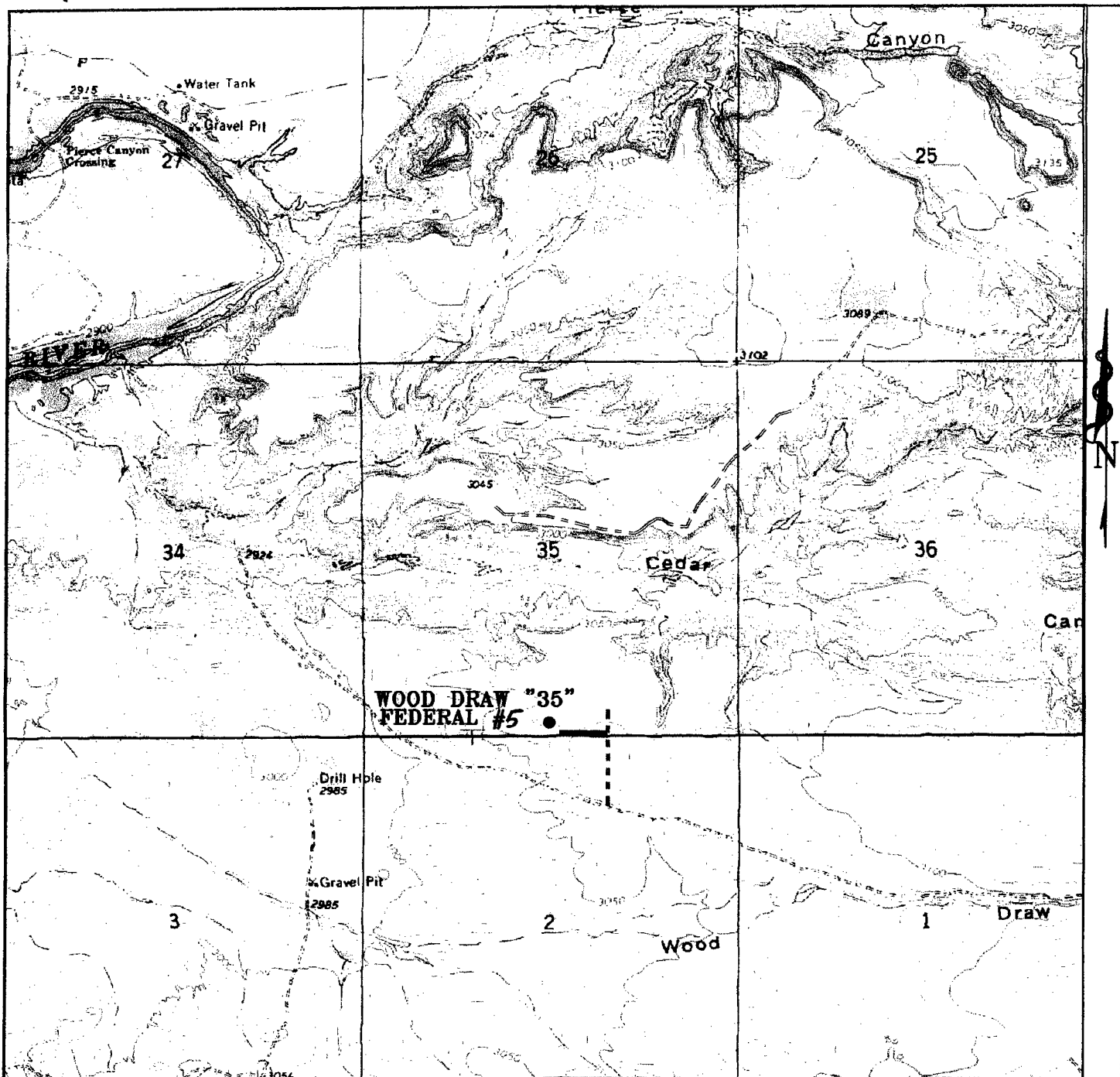
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	35	24 S	29 E		189	SOUTH	2582	WEST	EDDY

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
K	35	24S	29E		2310	SOUTH	2310	WEST	EDDY
Dedicated Acres 80	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

				Lat.: N32°10'01.1" Long.: W103°57'16.7" N.: 424668.65 E.: 617179.09 (NAD-27)		OPERATOR CERTIFICATION 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. Signature: <i>Kristi Green</i> Date: 3/26/07 Printed Name: Kristi Green	
				SURVEYOR CERTIFICATION 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. FEBRUARY 20, 2007 Date Surveyed: <i>GARY L. JONES</i> Signature: <i>GARY L. JONES</i> Professional Seal: <i>GARY L. JONES</i> Certificate No. Gary L. Jones 7977 BASIN SURVEYS A2			



WOOD DRAW "35" FEDERAL #5
 Located 189' FSL and 2582' FWL
 Section 35, Township 24 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: 17824T JMS

Survey Date: 02-20-2007

Scale: 1" = 2000'

Date: 02-22-2007

MEWBOURNE
OIL CO.

