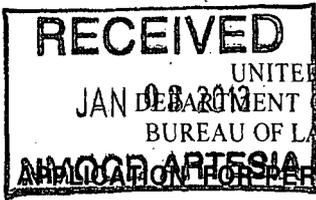


ATS-13-2



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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Operator Copy  
APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
NM-2807 (SL), NM-27279 (BHL)  
6. If Indian, Allottee or Tribe Name  
7. If Unit or CA Agreement, Name and No. *1/3/2013*

1a. Type of work:  DRILL  REENTER

1b. Type of Well:  Oil Well  Gas Well  Other  Single Zone  Multiple Zone

2. Name of Operator Mewbourne Oil Company

8. Lease Name and Well No.  
Bradley "30" Federal Com #4H *4384747*  
9. API Well No.  
*30-015-40934*

3a. Address PO Box 5270  
Hobbs, NM 88241

3b. Phone No. (include area code)  
575-393-5905

10. Field and Pool, or Exploratory  
Santo Nino Bone Spring (54600)

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface 330' FNL & 110' FWL - Sec. 30 T18S R30E *Lot 1/D'*  
At proposed prod. zone 400' FNL & 330' FEL - Sec. 30 T18S R30E *A'*

11. Sec., T. R. M. or Blk. and Survey or Area  
Sec. 30 T18S R30E

14. Distance in miles and direction from nearest town or post office\*  
24 miles NE of Carlsbad, NM

12. County or Parish  
Eddy  
13. State  
NM

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
110'

16. No. of acres in lease  
NM-28097 - 1076.65 acres  
NM-27279 - 1751.53 acres

17. Spacing Unit dedicated to this well  
158.31

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
330' (Santo Nino 30 Fed Com #3H)

19. Proposed Depth  
12,679 (MD)  
8158 (TVD)

20. BLM/BIA Bond No. on file  
NM-1693 Nationwide, NMB-000919

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3449' GL

22. Approximate date work will start\*  
11/01/2012

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.
- 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 *Bradley Bishop*

Name (Printed/Typed)  
Bradley Bishop

Date  
09/24/2012

Title

Approved by (Signature) *James A. Ames Jr*

Name (Printed/Typed)  
James A. Ames

Date  
1-2-13

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.

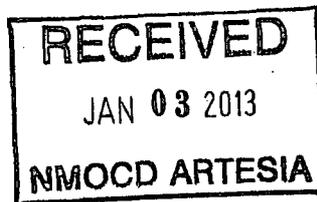
APPROVAL FOR TWO YEARS

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)

Capitan Controlled Water Basin



Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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 <b>30-015-40934</b>	Pool Code <b>54600</b>	Pool Name <b>Santo Nino Bone Spring</b>
Property Code <b>384774</b>	Property Name <b>BRADLEY "30" FEDERAL COM</b>	Well Number <b>4H</b>
OGRID No. <b>14744</b>	Operator Name <b>MEWBOURNE OIL COMPANY</b>	Elevation <b>3449'</b>

Surface Location

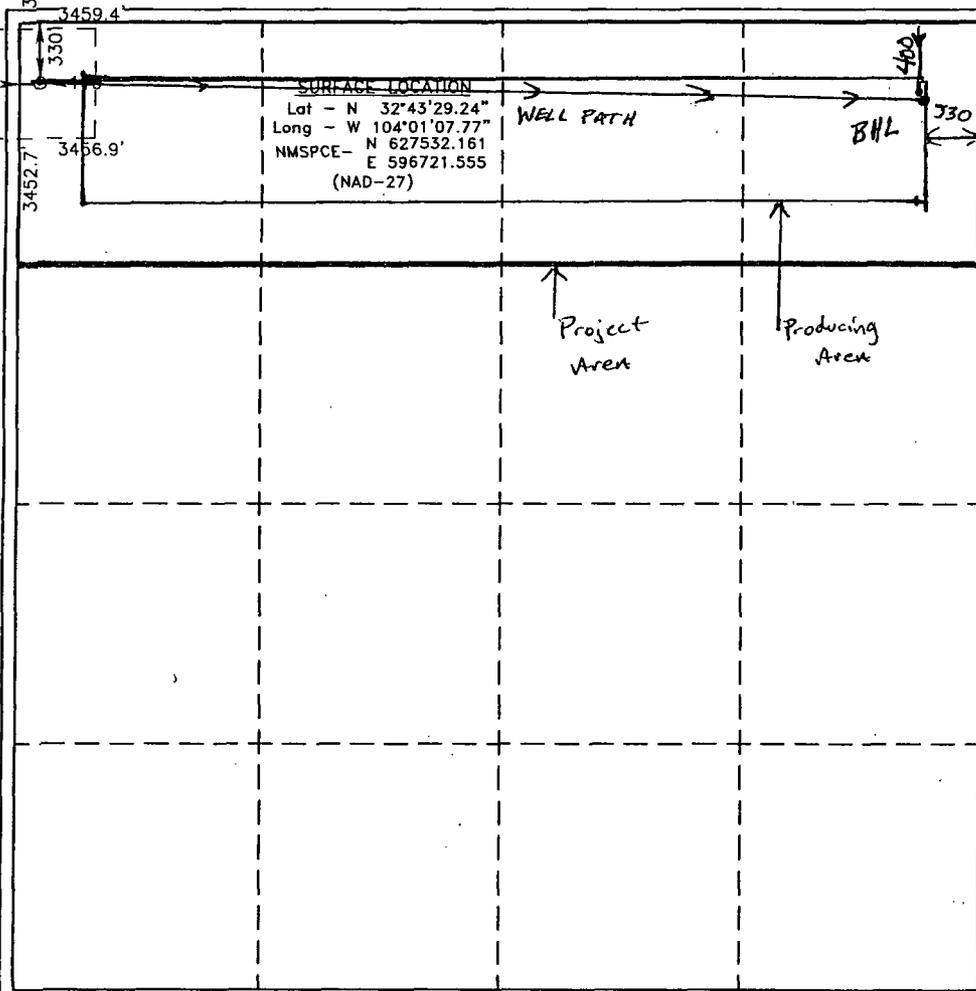
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>D</b>	<b>30</b>	<b>18 S</b>	<b>30 E</b>	<b>(1)</b>	<b>330</b>	<b>NORTH</b>	<b>110</b>	<b>WEST</b>	<b>EDDY</b>

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
<b>A</b>	<b>30</b>	<b>18S</b>	<b>30E</b>		<b>400</b>	<b>NORTH</b>	<b>330</b>	<b>EAST</b>	<b>EDDY</b>

Dedicated Acres <b>158.31</b>	Joint or Infill	Consolidation Code	Order No. <b>12679</b>
----------------------------------	-----------------	--------------------	---------------------------

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: *[Signature]* Date: *8/20/12*

Printed Name: *N M Y...*

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.

