AP5-11-352

OCD-HOBBS

Form 3160-3
(August 2007)

Split Estate

HOBBS OCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 02 2011

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NM-0359292
	6. If Indian, Allotee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. Salado Draw "10" Fed Com #1H 38606
2. Name of Operator Mewbourne Oil Company 14744	9. API Well No. 30-025-40124
3a. Address PO Box 5270, Hobbs, NM 88241	3b. Phone No. (include area code) (575) 393-5905
	10. Field and Pool, or Exploratory Wildcat Bone Spring 97741
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface Unit C, 330' FNL & 1690' FWL At proposed prod. zone Unit N, 330' FSL & 1690' FWL	11. Sec., T. R. M. or Blk. and Survey or Area Sec 10, T26S, R33E
14. Distance in miles and direction from nearest town or post office* 30 miles west of Jal, NM	12. County or Parish Lea / 13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of acres in lease 160	17. Spacing Unit dedicated to this well 160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 350'	19. Proposed Depth 13621' MD (9270' TVD) Pilot Hole 10,150	20. BLM/BIA Bond No. on file NM1693
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3319' GL	22. Approximate date work will start* 03/01/2011	23. Estimated duration 40 days

24. Attachments

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

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

25. Signature Charles L. Martin	Name (Printed/Typed) Charles Martin	Date 01/21/2011
Title Engineer		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date APR 28 2011
Title 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. 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.

(Continued on page 2)

*(Instructions on page 2)

KZ 05/02/11

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

MAY 04 2011

HOBBS OCD

MAY 02 2011

RECEIVED

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

OIL CONSERVATION DIVISION

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

Form C-102
Revised July 16, 2010

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-40124	97741	WILDCAT

Property Code	Property Name	Well Number
38606	SALADO DRAW "10" FEDERAL COM	1H

OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3319'

Surface Location

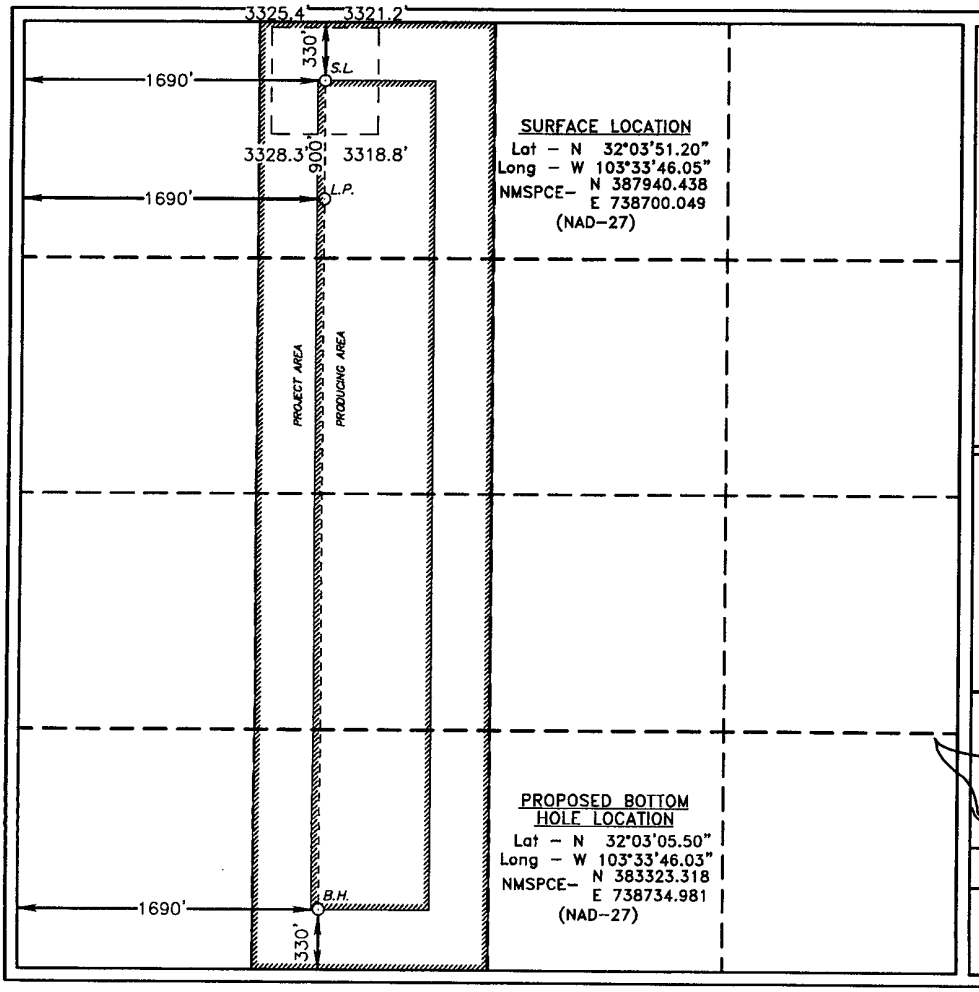
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	10	26 S	33 E		330	NORTH	1690	WEST	LEA

