

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

OCD Artesia  
HOBBS OCD

APP 9 4 2013

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No.:	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. <b>&lt;39830&gt;</b> Salado Draw <b>9 DM Fed Com #1H</b>	
2. Name of Operator Mewbourne Oil Company		9. API Well No. <b>&lt;14744&gt;</b> <b>30-025-41142</b>	
3a. Address PO Box 5270 Hobbs, NM 88241	3b. Phone No. (include area code) 575-393-5905	10. Field and Pool or Exploratory <b>Red Hill 15 Upper</b> <b>Wildcat Bone Spring Shale &lt;97900&gt;</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 320' FNL & 330' FWL, Sec. 9 T26S R33E At proposed prod. zone 330' FSL & 500' FWL, Sec. 9 T26S R33E		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 9 T26S R33E	
14. Distance in miles and direction from nearest town or post office* 24 mile SW of Jal, NM		12. County or Parish <b>Eddy Lea</b>	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 320'	16. No. of acres in lease 320	17. Spacing Unit dedicated to this well 160	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 85' MOC Salado Draw 9 Federal #2H	19. Proposed Depth <b>14,219' MD</b> <b>9867' TVD</b>	20. BLM/BIA Bond No. on file NM-1693 nationwide, NMB000919	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3327' GL	22. Approximate date work will start* 02/01/2013	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:

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

25. Signature <i>Bradley Bishop</i>	Name (Printed/Typed) <b>BRADLEY BISHOP</b>	Date <b>1-14-13</b>
Title	Office <b>CARLSBAD FIELD OFFICE</b>	Date <b>APR 18 2013</b>
Approved by (Signature)	Name (Printed/Typed)	Date
Title <b>FIELD MANAGER</b>	Office <b>CARLSBAD FIELD OFFICE</b>	Date <b>APR 18 2013</b>

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)

**RECEIVED**  
APR 22 2013  
NMOC D ARTESIA

Carlsbad Controlled Water Basin

*KZ*  
*04/25/13*

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Approval Subject to General Requirements  
& Special Stipulations Attached

**Drilling Program**  
**Mewbourne Oil Company**  
 Salado Draw "9" DM Fed Com #1H  
 320' FNL & 330' FWL  
 Sec 9, T26S, R33E  
 Lea County, New Mexico

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

Rustler	860'
Top Salt	1210'
Base Salt	4740'
*Yates	NA
Seven Rivers	NA
*Queen	NA
Grayburg	NA
San Andres	NA
*Lamar/Delaware	4970'
*Bone Springs	8970'
*Wolfcamp	NA

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

Water	Fresh water is anticipated @ 140' and will be protected by setting surface casing at 885' 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:**

*see COA*

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. 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.

*see COA* →

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 1<sup>st</sup> test as per BLM Onshore Oil and Gas Order #2.

**4. MOC proposes to drill a vertical wellbore to 9263' & kick off to horizontal @ 9837' TVD. The well will be drilled to 14219' MD (9867' TVD). See attached directional plan.**

**5. Proposed casing and cementing program:**

**A. Casing Program:**

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
17 1/2"	13 3/8" (new)	48#	H40	0' - 885' <i>970'</i>	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0' - 3300' MD	LT&C
12 1/4"	9 5/8" (new)	40#	J55	3300' - 4300' MD	LT&C
12 1/4"	9 5/8" (new)	40#	N80	4300' - 4900' MD	LT&C
8 3/4"	7" (new)	26#	P110	0' - 9263' MD	LT&C
8 3/4"	7" (new)	26#	P110	9263' - 10164' MD	BT&C

*see COA*

6 1/8"          4 1/2" (new)          13.5#          P110          9964' - TD          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  
 Salado "9" DM Fed Com #1H  
 Page 2

**B. Cementing Program:**

- i. Surface Casing: 480 sks Class C light cement with salt & LCM. Yield at 2.16 cuft/sk. 200 sks Class C cement containing 1% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- ii. Intermediate Casing: 1070 sacks Class C light cement with salt & LCM. Yield at 2.12 cuft/sk. 200 sacks Class C cement. Yield at 1.32 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. Production Casing: 300 sks Class "H" light cement w/salt, FL & LCM additives. Yeild @ 2.11 cuft/sk. 400 sks Class "H" cement w/ salt & FL additives. Yeild @ 1.18 cuft/sk. Cmt tied back 200' into intermediate casing 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' - 885' <sup>COA</sup> 970	FW spud mud	8.6-9.0	32-34 NA	
885' - 4900'	Brine water	10.0-10.2	28-30	NA
4900' - 9263' (KOP)	Cut Brine	8.5-8.7	28-30	NA
10164' - 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 (9163') to surface. GR from 10164' to TD.

