Form 3160-3
(August 2007)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs OCD HOBBS
APR 23 2013
RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NM-105559 (SL & BHL)
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone	6. If Indian, Allotee or Tribe Name
2. Name of Operator Mewbourne Oil Company <14744>	7. If Unit or CA Agreement, Name and No. NMNM-125386-A
3a. Address PO Box 5270 Hobbs, NM 88241	3b. Phone No. (include area code) 575-393-5905
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 330' FNL & 500' FWL , Sec. 10 T26S R32E At proposed prod. zone 330' FNL & 500' FWL, Sec. 3 T26S R32E	8. Lease Name and Well No. Red Hills West Unit #005H <39542> 9. API Well No. 30-025-41136 <97838> 10. Field and Pool or Exploratory ~~Wildcat~~ Bone Springs, Upper Shale 11. Sec., T. R. M. or Blk. and Survey or Area Sec. 10 T26S R32E
14. Distance in miles and direction from nearest town or post office* 29 miles SW 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
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 160'	19. Proposed Depth 15,749'-TVD 10,651-MD / 20. BLM/BIA Bond No. on file NM-1693 Nationwide, NMB-000919
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3251' 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:

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 [signature] Title	Name (Printed/Typed) Bradley Bishop	Date 01/23/2013
Approved by (Signature) /s/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date APR 19 2013
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)

Carlsbad Controlled Water Basin

KA 04/29/13

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Drilling Program
Mewbourne Oil Company
Red Hills West Unit #005H
330' FNL & 500' FWL (SHL)
Sec 10-T26S-R32E
Lea County, New Mexico

HOBBS OCD

APR 23 2013

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

Rustler	935'
Top of Salt	1275'
Base of Salt	4290'
*Delaware	4520'
Bell Canyon	4550'
Cherry Canyon	5610'
Manzanita Marker	5750'
Brushy Canyon	7245'
*Bone Springs	8640'
1st Bone Springs sand	9630'
2nd Bone Springs sand	10,240'

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

Water	Fresh water is anticipated @ 200' and will be protected by setting surface casing at 960' 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 ⅜" casing. A 3000# WP double ram BOP and 3000# WP Annular will be installed after running 9 ⅝" & 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.
Will test the 13 ⅜" annular to 1500# and the 9 ⅝" & 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 10,078' & kick off to horizontal @ 10,651' TVD. The well will be drilled to 15,749' MD (10,651' 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 ⅜" (new)	48#	H40	0'-960' 1040	ST&C
12 ¼"	9 ⅝" (new)	36#	J55	0'-3400'	LT&C
12 ¼"	9 ⅝" (new)	40#	J55	3400'-4300' 4510	LT&C
8 ¾"	7" (new)	26#	P110	0-8600' MD	LT&C
8 ¾"	7" (new)	26#	P110	8600'-9580'MD	BT&C
6 1/8"	4 ½" (new)	13.5#	P110	9380'-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:

i. Surface Casing: 510 sacks *Lite "C" (35:65:4) cement w/salt and lost circulation additives. Yield at 2.16 cuft/sk. 200 sks class "C" w/2% $CaCl_2$. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.

ii. Intermediate Casing: 670 sacks *Lite "C" (35:65:4) cement w/salt and lost circulation material additives. Yield at 2.11 cuft/sk. 200 sks class "C" neat. Yield at 1.33 cuft/sk. Cmt circulated to surface w/25% excess.

iii. Production Casing: 700 sacks *Lite "C" (60:40:0) cement w/salt and fluid loss additives. Yield at 2.11 cuft/sk. 300 sks class "H" w/salt and fluid loss additives. Yield at 1.19 cuft/sk. Cmt calculated to tieback into intermediate casing @ 4100' w/25% excess.

iv. 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 lite 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.

**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'-960'	FW spud mud	8.6-9.0	32-34	NA
960'-4300'	Brine water	10.0	29-30	NA
4300'-8683'	FW mud	8.6-8.8	28-30	NA
8683'- TD	FW 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:

Samples: 10' samples from surface casing to TD
Logging: GR, CNL & Gyro from KOP-100' (8583') to surface and GR from KOP 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:	155 degree F
Maximum bottom hole pressure:	8.3 lbs/gal gradient or less (10,078' x .43668 = 4400.86 psi per foot.)

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.

