

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

Expires July 31, 2010

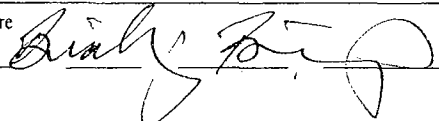
APPLICATION FOR PERMIT TO DRILL OR REENTER

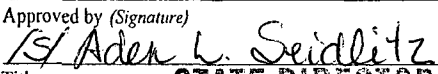
1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM-112273 (SL & BHL)
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mewbourne Oil Company (14744)		7. If Unit or CA Agreement, Name and No.
3a. Address PO Box 1270 Hobbs, NM 82241	3b. Phone No. (include area code) 575-393-5905	8. Lease Name and Well No. Two Mesas 7 MP Federal #1H (39931)
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 405' FSL & 200' FWL, Sec. 7 T20S R30E At proposed prod. zone 405' FSL & 330' FEL, Sec. 7 T20S R30E		9. API Well No. 30-015-41420 adduct
14. Distance in miles and direction from nearest town or post office* 16.6 mies NE of Carlsbad, NM		10. Field and Pool, or Exploratory Parkway Bone Spring (49622)
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200'	16. No. of acres in lease 637.92	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 7 T20S R30E UL 4/M
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 690' - MOC's Collinsosocpy Fed. #1	19. Proposed Depth 12905' - MD 8429' - TVD	12. County or Parish Eddy
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3314' GL	22. Approximate date work will start* 03/01/2013	13. State NM
20. BLM/BIA Bond No. on file NM-1693 Nationwide NMB-000919		23. Estimated duration 60 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. | 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 must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) Bradley Bishop	Date 2-6-13
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Approved by (Signature)  Title STATE DIRECTOR	Name (Printed/Typed) Office NM STATE OFFICE	Date MAY 21 2013
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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.

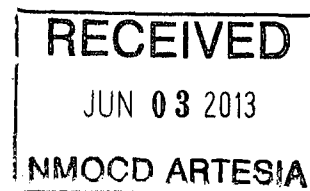
APPROVAL FOR TWO YEARS

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)

Capitan Controlled Water Basin



SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

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 July 16, 2010

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-41420	Pool Code 49622	Pool Name PARKWAY BONE SPRING
Property Code 39931	Property Name TWO MESAS "7" MP FEDERAL	Well Number 1H
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3314'

Surface Location

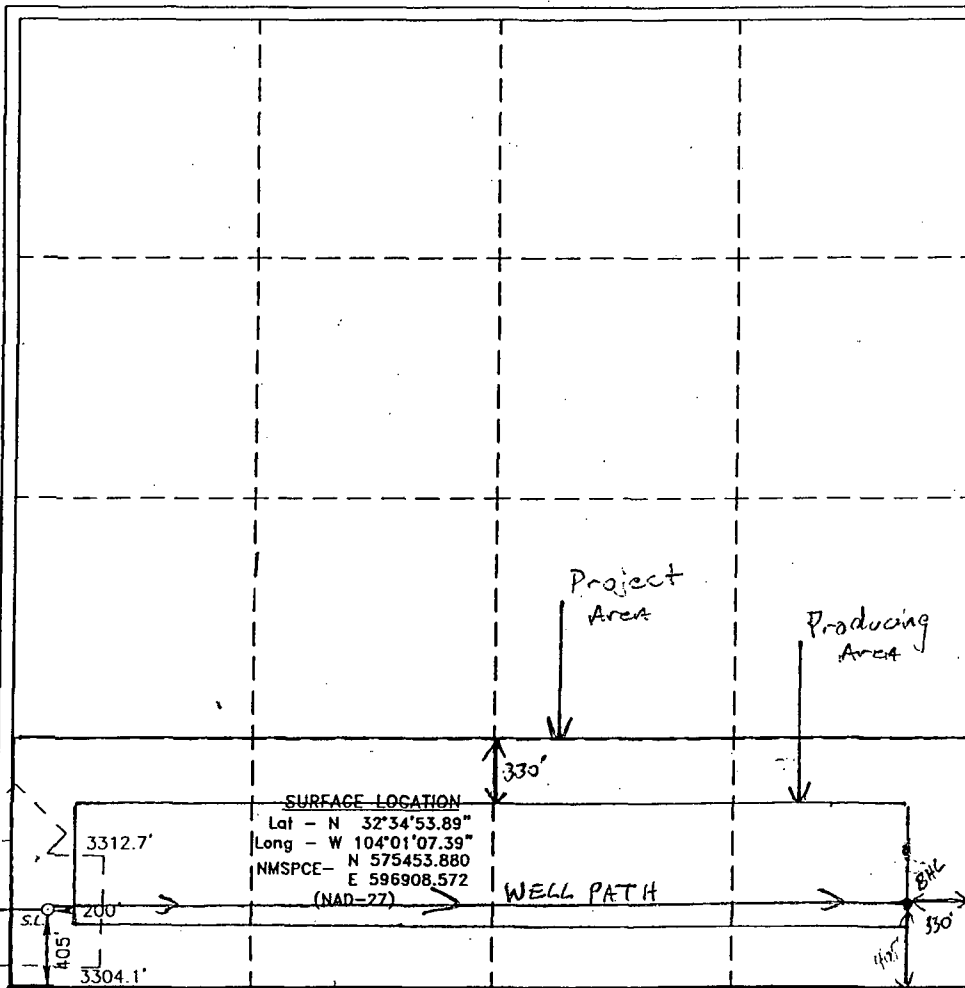
UL or lot No. 4	Section 7	Township 20 S	Range 30 E	Lot Idn	Feet from the 405	North/South line SOUTH	Feet from the 200	East/West line WEST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot No. P	Section 7	Township 20 S	Range 30 E	Lot Idn	Feet from the 405	North/South line SOUTH	Feet from the 330	East/West line EAST	County EDDY
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Dedicated Acres 160 159.27	Joint or Infill	Consolidation Code	Order No.
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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.

Brady Bishop
Signature _____ Date _____
BRADLEY BISHOP
Printed Name

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

GARY L. JONES
Date Surveyed _____
Signature _____ Seal of Professional Surveyor
GARY L. JONES
W.O. # 10193880

Certificate No. Gary L. Jones 7977

Basin Surveys 23980

Mewbourne Oil Company

PO Box 5270
Hobbs, NM 88241
(575) 393-5905

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 22 day of January, 2013.

Name: NM Young

Signature: *Bradley B. Young for NM Young*

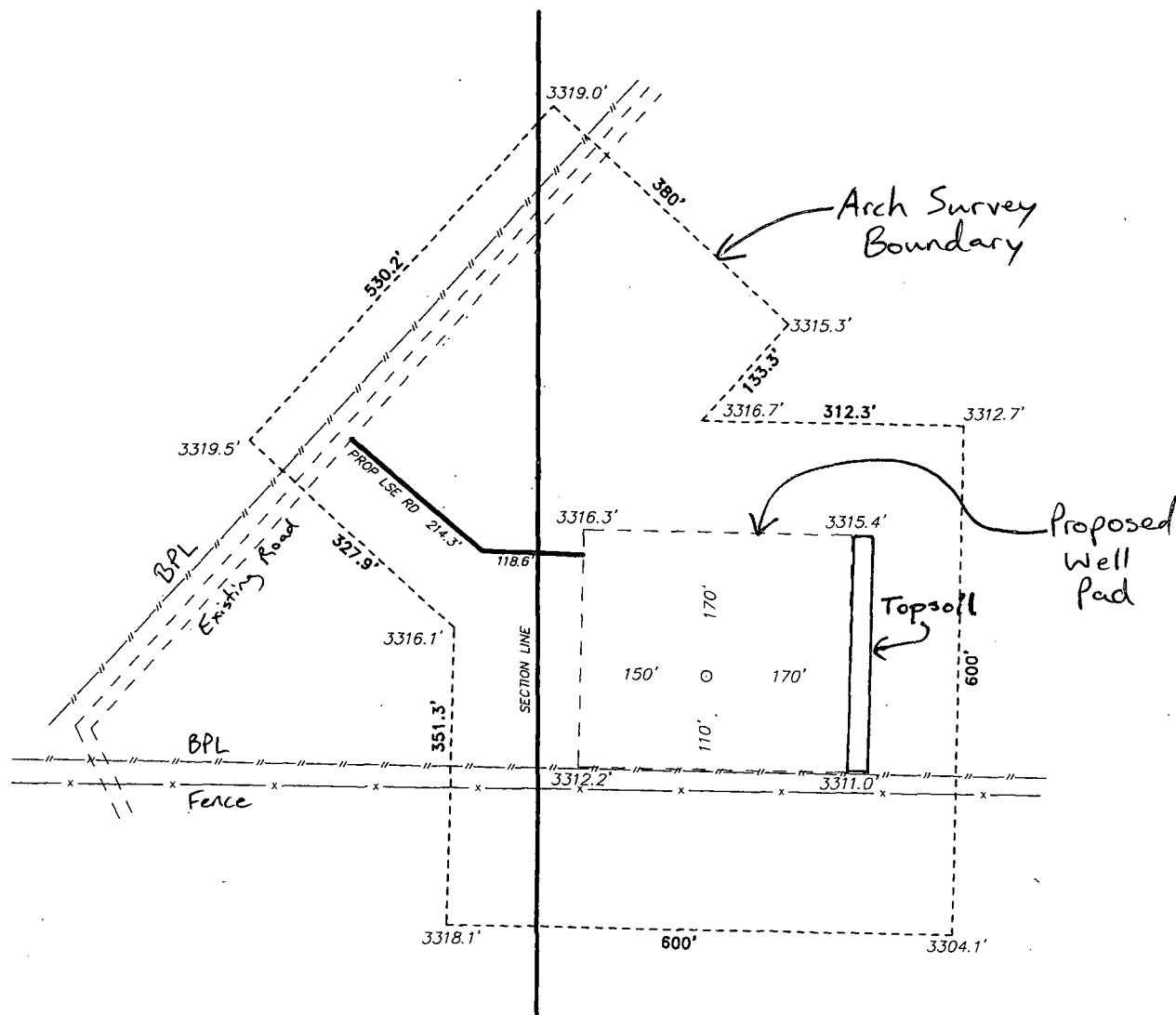
Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