**8. Downhole Conditions**

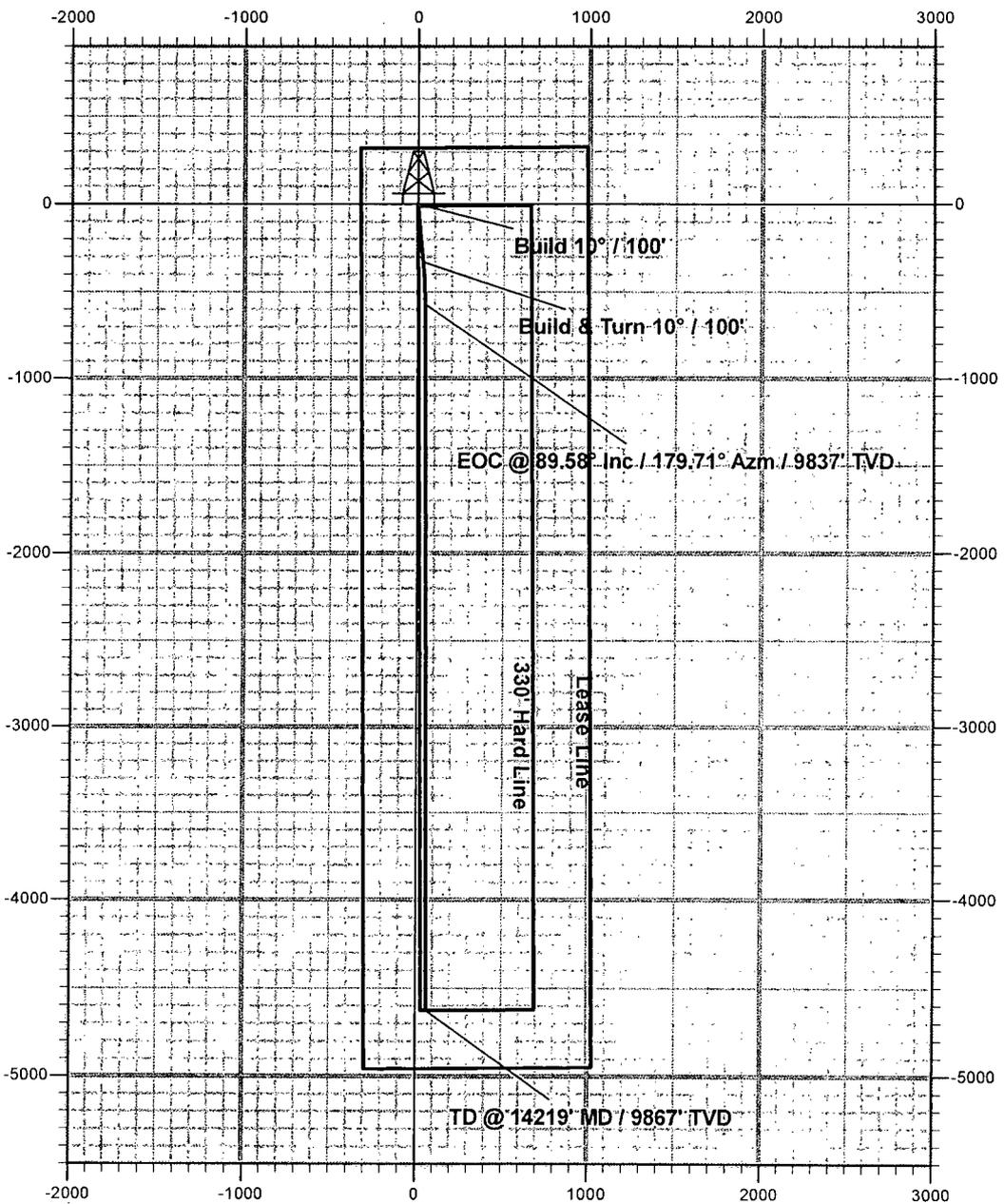
Zones of abnormal pressure: None anticipated  
 Zones of lost circulation: Anticipated in surface and intermediate holes  
 Maximum bottom hole temperature: 120 degree F  
 Maximum bottom hole pressure: 8.3 lbs/gal gradient or less(.43668 x 8158'=3562.44 psi)