Pathfinder Energy

Planning Report

Company: Mewbourne Oil Company Field: Wood Draw 35 Federal #5 Site: Wood Draw 35 Federal #5 Well: Wood Draw 35 Federal #5 Wellpath: OH				Date: 3/23/2007 Time: 07:49:58 Page: 1 Co-ordinate(NE) Reference: Wood Draw 35 Federal #5, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,352.69Azi) Plan: Plan #3 3-22-07						
Field: Wood Draw 35 Federal #5										
Map System: US State Plane Coordinate System 1927 Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level				Map Zone: New York Eastern Zone Coordinate System: Site Centre Geomagnetic Model: igrf2005						
Site: Wood Draw 35 Federal #5										
Site Position: From: Lease Line Position Uncertainty: 0.00 ft Ground Level: 3055.30 ft		Northing: Easting:		ft ft		Latitude: Longitude: North Reference: Grid Grid Convergence: 0.00 deg				
Well: Wood Draw 35 Federal #5				Slot Name:						
Well Position: +N/-S 0.00 ft +E/-W 0.00 ft Position Uncertainty: 0.00 ft		Northing: 0.00 ft Easting: 0.00 ft		Latitude: 39 59 10.548 N Longitude: 76 7 3.406 W						
Wellpath: OH				Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 0.00 deg Mag Dip Angle: 0.00 deg						
Current Datum: SITE Magnetic Data: 3/12/2007 Field Strength: 0 nT Vertical Section: Depth From (TVD) ft		Height 0.00 ft +N/-S ft		+E/-W ft Direction deg						
0.00		0.00		0.00 352.69						
Plan: Plan #3 3-22-07 Principal: No				Date Composed: 3/12/2007 Version: 1 Tied-to: From Surface						
Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4980.00	0.00	0.00	4980.00	0.00	0.00	0.00	0.00	0.00	0.00	
5480.00	90.00	318.00	5298.31	236.55	-212.99	18.00	18.00	0.00	318.00	
5717.69	90.58	0.78	5297.06	453.89	-294.73	18.00	0.24	18.00	89.15	
7385.04	90.58	0.78	5280.30	2121.00	-272.00	0.00	0.00	0.00	0.00	PBHL
Survey										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00					

Drilling Program
Mewbourne Oil Company
Wood Draw 35 Federal #5
189' FSL & 2582' FWL of Sec 35-T24S-R29E (Surface Location)
2310' FSL & 2310' FWL of Sec 35-T24S-R29E (Bottom Hole Location)
Eddy County, New Mexico

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

Top Salt	2780'
Base Salt	3040'
Delaware	3244'

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

Water	Below 200'
Hydrocarbons	All zones below Delaware

3. Pressure control equipment:

A 3000 psi WP Double Ram BOP and a 3000 psi WP Annular will be installed after running 9 5/8" casing. Pressure tests will be conducted prior to drilling out under the 9 5/8" casing string. 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 as recommended in Onshore Order #2 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:

<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>
12 1/4"	9 5/8"	36#	J55	0-800'
8 3/4"	5 1/2"	17#	J55/N80	0-7620' (MD)

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

B. Cementing Program

i. Surface Casing: 400 sacks Class C cement containing 2% CaCl.

iii. Production Casing: 1200 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.

522
COA →

**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'-800'	FW spud mud / BW	8.6-9.0	29-32	NA
800'-7620' (MD)	Brine water	10.0-10.2	30-32	15

6. Evaluation Program:

Samples:	10' samples from 3000' to TD
Logging:	A Gamma Ray will be run with directional tools. A Cased Hole/Gamma Ray Neutron will be run with the Bond Log.
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:	130 degree F
Maximum bottom hole pressure:	8.6 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 30 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