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
N	10	26 S	33 E		330	SOUTH	1690	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



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 or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 1/20/11

N. M. Young

Printed Name

Latham & Mewbourne Co

Email Address

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 supervison, and that the same is true and correct to the best of my belief.

DECEMBER 16, 2010

Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES — NEW MEXICO — REGISTERED PROFESSIONAL LAND SURVEYOR

NM PS 23880

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 23880

Drilling Program
Mewbourne Oil Company

Salado Draw "10" Federal Com #1H
330' FNL & 1690' FWL (SHL)
Sec 10-T26S-R33E
Lea County, New Mexico

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

Rustler	850'
Top of Salt	1200'
Base of Salt	4675'
Lamar	4950'
*Delaware	4975'
*Bone Springs	9050'
1st Bone Springs sand	10000'
Wolfcamp	WILL NOT PENETRATE

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

Water	Fresh water is anticipated at 115' and will be protected by setting surface casing at 875' 1000 and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

A 2000# WP 13 5/8" Annular will be installed after running 13 3/8" casing. A 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 9 5/8" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOPs will be inspected and operated as recommended in Onshore Order #2. A 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.
Will test the 7" and 9 5/8" BOPE to 3000# and all Annulars to 1500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. Drilling Program:

500sx yield 1.34

MOC proposes to drill a vertical wellbore to 10150' to log and evaluate the bone Springs. MOC will then plug back to 8677' with Class "H" neat cement (# sacks determined by wireline caliper)& kick off to horizontal @ 9245' TVD. The well will be drilled to 13621' MD (9270' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

See COA

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
17 ½"	13 3/8" (new)	48#	H40	0'-875' 1000'	ST&C
12 ¼"	9 5/8" (new)	36#	K55	0'-3300'	ST&C
12 ¼"	9 5/8" (new)	40#	K55	3300'-4300'	ST&C
12 ¼"	9 5/8" (new)	40#	N80	4300'-4900'	LT&C
8 ¾"	7" (new)	26#	P110	0-8677' MD	LT&C
8 ¾"	7" (new)	26#	P110	8677'-9577' MD	BT&C
6 1/8"	4 ½" (new)	11.63	P110	9377'-13621'MD	LT&C

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.
See COA *Subject to availability of casing.

B. Cementing Program: See COA

i. Surface Casing: 250 sacks Lite "C" (35:65:4) cement w/salt and LCM additives. Yield at 2.05 cuft/sk. 200 sks class "C" w/2% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface w/20% excess.

ii. Intermediate Casing: 650 sacks Lite "C" (35:65:4) cement w/LCM additives. Yield at 2.05 cuft/sk. 400 sks class "C" w/1% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface w/20% excess.

iii. Production Casing: 160 sacks Lite "H" (35:65:4) cement w/salt, fluid loss, & LCM additives. Yield at 2.45 cuft/sk. 400 sks class "H" w/salt & fluid loss additives. Yield at 1.29 cuft/sk. Cmt calculated to tieback to intermediate csg @4700' w/25% excess.

iv. Prod. Liner: Cement not required a packer/port completion will be used.