Mewbourne Oil Co

Lea County, NM
Sec 10, T-26S, R-32E
Red Hills West Unit 005H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

06 November, 2012

The DIRECTIONAL DRILLING COMPANY

DDC
Well Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Red Hills West Unit 3 #7H
Company:	Mewbourne Oil Co	**TVD Reference:**	WELL @ 3271.0usft (Patterson #41)
Project:	Lea County, NM	**MD Reference:**	WELL @ 3271.0usft (Patterson #41)
Site:	Sec 10, T-26S, R-32E	**North Reference:**	Grid
Well:	Red Hills West Unit 005 H	**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-26S, R-32E

Site Position:		**Northing:**	387,634.07 usft	**Latitude:**	32° 3' 50.245 N
From:	Map	**Easting:**	707,172.59 usft	**Longitude:**	103° 39' 52.435 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.36 °

Well Red Hills West Unit 3 #7H

Well Position	**+N/-S**	-12.4 usft	**Northing:**	387,621.71 usft	**Latitude:**	32° 3' 50.213 N
	+E/-W	-1,479.6 usft	**Easting:**	705,692.94 usft	**Longitude:**	103° 40' 9.630 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,251.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/5/2012	7.45	59.99	48,371

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	359.46

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	
10,078.0	0.00	0.00	10,078.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,978.0	90.00	359.46	10,651.0	572.9	-5.4	10.00	10.00	-0.06	359.46	
15,749.0	90.00	359.46	10,651.0	5,343.7	-50.4	0.00	0.00	0.00	0.00	PBHL Red Hills We