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

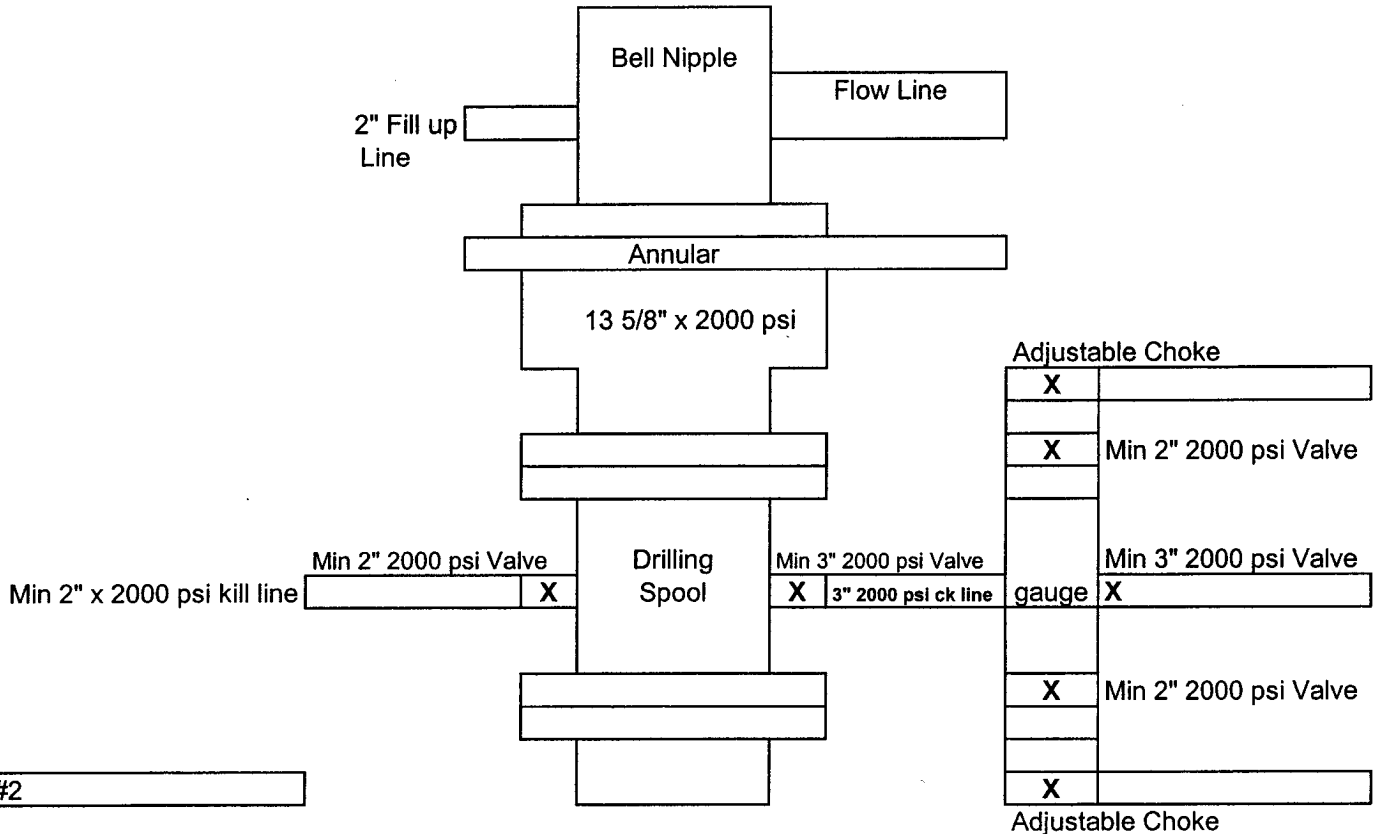


Exhibit #2

Wood Draw 35 Federal #5
189' FSL & 2582' FWL Surface Location
2310' FSL & 2310' FWL Bottom Hole Location
Sec 35-T24S-R29E
Eddy County, New Mexico