**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.

# Mewbourne Oil Company

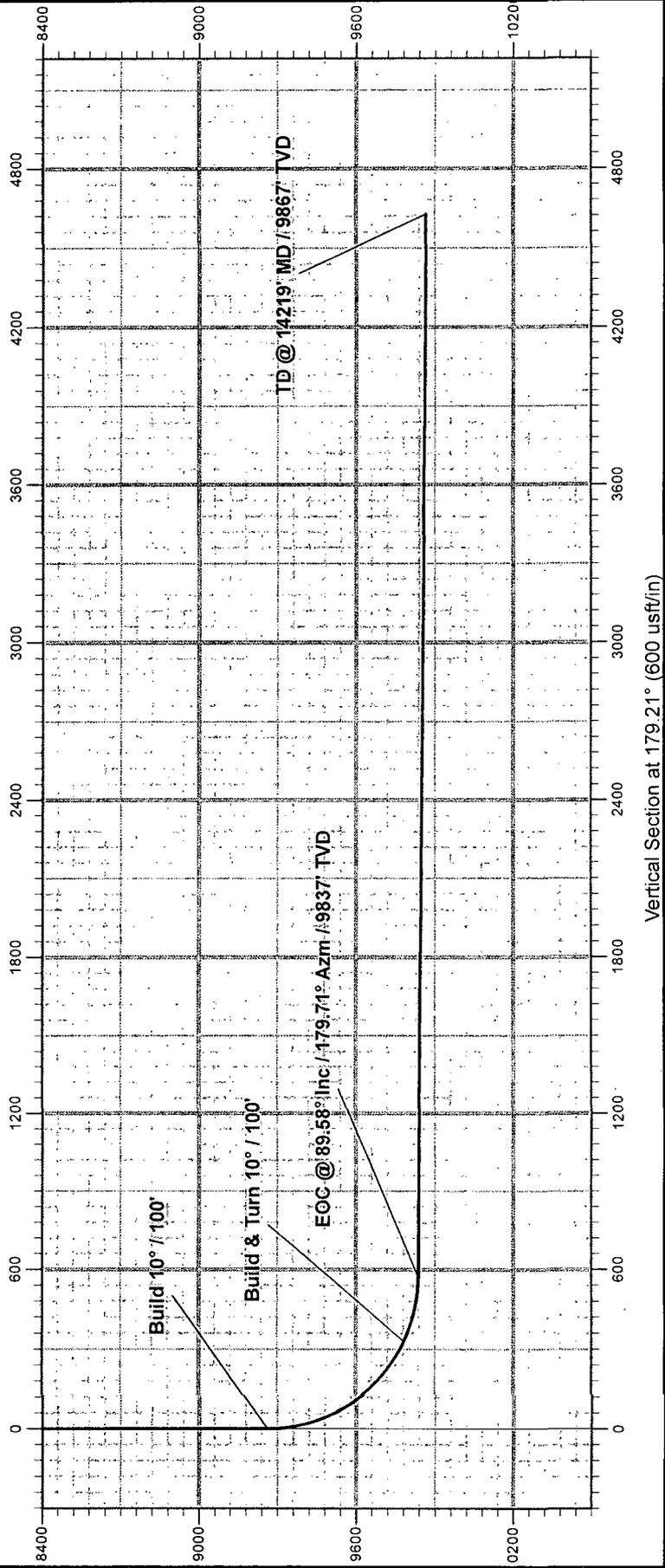
Lea County, NM  
Salado Draw 9 DM Federal Com #1H  
Quote 130025  
Design #1



# Mewbourne Oil Company



Lea County, NM  
Salado Draw 9 DM Federal Com #1H  
Quote 130025  
Design #1



Vertical Section at 179.21° (600 usft/in)



**DDC**  
Well Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Salado Draw 9 DM Federal Com #1H
<b>Company:</b>	Mewbourne Oil Co	<b>TVD Reference:</b>	WELL @ 3347.0usft (Patterson)
<b>Project:</b>	Lea County, NM	<b>MD Reference:</b>	WELL @ 3347.0usft (Patterson)
<b>Site:</b>	Sec 9,T26S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Salado Draw 9 DM Federal Com #1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project:</b>	Lea County, NM		
<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 9,T26S, R33E				
<b>Site Position:</b>	<b>Northing:</b>	387,916.48 usft	<b>Latitude:</b>	32° 3' 51.422 N	
<b>From:</b> Map	<b>Easting:</b>	732,056.11 usft	<b>Longitude:</b>	103° 35' 3.259 W	
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.40 °