Date Surveyed: *AUG 15 2012*

Signature & Seal of Professional Surveyor: *[Signature]*

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 23143

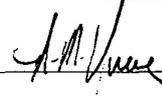
# Mewbourne Oil Company

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 25 day of Sept, 2012.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

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

**Statement Accepting Responsibility for Operations**

Operator Name: Mewbourne Oil Company  
Street or Box: P.O. Box 5270  
City, State: Hobbs, New Mexico  
Zip Code: 88241

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

Lease Number: (SL) NM-28097, (BHL) NM-27279

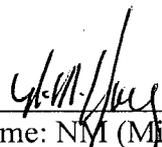
Legal Description of Land: Section 30, T-18S, R-30E Eddy County, New Mexico.  
Location @ 330' FNL & 110' FWL.

Formation (if applicable): Bone Springs

Bond Coverage: \$150,000

BLM Bond File: NM1693 Nationwide, NMB-000919

Authorized Signature: \_\_\_\_\_

  
Name: Micky Young

Title: District Manager

Date: 9/25/12

**Drilling Program**  
**Mewbourne Oil Company**  
Bradley "30" Federal Com #4H  
330' FNL & 110' FWL (SHL)  
Sec 30-T18S-R30E  
Eddy County, New Mexico

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

Rustler	260'
Top Salt	370'
Base Salt	1110'
*Yates	1280'
Seven Rivers	1490'
*Queen	2330'
Grayburg	2760'
San Andres	3190'
*Delaware	3570'
*Bone Springs Lime	4020'
*Wolfcamp	Will Not Penetrate

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

Water	Fresh water is anticipated @ 150' and will be protected by setting surface casing at 300' 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 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. 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. BOP's 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 9 5/8" & 7" BOPE to 3000# and the 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 1<sup>st</sup> test as per BLM Onshore Oil and Gas Order #2.

**4. MOC proposes to drill a vertical wellbore to 7621' & kick off to horizontal @ 8098' TVD. The well will be drilled to 12679' MD (8158' 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>
17 1/2"	13 3/8" (new)	48#	H40	0' - 300'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0' - 1340' MD	LT&C
8 3/4"	7" (new)	26#	P110	0' - 7365' MD	LT&C
8 3/4"	7" (new)	26#	P110	7365' - 8365' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	8165' - TD	LT&C

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

\*Subject to availability of casing.

**B. Cementing Program:**

See  
COA

- i. Surface Casing: 315 sks Class C cement containing 2% CaCl<sub>2</sub>. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- ii. Intermediate Casing: 120 sacks Class C light cement with salt & LCM. Yield at 2.16 cuft/sk. 200 sacks Class C cement w/2% CaCl<sub>2</sub>. Yield at 1.34 cuft/sk Cmt circulated to surface w/25% excess.
- iii. Production Casing: 520 sks Class "H" light cement w/salt, FL & LCM additives. Yeild @ 2.12 cuft/sk. 400 sks Class "H" cement w/ salt & FL additives. Yeild @ 1.19 cuft/sk. Cmt circulated w/25% excess.
- ii. 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: (65% fly ash : 35% cement : 4% 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:**

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0' - 300'	FW spud mud	8.6-9.0	32-34	NA
300' - 1340'	Brine water	10.0-10.2	28-30	NA
1340' - 7621' (KOP)	Cut Brine	8.5-8.7	28-30	NA
7621' - TD	Cut Brine w/Polymer	8.5-8.7	32-35	15

**7. Evaluation Program:**

Samples: 10' samples from KOP to TD  
Logging: GR, CN & Gyro 100' above KOP (7520') to surface. GR from 7520' 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(.43668 x 8158'=3562.44 psi)

**9. Anticipated Starting Date:**

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 20 days involved in completion operations on the project.



**DDC**  
Well Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Bradley 30 Federal Com #4H
<b>Company:</b>	Mewbourne Oil Co	<b>TVD Reference:</b>	WELL @ 3469.0usft (Patterson-UTI)
<b>Project:</b>	Eddy County, New Mexico	<b>MD Reference:</b>	WELL @ 3469.0usft (Patterson-UTI)
<b>Site:</b>	Sec 30, T18S, R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Bradley 30 Federal Com #4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project:</b>	Eddy County, New Mexico		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

<b>Site:</b>	Sec 30, T18S, R30E				
<b>Site Position:</b>		<b>Northing:</b>	622,986.86 usft	<b>Latitude:</b>	32° 42' 44.110 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	601,612.61 usft	<b>Longitude:</b>	104° 0' 10.680 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.18 °

<b>Well:</b>	Bradley 30 Federal Com #4H					
<b>Well Position</b>	<b>+N/-S</b>	4,545.3 usft	<b>Northing:</b>	627,532.17 usft	<b>Latitude:</b>	32° 43' 29.235 N
	<b>+E/-W</b>	-4,891.0 usft	<b>Easting:</b>	596,721.56 usft	<b>Longitude:</b>	104° 1' 7.768 W
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	3,449.0 usft

<b>Wellbore:</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	IGRF2010	8/29/2012	7.68	60.54	48,747

<b>Design:</b>	Design #1				
<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	90.80	

<b>Plan Sections</b>										
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	
7,620.6	0.00	0.00	7,620.6	0.0	0.0	0.00	0.00	0.00	0.00	
8,364.0	89.20	90.80	8,098.0	-6.6	470.8	12.00	12.00	12.21	90.80	
12,679.2	89.20	90.80	8,158.0	-66.6	4,785.2	0.00	0.00	0.00	0.00	PBHL Bradley 30 F