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

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-~~875'~~ 1600	FW spud mud	8.6-9.0	32-34	NA
~~875~~'-4900'	Brine water	10.0	28-30	NA
4900'- TD	FW w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program: See COA

Samples: 10' samples from surface casing to TD
Logging: GR surface to 10150' & Gyro from KOP (8700') to surface.

8. Downhole Conditions

Zones of abnormal pressure: None anticipated
Zones of lost circulation: Anticipated in surface and intermediate holes
Maximum bottom hole temperature: 120 degree F
Maximum bottom hole pressure: 8.3 lbs/gal gradient or less

9. 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.

Notes Regarding Blowout Preventer
Mewbourne Oil Company
Salado Draw "10" Federal Com #1H
330' FNL & 1690' FWL (SHL)
Sec 10-T26S-R33E
Lea 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 2000 psi working pressure on 9 5/8" casing and 3000 psi working pressure on 7".

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.

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Salado Draw "10" Federal Com #1H

330' FNL & 1690' FWL (SL)

Sec 10-T26S-R33E

Lea 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 Yates formation 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
   - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel
   Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H2S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H2S are detected the well will be shut in and a rotating head, mud/gas separator, and flare line with igniter will be installed.

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.

8. Emergency Phone Numbers

Lea County Sheriff's Office	**911 or 575-396-3611**
Ambulance Service	**911 or 575-885-2111**
Carlsbad Fire Dept	**911 or 575-885-2111**
Closest Medical Facility - Columbia Medical Center of Carlsbad	**575-492-5000**

Mewbourne Oil Company	**Hobbs District Office**	**575-393-5905**
	Fax	**575-397-6252**
	2nd Fax	**575-393-7259**
District Manager	**Micky Young**	**575-390-0999**
Drilling Superintendent	**Frosty Lathan**	**575-390-4103**
Engineer	**Charles Martin**	**575-441-2081**
Drilling Foreman	**Wesley Noseff**	**575-441-0729**

Mewbourne Oil Co

Lea County, NM
Sec 10, T-26-S, R-33-E
Salado Draw "10" Federal COM #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

19 January, 2011

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Salado Draw "10" Federal COM #1H
Company:	Mewbourne Oil Co	**TVD Reference:**	WELL @ 3340.0usft (Patterson #46)
Project:	Lea County, NM	**MD Reference:**	WELL @ 3340.0usft (Patterson #46)
Site:	Sec 10, T-26-S, R-33-E	**North Reference:**	Grid
Well:	Salado Draw "10" Federal COM #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project Lea County, NM

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Sec 10, T-26-S, R-33-E

Site Position:		**Northing:**	387,940.44 usft	**Latitude:**	32° 3' 51.196 N
From:	Map	**Easting:**	738,700.05 usft	**Longitude:**	103° 33' 46.053 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.41 °

Well Salado Draw "10" Federal COM #1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	387,940.44 usft	**Latitude:**	32° 3' 51.196 N
	+E/-W	0.0 usft	**Easting:**	738,700.05 usft	**Longitude:**	103° 33' 46.053 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,319.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/19/2011	7.62	60.05	48,562

Design Design #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.57

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,677.0	0.00	0.00	8,677.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,574.2	89.72	179.57	9,250.0	-570.1	4.3	10.00	10.00	20.01	179.57	
13,621.3	89.72	179.57	9,270.0	-4,617.0	35.0	0.00	0.00	0.00	0.00	PBHL Salado Draw