SECTION 7, TOWNSHIP 20 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



MEWBOURNE OIL COMPANY
TWO MESAS "7" MP FED. # 1H
ELEV. - 3314

Lat - N 32°34'53.89"
Long - W 104°01'07.39"
NMSPEC- N 575453.880
E 596908.572
(NAD-27)

200 0 200 400 FEET
SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF HWY 31 AND BUCKEYE, GO
WEST ON BUCK EYE FOR 1.3 MILES TO LEASE ROAD,
ON LEASE ROAD GO NORTH 3.1 MILES TO PROPOSED
LEASE ROAD.

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

W.O. Number: 23980 Drawn By: J. SMALL

Date: 02-09-2011 Disk: JMS 23980

MEWBOURNE OIL COMPANY

REF: TWO MESAS "7" MP Fed. # 1H/ WELL PAD TOPO

THE TWO MESAS "7" MP Fed. # 1H LOCATED 405'

FROM THE SOUTH LINE AND 200' FROM THE WEST LINE OF

SECTION 7, TOWNSHIP 20 SOUTH, RANGE 30 EAST,

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

Survey Date: 01-14-2011

Sheet 1 of 1 Sheets

[illegible]

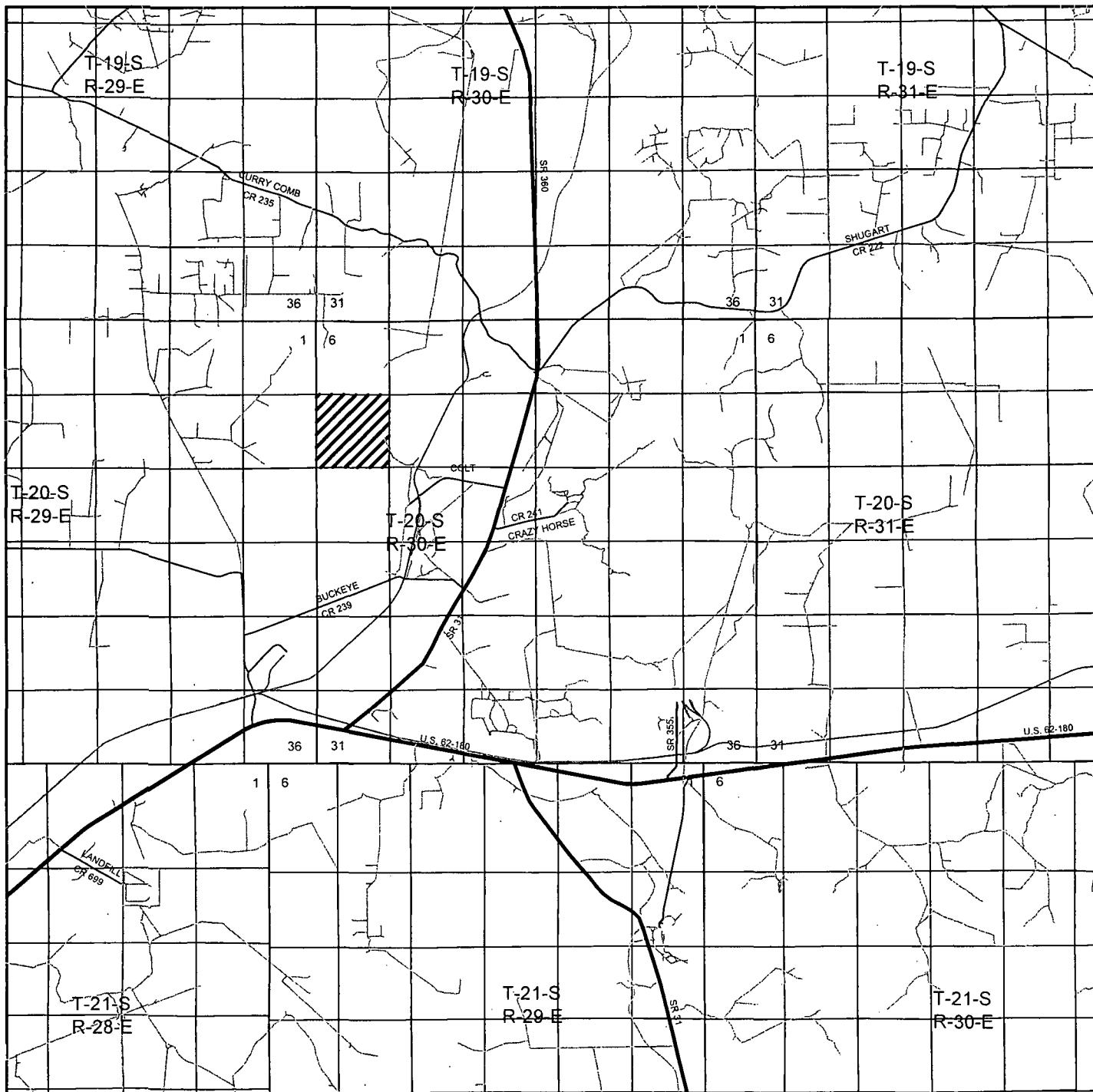
**basin
surveys**

focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

MEWBOURNE
OIL COMPANY

EXHIBIT "3B"



TWO MESAS "7" MP Federal # 14
 Located 405' FSL and 200' FWL
 Section 7, Township 20 South, Range 30 East,
 N.M.P.M., Eddy County, New Mexico.

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 Hobbs, New Mexico 88241
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 basinsurveys.com