**DDC**  
Well Planning Report



<b>Database Company:</b>	EDM 5000.1 Single User Db Mewbourne Oil Co	<b>Local Co-ordinate Reference:</b>	Well Bradley 30 Federal Com #4H
<b>Project:</b>	Eddy County, New Mexico	<b>TVD Reference:</b>	WELL @ 3469.0usft (Patterson-UTI)
<b>Site:</b>	Sec 30, T18S, R30E	<b>MD Reference:</b>	WELL @ 3469.0usft (Patterson-UTI)
<b>Well:</b>	Bradley 30 Federal Com #4H	<b>North Reference:</b>	Grid
<b>Wellbore Design:</b>	Wellbore #1 Design #1	<b>Survey Calculation Method:</b>	Minimum Curvature

**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)
<b>Build 12° / 100'</b>									
7,620.6	0.00	0.00	7,620.6	0.0	0.0	0.0	0.00	0.00	0.00
7,625.0	0.53	90.80	7,625.0	0.0	0.0	0.0	12.00	12.00	0.00
7,650.0	3.53	90.80	7,650.0	0.0	0.9	0.9	12.00	12.00	0.00
7,675.0	6.53	90.80	7,674.9	0.0	3.1	3.1	12.00	12.00	0.00
7,700.0	9.53	90.80	7,699.6	-0.1	6.6	6.6	12.00	12.00	0.00
7,725.0	12.53	90.80	7,724.2	-0.2	11.4	11.4	12.00	12.00	0.00
7,750.0	15.53	90.80	7,748.4	-0.2	17.4	17.4	12.00	12.00	0.00
7,775.0	18.53	90.80	7,772.3	-0.3	24.7	24.7	12.00	12.00	0.00
7,800.0	21.53	90.80	7,795.8	-0.5	33.3	33.3	12.00	12.00	0.00
7,825.0	24.53	90.80	7,818.8	-0.6	43.1	43.1	12.00	12.00	0.00
7,850.0	27.53	90.80	7,841.3	-0.8	54.1	54.1	12.00	12.00	0.00
7,875.0	30.53	90.80	7,863.1	-0.9	66.2	66.2	12.00	12.00	0.00
7,900.0	33.53	90.80	7,884.3	-1.1	79.4	79.4	12.00	12.00	0.00
7,925.0	36.53	90.80	7,904.8	-1.3	93.8	93.8	12.00	12.00	0.00
7,950.0	39.53	90.80	7,924.5	-1.5	109.2	109.2	12.00	12.00	0.00
7,975.0	42.53	90.80	7,943.3	-1.7	125.6	125.6	12.00	12.00	0.00
8,000.0	45.53	90.80	7,961.3	-2.0	143.0	143.0	12.00	12.00	0.00
8,025.0	48.53	90.80	7,978.4	-2.2	161.2	161.3	12.00	12.00	0.00
8,050.0	51.53	90.80	7,994.4	-2.5	180.4	180.4	12.00	12.00	0.00
8,075.0	54.53	90.80	8,009.4	-2.8	200.4	200.4	12.00	12.00	0.00
8,100.0	57.53	90.80	8,023.4	-3.1	221.1	221.1	12.00	12.00	0.00
8,125.0	60.53	90.80	8,036.3	-3.4	242.5	242.6	12.00	12.00	0.00
8,150.0	63.53	90.80	8,048.0	-3.7	264.6	264.6	12.00	12.00	0.00
8,175.0	66.53	90.80	8,058.6	-4.0	287.3	287.3	12.00	12.00	0.00
8,200.0	69.53	90.80	8,067.9	-4.3	310.4	310.5	12.00	12.00	0.00
8,225.0	72.53	90.80	8,076.0	-4.6	334.1	334.1	12.00	12.00	0.00
8,250.0	75.53	90.80	8,082.9	-5.0	358.1	358.1	12.00	12.00	0.00
8,275.0	78.53	90.80	8,088.5	-5.3	382.5	382.5	12.00	12.00	0.00
8,300.0	81.53	90.80	8,092.9	-5.7	407.1	407.1	12.00	12.00	0.00
8,325.0	84.53	90.80	8,095.9	-6.0	431.9	431.9	12.00	12.00	0.00
8,350.0	87.53	90.80	8,097.6	-6.4	456.8	456.9	12.00	12.00	0.00
<b>EOB @ 89.20° Inc / 90.80° Azm / 8098' TVD</b>									
8,364.0	89.20	90.80	8,098.0	-6.6	470.8	470.8	12.00	12.00	0.00
8,400.0	89.20	90.80	8,098.5	-7.1	506.8	506.9	0.00	0.00	0.00
8,500.0	89.20	90.80	8,099.9	-8.4	606.8	606.9	0.00	0.00	0.00
8,600.0	89.20	90.80	8,101.3	-9.8	706.8	706.8	0.00	0.00	0.00
8,700.0	89.20	90.80	8,102.7	-11.2	806.8	806.8	0.00	0.00	0.00
8,800.0	89.20	90.80	8,104.1	-12.6	906.7	906.8	0.00	0.00	0.00
8,900.0	89.20	90.80	8,105.5	-14.0	1,006.7	1,006.8	0.00	0.00	0.00
9,000.0	89.20	90.80	8,106.9	-15.4	1,106.7	1,106.8	0.00	0.00	0.00
9,100.0	89.20	90.80	8,108.2	-16.8	1,206.7	1,206.8	0.00	0.00	0.00
9,200.0	89.20	90.80	8,109.6	-18.2	1,306.7	1,306.8	0.00	0.00	0.00
9,300.0	89.20	90.80	8,111.0	-19.6	1,406.6	1,406.8	0.00	0.00	0.00
9,400.0	89.20	90.80	8,112.4	-21.0	1,506.6	1,506.8	0.00	0.00	0.00
9,500.0	89.20	90.80	8,113.8	-22.4	1,606.6	1,606.8	0.00	0.00	0.00
9,600.0	89.20	90.80	8,115.2	-23.8	1,706.6	1,706.7	0.00	0.00	0.00
9,700.0	89.20	90.80	8,116.6	-25.1	1,806.6	1,806.7	0.00	0.00	0.00
9,800.0	89.20	90.80	8,118.0	-26.5	1,906.5	1,906.7	0.00	0.00	0.00
9,900.0	89.20	90.80	8,119.4	-27.9	2,006.5	2,006.7	0.00	0.00	0.00
10,000.0	89.20	90.80	8,120.8	-29.3	2,106.5	2,106.7	0.00	0.00	0.00
10,100.0	89.20	90.80	8,122.1	-30.7	2,206.5	2,206.7	0.00	0.00	0.00
10,200.0	89.20	90.80	8,123.5	-32.1	2,306.5	2,306.7	0.00	0.00	0.00
10,300.0	89.20	90.80	8,124.9	-33.5	2,406.4	2,406.7	0.00	0.00	0.00