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Red Hills West Unit 3 #7H
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Site:	Sec 10, T-26S, R-32E	North Reference:	Grid
Well:	Red Hills West Unit 005H	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 10° / 100'									
10,078.0	0.00	0.00	10,078.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	2.20	359.46	10,100.0	0.4	0.0	0.4	10.00	10.00	0.00
10,150.0	7.20	359.46	10,149.8	4.5	0.0	4.5	10.00	10.00	0.00
10,200.0	12.20	359.46	10,199.1	12.9	-0.1	12.9	10.00	10.00	0.00
10,250.0	17.20	359.46	10,247.4	25.6	-0.2	25.6	10.00	10.00	0.00
10,300.0	22.20	359.46	10,294.5	42.5	-0.4	42.5	10.00	10.00	0.00
10,350.0	27.20	359.46	10,339.9	63.4	-0.6	63.4	10.00	10.00	0.00
10,400.0	32.20	359.46	10,383.3	88.1	-0.8	88.1	10.00	10.00	0.00
10,450.0	37.20	359.46	10,424.4	116.6	-1.1	116.6	10.00	10.00	0.00
10,500.0	42.20	359.46	10,462.9	148.5	-1.4	148.5	10.00	10.00	0.00
10,550.0	47.20	359.46	10,498.4	183.7	-1.7	183.7	10.00	10.00	0.00
10,600.0	52.20	359.46	10,530.7	221.8	-2.1	221.8	10.00	10.00	0.00
10,650.0	57.20	359.46	10,559.6	262.6	-2.5	262.6	10.00	10.00	0.00
10,700.0	62.20	359.46	10,584.8	305.7	-2.9	305.7	10.00	10.00	0.00
10,750.0	67.20	359.46	10,606.2	350.9	-3.3	350.9	10.00	10.00	0.00
10,800.0	72.20	359.46	10,623.5	397.8	-3.8	397.8	10.00	10.00	0.00
10,850.0	77.20	359.46	10,636.7	446.0	-4.2	446.0	10.00	10.00	0.00
10,900.0	82.20	359.46	10,645.7	495.2	-4.7	495.2	10.00	10.00	0.00
10,950.0	87.20	359.46	10,650.3	544.9	-5.1	545.0	10.00	10.00	0.00
EOB @ 90° Inc / 359.46° Azm / 10651' TVD									
10,978.0	90.00	359.46	10,651.0	572.9	-5.4	573.0	10.00	10.00	0.00
11,000.0	90.00	359.46	10,651.0	594.9	-5.6	595.0	0.00	0.00	0.00
Cross Hard Line @ 11065' MD / 10651' TVD									
11,065.0	90.00	359.46	10,651.0	659.9	-6.2	660.0	0.00	0.00	0.00
11,100.0	90.00	359.46	10,651.0	694.9	-6.6	695.0	0.00	0.00	0.00
11,200.0	90.00	359.46	10,651.0	794.9	-7.5	795.0	0.00	0.00	0.00
11,300.0	90.00	359.46	10,651.0	894.9	-8.4	895.0	0.00	0.00	0.00
11,400.0	90.00	359.46	10,651.0	994.9	-9.4	995.0	0.00	0.00	0.00
11,500.0	90.00	359.46	10,651.0	1,094.9	-10.3	1,095.0	0.00	0.00	0.00
11,600.0	90.00	359.46	10,651.0	1,194.9	-11.3	1,195.0	0.00	0.00	0.00
11,700.0	90.00	359.46	10,651.0	1,294.9	-12.2	1,295.0	0.00	0.00	0.00
11,800.0	90.00	359.46	10,651.0	1,394.9	-13.2	1,395.0	0.00	0.00	0.00
11,900.0	90.00	359.46	10,651.0	1,494.9	-14.1	1,495.0	0.00	0.00	0.00
12,000.0	90.00	359.46	10,651.0	1,594.9	-15.0	1,595.0	0.00	0.00	0.00
12,100.0	90.00	359.46	10,651.0	1,694.9	-16.0	1,695.0	0.00	0.00	0.00
12,200.0	90.00	359.46	10,651.0	1,794.9	-16.9	1,795.0	0.00	0.00	0.00
12,300.0	90.00	359.46	10,651.0	1,894.9	-17.9	1,895.0	0.00	0.00	0.00
12,400.0	90.00	359.46	10,651.0	1,994.9	-18.8	1,995.0	0.00	0.00	0.00
12,500.0	90.00	359.46	10,651.0	2,094.9	-19.8	2,095.0	0.00	0.00	0.00
12,600.0	90.00	359.46	10,651.0	2,194.9	-20.7	2,195.0	0.00	0.00	0.00
12,700.0	90.00	359.46	10,651.0	2,294.9	-21.6	2,295.0	0.00	0.00	0.00
12,800.0	90.00	359.46	10,651.0	2,394.9	-22.6	2,395.0	0.00	0.00	0.00
12,900.0	90.00	359.46	10,651.0	2,494.8	-23.5	2,495.0	0.00	0.00	0.00
13,000.0	90.00	359.46	10,651.0	2,594.8	-24.5	2,595.0	0.00	0.00	0.00
13,100.0	90.00	359.46	10,651.0	2,694.8	-25.4	2,695.0	0.00	0.00	0.00
13,200.0	90.00	359.46	10,651.0	2,794.8	-26.4	2,795.0	0.00	0.00	0.00
13,300.0	90.00	359.46	10,651.0	2,894.8	-27.3	2,895.0	0.00	0.00	0.00
13,400.0	90.00	359.46	10,651.0	2,994.8	-28.2	2,995.0	0.00	0.00	0.00
13,500.0	90.00	359.46	10,651.0	3,094.8	-29.2	3,095.0	0.00	0.00	0.00
13,600.0	90.00	359.46	10,651.0	3,194.8	-30.1	3,195.0	0.00	0.00	0.00
13,700.0	90.00	359.46	10,651.0	3,294.8	-31.1	3,295.0	0.00	0.00	0.00
13,800.0	90.00	359.46	10,651.0	3,394.8	-32.0	3,395.0	0.00	0.00	0.00