<b>Well:</b>	Salado Draw 9 DM Federal Com #1H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	387,916.48 usft	<b>Latitude:</b>	32° 3' 51.422 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	732,056.11 usft	<b>Longitude:</b>	103° 35' 3.259 W
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	3,327.0 usft	

<b>Wellbore:</b>	Wellbore #1
------------------	-------------

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/9/2013	7.39	60.00	48,362

<b>Design:</b>	Design #1
----------------	-----------

<b>Audit Notes:</b>	
<b>Version:</b>	<b>Phase:</b> PLAN <b>Tie On Depth:</b> 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.21

**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	
9,262.9	0.00	0.00	9,262.9	0.0	0.0	0.00	0.00	0.00	0.00	
9,912.9	65.00	174.50	9,782.2	-329.3	31.7	10.00	10.00	0.00	174.50	
10,163.8	89.58	179.71	9,837.0	-571.8	43.4	10.00	9.80	2.08	12.36	
14,218.9	89.58	179.71	9,867.0	-4,626.8	64.1	0.00	0.00	0.00	0.00	PBHL Salado Draw

DDC  
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Salado Draw 9 DM Federal Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3347.0usft (Patterson)
Project:	Lea County, NM	MD Reference:	WELL @ 3347.0usft (Patterson)
Site:	Sec 9,T26S, R33E	North Reference:	Grid
Well:	Salado Draw 9 DM 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)
<b>Build 10° / 100'</b>									
9,262.9	0.00	0.00	9,262.9	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	3.71	174.50	9,300.0	-1.2	0.1	1.2	10.00	10.00	0.00
9,350.0	8.71	174.50	9,349.7	-6.6	0.6	6.6	10.00	10.00	0.00
9,400.0	13.71	174.50	9,398.7	-16.2	1.6	16.3	10.00	10.00	0.00
9,450.0	18.71	174.50	9,446.7	-30.1	2.9	30.2	10.00	10.00	0.00
9,500.0	23.71	174.50	9,493.3	-48.1	4.6	48.2	10.00	10.00	0.00
9,550.0	28.71	174.50	9,538.1	-70.1	6.8	70.2	10.00	10.00	0.00
9,600.0	33.71	174.50	9,580.9	-95.9	9.2	96.0	10.00	10.00	0.00
9,650.0	38.71	174.50	9,621.2	-125.3	12.1	125.4	10.00	10.00	0.00
9,700.0	43.71	174.50	9,658.8	-158.1	15.2	158.3	10.00	10.00	0.00
9,750.0	48.71	174.50	9,693.4	-194.0	18.7	194.2	10.00	10.00	0.00
9,800.0	53.71	174.50	9,724.7	-232.8	22.4	233.1	10.00	10.00	0.00
9,850.0	58.71	174.50	9,752.5	-274.1	26.4	274.5	10.00	10.00	0.00
9,900.0	63.71	174.50	9,776.6	-317.7	30.6	318.1	10.00	10.00	0.00
<b>Build &amp; Turn 10° / 100'</b>									
9,912.9	65.00	174.50	9,782.2	-329.3	31.7	329.7	10.00	10.00	0.00
9,950.0	68.63	175.35	9,796.8	-363.3	34.7	363.7	10.00	9.77	2.30
10,000.0	73.52	176.44	9,813.0	-410.4	38.1	410.9	10.00	9.79	2.17
10,050.0	78.42	177.47	9,825.1	-458.8	40.7	459.4	10.00	9.80	2.06
10,100.0	83.32	178.47	9,833.0	-508.2	42.4	508.7	10.00	9.80	1.99
10,150.0	88.23	179.44	9,836.7	-558.0	43.3	558.5	10.00	9.81	1.95
<b>EOC @ 89.58° Inc / 179.71° Azm / 9837' TVD</b>									
10,163.8	89.58	179.71	9,837.0	-571.8	43.4	572.3	10.00	9.81	1.94
10,200.0	89.58	179.71	9,837.3	-608.0	43.6	608.5	0.00	0.00	0.00
10,300.0	89.58	179.71	9,838.0	-708.0	44.1	708.5	0.00	0.00	0.00
10,400.0	89.58	179.71	9,838.7	-808.0	44.6	808.5	0.00	0.00	0.00
10,500.0	89.58	179.71	9,839.5	-908.0	45.1	908.5	0.00	0.00	0.00
10,600.0	89.58	179.71	9,840.2	-1,008.0	45.6	1,008.5	0.00	0.00	0.00
10,700.0	89.58	179.71	9,841.0	-1,108.0	46.2	1,108.5	0.00	0.00	0.00
10,800.0	89.58	179.71	9,841.7	-1,208.0	46.7	1,208.5	0.00	0.00	0.00