**DDC**  
Well Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Bradley 30 Federal Com #4H
<b>Company:</b>	Mewbourne Oil Co	<b>TVD Reference:</b>	WELL @ 3469.0usft (Patterson-UTI)
<b>Project:</b>	Eddy County, New Mexico	<b>MD Reference:</b>	WELL @ 3469.0usft (Patterson-UTI)
<b>Site:</b>	Sec 30, T18S, R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Bradley 30 Federal Com #4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

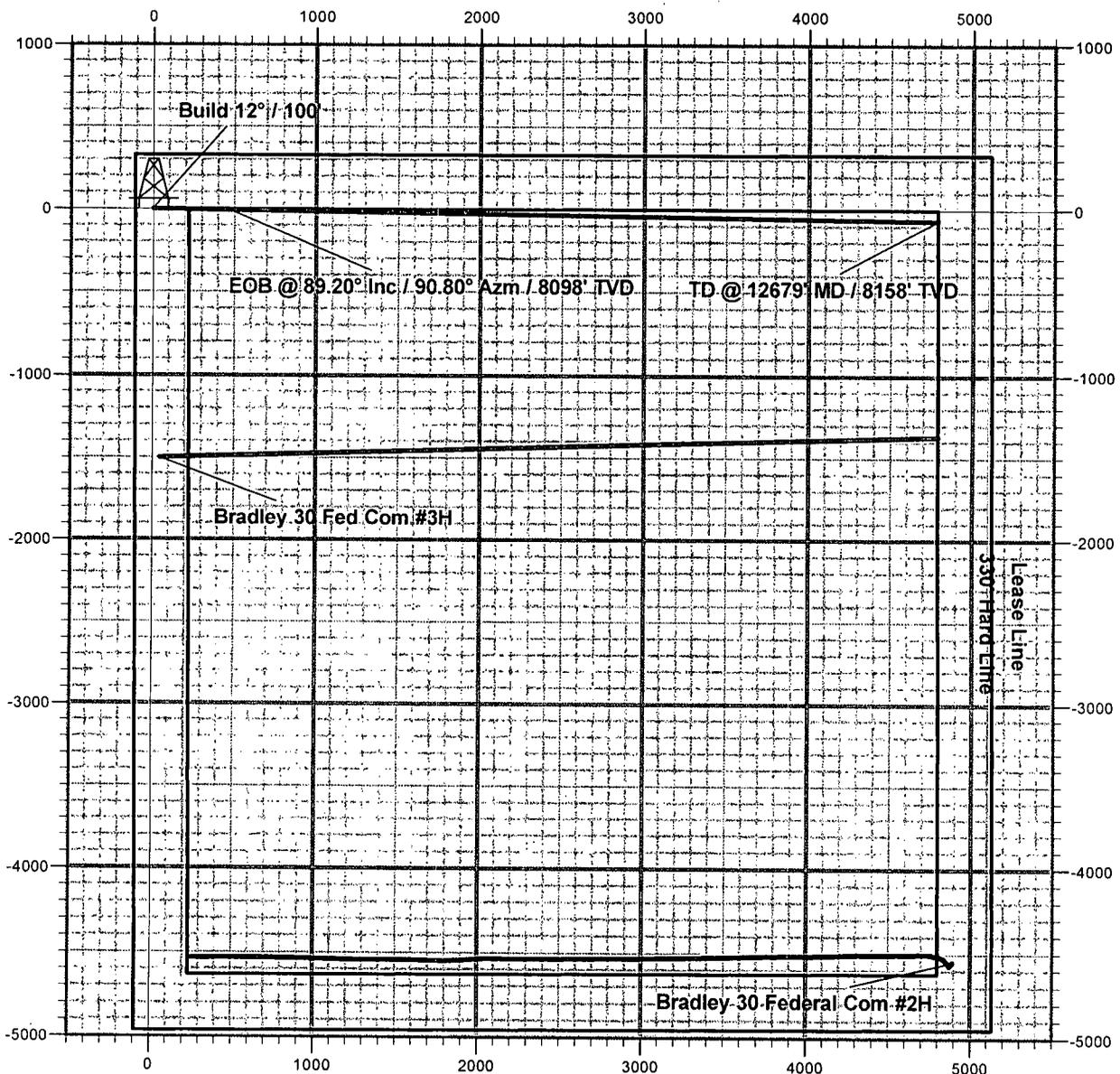
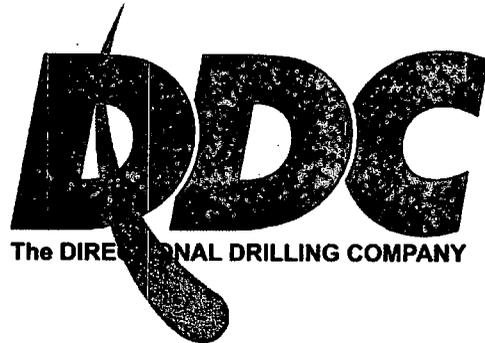
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400.0	89.20	90.80	8,126.3	-34.9	2,506.4	2,506.7	0.00	0.00	0.00	
10,500.0	89.20	90.80	8,127.7	-36.3	2,606.4	2,606.7	0.00	0.00	0.00	
10,600.0	89.20	90.80	8,129.1	-37.7	2,706.4	2,706.6	0.00	0.00	0.00	
10,700.0	89.20	90.80	8,130.5	-39.1	2,806.4	2,806.6	0.00	0.00	0.00	
10,800.0	89.20	90.80	8,131.9	-40.5	2,906.3	2,906.6	0.00	0.00	0.00	
10,900.0	89.20	90.80	8,133.3	-41.8	3,006.3	3,006.6	0.00	0.00	0.00	
11,000.0	89.20	90.80	8,134.7	-43.2	3,106.3	3,106.6	0.00	0.00	0.00	
11,100.0	89.20	90.80	8,136.0	-44.6	3,206.3	3,206.6	0.00	0.00	0.00	
11,200.0	89.20	90.80	8,137.4	-46.0	3,306.3	3,306.6	0.00	0.00	0.00	
11,300.0	89.20	90.80	8,138.8	-47.4	3,406.3	3,406.6	0.00	0.00	0.00	
11,400.0	89.20	90.80	8,140.2	-48.8	3,506.2	3,506.6	0.00	0.00	0.00	
11,500.0	89.20	90.80	8,141.6	-50.2	3,606.2	3,606.6	0.00	0.00	0.00	
11,600.0	89.20	90.80	8,143.0	-51.6	3,706.2	3,706.6	0.00	0.00	0.00	
11,700.0	89.20	90.80	8,144.4	-53.0	3,806.2	3,806.5	0.00	0.00	0.00	
11,800.0	89.20	90.80	8,145.8	-54.4	3,906.2	3,906.5	0.00	0.00	0.00	
11,900.0	89.20	90.80	8,147.2	-55.8	4,006.1	4,006.5	0.00	0.00	0.00	
12,000.0	89.20	90.80	8,148.6	-57.1	4,106.1	4,106.5	0.00	0.00	0.00	
12,100.0	89.20	90.80	8,149.9	-58.5	4,206.1	4,206.5	0.00	0.00	0.00	
12,200.0	89.20	90.80	8,151.3	-59.9	4,306.1	4,306.5	0.00	0.00	0.00	
12,300.0	89.20	90.80	8,152.7	-61.3	4,406.1	4,406.5	0.00	0.00	0.00	
12,400.0	89.20	90.80	8,154.1	-62.7	4,506.0	4,506.5	0.00	0.00	0.00	
12,500.0	89.20	90.80	8,155.5	-64.1	4,606.0	4,606.5	0.00	0.00	0.00	
12,600.0	89.20	90.80	8,156.9	-65.5	4,706.0	4,706.5	0.00	0.00	0.00	
TD @ 12679' MD / 8158' TVD										
12,679.2	89.20	90.80	8,158.0	-66.6	4,785.2	4,785.7	0.00	0.00	0.00	