Mewbourne Oil Company

BOP Schematic for
8 3/4" or 7 7/8" Hole

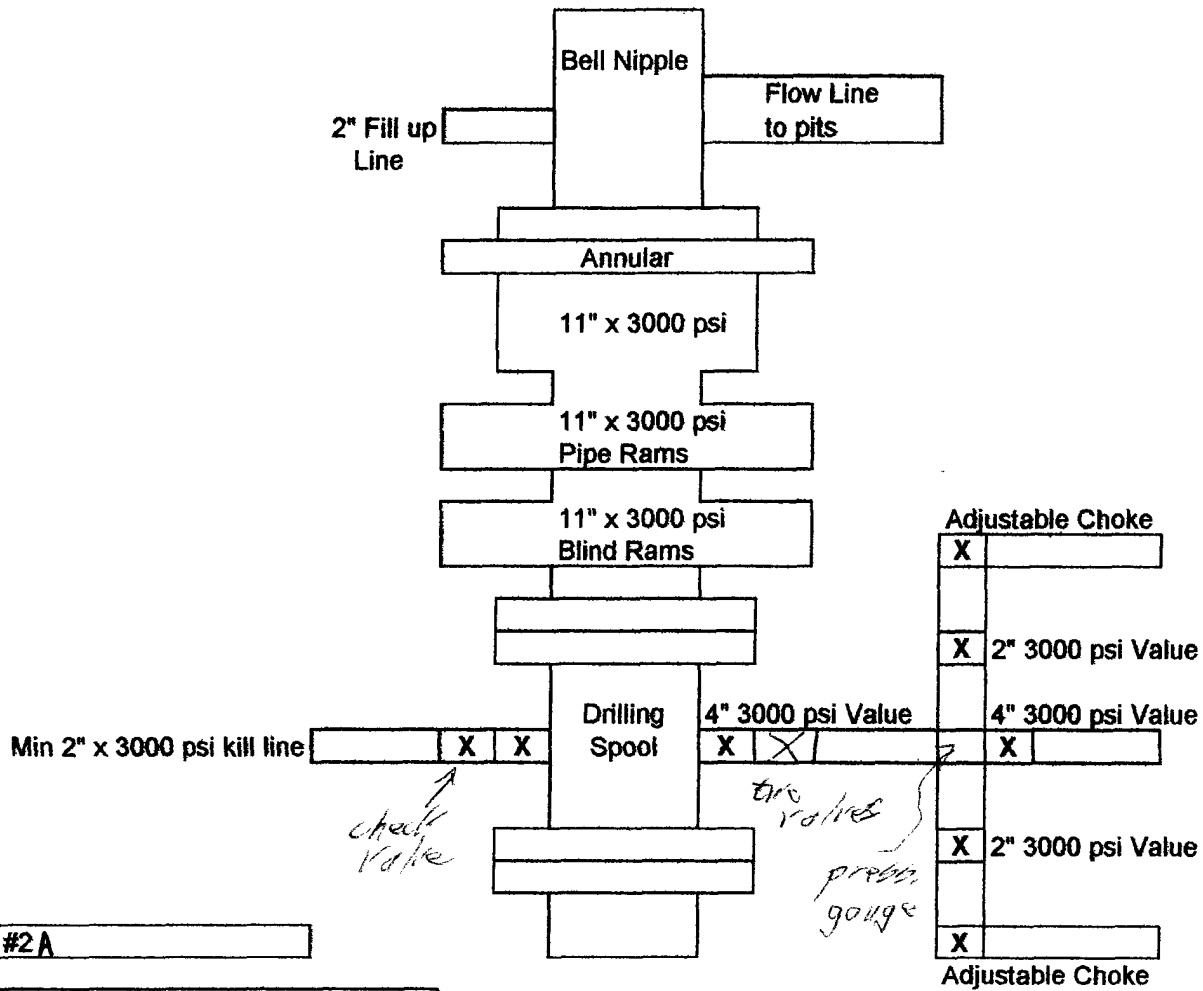


Exhibit #2A

Wood Draw 35 Federal #5

189' FSL & 2582' FWL Surface Location

2310' FSL & 2310' FWL Bottom Hole Location

Sec 35-T24S-R29E

Eddy County, New Mexico

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Wood Draw 35 Federal #5

189' FSL & 2582' FWL of Sec 35-T24S-R29E (Surface Location)

2310' FSL & 2310' FWL of Sec 35-T24S-R29E (Bottom Hole Location)

Eddy County, New Mexico

- I. 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.
- II. Blowout preventer and all fittings must be in good condition with a minimum 3000 psi working pressure.
- III. 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.
- IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- V. A kelly cock shall be installed on the kelly at all times.

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.

Pathfinder Energy

Planning Report

Company: Mewbourne Oil Company
Field: Wood Draw 35 Federal #5
Site: Wood Draw 35 Federal #5
Well: Wood Draw 35 Federal #5
Wellpath: OH

Date: 3/23/2007 **Time:** 07:49:58 **Page:** 2
Co-ordinate(NE) Reference: Site: Wood Draw 35 Federal #5, Grid Nort
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,352.69Azi)
Plan: Plan #3-22-07

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	0.00	0.00	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4980.00	0.00	0.00	4980.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP @ 4980' MD
5000.00	3.60	318.00	4999.99	0.47	-0.42	0.52	18.00	18.00	0.00	
5100.00	21.60	318.00	5097.18	16.61	-14.96	18.38	18.00	18.00	0.00	
5200.00	39.60	318.00	5182.90	54.29	-48.88	60.06	18.00	18.00	0.00	
5300.00	57.60	318.00	5248.76	109.80	-98.86	121.48	18.00	18.00	0.00	
5388.68	73.56	318.00	5285.30	169.61	-152.72	187.66	18.00	18.00	0.00	PBHL Case 2
5400.00	75.60	318.00	5288.31	177.72	-160.02	196.63	18.00	18.00	0.00	
5480.00	90.00	318.00	5298.31	236.55	-212.99	261.72	18.00	18.00	0.00	
5500.00	90.05	321.60	5298.30	251.82	-225.90	278.51	18.00	0.27	18.00	
5600.00	90.31	339.60	5297.98	338.59	-274.79	370.79	18.00	0.26	18.00	
5700.00	90.54	357.60	5297.23	436.21	-294.48	470.12	18.00	0.23	18.00	
5717.69	90.58	0.78	5297.06	453.89	-294.73	487.69	18.00	0.20	18.00	
5800.00	90.58	0.78	5296.23	536.19	-293.61	569.18	0.00	0.00	0.00	
5900.00	90.58	0.78	5295.22	636.18	-292.24	668.18	0.00	0.00	0.00	
6000.00	90.58	0.78	5294.22	736.16	-290.88	767.18	0.00	0.00	0.00	
6100.00	90.58	0.78	5293.21	836.15	-289.52	866.18	0.00	0.00	0.00	
6200.00	90.58	0.78	5292.21	936.13	-288.15	965.18	0.00	0.00	0.00	
6300.00	90.58	0.78	5291.20	1036.12	-286.79	1064.18	0.00	0.00	0.00	
6400.00	90.58	0.78	5290.20	1136.10	-285.43	1163.18	0.00	0.00	0.00	
6500.00	90.58	0.78	5289.19	1236.09	-284.06	1262.18	0.00	0.00	0.00	