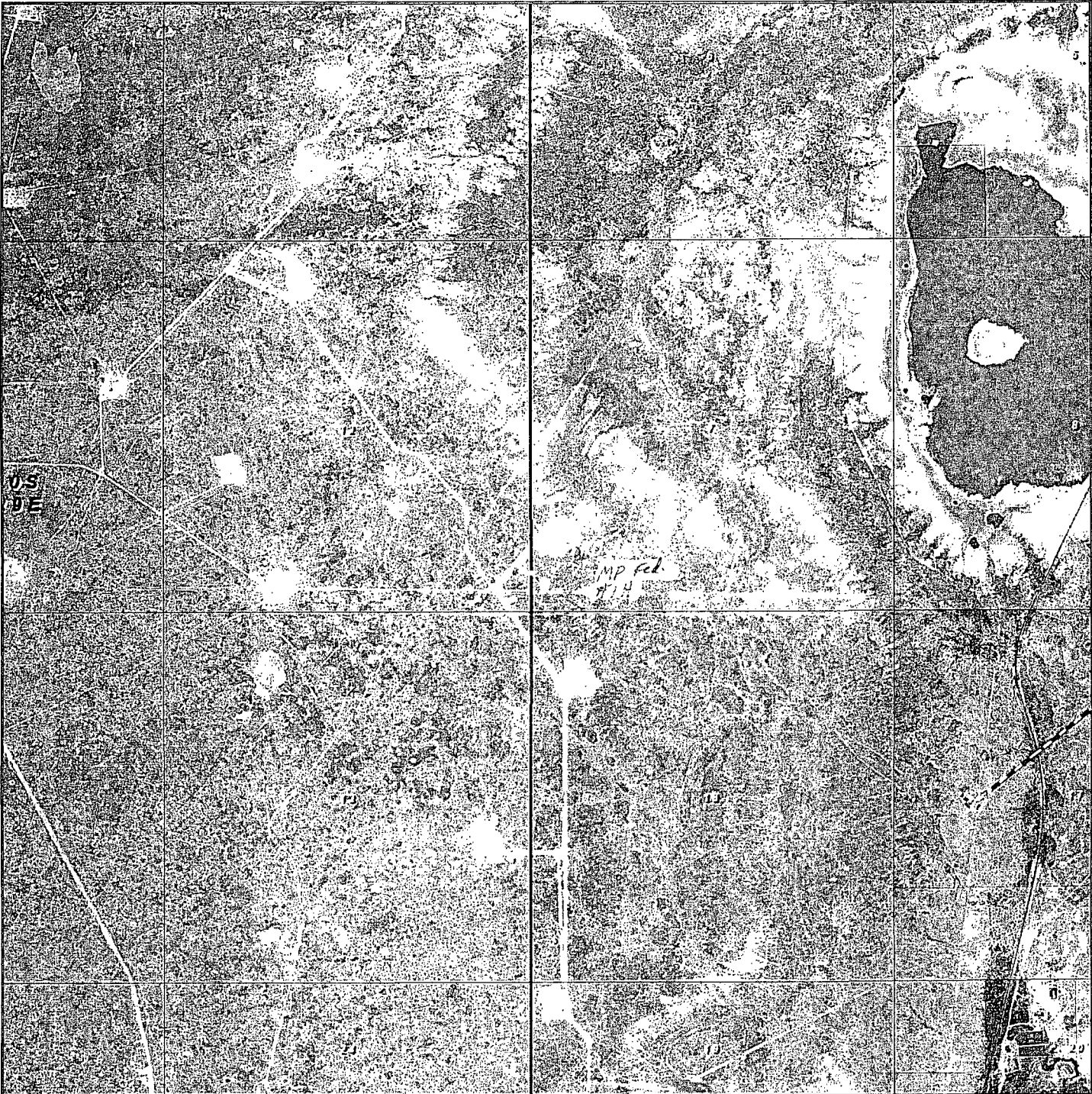
W.O. Number: JMS 23980

Survey Date: 01-14-2011

Scale: 1" = 2 Miles

Date: 02-09-2011

MEWBOURNE
 OIL COMPANY



TWO MESAS "7" MP Federal #14
Located 405' FSL and 200' FWL
Section 7, Township 20 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.



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in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: JMS 23980

Scale: 1" = 2000'

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

MEWBOURNE
OIL COMPANY

Abandoned Ld (Permit)	x
Gas Well	*
Oil Well	o
Oil and Gas V	o
Other (Obser	o
Injection Well	o
Suspended	o
Plugged Gas	o
Plugged Oil v	o
Plugged Oil a	o
Dry Hole (No	o
Dry Hole w/c	o
Dry Hole w/c	o
Dry Hole w/c	o
Shore	o

Two Mesas

EXHIBIT "

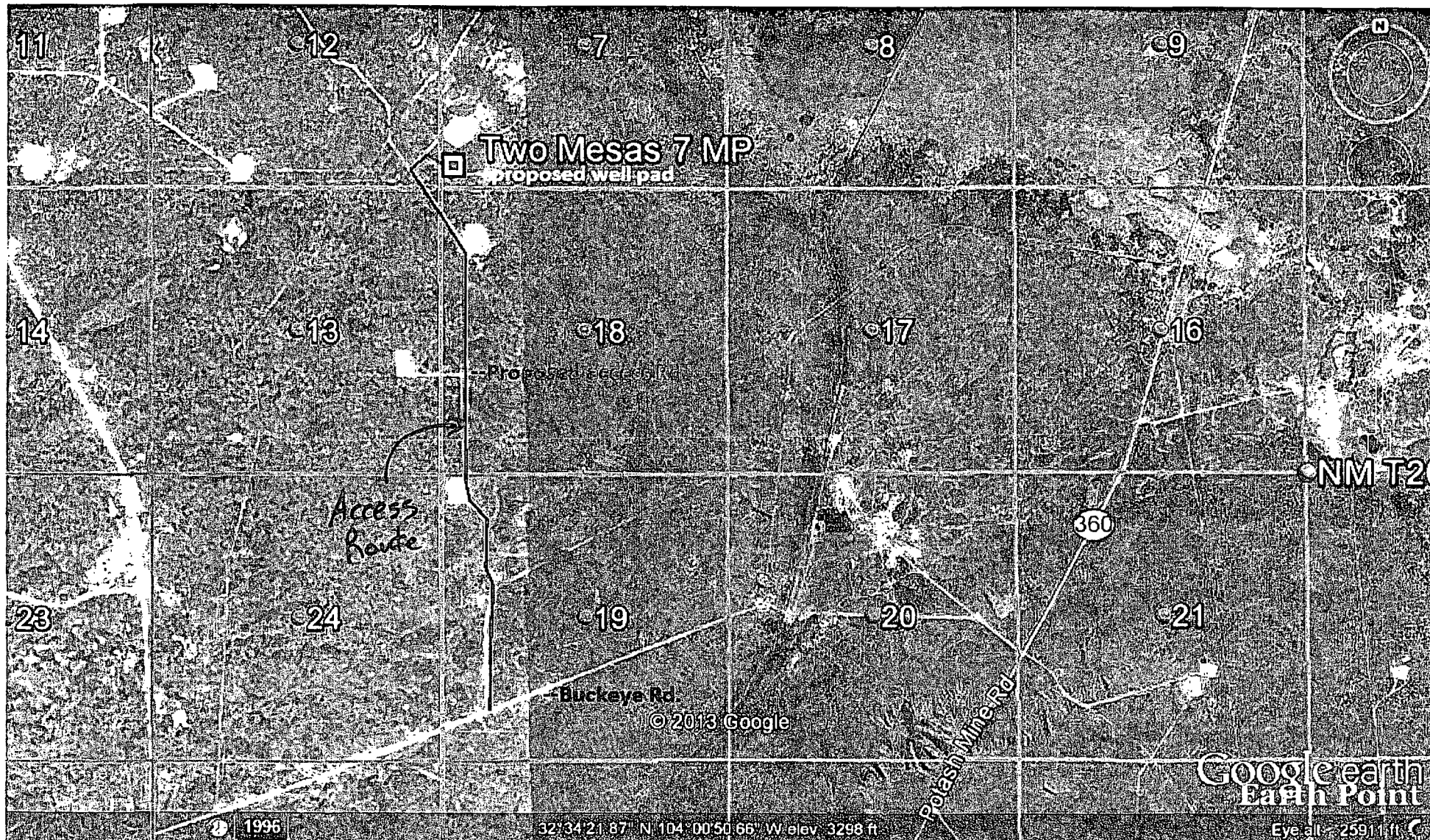


Exhibit 3C



Drilling Program
Mewbourne Oil Company
Two Mesas "7" MP Federal #1H
405' FSL & 200' FWL (SHL)
Sec 7-T20S-R30E
Eddy County, New Mexico

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

Rustler	360'
Top Salt	470'
Base Salt	1570'
Yates	1710'
Seven Rivers	1990'
Queen	NP
Capitan	2140'
Grayburg	NP
San Andres	NP
*Delaware	3310'
*Bone Spring	6280'

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

Water	Fresh water is anticipated at 35' and will be protected by setting surface casing at 385' 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:

MOC requests a variance to install a 2M diverter after running 20" casing. A 2000# WP 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" & 7" casing strings. 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. BOPE 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 13 3/8" annular to 1500# and the 9 5/8" & 7" BOPE to 3000# and annular 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:

MOC proposes to drill a vertical wellbore to 7912' & kick off to horizontal @ 8389' TVD. The well will be drilled to 12905' MD (8429' TVD). See attached directional plan.

5. 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>	<u>Jt Type</u>
26"	20" (new)	94#	K55	0'- 365' 275	BT&C
17 1/2"	13 3/8" (new)	61#	J55	0'-1760'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0'- 3250' 3450	LT&C
8 3/4"	7" (new)	26#	P110	0'-7912' MD	LT&C
8 3/4"	7" (new)	26#	P110	7912'-8657' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	8457'-12905' MD	LT&C

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

*Subject to availability of casing.

Drilling Program
Mewbourne Oil Company
Two Mesas "7" MPC Federal #1H
Page 2

B. Cementing Program:

- i. ^{20"} Surface Casing: 450 sacks Class "C" (35:65:4) light cement w/ 2% CaCl₂ & LCM additives. Yield at 2.0 cuft/sk. 200 sacks Class "C" cement w/ 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- ii. ^{13 3/8"} 1st Intermediate Casing: 730 sacks Class "C" (35:65:4) light cement w/ salt and LCM additives. Yield at 2.0 cuft/sk. 200 sacks Class "C" cement w/2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. ^{9 5/8"} 2nd Intermediate Casing: 600 sacks Class "C" (35:65:4) light cement w/ salt and LCM additives. Yield at 2.0 cuft/sk. 200 sacks Class "C" cement w/2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. ^{7"} Production Casing: 585 sacks Class H light cement (35:65:4) with fluid loss, LCM, & salt additives. Yield at 2.12 cuft/sk. 400 sacks Class H cement containing fluid loss additives. Yield at 1.18 cuft/sk. Cmt circulated to surface w/25% excess.
- iv. ^{4 1/2"} Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

*Referring to above blends of light cement: (wt% fly ash : wt% cement : wt% bentonite of the total of first two numbers). Generic names of additives are used since the availability of specific company and products are unknown at this time.