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Well:	Red Hills West Unit 3 #7H	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)
13,900.0	90.00	359.46	10,651.0	3,494.8	-33.0	3,495.0	0.00	0.00	0.00
14,000.0	90.00	359.46	10,651.0	3,594.8	-33.9	3,595.0	0.00	0.00	0.00
14,100.0	90.00	359.46	10,651.0	3,694.8	-34.9	3,695.0	0.00	0.00	0.00
14,200.0	90.00	359.46	10,651.0	3,794.8	-35.8	3,795.0	0.00	0.00	0.00
14,300.0	90.00	359.46	10,651.0	3,894.8	-36.7	3,895.0	0.00	0.00	0.00
14,400.0	90.00	359.46	10,651.0	3,994.8	-37.7	3,995.0	0.00	0.00	0.00
14,500.0	90.00	359.46	10,651.0	4,094.8	-38.6	4,095.0	0.00	0.00	0.00
14,600.0	90.00	359.46	10,651.0	4,194.8	-39.6	4,195.0	0.00	0.00	0.00
14,700.0	90.00	359.46	10,651.0	4,294.8	-40.5	4,295.0	0.00	0.00	0.00
14,800.0	90.00	359.46	10,651.0	4,394.8	-41.5	4,395.0	0.00	0.00	0.00
14,900.0	90.00	359.46	10,651.0	4,494.8	-42.4	4,495.0	0.00	0.00	0.00
15,000.0	90.00	359.46	10,651.0	4,594.8	-43.3	4,595.0	0.00	0.00	0.00
15,100.0	90.00	359.46	10,651.0	4,694.7	-44.3	4,695.0	0.00	0.00	0.00
15,200.0	90.00	359.46	10,651.0	4,794.7	-45.2	4,795.0	0.00	0.00	0.00
15,300.0	90.00	359.46	10,651.0	4,894.7	-46.2	4,895.0	0.00	0.00	0.00
15,400.0	90.00	359.46	10,651.0	4,994.7	-47.1	4,995.0	0.00	0.00	0.00
15,500.0	90.00	359.46	10,651.0	5,094.7	-48.1	5,095.0	0.00	0.00	0.00
15,600.0	90.00	359.46	10,651.0	5,194.7	-49.0	5,195.0	0.00	0.00	0.00
15,700.0	90.00	359.46	10,651.0	5,294.7	-49.9	5,295.0	0.00	0.00	0.00
TD @ 15749' MD / 10651' TVD									
15,749.0	90.00	359.46	10,651.0	5,343.7	-50.4	5,344.0	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 Red Hills West - plan hits target center - Point	0.00	0.00	10,651.0	5,343.7	-50.4	392,965.45	705,642.54	32° 4' 43.097 N	103° 40' 9.833 W

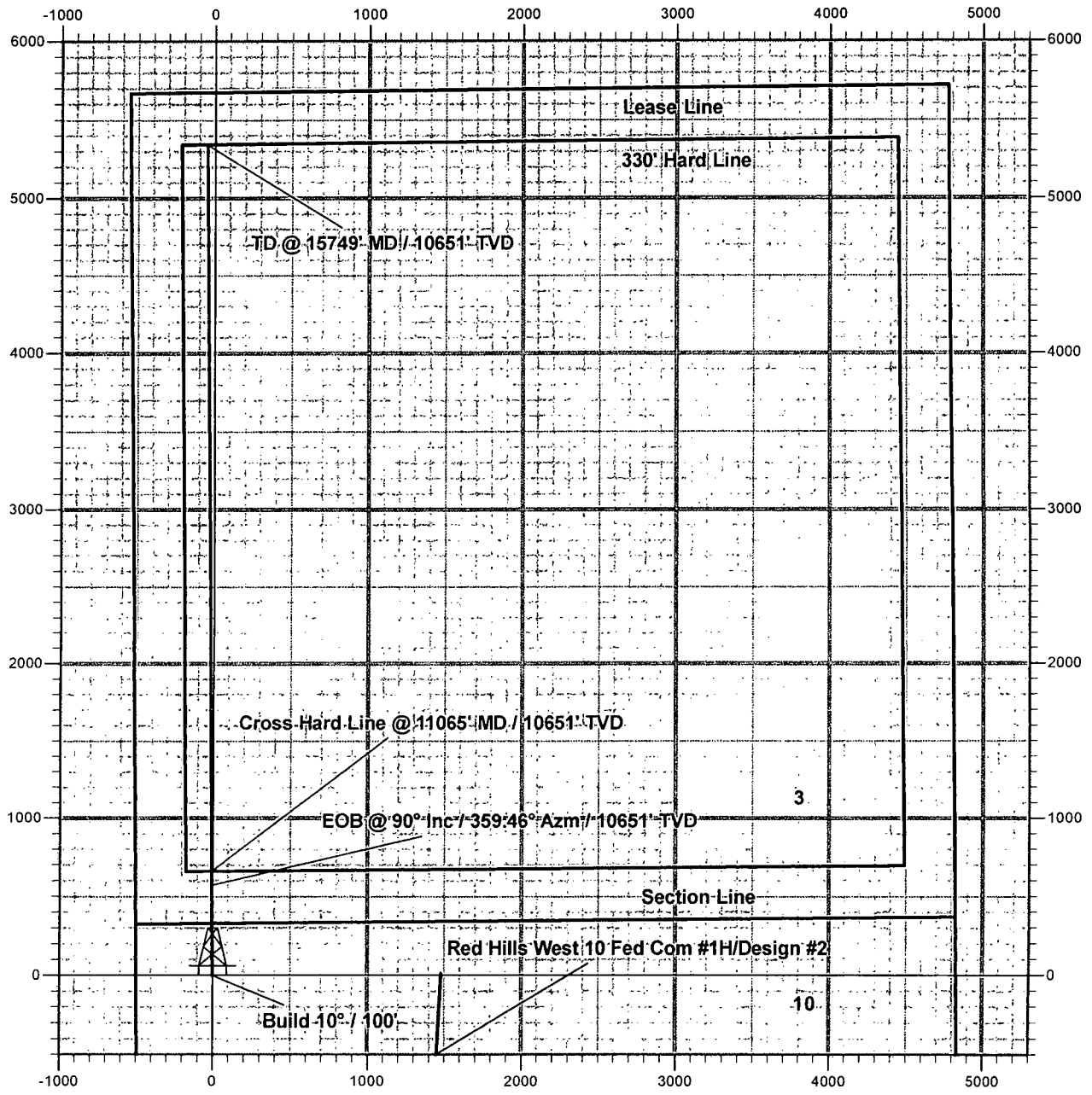
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,078.0	10,078.0	0.0	0.0	Build 10° / 100'
10,978.0	10,651.0	572.9	-5.4	EOB @ 90° Inc / 359.46° Azm / 10651' TVD
11,065.0	10,651.0	659.9	-6.2	Cross Hard Line @ 11065' MD / 10651' TVD
15,749.0	10,651.0	5,343.7	-50.4	TD @ 15749' MD / 10651' TVD