Pathfinder Energy

Planning Report

Company: Mewbourne Oil Company
Field: Wood Draw 35 Federal #5
Site: Wood Draw 35 Federal #5
Well: Wood Draw 35 Federal #5
Wellpath: OH

Date: 3/23/2007 **Time:** 07:49:58 **Page:** 3
Co-ordinate(NE) Reference: Wood Draw 35 Federal #5, Grid Nort
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,352.69Azi)
Plan: Plan #3 3-22-07

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6600.00	90.58	0.78	5288.19	1336.08	-282.70	1361.18	0.00	0.00	0.00	
6700.00	90.58	0.78	5287.18	1436.06	-281.34	1460.18	0.00	0.00	0.00	
6800.00	90.58	0.78	5286.18	1536.05	-279.97	1559.18	0.00	0.00	0.00	
6900.00	90.58	0.78	5285.17	1636.03	-278.61	1658.18	0.00	0.00	0.00	
7000.00	90.58	0.78	5284.17	1736.02	-277.25	1757.18	0.00	0.00	0.00	
7100.00	90.58	0.78	5283.16	1836.00	-275.89	1856.18	0.00	0.00	0.00	
7200.00	90.58	0.78	5282.16	1935.99	-274.52	1955.18	0.00	0.00	0.00	
7300.00	90.58	0.78	5281.15	2035.97	-273.16	2054.18	0.00	0.00	0.00	
7385.04	90.58	0.78	5280.30	2121.00	-272.00	2138.37	0.00	0.00	0.00	PBHL

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec		Longitude Deg Min Sec	
PBHL		5280.30	2121.00	-272.00	2121.00	-272.00	39	59 31.446 N	76	7 7.445 W
PBHL Case 2		5285.30	2121.00	-107.00	2121.00	-107.00	39	59 31.478 N	76	7 5.326 W
T1		5295.30	111.00	-272.00	111.00	-272.00	39	59 11.591 N	76	7 6.928 W
T1 Case 2		5300.30	111.00	-107.00	111.00	-107.00	39	59 11.623 N	76	7 4.809 W

Annotation

MD ft	TVD ft	
4980.00	4980.00	KOP @ 4980' MD

Mewbourne Oil Company

Field: Wood Draw 35 Federal #5
 Site: Wood Draw 35 Federal #5
 Well: Wood Draw 35 Federal #5
 Wellpath: OH
 Plan: Plan #3 3-22-07

SITE DETAILS
 Wood Draw 35 Federal #5
 Ground Level: 3055.30
 Positional Uncertainty: 0.00
 Convergence: 0.00

WELLPATH DETAILS
 OH
 Rig: SITE 0.00ft
 Ref. Datum: Origin Starting
 V Section +N-S +E-W From TVD
 Angle 352.69° 0.00 0.00 0.00