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
³⁴⁵⁰ 0'-385' ²⁷⁵	FW spud mud	8.6-9.0	32-34	NA
385'-1760'	Brine water	10.0-10.2	28-30	NA
1760'-3250'	FW	8.3-8.6	28-30	NA
3250'-8657' (KOP)	Cut Brine	8.5-8.7	28-30	NA
8657'- TD	Cut Brine w/Polymer	8.5-8.7	32-35	15

*Visual mud monitoring system shall be in place to detect volume changes indicating loss or gain of circulation fluid volume. Sufficient mud materials will be kept on location at all times to combat abnormal conditions.

7. Evaluation Program: See COA

Samples: 10' samples from surface casing to TD
Logging: GR, CN & Gyro 100' above KOP (8557') to surface. GR from 8657' to TD.

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 (.43368x8429'=3680.76psi)

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 60 days involved in drilling operations and an additional 20 days involved in completion operations on the project.

Mewbourne Oil Co

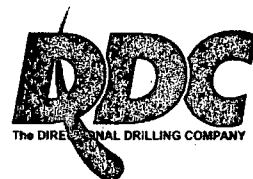
**Eddy County, New Mexico
Sec 7, T20S, R30E
Two Mesas 7 MP Federal #1H**

Wellbore #1

Plan: Design #1

DDC Well Planning Report

08 January, 2013



DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Two Mesas 7 MP Federal #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3334.0usft (Patterson)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3334.0usft (Patterson)
Site:	Sec 7, T20S, R30E	North Reference:	Grid
Well:	Two Mesas 7 MP Federal #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project:	Eddy County, New Mexico		
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 7, T20S, R30E		
Site Position:		Northing:	575,453.88 usft
From:	Map	Easting:	596,908.58 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 34' 53.886 N
		Longitude:	104° 1' 7.385 W
		Grid Convergence:	0.17 °

Well:	Two Mesas 7 MP Federal #1H		
Well Position	+N-S	0.0 usft	Northing: 575,453.88 usft
	+E-W	0.0 usft	Easting: 596,908.58 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,314.0 usft

Wellbore:	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/8/2013	7.63	60.40	48,626

Design:	Design #1
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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	89.90

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	
7,911.6	0.00	0.00	7,911.6	0.0	0.0	0.00	0.00	0.00	0.00	
8,657.1	89.46	89.90	8,389.0	0.8	473.0	12.00	12.00	12.06	89.90	
12,905.1	89.46	89.90	8,429.0	8.0	4,720.8	0.00	0.00	0.00	0.00	PBHL Two Mesas 7

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Two Mesas 7 MP Federal #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3334.0usft (Patterson)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3334.0usft (Patterson)
Site:	Sec 7, T20S, R30E	North Reference:	Grid
Well:	Two Mesas 7 MP Federal #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)
Build 12° / 100'									
7,911.6	0.00	0.00	7,911.6	0.0	0.0	0.0	0.00	0.00	0.00
7,925.0	1.61	89.90	7,925.0	0.0	0.2	0.2	12.00	12.00	0.00
7,950.0	4.61	89.90	7,950.0	0.0	1.5	1.5	12.00	12.00	0.00
7,975.0	7.61	89.90	7,974.8	0.0	4.2	4.2	12.00	12.00	0.00
8,000.0	10.61	89.90	7,999.5	0.0	8.2	8.2	12.00	12.00	0.00
8,025.0	13.61	89.90	8,023.9	0.0	13.4	13.4	12.00	12.00	0.00
8,050.0	16.61	89.90	8,048.1	0.0	19.9	19.9	12.00	12.00	0.00
8,075.0	19.61	89.90	8,071.8	0.0	27.7	27.7	12.00	12.00	0.00
8,100.0	22.61	89.90	8,095.1	0.1	36.7	36.7	12.00	12.00	0.00
8,125.0	25.61	89.90	8,118.0	0.1	46.9	46.9	12.00	12.00	0.00
8,150.0	28.61	89.90	8,140.2	0.1	58.3	58.3	12.00	12.00	0.00
8,175.0	31.61	89.90	8,161.8	0.1	70.8	70.8	12.00	12.00	0.00
8,200.0	34.61	89.90	8,182.8	0.1	84.5	84.5	12.00	12.00	0.00
8,225.0	37.61	89.90	8,203.0	0.2	99.2	99.2	12.00	12.00	0.00
8,250.0	40.61	89.90	8,222.4	0.2	115.0	115.0	12.00	12.00	0.00
8,275.0	43.61	89.90	8,240.9	0.2	131.7	131.7	12.00	12.00	0.00
8,300.0	46.61	89.90	8,258.6	0.3	149.5	149.5	12.00	12.00	0.00
8,325.0	49.61	89.90	8,275.3	0.3	168.1	168.1	12.00	12.00	0.00
8,350.0	52.61	89.90	8,290.9	0.3	187.5	187.5	12.00	12.00	0.00
8,375.0	55.61	89.90	8,305.6	0.4	207.8	207.8	12.00	12.00	0.00
8,400.0	58.61	89.90	8,319.2	0.4	228.8	228.8	12.00	12.00	0.00
8,425.0	61.61	89.90	8,331.6	0.4	250.4	250.4	12.00	12.00	0.00
8,450.0	64.61	89.90	8,342.9	0.5	272.7	272.7	12.00	12.00	0.00
8,475.0	67.61	89.90	8,353.1	0.5	295.6	295.6	12.00	12.00	0.00
8,500.0	70.61	89.90	8,362.0	0.5	318.9	318.9	12.00	12.00	0.00
8,525.0	73.61	89.90	8,369.7	0.6	342.7	342.7	12.00	12.00	0.00
8,550.0	76.61	89.90	8,376.1	0.6	366.9	366.9	12.00	12.00	0.00
8,575.0	79.61	89.90	8,381.2	0.7	391.3	391.3	12.00	12.00	0.00
8,600.0	82.61	89.90	8,385.1	0.7	416.0	416.0	12.00	12.00	0.00
8,625.0	85.61	89.90	8,387.7	0.7	440.9	440.9	12.00	12.00	0.00
8,650.0	88.61	89.90	8,388.9	0.8	465.9	465.9	12.00	12.00	0.00
EOB @ 89.46° Inc / 89.90° Azm / 8389' TVD									
8,657.1	89.46	89.90	8,389.0	0.8	473.0	473.0	12.00	12.00	0.00
8,700.0	89.46	89.90	8,389.4	0.9	515.9	515.9	0.00	0.00	0.00
8,800.0	89.46	89.90	8,390.4	1.0	615.9	615.9	0.00	0.00	0.00
8,900.0	89.46	89.90	8,391.3	1.2	715.9	715.9	0.00	0.00	0.00
9,000.0	89.46	89.90	8,392.3	1.4	815.8	815.8	0.00	0.00	0.00
9,100.0	89.46	89.90	8,393.2	1.6	915.8	915.8	0.00	0.00	0.00
9,200.0	89.46	89.90	8,394.1	1.7	1,015.8	1,015.8	0.00	0.00	0.00
9,300.0	89.46	89.90	8,395.1	1.9	1,115.8	1,115.8	0.00	0.00	0.00
9,400.0	89.46	89.90	8,396.0	2.1	1,215.8	1,215.8	0.00	0.00	0.00
9,500.0	89.46	89.90	8,397.0	2.2	1,315.8	1,315.8	0.00	0.00	0.00
9,600.0	89.46	89.90	8,397.9	2.4	1,415.8	1,415.8	0.00	0.00	0.00
9,700.0	89.46	89.90	8,398.9	2.6	1,515.8	1,515.8	0.00	0.00	0.00
9,800.0	89.46	89.90	8,399.8	2.7	1,615.8	1,615.8	0.00	0.00	0.00
9,900.0	89.46	89.90	8,400.7	2.9	1,715.8	1,715.8	0.00	0.00	0.00
10,000.0	89.46	89.90	8,401.7	3.1	1,815.8	1,815.8	0.00	0.00	0.00
10,100.0	89.46	89.90	8,402.6	3.2	1,915.8	1,915.8	0.00	0.00	0.00
10,200.0	89.46	89.90	8,403.6	3.4	2,015.8	2,015.8	0.00	0.00	0.00
10,300.0	89.46	89.90	8,404.5	3.6	2,115.8	2,115.8	0.00	0.00	0.00
10,400.0	89.46	89.90	8,405.4	3.8	2,215.8	2,215.8	0.00	0.00	0.00
10,500.0	89.46	89.90	8,406.4	3.9	2,315.8	2,315.8	0.00	0.00	0.00
10,600.0	89.46	89.90	8,407.3	4.1	2,415.8	2,415.8	0.00	0.00	0.00