Mewbourne Oil Company

Lea County, NM
Red Hills West Unit 005 H
Quote 120829
Design #1

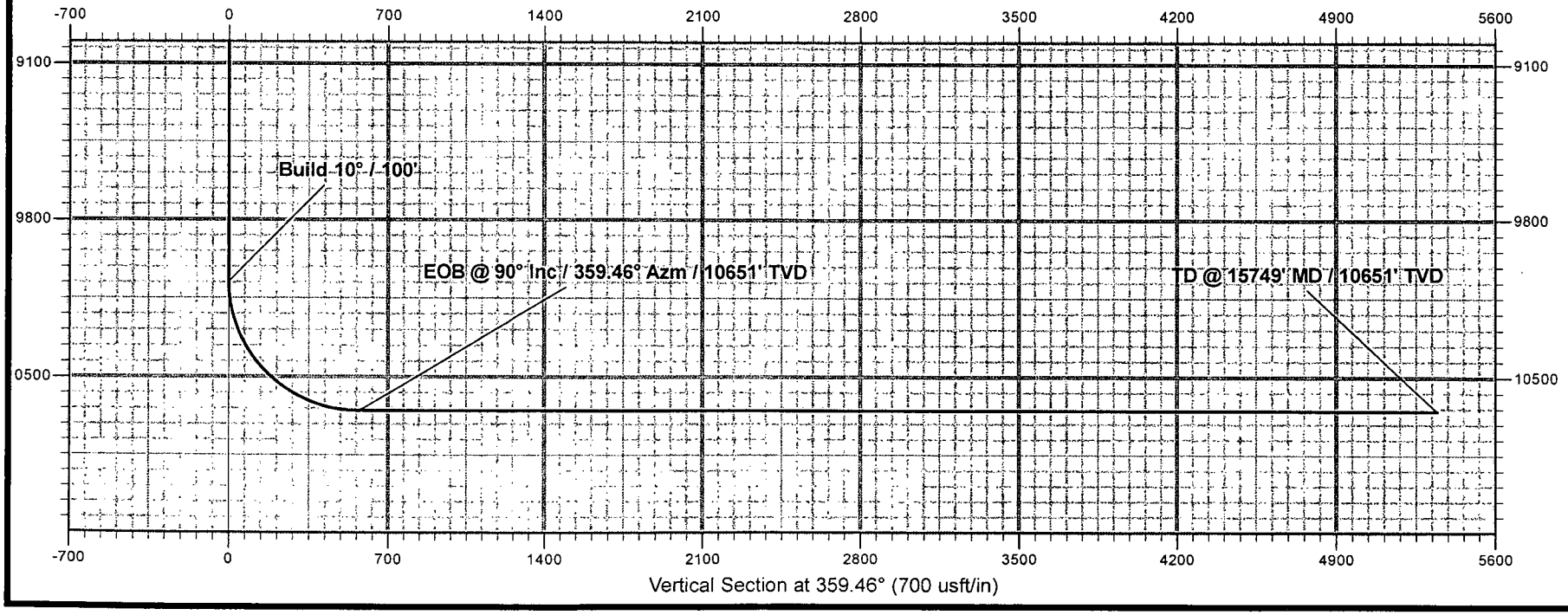
QDC
The DIRECTIONAL DRILLING COMPANY



Mewbourne Oil Company

Lea County, NM
Red Hills West Unit 005H
Quote 120829
Design #1

The DIRECTIONAL DRILLING COMPANY



Notes Regarding Blowout Preventer
Mewbourne Oil Company
Red Hills West Unit #005H
330' FNL & 500' FWL
Sec. 10 T26S R32E
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 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.