ANNOTATIONS
 No. TVD MD Annotation
 1 4980.00 4980.00 KOP @ 4980' MD

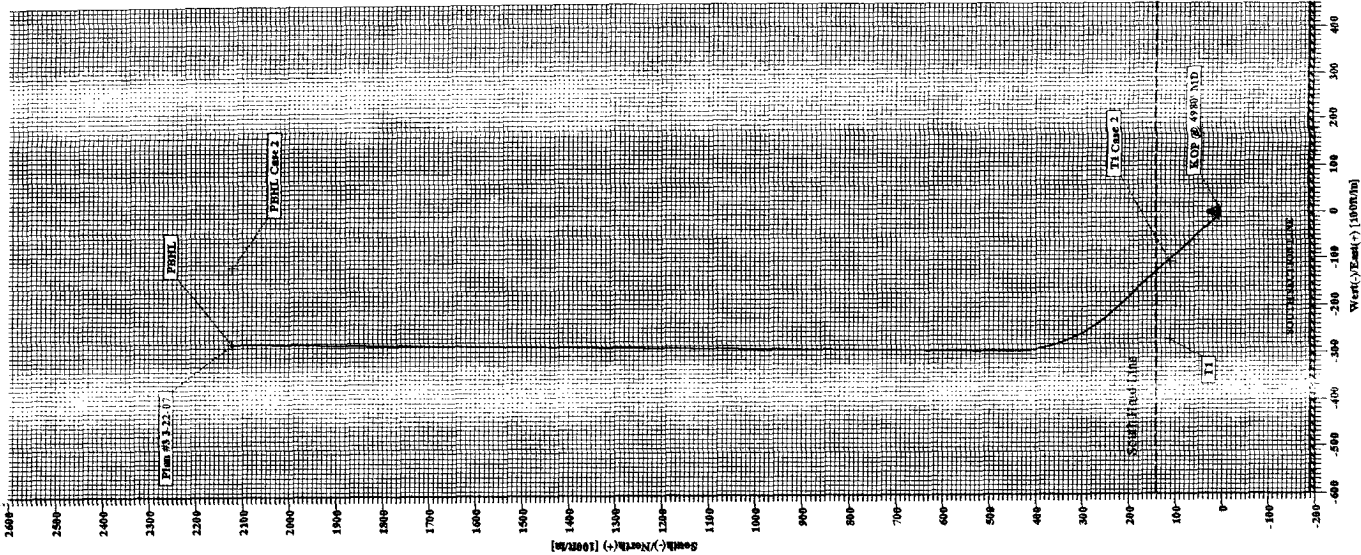
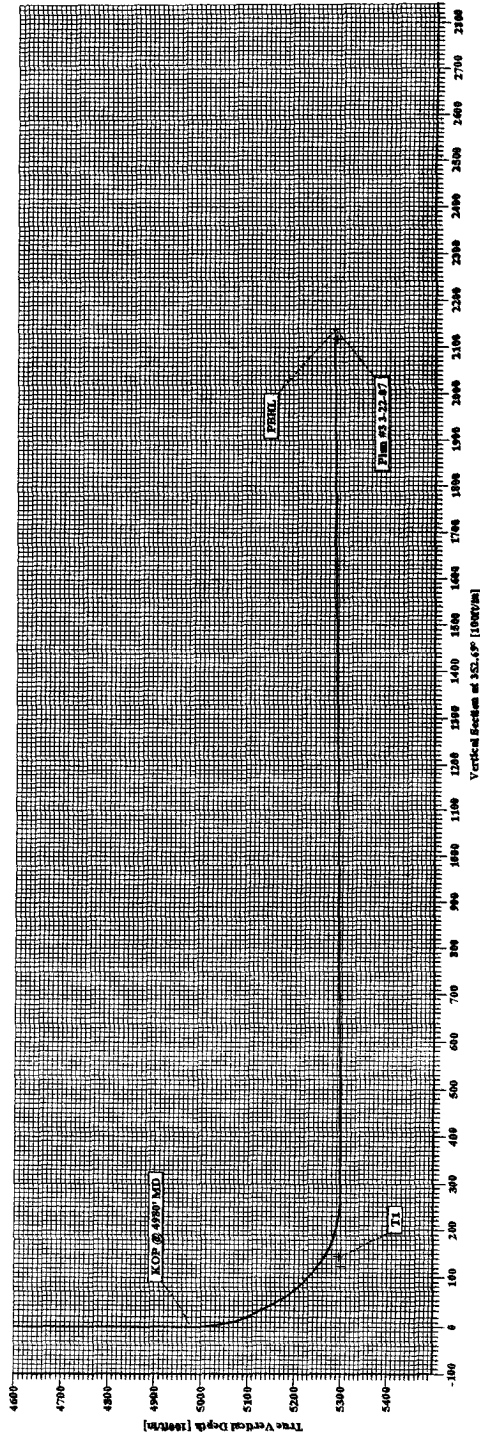
TARGET DETAILS

Name	MD	Inc	Azi	TVD	+N-S	+E-W	Shape
PRHL	5280.30	0.00	0.00	2121.00	-272.00	-272.00	Point
PRHL Case 2	5285.30	0.00	0.00	2121.00	-107.00	-107.00	Point
T1	5295.30	0.00	0.00	1111.00	-272.00	-272.00	Point
T1 Case 2	5300.30	0.00	0.00	1111.00	-107.00	-107.00	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	DLag	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4980.00	0.00	0.00	4980.00	0.00	0.00	0.00	0.00	0.00	
3	5480.00	90.00	318.00	5298.31	236.55	-212.99	18.00	318.00	261.72	
4	5490.00	90.38	0.78	5297.06	453.89	-294.73	18.00	89.15	487.69	
5	7385.04	90.38	0.78	5280.50	2121.00	-272.00	0.00	0.00	2138.37	PRHL