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL Bradley 30 Fed	-	0.00	0.00	8,158.0	-66.6	4,785.2	627,465.57	601,506.76	32° 43' 28.432 N	104° 0' 11.756 W
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
7,620.6	7,620.6	0.0	0.0	Build 12° / 100'	
8,364.0	8,098.0	-6.6	470.8	EOB @ 89.20° Inc / 90.80° Azm / 8098' TVD	
12,679.2	8,158.0	-66.6	4,785.2	TD @ 12679' MD / 8158' TVD	

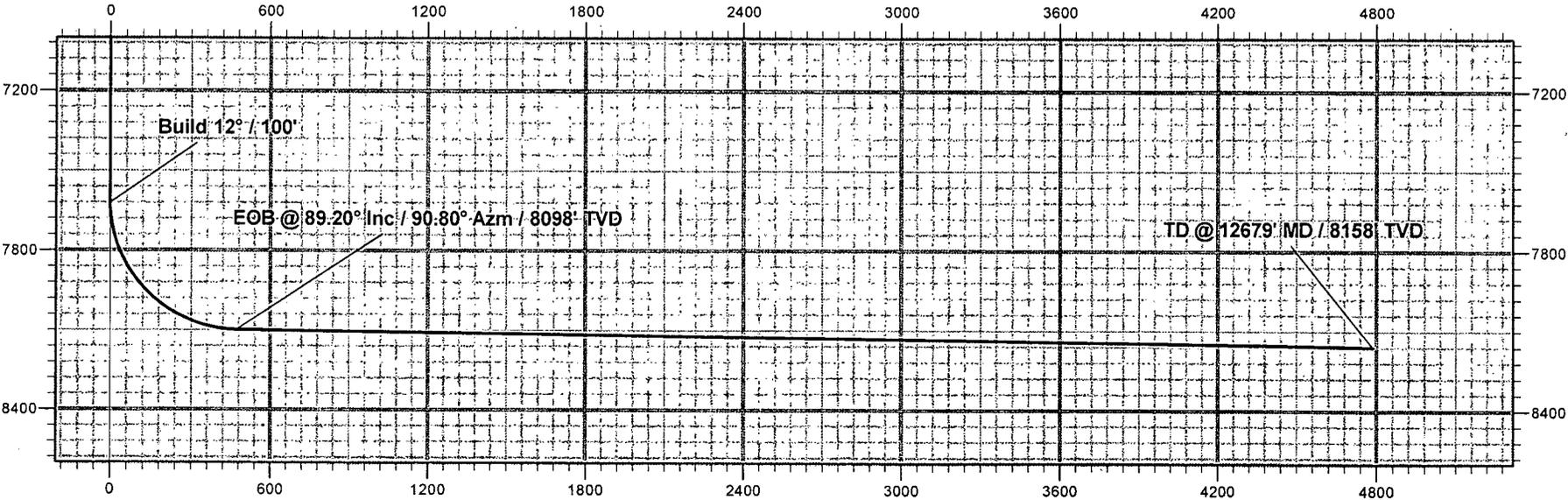
# Mewbourne Oil Company

Eddy County, New Mexico  
Bradley 30 Federal Com #4H  
Quote 120646  
Design #1



# Mewbourne Oil Company

Eddy County, New Mexico  
Bradley 30 Federal Com #4H  
Quote 120646  
Desing #1



Vertical Section at 90.80° (600 usft/in)

**Notes Regarding Blowout Preventer**

**Mewbourne Oil Company**

Bradley "30" Federal Com #4H

330' FNL & 110' FWL (SHL)

Sec 30-T18S-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 2000 psi working pressure on 9 5/8" casing and 3000 psi working pressure on 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.