10,900.0	89.58	179.71	9,842.4	-1,308.0	47.2	1,308.5	0.00	0.00	0.00
11,000.0	89.58	179.71	9,843.2	-1,408.0	47.7	1,408.5	0.00	0.00	0.00
11,100.0	89.58	179.71	9,843.9	-1,508.0	48.2	1,508.5	0.00	0.00	0.00
11,200.0	89.58	179.71	9,844.7	-1,608.0	48.7	1,608.5	0.00	0.00	0.00
11,300.0	89.58	179.71	9,845.4	-1,708.0	49.2	1,708.5	0.00	0.00	0.00
11,400.0	89.58	179.71	9,846.1	-1,807.9	49.7	1,808.5	0.00	0.00	0.00
11,500.0	89.58	179.71	9,846.9	-1,907.9	50.2	1,908.5	0.00	0.00	0.00
11,600.0	89.58	179.71	9,847.6	-2,007.9	50.7	2,008.4	0.00	0.00	0.00
11,700.0	89.58	179.71	9,848.4	-2,107.9	51.2	2,108.4	0.00	0.00	0.00
11,800.0	89.58	179.71	9,849.1	-2,207.9	51.8	2,208.4	0.00	0.00	0.00
11,900.0	89.58	179.71	9,849.8	-2,307.9	52.3	2,308.4	0.00	0.00	0.00
12,000.0	89.58	179.71	9,850.6	-2,407.9	52.8	2,408.4	0.00	0.00	0.00
12,100.0	89.58	179.71	9,851.3	-2,507.9	53.3	2,508.4	0.00	0.00	0.00
12,200.0	89.58	179.71	9,852.1	-2,607.9	53.8	2,608.4	0.00	0.00	0.00
12,300.0	89.58	179.71	9,852.8	-2,707.9	54.3	2,708.4	0.00	0.00	0.00
12,400.0	89.58	179.71	9,853.5	-2,807.9	54.8	2,808.4	0.00	0.00	0.00
12,500.0	89.58	179.71	9,854.3	-2,907.9	55.3	2,908.4	0.00	0.00	0.00
12,600.0	89.58	179.71	9,855.0	-3,007.9	55.8	3,008.4	0.00	0.00	0.00
12,700.0	89.58	179.71	9,855.8	-3,107.9	56.3	3,108.4	0.00	0.00	0.00
12,800.0	89.58	179.71	9,856.5	-3,207.9	56.8	3,208.4	0.00	0.00	0.00
12,900.0	89.58	179.71	9,857.2	-3,307.9	57.3	3,308.4	0.00	0.00	0.00
13,000.0	89.58	179.71	9,858.0	-3,407.9	57.9	3,408.4	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 Salado Draw 9 DM Federal Com #1H
<b>Company:</b>	Mewbourne Oil Co	<b>TVD Reference:</b>	WELL @ 3347.0usft (Patterson)
<b>Project:</b>	Lea County, NM	<b>MD Reference:</b>	WELL @ 3347.0usft (Patterson)
<b>Site:</b>	Sec 9,T26S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Salado Draw 9 DM Federal Com #1H	<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)	
13,100.0	89.58	179.71	9,858.7	-3,507.9	58.4	3,508.4	0.00	0.00	0.00	
13,200.0	89.58	179.71	9,859.5	-3,607.9	58.9	3,608.3	0.00	0.00	0.00	
13,300.0	89.58	179.71	9,860.2	-3,707.9	59.4	3,708.3	0.00	0.00	0.00	
13,400.0	89.58	179.71	9,860.9	-3,807.9	59.9	3,808.3	0.00	0.00	0.00	
13,500.0	89.58	179.71	9,861.7	-3,907.9	60.4	3,908.3	0.00	0.00	0.00	
13,600.0	89.58	179.71	9,862.4	-4,007.9	60.9	4,008.3	0.00	0.00	0.00	
13,700.0	89.58	179.71	9,863.2	-4,107.9	61.4	4,108.3	0.00	0.00	0.00	
13,800.0	89.58	179.71	9,863.9	-4,207.9	61.9	4,208.3	0.00	0.00	0.00	
13,900.0	89.58	179.71	9,864.6	-4,307.8	62.4	4,308.3	0.00	0.00	0.00	
14,000.0	89.58	179.71	9,865.4	-4,407.8	62.9	4,408.3	0.00	0.00	0.00	
14,100.0	89.58	179.71	9,866.1	-4,507.8	63.5	4,508.3	0.00	0.00	0.00	
14,200.0	89.58	179.71	9,866.9	-4,607.8	64.0	4,608.3	0.00	0.00	0.00	
<b>TD @ 14219' MD / 9867' TVD</b>										
14,218.9	89.58	179.71	9,867.0	-4,626.8	64.1	4,627.2	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	
- hit/miss target	0.00	0.00	9,867.0	-4,626.8	64.1	383,289.71	732,120.17	32° 3' 5.632 N	103° 35' 2.888 W	
- Shape										
PBHL Salado Draw 9										
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
9,262.9	9,262.9	0.0	0.0	Build 10° / 100'	
9,912.9	9,782.2	-329.3	31.7	Build & Turn 10° / 100'	
10,163.8	9,837.0	-571.8	43.4	EOC @ 89.58° Inc / 179.71° Azm / 9837' TVD	
14,218.9	9,867.0	-4,626.8	64.1	TD @ 14219' MD / 9867' TVD	