Compass Rose
 Azimuth to Grid North
 True North: 0.00°
 Magnetic North: 0.00°
 Magnetic Field
 Strength: 0.00
 Dip Angle: 0.00°
 Date: 3/12/2007
 Model: ig2005



PATHFINDER

Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company
Wood Draw 35 Federal #5
189' FSL & 2582' FWL of Sec 35-T24S-R29E (Surface Location)
2310' FSL & 2310' FWL of Sec 35-T24S-R29E (Bottom Hole Location)
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 @ 3244' 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 know 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. Choke manifold with minimum of one adjustable choke.
 - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
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. If 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.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
MEWBOURNE OIL COMPANY
Wood Draw 35 Federal #5
189' FSL & 2582' FWL of Sec 35-T24S-R29E (Surface Location)
2310' FSL & 2310' FWL of Sec 35-T24S-R29E (Bottom Hole Location)
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. A road map showing the location of the proposed well is attached to C102. Exhibit #3 is a topographic map showing the location of the proposed well and access road (proposed road is highlighted in blue).
- B. **Directions to location from: South of Carlsbad on US Hwy 285 (Pecos Hwy) 28 miles. Turn left (east) on Longhorn Rd (Eddy Co 725) and continue east 4 miles. Turn left (north) and continue NE 1.8 miles. Turn left (north) and continue north and east 6.2 miles. Turn left (north) and continue north 1 mile. Turn left (west) 0.1 mile, then right (north) 0.1 mile. Turn left (west) 0.2 miles to location**

2. Proposed Access Road:

- A. Approx 700' of 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 this well site shown on Exhibit 4.

4. Location of Existing and/or Proposed Facilities:

- A. There are production facilities on this lease at the Wood Draw 35 Federal #1 location.
- B. In the event that the well is productive, MOC will lay an On Lease 3" poly flowline following the staked and arc'ed proposed road back to the Wood Draw 35 Federal #1 (as shown in red on Exhibit 3).
- C. 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.

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 350' X 250' 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. 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 BLM/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.

11. Surface Ownership:

The surface is owned by: Located entirely on BLM land

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.
- C. Enclosed is the Directional Plan for the horizontal section (Exhibit 7).

13. 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

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: 03/26/07

Signature: 

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

SECTION 35, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

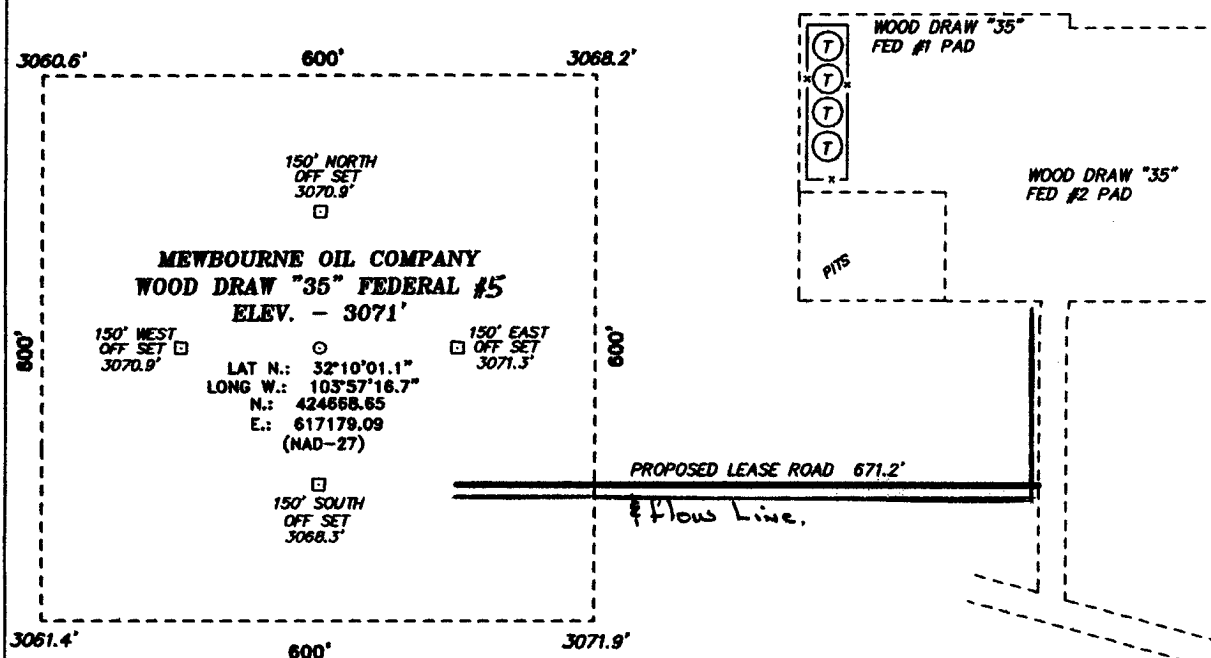
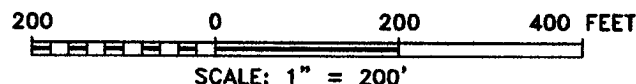