13 ⅝" 2M BOPE & Closed Loop Equipment Schematic

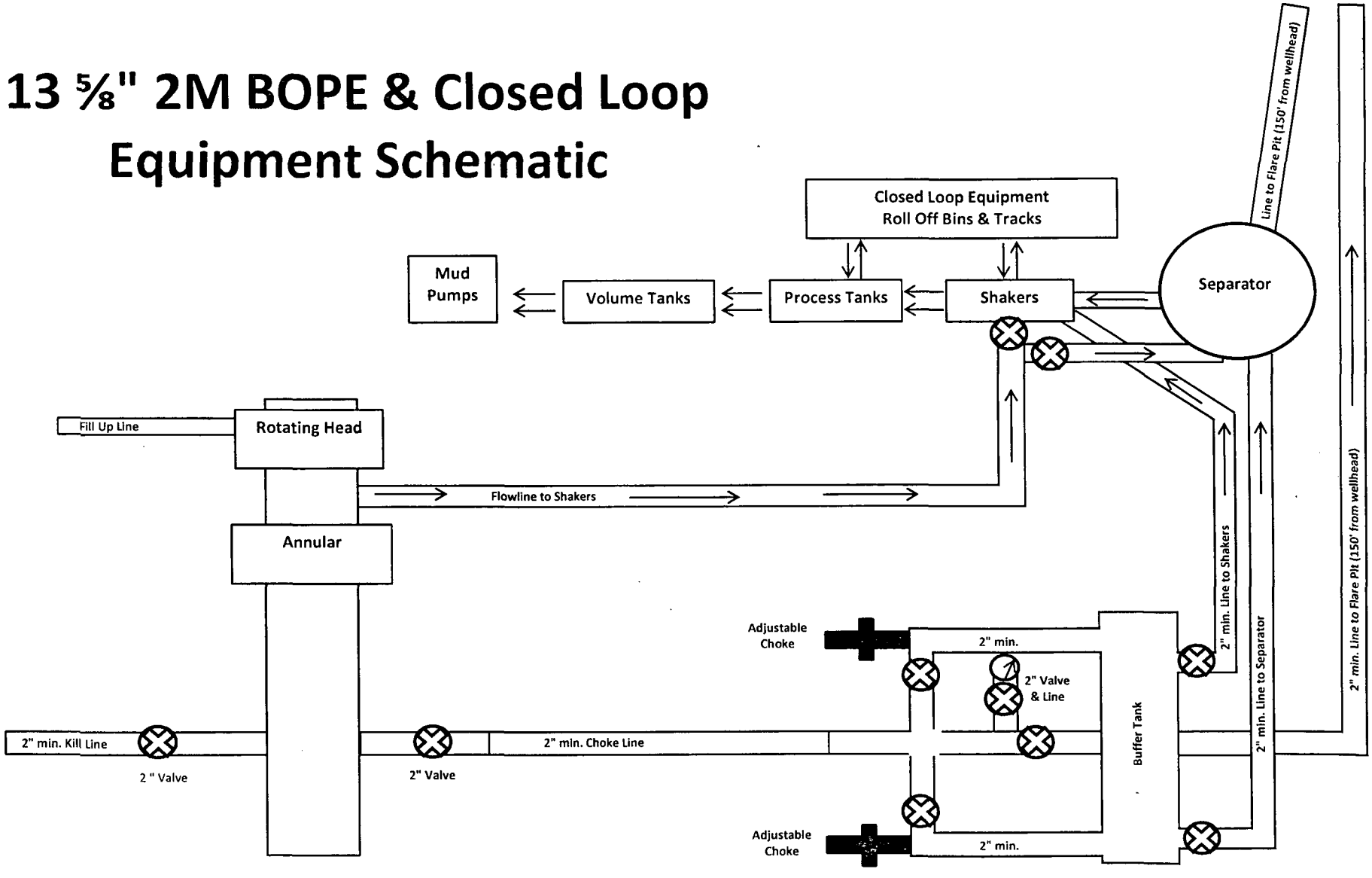


EXHIBIT "2"
Red Hills West Unit #005H

11" 3M BOPE & Closed Loop Equipment Schematic