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

## Equipment Schematic

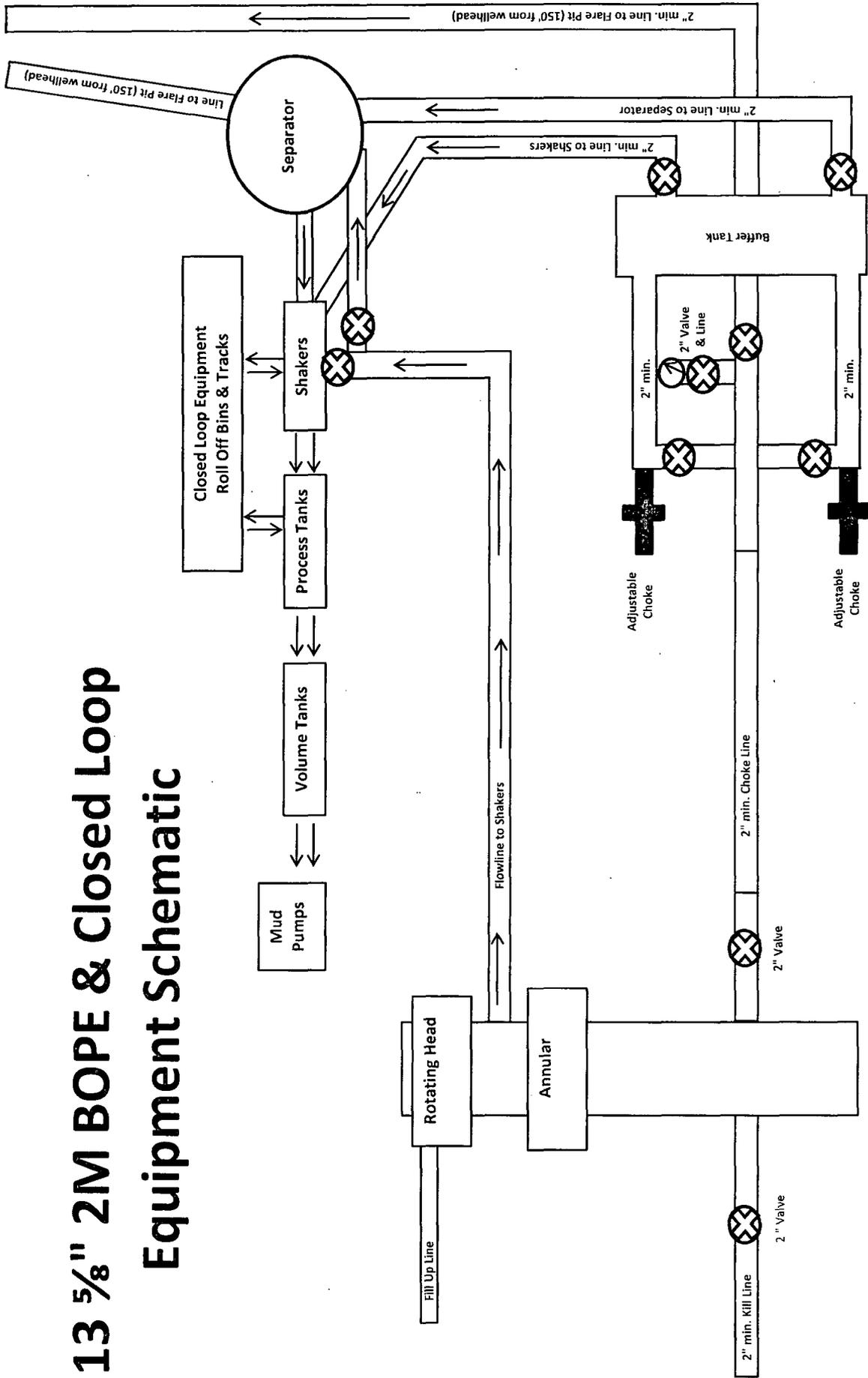
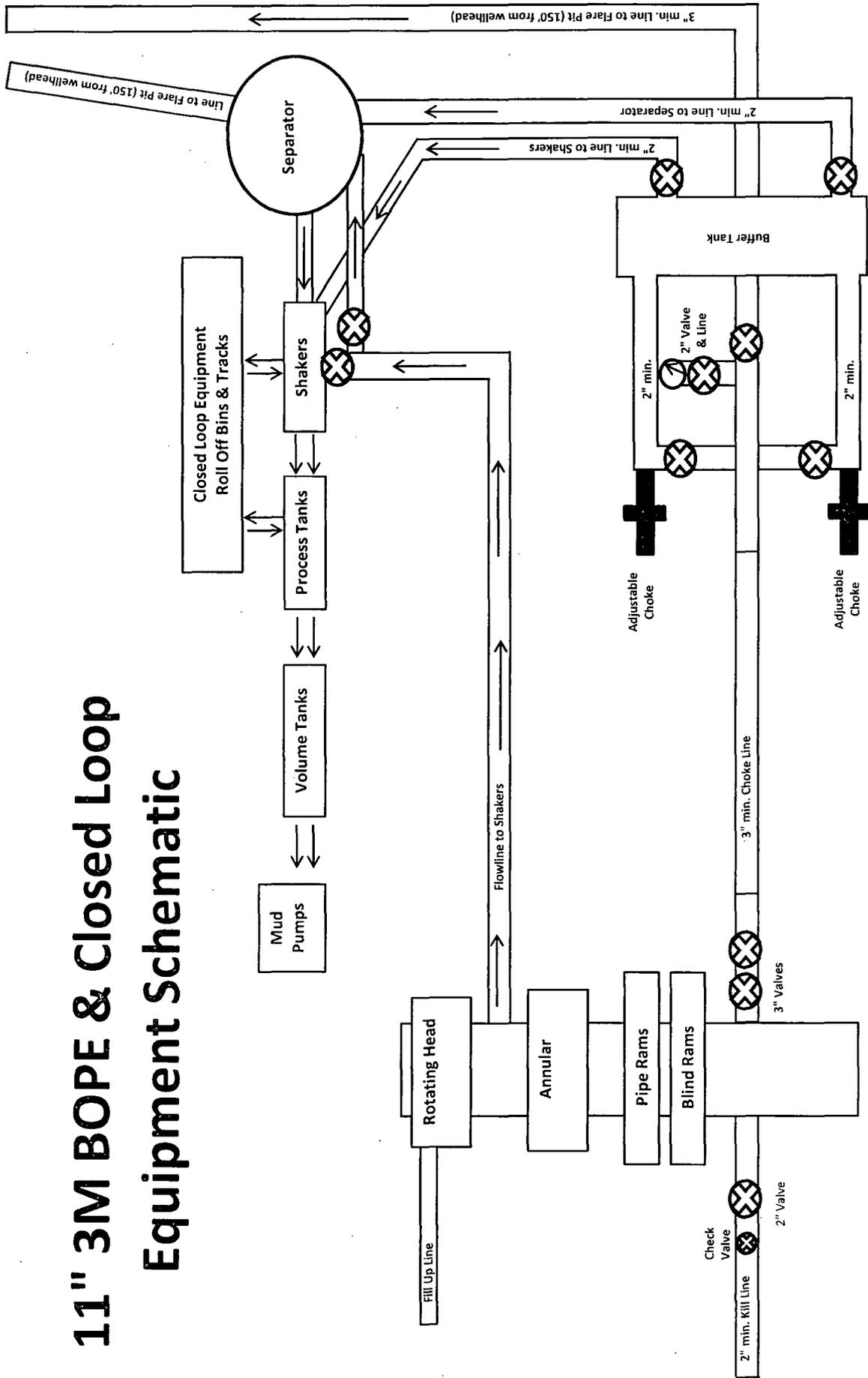