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Salado Draw "10" Federal COM #1H
Company:	Mewbourne Oil Co	**TVD Reference:**	WELL @ 3340.0usft (Patterson #46)
Project:	Lea County, NM	**MD Reference:**	WELL @ 3340.0usft (Patterson #46)
Site:	Sec 10, T-26-S, R-33-E	**North Reference:**	Grid
Well:	Salado Draw "10" Federal COM #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Salado Draw "10" Federal COM #1H
Company:	Mewbourne Oil Co	**TVD Reference:**	WELL @ 3340.0usft (Patterson #46)
Project:	Lea County, NM	**MD Reference:**	WELL @ 3340.0usft (Patterson #46)
Site:	Sec 10, T-26-S, R-33-E	**North Reference:**	Grid
Well:	Salado Draw "10" Federal COM #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 10°/100' @ 8677' MD									
8,677.0	0.00	0.00	8,677.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	2.30	179.57	8,700.0	-0.5	0.0	0.5	10.00	10.00	0.00
8,800.0	12.30	179.57	8,799.1	-13.2	0.1	13.2	10.00	10.00	0.00
8,900.0	22.30	179.57	8,894.4	-42.9	0.3	42.9	10.00	10.00	0.00
9,000.0	32.30	179.57	8,983.2	-88.7	0.7	88.7	10.00	10.00	0.00
9,100.0	42.30	179.57	9,062.6	-149.2	1.1	149.2	10.00	10.00	0.00
9,200.0	52.30	179.57	9,130.3	-222.6	1.7	222.6	10.00	10.00	0.00
9,300.0	62.30	179.57	9,184.3	-306.6	2.3	306.6	10.00	10.00	0.00
9,400.0	72.30	179.57	9,222.8	-398.7	3.0	398.8	10.00	10.00	0.00
9,500.0	82.30	179.57	9,244.8	-496.2	3.8	496.2	10.00	10.00	0.00
EOB @ 9574' MD / 89.72° Inc / 179.57° Azm / 9250' TVD									
9,574.2	89.72	179.57	9,250.0	-570.1	4.3	570.1	10.00	10.00	0.00
9,600.0	89.72	179.57	9,250.1	-595.9	4.5	596.0	0.00	0.00	0.00
9,700.0	89.72	179.57	9,250.6	-695.9	5.3	696.0	0.00	0.00	0.00
9,800.0	89.72	179.57	9,251.1	-795.9	6.0	796.0	0.00	0.00	0.00
9,900.0	89.72	179.57	9,251.6	-895.9	6.8	896.0	0.00	0.00	0.00
10,000.0	89.72	179.57	9,252.1	-995.9	7.5	996.0	0.00	0.00	0.00
10,100.0	89.72	179.57	9,252.6	-1,095.9	8.3	1,096.0	0.00	0.00	0.00
10,200.0	89.72	179.57	9,253.1	-1,195.9	9.1	1,196.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Salado Draw "10" Federal COM #1H
Company:	Mewbourne Oil Co	**TVD Reference:**	WELL @ 3340.0usft (Patterson #46)
Project:	Lea County, NM	**MD Reference:**	WELL @ 3340.0usft (Patterson #46)
Site:	Sec 10, T-26-S, R-33-E	**North Reference:**	Grid
Well:	Salado Draw "10" Federal COM #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.0	89.72	179.57	9,253.5	-1,295.9	9.8	1,295.9	0.00	0.00	0.00
10,400.0	89.72	179.57	9,254.0	-1,395.9	10.6	1,395.9	0.00	0.00	0.00