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Two Mesas 7 MP Federal #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3334.0usft (Patterson)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3334.0usft (Patterson)
Site:	Sec 7, T20S, R30E	North Reference:	Grid
Well:	Two Mesas 7 MP Federal #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

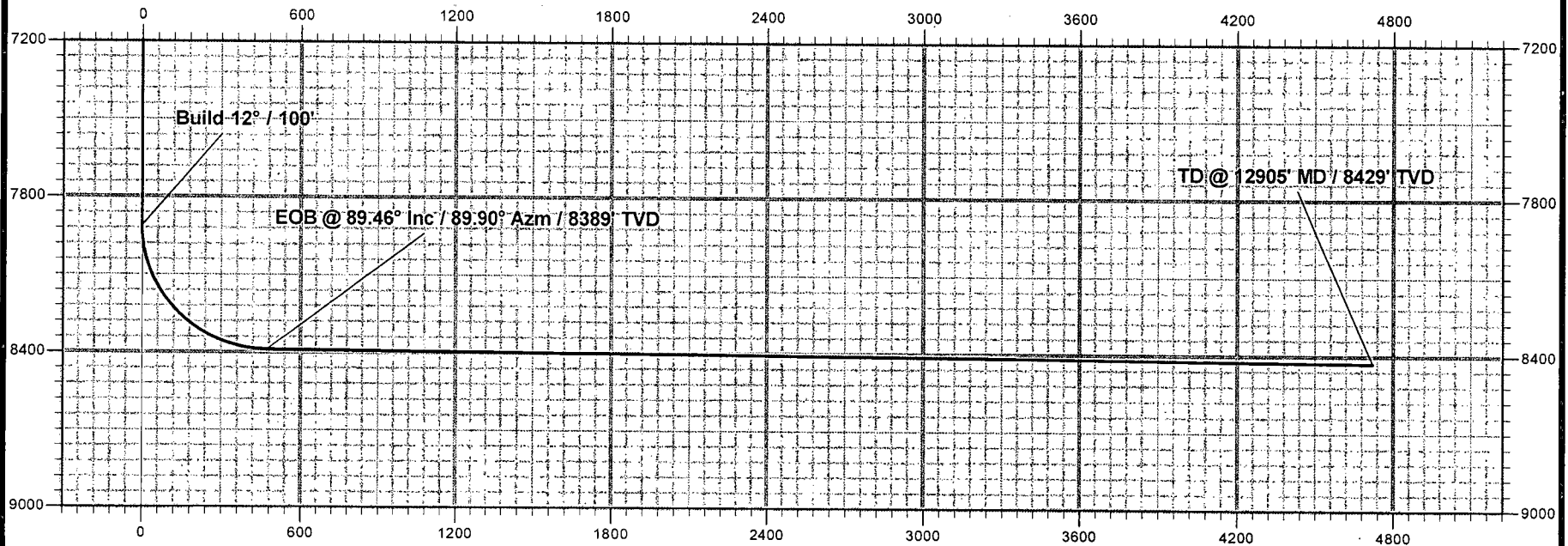
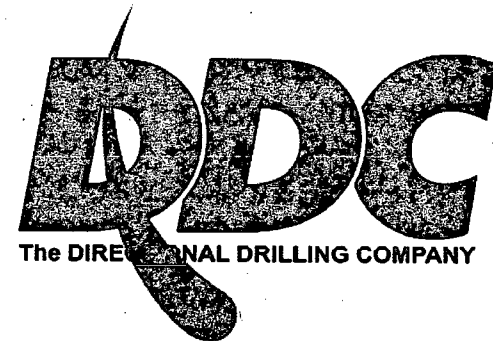
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,700.0	89.46	89.90	8,408.3	4.3	2,515.8	2,515.8	0.00	0.00	0.00	
10,800.0	89.46	89.90	8,409.2	4.4	2,615.8	2,615.8	0.00	0.00	0.00	
10,900.0	89.46	89.90	8,410.1	4.6	2,715.8	2,715.8	0.00	0.00	0.00	
11,000.0	89.46	89.90	8,411.1	4.8	2,815.8	2,815.8	0.00	0.00	0.00	
11,100.0	89.46	89.90	8,412.0	4.9	2,915.8	2,915.8	0.00	0.00	0.00	
11,200.0	89.46	89.90	8,413.0	5.1	3,015.7	3,015.8	0.00	0.00	0.00	
11,300.0	89.46	89.90	8,413.9	5.3	3,115.7	3,115.7	0.00	0.00	0.00	
11,400.0	89.46	89.90	8,414.8	5.4	3,215.7	3,215.7	0.00	0.00	0.00	
11,500.0	89.46	89.90	8,415.8	5.6	3,315.7	3,315.7	0.00	0.00	0.00	
11,600.0	89.46	89.90	8,416.7	5.8	3,415.7	3,415.7	0.00	0.00	0.00	
11,700.0	89.46	89.90	8,417.7	6.0	3,515.7	3,515.7	0.00	0.00	0.00	
11,800.0	89.46	89.90	8,418.6	6.1	3,615.7	3,615.7	0.00	0.00	0.00	
11,900.0	89.46	89.90	8,419.5	6.3	3,715.7	3,715.7	0.00	0.00	0.00	
12,000.0	89.46	89.90	8,420.5	6.5	3,815.7	3,815.7	0.00	0.00	0.00	
12,100.0	89.46	89.90	8,421.4	6.6	3,915.7	3,915.7	0.00	0.00	0.00	
12,200.0	89.46	89.90	8,422.4	6.8	4,015.7	4,015.7	0.00	0.00	0.00	
12,300.0	89.46	89.90	8,423.3	7.0	4,115.7	4,115.7	0.00	0.00	0.00	
12,400.0	89.46	89.90	8,424.2	7.1	4,215.7	4,215.7	0.00	0.00	0.00	
12,500.0	89.46	89.90	8,425.2	7.3	4,315.7	4,315.7	0.00	0.00	0.00	
12,600.0	89.46	89.90	8,426.1	7.5	4,415.7	4,415.7	0.00	0.00	0.00	
12,700.0	89.46	89.90	8,427.1	7.7	4,515.7	4,515.7	0.00	0.00	0.00	
12,800.0	89.46	89.90	8,428.0	7.8	4,615.7	4,615.7	0.00	0.00	0.00	
TD @ 12905' MD / 8429' TVD										
12,905.1	89.46	89.90	8,429.0	8.0	4,720.8	4,720.8	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL Two Mesas 7 N	0.00	0.00	8,429.0	8.0	4,720.8	575,461.88	601,629.38	32° 34' 53.824 N	104° 0' 12.212 W	
- hit/miss target										
- Shape										
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
7,911.6	7,911.6	0.0	0.0	Build 12° / 100'	
8,657.1	8,389.0	0.8	473.0	EOB @ 89.46° Inc / 89.90° Azm / 8389' TVD	
12,905.1	8,429.0	8.0	4,720.8	TD @ 12905' MD / 8429' TVD	