EXHIBIT "2"  
Salado Draw "9" DM Fed Com #1H

# 11" 3M BOPE & Closed Loop Equipment Schematic



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

Exhibit "2" A  
Salado Draw "9" DM Fed Com #1H

H2S Diagram  
 Closed Loop Pad Dimensions 280' x 320'

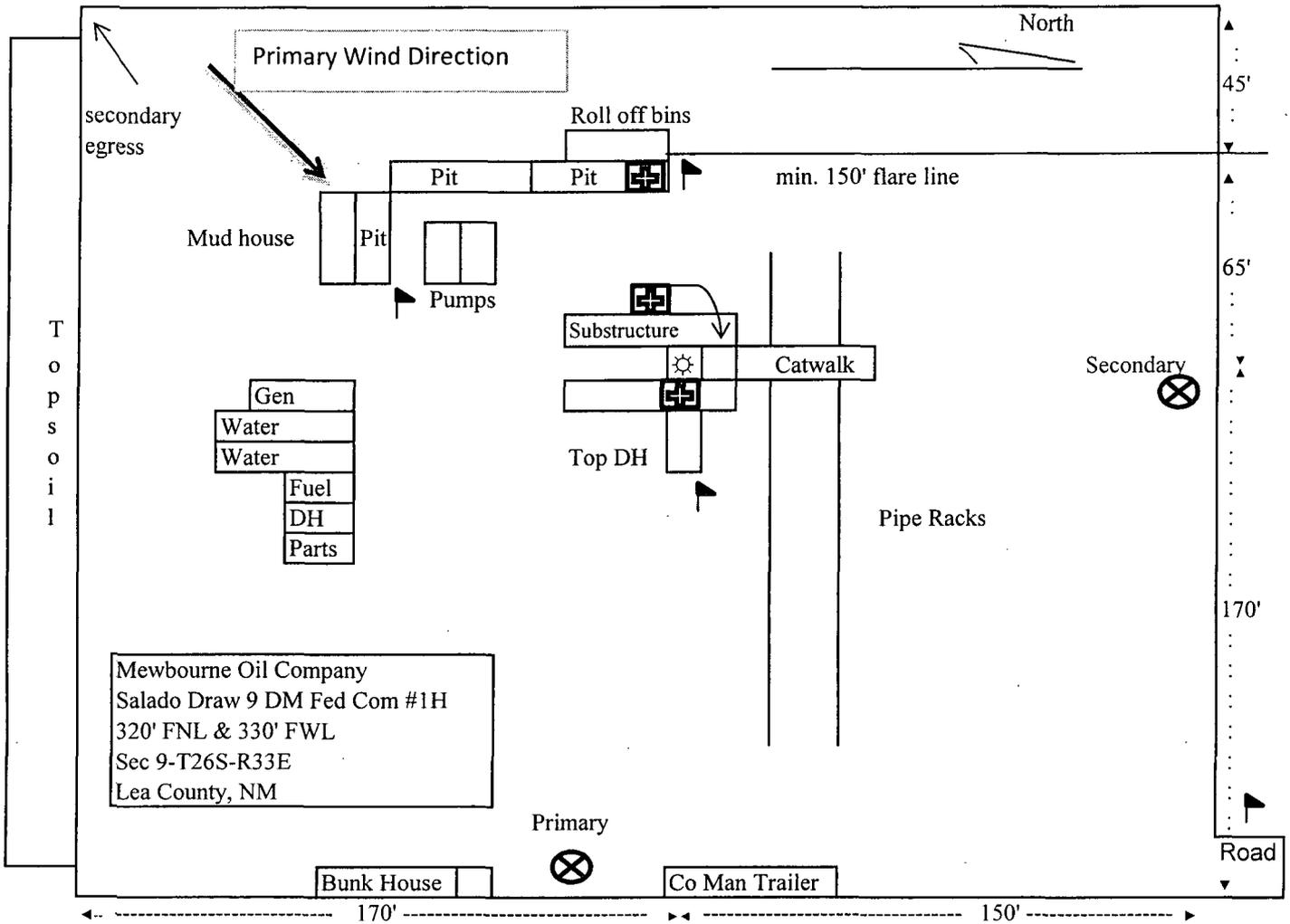


Exhibit '6'



= Safety Stations



= Wind Markers



= H2S Monitors