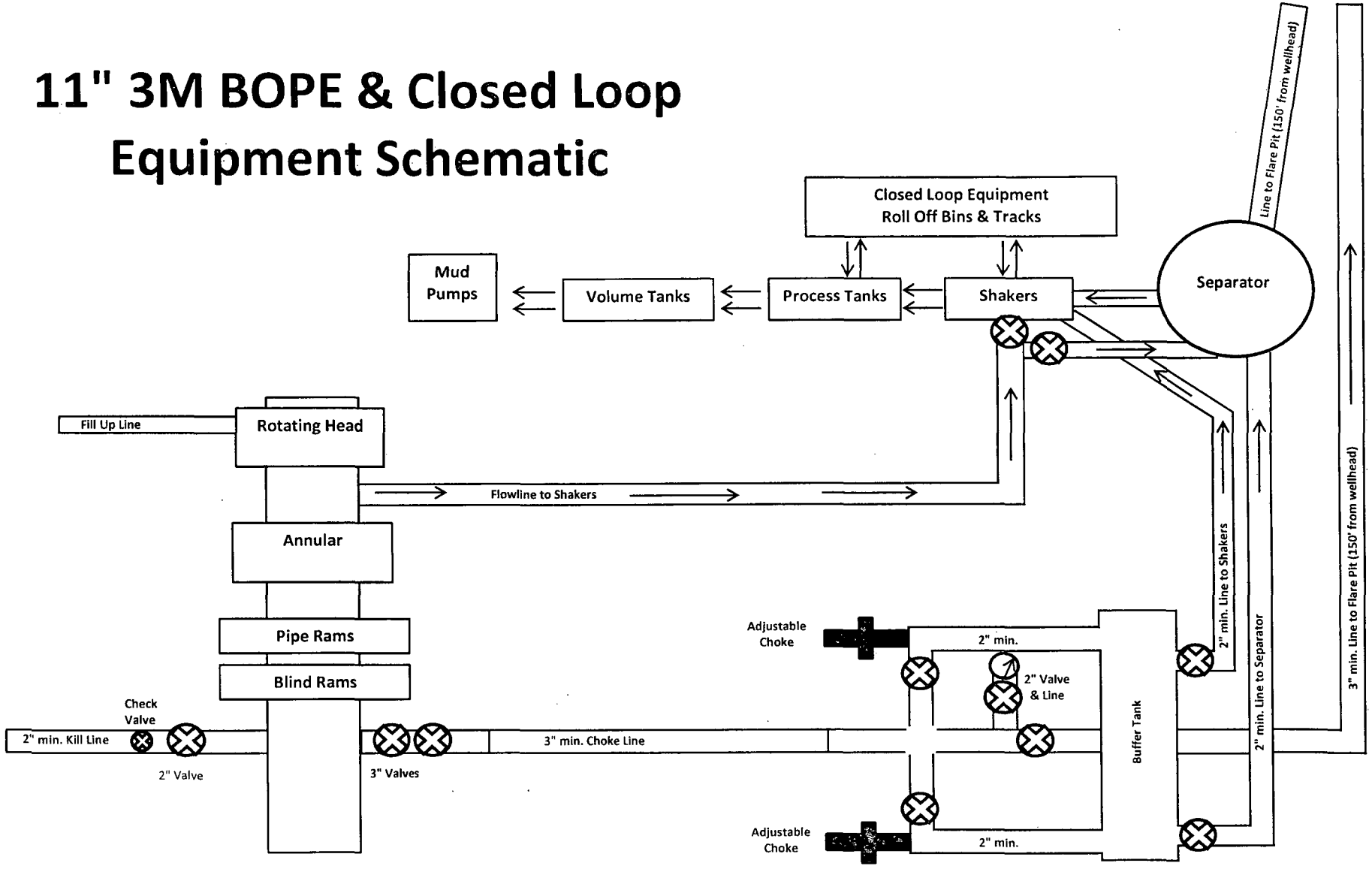


Exhibit "2"
Red Hills West Unit #005H

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