# 11" 3M BOPE & Closed Loop Equipment Schematic

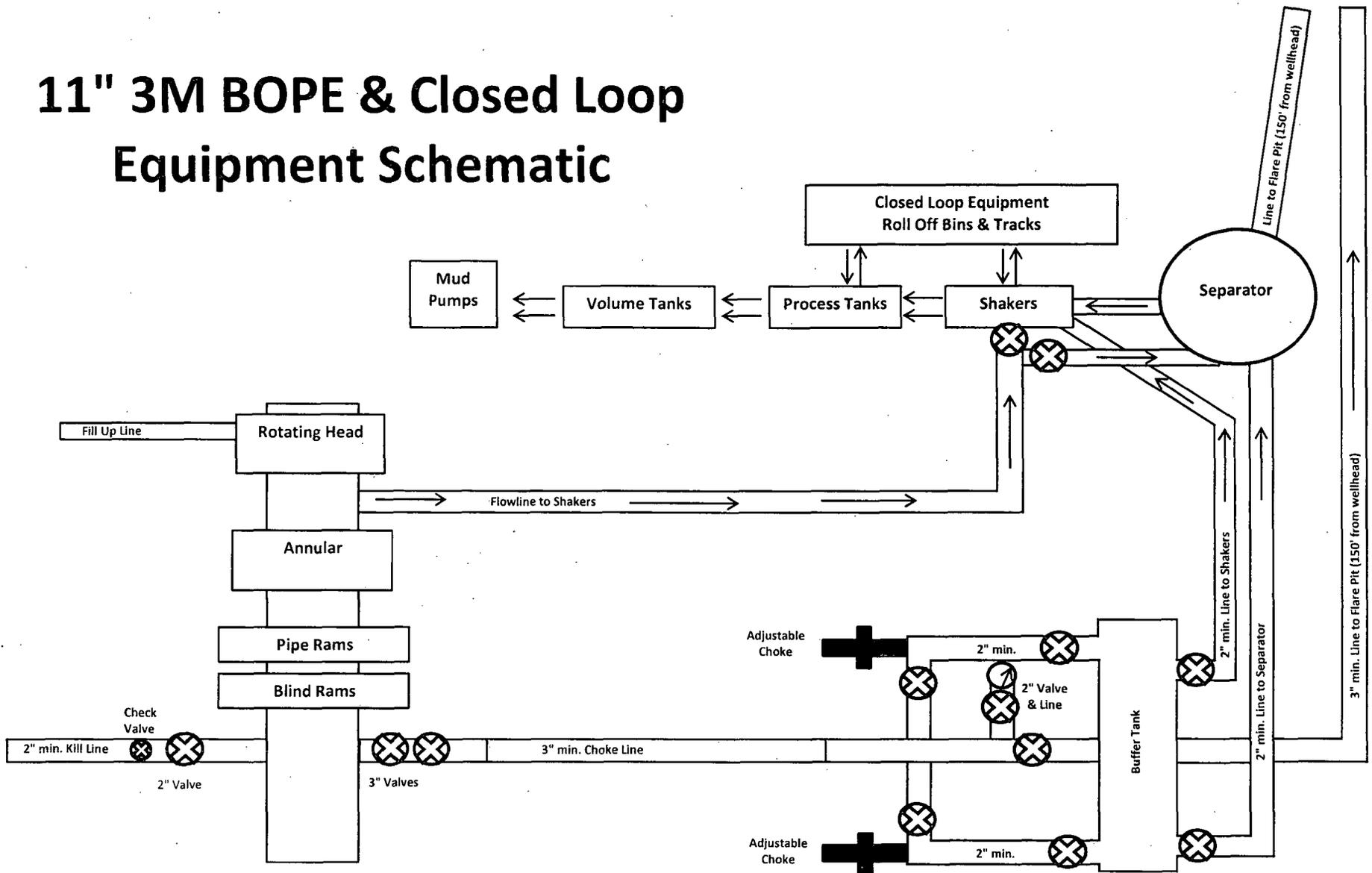


Exhibit 2  
Well Name: Bradley "30" Fed Com #4H

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

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

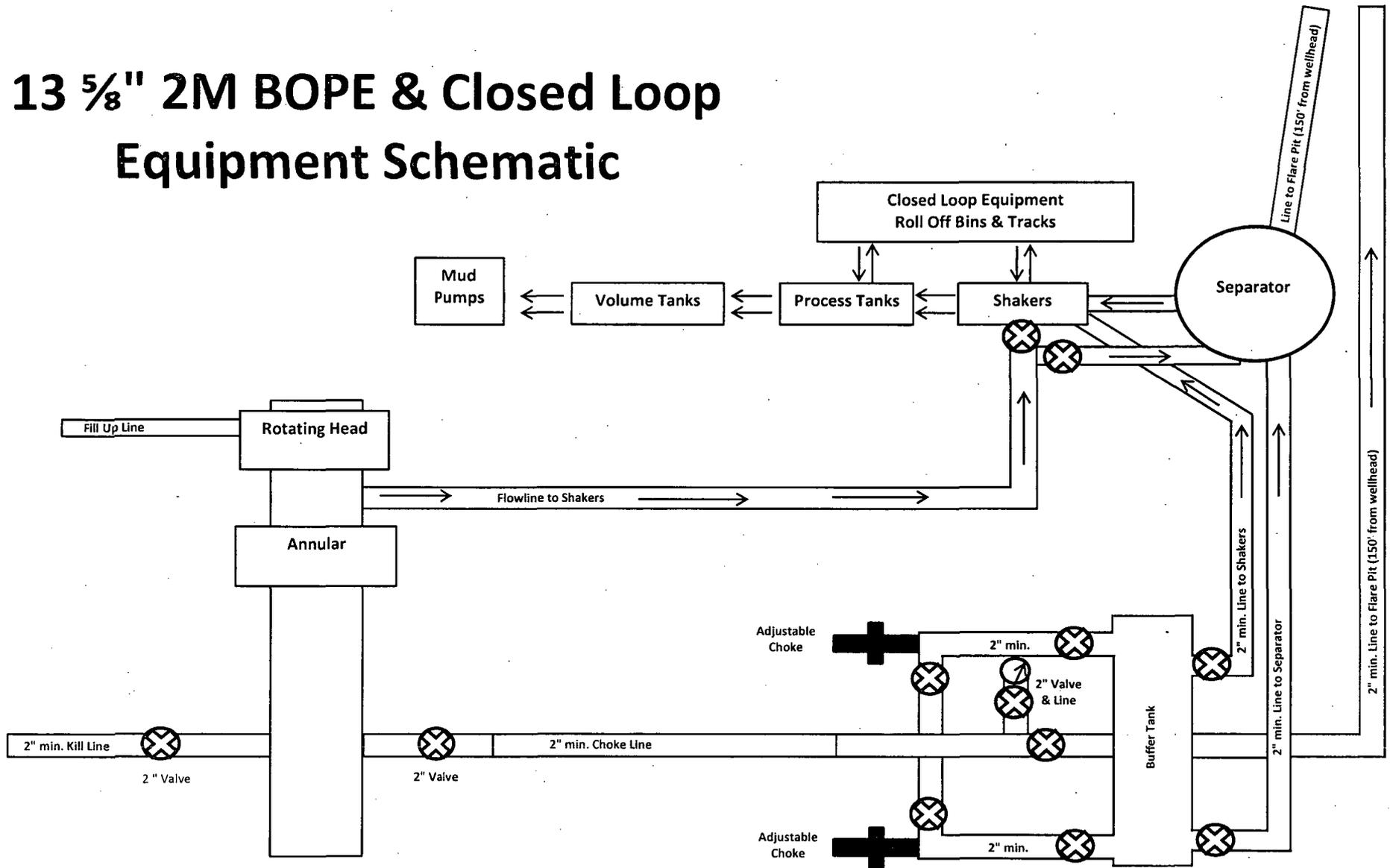


Exhibit 2A  
Well Name: Bradley "30" Fed Com #4H

H2S Diagram  
 Closed Loop Pad Dimensions 280' x 320'

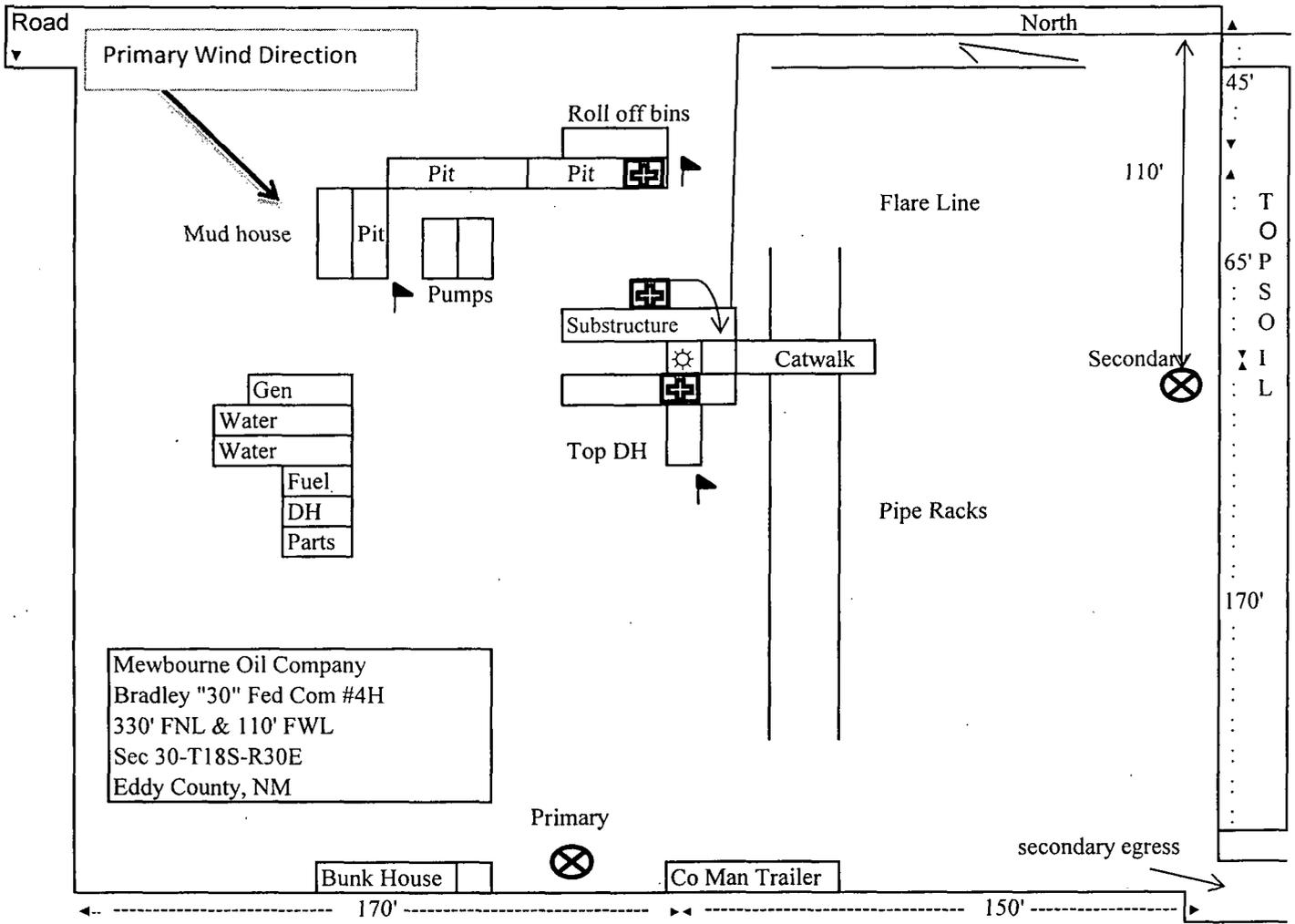


Exhibit 5

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

Hydrogen Sulfide Drilling Operations Plan

**Mewbourne Oil Company**  
Bradley "30" Fed Com #4H  
330' FNL & 110' FWL  
Sec 30-T18S-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 H<sub>2</sub>S were found. MOC will have on location and working all H<sub>2</sub>S 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 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~~ <sup>remotely operated</sup> 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 H<sub>2</sub>S 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 H<sub>2</sub>S are detected the well will be shut in and a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed to comply with Onshore Order 6.