Mewbourne Oil Company

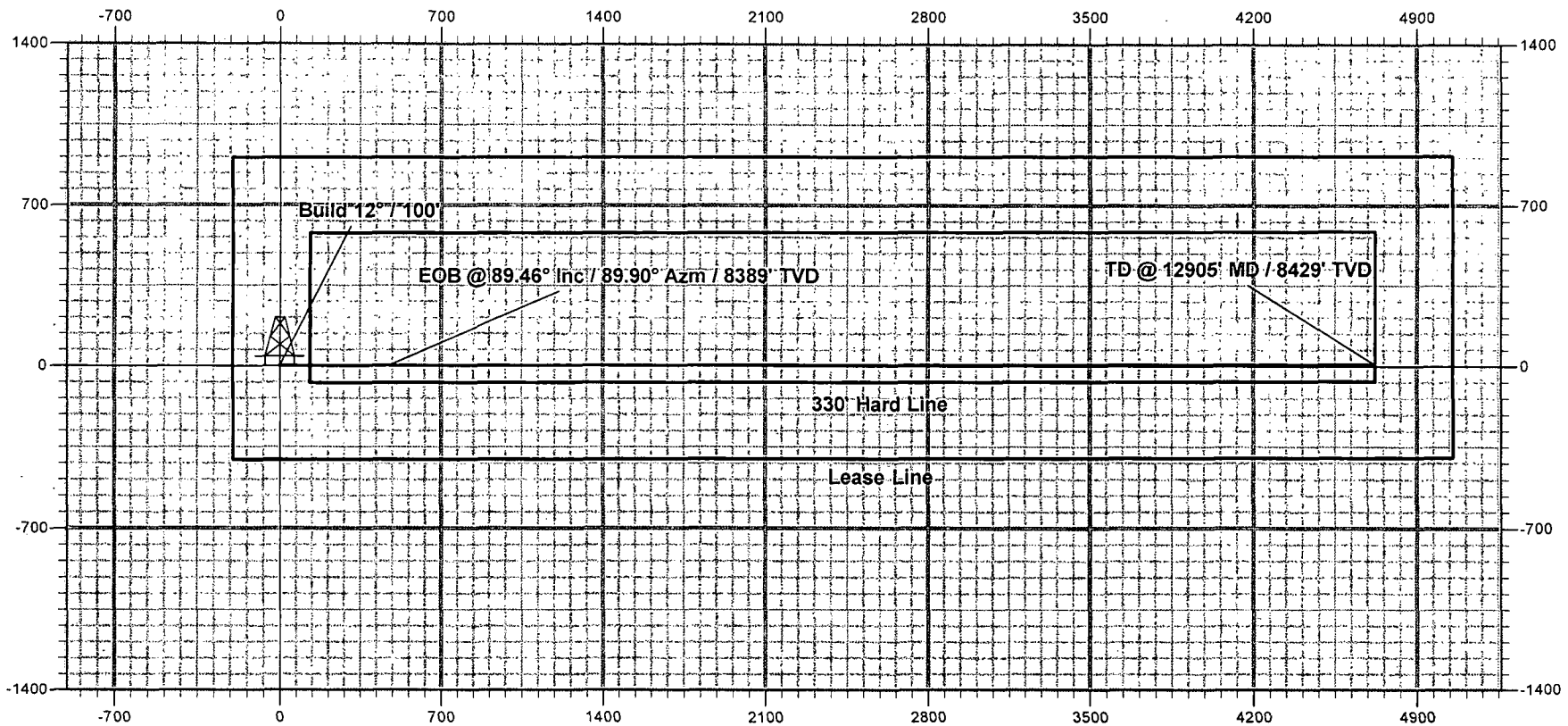
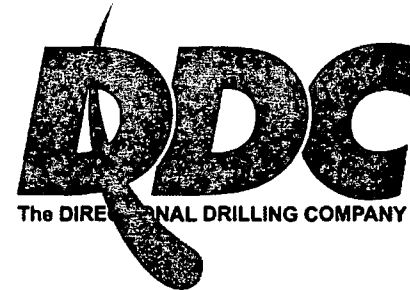
Eddy County, New Mexico
Two Mesas 7 MP Federal #1H
Quote 130012
Design #1



Vertical Section at 89.90° (600 usft/in)

Mewbourne Oil Company

Eddy County, New Mexico
Two Mesas 7 MP Federal #1H
Quote 130012
Design #1



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Two Mesas 7 MP Federal #1H

405' FSL & 200' FWL (SHL)

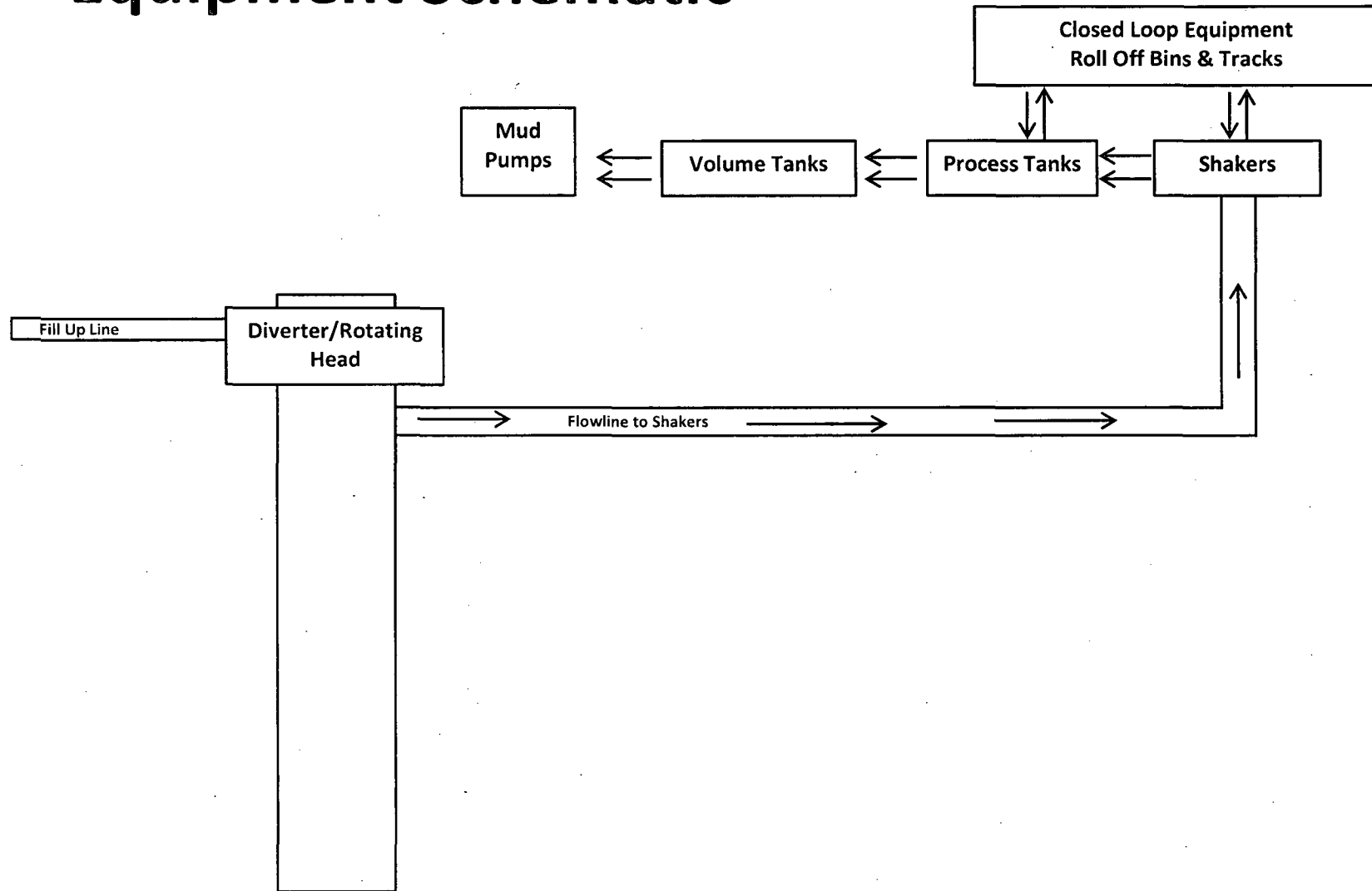
Sec 7-T20S-R30E

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 on 9 5/8" and 7" casing.
- 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.