Exhibit 3

DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF CO. RD. 746A (GAVILAN) AND CO. RD. 748 (McDONALD), PROCEED SOUTHEAST ON CO. RD. 746 FOR APPROX 2.4 MILES TO AN EXISTING LEASE ROAD, ON LEASE ROAD PROCEED SOUTHWEST 0.1 MILE WINDING SOUTHEAST 1.5 MILE TO LEASE ROAD, ON LEASE ROAD PROCEED 3.4 MILE WEST TO LEASE ROAD TO THE WOOD DRAW "35" FED. #1 AND PROPOSED LEASE ROAD.



MEWBOURNE OIL COMPANY

REF: WOOD DRAW "35" FEDERAL #5 / WELL PAD TOPO

THE WOOD DRAW "35" FEDERAL No. 5 LOCATED 189'

FROM THE SOUTH LINE AND 2582' FROM THE WEST LINE OF

SECTION 35, TOWNSHIP 24 SOUTH, RANGE 29 EAST,

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

A2

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

W.O. Number: 17824

Drawn By: J. SMALL

Date: 02-22-2007

Disk: JMS 17824W

Survey Date: 02-20-2007

Sheet 1 of 1 Sheets

Exhibit #4
Status of Wells in Immediate Vicinity
Mewbourne Oil Company
Wood Draw 35 Federal #5
189' FSL & 2582' FWL of Sec 35-T24S-R29E (Surface Location)
2310' FSL & 2310' FWL of Sec 35-T24S-R29E (Bottom Hole Location)
Eddy County, New Mexico

Section 35-T24S-R29E

Operator: Mewbourne Oil Company
Well Name: Wood Draw 35 Federal #1
Unit letter: O
Status: Pumping
Field: NW Corral Canyon Delaware

Section 35-T24S-R29E

Operator: Mewbourne Oil Company
Well Name: Wood Draw 35 Federal #2
Unit letter: O
Status: Pumping
Field: NW Corral Canyon Delaware

Section 35-T24S-R29E

Operator: Mewbourne Oil Company
Well Name: Pierce Crossing 35 Federal #1
Unit letter: H
Status: Flowing
Field: Owen Mesa Atoka

Section 35-T24S-R29E

Operator: Devon Energy Production
Well Name: Corral Fly 35 Fed Com #1
Unit letter: F
Status: Flowing
Field: Owen Mesa

**Conditions of Approval
Pecos River/Canyons Complex**

EA#: NM-080-07-0612

Lease #: NM-88139

Mewbourne Oil Company

Wood Draw 35 Fed. #5

Location: Section 35, T. 24 S. R. 29 E

Surface disturbance throughout Pecos River Canyons Complex ACEC must be restricted to minimize environmental impacts and mitigate adverse effects to natural and cultural resources.

Conditions of Approval Cave and Karst

EA#: NM-080-07-0612
Lease #: NM-88139
Mewbourne Oil Company
Wood Draw 35 Fed. #5

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone as identified in the geologic report.

Casing:

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-

bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:

Any blasting will be a phased and time delayed.

Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Pressure Tests:

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Differential Shut-off Systems:

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

Record Keeping:

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Mewbourne Oil Company
Well Name & No. 5-Wood Draw 35 Federal
Location SHL: 0189FSL, 2582FWL, Sec. 35, T-24-S, R-29-E, Eddy County, NM
Location BHL: 2310FSL, 2310FWL, Sec. 35, T-24-S, R-29-E, Eddy County, NM
Lease: NM-88139

.....

I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
 2. Setting and/or Cementing of all casing strings
 3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. Although no H2S has been reported in the area, it is always a possible hazard.
- C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- E. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

- A. The 9-5/8 inch surface casing shall be set at a minimum of 25 feet into the Rustler Anhydrite at approximately 800 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 4. If cement falls back, remedial action will be done prior to drilling out that string.

**Possible lost circulation in the Delaware and Bone Spring formations.
Well is in a high cave/karst area.**

- B. The minimum required fill of cement behind the 5-1/2 inch production casing is cement to extend a minimum of 200' inside the surface casing. If a DV tool is used, cement to circulate to tool. If cement does not meet these conditions, contact the appropriate BLM office.**
- C. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.**

III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53.**
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) PSI.**
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.**
 - 1. The tests shall be done by an independent service company.**
 - 2. The results of the test shall be reported to the appropriate BLM office.**
 - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.**

IV. DRILL STEM TEST:

If a drill stem test is performed, the conditions of Onshore Order 2.III.D must be met.

Engineer on call phone: 505-706-2779

WWI 042407