10,500.0	89.72	179.57	9,254.5	-1,495.9	11.3	1,495.9	0.00	0.00	0.00
10,600.0	89.72	179.57	9,255.0	-1,595.9	12.1	1,595.9	0.00	0.00	0.00
10,700.0	89.72	179.57	9,255.5	-1,695.9	12.8	1,695.9	0.00	0.00	0.00
10,800.0	89.72	179.57	9,256.0	-1,795.9	13.6	1,795.9	0.00	0.00	0.00
10,900.0	89.72	179.57	9,256.5	-1,895.9	14.4	1,895.9	0.00	0.00	0.00
11,000.0	89.72	179.57	9,257.0	-1,995.9	15.1	1,995.9	0.00	0.00	0.00
11,100.0	89.72	179.57	9,257.5	-2,095.9	15.9	2,095.9	0.00	0.00	0.00
11,200.0	89.72	179.57	9,258.0	-2,195.9	16.6	2,195.9	0.00	0.00	0.00
11,300.0	89.72	179.57	9,258.5	-2,295.9	17.4	2,295.9	0.00	0.00	0.00
11,400.0	89.72	179.57	9,259.0	-2,395.9	18.1	2,395.9	0.00	0.00	0.00
11,500.0	89.72	179.57	9,259.5	-2,495.9	18.9	2,495.9	0.00	0.00	0.00
11,600.0	89.72	179.57	9,260.0	-2,595.9	19.7	2,595.9	0.00	0.00	0.00
11,700.0	89.72	179.57	9,260.5	-2,695.9	20.4	2,695.9	0.00	0.00	0.00
11,800.0	89.72	179.57	9,261.0	-2,795.9	21.2	2,795.9	0.00	0.00	0.00
11,900.0	89.72	179.57	9,261.5	-2,895.8	21.9	2,895.9	0.00	0.00	0.00
12,000.0	89.72	179.57	9,262.0	-2,995.8	22.7	2,995.9	0.00	0.00	0.00
12,100.0	89.72	179.57	9,262.5	-3,095.8	23.4	3,095.9	0.00	0.00	0.00
12,200.0	89.72	179.57	9,263.0	-3,195.8	24.2	3,195.9	0.00	0.00	0.00
12,300.0	89.72	179.57	9,263.5	-3,295.8	24.9	3,295.9	0.00	0.00	0.00
12,400.0	89.72	179.57	9,263.9	-3,395.8	25.7	3,395.9	0.00	0.00	0.00
12,500.0	89.72	179.57	9,264.4	-3,495.8	26.5	3,495.9	0.00	0.00	0.00
12,600.0	89.72	179.57	9,264.9	-3,595.8	27.2	3,595.9	0.00	0.00	0.00
12,700.0	89.72	179.57	9,265.4	-3,695.8	28.0	3,695.9	0.00	0.00	0.00
12,800.0	89.72	179.57	9,265.9	-3,795.8	28.7	3,795.9	0.00	0.00	0.00
12,900.0	89.72	179.57	9,266.4	-3,895.8	29.5	3,895.9	0.00	0.00	0.00
13,000.0	89.72	179.57	9,266.9	-3,995.8	30.2	3,995.9	0.00	0.00	0.00
13,100.0	89.72	179.57	9,267.4	-4,095.8	31.0	4,095.9	0.00	0.00	0.00
13,200.0	89.72	179.57	9,267.9	-4,195.8	31.8	4,195.9	0.00	0.00	0.00
13,300.0	89.72	179.57	9,268.4	-4,295.8	32.5	4,295.9	0.00	0.00	0.00
13,400.0	89.72	179.57	9,268.9	-4,395.8	33.3	4,395.9	0.00	0.00	0.00
13,500.0	89.72	179.57	9,269.4	-4,495.8	34.0	4,495.9	0.00	0.00	0.00
13,600.0	89.72	179.57	9,269.9	-4,595.8	34.8	4,595.9	0.00	0.00	0.00
TD @ 13621' MD / 9270' TVD									
13,621.3	89.72	179.57	9,270.0	-4,617.0	35.0	4,617.2	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL Salado Draw 1(- plan hits target center - Point	0.00	0.00	9,270.0	-4,617.0	35.0	383,323.40	738,735.00	32° 3' 5.504 N	103° 33' 46.030 W