20" Diverter & Closed Loop Equipment Schematic



13 5/8" 2M BOPE & Closed Loop Equipment Schematic

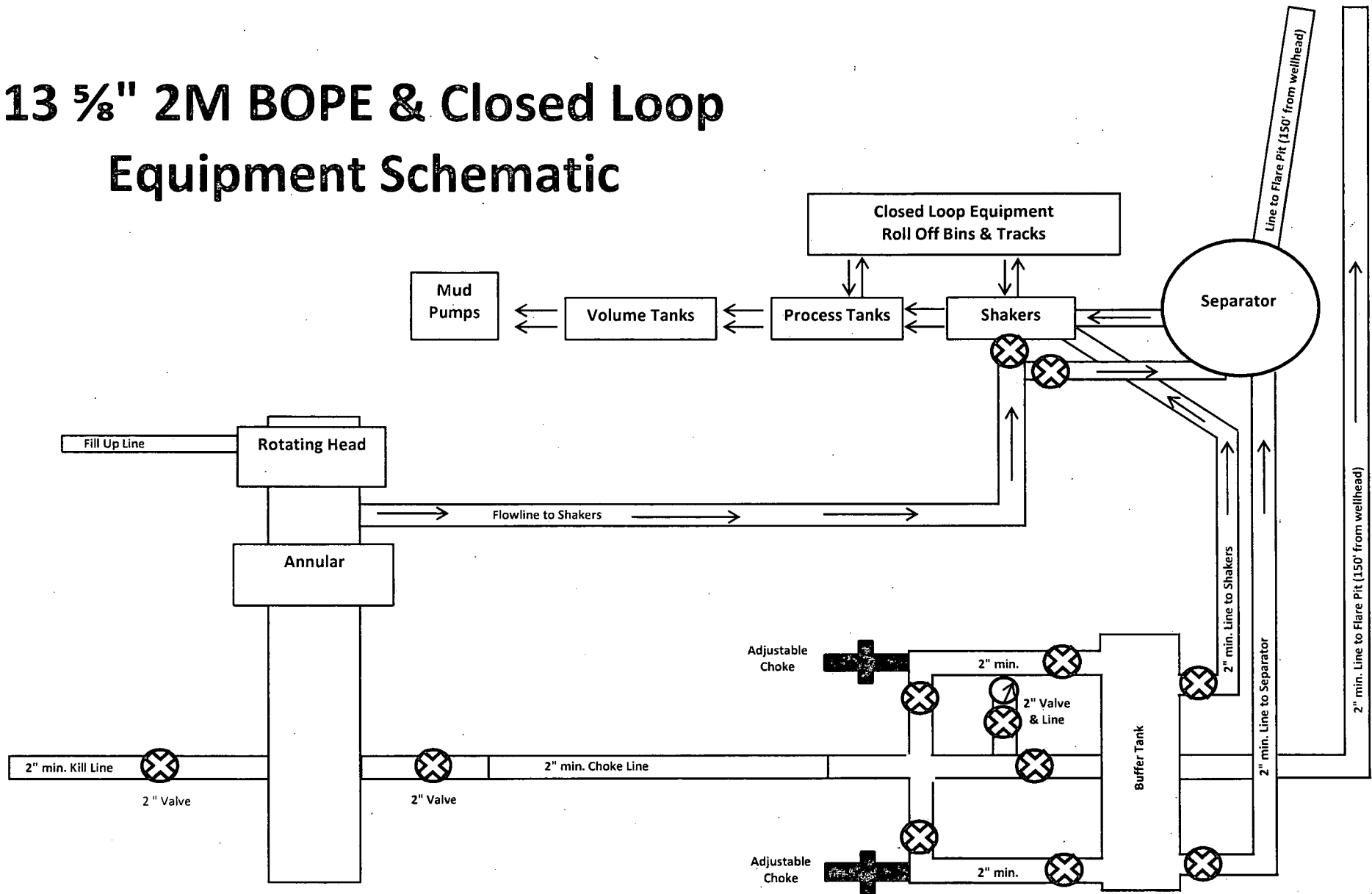


Exhibit 2A

Two Mesas 7 MP Federal #1H

11" 3M BOPE & Closed Loop Equipment Schematic

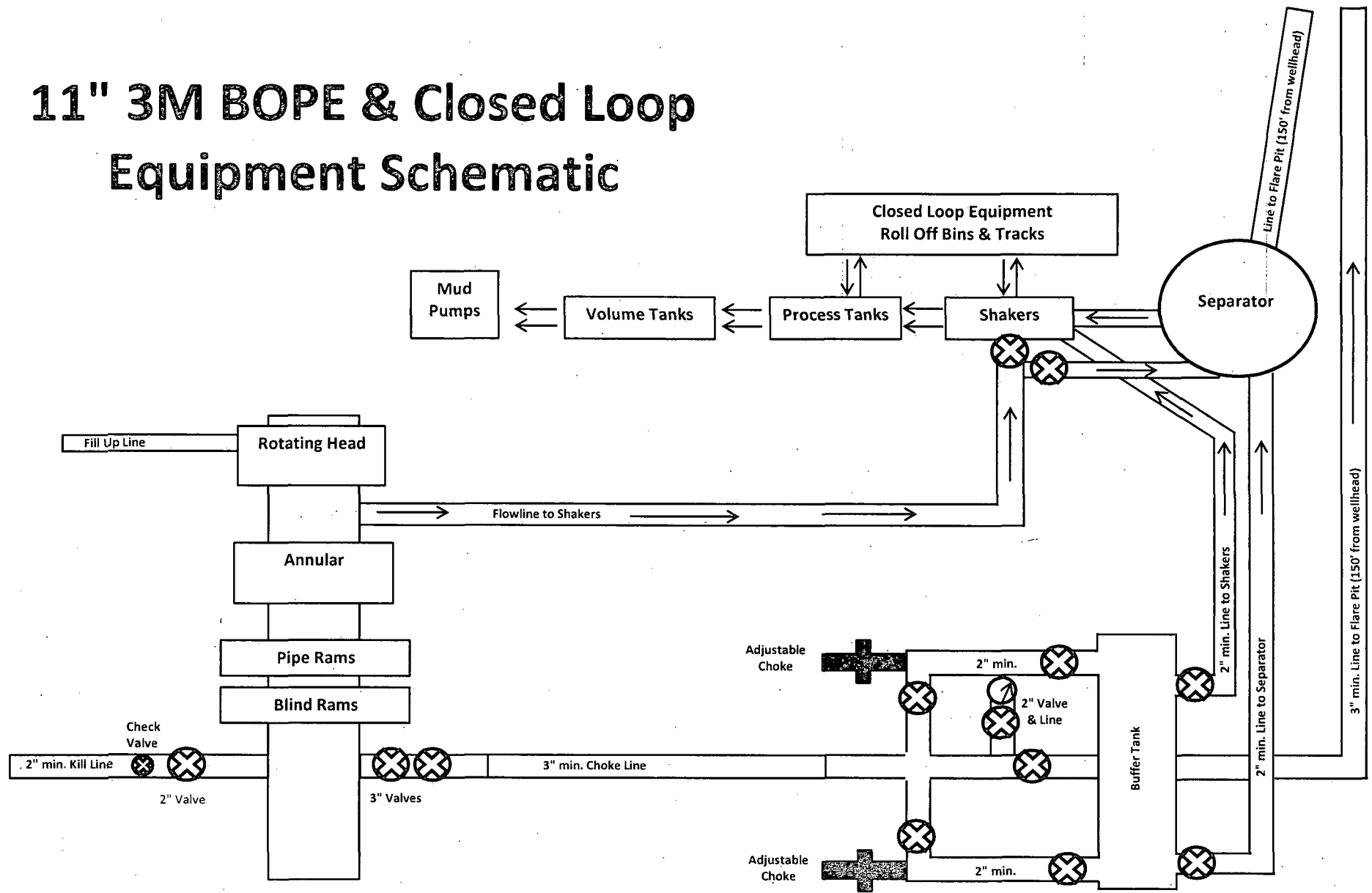


Exhibit 2
Two Mesas 7 MP Fed #1H

Note: All valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.

H2S Diagram

Closed Loop Pad Dimensions 280' x 320'

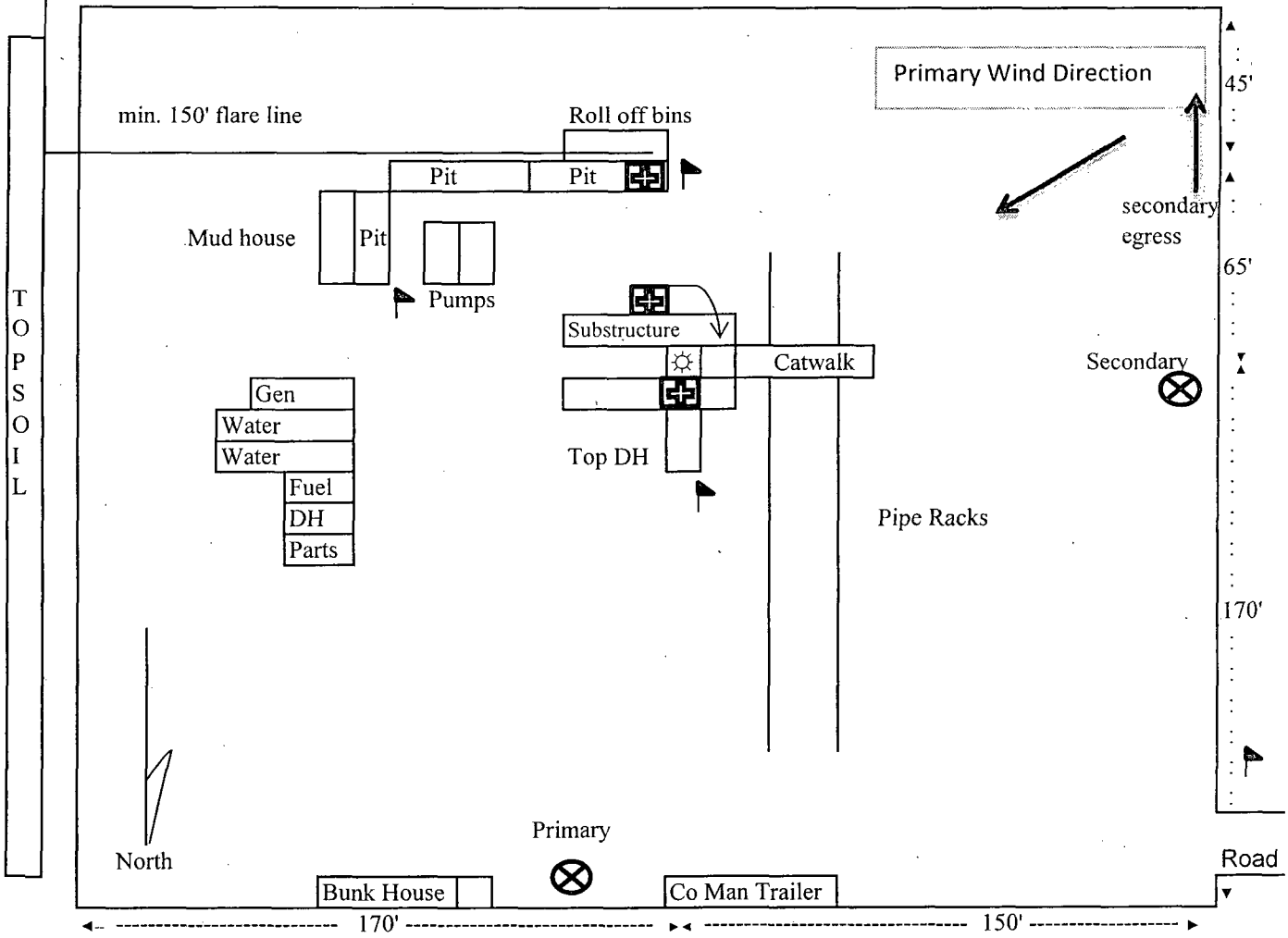


Exhibit 6

Mewbourne Oil Company
Two Mesas 7 MP Federal #1H
405' FSL & 200' FWL
Sec. 7 T20S R30E
Eddy County, NM