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**

Eddy County Sheriff's Office	911 or 575-887-7551
Ambulance Service	911 or 575-885-2111
Artesia Fire Dept	911 or 575-616-7155
Loco Hills Volunteer Fire Dept.	911 or 575-677-3266
Closest Medical Facility – Artesia General Hospital	575-748-3333

Mewbourne Oil Company	Hobbs District Office	575-393-5905
	Fax	575-397-6252
	2 <sup>nd</sup> Fax	575-393-7259

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

Closed Loop Pad Dimensions 280' x 320'

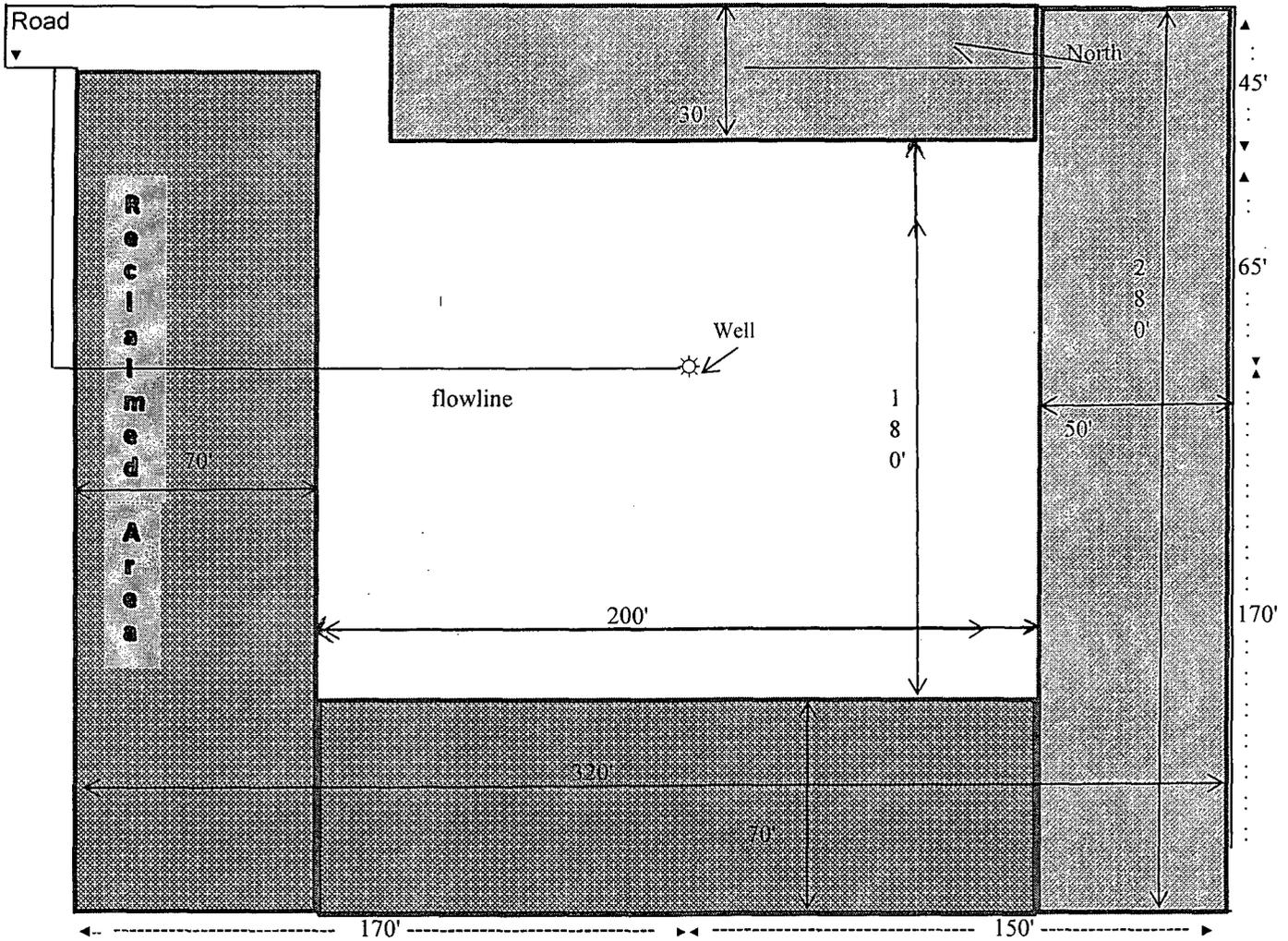


Exhibit 6

Mewbourne Oil Company  
Bradley "30" Fed Com #4H  
330' FNL & 110' FWL  
Sec. 30 T18S R30E  
Eddy County, NM

## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Co
LEASE NO.:	NM27279
WELL NAME & NO.:	4H Bradley 30 Federal Com
SURFACE HOLE FOOTAGE:	330'/ FNL & 110'/ FWL
BOTTOM HOLE FOOTAGE:	400'/ FNL & 330'/ FEL
LOCATION:	Section 30, T.18 S., R.30 E., NMPM
COUNTY:	Eddy County, New Mexico

### TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
  - Pipeline
  - Lesser Prairie-Chicken Timing Stipulations
  - Ground-level Abandoned Well Marker
  - Communitization Agreement
- Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- Road Section Diagram**
- Drilling**
  - H<sub>2</sub>S – Onshore Order #6
  - Waste Material and Fluids
  - Logging Requirements
- Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
- Interim Reclamation**
- Final Abandonment & Reclamation**