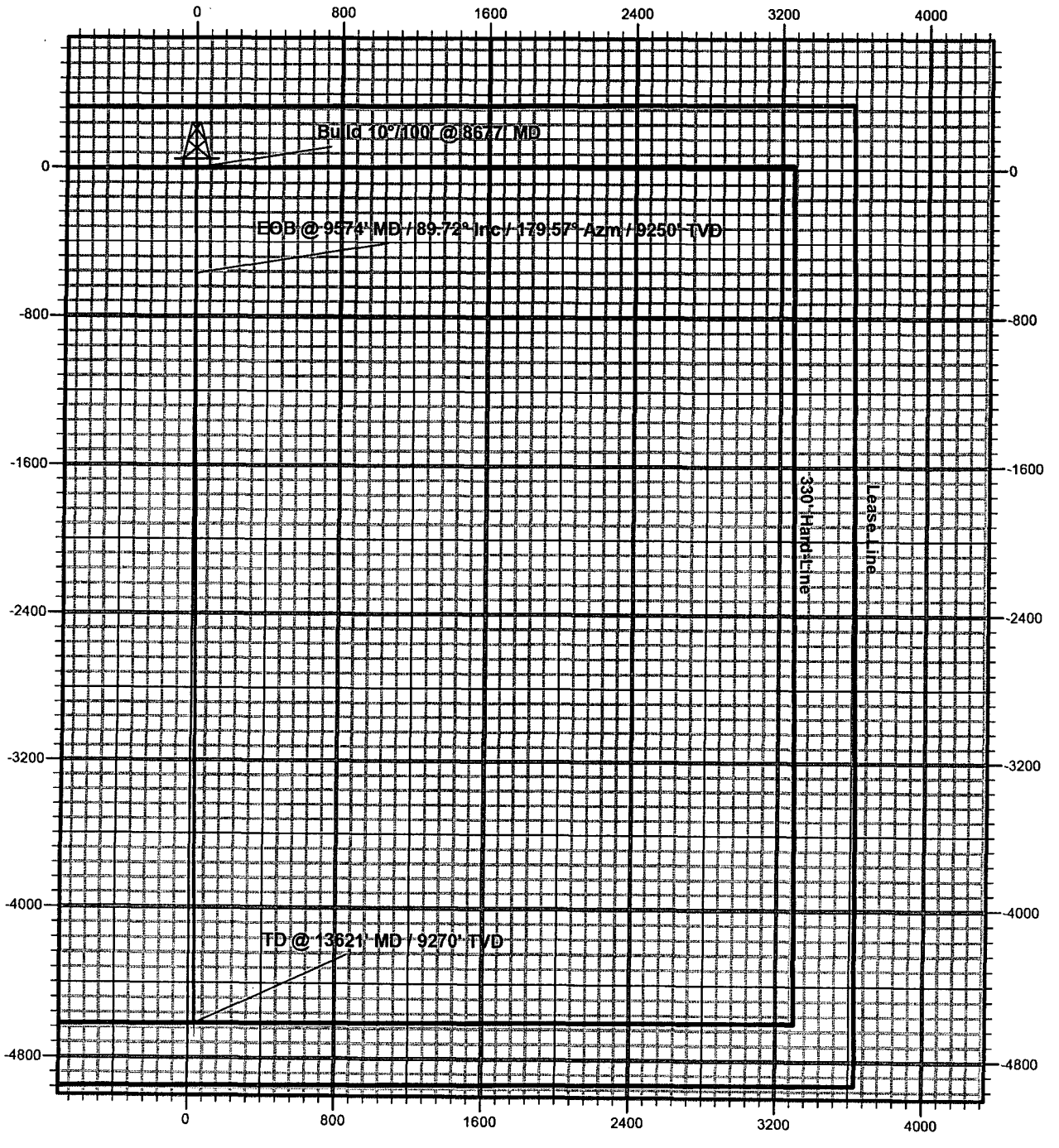
Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Salado Draw "10" Federal COM #1H
Company:	Mewbourne Oil Co	**TVD Reference:**	WELL @ 3340.0usft (Patterson #46)
Project:	Lea County, NM	**MD Reference:**	WELL @ 3340.0usft (Patterson #46)
Site:	Sec 10, T-26-S, R-33-E	**North Reference:**	Grid
Well:	Salado Draw "10" Federal COM #1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
8,677.0	8,677.0	0.0	0.0	Build 10°/100' @ 8677' MD
9,574.2	9,250.0	-570.1	4.3	EOB @ 9574' MD / 89.72° Inc / 179.57° Azm / 9250' TVD
13,621.3	9,270.0	-4,617.0	35.0	TD @ 13621' MD / 9270' TVD

Mewbourne Oil Company

Lea County, NM
Salado Draw "10" Federal COM #1H
Quote 110036



Mewbourne Oil Company

Lea County, NM
Salado Draw "10" Federal COM #1H
Quote 110036

QDC
The DIRE[illegible]NAL DRILLING COMPANY