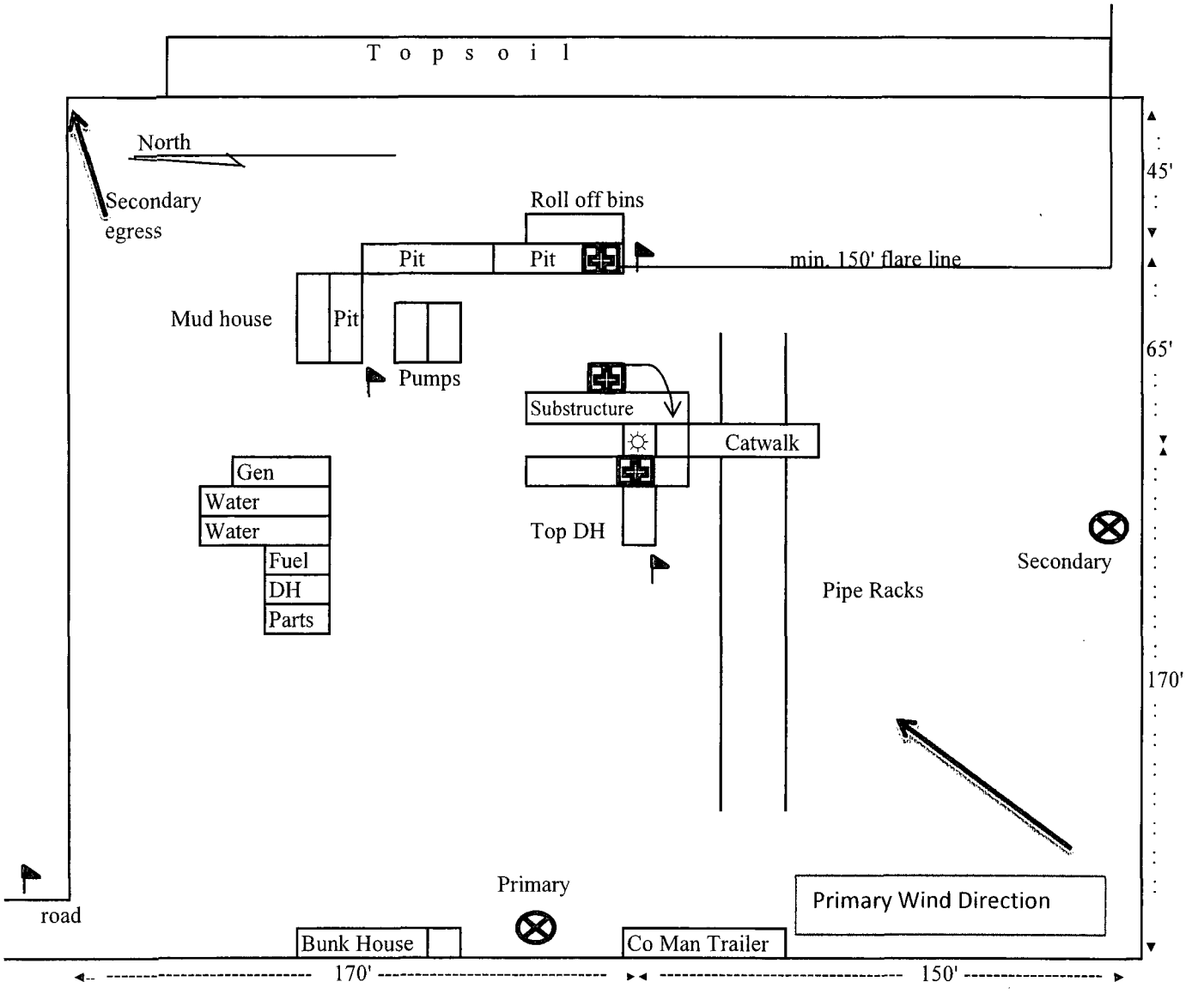


Exhibit 5
H2S Diagram
Closed Loop Pad Dimensions 280' x 320'

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