-  = Wind Markers
-  = H2S Monitors
-  = Safety Stations

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Two Mesas 7 MP Federal #1H

405' FSL & 200' FWL (SHL)

Sec 7-T20S-R30E

Eddy County, New Mexico

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

- A. Choke manifold with minimum of one adjustable choke/remote 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 MOC will follow Onshore Order 6 and install a rotating head, mud/gas separator, remote choke 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
	2 nd Fax	575-393-7259

District Manager	Micky Young	575-390-0999
Drilling Superintendent	Frosty Lathan	575-390-4103
	Bradley Bishop	575-390-6838
Drilling Foreman	Wesley Noseff	575-441-0729

Closed Loop Pad Dimensions 280' x 320'

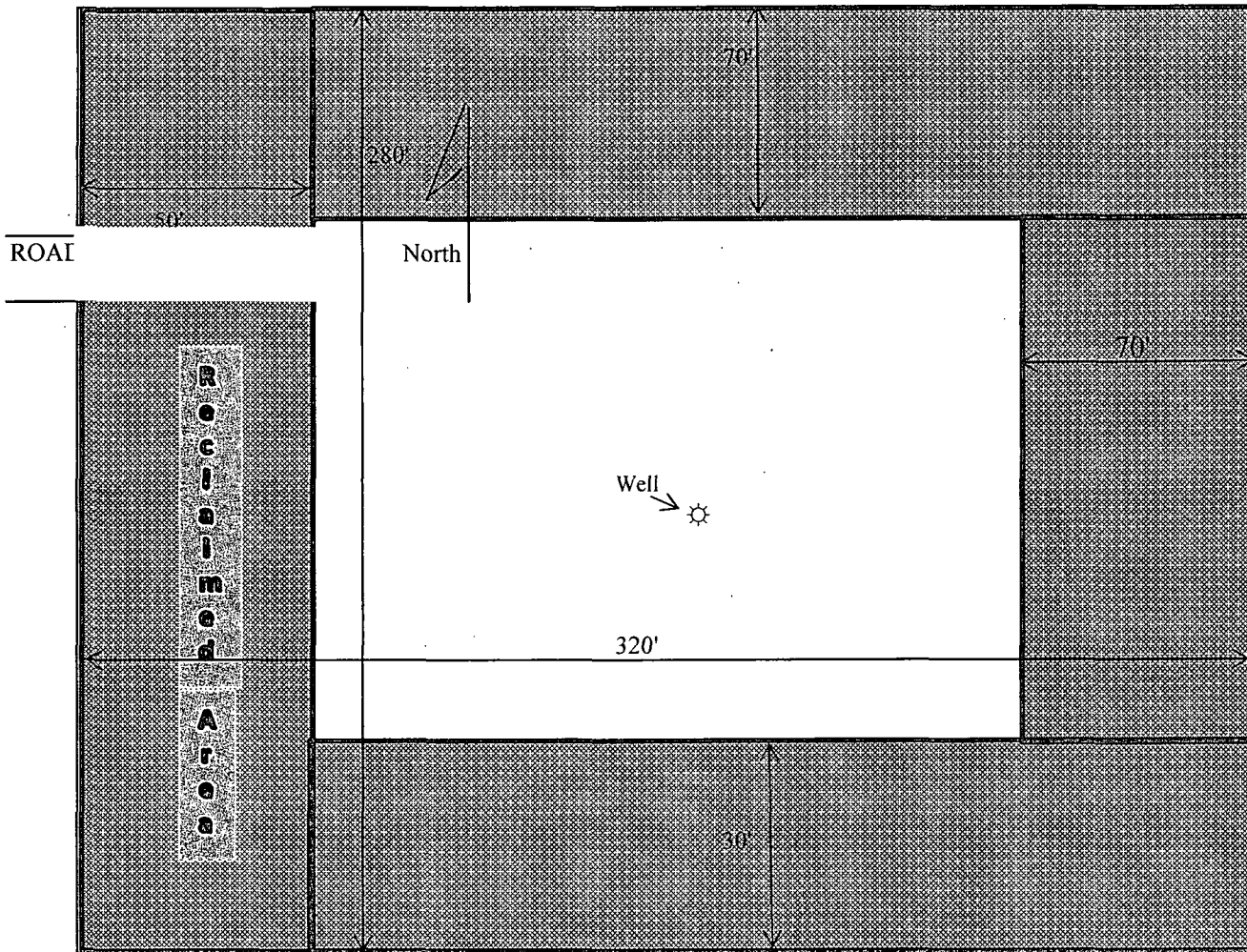


Exhibit "5"

Mewbourne Oil Company
Two Mesas 7 MP Federal #1H
405' FSL & 20' FWL
Sec. 7 T20S R30E
Eddy Co. NM

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Two Mesas 7 MP Federal #1H

405' FSL & 200' FWL (SHL)

Sec 7-T20S-R30E

Eddy County, New Mexico

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

1. Existing Roads:

- A. Exhibit #3 is a road map showing the location of the proposed well. Existing roads are highlighted in black. Exhibits #3-#3C are maps showing the location of the proposed well and access road. Existing and proposed roads are highlighted in black.
- B. Directions to location: From The junction of HWY 31 and Buckeye, go west on Buckeye for 1.3 miles to lease road. On lease road go north 3.1 miles to proposed lease road.
- C. Existing roads will be maintained in a condition the same as or better than before operations begin.

2. Proposed Access Road:

- A. Approx. 332.9 feet of new road construction will be needed.
- B. The maximum width of the driving surface will be 14 feet. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1 foot deep with 3:1 slopes. The road will be surfaced with 6" of rolled and compacted caliche.
- C. Mewbourne Oil Co. will cooperate with other operators in the maintenance of lease roads.

3. Location of Existing Wells:

There are producing wells within the immediate vicinity of the well site. Exhibit #4 shows 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 at MOC's Collinoscopy Fed. #1H. A flow line will follow new and existing lease roads from Two Mesas location to production facilities. See Exhibit 3D. Electric lines will be filed for at a later date.
- C. All production vessels left on location will be painted to conform to 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 hauled to an off-site permitted facility.
- B. Water produced during operations will be hauled to an off-site permitted SWD in the area.
- C. If any liquid hydrocarbons are produced during operations, those liquids will be stored in suitable tanks until sold.
- D. Sewage and gray water will be safely contained on-site, and then waste will be disposed at an approved off-site facility.
- E. 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 #6. Dimensions of the pad and location of major rig components are shown.
- B. The pad dimension of 280' x 320' has been staked and flagged.

10. Plans for Restoration of Surface

- A. Within 120 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location and surrounding area will be cleaned of all trash and junk to assure the well site is left as esthetically pleasing as reasonably possible.
- B. Interim reclamation:
 - i. All areas not needed for production operations will be reclaimed as shown in the interim reclamation layout, exhibit #5.

- ii. In these areas, caliche will be removed, the land will be recontoured to match the surrounding area, the topsoil from the stockpile will be spread over these areas.
- iii. The disturbed area will be restored by seeding during the proper growing season.
- iv. Any additional caliche required for production facilities will be obtained from the reclaimed areas.

C. Final Reclamation:

- i. Upon cessation of the proposed operations, if the well is abandoned, all equipment and trash will be removed and taken to a proper facility.
- ii. The location and road surfacing material will be removed and used to patch area lease roads.
- iii. The entire location will be restored to the original contour as much as reasonable possible.
- iv. The topsoil used for interim reclamation will be spread over the entire location.
- v. The disturbed area will be restored by seeding during the proper growing season.

All restoration work will be completed within 180 days of cessation of activities.

11. Surface Ownership:

The surface is owned by BLM. Archaeology is cleared through BLM MOA program.

12. Other Information:

- A. The primary use of the surface at the location is for grazing of livestock.

13. Operators Representative:

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

N.M. Young, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
575-393-5905